NPDES PERMIT NO. NMR04A000

FY 2024
MS4 ANNUAL REPORT

FOR

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

DECEMBER 1, 2024

2600 PROSPECT AVENUE NE

ALBUQUERQUE, NM 87107

(505) 884-2215

NPDES Permit No. NMR04A000
AMAFCA FY 2024 MS4 Annual Report
Table of Contents

NPDES Permit No. NMR04A000
AMAFCA FY 2024 MS4 Annual Report
Table of Contents

MS4 Program Summaries Continued:

Annual Report Format

National Pollutant Discharge Elimination System Stormwater Program
MS4 Annual Report Form

Check box if you are submitting an individual Annual Report with cooperative program elements ☒

Check box if you are submitting an individual Annual Report with individual program elements ☐

Check box if this is a new name, address, etc. ☐

1. MS4(s) Information

Albuquerque Metropolitan Arroyo Flood Control Authority (AMAFCA)
Name of MS4

Patrick | Chavez | Storm Water Quality Engineer
Name of Contact Person (First) (Last) (Title)

505-884-2215 | pchavez@amafca.org
Telephone (including area code) E-mail

2600 Prospect Ave. NE
Mailing Address

Albuquerque | NM | 87107
City State ZIP code

What size population does your MS4(s) serve? 562,599 NPDES number NMR04A016

What is the reporting period for this report? (mm/dd/yyyy) From 07/01/2023 to 06/30/2024

2. Water Quality Priorities

A. Does your MS4(s) discharge to waters listed as impaired on a state 303(d) list? ☒ Yes ☐ No

B. If yes, identify each impaired water, the impairment, whether a TMDL has been approved by EPA for each, and whether the TMDL assigns a wasteload allocation to your MS4(s). Use a new line for each impairment, and attach additional pages as necessary.

Impaired Water	Impairment	Approved TMDL		TMDL assigns WLA to MS4	
Rio Grande (Isleta -Tijeras)	E. coli	☒ Yes	☐ No	☒ Yes	☐ No
Rio Grande (Isleta -Tijeras)	DO, PCBs & Hg-Fish Consumpti	☐ Yes	☒ No	☐ Yes	☐ No
Rio Grande (Tijeras - Alameda)	DO & Temperature	☐ Yes	☒ No	☐ Yes	☐ No
Rio Grande (Tijeras - Alameda)	PCBs & Hg-Fish Consumption A	☐ Yes	☒ No	☐ Yes	☐ No

2. B. Continued

Impaired Water	Impairment	Approved TMDL		TMDL assigns WLA to MS4	
Rio Grande (Tijeras - Alameda)	E. coli	☒ Yes	☐ No	☒ Yes	☐ No
Rio Grande (Alameda - US550)	PCBs & Hg-Fish Consumption A	☐ Yes	☒ No	☐ Yes	☐ No
Rio Grande (Alameda - US550)	Gross Alpha, adjusted & PCBs	☐ Yes	☒ No	☐ Yes	☐ No
Rio Grande (Alameda - US550)	E. coli	☒ Yes	☐ No	☒ Yes	☐ No

C. What specific sources contributing to the impairment(s) are you targeting in your stormwater program?

Pet waste (E. coli) within the watershed & potential low DO related to the NDC outfall.

D. Do you discharge to any high-quality waters (e.g., Tier 2, Tier 3, outstanding natural resource waters, or other state or federal designation)? ☐ Yes ☒ No

E. Are you implementing additional specific provisions to ensure their continued integrity? ☐ Yes ☒ No

3. Public Education and Public Participation

A. Is your public education program targeting specific pollutants and sources of those pollutants? ☒ Yes ☐ No

B. If yes, what are the specific sources and/or pollutants addressed by your public education program?

AMAFCA's programs target specific sources & pollutants, as required in MS4 Permit.

C. Note specific successful outcome(s) (e.g., quantified reduction in fertilizer use; NOT tasks, events, publications) fully or partially attributable to your public education program during this reporting period.

Please refer to the attached CMC program summary for lab results related to a successful sampling outcome.

D. Do you have an advisory committee or other body comprised of the public and other stakeholders that provides regular input on your stormwater program? ☒ Yes ☐ No

4. Construction

A. Do you have an ordinance or other regulatory mechanism stipulating:

Erosion and sediment control requirements? ☒ Yes ☐ No

Other construction waste control requirements? ☒ Yes ☐ No

Requirement to submit construction plans for review? ☒ Yes ☐ No

MS4 enforcement authority? ☒ Yes ☐ No

B. Do you have written procedures for:

Reviewing construction plans? ☒ Yes ☐ No

Performing inspections? ☒ Yes ☐ No

Responding to violations? ☒ Yes ☐ No

C. Identify the number of active construction sites ≥ 1 acre in operation in your jurisdiction at any time during the reporting period. 1

D. How many of the sites identified in 4.C did you inspect during this reporting period? 1

E. Describe, on average, the frequency with which your program conducts construction site inspections.

Inspections complied with CGP requirements for inspection frequency.

F. Do you prioritize certain construction sites for more frequent inspections? ☐ Yes ☒ No

If Yes, based on what criteria?

G. Identify which of the following types of enforcement actions you used during the reporting period for construction activities, indicate the number of actions, or note those for which you do not have authority:

☐ Yes	Notice of violation		No Authority	☒
☐ Yes	Administrative fines		No Authority	☒
☐ Yes	Stop Work Orders	0	No Authority	☐
☐ Yes	Civil penalties		No Authority	☒
☐ Yes	Criminal actions		No Authority	☒
☐ Yes	Administrative orders		No Authority	☒
☒ Yes	Other	SWPPP Inspections		

H. Do you use an electronic tool (e.g., GIS, data base, spreadsheet) to track the locations, inspection results, and enforcement actions of active construction sites in your jurisdiction? ☒ Yes ☐ No

I. What are the 3 most common types of violations documented during this reporting period?

Ineffective track out pads, routine maintenance of silt fencing, and turbidity testing for dewatering activites.

J. How often do municipal employees receive training on the construction program? As required w/ CGP updates

5. Illicit Discharge Elimination

A. Have you completed a map of all outfalls and receiving waters of your storm sewer system? ☒ Yes ☐ No

B. Have you completed a map of all storm drain pipes and other conveyances in the storm sewer system? ☒ Yes ☐ No

C. Identify the number of outfalls in your storm sewer system. 5

D. Do you have documented procedures, including frequency, for screening outfalls? ☒ Yes ☐ No

E. Of the outfalls identified in 5.C, how many were screened for dry weather discharges during this reporting period?

5 - All outfalls

F. Of the outfalls identified in 5.C, how many have been screened for dry weather discharges at any time since you obtained MS4 permit coverage? 5 - All outfalls

G. What is your frequency for screening outfalls for illicit discharges? Describe any variation based on size/type.

Typically, outfalls are visually screened monthly.

H. Do you have an ordinance or other regulatory mechanism that effectively prohibits illicit discharges? ☒ Yes ☐ No

I. Do you have an ordinance or other regulatory mechanism that provides authority for you to take enforcement action and/or recover costs for addressing illicit discharges? ☐ Yes ☒ No

J. During this reporting period, how many illicit discharges/illegal connections have you discovered? 5

K. Of those illicit discharges/illegal connections that have been discovered or reported, how many have been eliminated? All

L. How often do municipal employees receive training on the illicit discharge program? As required

6. Stormwater Management for Municipal Operations

A. Have stormwater pollution prevention plans (or an equivalent plan) been developed for:

All public parks, ball fields, other recreational facilities and other open spaces	☐ Yes	☒ No
All municipal construction activities, including those disturbing less than 1 acre	☒ Yes	☐ No
All municipal turf grass/landscape management activities	☐ Yes	☒ No
All municipal vehicle fueling, operation and maintenance activities	☒ Yes	☐ No
All municipal maintenance yards	☒ Yes	☐ No
All municipal waste handling and disposal areas	☒ Yes	☐ No

Other

B. Are stormwater inspections conducted at these facilities? ☒ Yes ☐ No

C. If Yes, at what frequency are inspections conducted? As required

D. List activities for which operating procedures or management practices specific to stormwater management have been developed (e.g., road repairs, catch basin cleaning).

Procedures have been developed for AMAFCA Operation, Maintenance, and Inspection activities.

E. Do you prioritize certain municipal activities and/or facilities for more frequent inspection? ☐ Yes ☒ No

F. If Yes, which activities and/or facilities receive most frequent inspections?

G. Do all municipal employees and contractors overseeing planning and implementation of stormwater-related activities receive comprehensive training on stormwater management? ☒ Yes ☐ No

H. If yes, do you also provide regular updates and refreshers? ☒ Yes ☐ No

I. If so, how frequently and/or under what circumstances? Typically on an annual basis.

7. Long-term (Post-Construction) Stormwater Measures

A. Do you have an ordinance or other regulatory mechanism to require:

Site plan reviews for stormwater/water quality of all new and re-development projects?	☒ Yes	☐ No
Long-term operation and maintenance of stormwater management controls?	☒ Yes	☐ No
Retrofitting to incorporate long-term stormwater management controls?	☒ Yes	☐ No

B. If you have retrofit requirements, what are the circumstances/criteria?

As required by the MS4 permit for post-construction stormwater quality volume.

C What are your criteria for determining which new/re-development stormwater plans you will review (e.g., all projects, projects disturbing greater than one acre, etc.)?

Review all private development with a connection, that may impact, and/or are located adjacent to AMAFCA facilities.

D. Do you require water quality or quantity design standards or performance standards, either directly or by reference to a state or other standard, be met for new development and re-development? ☒ Yes ☐ No

E. Do these performance or design standards require that pre-development hydrology be met for:

Flow volumes	☐ Yes	☒ No
Peak discharge rates	☒ Yes	☐ No
Discharge frequency	☒ Yes	☐ No
Flow duration	☐ Yes	☒ No

F. Please provide the URL/reference where all post-construction stormwater management standards can be found.

https://www.amafca.org

G. How many development and redevelopment project plans were reviewed during the reporting period to assess impacts to water quality and receiving stream protection? 230

H. How many of the plans identified in 7.G were approved? N/A

I. How many privately owned permanent stormwater management practices/facilities were inspected during the reporting period? N/A

J. How many of the practices/facilities identified in I were found to have inadequate maintenance? N/A

K. How long do you give operators to remedy any operation and maintenance deficiencies identified during inspections? N/A

L. Do you have authority to take enforcement action for failure to properly operate and maintain stormwater practices/facilities? ☐ Yes ☒ No

M. How many formal enforcement actions (i.e., more than a verbal or written warning) were taken for failure to adequately operate and/or maintain stormwater management practices? N/A

N. Do you use an electronic tool (e.g., GIS, database, spreadsheet) to track post-construction BMPs, inspections and maintenance? ☒ Yes ☐ No

O. Do all municipal departments and/or staff (as relevant) have access to this tracking system? ☒ Yes ☐ No

P. How often do municipal employees receive training on the post-construction program? As required

8. Program Resources

A. What was the annual expenditure to implement MS4 permit requirements this reporting period? $210,000

B. What is next year's budget for implementing the requirements of your MS4 NPDES permit? $230,000

C. This year what is/are your source(s) of funding for the stormwater program, and annual revenue (amount or percentage) derived from each?

Source:	Mill Levy Property Taxes	Amount $		OR %	100
Source:		Amount $		OR %	
Source:		Amount $		OR %	

D. How many FTEs does your municipality devote to the stormwater program (specifically for implementing the stormwater program; not municipal employees with other primary responsibilities)? 1

E. Do you share program implementation responsibilities with any other entities? ☒ Yes ☐ No

Entity	Activity/Task/Responsibility	Your Oversight/Accountability Mechanism
Various	Storm Water Quality Team (SWQT)	Signed Joint Agreement
Various	Technical Advisory Group (TAG)	Signed Joint Agreement
Various	Compliance Monitoring Coop. (CMC)	Signed Joint Agreement

9. Evaluating/Measuring Progress

A. What indicators do you use to evaluate the overall effectiveness of your stormwater management program, how long have you been tracking them, and at what frequency? These are not measurable goals for individual management practices or tasks, but large-scale or long-term metrics for the overall program, such as macroinvertebrate community indices, measures of effective impervious cover in the watershed, indicators of in-stream hydrologic stability, etc.

Indicator	Began Tracking (year)	Frequency	Number of Locations
Example: E. coli	2003	Weekly April–September	20
Various (EPA approved analyte list)	2016	Qualifying events (up to 7)	3
Various/EPA approved analyte list	2014	Wet weather, annually	8
Various/EPA approved analyte list	2021	Wet weather, annually	11
Please contact AMAFCA			
for additional information			

B. What environmental quality trends have you documented over the duration of your stormwater program? Reports or summaries can be attached electronically, or provide the URL to where they may be found on the Web.

Trends and data collected by CMC & AMAFCA has been provided to NMED for additional analysis.

10. Additional Information

Please attach any additional information on the performance of your MS4 program, including information required in Parts I.C and III.B. If providing clarification to any of the questions on this form, please provide the question number (e.g., 2C) in your response.

Certification Statement and Signature

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. ☒ Yes ☐ No

Federal regulations require this application to be signed as follows: **For a municipal, State, Federal, or other public facility**: by either a principal executive or ranking elected official.

Signature 

Kevin Troutman, Executive Engineer — Name of Certifying Official, Title

11/25/2024 — Date (mm/dd/yyyy)

AMAFCA FY 24 Annual Report Fillable PDF_flattened (003)

Final Audit Report 2024-11-25

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NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
	3	**Part I.C - Special Conditions**			
	4	**Compliance with Water Quality Standards – General Requirements - Part I.C.1.a - c**			
Not Included in NOI	5	Part I.C.1 - Compliance with Water Quality Standards - Pursuant to Clean Water Act §402(p)(3)(B)(iii) and 40 CFR § 122.44(d)(1), this permit includes provisions to ensure that discharges from the permittee's MS4 do not cause or contribute to exceedances of applicable surface water quality standards, in addition to requirements to control discharges to the maximum extent practicable (MEP) set forth in Part I.D. Permittees shall address storm water management through development of the SWMP that shall include the following elements and specific requirements included in Part VI (sections below).	Part I.C.1 - AMAFCA's proposed plan for compliance with related Permit activities are described in the applicable sections of the AMAFCA SWMP.	• AMAFCA's measurable goals for compliance with related Permit activities are described in the applicable sections of the AMAFCA SWMP.	**See specific Permit section and activity.**
Not Included in NOI	6	Part I.C.1.a - Permittee's discharges shall not cause or contribute to an exceedance of surface water quality standards (including numeric and narrative water quality criteria) applicable to the receiving waters. In determining whether the SWMP is effective in meeting this requirement or if enhancements to the plan are needed, the permittee shall consider available monitoring data, visual assessment, and site inspection reports.	Part I.C.1.a - Compare AMAFCA monitoring data results to applicable surface water quality standards that occur in the following programs: Compliance with Water Quality Standards - Dissolved Oxygen Program, Compliance with Water Quality Standards - PCB Program, Compliance with Water Quality Standards - Temperature Program, Compliance with Water Quality Standards - Discharges to Impaired Waters with Approved TMDL Program, and the Wet Weather Monitoring Program. Refer to these sections for additional information.	• Compare AMAFCA monitoring data results to applicable surface water quality standards that occur in the following programs: Compliance with Water Quality Standards - Dissolved Oxygen Program, Compliance with Water Quality Standards - PCB Program, Compliance with Water Quality Standards - Temperature Program, Compliance with Water Quality Standards - Discharges to Impaired Waters with Approved TMDL Program, and the Wet Weather Monitoring Program. • AMAFCA's measurable goals for compliance with related Permit activities are described in the applicable sections of the AMAFCA SWMP.	**See specific Permit section and activity.**
Not Included in NOI	7	Part I.C.1.b - Applicable surface water quality standards for discharges from the permittees' MS4 are those that are approved by EPA and any other subsequent modifications approved by EPA upon the effective date of this permit found at New Mexico Administrative Code §20.6.4. Discharges from various portions of the MS4 also flow downstream into waters with Pueblo of Isleta and Pueblo of Sandia Water Quality Standards.	Part I.C.1.b - Compare AMAFCA monitoring data results to the applicable New Mexico Administrative Code §20.6.4, Pueblo of Isleta Water Quality Standards (amended on 3/18/2002, effective 7/22/2005 per EPA website), and Pueblo of Sandia Water Quality Standards (effective 3/9/2010). Compare AMAFCA monitoring data results to applicable surface water quality standards that occur in the following programs: Compliance with Water Quality Standards - Dissolved Oxygen Program, Compliance with Water Quality Standards - PCB Program, Compliance with Water Quality Standards - Temperature Program, Compliance with Water Quality Standards - Discharges to Impaired Waters with Approved TMDL Program, and the Wet Weather Monitoring Program. Refer to these sections for additional information.	• Compare AMAFCA monitoring data results to applicable surface water quality standards that occur in the following programs: Compliance with Water Quality Standards - Dissolved Oxygen Program, Compliance with Water Quality Standards - PCB Program, Compliance with Water Quality Standards - Temperature Program, Compliance with Water Quality Standards - Discharges to Impaired Waters with Approved TMDL Program, and the Wet Weather Monitoring Program. • AMAFCA's measurable goals for compliance with related Permit activities are described in the applicable sections of the AMAFCA SWMP.	**See specific Permit section and activity.**

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Not Included in NOI	8	Part I.C.1.c - The permittee shall notify EPA and the Pueblo of Isleta in writing as soon as practical but not later than 30 calendar days following each Pueblo of Isleta water quality standard exceedance at an in-stream sampling location. In the event that EPA determines that a discharge from the MS4 causes or contributes to an exceedance of applicable surface water quality standards and notifies the permittee of such an exceedance, the permittee shall, within sixty (60) days of notification, submit to EPA, NMED, Pueblo of Isleta (upon request) and Pueblo of Sandia (upon request), a report that describes controls that are currently being implemented and additional controls that will be implemented to prevent pollutants sufficient to ensure that the discharge will no longer cause or contribute to an exceedance of applicable surface water quality standards. The permittee shall implement such additional controls upon notification by EPA and shall incorporate such measures into their SWMP as described in Part I.D of this permit. NMED or the affected Tribe may provide information documenting exceedances of applicable water quality standards caused or contributed to by the discharges authorized by this permit to EPA Region 6 and request EPA take action under this paragraph.	Part I.C.1.c - AMAFCA will notify EPA and the Pueblo of Isleta of any Pueblo of Isleta of water quality standard exceedances at an in-stream sampling location (within the Rio Grande). Notification will be in writing as soon as practicable. Lab reports are typically received within 45 days of a sampling event. Preliminary review of the results typically requires 5 days. AMAFCA will include requirements to their contractors to review and report in-stream exceedances in a timely manner so that AMAFCA can better meet this requirement. AMAFCA will notify EPA and the Pueblo of Isleta within 30 days of the data review to determine a Pueblo of Isleta water quality standard exceedance at an in-stream (within the Rio Grande) sampling location. The Permit is unclear if this notification is required just for MS4 Permit compliance sampling, or if this includes results from other monitoring, such as citizen science projects. AMAFCA will provide this notification for in-stream samples that AMAFCA is involved with sampling, that result in a Pueblo of Isleta water quality standard exceedance. In addition, AMAFCA will continue to use sondes in the Rio Grande to monitor DO and temperature (refer to the Compliance with Water Quality Standards - Dissolved Oxygen (DO) Program). AMAFCA will continue to provide Isleta Pueblo with access to the real-time DO and temperature sonde data.	• AMAFCA will notify EPA and the Pueblo of Isleta of any Pueblo of Isleta water quality standard exceedances at an in-stream sampling location (within the Rio Grande). Notification will be in writing as soon as practicable. • AMAFCA will add the in-stream notification of Pueblo of Isleta water quality standard exceedance to monitoring reporting tasks with sub-consultants to ensure that results are reviewed and reported in a timely manner. • AMAFCA will continue to use sondes in the Rio Grande to monitor DO and temperature (refer to the Compliance with Water Quality Standards - Dissolved Oxygen Program). AMAFCA will continue to provide Isleta Pueblo with access to the real-time DO and temperature sonde data.	**Met FY 2024 Goals.** • AMAFCA notified EPA and the Pueblo of Isleta of any Pueblo of Isleta water quality standard exceedances at any in-stream sampling location (within the Rio Grande). Notification was in writing as soon as practical. AMAFCA notified the Pueblo of Isleta and EPA of exceedances related to CMC monitoring, AMAFCA water quality monitoring, and citizen science monitoring (BEMP).

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	9	**Compliance with Water Quality Standards – Dissolved Oxygen & Part I.C.1.d and Endangered Species Act (ESA) Requirements - Dissolved Oxygen Strategy - Part I.C.3.a**			
Not Included in NOI	10	According to the requirements in Part I.C.1.d and Part I.C.3.a.(ii), the permittees shall revise the May 1, 2012 Strategy to continue taking measures to address concerns regarding discharges to the Rio Grande by implementing controls to eliminate conditions that cause or contribute to exceedances of applicable dissolved oxygen water quality standards in waters of the United States. The permittee shall, as part of this revised strategy, complete the following activities [activities are listed in sections below]. Activities listed are a combination of permit activities in Part I.C.1.d - Special Conditions, Compliance with Water Quality Standards, Phase I Dissolved Oxygen Program and Part I.C.3.a - Dissolved Oxygen Strategy in Receiving Waters of the Rio Grande.	Part I.C.1.d and Part I.C.3.a.(ii) - The potential for low DO discharges to the Rio Grande at the NDC Embayment has been a concern which AMAFCA has been addressing, with the USFWS and EPA, since 2004. Several strategies, including various NDC Embayment modifications, have been implemented from 2011-2014. In 2015-2016, AMAFCA completed construction, after coordination with USFWS, of the NDC Outfall Grade Control Structures Modification Project and NDC Embayment Regrading Project. The NDC Embayment was filled in and regraded in 2015-2016, thereby removing the constant hydraulic connection between the Rio Grande and the NDC Bathtub/Outfall. In normal river flow conditions, water from the Rio Grande will not be able to stagnate in the Embayment and create low DO conditions. These improvement projects provide control measures to eliminate conditions that cause or contribute to exceedances of applicable DO water quality standards. These NDC projects and this Dissolved Oxygen Program Strategy were coordinated with the USFWS. AMAFCA received a Final BO from the USFWS and Special Conditions from USACE allowing the NDC Embayment to be filled in and revegetated.	• AMAFCA has completed the NDC Outfall Grade Control Structures Modification Project to fill in and revegetate the NDC Embayment and will continue following the terms of the Final BO from the USFWS and Final Special Conditions from USACE. This project is the revised strategy for the MS4 Permit elements related to DO. • A new vegetation assessment study and removal training will be conducted to determine the types of vegetation and optimal time for seeding. A revised monitoring plan, developed in consultation with the USACE, will be in place moving forward.	**Met FY 2024 Goals.** • The efforts for the NDC Outfall and Special Conditions from USACE were completed in FY 2023. Details on this are provided in the Dissolved Oxygen Program Summary for the Annual Report.
Not Included in NOI	11	Part I.C.1.d.(i) and Part I.C.3.a.(i) - Identify (or continue identifying) structural elements, natural or man-made topographical and geographical formations, MS4 operations activities, or oxygen demanding pollutants contributing to reduced dissolved oxygen in the receiving waters of the Rio Grande. Both dry and wet weather discharges shall be addressed. Assessment may be made using available data or collecting additional data;	Part I.C.1.d.(i) and Part I.C.3.a.(i)- The NDC Outfall/Embayment is the primary structural element identified by AMAFCA, City of Albuquerque, EPA, and USFWS as potentially contributing to low dissolved oxygen (DO) in the receiving waters of the Rio Grande. This Dissolved Oxygen Strategy is primarily focused on addressing this element. No other specific structural elements in the watershed have been identified as contributing to reduced DO in the receiving waters of the Rio Grande. Other stormwater outfalls, including the South Diversion Channel/Tijeras Arroyo, Calabacillas Arroyo, San Antonio Arroyo, will continue to be monitored. AMAFCA will continue to operate sondes in the Rio Grande deployed for monitoring DO and temperature. The sonde locations throughout the length of the Rio Grande through the UA will assist AMAFCA with bracketing segments of the Rio Grande to better understand elements that may be contributing to reduced DO in the receiving waters of the Rio Grande. DO results from AMAFCA monitoring efforts will assist AMAFCA in determining if there are other elements that may be contributing to reduced DO in the receiving waters of the Rio Grande. AMAFCA will update its SWMP if any other specific structural elements in the watershed are identified as contributing to reduced DO in the receiving waters of the Rio Grande.	• AMAFCA will follow the monitoring measurable goals in Part I.C.1.d.(iii) below. • Related to identifying structural elements in the watershed that may be contributing to reduced DO, AMAFCA will continue to use sondes in the Rio Grande to monitor DO and temperature; the sonde data will provide valuable data related to potential DO - stormwater related connections.	**Met FY 2024 Goals.** • In FY 2024, related to identifying structural elements in the watershed that may be contributing to reduced DO, AMAFCA operated three sondes, given safe flow conditions, in the Rio Grande (Sandia Pueblo Boundary, Central Ave., and Isleta Pueblo Boundary). Additional details on the sonde monitoring are available below and in the Dissolved Oxygen Program Summary for the Annual Report. This activity was updated during FY 2024 in conjunction with modifications to AMAFCA SWMP Rev. 6. The AMAFCA SWMP Rev. 7 was adopted on July 1, 2024. • Related to identifying structural elements in the watershed that may be contributing to reduced DO, AMAFCA collected and analyzed DO data from stormwater samples collected for the MS4 program (cooperative monitoring, AMAFCA monitoring, and Citizen Science monitoring). Details on this monitoring are provided in the Dissolved Oxygen Program Summary for the Annual Report.

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Not Included in NOI	12	Part I.C.1.d.(ii) - Continue implementing controls, and updating/revising as necessary, to eliminate structural elements or the discharge of pollutants at levels that cause or contribute to exceedances of applicable water quality standards for dissolved oxygen in waters of the United States;	Part I.C.1.d.(ii) - The primary controls for this DO Program are the NDC Outfall Grade Control Structures Modification Project and Embayment Grading Project. The water quality improvement goal for the NDC Outfall Grade Control Structures Modification Project is to improve maintenance operations, thereby improving efficiency of sediment, trash and debris removal due to better access and improved geometry. The NDC Embayment Regrading Project, as discussed above, removes the constant hydraulic connection between the Rio Grande and the NDC Bathtub/Outfall. These improvement projects provide control measures to mitigate conditions that cause or contribute to exceedances of applicable DO WQSs. In addition to the NDC Outfall and Embayment Projects, AMAFCA will continue to install stormwater quality structures within the watershed. AMAFCA plans, designs, and builds regional stormwater BMPs throughout the watershed to help eliminate the discharge of pollutants that cause or contribute to exceedances of applicable water quality standards for DO in waters of the Rio Grande. Pollutant source reduction strategies, such as public education and encouragement of GI/LID, are also part of the ongoing controls for this Program. AMAFCA actively participates in the MRGSQT, which organizes and leads public education, outreach, involvement, and participation activities which relate to this Program.	• AMAFCA will continue to plan, design, and build structural BMPs (regional water quality structures) throughout the MRG watershed. • AMAFCA will continue to contribute and participate in the MRGSQT which provides public education, outreach, and participation opportunities related to stormwater impacts to water quality.	**Met FY 2024 Goals.** • AMAFCA continued to use floating booms in the NDC Outfall to assist with trash and debris collection. Removal of trash and debris will assist with mitigating low DO issues in this area. • AMAFCA continued to plan, design, and build structural BMPs (regional water quality structures) throughout the MRG watershed. Refer to the Construction Control Measure and the Post Construction Control Measure for additional information. • AMAFCA continued to contribute and participate in the MRGSQT - refer to the Public Education and Outreach Control Measure and the Public Involvement and Participation Control Measure for additional information.
Not Included in NOI	13	Part I.C.1.d.(iii) Continue sampling for DO and temperature in the North Diversion Channel (NDC) Embayment until the data indicate the discharge does not exceed applicable DO water quality standards in waters of the United States. This coincides with the requirements in Part I.C.3.a.(ii).(a), the revised strategy shall include: A. A Monitoring Plan describing all procedures necessary to continue conducting continuous monitoring of DO and temperature in the NDC Embayment and at 1 location in the Rio Grande downstream of the mouth of the NDC within the action area (e.g., Central Bridge). B. A Quality Assurance and Quality Control (QA/QC) Plan describing all standard operating procedures, quality assurance and quality control plans, maintenance and implementation schedules that will assure timely and accurate collection and reporting of water temperature, DO, oxygen saturation, and flow. The QA/QC plan should include all procedures for estimating oxygen data when any oxygen monitoring equipment fail.	Part I.C.1.d.(iii) - With the NDC Embayment filled in since 2016, AMAFCA cannot physically measure the DO in the Embayment. AMAFCA will provide continuous monitoring of DO and temperature (using sondes) in the Rio Grande at the most appropriate locations for the purpose of complying with the MS4 Permit requirements in Part I.C.1.d.(iii) and Part I.C.3.a.(ii).(a). The sonde locations throughout the stretch of the Rio Grande through the Urbanized Area (UA) will assist AMAFCA with bracketing segments of the Rio Grande to better understand locations of elements that may be contributing to reduced DO in the receiving waters of the Rio Grande. For compliance with this Permit Activity, AMAFCA will deploy sondes to provide continuous DO, oxygen saturation, and temperature monitoring; sondes are currently located at the following locations: - Rio Grande at US 550 Bridge in Bernalillo - Rio Grande at Sandia Pueblo Boundary (just above the confluence with the NDC outfall) - Rio Grande at Central Ave. Bridge - Rio Grande at the Isleta Dam Note - sonde locations may change based on the results and program needs as well as river stage. Part I.C.3.a.(ii).(a).A and B - For the sonde monitoring, AMAFCA has standard operating procedures, quality assurance plans, maintenance, and implementation schedules in place.	• For compliance with this Permit Activity, AMAFCA will deploy sondes in the most appropriate locations to provide continuous DO and temperature monitoring. • AMAFCA will continue following the standard operating procedures, quality assurance plans, maintenance, and implementation schedules that are in place for the sonde monitoring. AMAFCA will continue to pursue, as applicable, data collection and reporting improvements to this program. • AMAFCA will continue to provide Isleta Pueblo with access to the real-time DO and temperature sonde data.	**Met FY 2024 Goals.** • Related to the NDC Embayment monitoring, AMAFCA deployed three sondes to provide continuous DO, pH, water depth, turbidity, and temperature monitoring at the following locations: Sandia Pueblo Boundary, Central Ave., and Isleta Dam. Additional details on the sonde program and results are provided in the In-Stream Water Quality Memos, which are available upon request. Use of sondes in the Rio Grande have physical challenges that make the measurement, monitoring, and maintenance difficult as well as time/staff intensive. There are times when the sonde data is not available due to maintenance and other issues with the equipment. This activity was updated during FY 2024 in conjunction with modifications to AMAFCA SWMP Rev. 6. The AMAFCA SWMP Rev. 7 was adopted on July 1, 2024. • In FY 2024, AMAFCA continued to operate real-time telemetry capabilities to these sondes allowing AMAFCA to be aware of sonde issues in real time, resulting in less data gaps. The sonde data was made available to the Pueblo of Isleta to improve data sharing and coordination with watershed stakeholders. • AMAFCA and monitoring consultants followed the standard operating procedures, quality assurance plan, maintenance, and implementation schedules that are in place for the sonde monitoring.

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Not Included in NOI	14	Part I.C.1.d.(iv) Submit a revised strategy to FWS for consultation and EPA for approval within a year of the effective date of the permit and progress reports with the subsequent annual reports. Progress reports to include: (a) Summary of data. (b) Activities undertaken to identify MS4 discharge contribution to exceedances of applicable dissolved oxygen water quality standards in waters of the United States. Including summary of findings of the assessment required in Part I.C.1.d.(i). (c) Conclusions drawn, including support for any determinations. (d) Activities undertaken to eliminate MS4 discharge contribution to exceedances of applicable dissolved oxygen water quality standards in waters of the United States. (e) Account of stakeholder involvement. Part I.C.3.a.(i) - The permittees shall submit a summary of findings and a summary of activities undertaken with each Annual Report. The SWMP submitted with the first and fourth annual reports must include a detailed description of controls implemented (or/and proposed control to be implemented) along with corresponding measurable goals. (Applicable to all permittees).	Part I.C.1.d.(iv) - AMAFCA completed the NDC project in 2016 to fill in and revegetate the NDC Embayment following the terms of the Final BO from the USFWS and Final Special Conditions from USACE. USFWS was consulted during this project and made aware of the revised strategy. The AMAFCA MS4 Annual Report and supporting documentation will be considered as the Progress Report. A separate progress report will not be submitted to EPA and USFWS. The MS4 Annual Report will include the Annual Incidental Take Report as an Attachment to the Annual Report. Part I.C.3.a.(i) - The Annual Report will include a summary of example activities undertaken to identify elements contributing to reduced dissolved oxygen in the receiving waters of the Rio Grande and changes or improvements to the Strategy for implementation of controls to eliminate exceedances of applicable water quality standards for dissolved oxygen in waters of the United States.	• AMAFCA completed the NDC Outfall Grade Control Structures Modification Project to fill in and revegetate the NDC Embayment following the terms of the Final BO from the USFWS and Final Special Conditions from USACE. • Vegetation assessments in this area will continue to be conducted following the current monitoring plan, developed in consultation with the USACE. • AMAFCA will complete the Incidental Take Report and follow the Incidental Take Reporting requirements and data submittal requirements. • AMAFCA will include a summary of example activities in each Annual Report. AMAFCA will incorporate documentation by reference into the Annual Report and plans to document progress on the AMAFCA website.	**Met FY 2024 Goals.** • Refer to ID #10 above for information related to the USACE Regional General Permit. The efforts for the NDC Outfall and USACE were completed in FY 2023. Details on this are provided in the Dissolved Oxygen Program Summary for the Annual Report. • AMAFCA completed the Annual Incidental Take analysis and this is included in the Dissolved Oxygen Program Summary for the Annual Report. AMAFCA followed a procedure for completing this Annual Incidental Take Report to ensure the current MS4 Permit requirements were met and that this report is consistently completed each year. This procedure is available upon request. • AMAFCA has completed this section of the Annual Report to serve as a progress report for this Permit element.
Not Included in NOI	15	According to the requirements in Part I.C.3.a.(ii), the permittees shall ensure that actions to reduce pollutants or remedial activities selected for the NDC Embayment and its watershed are implemented such that there is a reduction in frequency and magnitude of all low oxygen stormwater discharge events that occur in the Embayment or downstream in the MRG as indicated in Table 1.c. Actions to meet the year 3 measurable goals must be taken within 2 years from the effective date of the permit. Actions to meet the year 5 measurable goals must be taken within 4 years from the effective date of the permit.	Part I.C.3.a.(ii) - The result of removing the NDC Embayment and hydraulically disconnecting the NDC stormwater flows from the Rio Grande will minimize low DO conditions at this location. The Embayment has had historical issues with stagnate ponded water creating low DO conditions. The monitoring activities described above will be used to assess that the Embayment project functions as planned and that low DO conditions are reduced in both frequency and magnitude.	• AMAFCA will compare the DO monitoring results for "qualifying events" as defined by USFWS with the MS4 Permit measurable goals as listed in Table 1.c , using the table in Appendix G in the MS4 Permit. • AMAFCA will utilize Levelogger data to better define volumetric runoff events that discharge to the Rio Grande.	**Met FY 2024 Goals.** • AMAFCA continued to use the MS4 Permit measurable goal analysis and reporting in the Annual Incidental Take Report, and this is included in the Dissolved Oxygen Program Summary for the Annual Report. In addition, AMAFCA followed the procedure for completing this analysis to ensure the current MS4 Permit requirements were met and that this report is consistently completed each year. • AMAFCA discontinued analyzing the Levelogger data in the NDC watershed and at the equipment crossing in FY 2024. This activity was removed during FY 2024 in conjunction with modifications to AMAFCA SWMP Rev. 6. The AMAFCA SWMP Rev. 7 was adopted on July 1, 2024. • From the AMAFCA FY 2024 In-Stream Water Quality Monitoring Memos, which report on the AMAFCA sonde data, the DO fell slightly below 5 mg/L on only 1 day related to storm events within the watershed; refer to the Dissolved Oxygen Program Summary for additional information.

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Not Included in NOI	16	According to the requirements in Part I.C.3.a.(ii).(b), the permittees (COA and AMAFCA) shall provide: A. An Annual Incidental Take Report to EPA and the Service that includes the following information: beginning and end date of any qualifying stormwater events, DO values and water temperature in the NDC Embayment, DO values and water temperature at a downstream monitoring station in the MRG, flow rate in the NDC, mean daily flow rate in the MRG, evaluation of oxygen and temperature data as either anoxic or hypoxic using Table 2 of the BO, and estimate the number of silvery minnows taken based on Appendix A of the BO. Electronic copy of The Annual Incidental Take Report should be provided with the annual report required under Part III.B no later than December 1 for the proceeding calendar year.	Part I.C.3.a.(ii).(b).A - AMAFCA will complete the Incidental Take Report, which estimates the potential Rio Grande Silvery Minnow (RGSM) take using the method defined by USFWS for the BO (MRG Watershed Permit BO dated August 21, 2014 - Cons. #22420-2011-F-0024-R001). Using the BO procedure, AMAFCA will determine or measure, as technically feasible, the necessary data elements required for calculation of the predicted incidental takes during qualifying storm events. The definition of a qualifying storm event (for this Permit Activity) may be reassessed as the Levelogger data is analyzed for NDC Outfall and Embayment area. This activity may require additional follow-up with the EPA and the USFWS. The Annual Incidental Take Report will be provided with each Annual Report.	• AMAFCA will determine and/or measure, as technically feasible, the necessary data elements required for calculation of the predicted incidental takes during qualifying storm events. • AMAFCA will complete the Annual Incidental Take Report. • AMAFCA will provide EPA and USFWS with a copy of the Annual Incidental Take Report with each Annual Report submitted no later than December 1st for the preceding calendar year, as required under Part III.B.	**Met FY 2024 Goals.** • The Annual Incidental Take Report was completed to meet the Dec. 1, 2024 deadline for the Annual Report and is provided in the Dissolved Oxygen Program Summary.
Not Included in NOI	17	According to the requirements in Part I.C.3.a.(ii).(b), the permittees (COA and AMAFCA) shall provide: B. A summary of data and findings with each annual report to EPA and the FWS. All data collected (including provisional oxygen and water temperature data, and associated metadata), transferred, stored, summarized, and evaluated shall be included in the annual report. If additional data is requested by EPA or the FWS, COA and AMAFCA shall provide such information within two weeks upon request. The revised strategy required under Part I.C.3.a.(ii),the Annual Incidental Take Reports required under Part I.C.3.a.(ii).(b).A, and annual reports required under Part III.B can be submitted to FWS via e-mail nmesfo@fws.gov and Joel lusk@fws.gov, or by mail to the New Mexico Ecological Services field office, 2105 Osuna Road NE, Albuquerque, New Mexico 87113. [Note - as of July 2022, Debra Hill is the new contact at USFWS.]	Part I.C.3.a.(ii).(b).B - AMAFCA will provide EPA and USFWS with the necessary data elements required for calculation of the predicted incidental takes during qualifying storm events and the Annual Incidental Take Report, required under Part I.C.3.a.(ii).(b).A. If additional data is requested by EPA or the USFWS, AMAFCA will provide requested information within two (2) weeks upon request. AMAFCA will assess the DO on the same time frame as the MS4 Permit requires for the Annual Report – July 1 to June 30. Each Annual Report will be submitted no later than December 1 for the preceding calendar year, as required under Part III.B.	• AMAFCA will provide EPA and USFWS the required data and information with each Annual Report submittal, required under Part III.B, no later than December 1 for the proceeding calendar year.	**Met FY 2024 Goal.** • AMAFCA submitted AMAFCA's FY 2024 MS4 Annual Report with the Dissolved Oxygen Program Summary, the Incidental Take results, and applicable In-Stream Water Quality Monitoring (sonde) memos, as required under Part III.B.

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	18	**Compliance with Water Quality Standards – PCBs - Part I.C.1.e**			
Not Included in NOI	19	According to the requirements in Part I.C.1.e, the permittee shall address concerns regarding PCBs in channel drainage areas specified in Part I.C.1.e.(vi) by developing or continue updating/revising and implementing a strategy to identify and eliminate controllable sources of PCBs that cause or contribute to exceedances of applicable water quality standards in waters of the United States. COA and AMAFCA shall submit a progress report with the first and with the subsequent annual reports.	Part I.C.1.e - The results from the 2012-2014 monitoring of the NDC watershed indicated the presence of PCBs at the Grantline and N. Camino Inlets. Based on the data, MS4 partners concluded that there are no "hot spots" in the municipal area that are continuing to produce PCBs with the possible exception of the Grantline and N. Camino watersheds. In 2014-2017, AMAFCA continued activities to identify and eliminate controllable sources of PCBs specific to these two channels. A water quality consultant was tasked with reviewing and assessing all past PCB data for the NDC, identifying commercial and industrial properties that may have contributed PCBs to the North Camino and the Grantline Channel, researching past PCB releases from PNM in these areas, and providing additional PCB monitoring activity recommendations. In addition, a Field Sampling Plan (FSP), Sampling Analysis Plan (SAP), and a Quality Assurance Project Plan (QAPP) for soil and sediment sampling were developed. Sediment sampling and analysis for PCBs in the North Camino and the Grantline Channel were provided to NMED for consultation and direction. Based on the data collection and analysis results from the first five (5) years of the MS4 Permit term (2014-2019), AMAFCA has met its goals and objectives related to the PCB investigation and no further PCB sampling by AMAFCA is anticipated. If future PCB sampling is needed, AMAFCA will utilize the developed FSP, SAP, and QAPP and coordinate with EPA, NMED, and other MS4s, as applicable.	• Based on the data collection and analysis results from the first five (5) years of the MS4 Permit term (2014-2019), AMAFCA has met its goals and objectives related to the PCB investigation and no further PCB sampling by AMAFCA is anticipated. If future PCB sampling is needed, AMAFCA will utilize the developed FSP, SAP, and QAPP and coordinate with EPA, NMED, and other MS4s, as applicable.	**Met FY 2024 Goals.** • As reported to EPA in 2018, after considering the analyses completed over the 5 year period (2014-2019), AMAFCA has met its goals and objectives related to the PCB investigation and no additional PCB sampling and analysis by AMAFCA, in the Grantline or North Camino Watersheds, was completed in FY 2019. If future PCB sampling is needed, AMAFCA will utilize the developed FSP, SAP, and QAPP and coordinate with EPA, NMED, and other MS4s, as applicable.
Not Included in NOI	20	Part I.C.1.e - The progress reports shall include: (i) Summary of data. (ii) Findings regarding controllable sources of PCBs in the channel drainages area specified in Part I.C.1.e.(vi) that cause or contribute to exceedances of applicable water quality standards in waters of the US via the discharge of municipal stormwater. (iii) Conclusions drawn, including supporting information for any determinations. (iv) Activities undertaken to eliminate controllable sources of PCBs in the drainage areas specified in Part I.C.1.e. (vi) that cause or contribute to exceedances of applicable water quality standards in waters of the US via the discharge of municipal stormwater including proposed activities that extend beyond the 5 year permit term. (v) Account of stakeholder involvement in the process. (vi) Channel Drainage Areas: The PCB strategy required in Part I.C.1.e is only applicable to: COA and AMAFCA Areas: San Jose Drain and North Diversion Channel. Bernalillo County Areas: Adobe Acres Drain, Alameda Outfall Channel, Paseo del Norte Outfall Channel, and Sanchez Farm Drainage Area.	Part I.C.1.e - Based on ownership responsibilities, COA will continue to take the lead regarding follow-up PCB permit activities on the SJD, and AMAFCA will continue to take the lead on follow-up PCB permit activities on the NDC. Bernalillo County will take the lead on Adobe Acres Drain, Alameda Outfall Channel, Paseo del Norte Outfall Channel, and Sanchez Farm Drainage Area, as assigned in the MS4 Permit. Based on the data collection and analysis results from the first five (5) years of the MS4 Permit term (2014-2019), AMAFCA has met its goals and objectives related to the PCB investigation and no further PCB sampling by AMAFCA is anticipated. Results from any continued study will be provided to NMED for consultation and direction. If future PCB sampling is needed, AMAFCA will utilize the developed FSP, SAP, and QAPP and coordinate with EPA, NMED, and other MS4s, as applicable. AMAFCA will continue internal watershed stormwater quality monitoring, which typically collects samples that are screened for PCBs at eight (8) locations. Collection of these samples are weather and equipment dependent. No additional Compliance Monitoring Cooperative (CMC) monitoring is required until a new MS4 Permit is issued. However, the CMC members will evaluate and may choose to continue sampling to support their MS4 program needs during administrative continuance. CMC monitoring would include collecting samples, and screening for PCBs, at two (2) locations within the Rio Grande - one upstream of the MS4 and one downstream of the MS4. This program uses Method 1668 for testing PCBs. Monitoring results obtained from AMAFCA's internal stormwater quality assessment monitoring program and any continued CMC stormwater quality monitoring are available upon request.	• Based on the data collection and analysis results from the first five (5) years of the MS4 Permit term (2014-2019), AMAFCA has met its goals and objectives related to the PCB investigation and no further PCB sampling by AMAFCA is anticipated. If future PCB sampling is needed, AMAFCA will utilize the developed FSP, SAP, and QAPP and coordinate with EPA, NMED, and other MS4s, as applicable. • Results from any continued study will be provided to NMED. The Annual Report will serve as the progress report for additional PCB findings, if applicable. AMAFCA will incorporate documentation by reference into the Annual Report and plans to document progress on the AMAFCA website. • AMAFCA will continue its internal stormwater quality assessment monitoring program, which includes collecting samples, and screening for PCBs, at eight (8) locations. The monitoring program typically includes collecting one stormwater sample per season (wet and dry), weather and equipment permitting, and screening for PCBs. This program uses screening Method 608 and follow-up sampling with Method 1668 if PCBs are detected.	**Met FY 2024 Goals.** • For AMAFCA's internal stormwater quality monitoring program, during the FY 2024 wet season (July 2023 - October 2023), stormwater samples from five (5) of the AMAFCA monitoring locations were screened for PCBs; all the PCB screening results were reported as not detected. AMAFCA's internal stormwater monitoring program also collected three (3) stormwater samples in the FY 2024 dry season (November 2023 to June 2024) that were screened for PCBs, and all sample results were reported as Not Detected (ND). The watershed screening utilized Method 608 with the understanding that if results are detected with the screening method, AMAFCA would then sample and test with Method 1668. The monitoring reports are available upon request.

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Not Included in NOI	21	Part I.C.1.e.(vi) - A cooperative strategy to address PCBs in the COA, AMAFCA and Bernalillo County's drainage areas may be developed between Bernalillo County, AMAFCA, and COA. If a cooperative strategy is developed, the cooperative strategy shall be submitted to EPA within three (3) years from the effective date of the permit and submit a progress report with the fourth and with subsequent annual reports, Note: COA and AMAFCA must continue implementing the existing PCB strategy until a new Cooperative PCB Strategy is submitted to EPA.	Part I.C.1.e.(vi) - An updated cooperative strategy, if warranted, will be discussed with COA, AMAFCA, and Bernalillo County through the cooperative MS4 Technical Advisory Group (MS4 TAG). If a cooperative strategy is agreed to, work will begin to develop an agreement and develop a cooperative strategy to submit to EPA.	• AMAFCA will discuss the updated cooperative strategy option, if warranted, with COA and Bernalillo County through the cooperative MS4 TAG.	**Met FY 2024 Goal.** • Given that AMAFCA has already met the required goals and objectives for compliance under the Permit, AMAFCA continued discussing the cooperative strategy option with COA and Bernalillo County through the cooperative MS4 TAG. PCB study plans and results within the watershed were discussed and shared between AMAFCA, COA, and Bernalillo County.

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	22	**Compliance with Water Quality Standards – Temperature - Part I.C.1.f**			
Not Included in NOI	23	According to the requirements in Part I.C.1.f, the permittees must continue assessing the potential effect of stormwater discharges in the Rio Grande by collecting and evaluating additional data. If the data indicates there is a potential of stormwater discharges contributing to exceedances of applicable temperature water quality standards in waters of the United States, within 30 days such as findings, the permittees must develop and implement a strategy to eliminate conditions that cause or contribute to these exceedances. If the data indicates there is a potential of stormwater discharges contributing to exceedances of applicable temperature water quality standards in waters of Rio Grande, within 30 days such as findings, the permittees must develop and implement a strategy to eliminate conditions that cause or contribute to these exceedances.	Part I.C.1.f - AMAFCA and the original MS4 co-permittees (COA, NMDOT, and UNM) under MS4 Permit No. NMS000101 do not believe that stormwater discharges adversely affect temperature in the Rio Grande. In order to prove this assertion, temperature data from 1982 to 2012 was assembled and analyzed. This data analysis proved the assertion that the receiving waters of the Rio Grande are not adversely affected by the temperature of stormwater from the Albuquerque MS4. This data was presented in an initial report that was submitted to EPA on May 1, 2012. However, to meet the MS4 Permit requirements, AMAFCA continued assessing the potential effect of stormwater discharges in the Rio Grande by collecting and evaluating additional temperature data. From 2012 to 2017, temperature monitoring never showed a temperature exceedance at any of the monitoring locations in the watershed or in the river.	• AMAFCA's measurable goals for compliance with the Permit activities are described in the sections below.	**See specific Permit activity below.**
Not Included in NOI	24	The strategy must include: Part I.C.1.f.(i) - Identify structural controls, post construction design standards, or pollutants contributing to raised temperatures in the receiving waters of the Rio Grande. Both dry and wet weather discharges shall be addressed. Assessment may be made using available data or collecting additional data; Part I.C.1.f.(ii) - Develop and implement controls to eliminate structural controls, post construction design standards, or the discharge of pollutants at levels that cause or contribute to exceedances of applicable water quality standards for temperature in waters of the United States; and	Part I.C.1.f.(i) - AMAFCA has data supporting the fact that stormwater discharges do not adversely affect temperature in the Rio Grande. Assessment continues using temperature data collected in the Rio Grande using sondes (sondes are part of the Dissolved Oxygen - Compliance with Water Quality Standards and Endangered Species Act MS4 Permit program requirements). The four (4) sondes in the Rio Grande have real-time telemetry capabilities. The sonde locations throughout the length of the Rio Grande through the UA will assist AMAFCA with bracketing segments of the Rio Grande to better understand elements that may be contributing to high temperatures in the receiving waters of the Rio Grande. Part I.C.1.f.(ii) - If the temperature data trends begins to indicate that stormwater discharges are adversely affecting temperature in the Rio Grande, AMAFCA will develop a strategy to understand the causes and contributions. If this occurs, AMAFCA will work with COA in developing this strategy as it relates to the watershed. It is anticipated that development of controls will be a part of the strategy. The 30 day timeline in the MS4 Permit is not long enough to develop and implement a watershed wide strategy; AMAFCA and COA will work with EPA, as needed, to develop a reasonable time frame.	• Temperature data will continue to be collected in the Rio Grande using sondes. The sonde data will be available upon request.	**Met FY 2024 Goals.** • In FY 2024, temperature data was collected in the Rio Grande using the sondes that are described in the Dissolved Oxygen MS4 Permit program section of the Annual Report. This activity was updated during FY 2024 in conjunction with modifications to AMAFCA SWMP Rev. 6. The AMAFCA SWMP Rev. 7 was adopted on July 1, 2024. In addition, temperature data was collected during Compliance Monitoring Cooperative (CMC) sampling, Wet Weather monitoring during AMAFCA's internal stormwater quality monitoring, and during the Citizen Science sampling. • In FY 2024, the sondes recorded zero (0) temperature exceedances of the 32.2 degrees C water quality standard in the Rio Grande related to precipitation within the watershed. In-stream monitoring memos discuss this data further and are available upon request. The temperature graphs from the sondes are provided in the Temperature Program Summary for this Annual Report.

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Not Included in NOI	25	Part I.C.1.f.(iii) - Provide a progress report with the first and with subsequent Annual Reports. The progress reports shall include: (a) Summary of data. (b) Activities undertaken to identify MS4 discharge contribution to exceedances of applicable temperature water quality standards in waters of the United States. (c) Conclusions drawn, including supporting information for any determinations. (d) Activities undertaken to reduce MS4 discharge contribution to exceedances of applicable temperature water quality standards in waters of the United States. (e) Accounting of stakeholder involvement.	Part I.C.1.f.(iii) - AMAFCA will include progress regarding temperature impacts from stormwater to the Rio Grande that include adherence to schedule, activities undertaken, monitoring results, and conclusions drawn with Annual Reports, as applicable. AMAFCA will incorporate documentation by reference into the Annual Report and plans to document progress on the AMAFCA website. AMAFCA has provided data from 1982 to 2017 showing that the Rio Grande is not adversely affected by the temperature of stormwater from the Albuquerque MS4. The temperature monitoring results do not show a temperature exceedance at any of the monitoring locations in the watershed or in the river.	• Any update of data, activities, and conclusions regarding temperature impacts from stormwater to the Rio Grande will be provided with each Annual Report, if applicable. AMAFCA will incorporate documentation by reference into the Annual Report and plans to document progress on the AMAFCA website.	**Met FY 2024 Goals.** • This Annual Report serves as a progress report to EPA. Temperature data collected in the Rio Grande during FY 2024 continues to show that temperature exceedances in the Rio Grande due to stormwater from the contributing Albuquerque watershed are not occurring. AMAFCA, through its Annual Reports and associated communication with EPA, has provided data from 1982 to 2024 showing that the Rio Grande is not adversely affected by the temperature of stormwater from the Albuquerque MS4. • In FY 2024, AMAFCA continued to operate real-time telemetry capabilities to three (3) sondes, allowing AMAFCA to be aware of sonde issues in real time resulting in less data gaps. This activity was updated during FY 2024 in conjunction with modifications to AMAFCA SWMP Rev. 6. The AMAFCA SWMP Rev. 7 was adopted on July 1, 2024. Login information was shared with the Pueblo of Isleta so they could view the data in an effort to improve data sharing and coordination with watershed stakeholders.

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	26	**Discharges to Impaired Waters With Approved TMDLs - Part I.C.2.b.(i) and TABLE 1.a - TMDL Bacteria Program- Part I.C.2.b.(iii)**			
Not Included in NOI	27	According to the requirements in Part I.C.2.b.(i), if the permittee discharges to an impaired water body with an approved TMDL (see MS4 Permit, Appendix B), where stormwater has the potential to cause or contribute to the impairment, the permittee shall include in the SWMP controls targeting the pollutant(s) of concern along with any additional or modified controls required in the TMDL and this section. As stated in the Permit, Appendix B, a bacteria TMDL for the Middle Rio Grande was approved by the New Mexico Water Quality Control Commission on April 13, 2010, and by EPA on June 30, 2010. The new TMDL modifies: 1) the indicator parameter for bacteria from fecal coliform to E. coli, and 2) the way the WLAs are assigned The SWMP and required Annual Reports must include information on implementing any focused controls required to reduce the pollutant(s) of concern as described below:	Part I.C.2.b.(i) - A bacteria TMDL for the Middle Rio Grande was approved by the New Mexico Water Quality Control Commission on April 13, 2010, and by EPA on June 30, 2010. AMAFCA's proposed plans for compliance with the Permit activities are described in the sections below.	AMAFCA's measurable goals for compliance with the Permit activities are described in the sections below.	**See specific Permit activity below.**
Not Included in NOI	28	Part I.C.2.b.(i).(a), Targeted Controls: The SWMP submitted with the first Annual Report must include a detailed description of all targeted controls to be implemented, such as identifying areas of focused effort or implementing additional BMPs that will be implemented to reduce the pollutant(s) of concern in the impaired waters. and Part I.C.2.b.(i).(b), Measurable Goals: For each targeted control, the SWMP must include a measurable goal and an implementation schedule describing BMPs to be implemented during each year of the permit term. Where the impairment is for bacteria, the permittee must, at minimum comply with the activities and schedules described in Table 1.a of Part I.C.2.b.(iii). As required in Part I.C.2.b.(i).(e),the permittee shall include focused BMPs addressing the five areas below: A. Sanitary Sewer Systems - improve sanitary sewers; fix lift stations; identify and implement O&M procedures; improve violation reporting; and prevent overflows; B. On-site Sewage Facilities - address failing systems and inadequate maintenance of On-Site Sewage Facilities;	Part I.C.2.b.(i).(a), (b), & (e) -AMAFCA's proposed plan for targeted controls and measurable goals (see column to right) for bacteria include: A. Sanitary Sewer Systems - Targeted Controls: There are no sanitary sewer systems owned or operated by AMAFCA within AMAFCA owned property. Related to the Illicit Discharges and Improper Disposal Control Measure, AMAFCA will receive monthly DMRs of sanitary sewer overflows (SSO) from ABCWUA. These will be evaluated to ensure that the SSOs did not impact AMAFCA facilities. B. On-site Sewage Facilities - Targeted Controls: There are no on-site sewage facilities owned or operated by AMAFCA within AMAFCA-owned property.	A. Sanitary Sewer Systems - Measurable Goals: •There are no sanitary sewer systems owned or operated by AMAFCA within AMAFCA-owned property. • Through the IDDE Program, AMAFCA will continue coordination with ABCWUA, who will inform AMAFCA of any SSOs that potentially impact AMAFCA facilities. AMAFCA will receive monthly DMRs of SSOs from ABCWUA. These will be evaluated to ensure that the SSOs did not impact AMAFCA facilities. AMAFCA will continue to add these to GIS to improve tracking of the SSOs. B. On-site Sewage Facilities - Measurable Goals: • Not applicable to AMAFCA	**Met FY 2024 Goals.** A. Sanitary Sewer Systems: • There are no sanitary sewer systems owned or operated by AMAFCA within AMAFCA owned property. • AMAFCA received and reviewed the monthly DMR forms from ABCWUA. These reports are available upon request. No evidence of adverse health/environmental impacts were documented in FY 2024. • AMAFCA can and has accepted sanitary sewer flows, given emergency overflow conditions in the watershed, to help protect the Rio Grande water quality. • AMAFCA continued to participate in the MS4 311 call in program. Complaints were communicated with the appropriate agency regarding these notifications. AMAFCA also coordinated regarding complaints received directly by AMAFCA staff through email, phone, or received through ABCWUA's monthly DMR Sanitary Sewer Overflow Report provided to AMAFCA. B. On-site Sewage Facilities: • Not applicable to AMAFCA

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Not Included in NOI	29	Continuation of five areas in Part I.C.2.b.(i).(e) - C. Illicit Discharges and Dumping - effort to reduce waste sources of bacteria; for ex., septic systems, grease traps, and grit traps; D. Animal Sources - management programs to identify and target sources such as zoos, pet waste, and horse stables; E. Residential Education - bacteria from residential sites; fats, oils, and grease (FOG) clogging sanitary sewer lines and resulting overflows; decorative ponds; and pet waste.	Part I.C.2.b.(i).(a), (b), & (e) - Continuation - AMAFCA's proposed plan for targeted controls and measurable goals (see column to right) for bacteria include: C. Illicit Discharges and Dumping - Targeted Controls: AMAFCA has a robust IDDE Program. In the IDDE program, AMAFCA has focused on homeless camp cleanup and other efforts that target sources of bacteria. In addition, AMAFCA has manual and mechanical trash contracts to address IDDE cleanup. Refer to the Illicit Discharges and Improper Disposal Control Measure for additional information. D. Animal Sources - Targeted Controls: AMAFCA will continue its focus on reducing pet waste through its Mutt Mitt Stations Program and its involvement with the MRGSQT educational outreach "Scoop the Poop" and/or "There is No Poop Fairy" campaigns. E. Residential Education - Targeted Controls: AMAFCA will address this area through Public Education and Outreach and Public Involvement and Participation Control Measures through its involvement with the MRGSQT.	C. Illicit Discharges and Dumping - Measurable Goals: • AMAFCA will address the Illicit Discharge and Dumping through its IDDE Program; refer to the Illicit Discharges and Improper Disposal Control Measure for additional information. This IDDE program includes illicit discharge monitoring by AMAFCA staff and crew that often involves weekly discussion at staff meetings. Reports of discharge are cooperatively investigated by staff including, if appropriate, tracking and documentation procedures. An annual budget line item exists for contracts to address IDDE cleanup. D. Animal Sources - Measurable Goals: • AMAFCA will continue to provide Mutt Mitt Stations and bags in an effort to reduce pet waste reaching stormwater. • AMAFCA will continue to contribute and participate in the MRGSQT. Through the MRGSQT, pet waste will be targeted through the "Scoop the Poop" and/or "There is No Poop Fairy" campaigns and other programs. • As funding becomes available, AMAFCA will participate and/or conduct microbial source tracking (MST) studies in the Middle Rio Grande. E. Residential Education - Measurable Goals: • The MRGSQT Outcomes Report will summarize the activities and is available upon request and AMAFCA plans to share this document on its website.	**Met FY 2024 Goals.** C. Illicit Discharges and Dumping: • Refer to the Illicit Discharges and Improper Disposal Control section of the Annual Report for FY 2024 performance and implementation status. D. Animal Sources: • AMAFCA has continued the Mutt Mitt Station program. Tracking procedures continued in FY 2024 for this program. • The MRGSQT Outcomes Report summarizes the educational and outreach programs for FY 2024. This report is provided as a Program Summary. Pet waste education is a large component of the cooperative MRGSQT outreach efforts. E. Residential Education: • The MRGSQT Outcomes Report summarizes the educational and outreach programs for FY 2024. This report is contained in the Program Summaries section of the Annual Report.
	30	Part I.C.2.b.(i).(c).B - Identification of Measurable Goal: The SWMP must identify a measurable goal for the pollutant(s) of concern. The value of the measurable goal must be based on one of the following options in the Permit - AMAFCA is using Option B: B. Alternatively, if multiple permittees are discharging into the same impaired water body with an approved TMDL (which has an aggregate WLA for all permitted stormwater MS4s), the MS4s may combine or share efforts, in consultation with/and the approval of NMED, to determine an alternative sub-measurable goal derived from the WLA for the pollutant(s) of concern (e.g., bacteria) for their respective MS4. The SWMP must clearly define this alternative approach and must describe how the sub-measurable goals would cumulatively support the aggregate WLA. Where an aggregate WLA measurable goal has been broken into sub-measurable goals for individual MS4s, each permittee is only responsible for progress in meeting its WLA sub-measurable goal.	Part I.C.2.b.(i).(c).B - AMAFCA identified in its NOI that it was seeking, as part of a group of MS4s, an alternative sub-measurable goal for TMDL control under this part of the Permit. NMED and EPA were informed of this decision and NMED has worked with the CMC to help establish the cooperative waste load allocation (WLA) values and methodology for calculating E. coli loading. AMAFCA will continue following the established methodology for applying this to the CMC monitoring results.	• AMAFCA, as part of the CMC, will use the analytical results obtained in the Rio Grande during the CMC sampling and calculate an E. coli loading to compare with the waste load allocation allotted for the cooperative portion for the two defined stream assessment units of the Rio Grande (Isleta to Alameda and Alameda to Angostura). These calculations will be provided in each Annual Report, if applicable, as part of the CMC monitoring memos. AMAFCA will incorporate documentation by reference into the Annual Report and plans to provide documentation on the AMAFCA website.	**Met FY 2024 Goal.** • The required CMC sampling for the MS4 Permit term in the Rio Grande (2016 to 2019) was completed in FY 2019. The MRG Watershed Based MS4 Permit entered into administrative continuance in Dec. 2019 when EPA Region 6 did not issue a new MS4 Permit before the current MS4 Permit expiration date. The MS4 TAG sent EPA an Administrative Continuance letter dated October 15, 2019. Until a new MS4 Permit is issued, there are no compliance monitoring requirements in the Rio Grande. There was two (2) qualifying storm event monitored by the CMC in FY 2024. E. coli loading calculations were completed in FY 2024. The CMC memo summarizing the FY 2024 CMC wet weather monitoring activity, results, and E. coli loading calculations is attached to this Annual Report.

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
Not Included in NOI	31	According to the requirements in Part I.C.2.b.(i).(f), the permittee shall monitor or assess progress in achieving measurable goals and determining the effectiveness of BMPs, and shall include documentation of this monitoring or assessment in the SWMP and Annual Reports. In addition, the SWMP must include methods to be used. This program element may be coordinated with the monitoring required in Part III.A. The permittee may use the following methods either individually or in conjunction to evaluate progress towards the measurable goal and improvements in water quality as follows: A. Evaluating Program Implementation Measures or B. Assessing Improvements in Water Quality Progress towards achieving the measurable goal shall be reported in the Annual Report. Annual reports shall report the measurable goal and the year(s) during the permit term that the MS4 conducted additional sampling or other assessment activities.	Part I.C.2.b.(i).(f) - AMAFCA will assess and evaluate the program and progress in achieving the targeted controls and measurable goals listed above by tracking the number of educational outreach opportunities conducted and tracking the number of people reached through the educational outreach program. AMAFCA will incorporate documentation by reference into the Annual Report and plans to document progress on the AMAFCA website. AMAFCA is part of the Compliance Monitoring Cooperative (CMC) group, established in 2016, with 12 watershed partners cooperating for the Wet Weather Monitoring Program requirements. In addition, AMAFCA will monitor and test for E. coli at its facilities within the watershed. This internal monitoring program sampling will be done in accordance with Part III.A of the MS4 Permit and will assist with a water quality assessment of the overall watershed related to E. coli.	• The MRGSQT Outcomes Report will track the number of educational outreach opportunities conducted and list the number of people reached through the educational outreach program. This report is available upon request and AMAFCA plans to share this document on its website. • AMAFCA will conduct stormwater monitoring in accordance with the Wet Weather Monitoring Program, Part III.A.1 as part of the CMC. The goals and plan for this program are described in the Wet Weather Monitoring Program portion of this SWMP.	**Met FY 2024 Goals.** • The MRGSQT Outcomes Report summarizes the educational and outreach programs for FY 2024. This report is contained in the Program Summaries section of the Annual Report. • AMAFCA has continued involvement with the Compliance Monitoring Cooperative (CMC) group, established in 2016, with 12 watershed partners cooperating for the Wet Weather Monitoring Program requirements. At the end of FY 2019, the CMC members had met all Wet Weather sample collection requirements in the MS4 Permit. The MRG Watershed Based MS4 Permit entered into administrative continuance in Dec. 2019 when EPA Region 6 did not issue a new MS4 Permit before the current MS4 Permit expiration date. The MS4 TAG sent EPA an Administrative Continuance letter dated October 15, 2019. Until a new MS4 Permit is issued, there are no compliance monitoring requirements in the Rio Grande. There was two (2) qualifying storm event monitored by the CMC in FY 2024. If the CMC does continue wet weather compliance monitoring during administrative continuance of this MS4 Permit, AMAFCA will summarize, as applicable, any wet weather monitoring activity, results, and E. coli loading calculations in future Program Summaries.
Not Included in NOI	32	Part I.C.2.b.(i).(g) - If, by the end of the 3rd year from the effective date of the permit, the permittee observes no progress toward the measurable goal either from program implementation or water quality assessments, the permittee shall identify alternative focused BMPs that address new or increased efforts towards the measurable goal. As appropriate, the MS4 may develop a new approach to identify the most significant sources of the pollutant(s) of concern and shall develop alternative focused BMPs (this may also include information that identifies issues beyond the MS4's control). These revised BMPs must be included in the SWMP and subsequent Annual Reports. Where the permittee originally used a measurable goal based on an aggregated WLA, the permittee may combine or share efforts with other MS4s discharging to the same impaired stream segment to determine an alternative sub-measurable goal for the pollutant(s) of concern for their respective MS4s, as described in Part I.C.2.b.(i).(c).B above. Permittees must document the proposed schedule for the development and subsequent adoption of alternative measurable goals for the pollutant(s) of concern for their respective MS4s and associated assessment of progress in meeting those individual goals.	Part I.C.2.b.(i).(g) - AMAFCA, in cooperation with the TAG, MRGSQT, and CMC has observed progress towards E. coli controls and measurable goals. However, the impairment for E. coli has been re-listed in NMED's 2020-2022 State of New Mexico Clean Water Act Section 303(d)/Section 305(b) Integrated Report for 3 of the 4 assessment segments along the river within the Middle Rio Grande corridor; all 4 assessment segments in the Middle Rio Grande, from Isleta Pueblo Boundary to Angostura, currently has an E. coli impairment. The CMC will continue to collect data during administrative continence of the Permit to determine if the E. coli trend that previously de-listed the impairment or data that re-listed the impairment is the baseline. AMAFCA will annually assess and evaluate the program and progress in achieving the measurable goals listed in the sections above. In addition to the measurable goals listed above, Microbial Source Tracking (MST) studies may be a tool used for the assessment and evaluation of the program. AMAFCA will also continue to participate in regional water quality studies and plans, as opportunities become available, to continue to look for collaborative opportunities to improve this program.	• AMAFCA will continue to annually assess and evaluate the program and progress in achieving the measurable goals listed above. In addition to the measurable goals listed above, Microbial Source Tracking (MST) studies may be a tool used for the assessment and evaluation of the program. • AMAFCA will continue to participate in regional water quality studies and plans, as opportunities become available.	**Met FY 2024 Goals.** • The required CMC sampling for the MS4 Permit term in the Rio Grande (2016 to 2019) was completed in FY 2019. The MRG Watershed Based MS4 Permit entered into administrative continuance in Dec. 2019 when EPA Region 6 did not issue a new MS4 Permit before the current MS4 Permit expiration date. Additional details are provided above. The MRGSQT has funded dry weather E. coli data collection by students in the Bosque Ecosystem Monitoring Program (BEMP) program to better understand the baseline concentration of E. coli before storm events.

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Not Included in NOI	33	Part I.C.2.b.(iii) - Table 1.a, Identify potential significant sources of the pollutant of concern entering your MS4.	Part I.C.2.b.(iii) - Table 1.a - In 2014-2015, AMAFCA contracted with a consultant to restudy the bacteria within the Middle Rio Grande, specifically to evaluate the bacteria data over the recent history to report the trend analysis and the impact to the Rio Grande. The report for this study, Middle Rio Grande Rio Grande E. coli Analysis and Research report for AMAFCA by water quality on-call engineer (CDM Smith), is available from AMAFCA upon request. An updated bacterial source tracking study is being assessed with COA and will be considered during this Permit term. AMAFCA, through the MRGSQT, has contracted with BEMP to study E. coli at various locations along the Rio Grande during dry weather in an effort to identify potential sources of E. coli. For determining the source (area) of E. coli, AMAFCA will continue its internal watershed stormwater quality monitoring. Collection of these samples are weather and equipment dependent.	• AMAFCA, with its co-permittees from the 2012 MS4 Phase I Permit, have completed several studies related to identifying potential significant sources of the pollutant of concern entering the MRG Watershed MS4 area. The results of these studies will be used to guide the overall program plan and goals. An updated bacterial source tracking study is being assessed with COA and will be considered during this Permit term. • AMAFCA, with the MRGSQT, has contracted with BEMP to study E. coli at various locations along the Rio Grande during dry weather in an effort to identify potential sources of E. coli. • For determining the source (area) of E. coli, AMAFCA will continue its internal watershed stormwater quality monitoring. AMAFCA monitoring memos for the internal watershed stormwater quality monitoring are available upon request.	**Met FY 2024 Goals.** • Plots of the AMAFCA collected E. coli data are included in AMAFCA's internal watershed stormwater quality monitoring reports, which are available upon request. • AMAFCA, through the MRGSQT, has contracted with BEMP in calendar year 2024 to study E. coli at various locations along the Rio Grande during dry weather and after qualifying storm events in an effort to identify potential sources of E. coli. Results from this study are available upon request. • The monitoring reports for FY 2024 for AMAFCA's internal watershed stormwater quality monitoring are available upon request.
Not Included in NOI	34	From Part I.C.2.b.(iii) - Table 1.a, Develop (or modify an existing program- for prior permittees under NMS000101) and implement a public education program to reduce the discharge of bacteria in municipal stormwater contributed by (if applicable) by pets, recreational and exhibition livestock, and zoos.	Part I.C.2.b.(iii) - Table 1.a - As stated above, AMAFCA will continue its focus on reducing pet waste through providing Mutt Mitt Stations and through continued involvement with the MRGSQT educational outreach "Scoop the Poop" campaign.	• AMAFCA will continue to provide Mutt Mitt Stations and bags. • AMAFCA will contribute and participate in the MRGSQT. • The MRGSQT Outcomes Report will summarize the activities related to targeting pet waste sources and residential education targeting bacteria sources. This report is available upon request and AMAFCA plans to share this documentation on its website.	**Met FY 2024 Goals.** • AMAFCA continued its focus on reducing pet waste through providing Mutt Mitt Stations. Mutt Mitt Station supporting data for FY 2024 is available upon request. • In FY 2024, AMAFCA continued to contribute to and participated in the MRGSQT, which included educational outreach for the "Scoop the Poop" and "There is no Poop Fairy" campaigns. • The MRGSQT Outcomes Report summarizes the educational and outreach programs for FY 2024. This report is contained in the Program Summaries section of the Annual Report.
Not Included in NOI	35	From Part I.C.2.b.(iii) - Table 1.a, Develop (or modify an existing program- for prior permittees under NMS000101) and implement a program to reduce the discharge of bacteria in municipal stormwater contributed by areas within your MS4 served by on-site wastewater treatment systems.	Part I.C.2.b.(iii) - Table 1.a - As stated above, this is not applicable to AMAFCA. Through the IDDE Program, AMAFCA will continue coordination with ABCWUA, who will inform AMAFCA of any sanitary sewer overflows that impact AMAFCA facilities.	• As stated above, this is not applicable to AMAFCA. Through the IDDE Program, AMAFCA will continue coordination with ABCWUA, who will inform AMAFCA of any sanitary sewer overflows that impact AMAFCA facilities.	**Met FY 2024 Goal.** • AMAFCA received and reviewed the monthly DMR forms from ABCWUA. These reports are available upon request. No evidence of adverse health/environmental impacts were documented in FY 2024.
Not Included in NOI	36	From Part I.C.2.b.(iii) - Table 1.a, Review results to date from the Illicit Discharge Detection and Elimination program (see Part I.D.5.e) and modify as necessary to prioritize the detection and elimination of discharges contributing bacteria to the MS4.	Part I.C.2.b.(iii) - Table 1.a - AMAFCA will incorporate this Permit requirement into the IDDE program, refer to the SWMP - Table 6: Illicit Discharges and Improper Disposal - for additional information.	• AMAFCA will address this Permit activity in the IDDE Program, refer to the SWMP - Table 6: Illicit Discharges and Improper Disposal - for additional information.	**Met FY 2024 Goal.** • AMAFCA addresses this Permit activity in the Illicit Discharges and Improper Disposal Control Measure.
Not Included in NOI	37	Part I.C.2.b.(iii) - Table 1.a - Develop (or modify an existing program- for prior permittees under NMS000101) and implement a program to reduce the discharge of bacteria in municipal stormwater contributed by other significant source identified in the Illicit Discharge Detection and Elimination program (see Part I.D.5.e).	Part I.C.2.b.(iii) - Table 1.a - This requirement will be addressed in conjunction with AMAFCA's IDDE Program, refer to the SWMP Table 6: Illicit Discharges and Improper Disposal, for additional information. AMAFCA will review its IDDE Program results annually and identify illicit discharges (specific as well as general types of discharges and/or locations of discharges) that contributed bacteria to the MS4. Strategies will be developed to address these specific or general IDDEs. Development and implementation of strategies will depend on the IDDE program results.	• AMAFCA will review its IDDE Program results annually.	**Met FY 2024 Goals.** • AMAFCA addresses this Permit activity in the Illicit Discharges and Improper Disposal Control Measure.

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Not Included in NOI	38	Include in the Annual Reports progress on program implementation and reducing the bacteria and updates their measurable goals as necessary. As required in Part I.C.2.b.(i).(d), the Annual Report must include an analysis of how the selected BMPs have been effective in contributing to achieving the measurable goal and shall include graphic representation of pollutant trends, along with computations of annual percent reductions achieved from the baseline loads and comparisons with the target loads.	Part I.C.2.b.(i).(d) - The MRGSQT Outcomes Report will track the number of educational outreach opportunities conducted, list the number of people reached through the educational outreach program, and summarize the activities related to targeting pet waste sources as well as residential education targeting bacteria sources. This report is available upon request and AMAFCA plans to share this document on its website. In addition, if strategies are developed to address IDDEs found to contribute bacteria to the MS4, these will be reported in subsequent Annual Reports. AMAFCA will report annually on compliance monitoring to monitor and test for E. coli. This reporting will be done in accordance with Part III.A (Wet Weather Monitoring Program) of the MS4 Permit and will help with a water quality assessment of the overall watershed related to E. coli. Graphical representation of E. coli trends will also be completed annually.	• The MRGSQT Outcomes Report is available upon request and AMAFCA plans to share this document on its website. • Strategies developed to address IDDEs found to contribute bacteria to the MS4 will be reported in subsequent Annual Reports. AMAFCA will incorporate documentation by reference into the Annual Report and plans to document progress on the AMAFCA website. • AMAFCA will report annually on compliance monitoring to monitor and test for E. coli. This reporting will be done in accordance with Part III.A (Wet Weather Monitoring Program) of the MS4 Permit. • Graphical representation of E. coli trends will also be completed annually.	**Met FY 2024 Goals.** • The MRGSQT Outcomes Report summarizes the educational and outreach programs for FY 2024. This report is contained in the Program Summaries section of the Annual Report. • Plots of the AMAFCA collected E. coli data are included in AMAFCA's internal watershed stormwater quality monitoring reports, which are available upon request and also provided in the Program Summary.

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
	39	**Discharges to Impaired Waters Without Approved TMDLs - Part I.C.2.b.(ii)**			
Not Included in NOI	40	According to the requirements in Part I.C.2.b.(ii), if the permittee discharges directly into an impaired water body without an approved TMDL, the permittee shall perform the following activities (described in sections below).	Part I.C.2.b.(ii) - The Rio Grande impairments are listed on the EPA Annual Report Summary Form, pages 1-2. The Tijeras Arroyo upstream of the Four Hills Bridge is impaired for nutrient/eutrophication. The Tijeras Arroyo upstream of the Four Hills Bridge is all privately owned land. AMAFCA's operation and maintenance authority and access to the Tijeras Arroyo terminate at the Four Hills Bridge. Therefore, there are no requirements in this SWMP to comply with the activities and schedules related to Impairment for Nutrients in Table 1.b in Part I.C.2.b.(iii). AMAFCA does monitor for nutrients through its Wet Weather Monitoring Program, see Table 10 of the SWMP.	• Impairment for Dissolved Oxygen is addressed in the Endangered Species Act (ESA) section - Part I.C.3. The SWMP section for Part I.C.3 describes the proposed plan and measurable goals. • Impairment for PCBs is addressed in Compliance with Water Quality Standards - PCBs - Part I.C.1.e. The SWMP section for Part I.C.1.e describes the proposed plan and measurable goals. • Impairment for Temperature is addressed in Compliance with Water Quality Standards - Temperature - Part I.C.1.f. The SWMP section for Part I.C.1.f describes the proposed plan and measurable goals. • Compliance monitoring (Part III.A) includes Gross Alpha testing. Future assessment related to the impairment will be based on results of those samples.	**Met FY 2024 Goals.** • AMAFCA addresses this Permit activity in other Permit sections - please refer to these sections of the Annual Report for the FY 2024 status of implementation and performance assessment. -Dissolved Oxygen is addressed in the Endangered Species Act (ESA) section - Part I.C.3.a. - PCBs are addressed in Compliance with Water Quality Standards - PCBs - Part I.C.1.e. - Temperature is addressed in Compliance with Water Quality Standards - Temperature - Part I.C.1.f. - Gross Alpha is part of the Wet Weather Monitoring - Part III.A.
Not Included in NOI	41	Part I.C.2.b.(ii).(a) - The permittee shall: A. Determine whether the MS4 may be a source of the pollutant(s) of concern by referring to the CWA §303(d) list and then determining if discharges from the MS4 would be likely to contain the pollutant(s) of concern at levels of concern. The evaluation of CWA §303(d) list parameters should be carried out based on an analysis of existing data (e.g., IDDE Program) conducted within the permittee's jurisdiction. B. Ensure that the SWMP includes focused BMPs, and corresponding measurable goals, that the permittee will implement, to reduce, the discharge of pollutant(s) of concern that contribute to the impairment of the water body. Only applicable if the permittee determines that the MS4 may discharge the pollutant(s) of concern to an impaired water body without a TMDL. The SWMP submitted with the first Annual Report must include a detailed description of proposed controls to be implemented along with measurable goals. C. Amend the SWMP to include any BMPs to address the pollutant(s) of concern.	Part I.C.2.b.(ii).(a) - Most of the impaired pollutants of concern are specifically addressed in other sections of the MS4 Program and therefore in other sections of the SWMP. Please refer to: Dissolved Oxygen and Endangered Species Act (ESA) section - Part I.C.3; PCBs are addressed in Compliance with Water Quality Standards - PCBs - Part I.C.1.e; and Temperature is addressed in Compliance with Water Quality Standards - Temperature - Part I.C.1.f. Compliance monitoring (Part III.A) includes Gross Alpha testing. The testing will allow AMAFCA to determine background level relative to stormwater discharges. Future assessment related to this impairment will be based on results of those samples.	• Refer to other SWMP sections for: - Dissolved Oxygen is addressed in the Endangered Species Act (ESA) section - Part I.C.3. - PCBs are addressed in Compliance with Water Quality Standards - PCBs - Part I.C.1.e. - Temperature is addressed in Compliance with Water Quality Standards - Temperature - Part I.C.1.f. • Compliance monitoring (Part III.A) includes Gross Alpha testing. Future assessment and strategies related to this impairment will be based on results of the stormwater samples.	**Met FY 2024 Goals.** • AMAFCA addresses this Permit activity in other Permit sections. Please refer to these sections of the Annual Report for the FY 2024 status of implementation and performance assessment. -Dissolved Oxygen is addressed in the Endangered Species Act (ESA) section - Part I.C.3.a. - PCBs are addressed in Compliance with Water Quality Standards - PCBs - Part I.C.1.e. - Temperature is addressed in Compliance with Water Quality Standards - Temperature - Part I.C.1.f. - Gross Alpha is addressed in the Wet Weather Monitoring - Part III.A.

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
	42	**Endangered Species Act (ESA) Requirements - Sediment Pollutant Load Reduction Strategy - Part I.C.3.b**			
Not Included in NOI	43	According to the requirements in Part I.C.3.b, the permittee must develop, implement, and evaluate a sediment pollutant load reduction strategy to assess and reduce pollutant loads associated with sediment (e.g., metals, etc. adsorbed to or traveling with sediment, as opposed to clean sediment) into the receiving waters of the Rio Grande. The strategy must include the following elements (see sections below):	Part I.C.3.b - AMAFCA's proposed plan for compliance with the Permit activities are described in the sections below.	AMAFCA's measurable goals for compliance with the Permit activities are described in the sections below.	**See specific Permit activity below.**
Not Included in NOI	44	Part I.C.3.b.(i) - Sediment Assessment: The permittee must identify and investigate areas within its jurisdiction that may be contributing excessive levels (e.g., levels that may contribute to exceedance of applicable Water Quality Standards) of pollutants in sediments to the receiving waters of the Rio Grande as a result of stormwater discharges. The permittee must identify structural elements, natural or man-made topo-graphical and geographical formations, MS4 operations activities, and areas indicated as potential sources of sediments and pollutants in the receiving waters of the Rio Grande. At the time of assessment, the permittee shall record any observed erosion of soil or sediment along ephemeral channels, arroyos, or stream banks, noting the scouring or sedimentation in streams. The assessment should be made using available data from federal, state, or local studies supplemented as necessary with collection of additional data. The permittee must describe, in the first Annual Report, all standard operating procedures, quality assurance plans to assure that accurate data are collected, summarized, evaluated and reported.	Part I.C.3.b.(i) - All AMAFCA projects are regional flood control or water quality projects. Stormwater runoff from other MS4s enter AMAFCA facilities, which function as regional flood control facilities and also function as BMPs to capture sediment from stormwater before the stormwater continues to the Rio Grande. In the MRG MS4, AMAFCA is not adversely contributing to the sediment pollutant load, but rather functioning to capture the sediment pollutant load generated throughout the watershed by MS4s contributing runoff to AMAFCA facilities. A large portion of AMAFCA's routine activities include sediment removal from its facilities. AMAFCA has implemented a crew tracking system to measure the sediment removal quantities at all of its facilities. The data collected will be used by AMAFCA for the required MS4 Sediment Assessment. As part of AMAFCA's regular O&M activities, AMAFCA will continue the sediment assessment phase by tracking and estimating the volume of sediment removed from their stormwater facilities annually. The tracking of this data will continue and will be valuable to AMAFCA as it applies to this program and to future planning activities. In addition, AMAFCA will continue a rainfall and runoff monitoring program to quantitatively relate sediment removal to rainfall quantity, location, and runoff volume. AMAFCA has standard operating procedures (SOPs) related to operation and maintenance and a scheduling spreadsheet for inspections. These SOPs and procedures ensure that AMAFCA has accurate data related to sediment removal activities.	• AMAFCA's facilities function as BMPs for sediment removal. AMAFCA's O&M activities, which include sediment removal, will be scheduled, tracked, and evaluated for the Sediment Assessment requirement for this Permit activity. • AMAFCA will continue using a crew tracking system to measure the sediment removal quantities at all of its facilities and use this information for the Sediment Assessment. AMAFCA will continue to utilize GIS to view this information to better understand the watershed. • AMAFCA will continue with a rainfall and runoff monitoring program to continue to quantitatively relate sediment removal to rainfall quantity, location, and runoff volume.	**Met FY 2024 Goals.** • In FY 2024, AMAFCA adhered to its current established procedures in the "AMAFCA O&M Manual for Dams" and the "AMAFCA O&M Repair Replacement and Rehabilitation Manual" for sediment removal activities. Refer to the Pollution Retention/Good Housekeeping Control Measure for additional information. • AMAFCA's crew tracking system and database lists each of its stormwater quality facilities by drainage basin. These facilities are also shown on the AMAFCA Maintenance Map, available online: https://amafca.org/gis-maps-data/. • In FY 2024, AMAFCA discontinued operation and analysis from Leveloggers located at the channelized inlets to the NDC on AMAFCA ROW. This activity was removed during FY 2024 in conjunction with modifications to AMAFCA SWMP Rev. 6. The AMAFCA SWMP Rev. 7 was adopted on July 1, 2024.

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
Not Included in NOI	45	Part I.C.3.b.(ii) - Estimate Baseline Loading: Based on the results of the sediment pollutants assessment required in Part I.C.3.b.(i) above, the permittee must provide estimates of baseline total sediment loading and relative potential for contamination of those sediments by urban activities for drainage areas, sub-watersheds, Impervious Areas (IAs), and/or Directly Connected Impervious Area (DCIAs) draining directly to a surface waterbody or other feature used to convey waters of the United States. Sediment loads may be provided for targeted areas in the entire Middle Rio Grande Watershed using an individual or cooperative approach. Any data available and/or preliminary numeric modeling results may be used in estimating loads.	Part I.C.3.b.(ii) - In 2016, the COA, with cooperation from AMAFCA and area MS4s, completed an initial sediment assessment, "City of Albuquerque 2016 Sediment Assessment". This initial study assisted in establishing the baseline for the sediment assessment. In FY 2019, AMAFCA cooperated with Bernalillo County, who led the effort for the watershed to complete the estimated baseline sediment loading evaluation. Sediment loads are provided for targeted areas in the entire Middle Rio Grande Watershed using a cooperative approach. The "Progress Evaluation Report for the Sediment Pollutant Load Reduction Strategy" report, June 25, 2019 summarizes the sediment loading evaluation at five main outfalls into the Rio Grande. The data AMAFCA collected in the Sediment Assessment was used for estimating baseline sediment loading to its facilities. AMAFCA will review the "Progress Evaluation Report for the Sediment Pollutant Load Reduction Strategy" report and discuss the findings with the watershed MS4s. The results of this study may be used to guide the overall program plans and goals. Rainfall events and generated runoff are related to loading (sediment transport). AMAFCA has developed and began implementation of a rainfall and runoff monitoring program to begin to quantitatively tie sediment quantities reaching AMAFCA facilities (sediment removal volumes) to rainfall quantity, location, and runoff volumes.	• AMAFCA will review the "Progress Evaluation Report for the Sediment Pollutant Load Reduction Strategy" report and discuss the findings with the watershed MS4s. The results of this study may be used to guide the overall program plans and goals. Updates to the Sediment Pollutant Load Reduction Strategy will be implemented, as applicable. • AMAFCA will continue with the development and implementation of a rainfall and runoff monitoring program to begin to quantitatively tie sediment removal to rainfall quantity, location, and runoff volume.	**Met FY 2024 Goals.** • AMAFCA has reviewed the "Progress Evaluation Report for the Sediment Pollutant Load Reduction Strategy" report, June 25, 2019 which summarizes the sediment loading evaluation at five main outfalls into the Rio Grande. In FY 2024, there were no updates to report. • In FY 2024, AMAFCA discontinued operation and analysis from Leveloggers located at the channelized inlets to the NDC on AMAFCA ROW. This activity was removed during FY 2024 in conjunction with modifications to AMAFCA SWMP Rev. 6. The AMAFCA SWMP Rev. 7 was adopted on July 1, 2024.
Not Included in NOI	46	Part I.C.3.b.(iii) - Targeted Controls: Include a detailed description of all proposed targeted controls and BMPs that will be implemented to reduce sediment pollutant loads, calculated in Part I.C.3.b.(ii) above, during the next ten (10) years of permit issuance. For each targeted control, the permittee must include interim measurable goals (e.g., interim sediment pollutant load reductions) and an implementation and maintenance schedule, including interim milestones, for each control measure, and as appropriate, the months and years in which the MS4 will undertake the required actions. Any data available and/or preliminary numeric modeling results may be used in establishing the targeted controls, BMPs, and interim measurable goals. The permittee must prioritize pollutant load reduction efforts and target areas (e. g. drainage areas, sub watersheds, IAs, DCIAs) that generate the highest annual average pollutant loads.	Part I.C.3.b.(iii) - AMAFCA facilities function as regional flood control facilities as well as BMPs to remove sediment from stormwater before the stormwater reaches the Rio Grande. In the MRG MS4, AMAFCA is not adversely contributing to the sediment pollutant load, but rather functioning to capture the sediment pollutant load generated throughout the watershed by MS4s contributing runoff to AMAFCA facilities. As such, AMAFCA does not want to reduce the sediment loads but rather implement targeted controls to increase the capture of sediment in its facilities. The completed analysis of the Sediment Assessment and Estimated Baseline Loading will be used by AMAFCA to improve their program to target and prioritize sediment removal throughout the watershed. AMAFCA will continue to estimate the annual volume of sediment removed from each control facility. The AMAFCA operations and maintenance crew and subcontractors track the volume of floatables, sediment, trash, and debris removed from AMAFCA facilities on a daily basis. This tracking procedure includes the location of removal by facility and watershed. AMAFCA will continue to utilize the 2017 updated, cooperative waste characterization study, updating the “AMAFCA/Albuquerque MS4 Floatable and Gross Pollutant Study” conducted in 2005, to assist with determining needed controls and BMPs that may be implemented to reduce sediment pollutant loads. AMAFCA will continue analyzing, planning, and constructing needed sediment control BMPs. The AMAFCA Project Schedule process may be utilized in part for identifying, ranking, and planning area BMPs. AMAFCA's Mutt Mitt stations program will continue as a targeted BMP to reduce pollutants (specifically E. coli) present in sediment within the MS4.	• AMAFCA will review the "Progress Evaluation Report for the Sediment Pollutant Load Reduction Strategy" report and discuss the findings with the watershed MS4s. The results of this study may be used to guide the overall program plans and goals. Updates to the Sediment Pollutant Load Reduction Strategy will be implemented, as applicable. • AMAFCA will continue to estimate the annual volume of sediment removed from each control facility. The AMAFCA operations and maintenance crew and subcontractors track the volume of floatables, sediment, trash, and debris removed from AMAFCA facilities on a daily basis. This tracking procedure includes the location of removal by facility and watershed. • AMAFCA will continue utilizing the updated, cooperative waste characterization study in the watershed to assist with determining needed controls and BMPs that may be implemented to reduce sediment pollutant loads. • AMAFCA will continue analyzing, planning, and constructing needed sediment control BMPs. The AMAFCA Project Schedule process may be utilized in part for identifying, ranking, and planning area BMPs. • AMAFCA will continue its Mutt Mitt program focusing on reducing pollutants (specifically E. coli) present in sediment within the MS4.	**No Goals Required for FY 2024.** • The "Progress Evaluation Report for the Sediment Pollutant Load Reduction Strategy" report was completed at the end of FY 2019. An important element of the Strategy is the use of targeted controls and BMPs to reduce sediment transport by stormwater into the receiving water of the Rio Grande. In FY 2024, AMAFCA continued to maintain, design, and construct BMPs throughout its jurisdiction to reduce sediment transport by stormwater into the receiving water of the Rio Grande. • In FY 2024, AMAFCA continued use of the crew tracking system and database to estimate the volume of trash, homeless debris, sediment, and vegetation removed from its water quality facilities. Summary information is provided in the Program Summary and additional details are available upon request. • In FY 2024, AMAFCA continued its Mutt Mitt Station Program. Summary information for the Mutt Mitt Stations and bags is provided in the Program Summary and additional details are available upon request.

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
Not Included in NOI	47	Part I.C.3.b.(iv) - Monitoring and Interim Reporting: The permittee shall monitor or assess progress in achieving interim measurable goals and determining the effectiveness of BMPs, and shall include documentation of this monitoring or assessment in the SWMP and Annual Reports. In addition, the SWMP must include methods to be used. This program element may be coordinated with the monitoring required in Part III.A.	Part I.C.3.b.(iv) - AMAFCA will annually assess progress for this program. AMAFCA will monitor the volume of sediment captured by each of its facilities by measuring the volume of sediment removed from each facility. Documentation of this monitoring will be done using the tracking spreadsheet and procedure. AMAFCA will incorporate documentation by reference into the Annual Report and plans to document progress on the AMAFCA website. In addition, as mentioned above, AMAFCA will use the "Progress Evaluation Report for the Sediment Pollutant Load Reduction Strategy" report to guide the overall program plans and goals. Related monitoring also occurs through the Levelogger program, monitoring rainfall events and generated runoff. Monitoring and assessment will be considered during the development of future program plans and goals.	• AMAFCA will incorporate documentation by reference into the Annual Report. • Documentation of volume of sediment removed will continue to be done using the crew tracking spreadsheet and procedure. • AMAFCA Levelogger information are available upon request and AMAFCA plans to share related documents on its website.	**Met FY 2024 Goals.** • In FY 2024, AMAFCA continued utilizing the crew tracking system and database for sediment assessment and estimating baseline loading. Additional information is available upon request. • In FY 2024, AMAFCA discontinued operation and analysis from Leveloggers located at the channelized inlets to the NDC on AMAFCA ROW. This activity was removed during FY 2024 in conjunction with modifications to AMAFCA SWMP Rev. 6. The AMAFCA SWMP Rev. 7 was adopted on July 1, 2024.
Not Included in NOI	48	Part I.C.3.b.(v) - Progress Evaluation and Reporting: The permittee must assess the overall success of the Sediment Pollutant Load Reduction Strategy and document both direct and indirect measurements of program effectiveness in a Progress Report to be submitted with the fifth Annual Report. Data must be analyzed, interpreted, and reported so that results can be applied to such purposes as documenting effectiveness of the BMPs and compliance with the ESA requirements specified in Part I.C.3.b. The Progress Report must include: (a) A list of species likely to be within the action area: (b) Type and number of structural BMPs installed; (c) Evaluation of pollutant source reduction effects; (d) Any recommendation based on program evaluation; (e) Description of how the interim sediment load reduction goals established in Part I.C.3.b.(iii) were achieved; and (f) Future planning activities needed to achieve increase of sediment load reduction required in Part I.C.3.d.(iii).	Part I.C.3.b.(v) - AMAFCA facilities function as regional flood control facilities as well as BMPs to remove sediment from stormwater before the stormwater reaches the Rio Grande. In the MRG MS4, AMAFCA is not adversely contributing to the sediment pollutant load, but rather functioning to capture the sediment pollutant load generated throughout the watershed by MS4s contributing runoff to AMAFCA facilities. AMAFCA's goal is to implement targeted controls to increase the capture of sediment in its facilities rather than reducing sediment loads. AMAFCA worked cooperatively with Bernalillo County, City of Albuquerque, and SSCAFCA to complete this MS4 Permit requirement. The Progress Report on the Sediment Pollutant Load Reduction Strategy. This Progress report meets the MS4 Permit requirements, including: (a) A list of species likely to be within the action area: (b) Type and number of structural BMPs installed; (c) Evaluation of pollutant source reduction effects; (d) Any recommendation based on program evaluation; (e) Description of how the interim sediment load reduction goals established in Part I.C.3.b.(iii) were achieved; and (f) Future planning activities needed to achieve increase of sediment load reduction required in Part I.C.3.d.(iii). Related to the elements required by this Progress report, AMAFCA will continue to 1) maintain a cumulative list of AMAFCA's retrofit BMPs and 2) may utilize the AMAFCA Project Schedule process in part for identifying, ranking, and planning area BMPs to meet recommendations from this program evaluation.	• AMAFCA has completed this report and provided this to EPA with the FY 2019 Annual Report, December 1, 2019, a Progress Report on the Sediment Pollutant Load Reduction Strategy. AMAFCA cooperated with Bernalillo County, who led the effort for the watershed to complete the estimated baseline sediment loading. The City of Albuquerque and SSCAFCA also cooperated on this watershed wide strategy. • Related to requirement (c), AMAFCA will continue to maintain a cumulative list of AMAFCA's retrofit BMPs. AMAFCA will incorporate documentation by reference into the Annual Report and plans to document progress on the AMAFCA website. • Related to requirement (d) AMAFCA's Project Schedule process may be utilized in part for identifying, ranking, and planning area BMPs to meet recommendations from this program evaluation.	**Met FY 2024 Goals.** • The submission of the "Progress Evaluation Report for the Sediment Pollutant Load Reduction Strategy" report, June 25, 2019, with the FY 2019 Annual Report completes and meets the MS4 Permit requirements. Moving forward, future activities (planned, as well as implemented) determined to be needed to achieve improved sediment load reduction will be summarized in the Annual Reports. In FY 2024, there were no updates to report. • A cumulative list of AMAFCA's retrofit BMPs is available in upon request. • Related to requirement (c), the program elements above describe AMAFCA's methods for evaluation of pollutant source reduction effects. • Related to requirement (d), AMAFCA utilized the 2025 AMAFCA Project Schedule to focus on project priority BMPs for the community.
Not Included in NOI	49	Part I.C.3.b.(vi) - Critical Habitat: Verify that the installation of stormwater BMPs will not occur in or adversely affect currently listed endangered or threatened species critical habitat by reviewing the activities and locations of stormwater BMP installation within the location of critical habitat of currently listed endangered or threatened species at the FWS website http://criticalhabitat.fws.gov/crithab/.	Part I.C.3.b.(vi) - AMAFCA considers critical habitat for all of its projects, working closely with the USFWS and USACE, as required, and will continue this practice related to any BMPs installed related to sediment capture and removal.	• AMAFCA will continue its practice of coordination with the USFWS and USACE, as required, related to AMAFCA's facility construction projects.	**Met FY 2024 Goal.** • In FY 2024, USACE provided a letter releasing AMAFCA from any further revegetation monitoring requirements at the NDC outfall related to the special conditions of the USACE Regional General Permit. USACE determined that the site has met the revegetation performance goals. AMAFCA received notification from USACE in FY 2024 documenting that the Special Conditions of the Regional General Permit relative to vegetation monitoring had been fully satisfied and monitoring is no longer required at the NDC Outfall.

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
	50	**Part I.D.5 - Stormwater Management Plan (SWMP) Control Measures**			
	51	**TABLE 2: Construction Site Stormwater Runoff Control - Part I.D.5.a**			
See NOI Sections Below	52	Part I.D.5.a.(i) The permittee shall develop, revise, implement, and enforce a program to reduce pollutants in any stormwater runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of stormwater discharges from construction activity disturbing less than one acre must be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. Permittees previously covered under permit NMS000101 or NMR040000 must continue existing programs, updating as necessary, to comply with the requirements of this permit. (Note: Highway Departments and Flood Control Authorities may only apply the construction site stormwater management program to the permittee's own construction projects).	Part I.D.5.a.(i) - AMAFCA does not have jurisdiction over COA or Bernalillo County departments responsible for planning, review, permitting, or approval of public and private construction activities. However, AMAFCA does have jurisdiction over AMAFCA construction projects. Therefore, AMAFCA's Construction Site Stormwater Runoff Control Program addresses stormwater management during construction of AMAFCA projects that result in a land disturbance of greater than or equal to one acre, specifically when the construction contract is under AMAFCA. Coordination will continue to occur between AMAFCA's Stormwater Quality Engineer, Project Manager, Development Review Engineer, Drainage Engineer, Field Engineer, and Executive Engineer to ensure that the Program controls erosion and maintains sediment on site.	• Coordinate the Construction Site Stormwater Runoff Control Program requirements (as detailed in the Program and in sections below) with AMAFCA's Stormwater Quality Engineer, Project Manager, Development Review Engineer, Drainage Engineer, Field Engineer, and Executive Engineer to ensure that the Program controls erosion and maintains sediment on site for qualifying AMAFCA construction projects, as required under the Construction General Permit (CGP).	**Met FY 2024 Goal.** • AMAFCA construction projects and activities were discussed at staff meetings and at monthly AMAFCA Board meetings, allowing coordination among AMAFCA staff to ensure that the MS4 program controls are followed for active and upcoming qualifying AMAFCA construction projects. • AMAFCA continued to follow its Construction Site Stormwater Runoff Control Program.
1.1	53	Development of an ordinance or other regulatory mechanism as required in Part I.D.5.a.(ii)(a).	Part I.D.5.a.(ii).(a) - To the extent permitted by law, AMAFCA will comply with the requirements of this section. As applicable, AMAFCA will begin inserting MS4 Permit elements into construction contracts to provide AMAFCA with an enforceable contract mechanism. AMAFCA will also continue to work with the cooperative MS4 Technical Advisory Group (TAG) and other agencies to discuss and help develop regulatory mechanisms. Except for special circumstances, AMAFCA's regular maintenance activities do not disturb more than 5 acres at a time.	• AMAFCA will begin inserting MS4 Permit elements into construction contracts to provide AMAFCA with an improved enforceable contract mechanism. • AMAFCA will continue to work with the MS4 TAG and other agencies to discuss and help develop regulatory mechanisms. • Except for special circumstances, AMAFCA's regular maintenance activities will not disturb more than 5 acres at a time.	**Met FY 2024 Goals.** • AMAFCA contractually requires NPDES compliance with the CGP for qualifying projects, which are construction sites greater than one (1) acre in size located on AMAFCA property for which AMAFCA holds the construction contract. • AMAFCA continued to be involved in the MS4 TAG, facilitating cooperation and coordination with other MS4s in the Middle Rio Grande. • In FY 2024, AMAFCA staff did not report any regular maintenance activities that disturbed more than five (5) acres at a time.

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
1.2	54	Develop requirements and procedures as required in Part I.D.5.a.(ii)(b) through Part I.D.5.a.(ii)(h). These Permit sections include requirements for AMAFCA to implement and enforce requirements for construction site operators to: Part I.D.5.a(ii).(b) - implement appropriate erosion and sediment control BMPs; Part I.D.5.a(ii).(c) - control waste at the construction site that may cause adverse impacts to water quality; Part I.D.5.a.(ii).(d) - Procedures for site plan review which incorporate consideration of potential water quality impacts; Part I.D.5.a.(ii).(e) - Procedures for receipt and consideration of information submitted by the public; Part I.D.5.a.(ii).(f) - Procedures for site inspection (during construction) and enforcement of control measures, including provisions to ensure proper construction, operation, maintenance, and repair.	Part I.D.5.a.(ii).(b) - As part of AMAFCA's Program, AMAFCA engineers will continue to review all site plans and the SWPPPs to ensure implementation of appropriate BMPs and consistency with federal, state, and local sediment and erosion control requirements for AMAFCA projects. Pre-construction meetings will be held prior to beginning construction and SWPPP BMPs will be reviewed and discussed. Part I.D.5.a.(ii).(c) - AMAFCA ensures control of waste at construction sites during the SWPPP review, in accordance with the MS4 and CGP requirements. Part I.D.5.a(ii).(d) - In a cooperative effort with COA and Bernalillo County, the AMAFCA Development Review Engineer reviews private development that has a connection to AMAFCA facilities for projects disturbing at least one (1) acre. This review includes stormwater conveyance, water quality, and erosion control. In addition, AMAFCA staff performs and will continue to perform incremental reviews of all AMAFCA projects during design to assure quality control and design efficiency. Part I.D.5.a.(ii).(e) - AMAFCA will post a contact phone number at all required construction sites to ensure the public can contact AMAFCA with information. Part I.D.5.a.(ii).(f) - AMAFCA has procedures for construction site inspections of control measures to ensure compliance with the Construction General Permit (CGP). AMAFCA also has procedures in place to ensure site stabilization after NOT is filed.	• Review site plans and the SWPPPs (using the EPA SWPPP checklist) for AMAFCA projects disturbing at least one (1) acre in order to consider potential water quality impacts and ensure consistency with federal, state, and local sediment and erosion control requirements. • Conduct pre-construction meetings on AMAFCA construction projects disturbing at least one (1) acre prior to beginning earth-disturbing activities in order to discuss the SWPPP and BMPs. • SWPPP review will include ensuring the plans addresses control of waste at construction sites for AMAFCA projects. • In a cooperative effort with COA and Bernalillo County, the AMAFCA Development Review Engineer will review submitted private development that has a connection to AMAFCA facilities for projects disturbing at least one (1) acre. Review may include stormwater conveyance, water quality, and erosion control. • AMAFCA will post a contact phone number at all required construction sites. • AMAFCA will continue to utilize construction inspection procedures for control measures to ensure compliance with the Construction General Permit (CGP).	**Met FY 2024 Goals.** • AMAFCA continued to follow its Construction Site Stormwater Runoff Control Program. • AMAFCA reviewed 100% of the AMAFCA project SWPPPs using the most recent EPA CGP SWPPP checklist/template to guide the reviews. NOIs were submitted for 100% of the FY 2024 CGP qualifying AMAFCA projects. • AMAFCA conducted pre-construction meetings for all qualifying AMAFCA construction projects prior to beginning earth-disturbing activities. • AMAFCA's SWPPP reviews included ensuring the plan addresses control of waste at construction sites. • AMAFCA reviewed private development that had a connection to AMAFCA facilities for projects disturbing at least one (1) acre. Review included stormwater conveyance, water quality, and erosion control. • AMAFCA verified that the Contractors posted an AMAFCA contact phone number, as required, at AMAFCA construction sites. • AMAFCA continued to utilize construction inspection procedures for control measures to ensure compliance with the CGP.
	55	Continued...Develop requirements and procedures as required in Part I.D.5.a.(ii)(b) through Part I.D.5.a.(ii)(h). Part I.D.5.a.(ii).(g) - to educate and train permittee personnel and developers, construction site operators, contractors and supporting personnel; and Part I.D.5.a.(ii).(h) - for keeping records of and tracking all regulated construction activities within the MS4 - site reviews, inspections, inspection reports, warning letters and other enforcement documents. A summary of the number and frequency of site reviews, inspections (including inspector's checklist for oversight of sediment and erosion controls and proper disposal of construction wastes) and enforcement activities that are conducted annually and cumulatively during the permit term shall be included in each Annual Report.	Part I.D.5.a.(ii).(g) - AMAFCA will provide MS4 construction site inspection training for its staff and invite other agencies to attend trainings, when possible. In addition, construction site SWPPPs will continue to be discussed regularly by AMAFCA personnel. Part I.D.5.a.(ii).(h) - AMAFCA will maintain records of all AMAFCA-led projects disturbing at least one (1) acre within its rights-of-way. This will include AMAFCA's Construction Site Stormwater Runoff Control Program records, including NOIs, NOI tracking, inspection reports, non-conformance documents, and training documents. AMAFCA will maintain its MS4 Strategies and Procedures Notebook. AMAFCA's license agreements relative to CGP compliance for non-AMAFCA projects that occur within its rights-of-way are the responsibility of the licensee.	• AMAFCA will continue to provide MS4 construction site inspection training for its staff and invite other agencies responsible for construction projects. In addition, construction site SWPPPs will continue to be discussed at weekly staff meetings, included in daily reports by field personnel, and discussed at AMAFCA Board meetings. • AMAFCA will maintain records of all construction projects disturbing at least one (1) acre within its rights-of-way that do not qualify for a Low Erosivity Waiver (LEW). • AMAFCA will maintain a tracking spreadsheet for the Construction Site Stormwater Runoff Control Program elements for AMAFCA-led projects.	**Met FY 2024 Goals.** • AMAFCA continued to maintain all construction project records disturbing at least one (1) acre within its rights-of-way.

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1.3	56	Part I.D.5.a.(iii). Annually conduct site inspections of 100 percent of all construction projects cumulatively disturbing one (1) or more acres as required in Part I.D.5.a.(iii).	Part I.D.5.a.(iii) - As part of AMAFCA's Program, AMAFCA staff will continue to perform field inspections of AMAFCA construction projects which disturb at least one (1) acre. At a minimum, each project will be inspected once after filing the NOI (including follow-up inspections for any nonconformances) and at the NOT. An inspection form has been developed and will be used for all inspections. Should the contractor fail to operate, maintain and repair the BMPs and control measures, AMAFCA staff have the contractual authority to temporarily suspend work, withhold/stop payment, or terminate the contract should such issues go uncorrected. AMAFCA's license agreements for non-AMAFCA projects that occur within its rights-of-way are not inspected by AMAFCA and are the responsibility of the licensee. As AMAFCA partners with other MS4s, such as COA, UNM, or ExpoNM on construction projects, AMAFCA will continue to coordinate with those cooperating MS4s in order to assign responsibility of conducting site inspections.	• AMAFCA will complete the inspections per the Construction Site Stormwater Runoff Control Program Plan for 100% of the active construction sites under contract by AMAFCA which disturb at least one (1) acre. AMAFCA will provide each contractor with a rain gage for each construction site to facilitate construction inspections. • AMAFCA's Stormwater Quality Engineer will track all MS4 inspections using the NOI Construction Inspection Tracking spreadsheet. • AMAFCA will maintain copies of the completed MS4 construction inspection forms. • AMAFCA will continue membership and involvement in the cooperative MS4 TAG, which will facilitate cooperation and coordination with other MS4s in the Middle Rio Grande.	**Met FY 2024 Goals.** • For qualifying projects - construction sites greater than one (1) acre in size for which AMAFCA holds the construction contract - AMAFCA conducted site inspections for 100% of the projects in accordance with this MS4 Permit in FY 2024. In FY 2024, there was no need to suspend work. • AMAFCA continued to track all AMAFCA projects disturbing at least one (1) acre, including the NOI and NOT filing and MS4 inspections. • AMAFCA maintains copies of all MS4 construction inspections forms. • AMAFCA continued to be involved in the MS4 TAG, facilitating cooperation and coordination with other MS4s in the Middle Rio Grande.
1.4	57	Part I.D.5.a.(iv). Coordinate with all departments and boards with jurisdiction over the planning, review, permitting, or approval of public and private construction projects/activities within the permit area as required in Part I.D.5.a.(iv). Planning documents include, but are not limited to: comprehensive or master plans, subdivision ordinances, general land use plan, zoning code, transportation master plan, specific area plans, such as sector plan, site area plans, corridor plans, or unified development ordinances.	Part I.D.5.a.(iv) - AMAFCA does not have jurisdiction over the planning, review, permitting, or approval of non-AMAFCA public and private construction activities. Therefore, AMAFCA's program is limited to AMAFCA-owned properties. Regular coordination among AMAFCA staff, as well as with Board members, occurs and will continue. In a cooperative effort with COA and Bernalillo County, the AMAFCA Development Review Engineer will continue to coordinate with and to review public and private development that has a connection to AMAFCA facilities for projects disturbing at least one (1) acre.	• AMAFCA will continue regular coordination amongst AMAFCA engineering staff and Board members to verify that BMPs are in place to control erosion during construction on AMAFCA-owned properties. • AMAFCA will continue to meet monthly with the Board and will continue to seek Board approval for jointly funded water quality projects. • In a cooperative effort with COA and Bernalillo County, the AMAFCA Development Review Engineer reviews submitted public and private development that has a connection to AMAFCA facilities for projects disturbing at least one (1) acre. These reviews may include stormwater conveyance, water quality, and erosion control.	**Met FY 2024 Goals.** • AMAFCA construction projects and activities were discussed weekly in the AMAFCA staff meeting. • AMAFCA Board meetings typically occurred monthly during this reporting period. Board agendas and meeting minutes are available online: https://amafca.org/amafca-board-of-directors/ • In addition, AMAFCA reviewed all public and private development that has a connection to AMAFCA facilities. These reviews included stormwater conveyance, water quality, and erosion control considerations.
1.5	58	Evaluation of GI/LID/Sustainable practices in site plan reviews as required in Part I.D.5.a.(v). The site plan review must include an evaluation of opportunities for use of GI/LID/ Sustainable practices and when the opportunity exists, encourage project proponents to incorporate such practices into the site design to mimic the pre-development hydrology of the previously undeveloped site. For purposes of this permit, pre-development hydrology shall be met according to Part I.D.5.b of this Permit (consistent with any limitations on that capture). Include a reporting requirement of the number of plans that had opportunities to implement these practices and how many incorporated these practices.	Part I.D.5.a.(v) - AMAFCA does not have jurisdiction over site plan reviews of public and private construction activities, and AMAFCA does not program any private development type projects. AMAFCA ultimately has no authority to accept or reject public and private development projects. AMAFCA will continue to encourage use of sustainable practices during the review phase of projects within AMAFCA's rights-of-way and turn-key projects that AMAFCA will take over for operation and maintenance after construction. AMAFCA will encourage an evaluation of sustainable GI/LID practice opportunities within the watershed. The reporting requirement for the number of plans that AMAFCA reviews, typically because of a connection to an AMAFCA facility, that had opportunities to implement these practices will be reported annually. Because of lack of jurisdictional authority, AMAFCA is typically not told how many improvements were implemented. Therefore the number of improvements implemented will not be reported in the AMAFCA MS4 Annual Report.	• AMAFCA will continue to encourage use of sustainable practices during the review phase of projects. • AMAFCA will annually report the number of plans that were reviewed within AMAFCA's rights-of-way and turn-key projects that AMAFCA will take over for operation and maintenance after construction that had opportunities to implement GI/LID/Sustainable practices.	**Met FY 2024 Goals.** • AMAFCA continued to encourage use of sustainable practices during the review phase of projects. • AMAFCA's Development Review Engineer reviewed private development that has a connection to AMAFCA facilities. In FY 2024, 230 plans were reviewed by the AMAFCA Development Review Engineer; opportunities to potentially implement GI/LID/ Sustainable practices were considered, as appropriate, during these reviews. A copy of the Development Review Engineer's tracking list is available upon request. • AMAFCA continued to collaborate with Ciudad Soil and Water Conservation District to assist with water quality focused subdivision plan reviews, which are required for developments greater than five (5) acres.

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Not Included in NOI	59	Update the SWMP document and annual report as required in Part I.D.5.a.(vi) and in Part I.D.5.a.(vii). Part I.D.5.a.(vi) The permittee must include in the SWMP a description of the mechanism(s) that will be utilized to comply with each of the elements required in Part I.D.5.a.(i) throughout Part I.D.5.a.(v), including description of each individual BMP (both structural or non-structural) or source control measures and its corresponding measurable goal.	Part I.D.5.a.(vi) - The above sections of the SWMP describe the mechanism(s) AMAFCA utilizes to comply with each of the elements required in Part I.D.5.a.(i) throughout Part I.D.5.a.(v) and the corresponding measurable goal(s). AMAFCA will annually evaluate and revise the Construction Site Stormwater Runoff Control Program elements, as necessary, to ensure that AMAFCA's Program meets the MS4 Permit requirements.	• Evaluate and revise the Construction Site Stormwater Runoff Control Program, as necessary, to ensure that AMAFCA's Program meets the MS4 Permit requirements. Update the SWMP, as necessary.	**Met FY 2024 Goal.** • AMAFCA's Program was reviewed by the Storm Water Quality Engineer for this reporting period. The program was reviewed as part of this Annual Report.
Not Included in NOI	60	Update the SWMP document and annual report as required in Part I.D.5.a.(vi) and in Part I.D.5.a.(vii). Part I.D.5.a.(vii) - The permittee shall assess the overall success of the program, and document the program effectiveness in the Annual Report. The permittee must include in each Annual Report: Part I.D.5.a.(vii).(a) - A summary of the frequency of site reviews, inspections and enforcement activities that are conducted annually and cumulatively during the permit term. Part I.D.5.a.(vii).(b) - The number of plans that had the opportunity to implement GI/LID/Sustainable practices and how many incorporated the practices.	Part I.D.5.a.(vii) - AMAFCA will assess the overall success of the program, and document the program effectiveness in the Annual Report. Part I.D.5.a.(vii).(a) - AMAFCA will include in each Annual Report a summary of the number and frequency of site reviews and inspections activities that are conducted annually and cumulatively during the permit term. Part I.D.5.a.(vii).(b) - AMAFCA will include the number of plans that had the opportunity to implement GI/LID/Sustainable practices from the plans that were reviewed within AMAFCA's rights-of-way and turn-key projects that AMAFCA will take over for operation and maintenance after construction. AMAFCA ultimately lacks jurisdictional authority to accept public and private development projects.	• Included in each Annual Report will be a summary of the number and frequency of construction site reviews and inspection activities that are conducted annually and cumulatively during the Permit term. • Included in each Annual Report will be a summary of the plans that had the opportunity to implement GI/LID/Sustainable practices from the plans that were reviewed within AMAFCA's rights-of-way and turn-key projects that AMAFCA will take over for operation and maintenance after construction. This documentation is included above.	**Met FY 2024 Goals.** • This Annual Report documents the program effectiveness and program success in the status of implementation and performance assessment for each MS4 Permit requirements. • There was 1 active AMAFCA construction projects in FY 2024. • The number of plans reviewed by the AMAFCA Development Review Engineer is reported above; opportunities to potentially implement GI/LID/ Sustainable practices were considered, as appropriate, during these reviews.
1.6	61	Enhance the program to include the elements in Part I.D.5.a.(viii) through Part I.D.5.a.(x). These include: Part I.D.5.a.(viii) -Use of stormwater educational materials; Part I.D.5.a.(ix) - Develop or update existing construction handbooks; and Part I.D.5.a.(x) - construction inspections may be carried out in conjunction with other inspections and use a screening prioritization process.	Part I.D.5.a.(viii) - AMAFCA will continue to use stormwater educational materials, either developed locally or provided by EPA, NMED, environmental groups, public interest groups, trade organizations, and/or other MS4s. AMAFCA will continue to host training cooperative sessions with the watershed MS4s. Part I.D.5.a.(ix) - AMAFCA, along with other MS4s, provided external review to NMDOT on their 2020 update of the National Pollutant Discharge Elimination System Manual, Stormwater Management Guidelines for Construction, MS4 and Industrial Activities. Part I.D.5.a.(x) - AMAFCA will continue to incorporate a screening prioritization process for construction inspections.	• The MRGSQT Outcomes Report will summarize the activities where educational materials were dispersed and shared with the public. This report is available upon request and AMAFCA plans to share this document on its website. • AMAFCA will explore opportunities for training cooperative sessions held with the watershed MS4s during the reporting period. • AMAFCA will follow procedures, as applicable, outlined in the 2020 update of the National Pollutant Discharge Elimination System Manual, Stormwater Management Guidelines for Construction, MS4 and Industrial Activities. • AMAFCA will continue to incorporate a screening prioritization process for construction inspections.	**Met FY 2024 Goals.** • AMAFCA's educational efforts are summarized and included in the MRGSQT Outcomes Report. This report is contained in the Program Summaries section of the Annual Report. • AMAFCA continued to utilize the most recent EPA CGP SWPPP checklist/template to guide the reviews of SWPPP documents. • AMAFCA conducted site inspections for 100% of the AMAFCA construction projects in accordance with this MS4 Permit in FY 2024.
1.7	62	Item from MS4 Permit NOI. Describe other proposed activities to address the Construction Stormwater Management in New Development and Redevelopment Measure.	AMAFCA will continue to utilize the Annual Report and SWMP revision process as a means to perform a self-audit with the goal to improve its MS4 Programs. AMAFCA will maintain and update, as necessary, its MS4 Strategies and Procedures Notebook for this MS4 Program.	• AMAFCA will document progress made, if any, related to the Annual Report and SWMP revision process as a means to perform a self-audit on the MS4 Program elements. • AMAFCA will maintain and update, as necessary, its MS4 Strategies and Procedures Notebook.	**Met FY 2024 Goals.** • AMAFCA continued to utilize the Annual Report and SWMP revision process as a means to perform a self-audit on the MS4 Program elements.

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
	63	**TABLE 3: Post-Construction Stormwater Management in New Development and Redevelopment- Part I.D.5.b**			
See NOI Sections Below	64	Part I.D.5.b.(i) The permittee must develop, revise, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the MS4. The program must ensure that controls are in place that would prevent or minimize water quality impacts. Permittees previously covered under NMS000101 or NMR040000 must continue existing programs, updating as necessary, to comply with the requirements of this permit. (Note: Highway Departments and Flood Control Authorities may only apply the post-construction stormwater management program to the permittee's own construction projects).	Part I.D.5.b.(i) - All AMAFCA projects are regional flood control or water quality projects. AMAFCA does not have jurisdiction over private or public (non-AMAFCA) development or redevelopment projects - this responsibility lies with COA, NMDOT, or Bernalillo County. AMAFCA facilities receive stormwater after it flows through new development and redevelopment. As a result, some permit activities in this section do not apply to AMAFCA. AMAFCA's routine operation & maintenance (O&M) activities address post-construction stormwater management at all AMAFCA facilities.	• Coordinate O&M activities with AMAFCA's Stormwater Quality Engineer, Project Manager, Development Review Engineer, Drainage Engineer, GIS Manager, Field Engineer, and Executive Engineer.	**Met FY 2024 Goal.** •AMAFCA O&M activities continued to be discussed and coordinated weekly in the AMAFCA staff meeting.
2.1	65	Development of strategies as required in Part I.D.5.b.(ii).(a). Strategies which include a combination of structural and/or non-structural BMPs to control pollutants in stormwater runoff.	Part I.D.5.b.(ii).(a) - All AMAFCA projects are regional flood control or stormwater quality projects - functioning as BMPs. AMAFCA will continue to include both structural and non-structural BMPs to control pollutants in stormwater runoff from AMAFCA owned facilities. AMAFCA may continue to coordinate with watershed MS4s and other entities within its jurisdiction to discuss areas requiring drainage and water quality improvements, project priorities, and multi-agency funding opportunities. As part of the development of the AMAFCA Project Schedule, a system review will be completed. AMAFCA will publish projects, including schedule and cost sharing, in the biennial AMAFCA Project Schedule. AMAFCA will continue development of this program element in its MS4 Strategies and Procedures Notebook for this Program.	• AMAFCA will continue to include both structural and non-structural BMPs to control pollutants in stormwater runoff from AMAFCA owned facilities. • AMAFCA may coordinate with watershed MS4s as well as other entities within its jurisdiction during project review, complete a system review, and publish projects, including schedule and cost sharing, in the biennial AMAFCA Project Schedule. • AMAFCA will continue development of this program element in its MS4 Strategies and Procedures Notebook.	**Met FY 2024 Goals.** • AMAFCA continued to include both structural and non-structural BMPs to control pollutants in stormwater runoff from AMAFCA owned facilities. In addition, several structural BMPs have been constructed under the Agency and Area-Wide (A&AW) contract and Miscellaneous contract maintenance activities during the Permit term. A complete list of A&AW by FY can be provided upon request. • AMAFCA continued to work with the watershed MS4s, cooperative MS4 TAG, and other agencies to discuss and help develop strategies, where feasible, to contractually require and/or suggest BMPs on projects that AMAFCA may take over for operation and maintenance after construction. • In FY 2024, AMAFCA completed the 2025 Project Schedule which covers a six-year planning horizon (2025-2030). Coordination meetings with watershed MS4s, TAG members, and other entities occurred during the development of this Project Schedule and included the ranking of stormwater quality projects. • AMAFCA continued to be involved in the MS4 TAG group, facilitating cooperation and coordination with other MS4s in the Middle Rio Grande. • In FY 2024, the MRGSQT members continued discussions and agency implementation related to the Post-Construction Stormwater Quality Design Standards in the Middle Rio Grande Watershed study.
2.2	66	Development of an ordinance or other regulatory mechanism as required in Part I.D.5.b.(ii).(b).	Part I.D.5.b.(ii).(b) - It is not within AMAFCA's jurisdiction to enact ordinances or other legal authority mechanisms. AMAFCA is unable to develop, implement, or enforce any ordinances or regulatory mechanisms required in this section.	• AMAFCA will continue to work with the cooperative MS4 TAG and other agencies to discuss and help develop regulatory mechanisms.	**Met FY 2024 Goal.** • AMAFCA continued to be involved in the MS4 TAG, facilitating cooperation and coordination with other MS4s in the Middle Rio Grande.

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2.3	67	Implementation and enforcement, via the ordinance or other regulatory mechanism of site design standards as required in Part I.D.5.b.(ii).(b).	Part I.D.5.b.(ii).(b) - It is not within AMAFCA's jurisdiction to enact ordinances or other legal authority mechanisms. AMAFCA is unable to develop, implement, or enforce any ordinances or regulatory mechanisms required in this section.	• AMAFCA will continue to work with the cooperative MS4 TAG and other agencies to discuss and help develop regulatory mechanisms.	**Met FY 2024 Goal.** • AMAFCA continued to work with the MS4 TAG and other agencies to discuss and help develop strategies, where feasible, to contractually require post-construction BMPs on projects that AMAFCA will take over for operation and maintenance after construction.
2.4	68	Ensure appropriate implementation of post-construction structural controls as required in Part I.D.5.b.(ii).(c) and Part I.D.5.b.(ii).(d).	Part I.D.5.b.(ii).(c) - AMAFCA will continue to ensure the appropriate implementation of structural BMPs on AMAFCA owned projects through pre-construction design review (see Construction Site Stormwater Runoff Control Measure). For watershed cooperative elements, AMAFCA occasionally partners with other MS4s, such as the COA, UNM, and ExpoNM, on construction of structural BMPs. AMAFCA is also a member of the MS4 TAG. Part I.D.5.b.(ii).(d) - AMAFCA will conduct inspections at the beginning and end of construction, (see Construction Site Stormwater Runoff Control Measure), conduct Post-Construction inspection and maintenance (AMAFCA's routine O&M activities address post-construction stormwater management), and enforce contractual penalty provisions for noncompliance by the Operator during construction. These items will be discussed periodically with the AMAFCA Field Engineer.	• AMAFCA will ensure the appropriate implementation of structural BMPs on AMAFCA owned projects through pre-construction design review (see Construction Site Stormwater Runoff Control Measure). • AMAFCA will continue to work with the watershed MS4s, TAG, and other agencies to discuss cooperative implementation of structural BMPs. • AMAFCA will conduct inspections as required during construction, (see Construction Site Stormwater Runoff Control Measure). • AMAFCA's Post-Construction inspections and maintenance will be through the AMAFCA O&M activities (see Pollution Prevention /Good Housekeeping Control Measure).	**Met FY 2024 Goals.** • See the Construction Site Stormwater Runoff Control Measure for pre-construction design review and inspections during construction. • AMAFCA continued to be involved in the MS4 TAG, facilitating cooperation and coordination with other MS4s in the Middle Rio Grande. • See the Pollution Prevention/Good Housekeeping Control Measure for post-construction inspections and maintenance, which are part of AMAFCA O&M activities. These inspections and maintenance continued to be discussed in the AMAFCA staff meetings. • In FY 2024, the MRGSQT members continued discussions and agency implementation related to the Post-Construction Stormwater Quality Design Standards in the Middle Rio Grande Watershed study.
2.5	69	Develop procedures as required in Part I.D.5.b.(ii).(e) - Procedure to develop and implement an educational program for project developers regarding designs to control water quality effects from stormwater, and a training program for plan review staff regarding stormwater standards, site design techniques and controls, including training regarding GI/LID/ Sustainability practices. Training may be developed independently or obtained from outside resources; Part I.D.5.b.(ii).(f) - Procedures for site inspection and enforcement to ensure proper long-term operation, maintenance, and repair of storm water management practices that are put into place as part of construction projects/activities; Part I.D.5.b.(ii).(g) - Procedures to control the discharge of pollutants related to commercial application and distribution of pesticides, herbicides, and fertilizers; and Part I.D.5.b.(ii). (h) - Procedure or system to review and update, as necessary, the existing program to ensure that storm water controls or management practices for new development and redevelopment projects/ activities continue to meet the requirements and objectives of the permit.	Part I.D.5.b.(ii).(e) - As a cooperative program, AMAFCA contributes to the Mid Rio Grande Stormwater Quality Team (MRGSQT), which includes training on GI/LID and sustainability practices. This is achieved by sponsoring conferences featuring GI/LID lectures, such as the annual Land and Water Summit. Reporting on the MRGSQT activities will be part of Public Education and Outreach on Stormwater Impacts Control Measure. Part I.D.5.b.(ii).(f) - AMAFCA is responsible for all long term inspection, operation, maintenance, and repair of its own facilities. AMAFCA will perform inspections, maintenance and repair in accordance with the established procedures in the "AMAFCA O&M Manual for Dams", the "AMAFCA O&M Repair Replacement and Rehabilitation Manual", and Project O&M Plan (Plan No. 7). This is covered in the Pollution Prevention/Good Housekeeping Control Measure. Part I.D.5.b.(ii).(g) - AMAFCA will only allow licensed staff or professionally licensed contractors to apply herbicides and pesticides within AMAFCA rights-of-way (AMAFCA does not apply fertilizers in its operations). This is covered in the Pollution Prevention/Good Housekeeping Control Measure. Part I.D.5.b.(ii).(h) - AMAFCA's routine O&M activities address post-construction stormwater management at all AMAFCA facilities.	• As a cooperative program, AMAFCA contributes to the MRGSQT. AMAFCA's educational efforts are included in the MRGSQT Outcomes Report which will summarize, if applicable, the activities where educational materials were dispersed and shared with project developers. This report is available upon request and AMAFCA plans to share this document on its website. • AMAFCA will provide MS4 training for its staff and invite other agencies responsible for construction projects. AMAFCA may participate in other agencies' MS4 trainings. • AMAFCA's Post-Construction inspections and maintenance are conducted following the AMAFCA O&M procedures (see Pollution Prevention /Good Housekeeping Control Measure). • AMAFCA will only allow licensed staff or professionally licensed contractors to apply herbicides and pesticides within AMAFCA rights-of-way (AMAFCA does not apply fertilizers in its operations). • AMAFCA will compile and document applicable program procedures in its MS4 Strategies and Procedures Notebook.	**Met FY 2024 Goals.** • AMAFCA only allows certified staff or professionally licensed contractors to apply herbicides and pesticides within AMAFCA right-of-way. This is also discussed in Pollution Prevention/Good Housekeeping and Public Education and Outreach Control Measures of this Annual Report.

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
2.6	70	Coordinate internally with all departments and boards with jurisdiction over the planning, review, permitting, or approval of public and private construction projects/ activities within the permit area as required in Part I.D.5.b.(iii) related to developed hydrology mimicking pre-development hydrology.	Part I.D.5.b.(iii) - AMAFCA does not have any internal departments or boards with jurisdiction. AMAFCA will coordinate with all entities as necessary. AMAFCA will coordinate internally and, to the extent possible and applicable, design AMAFCA facilities for compliance with developed hydrology mimicking pre-development hydrology. For AMAFCA led DMPs, Sediment Studies, Facility Plans, and WQ studies, AMAFCA will require, to the extent possible and applicable, that developed hydrology mimic pre-development hydrology. The NM OSE regulates the water delivery to the Rio Grande in order to meet water delivery requirements to Texas; therefore, AMAFCA's objective is to design its facilities to drain within 96 hours per the OSE requirements.	• AMAFCA will coordinate internally on studies and projects for MS4 Permit compliance with developed hydrology mimicking pre-development hydrology. AMAFCA will abide by the NM OSE rule and plan/design its facilities to drain within 96 hours per the OSE requirements. • AMAFCA will continue to follow the standard practice for Drainage Master Plans (DMPs) options development and consider two options for developed condition hydrology flowrates and volumes: 1) determine pond locations and volumes required on a sub-basin by sub-basin basis to mimic pre-development hydrology and, 2) determine pond locations and volumes required on a regional approach basis to mimic pre-development hydrology.	**Met FY 2024 Goals.** • AMAFCA continued to coordinate internally related to developed hydrology mimicking pre-development hydrology. All active AMAFCA Drainage Management and Water Quality Plans considered the MS4 Permit stormwater quality design standard defined in Part I.D.5.b.(ii)(b). • In FY 2024, the MRGSQT members continued discussions and agency implementation related to the Post-Construction Stormwater Quality Design Standards in the Middle Rio Grande Watershed study.
2.7	71	As required in Part I.D.5.b.(iv), the permittee must assess all existing codes, ordinances, planning documents and other applicable regulations, for impediments to the use of GI/LID/Sustainable practices.	Part I.D.5.b.(iv) - AMAFCA does not have jurisdictional authority pertaining to codes, ordinances, planning documents and other applicable regulations, for impediments to the use of GI/LID/Sustainable practices. AMAFCA will provide information, as requested, and coordinate with other watershed MS4s for assessment of existing codes, ordinances, planning documents and other applicable regulations for impediments to the use of GI/LID/Sustainable practices. The NM OSE regulates the water delivery to the Rio Grande in order to meet water delivery requirements to Texas; therefore, AMAFCA's objective is to design its facilities to drain within 96 hours per the OSE requirements.	• AMAFCA will provide information, as requested, and coordinate and cooperate with other watershed MS4s for the assessment of existing codes, ordinances, planning documents, and other applicable regulations for impediments to the use of GI/LID/Sustainable practices.	**Met FY 2024 Goal.** • This Permit activity was conducted cooperatively with Bernalillo County in FY 2018. FY 2024 continued to focus on understanding the impediments and beginning discussions to address the findings. • AMAFCA participated as a review partner for the Bernalillo County's updated technical standards, which includes the Green Stormwater Infrastructure/Low Impact Development (GSI/LID) Standards document. During FY 2024, Bernalillo County continued the process of updating its Technical Standards. Integration of GSI/LID into the Technical Standards and review process was a key focus of this update. As a part of this update, the County developed a stand-alone GSI/LID Standards document that identifies GSI/LID best management practices (BMPs) that are arid-appropriate and support Bernalillo County's Stormwater Quality Ordinance, representing an increased commitment from the County toward the goal of broad implementation of GSI/LID in the MRG watershed.
2.8	72	As required in Part I.D.5.b.(iv), develop and submit a report of the assessment findings on GI/LID/Sustainable practices.	Part I.D.5.b.(iv) - AMAFCA does not have jurisdictional authority pertaining to codes, ordinances, planning documents and other applicable regulations, for impediments to the use of GI/LID/Sustainable practices. However, to the extent permitted by law, AMAFCA will comply with the requirements of this section. AMAFCA will provide information, as requested, and coordinate with other watershed MS4s for assessment of existing codes, ordinances, planning documents and other applicable regulations for impediments to the use of GI/LID/Sustainable practices.	**Met Permit Requirement - Activity is Complete. No additional measurable goals.** • AMAFCA provided information, as requested, and coordinated and cooperated with other watershed MS4s for the development of a report of the assessment of finding from Part I.D.5.b.(iv). This was completed in March 2017 and was submitted to the EPA with the Annual Report, due Dec. 1, 2017.	**No Goals Required for FY 2024.** **Met Permit Requirement - Activity is Complete.** • This Permit activity was conducted cooperatively with Bernalillo County in FY 2017 and this activity is complete.

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
Not Included in NOI	73	As required in Part I.D.5.b.(v), Alternative compliance for infeasibility due to Site Constraints. Part I.D.5.b.(v).(a) - Infeasibility to manage the design standard volume specified in Part I.D.5.b.(ii).(b), or a portion of the design standard volume, onsite may result from site constraints including: A. too small a lot outside of the building footprint to create the necessary infiltrative capacity even with amended soils; B. soil instability as documented by a thorough geotechnical analysis; C. a site use that is inconsistent with capture and reuse of storm water; D. other physical conditions; or, E. to comply with applicable requirements for on-site flood control structures leaves insufficient area to meet the standard. Part I.D.5.b.(v).(b) - A determination that it is infeasible to manage the design standard volume specified in Part I.D.5.b.(ii).(b), or a portion of the design standard volume, on site may not be based solely on the difficulty or cost of implementing onsite control measures, but must include multiple criteria that rule out an adequate combination of the practices set forth in Part I.D.5.b.(v).	Part I.D.5.b.(v).(a) and (b) - As previously mentioned, all AMAFCA projects are regional flood control or stormwater quality projects that function as BMPs, and AMAFCA does not have jurisdictional authority pertaining to new development or redevelopment activities. Therefore, AMAFCA itself will likely not have requirements for alternative compliance regarding infeasibility to manage the post construction design standard volume. However, AMAFCA's regional facilities may offer other MS4s an option for alternative compliance to manage the post-construction stormwater quality volume. The on-site stormwater management decisions and feasibility will typically be determined during development by other agencies (COA, Bernalillo County, etc.). AMAFCA will continue coordination with and support these agency decisions, as appropriate. AMAFCA's involvement will typically occur during the development review or stake-holder review.	• AMAFCA will continue to coordinate with and support these agency decisions, as appropriate, related to on-site stormwater management decisions and feasibility. AMAFCA's involvement will typically occur during the development review or stake-holder review. AMAFCA's regional facilities may offer other MS4s an option for alternative compliance to manage the post-construction stormwater quality volume.	**Met FY 2024 Goal.** • AMAFCA coordinated with and supported community agency decisions, as appropriate, related to on-site stormwater management decisions and feasibility. AMAFCA's involvement typically occurred during the development review or stake-holder review.
Not Included in NOI	74	Part I.D.5.b.(v) continued - Part I.D.5.b.(v).(c) - This permit does not prevent imposition of more stringent requirements related to flood control. Where both the permittee's site design standard ordinance or policy and local flood control requirements on site cannot be met due to site conditions, the standard may be met through a combination of on-site and off-site controls. Part I.D.5.b.(v).(d) - Where applicable New Mexico water law limits the ability to fully manage the design standard volume on site, measures to minimize increased discharge consistent with requirements under New Mexico water law must still be implemented. Part I.D.5.b.(v).(e) - In instances where an alternative to compliance with the standard on-site is chosen, technical justification as to the infeasibility of on-site management of the entire design standard volume, or a portion of the design standard volume, is required to be documented by submitting to the permittee a site-specific hydrologic and/or design analysis conducted and endorsed by a registered professional engineer, geologist, architect, and/or landscape architect.	Part I.D.5.b.(v).(c) - AMAFCA's primary function is to provide regional flood control; this includes stormwater quality projects that function as BMPs. Flood control requirements will continue to be required. Part I.D.5.b.(v).(d) - The NM ISC/OSE regulates the water delivery to the Rio Grande in order to meet water delivery requirements to Texas; therefore, AMAFCA's objective is to design its facilities to drain within 96 hours per the OSE requirements. Using AMAFCA facilities for off-site mitigation would assure the community that New Mexico water law limits are being met at the AMAFCA facilities. Part I.D.5.b.(v).(e) - Alternatives to compliance for on-site requirements are discussed below. AMAFCA itself will likely not have requirements for alternative compliance regarding infeasibility to manage the post construction stormwater quality volume. However, AMAFCA's regional facilities may offer other MS4s an option for alternative compliance to manage the post construction stormwater quality volume.	• AMAFCA will continue its primary function is to provide regional flood control; this includes stormwater quality projects that function as BMPs. Flood control requirements will continue to be required. • AMAFCA will abide by the NM OSE rule and plan/design its facilities to drain within 96 hours per the ISC/OSE guidance document. Using AMAFCA facilities for off-site mitigation would assure the community that New Mexico water law limits are being met at the AMAFCA facilities. • AMAFCA's regional facilities may offer other MS4s an option for alternative compliance to manage the post construction stormwater quality volume.	**Met FY 2023 Goals.** • AMAFCA continued its primary function to provide regional flood control; this included stormwater quality projects that function as BMPs. Flood control requirements will continue to be required. • AMAFCA abided by the NM ISC/OSE rule and plan/design its facilities to drain within 96 hours per the ISC/OSE requirements and guidelines. • AMAFCA continued discussions with Middle Rio Grande MS4 permittees regarding using AMAFCA's regional facilities as an option for alternative compliance to manage the post construction stormwater quality volume.

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
Not Included in NOI	75	As required in Part I.D.5.b.(v).(f), when a Permittee determines a project applicant has demonstrated infeasibility due to site constraints specified in Part I.D.5.b.(v) to manage the design standard volume specified in Part I.D.5.b.(ii).(b) or a portion of the design standard volume on-site, the Permittee shall require one of the following mitigation options: A. The off-site mitigation option only applies to redevelopment sites and cannot be applied to new development. Management of the standard volume, or a portion of the volume, may be implemented at another location within the MS4 area, approved by the permittee. The permittee shall identify priority areas within the MS4 in which mitigation projects can be completed and shall determine who will be responsible for long-term maintenance on off-site mitigation projects. B. Implementation of a project that has been determined to provide an opportunity to replenish regional ground water supplies at an offsite location. C. Payment in lieu may be made to the permittee, who will apply the funds to a public storm water project. MS4s shall maintain a publicly accessible database of approved projects for which these payments may be used.	Part I.D.5.b.(v).(f) - AMAFCA may continue to coordinate with watershed MS4s and other entities within its jurisdiction to discuss areas requiring drainage and water quality improvements, project priorities, and multi-agency funding opportunities. Off-site stormwater quality mitigation projects will be included in these discussions. As part of the development of the AMAFCA Project Schedule, a system review will be completed. AMAFCA will publish projects, including schedule and cost sharing, in the biennial AMAFCA Project Schedule. AMAFCA, as part of the MS4 TAG, has discussed with EPA Region 6 (verbally and in writing) the MS4 Permit language for this section. The MS4 TAG members and EPA discussed how some of the terms/language of the Permit may limit the flexibility of the MS4s to allow off-site stormwater mitigation. The MS4s identified terms in the Permit which restrict the flexibility to achieve stormwater quality objectives by using alternate methods of compliance with post-construction permit requirements. The MS4 TAG provided this in writing to EPA on August 19, 2017 (letter from Dave Gatterman, SSCAFCA, "August 8, 2016 Meeting Follow-up"). This letter included scanned page 30 of Permit No. NMR04A000 to illustrate language changes the MS4 TAG think would allow the permittees to move forward and comply with both the Permit and state statute. Removing these limitations relative to post construction runoff will better allow the permittees flexibility to comply with New Mexico water law, protect the quality of the river, and not overly constrict development of our arid watershed. AMAFCA will continue discussions with EPA Region 6 regarding Permit language related to off-site stormwater mitigation.	• AMAFCA may coordinate with watershed MS4s as well as other entities during project review, complete a system review, and publish projects, including schedule and cost sharing, in the biennial AMAFCA Project Schedule. Off-site stormwater quality mitigation projects may be included in these discussions. • AMAFCA will continue discussions with EPA Region 6 regarding Permit language related to off-site stormwater mitigation. Removing these Permit limitations relative to post construction runoff will better allow the permittees flexibility to comply with New Mexico water law, protect the quality of the river, and not overly constrict development of our arid watershed.	**Met FY 2024 Goals.** • In FY 2024, AMAFCA completed the 2025 Project Schedule which covers a six-year planning horizon (2025-2030). Coordination meetings with watershed MS4s, TAG members, and other entities occurred during the development of this Project Schedule and included the ranking of stormwater quality projects. • AMAFCA continued discussions with stakeholders regarding Permit language related to off-site stormwater quality mitigation. Utilizing the Permit opportunities relative to post construction runoff will better allow the permittees flexibility to comply with New Mexico water law, protect the quality of the river, and not overly constrict development of our arid watershed.
2.9	76	Estimation of the number of acres of IA and DCIA as required in Part I.D.5.b.(vi).	Part I.D.5.b.(vi) - AMAFCA will estimate the Impervious Area (IA) and Directly Connected Impervious Area (DCIA) within AMAFCA's jurisdiction and/or rights of way.	• AMAFCA will estimate the IA and DCIA within AMAFCA's jurisdiction and/or rights of way. AMAFCA will update this estimate, as appropriate, given development in the watersheds. This will be a cooperative effort with other watershed MS4s.	**Met FY 2024 Goal.** • This Permit activity was conducted cooperatively in FY 2024.

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
2.10	77	Inventory and priority ranking as required in Part I.D.5.b.(vii) for MS4-owned property and infrastructure (including public right-of-way) that may have the potential to be retrofitted with control measures designed to control the frequency, volume, and peak intensity of stormwater discharges to and from its MS4. The NM Office of the State Engineer (OSE) regulates the water delivery to the Rio Grande in order to meet water delivery requirements to Texas; therefore, AMAFCA's objective is to design its facilities to drain within 96 hours per the OSE requirements.	Part I.D.5.b.(vii) - AMAFCA will continue to keep an inventory and develop a priority ranking of AMAFCA owned properties and facilities that may have the potential for retrofitted control measures and stormwater quality facilities and BMPs. AMAFCA may continue to coordinate with watershed MS4s and other entities within its jurisdiction to discuss areas requiring drainage and water quality retrofits, project priorities, and multi-agency funding. AMAFCA will publish projects, including schedule and cost sharing, in the biennial AMAFCA Project Schedule. As part of the development of the AMAFCA Project Schedule, a system review will be completed. Internally, using the Project Schedule, water quality projects and water quality retrofit projects may be ranked and tabulated. AMAFCA may evaluate the existing BMPs based on their effectiveness and capacity in order to identify where additional BMPs are needed. AMAFCA is also a member of the cooperative MS4 TAG, facilitating cooperation and coordination with other watershed MS4s. AMAFCA will operate and maintain Leveloggers in major inlets into the NDC on AMAFCA ROW and analyze the data to assist in the priority ranking. AMAFCA will complete, as allowed, updated hydrologic analyses for the Rio Grande watersheds to assist with determining priority ranking.	• AMAFCA may continue to coordinate with watershed MS4s and other entities within its jurisdiction to discuss the areas requiring drainage and water quality retrofitting within the Middle Rio Grande Watershed, project priorities, and multi-agency funding contributions. • AMAFCA will publish the AMAFCA-funded projects, including the schedule and proposed cost-sharing, in the biennial AMAFCA Project Schedule. As part of the development of the AMAFCA Project Schedule, a system review will be completed. AMAFCA may utilize the Project Schedule, in part, to rank and tabulate water quality projects and water quality retrofit projects. • AMAFCA will continue membership and involvement in the cooperative MS4 TAG which will facilitate cooperation and coordination with other MS4s in the Middle Rio Grande. • AMAFCA will operate and maintain Leveloggers in major channel inlets into the NDC on AMAFCA ROW and analyze the data to assist with priority ranking. • AMAFCA will complete updated hydrologic analyses, utilizing the AMAFCA White Paper Methodology, for the NDC watersheds, to assist with determining priority ranking.	**Met FY 2024 Goals.** • In FY 2024, AMAFCA completed the 2025 Project Schedule which covers a six-year planning horizon (2025-2030). Coordination meetings with watershed MS4s, TAG members, and other entities occurred during the development of this Project Schedule and included the ranking of stormwater quality projects. • In FY 2024, AMAFCA discontinued operation and analysis from Leveloggers located at the channelized inlets to the NDC on AMAFCA ROW. This activity was removed during FY 2024 in conjunction with modifications to AMAFCA SWMP Rev. 6. The AMAFCA SWMP Rev. 7 was adopted on July 1, 2024. • In FY 2024, AMAFCA continued working on Drainage Management Plans (DMPs) and Water Quality Plans to plan for flood protection and water quality volumes.
2.11	78	Incorporate watershed protection elements into regular planning or policy documents as required in Part I.D.5.b.(viii). As applicable to each permittee's MS4 jurisdiction, policy and/or planning documents must include the following: Part I.D.5.b.(viii).(a) - A description of master planning and project planning procedures to control the discharge of pollutants to and from the MS4. Part I.D.5.b.(viii).(b) - Minimize the amount of impervious surfaces (roads, parking lots, roofs, etc.) within each watershed, by controlling the unnecessary creation, extension and widening of impervious parking lots, roads and associated development. Part I.D.5.b.(viii) (c) - Identify environmentally and ecologically sensitive areas that provide water quality benefits and serve critical watershed functions within the MS4 and ensure requirements to preserve, protect, create and/or restore these areas are developed and implemented during the plan and design phases of projects in these identified areas.	Part I.D.5.b.(viii).(a) - AMAFCA will continue to produce and publish the biennial AMAFCA Project Schedule for all regional drainage and water quality projects within AMAFCA's jurisdiction that will either be led or partly funded by AMAFCA. For the projects led by AMAFCA, watershed protection elements may be incorporated, when feasible, into drainage management plans, as appropriate, in order to identify watersheds which can be retrofitted with regional water quality facilities. Part I.D.5.b.(viii).(b) - This section is not applicable to AMAFCA's projects, which are regional flood control or water quality projects. Part I.D.5.b.(viii).(c) - During planning of AMAFCA projects, environmentally and ecologically sensitive areas that provide water quality benefits are considered.	• Produce and publish the AMAFCA Project Schedule for CY 2016 and every other year thereafter. • AMAFCA may coordinate with MS4s to provide input for project planning of infrastructure retrofitting. • For projects led by AMAFCA, watershed protection elements may be incorporated into Drainage Management Plans, as appropriate, in order to identify watersheds which potentially can be retrofitted with regional water quality facilities. • All AMAFCA projects will obtain USFWS, USACE, and/or pueblo consultation, if required.	**Met FY 2024 Goals.** • In FY 2024, AMAFCA completed the 2025 Project Schedule which covers a six-year planning horizon (2025-2030). Coordination meetings with watershed MS4s, TAG members, and other entities occurred during the development of this Project Schedule and included the ranking of stormwater quality projects. • In FY 2024, AMAFCA continued working on Drainage Management Plans (DMPs) and Water Quality Plans to plan for watershed flood protection and water quality volumes.

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
2.11	79	Continuation of incorporate watershed protection elements into regular planning or policy documents as required in Part I.D.5.b.(viii). Part I.D.5.b.(viii).(d) - Implement stormwater management practices that minimize water quality impacts to streams, including disconnecting direct discharges to surface waters from impervious surfaces such as parking lots. Part I.D.5.b.(viii).(e) - Implement stormwater management practices that protect and enhance groundwater recharge as allowed under the applicable water rights laws. Part I.D.5.b.(viii).(f) - Seek to avoid or prevent hydromodification of streams and other water bodies caused by development, including roads, highways, and bridges. Part I.D.5.b.(viii).(g) - Develop and implement policies to protect native soils, prevent topsoil stripping, and prevent compaction of soils. Part I.D.5.b.(viii).(h) - The program must be specifically tailored to address local community needs (e.g. protection to drinking water sources, reduction of water quality impacts) and must be designed to attempt to maintain pre-development runoff conditions.	Part I.D.5.b.(viii).(d) - This section is rarely applicable to AMAFCA's projects. In the arid southwest, direct discharges to surface waters are rare. Part I.D.5.b.(viii).(e) - The NM OSE regulates the water delivery to the Rio Grande in order to meet water delivery requirements to Texas; therefore, AMAFCA's objective is to design its facilities to drain within 96 hours per the OSE requirements. Part I.D.5.b.(viii).(f) - AMAFCA projects, to the extent feasible and as consistent with O&M of sediment removal, will continue to seek to avoid or prevent hydromodification of streams and other water bodies. Part I.D.5.b.(viii).(g) - AMAFCA projects and those in coordination with other MS4s, will, to the extent possible, protect native soils, prevent topsoil stripping, and prevent compaction of soils. Part I.D.5.b.(viii).(h) - AMAFCA does not have jurisdictional authority pertaining to development or redevelopment activities. However, through AMAFCA's involvement with the MRGSQT and TAG, AMAFCA will support programs tailored to address local community needs and that are designed to attempt to maintain pre-development runoff conditions.	• AMAFCA will develop written procedures that include applicable watershed protection elements in Part I.D.5.b.(viii).(f), (g) and (h) as required in the MS4 Permit and as applicable to AMAFCA. • AMAFCA will continue to contribute and participate in the MRGSQT, which supports programs tailored to address local community needs and are designed to attempt to maintain pre-development runoff conditions. • AMAFCA will complete updated hydrologic analyses, utilizing the AMAFCA White Paper Methodology, for the NDC watersheds, to assist with understanding options for maintaining pre-development runoff conditions.	**Met FY 2024 Goals.** • Many of these applicable Permit activities are being conducted cooperatively. • AMAFCA continued to contribute and participate in the MRGSQT, which supports programs tailored to address local community needs and are designed to attempt to maintain pre-development runoff conditions.
Not Included in NOI	80	Update the SWMP document and annual report as required in Part I.D.5.b.(ix) and Part I.D.5.b.(x). The permittee must update the SWMP as necessary to include a description of the mechanism(s) utilized to comply with the permit elements listed above as well as the citations/descriptions of design standards for structural and non-structural controls to control pollutants in runoff. The following information must be included in each Annual Report: Part I.D.5.b.(x).(a) - Include a summary and analysis of all maintenance, inspections and enforcement, and the number and frequency of inspections performed annually. Part I.D.5.b.(x).(b) - A cumulative listing of the annual modifications made to the Post-Construction Stormwater Management Program, and Part I.D.5.b.(x).(c) - According to the schedule presented in Table 3, the permittee must: A. Report the no. of MS4-owned properties and infrastructure that have been retrofitted with control measures designed to control the frequency, volume, and peak intensity of stormwater discharges. B. As required in Part I.D.5.b.(vi), report the tabulated results for IA & DCIA and its estimation methodology.	Part I.D.5.b.(ix) - AMAFCA will update the SWMP as necessary to comply with the permit elements listed above as well as the citations and descriptions of design standards for structural and non-structural controls to control pollutants in stormwater runoff, including discussion of the methodology used during design for estimating impacts to water quality and selecting structural and non-structural controls. Part I.D.5.b.(x).(a) - AMAFCA tracks all crew activity related to maintenance of all water quality structures. Part I.D.5.b.(x).(b) - AMAFCA does not have any development or redevelopment projects - all AMAFCA projects are regional flood control or water quality projects. AMAFCA will continue to maintain a cumulative listing of the annual modifications made to the Post-Construction Stormwater Management Program. Part I.D.5.b.(x).(c).A - AMAFCA will continue to maintain a list of properties and infrastructure within AMAFCA rights-of-way that have been retrofitted with control measures designed to control frequency, volume and peak intensity of stormwater discharges. Part I.D.5.b.(x).(c).B - AMAFCA will estimate the Impervious Area (IA) and Directly Connected Impervious Area (DCIA) within AMAFCA's jurisdiction and/or rights of way (refer to ID 76).	• AMAFCA will update the SWMP as necessary to comply with the permit elements listed above. • AMAFCA will continue to annually inspect and track all crew activity related to maintenance of all AMAFCA owned water quality structures. • AMAFCA will continue to maintain a cumulative listing of the annual modifications made to the Post-Construction Stormwater Management Program. • AMAFCA will continue to provide a cumulative list of AMAFCA's retrofit BMPs. AMAFCA will incorporate documentation by reference into the Annual Report and plans to document progress on the AMAFCA website. • AMAFCA will estimate the IA and DCIA within AMAFCA's jurisdiction and/or rights of way. AMAFCA will update this estimate, as appropriate, given development in the watersheds. This will be a cooperative effort with other watershed MS4s (refer to ID 76).	**Met FY 2024 Goals.** • AMAFCA conducted site inspections for 100% of the AMAFCA construction projects in accordance with this MS4 Permit in FY 2024. • Lists of MS4 program modifications and facility modifications/retrofits are available upon request.

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
2.12	81	Enhance the program to include the elements in Part I.D.5.b.(xi) and Part I.D.5.a.(xii). These include: Part I.D.5.b.(xi) - Use of stormwater educational materials; and Part I.D.5.b.(xii) - When choosing appropriate BMPs, the permittee may participate in locally-based watershed planning efforts, which attempt to involve a diverse group of stakeholders including interested citizens. and Part I.D.5.b.(xiii) - The permittee may incorporate the following elements in the Post-Construction Stormwater Management in New Development and Redevelopment program required in Part I.D.5.b.(ii)(b): (a) Provide requirements and standards to direct growth to identified areas to protect environmentally and ecologically sensitive areas such as floodplains and/or other areas with endangered species and historic properties concerns; (b) Include requirements to maintain and/or increase open space/buffers along sensitive water bodies, minimize impervious surfaces, and minimize disturbance of soils and vegetation; and (c) Encourage in fill development in higher density urban areas, and areas with existing storm sewer infrastructure.	Part I.D.5.b.(xi) - As part of the MRGSQT, AMAFCA will continue to use stormwater educational materials, either developed locally or provided by EPA, NMED environmental groups, public interest groups, trade organizations, and/or other MS4 as well as utilizing the MRGSQT. Part I.D.5.b.(xii) - AMAFCA may continue to participate in the watershed-planning efforts with other MS4s in order to publish the AMAFCA Project Schedule biennially. AMAFCA will continue membership and involvement in the cooperative MS4 TAG, which will facilitate cooperation and coordination with other MS4s in the Middle Rio Grande watershed. Part I.D.5.b.(xiii) - These program enhancements are outside the AMAFCA's authority and mission. However, AMAFCA will cooperate with other watershed MS4s, as applicable, to support this program enhancement.	• AMAFCA will continue to contribute and participate in the MRGSQT. The MRGSQT Outcomes Report will summarize the activities where educational materials were dispersed and shared with the public. This report is available upon request and AMAFCA plans to share this document on its website. • AMAFCA may coordinate with MS4s for project planning of infrastructure retrofitting. AMAFCA will continue to produce and publish the AMAFCA Project Schedule for CY 2016 and every other year thereafter. • AMAFCA will continue membership and involvement in the cooperative MS4 Technical Advisory Group (MS4 TAG) which will facilitate cooperation and coordination with other MS4s in the Middle Rio Grande.	**Met FY 2024 Goals.** • AMAFCA continued to contribute and participate in the MRGSQT, which supports post-construction education and outreach programs. The Outcomes Report is contained in the Program Summaries section of the Annual Report. • In FY 2024, AMAFCA completed the 2025 Project Schedule which covers a six-year planning horizon (2025-2030). Coordination meetings with watershed MS4s, TAG members, and other entities occurred during the development of this Project Schedule and included the ranking of stormwater quality projects. • AMAFCA continued to be involved in the MS4 TAG group, facilitating cooperation and coordination with other MS4s in the Middle Rio Grande. • AMAFCA participated as a review partner for the Bernalillo County's updated technical standards, which includes the Green Stormwater Infrastructure/Low Impact Development (GSI/LID) Standards document. During 2024, Bernalillo County completed updating its Technical Standards. Integration of GSI/LID into the Technical Standards and review process was a key focus of this update. As a part of this update, the County developed a stand-alone GSI/LID Standards document that identifies GSI/LID BMPs that are arid-appropriate and support Bernalillo County's Stormwater Quality Ordinance, representing an increased commitment from the County toward the goal of broad implementation of GSI/LID in the MRG watershed.
2.13	82	Item from MS4 Permit NOI. Describe other proposed activities to address the Post-Construction Stormwater Management in New Development and Redevelopment Measure.	Because AMAFCA is a flood control authority, the legal authority and jurisdiction granted to it by the State of New Mexico is limited. AMAFCA has begun requiring, and will continue to require, MS4 permit elements into construction contracts.	• AMAFCA will continue, as appropriate, to insert MS4 Permit elements into construction contracts to provide AMAFCA with a contractual mechanism for MS4 elements.	**Met FY 2024 Goals.** • AMAFCA continued to, as appropriate, insert MS4 Permit elements into construction contracts to provide AMAFCA with a contractual mechanism for MS4 elements.

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
	83	**TABLE 4: Pollution Prevention/Good Housekeeping for Municipal/Co-permittee Operations - Part I.D.5.c**			
3.1	84	Develop or update the Pollution Prevention/Good Housekeeping program to include the elements in Part I.D.5.c.(i). Elements include: Part I.D.5.c.(i).(a) - Employee training program to incorporate pollution prevention and good housekeeping, including a tracking procedure; Part I.D.5.c.(i).(b) - O&M activities, schedules, and long term inspections procedures for structural and non-structural stormwater controls; Part I.D.5.c.(i).(c) - Controls for reducing or eliminating the discharge of pollutants from AMAFCA maintenance and storage yards and shop; Part I.D.5.c.(i).(d) - Procedures for properly disposing of waste removed from separate storm sewers and facilities listed in Part I.D.5.c.(i).(c) (such as dredged spoil, accumulated sediments, floatables, and other debris); Part I.D.5.c.(i).(e) - Procedures to ensure that new flood management projects assess the impacts on water quality and examine existing projects for incorporating additional water quality protection devices or practices .	Part I.D.5.c.(i) - AMAFCA will continue its Pollution Prevention/Good Housekeeping Program. Part I.D.5.c.(i).(a) - AMAFCA will continue employee training to incorporate pollution prevention and good housekeeping; Part I.D.5.c.(i).(b) - AMAFCA will adhere to its current O&M and Safety procedures, which include employee training for maintenance of AMAFCA flood control and water quality facilities and BMPs. Part I.D.5.c.(i).(c) - AMAFCA will implement and maintain controls for reducing the discharge of pollutants from AMAFCA maintenance and storage yards and shop; Part I.D.5.c.(i).(d) - AMAFCA will develop procedures, where appropriate, for properly disposing of waste removed from AMAFCA facilities (sediment, floatables, and other debris); Part I.D.5.c.(i).(e) - AMAFCA ensures that new projects will assess the impacts on water quality and existing projects will be examined for retrofit opportunities as part of AMAFCA's Post Construction Control Measures.	• AMAFCA will document training provided to its employees & include pollution prevention and good housekeeping into training, as needed. • AMAFCA encourages that crew members are trained in spill prevention & control, as well as truck fueling activities during the Permit term. • AMAFCA will adhere to its current O&M and Safety Procedures. • In the Annual Report, AMAFCA will consider projected costs for the operation and maintenance of its stormwater quality facilities. • AMAFCA will continue development of this program element in its MS4 Strategies and Procedures Notebook. This will address stormwater controls for AMAFCA's yard and standard operating procedures, as applicable, for disposal activities. • AMAFCA will review new projects to assess the impacts on water quality and will examine existing projects for retrofit opportunities as part of AMAFCA's Post Construction Control Measure.	**Met FY 2024 Goals.** • In FY 2024, stormwater continued to be a topic at the staff and crew meetings, including discussions related to pollution prevention and good housekeeping. • Training records for AMAFCA staff & crew are available upon request. • In FY 2024, AMAFCA adhered to its current O&M and Safety Procedures. • The FY 2024 annual cost for maintenance of its stormwater quality facilities is available upon request. • Refer to AMAFCA's Post Construction Control Measure in this Annual Report for additional information on new and retrofit project assessments for impacts on water quality. • In FY 2024, AMAFCA completed the 2025 Project Schedule which covers a six-year planning horizon (2025-2030). Coordination meetings with watershed MS4s, TAG members, and other entities occurred during the development of this Project Schedule and included the ranking of stormwater quality projects.
3.2	85	The program will include the elements in Part I.D.5.c.(ii). These include: Part I.D.5.c.(ii).(a) - Develop or update the existing list of all stormwater quality facilities by drainage basin, including location and description;	Part I.D.5.c.(ii).(a) - As part of the Program, AMAFCA will continue to up-date a map of all stormwater quality facilities by drainage basin, including location and description.	• AMAFCA will continue to up-date a map of all AMAFCA stormwater quality facilities by drainage basin, including location and description.	**Met FY 2024 Goal.** • AMAFCA's crew tracking system and database lists each of its stormwater quality facilities by drainage basin. These facilities are also shown on AMAFCA Maintenance Map, available online: https://amafca.org/gis-maps-data/
3.2	86	Part I.D.5.c.(ii).(b) - Develop or modify existing operational manual for de-icing activities addressing alternate materials and methods to control impacts to stormwater quality;	Part I.D.5.c.(ii).(b) - N/A - AMAFCA only has jurisdiction to maintain its facilities; AMAFCA does not engage in the following: de-icing, roadway debris control, street sweeping, or roadway pollutant removal.	N/A	N/A
3.2 & 3.4	87	Part I.D.5.c.(ii).(c) - Develop or modify existing program to control pollution in stormwater runoff from equipment and vehicle maintenance yards and maintenance center operations located within the MS4;	Part I.D.5.c.(ii).(c) - For compliance with this section of the MS4 Permit, AMAFCA's focus is to evaluate and modify, where necessary, the existing program to control pollution in stormwater runoff from AMAFCA's equipment and vehicle maintenance yard and satellite facilities.	• AMAFCA will continue to implement and maintain the recommended administrative and structural BMPs, as appropriate, from the Good Housekeeping Inspection Reports for AMAFCA facilities. • AMAFCA will continue development of this program element in its MS4 Strategies and Procedures Notebook.	**Met FY 2024 Goals.** • AMAFCA continued to review the Good Housekeeping Assessments for AMAFCA facilities.
3.2	88	Part I.D.5.c.(ii).(d) - Develop or modify existing street sweeping program. Assess possible benefits from changing frequency or timing of sweeping activities or utilizing different equipment for sweeping activities;	Part I.D.5.c.(ii).(d) - N/A - AMAFCA only has jurisdiction to maintain its facilities; AMAFCA does not engage in the following: de-icing, roadway debris control, street sweeping, or roadway pollutant removal.	N/A	N/A

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
3.2	89	Part I.D.5.c.(ii).(e) - A description of procedures used by permittees to target roadway areas most likely to contribute pollutants to and from the MS4 (i.e., runoff discharges directly to sensitive receiving water, roadway receives majority of de-icing material, roadway receives excess litter, roadway receives greater loads of oil and grease);	Part I.D.5.c.(ii).(e) - AMAFCA only has jurisdiction to maintain its facilities; AMAFCA does not engage in the following: de-icing, roadway debris control, street sweeping, or roadway pollutant removal. AMAFCA will continue coordination, as applicable, with other MS4s in the watershed related to illicit discharge detection and elimination from roadways - refer to the Illicit Discharges and Improper Disposal Control Measure.	N/A	N/A
3.2	90	Part I.D.5.c.(ii).(f) - Develop or revise existing standard operating procedures for collection of used motor vehicle fluids (at a minimum oil and antifreeze) and toxics (including paint, solvents, fertilizers, pesticides, herbicides, and other hazardous materials) used in permittee operations or discarded in the MS4, for recycle, reuse, or proper disposal.	Part I.D.5.c.(ii).(f) - For compliance with this section of the MS4 Permit, AMAFCA's focus is to evaluate and modify, where necessary, the existing program to control pollution in stormwater runoff from the equipment and vehicle maintenance yard.	• AMAFCA will maintain the existing program to control polluted stormwater runoff from its equipment and maintenance yard. • AMAFCA will continue to implement and maintain the recommended BMPs, as appropriate, from the Good Housekeeping Inspection Report for AMAFCA facilities. • AMAFCA will continue development of this program element in its MS4 Strategies and Procedures Notebook.	**Met FY 2024 Goals.** • AMAFCA continued the existing program to control pollutants to stormwater runoff from its equipment and maintenance yard. • AMAFCA coordinated with local landfills for appropriate testing requirements for material disposal as a result of maintaining agency equipment, as needed. • AMAFCA continued to review the Good Housekeeping Assessments for AMAFCA facilities.
3.2	91	Part I.D.5.c.(ii).(g) - Standard operating procedure for disposal of accumulated sediments, floatables, and debris;	Part I.D.5.c.(ii).(g) - AMAFCA performs waste disposal for sediment, floatables, and other debris in accordance with the "AMAFCA Operations and Maintenance Manual for Dams" and "AMAFCA Operation and Maintenance Repair Replacement and Rehabilitation Manual" (OMRRR). As a cooperative program, AMAFCA is a participant in an OMRRR with Bernalillo County, the MRGCD, and the Bureau of Reclamation related to facilities that are connected to MRGCD ditches (primarily in the SW Valley of Albuquerque).	• Continue to perform all waste disposal for sediment, floatables, and other debris in accordance with the operation and maintenance manuals and direct vendor contractors to collect and dispose of trash, floatables, and debris. • AMAFCA will develop standard operating procedures, as applicable, for these disposal activities and include them in the program's MS4 Strategies and Procedures Notebook section. • AMAFCA will continue to participate, as appropriate, in the Operation Maintenance Repair, Replacement, and Rehabilitation (OMRRR) - Southwest Valley Flood Reduction Project cooperative program with MRGCD, Bernalillo County, and Bureau of Reclamation.	**Met FY 2024 Goals.** • AMAFCA continued to perform all waste disposal for sediment, floatables and other debris in accordance with the O&M manuals and direct vendor contractors to collect and dispose of trash, floatables, and debris. • AMAFCA continued to follow standard operating procedures, as applicable. • AMAFCA coordinated with local landfills for appropriate testing requirements for material disposal as a result of maintaining agency equipment, as needed. • AMAFCA continued to participate in the OMRRR - cooperative program with MRGCD, Bernalillo County, and Bureau of Reclamation.
3.2	92	Part I.D.5.c.(ii).(h) - litter source control program, include targeted public awareness campaign;	Part I.D.5.c.(ii).(h) - Through involvement in the MRGSQT, AMAFCA will continue to collaborate with the MS4 permittees to improve upon the existing litter source control program, including a targeted public awareness campaign.	• AMAFCA will continue its involvement with and financial support of the MRGSQT. • AMAFCA will continue to collaborate with the MS4 permittees to improve upon the existing litter source control program. • The MRGSQT Outcomes Report is available upon request and AMAFCA plans to share this document on its website.	**Met FY 2024 Goals.** • AMAFCA continued to contribute and participate in the MRGSQT, which supports litter source control public awareness programs. The MRGSQT Outcomes Report is contained in the Program Summaries section of the Annual Report. A summary of trash removed from all AMAFCA facilities is provided in a Program Summary and information related to each AMAFCA facility is available upon request.

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
3.2	93	Part I.D.5.c.(ii).(i) - Develop or review and revise, as necessary, the criteria, procedures and schedule to evaluate existing flood control devices, structures and drainage ways to assess the potential of retrofitting to provide additional pollutant removal from stormwater. Implement routine review to ensure new and/or innovative practices are implemented where applicable.	Part I.D.5.c.(ii).(i) - AMAFCA may continue to coordinate with watershed MS4s and other entities within its jurisdiction to discuss areas requiring drainage and water quality retrofits, project priorities, and multi-agency funding. AMAFCA will publish projects, including schedule and cost sharing, in the biennial AMAFCA Project Schedule. Operation and Maintenance procedures, inspections, repairs, and retrofits are evaluated through the annual cooperative Agency and Area Wide and Miscellaneous contracts.	• AMAFCA may continue to coordinate with watershed MS4s and other entities within its jurisdiction to discuss the areas requiring drainage and water quality retrofitting within the Middle Rio Grande Watershed, project priorities, and multi-agency funding contributions. AMAFCA will continue to produce and publish the biennial AMAFCA Project Schedule, which includes projects for retrofitting existing flood control devices, structures and drainage ways to provide additional pollutant removal from stormwater. • AMAFCA will continue to participate in the cooperative Agency and Area Wide contract and utilize the Miscellaneous contract to address rehabilitation, repair, and retrofit activities for AMAFCA structures.	**Met FY 2024 Goals.** • In FY 2024, AMAFCA completed the 2025 Project Schedule which covers a six-year planning horizon (2025-2030). Coordination meetings with watershed MS4s, TAG members, and other entities occurred during the development of this Project Schedule and included the ranking of stormwater quality projects. • AMAFCA continued to utilize the Agency and Area Wide and Miscellaneous contracts to address rehabilitation, repair, and retrofit activities for AMAFCA structures and cooperative maintenance projects.
3.2	94	Part I.D.5.c.(ii).(j) -Enhance inspection and maintenance programs by coordinating with maintenance personnel to ensure that a target number of structures per basin are inspected and maintained per quarter;	Part I.D.5.c.(ii).(j) - AMAFCA has in place a well-defined and implemented routine inspection and O&M program that includes both formal and informal inspections and maintenance schedules. This program will be enhanced to ensure a target number of structures per basin are inspected and maintained per quarter, as required by the MS4 Permit, for annual compliance with the MS4 Permit. AMAFCA will enhance its inspection and maintenance programs, as required by the MS4 Permit, through improved coordination with the Stormwater Quality Engineer, Field Engineer, Maintenance Superintendent, and AMAFCA Maintenance Crew. AMAFCA will, depending on funding available, utilize the Agency and Area Wide and Miscellaneous contracts to address portions of the required inspection and maintenance.	• AMAFCA will continue coordination between maintenance personnel and staff to ensure that, on average, two (2) structures per basin are inspected and maintained per quarter. • AMAFCA will, depending on funding available, utilize the Agency and Area Wide and Miscellaneous contracts to address portions of the required inspection and maintenance.	**Met FY 2024 Goals.** • AMAFCA O&M activities are discussed at staff and crew meetings to allow coordination among staff and crew. • In this Permit term, AMAFCA inspected AMAFCA structures as required by the MS4 Permit. • AMAFCA continued to participate in the Agency and Area Wide contract and issue tasks under the annual Miscellaneous contract to address rehabilitation, repair, and retrofit activities for AMAFCA structures and cooperative maintenance projects.
3.2	95	Part I.D.5.c.(ii).(k) - Enhance the existing program to control the discharge of floatables and trash from the MS4 by implementing source control of floatables in industrial and commercial areas;	Part I.D.5.c.(ii).(k) - AMAFCA does not have jurisdiction over industrial and commercial areas in the MS4. AMAFCA will continue coordination with the MRG MS4s, as well as involvement with the MRGSQT and the MS4 TAG, to enhance the program to control the discharge of floatables and trash from the MS4 by implementing source control of floatables in industrial and commercial areas.	• AMAFCA will continue its involvement with and financial support of the MRGSQT. • AMAFCA will continue to collaborate with the MS4 permittees to improve upon the source control of floatables in industrial and commercial areas. • AMAFCA will continue membership and involvement in the cooperative MS4 TAG.	**Met FY 2024 Goals.** • AMAFCA continued to contribute and participate in the MRGSQT, which supports trash and litter control public awareness programs. • AMAFCA continued to be involved in the MS4 TAG group, facilitating cooperation and coordination with other MS4s in the Middle Rio Grande.

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
3.2	96	Part I.D.5.c.(ii).(l) - Include in each Annual Report, a cumulative summary of retrofit evaluations conducted during the permit term on existing flood control devices, structures and drainage ways to benefit water quality. Update the SWMP to include a schedule (with priorities) for identified retrofit projects;	Part I.D.5.c.(ii).(l) - AMAFCA may continue to coordinate with watershed MS4s and other entities within its jurisdiction to discuss areas requiring drainage and water quality retrofits, project priorities, and multi-agency funding. As part of the development of the AMAFCA Project Schedule, a system review will be completed. AMAFCA will publish projects, including schedule and cost sharing, in the biennial AMAFCA Project Schedule. Using the Project Schedule process, water quality projects and water quality retrofit projects may be ranked and prioritized.	• AMAFCA will continue to provide a cumulative list of AMAFCA's retrofit BMPs. AMAFCA will incorporate documentation by reference into the Annual Report and plans to document progress on the AMAFCA website - refer to the Post-Construction Control Measure. • AMAFCA will continue including facility evaluations as part of AMAFCA studies, including drainage management plans, facility plans, and other analysis projects, as appropriate. • AMAFCA will continue to include BMP/water quality facility retrofit projects in the biennial Project Schedule.	**Met FY 2024 Goals.** • In FY 2024, AMAFCA completed the 2025 Project Schedule which covers a six-year planning horizon (2025-2030). Coordination meetings with watershed MS4s, TAG members, and other entities occurred during the development of this Project Schedule and included the ranking of stormwater quality projects.
3.2	97	Part I.D.5.c.(ii).(m) - Flood management projects: review and revise, as necessary, technical criteria guidance documents and program for the assessment of water quality impacts and incorporation of water quality controls into future flood control projects. The criteria guidance document must include the following elements: Part I.D.5.c.(ii).(m).A. - Describe how new flood control projects are assessed for water quality impacts. Part I.D.5.c.(ii).(m).B. - Provide citations and descriptions of design standards that ensure water quality controls are incorporated in future flood control projects. Part I.D.5.c.(ii).(m).C. - Include method for permittees to update standards with new and/or innovative practices. Part I.D.5.c.(ii).(m).D. - Describe master planning and project planning procedures and design review procedures.	Part I.D.5.c.(ii).(m).A. - AMAFCA, through its processes, will assess new flood control projects for water quality impacts. As new flood control projects are constructed, AMAFCA will consider the appropriate time and location for the collection of water quality data to assess project water quality impacts. During facility planning, AMAFCA will adhere to current and future drainage and water quality management plans passed by the AMAFCA Board of Directors, Bernalillo County Commission, or Albuquerque City Council. AMAFCA will continue its proactive policy of incorporating stormwater quality BMPs into new flood control projects when feasible. AMAFCA will publish projects, including schedule and cost sharing, in the biennial AMAFCA Project Schedule. Using the Project Schedule process, water quality projects and water quality retrofit projects may be ranked and prioritized. Part I.D.5.c.(ii).(m).B. - AMAFCA is assessing the use of National design standards related to water quality controls. Part I.D.5.c.(ii).(m).C. - AMAFCA will continually assess design standards and practices, technical specifications, and BMPs and implement them, as applicable. Part I.D.5.c.(ii).(m).D. - AMAFCA has established procedures for master planning through its Drainage Master Plan development, project planning procedures using its Project Schedule, and design review procedures used by its Development Review Engineer.	• AMAFCA has all of the elements of the Technical Criteria Guidance Document as part of their various programs but not as part of one document. Many of these elements are done in cooperation with watershed MS4s. • AMAFCA's Project Schedule process includes, in part, coordination with watershed MS4s, TAG members, and other entities within its jurisdiction and may include the ranking of flood control and stormwater quality projects. • AMAFCA is assessing the use of National design standards related to water quality controls. • AMAFCA will continually assess design standards and practices and implementing them, as applicable. • AMAFCA will continue to follow its established procedures for Drainage Master Plan development, project planning procedures using its Project Schedule, and design review procedures used by its Development Review Engineer.	**Met FY 2024 Goals.** • In FY 2024, AMAFCA completed the 2025 Project Schedule which covers a six-year planning horizon (2025-2030). Coordination meetings with watershed MS4s, TAG members, and other entities occurred during the development of this Project Schedule and included the ranking of stormwater quality projects. • AMAFCA is assessing the use of ASCE's "Standard Guidelines for the Design of Urban Stormwater Systems, Standard Guidelines for Installation of Urban Stormwater Systems, and Standard Guidelines for the Operation and Maintenance of Urban Stormwater Systems" for national design standards related to water quality controls. • AMAFCA continued to follow its established procedures for Drainage Master Plan development, project planning procedures using its Project Schedule (refer to the Post-Construction section of the Annual Report for additional information), and design review procedures used by its Development Review Engineer.
3.2	98	Part I.D.5.c.(ii).(n) -Develop procedures to control the discharge of pollutants related to the storage and application of pesticides, herbicides, and fertilizers applied, by the permittee's employees or contractors, to public right-of-ways, parks, and other municipal property. The permittee must provide an updated description of the data monitoring system for all permittee departments utilizing pesticides, herbicides and fertilizers.	Part I.D.5.c.(ii).(n) - AMAFCA will only allow licensed staff or professionally licensed contractors to apply herbicides and pesticides within AMAFCA rights-of-way (AMAFCA does not apply fertilizers in its operations). In addition, AMAFCA will review, as necessary, leases and licenses, to ensure wording is included addressing the control of discharge of pollutants related to the storage and application of pesticides, herbicides, and fertilizers applied by entities leasing or licensed to use AMAFCA lands. AMAFCA will develop a tracking system to monitor herbicides and pesticides within AMAFCA rights-of-way (AMAFCA does not apply fertilizers in its operations). AMAFCA will store all herbicides and pesticides according to direction by product vendors.	• AMAFCA personnel will typically not apply fertilizers in its operations. • AMAFCA will only allow professional licensed contractors or licensed crew members to apply herbicides and pesticides within AMAFCA rights-of-way. • AMAFCA will be reviewing, as necessary, leases and licenses, to ensure wording is included addressing the control of discharge of pollutants related to the storage and application of herbicides, pesticides, and fertilizers applied by entities leasing or licensed to use AMAFCA lands. • AMAFCA will continue developing a tracking system to monitor herbicide and pesticide applications within AMAFCA ROW. • AMAFCA will store all herbicides and pesticides according to direction by product vendors.	**Met FY 2024 Goals.** • In FY 2024, the AMAFCA licensed crew members or professional licensed contractors were used when herbicide and/or pesticide application was necessary. • Herbicide and pesticide storage was reviewed as part of the Good Housekeeping assessment. • AMAFCA has a tracking system for the herbicide and pesticide inventory.

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
3.3	99	Develop or update a list and a map of industrial facilities owned or operated by the permittee as required in Part I.D.5.c.(iii).	Part I.D.5.c.(iii) - N/A - No EPA Multi Sector General Permit (MSGP) facilities within AMAFCA rights-of-way. This has been discussed and confirmed with NMED. This was submitted to EPA in AMAFCA's NOI and accepted.	N/A	N/A
Not Included in NOI	100	Update the SWMP document and annual report as required in I.D.5.c.(iv) and Part I.D.5.c.(v). Part I.D.5.c.(iv) - The permittee must include in the SWMP a description of the mechanism(s) utilized to comply with each of the elements required in Part I.D.5.c.(i) throughout Part I.D.5.c.(iii) and its corresponding measurable goal. and Part I.D.5.c.(v) - The permittee shall assess the overall success of the program, and document the program effectiveness in the Annual Report.	Part I.D.5.c.(iv) - AMAFCA's Stormwater Quality Engineer will review the program requirements for the above-mentioned SWMP elements during the Annual Report process. The measurable goals in this section of the SWMP are the mechanisms used to comply with the Permit elements. A strategy to implement any new program requirements will be developed as needed. Part I.D.5.c.(v) - The Annual Report will serve as the progress report for this program, if applicable. AMAFCA will incorporate documentation by reference into the Annual Report.	• As part of the Annual Report process, the Stormwater Quality Engineer will review the program requirements listed in Part I.D.5.c, for the above-mentioned SWMP elements and develop a strategy to implement any new program requirements. • The Annual Report will serve as the progress report for this program, if applicable. AMAFCA will incorporate documentation by reference into the Annual Report.	**Met FY 2024 Goals.** • During the Annual Report preparation, AMAFCA's Storm Water Quality Engineer reviewed the program requirements listed in Part I.D.5.c, for the program SWMP elements, and considered program needs and requirements. • This Annual Report documents the program effectiveness and program success in the status of implementation and performance assessment for each MS4 Permit requirement.

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
	101	**TABLE 5: Industrial and High Risk Runoff - Part I.D.5.d**			
4	102	As described in Part I.D.5.d, the permittees shall: (i) control through ordinance, permit, contract, order or similar means, the contribution of pollutants to the municipal storm sewer by stormwater discharges associated with industrial activity and the quality of stormwater discharged from sites of industrial activity as defined in 40 CFR 122.26(b)(14)(i)-(ix) and (xi). If no such industrial activities are in a permittees jurisdiction, that permittee may certify that this program element does not apply.	Part I.D.5.d - Activity removed from AMAFCA's SWMP (Rev. 0, December 1, 2015). AMAFCA certifies with submittal of this SWMP that no such industrial activities are in AMAFCA's jurisdiction and this program element does not apply. This was submitted to EPA in AMAFCA's NOI and accepted.	N/A	N/A

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
	103	**TABLE 6: Illicit Discharges and Improper Disposal - Part I.D.5.e**			
See NOI Sections Below	104	As described in Part I.D.5.e.(i), the permittee shall develop, revise, implement, and enforce a program to detect and eliminate illicit discharges (as defined at 40 CFR 122.26(b)(2)) entering the MS4. Permittees previously covered under NMS000101 or NMR040000 must continue existing programs while updating those programs, as necessary, to comply with the requirements of this permit. The permittee must (see required items listed below):	Part I.D.5.e.(i) - AMAFCA has developed a program to detect and eliminate illicit discharges. The program elements, as they relate to the permit requirements, are described in detail below.	• The AMAFCA Stormwater Quality Engineer will continue to review, revise, and implement the Illicit Discharge Detection and Elimination Program requirements, as needed. • AMAFCA will continue to update the current written procedure for this program element as part of the MS4 Strategies and Procedures Notebook.	**Met FY 2024 Goals.** • In FY 2024, AMAFCA followed its policy of immediate coordination with downstream MS4 permittees and/or appropriate local, state, tribal, or federal regulatory agencies when such discharges were detected by AMAFCA personnel. The Illicit Discharge Response Plan specifies that AMAFCA alert the proper agency, if required.
5.1	105	Mapping as required in Part I.D.5.e.(i).(a). Develop, if not already completed, a storm sewer system map, showing the names and locations of all outfalls as well as the names and locations of all waters of the United States that receive discharge from those outfalls. Identify all discharges points into major drainage channels draining more than twenty (20) percent of the MS4 area;	Part I.D.5.e.(i).(a) - AMAFCA will continue to update its Maintenance Responsibilities for Drainage Facilities in the Albuquerque Metropolitan Area (Map). This is a color coded, detailed maintenance map showing all AMAFCA facilities (water quality BMPs, channels, large diameter storm drains, ponds, berms or dikes, dams, and receiving waters) and AMAFCA outfalls. AMAFCA cooperates with COA, NMDOT, Bernalillo County, SSCAFCA, Village of Los Ranchos, and MRGCD to collect their data for AMAFCA's map. This map is available on the AMAFCA website: http://www.amafca.org/maps-2/	• AMAFCA will continue to keep this maintenance map up-to-date for AMAFCA facilities and other MS4 permittee facilities, as information is provided. Cooperation with other MS4s will continue related to this map. • AMAFCA will continue to update the map and publish this map on-line.	**Met FY 2024 Goals.** • In FY 2024, AMAFCA updated the GIS and webpage Interactive Map. This map is available online: https://amafca.org/gis-maps-data/
5.2	106	Ordinance (or other control method) as required in Part I.D.5 .e.(i)(b).	Because AMAFCA is a flood control authority, the legal authority and jurisdiction granted to it by the State of New Mexico is limited. Part I.D.5 .e.(i)(b) - AMAFCA will contractually and/or administratively require the control of non-stormwater discharges from third-party operations within AMAFCA's jurisdiction and/or rights of way to the extent allowable under State, Tribal, or local law.	• AMAFCA will begin development of contractually and/or administratively requiring the control of non-stormwater discharges on turn-key projects that AMAFCA will take over for operation and maintenance after construction to the extent allowable under State, Tribal, or local law.	N/A
5.3	107	Develop and implement a IDDE plan as required in Part I.D.5.e.(i).(c). The permittee must include the following elements in the plan: A. Procedures for locating priority areas likely to have illicit discharges including field tests for selected pollutant indicators (ammonia, boron, chlorine, color, conductivity, detergents, E. coli, enterococci, total coliform, fluoride, hardness, pH, potassium, conductivity, surfactants), and visually screening outfalls during dry weather; B. Procedures for enforcement, including enforcement escalation procedures for recalcitrant or repeat offenders; C. Procedures for removing the source of the discharge; D. Procedures for program evaluation and assessment; and E. Procedures for coordination with adjacent municipalities and/or state, tribal, or federal regulatory agencies to address situations where investigations indicate the illicit discharge originates outside the MS4 jurisdiction.	Part I.D.5.e.(i).(c) - AMAFCA will continue to assess its IDDE program, as appropriate.	• AMAFCA will continue to implement the updated IDDE program elements. • AMAFCA will continue membership and involvement in the cooperative MS4 Technical Advisory Group (MS4 TAG) which will facilitate cooperation and coordination with other MS4s in the Middle Rio Grande related to the IDDE program. • AMAFCA will continue development of this program element in its MS4 Strategies and Procedures Notebook.	**Met FY 2024 Goals.** • AMAFCA continued its membership and involvement in the cooperative MS4 TAG, which facilitated cooperation and coordination with other MS4s in the Middle Rio Grande related to the IDDE program. • AMAFCA received and reviewed the monthly DMR forms from ABCWUA. These reports are available upon request. No evidence of adverse health/environmental impacts were documented in FY 2024. ABCWUA's CMOM Annual Report (which includes the Overflow Emergency Response Plan) is available upon request to the ABCWUA. • AMAFCA continued utilizing established IDDE screening procedures, protocols, and response plan.

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
5.4	108	Develop an education program as required in Part I.D.5.e.(i).(d). Develop an education program to promote, publicize, and facilitate public reporting of illicit connections or discharges, and distribution of outreach materials. The permittee shall inform public employees, businesses and the general public of hazards associated with illegal discharges and improper disposal of waste.	Part I.D.5.e.(i).(d) - AMAFCA will continue to participate in the MRGSQT and collaborate with the MS4 permittees to provide educational information regarding stormwater quality to the community. This information will promote, publicize, and facilitate public reporting of illicit connections or discharges, and distribution of outreach materials. This program informs the public of hazards associated with illicit discharges and improper waste disposal, as well as proper ways to dispose of hazardous wastes.	• AMAFCA will continue work with the MRGSQT to inform the general public of the hazards associated with illegal discharges and improper disposal of waste. • AMAFCA will continue its involvement with and financial support of BEMP and through the MRGSQT. • The MRGSQT Outcomes Report is available upon request and AMAFCA plans to share this document on its website. • AMAFCA will continue an in-house training program for its administrative, engineering, and field employees regarding illegal discharges and improper disposal of waste.	**Met FY 2024 Goals.** • AMAFCA continued its partnership with the MRGSQT to inform the general public of the hazards associated with illegal discharges and improper disposal of waste. • In FY 2024, AMAFCA continued its involvement with and financial support of BEMP through the MRGSQT. • The MRGSQT Outcomes Report summarizes the educational and outreach programs for FY 2024. This report is contained in the Program Summaries section of the Annual Report. • Stormwater continues to be a topic at the weekly staff and monthly crew meetings, including discussions related to pollution prevention and good housekeeping. In addition, pertaining to AMAFCA employees, AMAFCA continues utilizing the IDDE Incident Report Form.
5.5	109	Establish a hotline as required in Part I.D.5.e.(i).(e).	Part I.D.5.e.(i).(e) - MS4s that are members of the MRGSQT benefit from the Albuquerque 311 Citizen Contact Center. The 311 service is a single telephone number for all non-emergency inquiries and services. This program includes citizen calls regarding illicit discharges.	• MS4s in the watershed will continue to participate in the 311 call in program.	**Met FY 2024 Goal.** • AMAFCA continued to participate in the MS4 311 call in program. Complaints were communicated with the appropriate agency regarding these notifications. AMAFCA also coordinated regarding complaints received directly by AMAFCA staff through email, phone, or received through ABCWUA's monthly DMR Sanitary Sewer Overflow Report provided to AMAFCA. AMAFCA continued use of the IDDE Incident Report Form, which is used to report illicit discharges that were witnessed by or reported to AMAFCA staff. The 311 complaints that are not in AMAFCA's jurisdiction are directed to the appropriate jurisdictional agency. • AMAFCA continued to discuss illicit discharges (events, issues, and follow-up) at staff meetings. • A copy of the IDDE Incident Report Form as well as the current Illicit Discharge Response Plan and testing procedures are available upon request.
5.6	110	Investigate suspected significant/severe illicit discharges as required in Part I.D.5.e.(i).(f). Investigate suspected significant/severe illicit discharges within forty-eight (48) hours of detection and all other discharges as soon as practicable; elimination of such discharges as expeditiously as possible; and, requirement of immediate cessation of illicit discharges upon confirmation of responsible parties. Illicit Discharge is defined in 40 CFR 122.26(b)(2)as "Illicit discharge means any discharge to a municipal separate storm sewer that is not composed entirely of stormwater except discharges pursuant to a NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from fire fighting activities."	Part I.D.5.e.(i).(f) - AMAFCA will continue its policy of investigation of suspected significant/severe illicit discharges within forty-eight (48) hours of detection/reporting and all other discharges as soon as practicable. AMAFCA plans to continue removing/treating such discharges as expeditiously as possible and requiring immediate cessation of illicit discharges upon confirmation of responsible parties. AMAFCA will continue its procedures for illicit discharge investigation and use of its IDDE Incident Report Form. "Illicit discharge" also covers illegal or improper disposal or dumping of wastes into AMAFCA facilities. For AMAFCA, "illicit discharges" typically fall into two categories: (1) liquid discharge, or (2) solid discharge (dumped trash, debris, dirt/sediment, tires). Liquid discharges are considered urgent in order to quickly determine if they are significant/severe illicit discharges and are investigated within forty-eight (48) hours of detection. Solid discharge are investigated and identified for clean-up during the weekly staff meetings.	• AMAFCA will continue its policy of investigation of suspected significant/severe illicit discharges within 48 hours of detection and all other discharges as soon as practicable. • MS4s in the watershed will continue to participate in the 311 call in program. • AMAFCA will continue membership and involvement in the cooperative MS4 Technical Advisory Group (MS4 TAG) which will facilitate cooperation and coordination with other MS4s in the Middle Rio Grande related to investigation of illicit discharges. • AMAFCA will continue development of this program element in its MS4 Strategies and Procedures Notebook.	**Met FY 2024 Goals.** • In FY 2024, AMAFCA continued its policy of investigation of suspected significant/severe illicit discharges within 48 hours of detection and all other discharges as soon as practicable. • In addition, in FY 2024, AMAFCA continued to participate in the MS4 311 call in program. Complaints were communicated with the appropriate agency regarding these notifications. AMAFCA also coordinated regarding complaints received directly by AMAFCA staff through email, phone, or received through ABCWUA's monthly DMR Sanitary Sewer Overflow Report provided to AMAFCA. The 311 complaints that are not in AMAFCA's jurisdiction are directed to the jurisdictional agency. • AMAFCA continued to be involved in the MS4 TAG group, facilitating cooperation and coordination with other MS4s in the Middle Rio Grande.

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5.7	111	Review complaint records and develop a targeted source reduction program as required in Part I.D.5.e.(i).(g). Review complaint records for the last permit term and develop a targeted source reduction program for those illicit discharge /improper disposal incidents that have occurred more than twice in two (2) or more years from different locations.	Part I.D.5.e.(i).(g) - AMAFCA will continue its policy of reviewing complaint records. In addition, complaint records that are determined to be illicit discharges will be added to the AMAFCA GIS database. The location, date, type of illicit discharge, and source (if known) will be documented. This database was developed in 2014 and is updated annually. To meet the Permit requirements in Table 1.a (Part I.C.2), regarding discharges to impaired waters with a TMDL (E. coli), AMAFCA's review of complaint records will include a focus on illicit discharges contributing bacteria to the MS4. AMAFCA will develop a targeted source reduction program for those illicit discharge/improper disposal incidents that have occurred more than twice in 2 or more years from different locations. AMAFCA coordinates with COA and the Albuquerque Bernalillo Water Utility Authority (ABCWUA) for notification of illicit discharges.	• AMAFCA will continue its policy of reviewing complaint records. This will include a focus on illicit discharges contributing bacteria to the MS4. • Annually, AMAFCA will reevaluate its targeted source reduction program. Potential future targets will be determined and cooperative efforts for targeted source reduction programs with MRGSQT members will be considered. • AMAFCA will continue adding illicit discharge complaint records for the Permit term to the AMAFCA GIS database to help identify sources and trends. • AMAFCA will continue development of this program element in its MS4 Strategies and Procedures Notebook. • AMAFCA will continue coordination with other agencies for this program element	**Met FY 2024 Goals.** • In FY 2024, AMAFCA continued to participate in the MS4 311 call in program. Complaints were communicated with the appropriate agency regarding these notifications. • AMAFCA received and reviewed the monthly DMR forms from ABCWUA. These reports are available upon request. No evidence of adverse health/environmental impacts were documented in FY 2024. ABCWUA's CMOM Annual Report (which includes the Overflow Emergency Response Plan) is available upon request from the ABCWUA.
Not Included in NOI	112	As required in Part I.D.5.e.(ii), the permittee shall address the following categories of non-stormwater discharges or flows (e.g., illicit discharges) only if they are identified as significant contributors of pollutants to the MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(90)), uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water. Note: Discharges or flows from fire fighting activities are excluded from the effective prohibitions against non-stormwater and need only be addressed where they are identified a significant sources of pollutants to water of the United States).	Part I.D.5.e.(ii) - Any such discharge that is identified as a significant contributor of pollutants to the AMAFCA MS4, or is causing or contributing to a water quality standards violation, will be addressed as an illicit discharge pursuant to Part I.D.5.e of the MS4 Permit. The Permit lists authorized non-stormwater discharges in Part I.D.5.e.(ii). Many of these authorized non-stormwater discharges are not applicable to AMAFCA and none of these discharges are expected to be significant contributors of pollutants to the MS4. The AMAFCA Stormwater Quality Engineer will continue coordination & communication with ABCWUA regarding well flushing and rehabilitation schedules to ensure that AMAFCA is aware of authorized non-stormwater discharges into its facilities.	• The AMAFCA Stormwater Quality Engineer will review this list annually to check that the categories of authorized non-stormwater discharges are still not considered significant contributors of pollutants to the MS4. • The AMAFCA Stormwater Quality Engineer will communicate with ABCWUA regarding well flushing and rehabilitation schedules to ensure that AMAFCA is aware of authorized non-stormwater discharges into its facilities.	**Met FY 2024 Goals.** • The AMAFCA Storm Water Quality Engineer reviewed this list as part of the Annual Report preparation to check that the categories of authorized non-stormwater discharges are still not considered significant contributors of pollutants to the MS4. • The AMAFCA Storm Water Quality Engineer continued coordination & communication with ABCWUA regarding well, tank, and line flushing schedules to ensure that AMAFCA was aware of authorized non-stormwater discharges into its facilities.

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5.8	113	As required in Part I.D.5.e.(iii), the permittee must screen the entire jurisdiction at least once every five (5) years and high priority areas at least once every year. High priority areas include any area where there is ongoing evidence of illicit discharges or dumping, or where there are citizen complaints on more than five (5) separate events within twelve (12) months. The permittee must: (a) Include in its SWMP document a description of the means, methods, quality assurance and controls protocols, and schedule for successfully implementing the required screening, field monitoring, laboratory analysis, investigations, and analysis evaluation of data collected. (b) Comply with the dry weather screening program established in Table 6 and the monitoring requirements specified in Part III.A.2. (c) If applicable, implement the priority ranking system developed in previous permit term.	AMAFCA will continue to make progress with its IDDE activities and program. Much of this effort may be in coordination with MS4 permittees COA, Bernalillo County, and NMDOT, as the AMAFCA facilities are stormwater collectors for the basins that are primarily controlled by other MS4 programs, rules, and regulations. Part I.D.5.e.(ii).(a) - IDDE screening methods and protocols for implementing the required screening, field monitoring, laboratory analysis, investigations, and analysis evaluation of data collected has been developed. AMAFCA has in place a well-defined and implemented routine inspection and O&M program that includes both formal and informal inspections. These O&M inspections are part of the IDDE screening program. Part I.D.5.e.(ii).(b) - AMAFCA screening procedures and protocols will comply with the dry weather screening program monitoring requirements specified in Part III.A.2 of the MS4 Permit. COA and AMAFCA have a cooperative dry weather screening program. In addition, as part of AMAFCA's Levelogger monitoring, AMAFCA screens all inlets to the NDC on AMAFCA ROW monthly. Part I.D.5.e.(ii).(c) - For AMAFCA, facility screening is part of AMAFCA's routine O&M activities. All areas are screened and there are no low priority areas.	• AMAFCA has developed screening procedures, protocols, and plan. • AMAFCA will continue routine inspections through its O&M program, including both formal and informal inspections. These O&M inspections are part of the IDDE screening program. • As a cooperative program, COA will continue to perform dry weather screening. • AMAFCA will screen major channelized inlets to the NDC on AMAFCA ROW monthly through its Levelogger monitoring program. • AMAFCA will continue membership and involvement in the cooperative MRGSQT and TAG, which will facilitate cooperation and coordination with other MS4s in the Middle Rio Grande related to screening for illicit discharges.	**Met FY 2024 Goals.** • AMAFCA continued utilizing established IDDE screening procedures, protocols, and plan. • In FY 2024, AMAFCA continued routine inspections through its O&M program, including both formal and informal inspections. These O&M inspections were part of the IDDE screening program. • As a cooperative program, COA continued to perform dry weather screening. Additional information for this is provided in the Dry Weather Screening section of the Annual Report. • In FY 2024, AMAFCA discontinued operation and analysis from Leveloggers located at the channelized inlets to the NDC on AMAFCA ROW. This activity was removed during FY 2024 in conjunction with modifications to AMAFCA SWMP Rev. 6. The AMAFCA SWMP Rev. 7 was adopted on July 1, 2024. AMAFCA continued to visit these locations for evidence of illicit discharges. • AMAFCA continued membership and involvement in the cooperative MRGSQT and TAG, both which facilitated cooperation and coordination with other MS4s in the Middle Rio Grande related to screening for illicit discharges.
5.9	114	Develop, update, and implement a Waste Collection Program as required in Part I.D.5.e.(iv).	Part I.D.5.e.(iv) - Activity removed from AMAFCA's SWMP. Public waste collection is the responsibility of the municipalities. AMAFCA does not have the jurisdictional authority to perform these activities. AMAFCA will continue to regularly collect waste within its rights-of-way. This was submitted to EPA in AMAFCA's NOI and accepted.	N/A	N/A
5.10	115	Develop, update and implement a Spill Prevention and Response program to prevent, contain, and respond to spills that may discharge into the MS4 as required in Part I.D.5.e.(v). The Spill Prevention and Response program shall include: (a) Where discharge of material resulting from a spill is necessary to prevent loss of life, personal injury, or severe property damage, the permittee(s) shall take, or ensure the party responsible for the spill takes, all reasonable steps to control or prevent any adverse effects to human health or the environment: and (b) The spill response program may include a combination of spill response actions by the permittee (and/or another public or private entity), and legal requirements for private entities within the permittee's municipal jurisdiction.	Part I.D.5.e.(v) - AMAFCA will continue its Spill Prevention and Response program. This program element relates to Illicit Discharge, reporting requirements, crew training, spill response materials on hand (in maintenance vehicles), and good housekeeping. For AMAFCA facilities, AMAFCA encourages that crew members are trained in spill prevention and control (refer to Pollution Prevention/Good Housekeeping Control Measure).	• AMAFCA will continue development of its cooperative Spill Response Program with agency partners and as part of its MS4 Strategies and Procedures Notebook. • AMAFCA encourages that crew members are trained in spill prevention and control (refer to Pollution Prevention/Good Housekeeping Control Measure). • AMAFCA will continue membership and involvement in the cooperative MS4 TAG and the MRGSQT, which will facilitate cooperation and coordination with other MS4s in the Middle Rio Grande related to spill prevention and response.	**Met FY 2024 Goals.** • AMAFCA continued to follow the Spill Prevention and Response Plan. • AMAFCA continued development of its cooperative Spill Prevention and Response Program with agency partners. As part of this cooperative, MS4s have established contracts with an environmental clean-up company to assist the Middle Rio Grande MS4s with IDDE response. • AMAFCA continued to be involved in the MS4 TAG group, facilitating cooperation and coordination with other MS4s in the Middle Rio Grande.

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
Not Included in NOI	116	Part I.D.5.e.(vi) - The permittee must include in the SWMP a description of the mechanism(s) utilized to comply with each of the elements required in Part I.D.5.e.(i) throughout Part I.D.5.e.(v) and its corresponding measurable goal. A description of the means, methods, quality assurance and controls protocols, and schedule for successfully implementing the required screening, field monitoring, laboratory analysis, investigations, and analysis evaluation of data collected; and Part I.D.5.e.(vii) - The permittee shall assess the overall success of the program, and document the program effectiveness in the Annual Report.	Part I.D.5.e.(vi) - AMAFCA's Stormwater Quality Engineer will review the program requirements listed for the above-mentioned program elements, during the Annual Report process. A review of the screening completed and the data collected, if any, will be available upon request and AMAFCA will incorporate documentation by reference into the Annual Report and plans to document progress on the AMAFCA website. A strategy to implement any new program requirements will be developed as needed. AMAFCA will maintain and update, as necessary, its MS4 Strategies and Procedures Notebook for this MS4 Program. Part I.D.5.e.(vii) - AMAFCA will document the program effectiveness and program success. AMAFCA will incorporate documentation by reference into the Annual Report.	• As part of the Annual Report process each year, the Stormwater Quality Engineer will review the program requirements listed in Part I.D.5.e, for the above-mentioned SWMP elements, and develop a strategy, if applicable, to implement any new program requirements. • A review of the screening completed and the data collected, if any, will be available upon request and AMAFCA will incorporate documentation by reference into the Annual Report and plans to document progress on the AMAFCA website. • AMAFCA will document the program effectiveness and program success. AMAFCA will incorporate documentation by reference into the Annual Report.	**Met FY 2024 Goals.** • AMAFCA's Program was reviewed by the Storm Water Quality Engineer for the reporting period as part of the Annual Report and SWMP revision process. • In FY 2024, AMAFCA discontinued operation and analysis from Leveloggers located at the channelized inlets to the NDC on AMAFCA ROW. This activity was removed during FY 2024 in conjunction with modifications to AMAFCA SWMP Rev. 6. The AMAFCA SWMP Rev. 7 was adopted on July 1, 2024. AMAFCA continued to visit these locations for evidence of illicit discharges. • This Annual Report and associated Program Summaries document the program effectiveness and program success in the status of implementation and performance assessment for each MS4 Permit requirement.
5.11	117	Enhance the program to include requirements in Part I.D.5.e.(ix). The permittee may: (a) Divide the jurisdiction into assessment areas where monitoring at fewer locations still provides sufficient information; (b) Downgrade high priority areas after the area has been screened at least once and there are citizen complaints on no more than 5 separate events within a 12 month period; (c) Rely on a cooperative program with other MS4s for detection and elimination of illicit discharges and illegal dumping; (d) If cooperative program, required detection program frequencies may be based on the combined jurisdictional area rather than individual jurisdictional areas to reduce total number of screening locations; (e) After screening a non-high priority area once, adopt an "in response to complaints only" IDDE for that area (no more than 2 separate events within a 12 month period); (f) Enhance the program to utilize methodologies consistent with those described in "Illicit Discharge Detection and Elimination, A Guidance Manual for Program Development and Technical Assessments."	Part I.D.5.e.(ix).(a) - AMAFCA operates and maintains Leveloggers and rainfall gauges for the NDC watershed to better understand runoff and evaluate monitoring locations. Future telemetry project will add screening capabilities for other outfalls. Part I.D.5.e.(ix).(b) - This enhancement may be considered and included in the future. Part I.D.5.e.(ix).(c) - AMAFCA currently coordinates with MS4s, as appropriate, and the ABCWUA for notification of illicit discharges. AMAFCA will continue to pursue developing similar cooperative coordination with other agencies. Part I.D.5.e.(ix).(d) and (e) - These cooperative elements may be considered in the future. Part I.D.5.e.(ix).(f) - AMAFCA had a consultant evaluate the AMAFCA IDDE program and develop recommendations for improving the program in order to comply with the MS4 Permit. The report included evaluating the procedures and methodologies described in "IDDE, A Guidance Manual for Program Development and Technical Assessments", for incorporation into AMAFCA's IDDE program. AMAFCA will continue to implement recommendations from this report, as appropriate.	• AMAFCA will document progress made, if any, with these program enhancement activities.	**Met FY 2024 Goals.** • In FY 2024, AMAFCA discontinued operation and analysis from Leveloggers located at the channelized inlets to the NDC on AMAFCA ROW. This activity was removed during FY 2024 in conjunction with modifications to AMAFCA SWMP Rev. 6. The AMAFCA SWMP Rev. 7 was adopted on July 1, 2024. AMAFCA continued to visit these locations for evidence of illicit discharges. • In FY 2024, AMAFCA worked with COA and ABCWUA for notification of illicit discharges. AMAFCA also cooperated with Bernalillo County and NMDOT related to IDDE in FY 2024.
5.12	118	Item from MS4 Permit NOI. Describe other proposed activities to address the Illicit Discharges and Improper Disposal Measure.	AMAFCA will continue to utilize the Annual Report process as a means to perform a self-audit with the goal to improve its MS4 Programs.	• AMAFCA will annually document progress made, if any, related to the Annual Report and SWMP revision process as a means to perform a self-audit on the MS4 Program elements.	**Met FY 2024 Goal.** • AMAFCA continued to utilize the Annual Report and SWMP revision process as a means to perform a self-audit on the MS4 Program elements.

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
	119	**TABLE 7: Control of Floatables Discharges - Part I.D.5.f**			
6.1	120	As required in Part I.D.5.f.(i), the permittee must develop, update, and implement a program to address and control floatables in discharges into the MS4. The floatables control program shall include source controls and, where necessary, structural controls. Permittees previously covered under NMS000101 or NMR04A000 must continue existing programs while updating those programs, as necessary, to comply with the requirements of this permit. The permittee shall develop or update a schedule to implement as required in Part I.D.5.f.(i).(a). Note: AMAFCA and COA should update the schedule according to the findings of the 2005 AMAFCA/COA Floatable and Gross Pollutant Study and other studies.	Part I.D.5.f.(i) and (i).(a) - AMAFCA will continue to implement a program to address and control floatables in discharges into the MS4. AMAFCA will continue to install stormwater quality features to control floatables, such as ported risers, trash racks, and screened inlets in both new construction and retrofits where appropriate. AMAFCA will continue to coordinate with COA relative to structural BMPs within AMAFCA rights-of-way.	• The AMAFCA Stormwater Quality Engineer will continue to review, revise, and implement a program to address and control floatables in discharges into the MS4. AMAFCA will develop a written procedure for this program element. • AMAFCA will continue to cooperate and coordinate with COA relative to structural BMPs within AMAFCA rights-of-way. • AMAFCA will continue membership and involvement in the cooperative MS4 Technical Advisory Group (MS4 TAG), which will facilitate cooperation and coordination with other MS4s in the Middle Rio Grande related control of floatables discharges. • AMAFCA will continue utilizing the manual trash collection contracts. • AMAFCA is pursuing developing a cooperative program for this program element.	**Met FY 2024 Goals.** • The AMAFCA Storm Water Quality Engineer continued to implement a program to address and control floatables in discharges into the MS4. • AMAFCA continued to be involved in the MS4 TAG, facilitating cooperation and coordination with other MS4s in the Middle Rio Grande. • AMAFCA continued utilizing the manual trash collection contracts in FY 2024. • Photos of AMAFCA operations to remove floatables and sediment in FY 2024 are provided in the Pollution Prevention/ Good Housekeeping Program & Control of Floatables Program Summary.
6.2	121	Estimate the annual volume of floatables and trash removed from each control facility and characterize the floatable type as required in Part I.D.5.f.(i).(b).	Part I.D.5.f.(i).(b) - AMAFCA will continue to estimate the annual volume of floatables and trash removed from each control facility as well as to characterize the floatable type. The AMAFCA operations and maintenance crew and subcontractors track the volume of floatables, sediment, trash, and debris removed from AMAFCA facilities. This tracking procedure includes the location of removal by facility and watershed.	• AMAFCA will continue to estimate the annual volume of floatables and trash removed from each control facility and characterize the floatable type. • AMAFCA will continue to utilize crew activity tracking, allowing AMAFCA to better and more easily determine the volume of floatables and sediment removed from each AMAFCA facility. • AMAFCA has updated, cooperative waste characterization study in the watershed during the Permit term.	**Met FY 2024 Goals.** • In FY 2024, AMAFCA continued to implement its crew tracking system and database. A summary of trash, sediment, and vegetation removed within AMAFCA's jurisdiction is included in the relevant Program Summary.
6.3	122	Item from MS4 Permit NOI. Describe other proposed activities to address the Control of Floatables Discharges Measure.	AMAFCA will continue to utilize the Annual Report and SWMP revision process as a means to perform a self-audit with the goal to improve its MS4 Programs.	• AMAFCA will document progress made, if any, related to the Annual Report and SWMP revision process as a means to perform a self-audit on the MS4 Program elements.	**Met FY 2024 Goal.** • AMAFCA continued to utilize the Annual Report and SWMP revision process as a means to perform a self-audit on the MS4 Program elements.
Not Included in NOI	123	Update the SWMP document and Annual Report as required in Part I.D.5.f.(ii) and Part I.D.5.f.(iii). Part I.D.5.f.(ii) - The permittee must include in the SWMP a description of the mechanism(s) utilized to comply with each of the elements required in Part I.D.5.f.(i). Part I.D.5.f.(iii) - The permittee shall assess the overall success of the program, and document the program effectiveness in the Annual Report.	Part I.D.5.f.(ii)- AMAFCA's Stormwater Quality Engineer will review the program requirements listed for the above-mentioned program elements, during the Annual Report process. A strategy to implement any new program requirements or improve the compliance with program requirements will be developed as needed. Part I.D.5.f.(iii) - AMAFCA will document the program effectiveness and program success. AMAFCA will incorporate documentation by reference into the Annual Report.	• As part of the Annual Report process each year, the Stormwater Quality Engineer will review the program requirements listed in Part I.D.5.f, for the above-mentioned SWMP elements, and assess the overall success of the program. AMAFCA will document the program effectiveness and program success. AMAFCA will incorporate documentation by reference into the Annual Report.	**Met FY 2024 Goals.** • In FY 2024, as part of the Annual Report development, AMAFCA's Storm Water Quality Engineer reviewed the program requirements listed in Part I.D.5.f for this section. • This Annual Report and associated Program Summaries document the program effectiveness and program success in the status of implementation and performance assessment for each MS4 Permit requirement. Additional documentation available upon request.

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
	124	**TABLE 8: Public Education and Outreach on Stormwater Impacts - Part I.D.5.g**			
7.1	125	Develop, revise, implement, and maintain an education and outreach program as required in Part I.D.5.g.(i) and Part I.D.5.g.(ii). This comprehensive stormwater program should educate the community, employees, businesses, and the general public of hazards associated with the illegal discharges and improper disposal of waste and about the impact that stormwater discharges on local waterways, as well as the steps that the public can take to reduce pollutants in stormwater.	Part I.D.5.g.(i) - Through involvement in the MRGSQT and Bernalillo County, AMAFCA will continue to collaborate with the MS4 permittees to implement and improve upon the existing Public Education and Outreach program. The MRGSQT has a consulting firm under contract to act as Stormwater Coordinator and assist the team in providing public education and outreach on stormwater impacts. Included in the Stormwater Coordinator scope is to provide an Outcomes Report to the team members to summarize the yearly outreach activities through different media and methods, target audiences, and estimate of people reached. In addition to the cooperative elements with MRGSQT, AMAFCA will continue to conduct education and outreach presentations to the community specific to AMAFCA facilities and water quality.	• AMAFCA will continue to contribute to and participate in the MRGSQT. • AMAFCA will continue to conduct education and outreach presentations to the community specific to AMAFCA facilities and water quality. AMAFCA's efforts will be included in the MRGSQT Outcomes Report. This report is available upon request and AMAFCA plans to share this document on its website.	**Met FY 2024 Goals.** • AMAFCA continued to contribute to and participate in the MRGSQT. • AMAFCA's efforts are included in the MRGSQT Outcomes Report. This report is contained in the Program Summaries section of the Annual Report.
Not Included in NOI	126	Part I.D.5.g.(ii), the permittee must implement a public education program to distribute educational knowledge to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff. The permittee must: Part I.D.5.g.(ii).(a),Define the goals and objectives of the program based on high priority community-wide issues; Part I.D.5.g.(ii)(b),Develop or utilize appropriate educational materials, such as printed materials, billboard and mass transit advertisements, signage at select locations, radio advertisements, television advertisements, and websites.	Part I.D.5.g.(ii).(a) - The MRGSQT has developed a matrix to define the Public Education and Outreach objectives, priorities, and target audiences. The matrix will be reviewed and updated, as necessary, throughout the Permit term. Part I.D.5.g.(ii).(b) - The MRGSQT will continue to develop and utilize appropriate educational materials such as brochures, media campaigns, public presentations/events, giveaways, display booths/kiosks, signage at select locations, and postings on social media sites (Facebook) and websites. The types of materials utilized by the MRGSQT are summarized in the annual Outcomes Report.	• AMAFCA, through its participation in the MRGSQT will review, throughout the Permit term, and update, as necessary, the program matrix to define the Public Education and Outreach and Public Involvement and Participation objectives, priorities, and target audiences. • The MRGSQT will continue to develop and utilize appropriate educational materials such as brochures, media campaigns, public presentations/events, giveaways, display booths/kiosks, signage at select locations, and postings on social media sites (Facebook) and websites.	**Met FY 2024 Goals.** • The MRGSQT continued to use the matrix this year to guide the Public Education and Outreach and Public Involvement and Participation objectives, priorities, and target audiences. • The types of materials utilized are summarized in the attached Program Summary MRGSQT Outcomes Report. The Facebook page and website (www.keeptheriogrande.org) remained active in FY 2024. • MRGSQT continued to distribute BMP brochures in English and Spanish for specific industries (Contractors, Food Preparation or Service, Parking Lots and Drive Through Lanes, Fueling Stations, Vehicle and Equipment Repair, Carpet and Upholstery Cleaning, Scrap Metal Recycling, and Landscaping). These materials are available upon request.
Not Included in NOI	127	Part I.D.5.g.(ii).(c), Inform individuals and households about ensuring proper septic system maintenance, ensuring the proper use and disposal of landscape and garden chemicals including fertilizers and pesticides, protecting and restoring riparian vegetation, and properly disposing of used motor oil or household hazardous wastes;	Part I.D.5.g.(ii).(c) - The MRGSQT's program matrix and Public Education and Outreach programs include proper septic system maintenance, proper use and disposal of landscape and garden chemicals including fertilizers and pesticides, and properly disposing of household hazardous wastes.	• The MRGSQT will continue to include these specific educational areas in their program matrix and reporting on these areas in their annual Outcomes Report.	**Met FY 2024 Goal.** • The MRGSQT Outcomes Report typically includes a table summarizing the MS4 Permit Public Education and Outreach Component/reference with the MRGSQT activities, as well as including the type of audiences reached. In addition, information on these topics is available on the MRGSQT website (www.keeptheriogrande.org). • In FY 2024, the MRGSQT continued distribution of brochures targeting septic system education. • AMAFCA and Bernalillo County continued to distribute BMPs brochures for specific industries. Landscaping was one industry area of focus. • Both COA and Bernalillo County sponsor Household Hazardous Waste (HHW) collection events throughout the year.

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
Not Included in NOI	128	Part I.D.5.g.(ii).(d), Inform individuals and groups how to become involved in local stream and beach restoration activities as well as activities that are coordinated by youth service and conservation corps or other citizen groups.	Part I.D.5.g.(ii).(d) - The MRGSQT, which AMAFCA is a member, utilizes volunteers throughout communities within the watershed to assist with park, open space, trail, and river cleanup projects. Communication for Public Education and Outreach and Public Involvement and Participation is achieved by activities organized with youth service groups, conservation corps, and other citizen groups. In addition, AMAFCA will continue to foster Public Education and Outreach and Public Involvement and Participation programs, including Earth Force - Keep it Clean student outreach, Talking Talons Youth Leadership Activities, and Rocky Mountain Youth Corps programs.	• The MRGSQT will continue communication for public involvement and participation activities as well as assist with communication for Public Education and Outreach and Public Involvement and Participation activities organized by youth service groups, conservation corps, and other citizen groups. These volunteer activities will be summarized in the annual MRGSQT Outcomes Report. The MRGSQT Outcomes Report is available upon request and AMAFCA plans to share this document on its website. • Through the MRGSQT, two partner education programs, BEMP and , are supported. is an innovative, long-term outreach program that integrates water resource topics with computer technology, student writing, and a hands-on curriculum to meet specific, measurable outcomes. The main objective of the Stormwater Science outreach education program BEMP is to teach students that the health of the Rio Grande is directly related to the health of the surrounding watershed. • AMAFCA will continue to foster Public Education and Outreach and Public Involvement and Participation programs, including Earth Force, Talking Talons Youth Leadership Activities, and Rocky Mountain Youth Corps programs.	**Met FY 2024 Goals.** • The MRGSQT Outcomes Report typically documents volunteer participation in park, open space, trail, and river cleanup projects. The Keep the Rio Grande website has been updated to better assist with implementation of this activity. • Through the MRGSQT, three partner education and student involvement programs, Arroyo Classroom, BEMP, and RiverXchange, were supported in FY 2024.
Not Included in NOI	129	Part I.D.5.g.(ii).(e), Use tailored public education program, using a mix of locally appropriate strategies, to target specific audiences and communities. Examples of strategies include distributing brochures or fact sheets, sponsoring speaking engagements before community groups, providing public service announcements, implementing educational programs targeted at school age children, and conducting community-based projects such as storm drain stenciling, and watershed cleanups;	Part I.D.5.g.(ii).(e) - The MRGSQT will continue to organize comprehensive Public Education and Outreach programs with appropriate strategies to target specific audiences in the Middle Rio Grande community.	• The MRGSQT will continue to include comprehensive education programs with appropriate strategies to target specific audiences in the Middle Rio Grande community. The target audiences for the educational programs will be identified in the Outcomes Report.	**Met FY 2024 Goal.** • The MRGSQT Outcomes Report includes information on the comprehensive Public Education and Outreach programs, community events, presentations, and participation activities in FY 2024. The MRGSQT participated in a wide variety of community events. Through the MRGSQT, three partner education and student involvement programs, Arroyo Classroom, BEMP, and RiverXchange, were supported in FY 2024. The target audiences for these activities are typically identified in the Outcomes Report. The Keep the Rio Grande website has been updated to better assist with implementation of this activity.

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
Not Included in NOI	130	Part I.D.5.g.(ii).(f), Use materials or outreach programs directed toward targeted groups of commercial, industrial, and institutional entities likely to have significant stormwater impacts. For example, providing information to restaurants on the impact of grease clogging storm drains and to garages on the impact of oil discharges. The permittee may tailor the outreach program to address the viewpoints and concerns of all communities, particularly minority and disadvantaged communities, as well as any special concerns relating to children. The permittee must make information available for non-English speaking residents, where appropriate.	Part I.D.5.g.(ii).(f) - The MRGSQT will continue to include Public Education and Outreach programs directed toward commercial, industrial, engineering/contractors, and other institutional entities to meet the MS4 Permit requirements. Where outreach target groups include Spanish-speaking residents, MRGSQT may have Spanish-translations available of public meeting announcements and data sheets. The need for bi-lingual outreach will be assessed by the MRGSQT as needed.	• The MRGSQT cooperative programs will continue to include information on Public Education and Outreach and Public Involvement and Participation programs directed toward commercial, industrial, engineering/contractors, and other institutional entities. • Where outreach target groups include Spanish-speaking residents, MRGSQT may have Spanish-translations available of public meeting announcements and data sheets. The need for bi-lingual outreach will be assessed by the MRGSQT as needed.	**Met FY 2024 Goals.** • The MRGSQT Outcomes Report includes information on Public Education and Outreach and Public Involvement and Participation programs directed toward commercial, industrial, engineering/contractors, and other institutional entities. • The MRGSQT continued to distribute BMP brochures in English and Spanish for specific industries (Contractors, Food Preparation or Service, Parking Lots and Drive Through Lanes, Fueling Stations, Vehicle and Equipment Repair, Carpet and Upholstery Cleaning, Scrap Metal Recycling, and Landscaping). These materials are available upon request.
7.2	131	Update the SWMP document and Annual Report as required in Part I.D.5.g.(iii) and Part I.D.5.g.(iv). Part I.D.5.g.(iii), The permittee must include the following information in the SWMP document: (a) A description of a program to promote, publicize, facilitate public reporting of the presence of illicit discharges or water quality associated with discharges from MS4s; (b) A description of the education activities, public information activities, and other appropriate activities to facilitate the proper management and disposal of used oil and toxic materials; (c) A description of the mechanism(s) utilized to comply with each of the elements required in Part I.D.5.g.(i) and Part I.D.5.g.(ii) and its corresponding measurable goal. Part I.D.5.g.(iv), The permittee must assess the overall success of the program, and document both direct and indirect measurements of program effectiveness in the Annual Report.	Part I.D.5.(g).(iii) - (a) MS4s that are members of the MRGSQT benefit from the Albuquerque 311 Citizen Contact Center. Reports for illicit discharge can be done by phone, on-line, e-mail, or through an app on cellular phones. (b) Educational and public outreach activities are primarily handled through the MRGSQT. (c) This SWMP, AMAFCA's Annual Reports, and the MRGSQT outreach coordinator contract all serve an mechanisms to comply with the elements in this section of the permit. Refer to the above SWMP program elements for additional information. AMAFCA's Stormwater Quality Engineer will review the program requirements listed for the above-mentioned program elements during the SWMP update and Annual Report process. A strategy to implement any new program requirements or improve compliance with the program requirements will be discussed with the MRGSQT and developed as needed. Part I.D.5.(g).(iv) - AMAFCA will document the program effectiveness and program success. AMAFCA will incorporate documentation by reference into the Annual Report and plans to document progress on the AMAFCA website.	• The AMAFCA Stormwater Quality Engineer will review and include the program requirements listed in Part I.D.5.g during the SWMP update and Annual Report process. • AMAFCA will document the program effectiveness and program success. AMAFCA will incorporate documentation by reference into the Annual Report and plans to document progress on the AMAFCA website. • AMAFCA (both through the MRGSQT and individually) will use surveys to assist with determining the effectiveness of programs.	**Met FY 2024 Goals.** • The SWMP was reviewed during the FY 2024 Annual Report development. • The MRGSQT website (www.keeptheriogrande.org) has links related reporting illicit discharge and the COA website promotes the 311 Citizen Contact Center. • AMAFCA projects require SWPPP Management boards for all their construction projects to provide the public with contact information for reporting indicators of stormwater discharges. • This Annual Report and the MRGSQT Outcomes Report document the program effectiveness and program success in the status of implementation and performance assessment for each MS4 Permit requirement in this section of the Permit. • The MRGSQT utilized updated stormwater surveys to assess the effectiveness of the Public Education and Outreach and Public Involvement and Participation program elements. An example of the MRGSQT/AMAFCA survey, as well as survey results trendline data, are available upon request.
7.2	132	Enhance the program to include Program Flexibility Elements in Part I.D.5.g.(v) through Part I.D.5.g.(viii). Part I.D.5.g.(v), Where necessary to comply with the MS4 Permit, the permittee should develop a program or modify/revise an existing education and outreach program to: (a) Promote, publicize, and facilitate the use of GI/LID/Sustainability practices; and (b) Include an integrated public education program regarding litter reduction, reduction in pesticide/herbicide use, recycling, and disposal (including yard waste, hazardous waste materials, and used motor vehicle fluids), and GI/ LID/ Sustainable practices (as allowed by the NM OSE).	Part I.D.5.g.(v).(a) and (b) - AMAFCA will continue to include in its (and in the cooperative MRGSQT) Public Education and Outreach program: GI/LID/sustainability practices, litter reduction, herbicide and pesticide proper use and reduction (AMAFCA does not apply fertilizers in its operations), recycling, proper disposal of hazardous waste, proper disposal motor vehicle fluids, and proper disposal of yard waste.	• AMAFCA will document progress made with these program enhancement activities.	**Met FY 2024 Goal.**

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
Not Included in NOI	133	Enhance the program to include Program Flexibility Elements in Part I.D.5.g.(v) through Part I.D.5.g.(viii) [continued] Part I.D.5.g.(vi), The permittee may collaborate or partner with other MS4 operators to maximize the program and cost effectiveness of the required outreach.	Part I.D.5.g.(vi) - The MRGSQT is a cooperative effort allowing watershed MS4 participants to maximize their education, outreach, participation, and involvement programs in a cost effective manner. Through involvement in the MRGSQT, AMAFCA will continue to collaborate with the MS4 permittees to implement and improve upon the existing Public Education and Outreach and Public Involvement and Participation programs.	• AMAFCA will continue to contribute to and participate in the MRGSQT in order to maximize their Public Education and Outreach and Public Involvement and Participation programs in a cost effective manner.	**Met FY 2024 Goal.** • AMAFCA continued to contribute to and participate in the MRGSQT.
Not Included in NOI	134	Enhance the program to include Program Flexibility Elements in Part I.D.5.g.(v) through Part I.D.5.g.(viii). [continued] Part I.D.5.g. (vii), The education and outreach program may use citizen hotlines as a low-cost strategy to engage the public in illicit discharge surveillance.	Part I.D.5.g.(vii) - MS4s that are members of the MRGSQT benefit from the Albuquerque 311 Citizen Contact Center. The 311 service is a single telephone number for all non-emergency inquiries and services. This program includes citizen calls regarding illicit discharges and notifies AMAFCA of such calls within its jurisdiction.	• MS4s that are members of the MRGSQT benefit from the Albuquerque 311 Citizen Contact Center. This is discussed in more detail in the Illicit Discharges and Improper Disposal Control Measure.	**Met FY 2024 Goal.** • AMAFCA continued to participate in the 311 citizen hotline as well as the Illegal Dumping Partnership, which has various jurisdictional reporting contacts. The MRGSQT website (https://keeptheriograndorg/resources/) has additional information. This is discussed in more detail in the Illicit Discharges and Improper Disposal section of the Annual Report.
Not Included in NOI	135	Enhance the program to include Program Flexibility Elements in Part I.D.5.g.(v) through Part I.D.5.g.(viii). [continued] Part I.D.5.g. (viii), The permittee may use stormwater educational materials provided by the State, Tribe, EPA, environmental groups, public interest or trade organ., or other MS4s. The permittee may also integrate the education and outreach program with existing education and outreach programs in the MRG area. Examples of existing programs include: Classroom education on stormwater that allows students to develop watershed map to help students visualize area impacted and develop pet specific education. As well as education and outreach programs for commercial activities, lawn and garden activities, sustainable practices, pet waste management, proper disposal of household waste, trash management, water conservation practices designed to reduce pollutants in stormwater for home residences. Existing programs should include regular employee trainings with industry groups and contribute and participate in Stormwater Quality Team.	Part I.D.5.g.(viii) - The MRGSQT may utilize educational materials provided by the State, Tribe, EPA, environmental groups, public interest or trade organizations, or other MS4s.	• The MRGSQT may utilize materials, as appropriate, provided by the State, Tribe, EPA, environmental groups, public interest or trade organizations, or other MS4s. The types of materials and program focus for the materials utilized will be summarized in the annual MRGSQT Outcomes Report. This report is available upon request and AMAFCA plans to share this document on its website.	**Met FY 2024 Goal.** • Educational materials are provided on the MRGSQT website (https://keeptheriograndorg) and are typically summarized in the MRGSQT Outcomes Report.

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
	136	**TABLE 9: Public Involvement and Participation - Part I.D.5.h**			
8.1	137	Develop (or update), implement, and maintain a public involvement and participation plan as required in Part I.D.5.h.(ii). This plan should provide opportunities for participation in the review, modification and implementation of the SWMP; develop and implement a process by which public comments to the plan are received and reviewed by the person(s) responsible for the SWMP; and make the SWMP available to the public and to the operator of any MS4 or Tribal authority receiving discharges from the MS4.	Part I.D.5.h.(ii) - AMAFCA will continue its Public Involvement and Participation program to encourage public involvement in the review, modification and implementation of the AMAFCA SWMP.	• AMAFCA will post the draft SWMP, any SWMP amendments or modifications, and draft Annual Reports to the www.amafca.org website with an explanation of the public comment period and instructions on how to submit comments. The posted documents will provide explanations of substantial changes, if applicable. • At least 30-days prior to submission of each updated SWMP, AMAFCA will provide public notice and make a draft copy of the updated SWMP available for public review and comment. • At least 45-days prior to submission of each Annual Report, AMAFCA will provide public notice and make a draft copy of the Annual Report available for public review and comment, as required in Part III.B of the MS4 Permit. • AMAFCA will implement, and update as needed, the Public Involvement and Participation Plan.	**Met FY 2024 Goals.** • AMAFCA posted the availability of a draft Annual Report on the www.AMAFCA.org website with an explanation of the public comment period and instructions on how to submit comments. • AMAFCA met the Permit required 45-day notice period for the draft FY 2024 Annual Report.
8.1	138	As required in Part I.D.5.h.(iii), the Public Involvement and Participation Plan shall include a comprehensive planning process which involves public participation and where necessary intergovernmental coordination. The permittee must include the following elements in the plan: (a) A detailed description of the general plan for informing the public of involvement and participation opportunities, including types of activities; target audiences; how interested parties may access the SWMP; and how the public was involved in development of the SWMP; (b) The development and implementation of at least one (1) assessment of public behavioral change following a public education and/or participation event; (c) A process to solicit involvement by environmental groups, environmental justice communities, civic organizations or other neighborhoods /organizations interested in water quality-related issues; and (d) An evaluation of opportunities to utilize volunteers for stormwater pollution prevention activities and awareness throughout the area.	Part I.D.5.h.(iii) - As allowed in this Permit section's "Program Flexibility Elements", AMAFCA, through its involvement with the MRGSQT, has integrated this section of the Public Involvement and Participation program with the existing Public Education and Outreach programs in the Middle Rio Grande area. The program includes: (a) A general plan for public of involvement and participation opportunities, including types of activities; target audiences; how interested parties may access the SWMP; and how to encourage public involvement in development and updates of the SWMP; (b) The development and implementation of water quality surveys to assess public knowledge and behavioral change following a public education and/or participation event; (c) A process to solicit involvement in development and updates of the SWMP through following the 45-day Annual Report and 30-day SWMP public comment period; and (d) An evaluation of opportunities to utilize volunteers for stormwater pollution prevention activities, including maintaining Mutt Mitt stations.	• AMAFCA will contribute and participate in the MRGSQT, which participates in public events and solicits public participation and feedback by way of volunteer participation and water quality surveys. Both the BEMP and program include participation metrics. In addition, the MRGSQT has developed and will include surveys for public behavior changes and feedback at their events. • AMAFCA will continue to follow the 45-day Annual Report and 30-day SWMP public comment period during the term of this Permit. • AMAFCA will continue to provide Mutt Mitt stations and seek volunteers to maintain the stations. AMAFCA will continue tracking this activity and reviewing metrics during the term of this Permit.	**Met FY 2024 Goal.** • AMAFCA continued to contribute to and participate in the MRGSQT; the Outcomes Report is contained in the Program Summaries section of the Annual Report. BEMP, River Xchange, and Arroyo Classroom programs continued in FY 2024. • AMAFCA met the Permit required notice period for the FY 2024 Annual Report documents public review. • When appropriate, AMAFCA held project specific project meetings to solicit involvement from organization interested in water quality related issues. In addition, AMAFCA participates in the Water Protection Advisory (WPAB) Board Public Involvement Committee (PIC) and presented to the Board in FY 2024. • AMAFCA continued its focus on reducing pet waste through providing Mutt Mitt Stations and bags, maintained by community volunteers. Summary information for the Mutt Mitt Stations Program is available upon request.
8.2	139	Comply with State, Tribal, and local notice requirements when implementing a Public Involvement and Participation Program as required in Part I.D.5.h.(iv). Reporting notification requirements also in Part III.D.4.	Part I.D.5.h.(iv) & Part III.D.4 - AMAFCA will provide digital copies of all MS4 compliance reporting documents to the NMED, Pueblos of Sandia and Isleta as required of the MS4 Permit. The SWMP and Annual Reports are also available on the amafca.org website.	• AMAFCA will provide digital copies of MS4 compliance reporting documents, as appropriate, to the NMED, Pueblos of Sandia and Isleta as required here and in Part III.D.4 of the MS4 Permit. • AMAFCA will continue to post the SWMP and Annual Reports on the www.amafca.org website.	**Met FY 2024 Goal.** • AMAFCA provided copies of the FY 2024 Annual Report to the NMED, Pueblo of Sandia, and Pueblo of Isleta as required here and in Part III.D.4 of the MS4 Permit. • AMAFCA continued its process of posting the current SWMP and the most recent Annual Report on the www.keeptheriograndе.org and/or the www.amafca.org websites.

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
8.3	140	Include elements as required in Part I.D.5.h.(v). The public participation process must reach out to all economic and ethnic groups. Opportunities for members of the public to participate in program development and implementation include serving as citizen representatives on a local stormwater management panel, attending public hearings, working as citizen volunteers to educate other individuals about the program, assisting in program coordination with other preexisting programs, or participating in volunteer monitoring efforts.	Part I.D.5.h.(v) - As allowed in this Permit section's "Program Flexibility Elements", AMAFCA, through its involvement with the MRGSQT cooperative programs, has integrated this section of the Public Involvement and Participation program with existing Public Education and Outreach programs in the Middle Rio Grande area. AMAFCA will continue to include stormwater quality information for the public at events, including public meetings. AMAFCA may have Spanish translations, as needed, of public meeting announcements and data sheets.	• AMAFCA will continue to include (along with the cooperative MRGSQT programs) water quality information for the public at events, including public meetings. Where neighborhoods include Spanish-speaking residents, MRGSQT may have Spanish-translations available of public meeting announcements and data sheets. By attending a variety of events at widespread locations throughout the area and by using the leading area newspaper (Albuquerque Journal) to advertise events, the MRGSQT ensures that a wide-range of economic and ethnic groups are reached, as documented in the Outreach Report. • AMAFCA will use the Watershed Protection Advisory Board, Public Involvement Committee as a mechanism to reach out to the community for volunteers and to solicit input through public meetings and discussions.	**Met FY 2024 Goals.** • AMAFCA participated in the Watershed Protection Advisory Board (WPAB) Public Involvement Committee (PIC).
8.4	141	Update the SWMP document and Annual Report as required in Part I.D.5.h.(vi), Part I.D.5.h.(vii), and Part I.D.5.h.(viii). The permittee must include in the SWMP a description of the mechanisms utilized to comply with each of the elements required in Parts I.D.5.h.(i) throughout part I.D.5.h.(iv) and its corresponding measurable goal. The permittee shall assess the overall success of the program, and document the program effectiveness in the Annual Report. The permittee must provide public accessibility of the SWMP and Annual Reports online via the Internet and during normal business hours at the MS4 operator's main office for public inspection and copying consistent with any applicable federal, state, tribal, or local open records requirements. Upon a showing of significant public interest, the MS4 operator is encouraged to hold a public meeting (or include in the agenda of in a regularly scheduled city council meeting, etc.) on the NOI, SWMP, and Annual Reports.	Part I.D.5.h.(vi) - AMAFCA's Stormwater Quality Engineer will review the program requirements listed for the above-mentioned program elements during the SWMP update and Annual Report process. A strategy to implement any new program requirements or improve compliance with the program requirements will be discussed with the MRGSQT, if applicable, and developed as needed. Part I.D.5.h.(vii) - AMAFCA will document the program effectiveness and program success. AMAFCA will incorporate documentation by reference into the Annual Report. Part I.D.5.h.(viii) - AMAFCA will provide public accessibility of the SWMP and Annual Reports online via the Internet on the www.amafca.org website. At least 30-days prior to submission of each updated SWMP, AMAFCA will provide public notice and make a draft copy of the updated SWMP available for public review and comment and at least 45-days prior to submission of each Annual Report, AMAFCA will provide public notice and make a draft copy of the Annual Report available for public review and comment, as required in Part III.B of the MS4 Permit.	• The AMAFCA Stormwater Quality Engineer will review and include the program requirements listed in Part I.D.5.g during the SWMP update and Annual Report process. • AMAFCA will document the program effectiveness and program success. AMAFCA will incorporate documentation by reference into the Annual Report. • AMAFCA will provide public accessibility of the current SWMP document and the most recent Annual Report online via the Internet on the www.amafca.org website.	**Met FY 2024 Goals.** • AMAFCA continued to utilize the Annual Report and SWMP revision process as a means to perform a self-audit on the MS4 Program elements. • This Annual Report and the MRGSQT Outcomes Report document the program effectiveness and program success in the status of implementation and performance assessment for each MS4 Permit requirement. The MRGSQT Outcomes Report is contained in the Program Summaries section of the Annual Report. • AMAFCA continued to provide public accessibility of the current SWMP document and the most recent Annual Report online via the Internet (www.amafca.org and/or www.keeptheriograndе.org) and during normal business hours at the AMAFCA office. AMAFCA is located at 2600 Prospect Avenue NE, Albuquerque, NM 87107. The phone number is 505-884-2215. • AMAFCA met the Permit required 45-day notice period for the FY 2024 Annual Report. Documentation for the public review notices are provided in this section of the Annual Report.

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
8.5	142	Enhance the program to include requirements in Part I.D.5.h.(ix). The permittee may integrate the public involvement and participation program with existing education and outreach programs in the Middle Rio Grande area. Example of existing programs include: Adopt-A-Stream Programs; Attitude Surveys; Community Hotlines (e.g. establishment of a '311'-type number and system established to handle storm-water-related concerns, setting up a public tracking/reporting.	Part I.D.5.h.(ix) - AMAFCA will continue to include in its (and in the cooperative MRGSQT programs) public involvement and participation programs: funds toward groups which include public participation, such as Boy or Girl Scouts of America, , the Bosque Ecosystem Monitoring Program (BEMP), Earth Force - Keep it Clean student outreach, Talking Talons Youth Leadership Activities, and Youth Corps programs. MS4s that are members of the MRGSQT benefit from the Albuquerque 311 Citizen Contact Center.	• AMAFCA will document progress made with these program enhancement activities. AMAFCA and the MRGSQT will continue to review, update, and enhance public involvement and participation programs. The MRGSQT Outcomes Report will provide the documentation for this Permit activity. This report is available upon request and AMAFCA plans to share this document on its website. • MS4s that are members of the MRGSQT benefit from the Albuquerque 311 Citizen Contact Center. This is discussed in more detail in the Illicit Discharges and Improper Disposal Control Measure.	**Met FY 2024 Goals.** • The MRGSQT Outcomes Report summarizes the public involvement and participation programs and activities for FY 2024. This report is contained in the Program Summaries section of the Annual Report. • AMAFCA continued to participate in the 311 call in program. This is discussed in more detail in the Illicit Discharges and Improper Disposal Control Measure section.
8.6	143	Item from MS4 Permit NOI. Describe other proposed activities to address the Public Involvement and Participation Measure.	AMAFCA will continue to utilize the Annual Report and SWMP revision process as a means to perform a self-audit with the goal to improve its MS4 Programs.	• AMAFCA will document progress made, if any, related to the Annual Report and SWMP revision process as a means to perform a self-audit on the MS4 Program elements.	**Met FY 2024 Goal.** • AMAFCA continued to utilize the Annual Report and SWMP revision process as a means to perform a self-audit on the MS4 Program elements.

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
	144	**Part III - Monitoring, Assessment and Reporting Requirements**			
	145	**TABLE 10: Wet Weather Monitoring Program - Part III.A.1**			
See NOI Sections Below	146	According to the requirements in Part III.A.1., The permittee must develop, in consultation with NMED and EPA (and affected Tribes if monitoring locations would be located on Tribal lands), and implement a comprehensive monitoring and assessment program. The permittees shall conduct wet weather monitoring to gather information on the response of receiving waters to wet weather discharges from the MS4 during both wet season (July 1 through October 31) and dry season (November 1 through June 30). Wet Weather Monitoring shall be conducted at outfalls, internal sampling stations, and/or in-stream monitoring locations at each water of the US that runs in each entity or entities' jurisdiction(s).	Part III.A.1 - Wet weather screening is synonymous with compliance monitoring. In the MRG MS4 Permit area, stormwater runoff discharges to the Rio Grande at outfall locations via major drainage channels, storm drains, and pump stations. The Rio Grande, the only perennial river in the watershed, enters the MRG Watershed in one location (North of Albuquerque) and leaves the MRG Watershed south of Albuquerque. Details for this program are provided in the SWMP sections below.	The program details and measurable goals are described below. The Final Sampling Plan for Cooperative Compliance Monitoring (CMC) was submitted to EPA on May 5, 2016. The sampling plan was accepted by the EPA and NMED. The current 2014 Middle Rio Grande Watershed Based Municipal Separate Storm Sewer System (MS4) Permit, NPDES Permit No. NMR04A000, expired on December 19, 2019. The MRG Watershed Based MS4 Permit entered into administrative continuance in Dec. 2019 when EPA Region 6 did not issue a new MS4 Permit before the current MS4 Permit expirations date. The MRG TAG sent EPA an Administrative Continuance letter dated October 15, 2019. Until a new MS4 Permit is issued, there are no wet and dry weather monitoring requirements in the Rio Grande. However, during administrative continuance, the CMC members will evaluate and may choose to continue sampling to support their MS4 program needs, demonstrate program progress, or gather additional data in support of the future Permit compliance.	**See specific Permit activity below.**
IV	147	Part III.A.3.1.b. Option B: Cooperative Monitoring Program Develop a cooperative wet weather monitoring program with other permittees in the Middle Rio Grande Watershed. The program will monitor waters coming into the watershed (upstream) and leaving the watershed (downstream). The program must include sampling for TSS, TDS, COD, BOD5, DO, oil and grease, E. coli, pH, total kjeldahl nitrogen, nitrate plus nitrite, dissolved phosphorus, total ammonia plus organic nitrogen, total phosphorus, PCBs and Gross alpha. Monitoring of temperature shall be also conducted at outfalls and/or Rio Grande monitoring locations. Permittees must include additional parameters from monitoring conducted under permits NMS000101, NMR04A000 or/and NMR040001 whose mean values are at or above a WQS. The monitoring program must sample the pollutants for a minimum of 7 storm events per location during the permit term with at least 3 events in the wet season and 2 events in the dry season.	Part III.A.3.1.b. Option B: Cooperative Monitoring Program -The cooperative wet weather compliance monitoring will monitor waters coming into the watershed (upstream) and leaving the watershed (downstream) for a minimum of 7 storm events per location during the Permit term with at least 3 in the events in the wet season and 2 events in the dry season. The wet season is defined in the permit as July 1 through October 31 and the dry season as November 1 through June 30. AMAFCA joined the Compliance Monitoring Cooperative (CMC) group, which includes 12 watershed partners. The participatory permittees have developed a cooperative wet weather compliance monitoring program to assess the effect of stormwater discharges on the receiving water, the Middle Rio Grande. This monitoring plan was reviewed and discussed with NMED and EPA during its development. The cooperative sampling plan was accepted by EPA and permittees submitted the sampling plan on May 5, 2016 and sampling certification to EPA on June 28, 2016. At the end of FY 2019, all Permit required samples have been obtained by the CMC.	• If the CMC does continue wet weather compliance monitoring during administrative continuance of this Permit, the monitoring program will follow the Permit requirements for parameters tested (TSS, TDS, COD, BOD5, DO, oil and grease, E. coli, pH, total kjeldahl nitrogen, nitrate plus nitrite, dissolved phosphorus, total ammonia plus organic nitrogen, total phosphorus, PCBs, Gross alpha, and temperature). In addition, parameters from stormwater monitoring conducted under Permit NMS000101, whose mean values were at or above a WQS, will also be tested. The complete list of parameters is listed in the CMC sampling plan. In addition, DO, pH, conductivity, and temperature will be analyzed in the field within 15 minutes of sample collection. • If the CMC does continue wet weather compliance monitoring during administrative continuance of this Permit, the parameter list may be modified based on a review of the results obtained within the watershed and the program assessment needs for the permittees. AMAFCA will document, as applicable, any wet weather monitoring activity. AMAFCA will incorporate documentation by reference into the Annual Report and plans to document progress on the AMAFCA website. • If the CMC does continue wet weather compliance monitoring during administrative continuance of this Permit, the monitoring program will be conducted according to the approved Sampling Plan for Compliance Monitoring.	**Met FY 2024 Goals.** • The required CMC sampling for the MS4 Permit term in the Rio Grande (2016 to 2019) was completed in FY 2019. The MRG Watershed Based MS4 Permit entered into administrative continuance in Dec. 2019 when EPA Region 6 did not issue a new MS4 Permit before the current MS4 Permit expired. The MS4 TAG sent EPA an Administrative Continuance letter dated October 15, 2019, acknowledging that until a new MS4 Permit is issued, there are no compliance monitoring requirements in the Rio Grande. Although compliance sampling is currently not required, the CMC has opted to continue collecting samples while the permit is in administrative continuance. Two (2) CMC monitoring and sampling events were conducted in FY 2024. The CMC sampled the wet season storm events on Dec 13-14, 2023 and June 26-27, 2024. • The CMC continued to maintain a database of the analysis results from the collected samples for the approved parameters. This database is available upon request. The E. coli loading and load allocation calculations related to the CMC monitoring program are available upon request for the cooperative sampling completed in FY 2016 – FY 2024.

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
IV	148	As required in Part III.A.1.e. and Table 10, the permittees shall submit wet weather monitoring preference Option A or Option B to EPA (i.e., individual monitoring program vs. cooperative monitoring program) with NOI submittals.	Part III.A.1.e, Table 10 - AMAFCA submitted its NOI in compliance with the permit requirements and schedule. AMAFCA will participate in Option B - cooperative monitoring program.	• This Permit activity is complete.	**Permit Activity is Complete.**
Not Included in NOI	149	Part III.A.1.e, Table 10 - Submit a detailed description of the monitoring scheme to EPA and NMED for approval. The monitoring scheme should include: a list of pollutants; a description of monitoring sites with an explanation of why those sites were selected; and a detailed map of all proposed monitoring sites. In addition, as required in Part III.A.1.h, the monitoring program must include a contingency plan for collecting additional monitoring data within the MS4 or at additional appropriate instream locations should monitoring results indicate that MS4 discharges may be contributing to instream exceedances of WQS. The purpose of this additional monitoring effort would be to identify sources of elevated pollutant loadings so they could be addressed by the SWMP.	Part III.A.1.e, Table 10 - AMAFCA joined the Compliance Monitoring Cooperative (CMC) group, which includes 12 watershed partners. The participatory permittees have developed a wet weather cooperative monitoring program to assess the effect of stormwater discharges on the receiving water, the Middle Rio Grande. This monitoring plan was reviewed and discussed with NMED and EPA during its development. Multiple drafts were submitted to EPA and NMED by the CMC, including drafts on Sept. 16, 2015 and Dec. 21, 2015. The cooperative monitoring plan was accepted by EPA and permittees submitted the sampling plan on May 5, 2016 and sampling certification to EPA on June 28, 2016. Modifications to this sampling may be submitted to the EPA in the future, as needed for approval.	• This Permit activity is complete. • The CMC members have met all requirements for wet weather compliance monitoring. If the CMC does continue wet weather monitoring during administrative continuance of this Permit, the monitoring program will be conducted according to the EPA/NMED approved monitoring plan.	**Permit Activity is Complete.**
Not Included in NOI	150	Part III.A.1.e, Table 10 - Submit certification that all wet weather monitoring sites are operational and begin sampling.	Part III.A.1.e, Table 10 - AMAFCA submitted its sampling certification to EPA on June 28, 2016.	• This Permit activity is complete. • AMAFCA, with its cooperative partners, has submitted certifications to the EPA that all wet weather compliance monitoring sites are operational and the CMC has begun sampling, according to the Permit requirements.	**Permit Activity is Complete.**
Not Included in NOI	151	As required in Part III.A.1.e, update SWMP document and submit Annual Reports. The results of the Wet Weather Monitoring must be provided in each Annual Report. As required in Part III.D.1 -Monitoring results obtained during the reporting period running from July 1st to June 30th shall be submitted on discharge monitoring report (DMR) forms along with the Annual Report required by Part III.B. A separate DMR form is required for each monitoring period (season) specified in Part III.A.I. If any individual analytical test result is less than the minimum quantification level (MQL) listed for that parameter, then a value of zero (0) may be used for that test result for the DMR calculations and reporting requirements. The Annual Report shall include the actual value obtained, if test result is less than the MQL.	Part II.A.1.e, Table 10 - AMAFCA's Stormwater Quality Engineer will review the program requirement for the above-mentioned program elements, during the Annual Report process. A strategy to implement any new program requirements or improve compliance with the program requirements will be developed as needed. Part III.D.1 - The wet weather compliance monitoring results obtained by the CMC from July 1st to June 30th will be submitted as required by the EPA using the netDMR online website or as otherwise approved by EPA as part of the cooperative sampling program. EPA has required that the NetDMR online system be used to submit DMR results. Since this Permit will be in administrative continuance, and all required compliance monitoring results have been obtained, AMAFCA anticipates additional coordination with EPA relative to future samples uploaded to the NetDMR system. AMAFCA will continue internal watershed stormwater quality monitoring, which typically collects samples from various locations. Collection of these samples are weather and equipment dependent. Monitoring results obtained from AMAFCA's internal stormwater quality assessment monitoring program and any continued CMC stormwater quality monitoring are available upon request.	• As part of the Annual Report process each year, the Stormwater Quality Engineer will review the program requirements listed in Part III.A.1, for the above-mentioned SWMP elements, and assess the overall success of the program. AMAFCA will document the program effectiveness and program success. AMAFCA will incorporate documentation by reference into the Annual Report. • The CMC members have met all requirements for wet weather compliance monitoring. If the CMC does continue wet weather monitoring during administrative continuance of this Permit, the wet weather compliance monitoring results obtained from July 1st to June 30th will be submitted as required by the EPA using the NetDMR online website or as otherwise approved by EPA as part of the cooperative sampling program. Since this Permit is in administrative continuance, and all required compliance monitoring results have been obtained, AMAFCA anticipates additional coordination with EPA relative to future samples uploaded to the NetDMR system. • Monitoring results obtained from AMAFCA's internal stormwater quality assessment monitoring program and any continued CMC stormwater quality monitoring are available upon request.	**Met FY 2024 Goals.** • Refer to ID # 30 above for monitoring program updates for FY 2024.

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
	152	**Dry Weather Discharge Screening of MS4 - Part III.A.2**			
Not Included in NOI	153	According to the requirements in Part III.A.2., Each permittee shall identify, investigate, and address areas within its jurisdiction that may be contributing excessive levels of pollutants to the Municipal Separate Storm Sewer System as a result of dry weather discharges (i.e., discharges from separate storm sewers that occur without the direct influence of runoff from storm events, e.g. illicit discharges, allowable non-stormwater, groundwater infiltration, etc.). Due to the arid and semi-arid conditions of the area, the dry weather discharges screening program may be carried out during both wet season (July I through October 31) and dry season (November 1 through June 30). Results of the assessment shall be provided in each Annual Report.	Part III.A.2 - The program details and measurable goals are described below, in the Pollution Prevention/Good Housekeeping Control Measure, and in the Illicit Discharge and Improper Disposal Control Measure. There are no perennial streams in the Albuquerque area that contribute to the Rio Grande. As such, the dry weather screening program serves a dual purpose as an illicit discharge screening analysis.	• The program details and measurable goals are described below, in the Pollution Prevention/Good Housekeeping Control Measure, and in the Illicit Discharge and Improper Disposal Control Measure.	**Met FY 2024 Goal.** • The program details and measurable goals are described below, in the Pollution Prevention/Good Housekeeping Control Measure, and in the Illicit Discharge and Improper Disposal Control Measure.
Not Included in NOI	154	Part III.A.2 -This program may be coordinated with the illicit discharge detection and elimination program required in Part I.D.5.e. The dry weather screening program shall be described in the SWMP and comply with the schedules contained in Part I.D.5.e.(iii). The permittee shall: a) Include sufficient screening points to adequately assess pollutant levels from all areas of the MS4. b) Screen for, at a minimum, BOD5, sediment or a parameter addressing sediment (e.g., TSS or turbidity), E. coli, Oil and Grease, nutrients, any pollutant that has been identified as cause of impairment of a waterbody receiving discharges from that portion of the MS4, including temperature. c) Specify the sampling and non-sampling techniques to be issued for initial screening and follow-up purposes. d) Perform monitoring only when an antecedent dry period of at least 72 hours after a rain event greater than 0.1 inch in magnitude is satisfied. Monitoring methodology shall consist of collecting a minimum of 4 grab samples spaced at a minimum interval of 15 minutes each.	Part III.A.2 - AMAFCA will continue with the existing, cooperative Dry Weather Screening program in place under MS4 Permit NMS000101. The existing Dry Weather Screening program cooperative program with COA includes screening various locations, which screen 100% of COA/AMAFCA jurisdiction and targets industrial areas. Should any discharge be present in a quantity sufficient for analysis, it will be screened for BOD5, sediment (e.g., TSS or turbidity), E. coli, oil and grease, and nutrients. Any discharge collected will be a grab sample according to the Permit monitoring methodology. In addition, AMAFCA has in place a well-defined and implemented routine inspection and O&M program that includes both formal and informal inspections and maintenance schedules for its watershed protection elements. Also, as part of AMAFCA's Levelogger monitoring, AMAFCA screens all major channel inlets to the NDC on AMAFCA ROW monthly. These inspections all function as dry weather inspections. AMAFCA will continue membership and involvement in the cooperative MS4 Technical Advisory Group (MS4 TAG), which will facilitate cooperation and coordination with other MS4s in the Middle Rio Grande related to screening for illicit discharges.	• Under MS4 Permit NMR04A000, COA has taken the lead on this program and is responsible for the dry weather screening and documentation for this existing program. Screening results collected by the COA can be provided upon request. • AMAFCA will continue to perform inspections according to the applicable O&M Manuals and Plans. These inspections also function as dry weather inspections. • As part of AMAFCA's Levelogger monitoring, AMAFCA will continue to inspect all channelized inlets to the NDC on AMAFCA ROW monthly. In addition, AMAFCA will incorporate dry weather inspections into projects, as applicable, to increase the documentation of facility inspections. • AMAFCA will continue membership and involvement in the cooperative MS4 Technical Advisory Group (MS4 TAG) which will facilitate cooperation and coordination with other MS4s in the Middle Rio Grande related to screening for illicit discharges.	**Met FY 2024 Goals.** • In cooperation with the COA, the Dry Weather Screening for 40 locations throughout the Middle Rio Grande Watershed, including the AMAFCA MS4, was completed and shared with AMAFCA by COA. The screening followed the requirements in (a) through (d) for this Permit element. The screening report is included as a Program Summary for the Annual Report. • In FY 2024, AMAFCA continued to implement routine inspections and maintenance that included both formal and informal inspections and maintenance schedules for its watershed protection elements. These inspections also functioned as dry weather inspections. Refer to the Pollution Prevention/Good Housekeeping Control Measure for additional information. In FY 2024, AMAFCA continued to perform inspections according to the applicable Manuals and Plans. • AMAFCA discontinued dry weather/illicit discharge inspections with its Levelogger monitoring. In FY 2024, AMAFCA discontinued operation and analysis from Leveloggers located at the channelized inlets to the NDC on AMAFCA ROW. This activity was removed during FY 2024 in conjunction with modifications to AMAFCA SWMP Rev. 6. The AMAFCA SWMP Rev. 7 was adopted on July 1, 2024. AMAFCA continued to visit these locations for evidence of illicit discharges or dry weather discharges. • AMAFCA continued to be involved in the MS4 TAG group in FY 2024.

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
	155	**Floatables Monitoring - Part III.A.3**			
Not Included in NOI	156	According to the requirements in Part III.A.3., The permittees shall establish locations for monitoring/assessing floatable material in discharges to and/or from their MS4. A cooperative monitoring program may be established in partnership with other MS4s to monitor and assess floatable material in discharges to and/or from a joint jurisdictional area or watershed basis. Floatable material shall be monitored at least twice per year at priority locations and at minimum of two (2) stations. The amount of collected material shall be estimated in cubic yards. a) One (1) station should be located in the North Diversion (only applicable to COA and AMAFCA).	Part III.A.3 - AMAFCA will continue to monitor floatable material and the amount collected in participation with other MS4s. AMAFCA will monitor floatable material in the settling area of the NDC and at the I-25/SDC Baffle Chute Stormwater Quality Facility. Note the NDC settling area is within the AMAFCA easement on Sandia Pueblo property, but that is where AMAFCA has monitored floatables for many years. The requirements in this Permit section will be completed in conjunction with the requirements in TABLE 7: Control of Floatables Discharges - Part I.D.5.f. AMAFCA monitors and tracks collection of floatables at all AMAFCA facilities.	• AMAFCA will continue to monitor floatable material and estimate the amount collected at least twice per year at a minimum of 2 stations. • AMAFCA will maintain its 5 drying stations, locations where floatable material, sediment and debris is hauled, separated, and properly disposed of. These stations help AMAFCA meet the requirements for this activity.	**Met FY 2024 Goals.** • AMAFCA continued to monitor floatables and the amount collected in the settling area of the NDC and at the I-25/SDC Baffle Chute Stormwater Quality Facility. In addition to these two locations, AMAFCA continued the task of determining the amount of floatables collected from each of the AMAFCA water quality facilities. In FY 2024, AMAFCA continued to use its crew tracking system and database created internally, specifically to meet the MS4 Permit needs. AMAFCA has estimated quantities for the volume of trash, sediment, and vegetation removed from its water quality facilities in FY 2024. Refer to the Annual Report Program Summary for additional information related to control of floatables.

NOI Section	ID	Permit Activity Description	Plan SWMP Rev. 6 - July 1, 2021	Measurable Goal SWMP Rev. 6 - July 1, 2021	Status of Implementation and Performance Assessment Permit Year July 2023 to June 2024 (FY 2024)
	157	**Industrial and High Risk Runoff Monitoring - Part III.A.4**			
4	158	The permittees shall monitor stormwater discharges from Type 1 and 2 industrial facilities which discharge to the MS4 provided such facilities are located in their jurisdiction. (Note: if no such facilities are in the permittee's jurisdiction, the permittee must certify that this program element does not apply).	Activity removed from AMAFCA's SWMP (Rev. 0, December 1, 2015). AMAFCA certifies with submittal of this SWMP that no such industrial activities are located in AMAFCA's jurisdiction and this program element does not apply. This was submitted to EPA in AMAFCA's NOI and accepted.	N/A	N/A

AMAFCA Board Meeting Memorandum — Agenda Item 17a
Information Item

To: AMAFCA Board of Directors
From: Patrick J. Chavez, PE, Stormwater Quality Engineer for Patrick Chavez
Date: July 19, 2023

Subject: Stormwater Quality FY2023 Program Update

Action Requested: None

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The Albuquerque Metropolitan Arroyo Flood Control Authority (AMAFCA) is currently authorized to discharge stormwater under the Municipal Separate Storm Sewer System (MS4) Watershed Based Permit NMR04A016 (Permit). A notification letter was sent to EPA Region 6 on June 15, 2023, stating that AMAFCA will continue in Fiscal Year 2024 to discharge stormwater, as described in the Revision 6 Stormwater Management Program (SWMP), given that the MS4 Permit NMRR04A016 was administratively continued December 19, 2019.

The Stormwater Quality Engineer will deliver a presentation, with an emphasis on streamlining the Program in FY24, on AMAFCA's Minimum Control Measures in the watershed, see below, that are featured in AMAFCA's Rev. 6 SWMP as required by the MS4 Permit:

Special Conditions (compliance with water quality standards, ESA requirements, et cetera)
Construction Site Stormwater Runoff Control
Post-Construction Stormwater Management
Pollution Prevent/Good Housekeeping
Illicit Discharges and Improper Disposal
Control of Floatables
Public Education and Outreach
Public Involvement and Participation

Unanticipated Impacts on AMAFCA Budget:
Short and Long Term – The costs associated with SWMP compliance are included in the FY24 AMAFCA Stormwater Quality Program budget. A budget adjustment to the FY24 budget will be required because of water quality tasks and work completed in FY23 but not invoiced until FY24.

Unanticipated Impacts on AMAFCA Staff:
Short Term – Staff allocation related to compliance with the SWMP is included in the FY24 AMAFCA Work Plan.

AMAFCA Board Meeting Memorandum Agenda Item 16a
Information Item

To: AMAFCA Board of Directors
From: Patrick J. Chavez, PE, Stormwater Quality Engineer
Date: August 16, 2023

Subject: Stormwater Quality – New Mexico Environment Department (NMED) Primacy Discussion

Action Requested: None

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United States Environmental Protection Agency (EPA) Region 6 staff in Texas currently develop and enforce permits to protect New Mexico's surface water quality. New Mexico is one of three states that does not have "primacy" and thus does not develop, issue, and enforce its own permits. NMED is working to develop a state-led permitting program to protect surface water quality in New Mexico.

AMAFCA will be hosting the August 23rd meeting of the Middle Rio Grande Technical Advisory Group (TAG). Staff from the NMED will deliver a short presentation, and answer questions, about the regulatory and enforcement process related to how the state legislature has asked the department to create a state-led permit program. This program would protect New Mexico's surface water quality in the future.

A seven-question on-line survey was sent out earlier this month by NMED to water quality stakeholders in New Mexico. AMAFCA staff responded to the survey by the August 15th, 2023 deadline and two of the most relevant responses are shared below.

For reference, Question 1 of the survey was, "How supportive are you of NMED taking the steps needed to develop a state-led water quality permit program for surface waters in New Mexico?" Question 1 had four answer options ranging from "very supportive" to "not supportive" with AMAFCA providing a "somewhat supportive" response to the question.

"**Please share some thoughts on why you answered Question 1 as you did.**
The EPA Region 6 office is located out-of-state in Dallas and while the monitoring conditions of the 2014 Middle Rio Grande Watershed Based Permit are generally favorable to the watershed, proactive outreach and support from Region 6 staff has been lacking for several years. New permits take time to become fully implemented by stormwater discharging agencies. EPA Region 6 hasn't been staffed and/or charged to properly follow through in renewing the now expired Middle Rio Grande Watershed Based Permit (permit currently in effect due to administrative continuance) or issuing the delayed state-wide watershed-based permit. Sustained compliance with any permit to protect water quality is complicated by not having New Mexico water professionals making timely decisions for what's best for New Mexico's surface waters."

"What concerns or questions do you have about a state-led water quality permit program for New Mexico's surface waters?
Biggest concern is the relative cost of compliance for primarily a "conveyor" and not a "generator" of stormwater. The permit application and renewal dollar amounts must be fairly assessed for all of New Mexico given that authorization to discharge stormwater will be issued by the state. The permitees of the watershed-based permit have established the Compliance Monitoring Cooperative (CMC) to equitably share the cost of monitoring stormwater quality in the urbanized area. This framework of funding the CMC takes into account factors such as population served and jurisdictional area."

AMAFCA's Stormwater Quality Engineer will update the Board of Directors at the August meeting concerning the TAG's discussion with NMED relative to New Mexico's water quality primacy.

Unanticipated Impacts on AMAFCA Budget:
Short and Long Term – There are currently no anticipated impacts, both short and long term, to AMAFCA's FY24 budget.

Unanticipated Impacts on AMAFCA Staff:
Short and Long Term – There are currently no anticipated impacts, both short and long term, to AMAFCA's FY24 staffing.

AMAFCA Board Meeting Memorandum Agenda Item 14a
Information Item

To: AMAFCA Board of Directors
From: Patrick J. Chavez, PE, Stormwater Quality Engineer
Date: October 18, 2023

Subject: Stormwater Quality – Annual Report Update

Action Requested: None

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The Albuquerque Metropolitan Arroyo Flood Control Authority (AMAFCA) is currently authorized to discharge stormwater under the Municipal Separate Storm Sewer System (MS4) Watershed Based Permit NMR04A016 (Permit). Permittees of the MS4 Permit are required to submit an Annual Report by no later than December 1st that covers the previous fiscal year from July 1st to June 30th.

AMAFCA is required to provide public notice of and make available for review and comment a draft copy of the Annual Report at least 45 days prior to submission of each Annual Report. A draft copy of AMAFCA's FY23 MS4 Annual Report was posted on the website (www.amafca.org) on October 9, 2023.

The Stormwater Quality Engineer will present an update to the Board that covers sections of AMAFCA's draft Annual Report. The presentation will also highlight AMAFCA's Minimum Control Measures, see below list provided, in the watershed for the FY23 Annual Report that are also featured in AMAFCA's current Stormwater Management Program (SWMP):

Special Conditions (compliance with water quality standards, ESA requirements, et cetera)
Construction Site Stormwater Runoff Control
Post-Construction Stormwater Management
Pollution Prevent/Good Housekeeping
Illicit Discharges and Improper Disposal
Control of Floatables
Public Education and Outreach
Public Involvement and Participation

Unanticipated Impacts on AMAFCA Budget:
Minimal – There are currently no anticipated impacts, both short and long term, to AMAFCA's FY24 budget.

Unanticipated Impacts on AMAFCA Staff:
Minimal – There are currently no anticipated impacts, both short and long term, to AMAFCA's FY24 staffing.

AMAFCA Board Meeting Memorandum Agenda Item 13a
Informational Item

To: AMAFCA Board of Directors
From: Patrick J. Chavez, PE, Storm Water Quality Engineer
Date: November 7, 2023

Subject: Storm Water Quality Education Coordinator – 2023 Program Review

Action Requested: No Action Requested

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Summary:
Sunny 505 will deliver a presentation to the Board about the Storm Water Quality Team's FY23 Program for public education, outreach, involvement, and participation.

Possible Budget Impact:
Minimal – The Storm Water Quality Education Coordinator is funded by the Storm Water Quality Team

Possible Staff Impact:
Minimal – The Storm Water Quality Education Coordinator is managed by the Storm Water Quality Team.

AMAFCA Board Meeting Memorandum Agenda Item 13b
Action Item

To: AMAFCA Board of Directors
From: Patrick J. Chavez, PE, Storm Water Quality Engineer
Date: November 7, 2023

Subject: Storm Water Quality Education Coordinator Agreement - Approval of Third / Final Extension

Action Requested: A motion to approve the third and final extension to the Storm Water Quality Education Coordinator Agreement with Sunny505

***

Summary:
The agreement for Storm Water Quality Education Coordinator Services was originally authorized December 22, 2020. It is a standard one-year agreement, with the option to renew at the pleasure of the Board and the concurrence of Sunny505(contractor). AMAFCA staff is satisfied with the services of Sunny 505, and they would like to extend their agreement for an additional year. A signed AMAFCA Campaign Contribution Disclosure Form is attached. Staff recommends that the Board approve the third and final, one-year extension of the agreement.

Possible Budget Impact:
None

Possible Staff Impact:
None

AMAFCA Memorandum — Agenda Item 15a
Information Item

To: Kevin Troutman, Executive Director
From: Patrick J. Chavez, PE, Stormwater Quality Engineer
Date: March 21, 2024

Subject: Statewide MS4 General Permit

Action Requested: None

***

On February 13, 2024, Region 6 staff from the Environmental Protection Agency (EPA) hosted a virtual public meeting for the revised designation determination that stormwater discharges from the Los Alamos Urban Area and Los Alamos National Laboratory (LANL) property in Los Alamos County and Santa Fe County, New Mexico are contributing to violations of New Mexico water quality standards (WQS) and require National Pollutant Discharge Elimination System (NPDES) permit coverage under the Clean Water Act (CWA).

EPA made an announcement during the public meeting that stormwater discharges from MS4 permittees, like AMAFCA in the Middle Rio Grande (MRG), would also be covered in the future under a soon-to-be-issued EPA Statewide MS4 Permit (NMR040000) for the State of New Mexico.

As a result of that meeting, the AMAFCA Board of Directors asked that the Stormwater Quality Engineer reach out and request that EPA staff virtually attend the March board meeting and be available for questions. EPA responded to the request and stated that they would not be able to attend the March board meeting as requested. Region 6 staff did announce, however, that a virtual meeting would be held for stakeholders in New Mexico regarding the development of a new Statewide MS4 permit.

On March 14, 2024, EPA hosted a virtual public meeting with over 50 attendees from all over New Mexico. Prior to the meeting EPA presented a "strawman" copy of the upcoming Statewide MS4 permit for review and comment. AMAFCA staff also attended the meeting and were given an opportunity to express some concerns about issuing a new MS4 permit given the current state of administrative continuance for AMAFCA's existing NPDES permit. During the meeting a deadline of April 30, 2024, was established for MS4s to formally submit comments, concerns, and/or suggestions to EPA.

Stormwater runoff that is conveyed by and discharged from AMAFCA's facilities is currently authorized under the expired NPDES Permit NMR04A000 Middle Rio Grande Watershed Based Permit (WBP). The WBP has been a great success in the MRG and there are concerns about the timing and process of including the Albuquerque area in the statewide permit. EPA was receptive to receiving comments from stakeholders in New Mexico. EPA indicated that comments

addressing "lessons-learned" from the current MRG permittees under the existing MS4 permit would also be appropriate. The MRG Technical Advisory Group (TAG) is scheduled to meet in person on April 4, 2024, to combine respective MS4 comments into a single document to submit to EPA.

A brief discussion was held with EPA during the latest virtual public meeting centered on additional potential pollutants in the upcoming Statewide Permit. There was one type of pollutant mentioned, Per- and Polyflouroalkyl Substances (PFAS), that EPA stated will be added to the existing analyte list for required stormwater compliance samples. PFAS are a group of manufactured chemicals that have been used in industry and consumer products since the 1940s because of their useful properties.

There are thousands of different PFAS, some of which have been more widely used and studied than others. Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS), for example, are two of the most widely used and studied chemicals in the PFAS group. PFOA and PFOS have been replaced in the United States with other PFAS in recent years. One common characteristic of concern of PFAS is that many break down very slowly and can build up in people, animals, and the environment over time.

EPA no longer plans on reissuing the currently expired Middle Rio Grande WBP. EPA plans to issue a final version of the Statewide MS4 General Permit in late 2024 and a 90-day comment period will then follow. AMAFCA staff will continue collecting additional information concerning this latest development of a Statewide MS4 permit to report to the Board in the coming months.

Unanticipated Impacts on AMAFCA Budget:
Long Term – The addition of pollutants like PFAS to the required stormwater quality analyte list will increase sample collection and analysis costs for both AMAFCA as well as for the Compliance Monitoring Cooperative (CMC), of which AMAFCA is a member.

Unanticipated Impacts on AMAFCA Staff:
Minimal – Staff has been allocated for the AMAFCA Stormwater Program.

AMAFCA Memorandum — Agenda Item 15a
Information Item

To: AMAFCA Board of Directors
From: Patrick J. Chavez, PE, Stormwater Quality Engineer
Date: April 17, 2024

Subject: Statewide MS4 General Permit Update

Action Requested: None

***

Environmental Protection Agency (EPA) Region 6 staff hosted a virtual public meeting in February for the revised designation determination that stormwater discharges from the Los Alamos Urban Area and Los Alamos National Laboratory (LANL) property are contributing to violations of New Mexico water quality standards (WQS) and require National Pollutant Discharge Elimination System (NPDES) permit coverage under the Clean Water Act (CWA).

EPA made a surprising announcement during the February public meeting that stormwater discharges from all MS4 permittees in New Mexico, like AMAFCA in the Middle Rio Grande (MRG), would also be covered in the future under a statewide MS4 permit. Stormwater runoff that is conveyed by and discharged from AMAFCA's facilities is currently authorized under the administratively continued Middle Rio Grande Watershed Based Permit (WBP). The WBP has been a great success in the MRG and there are concerns about the timing and process of including the Albuquerque area in the statewide permit.

EPA hosted a second virtual public meeting for MS4 stakeholders in March with over 50 attendees from all reaches of New Mexico. Prior to the meeting EPA presented a "strawperson" copy of the upcoming statewide MS4 permit for review and comment. During the March virtual meeting a deadline of April 30, 2024, was established for MS4s to informally submit comments, concerns, and/or suggestions to EPA. EPA indicated that comments from current MRG permittees addressing "lessons-learned" under the existing MS4 permit would also be appropriate.

The MRG Technical Advisory Group (TAG) met in person on April 4, 2024, to discuss respective MS4 comments before submittal to EPA. The number and type of comments were too numerous for just one meeting. A second TAG meeting for this month has been schedule for April 24, 2024, to further summarize comments into a single document and prepare a cover letter for submittal to EPA. AMAFCA plans to also submit separate comments related to specific permit changes that have been compiled under the current WBP.

An example of the type of comment that was produced at the initial TAG meeting earlier this month, when reviewing the "strawperson" permit, is shown below in bold for clarity:

> Permit text reads, "Authorized Non-Stormwater Discharges. The following non-

stormwater discharges **are** prohibited unless determined by the permittees…"

But the text in this section of the existing WBP reads, "Authorized Non-Stormwater Discharges. The following non-stormwater discharges **need not be** prohibited unless determined by the permittees…"

Many of the TAG comments are grammatical in nature and underscore the somewhat confusing status of the existing "strawperson" statewide MS4 permit that has been provided by EPA for comment.

An example of the type of comment that AMAFCA plans to submit to EPA deals with Illicit Discharge Detection and Elimination (IDDE) and is from Part I.D.5.e.(I).(c) of the existing WBP as shown below:

"Procedures for locating priority areas likely to have illicit discharges including field test for selected pollutant indicators (ammonia, boron, chlorine, color, conductivity, detergents, E. coli, total coliform, fluorite, hardness, pH, potassium, conductivity, surfactants), and visually screening…"

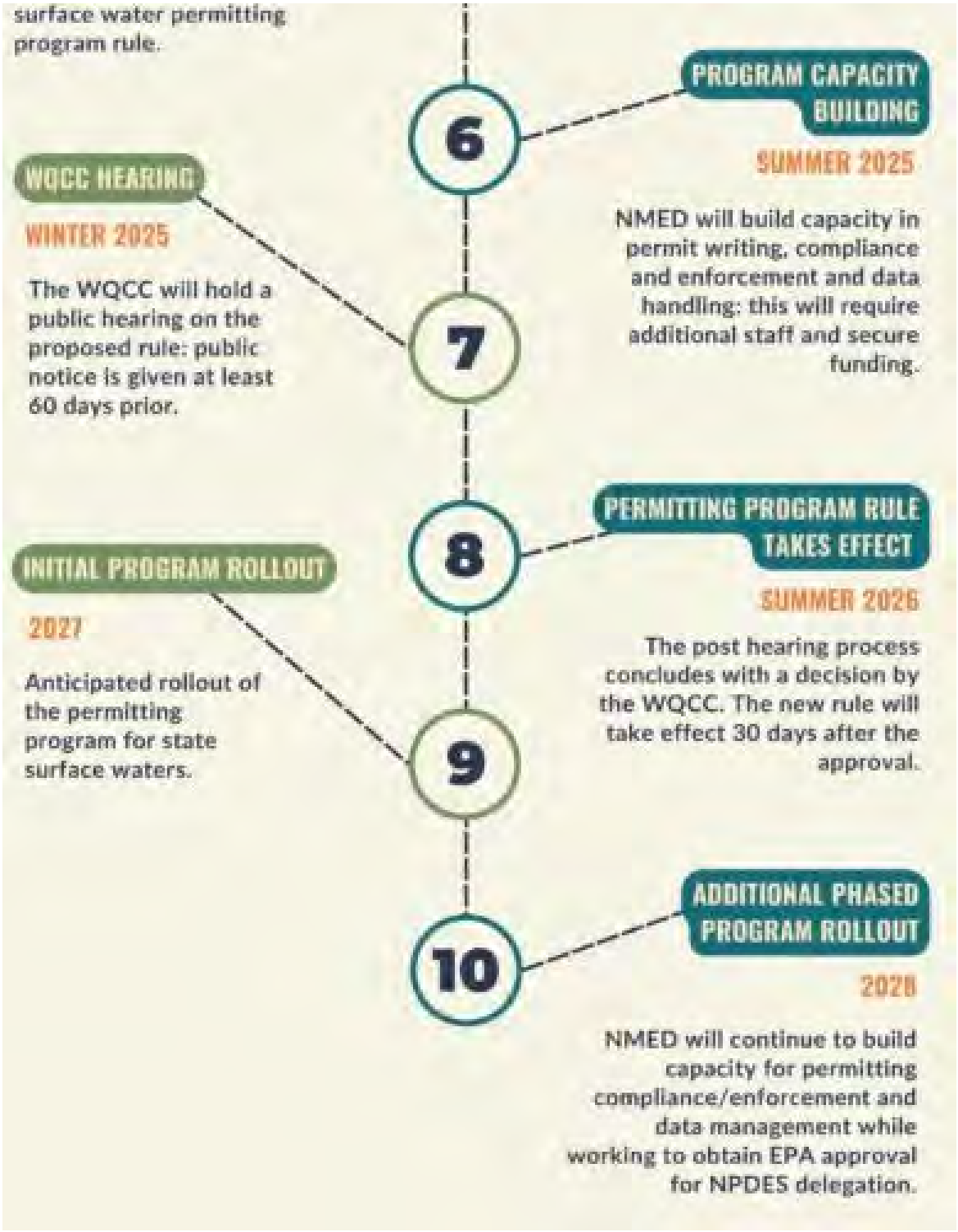
AMAFCA plans to comment that instead of listing specific tests required let permittees select the appropriate field test based on what they see and know about the illicit discharge.

The New Mexico Environment Department (NMED) is developing a State Permitting Program to protect the water quality of New Mexico's surface waters. New Mexico currently relies on federal Clean Water Act permits to control the discharge of pollutants into its surface waters. Supreme Court decisions have scaled back federal jurisdiction. In the Sackett decision, most recently, the Court decided that federal jurisdiction only extends to relatively permanent waters. This court decision leaves many surface waters of New Mexico at risk of contamination and degradation.

NMED has published an estimate that it will take until 2027 to begin issuing permits under the newly created program. The New Mexico Water Quality Control Commission must first adopt a rule to establish the state permit part of the program; and then obtain EPA's approval to implement the NPDES part of the program. The projected timeline for this entire process is attached below for further reference. It is possible that the timeline associated with New Mexico's move to "primacy" and EPA's timeline for issuance of a new statewide MS4 Permit could overlap and potentially cause conflicts with approvals and/or certifications from reviewing agencies.

EPA no longer plans on reissuing the currently expired Middle Rio Grande WBP. EPA plans to issue a final version of the Statewide MS4 General Permit in late 2024 and a 90-day formal comment period will then follow. AMAFCA staff will continue monitoring the latest developments concerning the timeline of issuing a statewide MS4 permit, relative to the timeline of New Mexico obtaining primacy, to update the Board in the coming months.

New Mexico Environment Department (NMED) Surface Water Quality State Permitting Program Timeline to Implementation



Source: NMED Surface Water Quality Website

Unanticipated Impacts on AMAFCA Budget:
Long Term – The addition of pollutants like PFAS to the required stormwater quality analyte list will increase sample collection and analysis costs for both AMAFCA as well as for the Compliance Monitoring Cooperative (CMC), of which AMAFCA is a member. If permit fees are implemented, they will need to be included in later budgets.

Unanticipated Impacts on AMAFCA Staff:
Long Term – The unknown nature of the new permit, possible new sampling requirements, and the administration of primacy may alter staffing needs in the future.

AMAFCA Board Meeting Memorandum — Agenda Item 9a
Action Item

To: AMAFCA Board of Directors
From: Crystal Griego, Director of Administration
Date: June 18, 2024

Subject: Acceptance of Inventories

Action Requested: A motion to accept the inventory lists as of June 30, 2024

***

Summary:
Staff has completed an inventory of all equipment and supplies as required by AMAFCA's Capitalization Policy. Staff recommends the Board approve the inventory lists as of June 30, 2024.

Background:
Pursuant to AMAFCA Resolution 2006-17, Capitalization Policy, staff has completed a thorough review of all materials and equipment as required. The resulting inventories are categorized as follows:

- **Office Inventory:** Lists separated into under $5,000 and over $5,000.
- **Maintenance Inventory:** Lists separated into under $5,000 and over $5,000.
- **Water Quality Inventory:** Lists separated into under $5,000 and over $5,000.
- **Telemetry Inventory:** Single list for items over $5,000.

Maintenance Superintendent Sal Hernandez and Engineering Technician Esqui Padilla conducted physical inventory for the Maintenance and Telemetry Inventories, with Padilla certifying all items therein. Stormwater Quality Engineer Patrick Chavez similarly certifies all items in the Water Quality Inventory. GIS Manager Jessica Regensberg has certified all items in the Office Inventory. Disposals are noted at the end of each list. Inventory is as of 6/30/24, and an updated list will be provided to the Board in July if any acquisitions occur before fiscal year-end.

Possible Budget Impact:
Minimal – This is required by the NM State Auditor's Office and is included in the AMAFCA Operations Budget.

Possible Staff Impact:
Minimal – This is required by the NM State Auditor's Office and is included in the AMAFCA work plan.

Office Inventory Over $500 and $5000 and Under as of June 30, 2024

Item	Type	Description	No.		Purchase Price	ID#	Purchased
AV Equipment	Camera	Owl Meeting Pro (Kevin's Cabinet)	1		1,077.67	1006	Purchased 3/6/22
Cabinet	Filing	36" 5 drawer Lateral Files (2 Breakroom, 1 Marie)	3		3,028.00	1091, 1089, 1036	
Cabinet	Filing	42" 4 Drawer Lateral File w/lock (Hallway)	1		712.00	1079	
Cabinet	Filing	Cole-Steel Map Drawer File Cabinet (Downstairs)	3		1,517.72	1072	
Cabinet	Filing	HON 3 Drawer Lateral File Cabinet (Sal)	1		873.90	1099	Purchased 1/28/13 - Grainger
Cabinet	Filing	Planhold - 10 Drawer Plan File (Library)	1		1,047.00	1073	
Cabinet	Filing	Hamilton Industries Planhold Files (Downstairs)	2		4,150.00	1071	
Cabinet	Filing	Planhold Masterfile Cabinet (In Conex)	1		1,612.71	1138	
Cabinet	Filing	SAFCO 5 drawer steel flat files (Downstairs)	3		2,748.34	1068, 1069, 1070	Purchased 10/28/14 - Zerbee
Cabinet	Filing	SAFCO Masterfile 2 Model 5023AH (North Hallway)	3		4,999.50	1093, 1094, 1095	
Cabinet	Filing	Schwab 2 Drawer Lateral Fireproof File (Maria)	1		1,350.00	1023	
Cabinet	Filing	Steelcase 30" 5 Drawer Lateral Files (2 Chas, 1 Breakroom)	3		1,980.00	1046, 1047, 1090	
Cabinet	Filing	Steelcase 36" 4 Drawer Lateral File w/lock - (Hallway)	4		2,512.00	1075, 1076, 1077, 1078	
Cabinet	Filing	Steelcase 4 Drawer w/1 lift up door (Kevin)	1		660.66	1002	Purchased 4/8/10 - Business Environments
Cabinet	Filing	Steelcase 4 Drawer w/1 lift up door (Nicole)	1		660.66	1009	Purchased 4/8/10 - Business Environments
Cabinet	Filing	Steelcase 4 Drawer w/1 lift up door (Paula)	1		660.66	1017	Purchased 4/8/10 - Business Environments
Cabinet	Filing	Supreme 5 Drawer Lateral File Cabinet (Black) - (Downstairs)	2		792.00	1128, 1129	
Cabinet	Filing	SAFECO 10 Drawer Steel Flat File Cabinet (Library)	1		1,374.99	1074	Purchased 2/08
Cabinet	Safety	Fireproof NFPA Safety Cabinet (Herbicide Storage)	1		829.71	1139	
Cabinet	Square Tube	Planhold Square Tube Cabinet (Conex)	1		741.53	1137	
Chair	Office	Workstation chairs (Adrienne, Esqui, Jessica)	3		1,621.80	1054, 1065, 1057	Purchased 1-26-22
Computer	Desktop	Dell OptiPlex 7000 Tower (87396S3) - (Jessica)	1		2,450.11	1013	Purchased October 2022 - Dell
Computer	Desktop	Dell OptiPlex 7000 Tower (B7396S3) - (Maria)	1		2,450.11	1028	Purchased October 2022 - Dell
Computer	Desktop	Dell OptiPlex 7000 Tower (97396S3) - (Marie)	1		2,450.11	1039	Purchased October 2022 - Dell
Computer	Desktop	Dell Optiplex 7080 Small Form Factor (GX46ZC3) - (Boardroom)	1		1,093.32	1110	Purchased 3/22/21
Computer	Desktop	Dell Optiplex 7080 SN-J9L80C3 - (Jared- Drone Software Computer)	1		1,337.47	1149	Purchased 3/22/21
Computer	Desktop	Dell OptiPlex Small Form Factor Plus 7010 (R26R0F1) - Chas	1		1,095.52	1112	Purchased 1/25/2024 - Dell
Computer	Desktop	Dell OptiPlex Tower (Plus 7010) (89XPW04) - Adrienne	1		1,565.06	1111	Purchased 1/25/2024 - Dell
Computer	Desktop	Dell OptiPlex Tower (Plus 7010) (2JBSBQP) - Jared	1		1,565.06	1114	Purchased 1/25/2024 - Dell
Computer	Desktop	Dell OptiPlex Tower (Plus 7010) (13M0RHK) - Nicole	1		1,565.06	1115	Purchased 1/25/2024 - Dell
Computer	Desktop	Dell OptiPlex Tower (Plus 7010) (9RHDB1K) - Willie	1		1,565.06	1113	Purchased 1/25/2024 - Dell
Computer	Laptop	Dell Latitude 5540 XCTO Base (20HQ814) - Willie	1		1,912.54	1154	Purchased 3/5/2024 - Dell
Computer	Laptop	Dell Latitude 5540 XCTO Base (HZGQ814) - Engineering Floater (Marie)	1		1,912.54	1158	Purchased 3/5/2024 - Dell
Computer	Laptop	Dell Latitude 5540 XCTO Base (30HQ814) - Nicole	1		1,912.54	1155	Purchased 3/5/2024 - Dell
Computer	Laptop	Dell Latitude 5540 XCTO Base (JZGQ814) - Paula	1		1,912.54	1156	Purchased 3/5/2024 - Dell
Computer	Desktop	Dell OptiPlex Small Form Factor Plus 7010 (4560D14) -Guylene	1		1,253.12	1152	Purchased 3/5/2024 - Dell
Computer	Desktop	Dell OptiPlex Tower (Plus 7010) (8VL0D14) - Esqui	1		1,656.90	1151	Purchased 3/5/2024 - Dell
Computer	Desktop	Dell OptiPlex Tower (Plus 7010) (9VL0D14) - Paula	1		1,656.90	1150	Purchased 3/5/2024 - Dell
Computer	Laptop	Dell Latitude 5540 XTCO Base (FGGQ814) - Maria	1		1,579.00	1160	Purchased 3/5/2024 - Dell
Computer	Laptop	Dell Latitude 5540 XTCO Base (3TDQ814) - Laurel	1		1,579.00	1159	Purchased 3/5/2024 - Dell
Computer	Laptop	Dell Latitude 5540 XTCO Base (10HQ814) - PJ	1		1,912.54	1157	Purchased 3/5/2024 - Dell
Computer	Desktop	Dell OptiPlex Small Form Factor Plus 7010 (3560D14) - Maria	1		1,253.52	1153	Purchased 3/5/2024 - Dell
Computer	Desktop	OptiPlex 9020 - (Intern)	1		1,244.40	322	Purchased 2/22/16 - Dell
Computer	Laptop	Dell Latitude 5430 Rugged (Esqui)	1		2,424.78	1053	Purchased October 2022 - Dell
Computer	Laptop	Dell Latitude 5430 Rugged (Sal)	1		2,424.78	1140	Purchased October 2022 - Dell
Computer	Laptop	Dell Mobile Precision 7770 (GIS Cabinet)	1		3,082.81	GHS52TE	Purchased October 2022 - Dell
Fax	Laser	Sharp Model F04500 Facsimile Transceiver (Workroom)	1		1,380.00	1040	
Locator	SubSurface	Serial No. 06045341 (Sal.)	1		750.00	1141	Purchased 6/16/06
Panel	Fabric	Office Divider (2- Adrienne & Esqui, 1-Library)	3		721.59	1055, 1063, 1056	Purchased 1-26-22
Printer	Laser	HP LaserJet 4100TN (Storage)	1		1,820.00	1098	
Projector	Slide	Medalist II Kodak Projector S/N853238 + lens (Breakroom)	1		519.73	1142	

Office Inventory Over $500 and $5000 and Under as of June 30, 2024

Item	Type	Description	No.		Purchase Price	ID#	Purchased
Refridgerator	Refridgerator	Frigidaire 23CF - (Breakroom)	1		969.80	1066	Purchased 6/13 - Builders Source
Refridgerator	Refridgerator	Frigidaire 23CF - (Downstairs; breakroom crew)	1		969.80	1067	Purchased 6/13 - Builders Source
Table	Conference	48" Round Laminated Table w/Base (Executive Engineer)	1		507.00		
Table	Oval	Laminated - (Breakroom)	1		547.00		
Typewriter	Electric	IBM Correcting Selectric II Typewriter (Workroom)	1		621.00	1041	
White Board	Denska	120w x 48 h White Board/Marker Board (Boardroom)	1		817.59	1107	Purchased 11/10 - Business Environments
White Board	Porcelain	White board (Adrienne)	1		539.99	1062	
Workstation	Cubicle	Haworth (2) Cubicles, (1) Desk, (2) 2-Drawer Lateral File Cabinets	1		3,976.89	1119, 1118, 1117, 1116	Purchased 7/14/2022 - AOS
Workstation	Desk	Steelcase Modular Workstation - Jared	1		2,337.00	1096	Purchased before 2009
Workstation	Desk	Steelcase Modular Workstation - PJ	1		2,603.59	1122	Purchased before 2009
Workstation	Desk	Steelcase Modular Workstation - Sal	1		1,809.96	1097	Purchased before 2009
Workstation	Desk	Steelcase Modular Workstation - Willie	1		2,178.54	1042	Purchased before 2009
Workstation	Desk	Steelcase Modular Workstation (Dark Grey) - Nicole	1		3,231.07	1008	Purchased 4/8/10 - Business Environments
Workstation	Desk	Steelcase Modular Workstation (Dark Grey) - Paula	1		2,893.20	1021	Purchased 4/8/10 - Business Environments
Workstation	Desk	Steelcase Modular Workstation (Dark Grey) -Kevin	1		2,457.58	1004	Purchased 4/8/10 - Business Environments
Workstation	Desk	Steelcase Modular Workstation (Green) - Maria	1		2,969.09	1024	Purchased before 2009
Workstation	Desk	Steelcase Modular Workstation (Green) - Marie	1		2,153.00	1035	Purchased before 2009
Workstation	Desk	Steelcase Modular Workstation (Green)- Chas	1		4,747.04	1048	Purchased before 2009
Workstation	Desk	Steelcase Modular Workstation (Green) -Guylene	1		2,129.74	1105	Purchased before 2009
Workstation	Desk	Workstation desks (Adrienne, Esqui, Jessica)	3		2,444.46	1059, 1058, 1064	Purchased 1-26-22
		Total inventory as of June 30, 2024			$125,900.30		

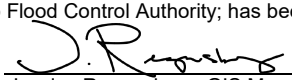
Deleted from Inventory: 2023/2024

Table	Conference	Table (Boardroom) -Approved 12/14/2023 for removal	1		572.63	192	
Table	Library	Sorento Conference Table (In Container) -Approved 12/14/2023 for removal	1		874.99	444	Purchased 4/12/10 - TEMA Furniture
Computer	Personal	OptiPlex 9020 - (4Q4L482) -Approved 12/14/2023 for removal	1		1,457.38	319	Purchased 2/22/16 - Dell
Computer	Personal	OptiPlex 9020 - (4GBK482) -Approved 12/14/2023 for removal	1		1,244.40	324	Purchased 2/22/16 - Dell
Computer	Personal	OptiPlex 9020 - (4GBG482) -Approved 12/14/2023 for removal	1		1,244.40	327	Purchased 2/22/16 - Dell
Computer	Personal	OptiPlex 9020 - (4GBH482) -Approved 12/14/2023 for removal	1		1,244.40	326	Purchased 2/22/16 - Dell
Computer	Personal	OptiPlex 9020 - (4G9H482) -Approved 12/14/2023 for removal	1		1,244.40	329	Purchased 2/22/16 - Dell
Computer	Personal	OptiPlex 9020 - (4G9L482) -Approved 12/14/2023 for removal	1		1,244.40	323	Purchased 2/22/16 - Dell
Computer	Laptop	Dell Latitude E5520 (HZ2C4S1) -Approved 12/14/2023 for removal	1		1,538.45	473	Purchased 5/3/12 - Dell Marketing Group
AED	AED	Plus Rx, Fully Automatic with Case - Approved 4/25/2024 for removal	1		1,617.55	352	Purchased 3/27/17 - ESP
AED	AED	Zoll AED PlusRX Medical pads w/cary case - Approved 4/25/2024 for removal	1		1,823.58	294	Purcahsed June 2014 - Essential Safety Products
Computer	Desktop	OptiPlex 9020 - (4G9K482) - Approved 4/25/2024 for removal	1		1,244.40	328	Purchased 2/22/16 - Dell
Computer	Desktop	OptiPlex 9020 - (4GBF482) - Approved 4/25/2024 for removal	1		1,244.40	325	Purchased 2/22/16 - Dell
Computer	Desktop	OptiPlex 9020 - (6QX9482) - Approved 4/25/2024 for removal	1		1,122.79	318	Purchased 2/22/16 - Dell
Heater	Infra-Red	25,000 BTU Infra-Red Heater (downstairs north wall)- Approved 4/25/2024 for ren	1		923.67	336	
Computer	Desktop	Dell Optiplex 7080 SN-J9L6ZC3 (Willie) - Approved 4/25/2024 for removal	1		1,337.47	J9L6ZC3	Purchased 3/22/21
Computer	Desktop	Dell Optiplex 7080 SN-J9L70C3 (Adrienne) - Approved 4/25/2024 for removal	1		1,337.47	J9L70C3	Purchased 3/22/21
Computer	Desktop	OptiPlex 9020 SN-4G9J482 (Jared; Drone Software) - Approved 4/25/2024	1		1,244.40	321	Purchased 2/22/16 - Dell
Computer	Desktop	Dell Optiplex 7080 SN-J9L90C3 (Chas) - Approved 4/25/2024 for removal	1		1,337.47	J9L90C3	Purchased 3/22/21
Computer	Desktop	Dell Optiplex 7080 SN-J9L7ZC3 (Nicole) - Approved 4/25/2024 for removal	1		1,337.47	J9L7ZC3	Purchased 3/22/21
Computer	Desktop	Dell Optiplex 7080 SN-J9L5ZC3 (Guylene) - Approved 4/25/2024 for removal	1		1,337.47	J9L5ZC3	Purchased 3/22/21
Computer	Desktop	Dell Optiplex 7080 SN-J9L60C3 (Paula) - Approved 4/25/2024 for removal	1		1,337.47	J9L60C3	Purchased 3/22/21
Computer	Desktop	Dell Optiplex 7080 SN-J9L8ZC3 (Laurel) - Approved 4/25/2024 for removal	1		1,337.47	J9L8ZC3	Purchased 3/22/21
Computer	Laptop	Dell Latitude 5590 SN-4WNZXT2 (Maria) - Approved 4/25/2024 for removal	1		1,622.65	374	Purchased 6/8/19 - Dell
Computer	Laptop	Mobile Precision 7750 with Dock 1FB98D3 (Nicole) - Approved 4/25/2024	1		1,905.37	1FB98D3	Purchased 3/22/21
Computer	Laptop	Mobile Precision 7750 with Dock 8T7J8D3 (PJ) - Approved 4/25/2024	1		1,905.37	8T7J8D3	Purchased 3/22/21
Computer	Laptop	Mobile Precision 7750 with Dock 9P498D3 (Laurel) - Approved 4/25/2024	1		1,905.37	9P498D3	Purchased 3/22/21
Computer	Laptop	Mobile Precision 7750 with Dock JT4C8D3 (Paula) - Approved 4/25/2024	1		1,905.37	JT4C8D3	Purchased 3/22/21
Computer	Laptop	Dell Latitude E5550 (Cabinet) - Approved 4/25/2024 for removal	1		2,036.54	311	Purchased 3/24/15 - Dell

Office Inventory Over $500 and $5000 and Under as of June 30, 2024

Item	Type	Description	No.		Purchase Price	ID#	Purchased
Computer	Desktop	Dell Optiplex 7080 SN-J9L50C3 (Kevin) - Approved 4/25/2024 for removal	1		1,337.47	J9L50C3	Purchased 3/22/21
Computer	Laptop	Dell Latitude 5420 Rugged (Agustin) - Approved 4/25/2024 for removal	1		1,558.80	375	Purchases 6/8/19 - Dell
AV Receiver	Yamaha	Yamaha RX-N600 Receiver & subwoofer (Boardroom) - Approved 4/25/2024 for	1		679.94	1109	Purchased 8/07
Computer	Server Rack	Dell 2420 24U Rack SN 3JS29K1 w/backup battery SN IN-0R0072-18740-8C3-9511 & Touchpad keyboard - Approved 4/25/2024 for removal	1		3,417.00	1143	Purchased 5/09
Microphone	Mixer	Shure M367 6-input Portable (Boardroom) - Approved 4/25/2024 for removal	1		599.95	1108	Purchased 8/07
		Total Transfers			$48,122.36		

I hereby certify that the foregoing inventory of office furniture and fixtures is complete and correct; is in the possession of the Albuquerque Metropolitan Arroyo Flood Control Authority; has been paid for in full, and that the Authority has full title thereto.



6/10/2024

Jessica Regensberg, GIS Manager Date

Office Inventory Over $5001 as of June 30, 2024

Inventory (Account # 83-570)							
Item	***Type***	***Description***	***No.***	***Purchase Price***	***ID#***	***Purchased***	***Comments***
Plotter/ Scanner	HP	HP DesignJet T2600 Plotter/ Scanner	1	15,670.00	1030	Jun-22	Pacific Office Automation
Receiver	GNSS	Topcon handheld GPS receiver w/antenna and accessories	1	7,679.65	1005	June 2009	Holman's
Server	HPE	HPE ProLiant DL380 Gen 10 Server (2M232601Y9)	1	19,878.80	1147	Jul-23	Kosh Solutions
Server	Dell	Dell Poweredge Server R740xD2	1	11,675.69	1145	4/1/2020	
Software	GIS	2000 ArcGIS 8.2 Software upgraded to 10.8 (Electronic License - On Server)	1	9,935.18		September 2003	
Software	GIS	Additional licenses & 3d Analyst (Electronic License - On Server)	1	11,830.00		Feb 2018	
Software	Photo scan	Agi Soft Photo Scan Professional (Electronic License - On Server)	1	6,100.00		March 2018	
Software	Work order	iWorQ (Cloudbased Software)	1	16,500.00		4/1/2018	
			Total Inventory	$ 99,269.32			

Deletions 2023/2024 :							
Server	Dell	PowerEdge R510 Server SN 8CKXVN1 plus SQL Server software	1	14,902.57	480	September, 2010	*Board approved removal 4/25/24*
Reader/Printer	Microfilm	Minolta PP605Z SN365145	1	5,947.00	216		Board approved removal 1/25/24
Telephone	System	Network switches	1	5,029.70	495	April 2014	CenturyLink - Board approved removal 4/25/24
Telephone	System	ShoreTel Model 220TA 230 & network switches	1	16,063.55	495	April 2014	CenturyLink- Board approved removal 4/25/24
HD LED TV	Sharp	80" HD LED -LCD Touch Display	1	9,636.63	494	August, 2012	Visual Innovations - Board approved removal 4/25/24
Server	Dell	Dell PowerEdge Server R730	1	11,897.00	1144	June 2016	Board approved removal 4/25/24
			Total Deletions	$63,476.45			

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6/10/2024

Jessica Regensberg, GIS Manager — Date

Albuquerque Metropolitan Arroyo Flood Control Authority

Maintenance Inventory Over $500 and under $5000 as of 6/30/24

ITEM	TYPE	DESCRIPTION	Location	NO.	Purchase Price	ID#	Purchased
Brush Cutter	Brushhog	Predator Talon Commercial Plus (black)	Conex Box		2,231.20		9/2/2015
Brush Cutter	Outback	Model BC2402HE 13.0 HP SN 121 1806047 (green)	Conex Box	1	2,490.25	450	5/16/2007
Gas Compressor	Gas	Gas Compressor5.5 - 8 Gallon w/ 3/8" Airline Filter & 1/4" Coupler (storage shed)	Conex Box	1	971.25	268	08/05/09
Confined Space	Tool Box	Rigid steel box	South Storage-Red Shed	1	916.00	309	3/24/2015
Lifelines	Self-Retracting	Self Locking Hooks Full Body Harness Lock	South Storage-Red Shed	2	1,252.10	202	
Sandblaster	Air	Bowen Tools w/Couplings & Hoses (SN: 24L84 4 CU)	South Storage-Red Shed	1	2,945.83	140	
Tamper	Backfill	Model 131	South Storage-Red Shed	1	695.00	460	04/09/09
Tripod	Aluminum	Aluminum Tripod with Winch	South Storage-Red Shed	1	1,913.90	193	
Ventilation		IKON, 12 Volt Ventilation System, Flex Duct	South Storage-Red Shed	1	739.00	196	
Washer	Pressure washer	Northstar Pressure Washer - electric	Wash Bay		829.99		5/31/2018
Air Compressor	R01	4P 80 Gallon 2-Stage Compressor	Welding Shop-Green Shed	1	1,079.00	267	06/30/2009
Airscreed	Control	Allen 12 SX, 2 Gear Winches	Welding Shop-Green Shed	1	3,678.00	183	
Cutter	Plasma	Powermax Plasma Cutter	Welding Shop-Green Shed		2,097.20		2/28/2017
Detector	Gas	MSA Altair 4 Gas w/case SN 00027549 F09EO	Welding Shop-Green Shed	1	1,035.00	271	06/19/09
Detector	Gas	Altair 4x Multi Gas Detector	Welding Shop-Green Shed		925.00		1/31/2019
Flowmeter	Flowmeter	BB1100 Flowmeter (ordered from YSI)	Welding Shop-Green Shed		1,284.00		5/9/2020
Generator	Generator	Yamaha 3000 watt inverter	Welding Shop-Green Shed		2,537.22		7/23/2018
Generator	Generator	Yamaha - EF7200DE (7200 watt)	Welding Shop-Green Shed	1	1,699.00	313	6/15/2015
Gun	Hog Ring	Spenax SC-50, 350 Pneumatic (SN: 531)	Welding Shop-Green Shed	1	1,337.65	187	
Jack	Hydraulic	4-Ton (SN: 1281094)	Welding Shop-Green Shed	1	716.00	118	
Paint Sprayer	Spray Unit	paint sprayer	Welding Shop-Green Shed		790.47		11/21/2017
Post Driver		Post Driver w/Adapter & Throttle Valve Kit	Welding Shop-Green Shed	1	1,333.24	333	
Rotary Hammer	Power	Dewalt Electric Rotary Hammer	Welding Shop-Green Shed	1	619.00	312	5/22/2015
Saw	Band	7 X 12" Band Saw (SN: 200112)	Welding Shop-Green Shed	1	949.05	242	
Saw	Cut Off	Stihl SN STI TS700 14" cutoff saw	Welding Shop-Green Shed	1	1,195.00	458	3/23/2009
Saw	Cutoff	14" Husqvarna K760 gas cutoff saw SN2014100808	Welding Shop-Green Shed	1	957.65	279	6/14/2014
Storage	Cabinet	Non-flamable Safety Cabinet (green shed)	Welding Shop-Green Shed	1	803.00	310	3/24/2015
Welder	AC/DC	Mach-Weld Ranger 8 (Onan) (SN: U1970105483)	Welding Shop-Green Shed	1	2,308.50	212	
Welder	MIG PM255C	208/230V S #K2416-1	Welding Shop-Green Shed	1	1,850.00	262	6/15/2006

Total inventory as of June 30, 2024 $ 42,178.50

I hereby certify that the foregoing inventory of automotive and maintenance equipment is complete and correct; is in the possession of the Albuquerque Metropolitan Arroyo Flood Control Authority; has been paid for in full; and that the Authority has full title thereto.

Esqui Padilla, Engineering Technician — Date 6/18/24
Albuquerque Metropolitan Arroyo Flood Control Authority

Maintenance Inventory *Over $5000 as of 06/30/2024*

ITEM	TYPE	DESCRIPTION	VIN or Serial Number s	ID#	Miles	Hours	Condition	Lic. Plate Y/N	Registration Y/N	Insurance Y/N	Fire Extinguisher	First Aid Kit	Radios	Original Purchase Price	Purchased
SUV	Ford Explorer	2015	1FM5K8880FGA21573	100	78,641		Good	Y			N	Y	Y	26,965.00	6/5/2014
Truck	Crew Cab	2004 Ford F-550 S-DTY	1FDAW57PRREC32110	102	100,780		Fair	Y	N	Y	N	N	N	38,461.00	4/7/2004
Truck	Crew Chassis	2004 Ford DRW F-550 Crew Chassis	1FDAW57P84EC32109	105	69,554		Fair	Y	Y	Y	Y	N	Y	37,126.00	4/29/2004
Truck	Pickup	2015 Dodge 1500	3C6RR7KT6FG635894	111			Poor/Dead Battery	Y	Y	Y	N	N	Y	30,739.00	5/22/2015
	Winch	8,000Lb												2,250.00	9/5/2017
Truck	F-550	2017 Ford Welding Truck	1FD0W5HT3HEC57254	112	39,976		Good	Y	N	N	Y	Y	Y	69,642.00	5/1/2017
	welding truck	Mods to 2017 F-550												7,555.00	5/1/2017
	Bobcat	Welder-250 Diesel GFCI Miller												8,405.00	5/1/2017
	Crane	Crane-2007 IMT Model 32031 10k ft lbs (purchased used from Clark Truck Equip)												10,175.00	10/31/2017
	Band Saw	Bandsaw Need Info												1,236.00	5/5/2017
	Welding Leads	Welding Leads												1,435.00	5/18/2017
Truck	Pickup	2017 Dodge 1500 Quad Cab -Field engineer	1C6RR7FT5HS820688	113	65,594		Good	Y	Y	N	Y	Y	Y	27,751.00	6/30/2017
	Winch	Ramsey Model 2600/12,000Lb SN-502596												1,170.00	
Truck	Pickup	2017 Dodge 1 ton Club Cab -	3C63R3GL4HG770284	114	39,076		Good	Y	N	N	Y	Y	Y	44,469.00	9/30/2017
ATV		2-Seat UTV-4-wheel drive	RY1215273320	115		1,865	Fair	NA	NA	N	Y	Y	N	3,900.00	11/30/2017
Truck	Pickup	2021 Dodge 3500 Flatbed	3C7WRTCLXMG530729	116	15,942		Good	Y	Y	Y	Y	Y	Y	55,846.00	1/1/2021
	Compressor	Honda 9HP; 16.2 CFM		116										1,325.00	7/24/2015
SUV	Ford Explorer	2022 Ford Explorer	1FMSK8BHXNGA32226	117	12,284		Good	Y	Y	Y	N	Y	Y	33,373.00	2/22/2022
Van	Ford Transit	2022 Ford Transit	1FTYE1C87NKA05915	118	10,276		Good	Y	Y	Y	Y	Y	Y	36,215.00	3/16/2022
Truck	F-250	2023 Ford F-250	1FT7X2BA4PED38817	119										57,900.00	10/24/2023
Truck	Transport	2004 International Cab & Chassis	2HSCHSCR35C292568	209										86,374.00	1/1/2004
Truck	Water Truck	2009 International	1HTWDAZR5AJ258353	210	71,090		Fair	Y	N	N	N	Y	Y	87,745.00	11/10/2009
Tandem	International	2013 Tandem Axle Dump Truck VIN:	1HTGRSJT1DJ480402	212										132,958.00	2/26/2013
Truck	International	2014 International	3HAWLAZR6EL030554	213	76,876		Fair	Y	N	N	Y	Y	Y	98,325.00	12/13/2013
Truck	International	2015 International	3HAWLAZR1FL15837	214										101,500.00	10/30/2014
Truck	International	2015 International	3HAWLAZR1FL75837	215	61,032		Fair	Y	N	N	Y	Y	Y	101,500.00	10/30/2014
Truck	Fuel Truck	2006 International Model 7400	1HTWDAZR26J308248	216	105,118		Fair	Replace	N	Y	Y	Y	Y	69,478.00	11/4/2005
	Fuel Bed	FY16 Conversion of Fuel Truck												10,579.00	8/31/2015
	Fuel Bed	Existing Fuel bed												25,579.00	8/31/2015
	Tool Chest	Coustom Made-Steel												529.06	
	Tool Set	430 Piece Sears Tool Kit												619.00	
Truck	Transport	2019 Kenworth T880	1XKZD40X1LJ368984	217	19,007		Good	Y	N	N	Y	Y	Y	145,792.00	6/10/2019
Truck	Water Truck	2023 Kenworth T680	1NKZLP0X7PJ247071	218	2413		Good	Y	Y	Y	Y	N	Y	217,972.00	6/26/2023
Truck	Dump Truck	2024 Volvo Dump Truck VHD64F300	4V5KC9EH0RN629750	219			Good	Y	Y	Y	Y	Y	Y	194,261.00	1/4/2024
Trackloader	Bobcat	T250 w/attachments	531813509	300		3,622	Fair							62,543.00	9/4/2007
Tractor/Mower	New Holland	2004 Tractor/Mower Model DA75C4	HJE015415	302							Y	N	Y	68,834.00	12/20/2004
	John Deere	MX8 Lift type Center Drive Rotary Cutter												4,733.19	2/22/2017
	Spray Unit	Beaver Valley CMT												3,500.00	4/7/2020
Backhoe	John Deere	2015 - 310SL-HL	1T0310HLTFF287026	309		4,764	Fair				Y	REPLACE	Y	91,820.00	9/3/2015
	WERK	24 WBKT Smooth Bucket Attachment												1,596.25	3/11/2019
	Coupler Forks	Forks												1,950.00	6/30/2016
Loader	John Deere	2015 - 624K	1DW624KZCFF672057	310		6567	Fair				Y	N	Y	171,217.00	9/15/2015
	Skelton	Rock Bucket - HI VIS Coupler 8707001												15,550.00	9/15/2015
	Bucket	48 inch 1.2 CY Extra Ditch Cleaning Bucket												700.00	
Skidsteer	John Deere	333G Compact Loader	1T0333GMCLF371606	311		2006	Good							70,000.81	5/20/2020
	Blade	John Deere Dozer Blade												6,500.00	7/1/2021
	Sweeper	Sweeper												2,900.00	11/30/2017
	Grapple	Erksine Mower Deck	103114285											4,977.00	8/5/2012
	Grapple	TG7041 CE	TAG7041											4,427.00	10/30/2013
	Mower	Need Info												4,796.00	3/6/2017
	Fecon Mulcher	2013 Fecon Mulcher attachment for skidsteer												20,528.00	6/30/2013
Loader	John Deere	2021 John Deere 624 P	1DW624PAAMEZ12249	312		1250	Good				Y	REPLACE	Y	176,944.35	9/2/2021
		Wall Barrier Attachment												776.47	9/5/2017
Mower	John Deere	2997R Diesel	1TC2997RVRC110845	313										25,334.00	5/8/2024
Mower	John Deere	2997R Diesel	1TC2997RTRC110837	314										25,334.00	5/8/2024
Trailer	2007 Trail Eze	50-ton Utility Trailer w/spare	1DA72C2077C018558	401				Y						44,749.00	11/15/2006
Trailer	DUMP	1992 BIG TEX UTILITY Could not find Vin	16VDX1221N1326784	403				Y						5,450.00	5/1/1992
Trailer	Big Tex	Interstate 30K	1JKDLA20XNA150004	404				Y						9,975.00	8/1/1992
End Dump	2007 CT End Dump	16,000 lb end dump	5TU24322585000288	405										47,313.00	10/4/2007
Trailer	2008 Pro-Trak	Dovetail Gooseneck	5BNDG252X8W001251	406				Y						10,550.00	9/1/2008
Box Trailer	Cargo	2014 Delta Enclosed Cargo Trailer	4MWBC1627EN035894	407				Y						6,450.00	6/1/2015
	Chainsaw	SN-182709777												512.95	6/20/2017
	Chainsaw	SN-182877453												512.95	6/20/2017
	Chainsaw	Pole Saw Stihl BR450													
	Chainsaw	Stihl MS462													
	Blower	Backpack Blower Stihl HT135													
Trailer			1J9EH1629F1287021	409				Y							
Trailer	Lowboy	50 Ton EagerBeaver	112SD2490KL083712	410				Y						74,045.00	7/1/2019
Trailer	Holden Flatbed	Utility Trailer	512HTD3425M204183	411				Y						23,347.00	1/1/2021
Trailer	Diamond T	Gooseneck Trailer	5FWFP2528NR029835	412				N						19,930.00	1/1/2023
Trailer		Porta Pot Trailer	4YMBU061XJT005748	413				Y							
Trailer	JB Manufacturing	Single axle equipment trailer	1J9LS1017R1287256	414										2,250.00	5/15/2024

ITEM	TYPE	DESCRIPTION	VIN or Serial Number #	ID#	Miles	Hours	Condition	Lic. Plate Y/N	Registration Y/N	Insurance Y/N	Fire Extinguisher	First Aid Kit	Radios	Original Purchase Price	Purchased
Air Compressor	Atlas Copco	XAS 165JD Steel S/N HOP044194	4500A1010DR044194	502	323									18,672.00	10/29/2013
Pump/Trailer	MWI	Trailer Mounted 8in Pump	1M9MA0311F	503										41,014.00	6/30/2015
Brush mower	Erskine	TG7251 Ser # TAG7251	M961143	296										5,874.00	10/1/2014
SAW	CONCRETE	GDMMOD 24 SELFPROP (SN: 631/TRACK)		NA										8,195.00	5/1/1984
Sprayer	Herbacide	Mounted on Unit 101		NA										6,094.00	10/31/2021
Storage	Container	20' storage container - steel												5,300.00	8/17/2022
Storage	Container	20' storage container - steel												5,300.00	8/17/2022

Deleted Inventory FY-2024

Truck	2006 Ford F150	Supercrew 4X4 SN1FPW14576A51283	1	101
Truck	Dump	INTERNATIONAL 40S UNIT # 201 (SN: 1HTSDAAR8XH207542)	1	201
Truck	Water Truck	2004 International Cab/Chassis VIN 1HTMKAAR84H860250	1	208
Truck	Freightliner	Tandem Axle Dump Truck - 1FVHC5DV0BHAX5810 (Unit #211)	1	211
Skidsteer	Volvo	2015 Skidsteer Loader MCT125C, serial # 2429027	1	308
Trailer	JB Manufacturing	2015 16 flatbed trailer with ramps JB Manufacturing VIN: 1J9EH1622F1287023	1	408

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6/18/24

Esqui Pardo, Engineering Technician Date
Albuquerque Metropolitan Arroyo Flood Control Authority

Water Quality Inventory Over $500 and Under $5000 as of June 30, 2024

Item	Type	Description	No	Purchase Price	ID#	Purchased
Tube	In-Situ	Tube Telemetry with Hydrovu	1	1,195.00	17103484	Purchased 9/15/2017
Sonde	In-Situ	Aqua Troll 500, Non-Vented (Inv 00153838)	1	1,436.00	946178	Purchased 6/14/2022
Tube	In-Situ	Tube Telemetry with Hydrovu	1	1,195.00	16502358	Purchased 1/31/2017
Sonde	In-Situ	Aqua Troll 500, Non-Vented (Inv 00153838)	1	1,436.00	946090	Purchased 6/14/2022
Sonde	In-Situ	Aqua Troll 500, Non-Vented (Inv 00145195)	1	3,910.50	852471	Purchased 7/1/2021
Sonde	In-Situ	Aqua Troll 500, Non-Vented	1	3,217.80	746007	Purchased June 2020
Tube	In-Situ	VuLink Telemetry with Hydrovu (Inv 00142589)	1	495.00	824479	Purchased 4/6/2021
Tube	In-Situ	VuLink Telemetry with Hydrovu (Inv 00142589)	1	495.00	824534	Purchased 4/6/2021
Tube	In-Situ	VuLink Telemetry with Hydrovu (Inv 00142589)	1	495.00	824471	Purchased 4/6/2021
Tube	In-Situ	VuLink Telemetry with Hydrovu (Inv 00142589)	1	495.00	824485	Purchased 4/6/2021
Meter	In-Situ	Solinst Field Reader 5 Assembly	1	99.00	543285	Purchased 5/16/2022
Probes	SWQ Probe	DO Meter ProSOLO, YSI 626650 w/4M Cable	1	1,515.30	383	Purchased 6/30/20 - Geotech Environmental Equip.
Sonde	In-Situ	Multiparameter Surface Water Quality Sonde	1	4,500.00	51209	Puchased by USGS for AMAFCA in Early 2014
Sonde	In-Situ	Multiparameter Surface Water Quality Sonde	1	4,500.00	51021	Purchased by USGS for AMAFCA in Early 2014
Meter	Model 102	Levelogger Edge water level & temperature logger w/USB communication	1	750.15	338	Purchased 6/24/14 from Fondriest Environmental
Meter	Solinst	Water Level Logger	1	578.32	339	Purchased July 2014 from Fondriest Environmental
Meter	Solinst	Water Level Logger	2	1,134.30	341, 340	11/5/2014
Meter	Solinst	Barologger	1	288.00	382	Purchased June 2015
Meter	Solinst	Barologger 5, M1 5, Model 3001	1	342.00	12157483	Purchased 5/16/2022
Meter	Solinst	Levelogger Edge water level & temperature logger	1	581.00	337	Purchased June 2015
Meter	Solinst	Levelogger Edge water level & temperature logger	1	581.00	315	Purchased June 2015
Meter	Solinst	Levelogger Edge water level & temperature logger	1	581.00	314	Purchased June 2015
Meter	Solinst	Levelogger Edge water level & temperature logger	1	581.00	317	Purchased June 2015
Meter	Solinst	Levelogger Edge water level & temperature logger	1	581.00	293	Purchased June 2015
Meter	Solinst	Levelogger Edge water level & temperature logger	1	581.00	307	Purchased June 2015
Meter	Solinst	Levelogger Edge water level & temperature logger	1	581.00	343	Purchased June 2015
Meter	Solinst	Levelogger Edge water level & temperature logger	1	581.00	344	Purchased 5/19/2016
Meter	Solinst	Levelogger Edge water level & temperature logger	1	581.00	345	Purchased 5/19/2016
Meter	Solinst	Levelogger Edge water level & temperature logger	1	581.00	346	Purchased 5/19/2016
Meter	Solinst	Levelogger Edge water level & temperature logger	1	581.00	347	Purchased 5/19/2016
Meter	Solinst	Levelogger Edge water level & temperature logger	1	581.00	348	Purchased 5/19/2016
Meter	Solinst	Levelogger Edge water level & temperature logger	1	581.00	349	Purchased 5/19/2016
Meter	Solinst	Levelogger Edge water level & temperature logger	1	581.00	350	Purchased 5/19/2016
Meter	Solinst	Levelogger Edge water level & temperature logger	1	581.00	361	Purchased 5/19/2016
Meter	Solinst	Levelogger Edge water level & temperature logger	1	581.00	362	Purchased 5/19/2016
Meter	Solinst	Levelogger Edge water level & temperature logger	1	581.00	363	Purchased 5/19/2016
Meter	Solinst	Levelogger Edge water level & temperature logger	1	581.00	365	Purchased 5/19/2016
Meter	Solinst	Levelogger Edge water level & temperature logger	1	581.00	366	Purchased 5/19/2016
Meter	Solinst	Levelogger Edge, M20	1	581.00	367	Purchased 12/27/2017
Meter	Solinst	Levelogger Edge, M20	1	581.00	368	Purchased 12/27/2017
Meter	Solinst	Levelogger Edge, M20	1	581.00	369	Purchased 12/27/2017
Meter	Solinst	Levelogger Edge, M20	1	581.00	370	Purchased 12/27/2017
Meter	Solinst	Levelogger Edge, M20	1	581.00	371	Purchased 12/27/2017
Meter	Solinst	Levelogger Edge, M20	1	581.00	372	Purchased 12/27/2017
Meter	Solinst	Levelogger Edge, M20	1	581.00	373	Purchased 12/27/2017
Meter	Solinst	Levelogger Edge, M20	1	581.00	374	Purchased 12/27/2017
Meter	Solinst	Levelogger Edge, M20	1	581.00	375	Purchased 12/27/2017
Meter	Solinst	Levelogger Edge, M20	1	581.00	376	Purchased 12/27/2017
Meter	Solinst	Levelogger Edge, M20	1	581.00	377	Purchased 12/27/2017
Meter	Solinst	Levelogger Edge, M20	1	581.00	378	Purchased 12/27/2017
Meter	Solinst	Levelogger Edge, M20	1	581.00	379	Purchased 12/27/2017
Meter	Solinst	Levelogger Edge, M20	1	581.00	380	Purchased 12/27/2017
Meter	Solinst	Levelogger Edge, M20	1	581.00	381	Purchased 12/27/2017
Meter	Solinst	Levelogger Edge, M20	1	581.00	306	Purchased 12/27/2017
Meter	Solinst	Levelogger 5 Junior, M10	1	459.00	011-2156927	Purchased 5/16/2022
Meter	Solinst	Levelogger 5 Junior, M10	1	459.00	011-2156943	Purchased 5/16/2022
Metet	Solinst	LevelVent 5, M20 114628	1	629.00	382	Purchased 11/10/2020
		Total inventory as of June 30, 2024		$49,959.37		

Deletions: FY24

Total Deletions $0.00

I hereby certify that the foregoing inventory of office furniture and fixtures is complete and correct; is in the possession of the Albuquerque Metropolitan Arroyo Flood Control Authroity; has been paid for in full, and that they Authority has full title thereto.

Patrick J. Chavez, PE, Stormwater Quality Engineer
Albuquerque Metropolitan Arroyo Flood Control Authority

30-Jun-24
Date

Water Quality Inventory Over $5001 as of June 30, 2024

Inventory						
Item	**Type**	**Description**	**No.**	**Purchase Price**	**ID#**	**Purchased**
Sonde	In-Situ	Multiparameter Surface Water Quality Sonde	1	6,914	504292	1/31/2017
Sonde	In-Situ	Multiparameter Surface Water Quality Sonde	1	6,914	504310	1/31/2017

Total Inventory as of June 30, 2024 $ 13,828.00

Deletions FY24:

Item	**Type**	**Description**	**No.**	**Purchase Price**	**ID#**	**Purchased**

Total Deletions $0.00

I hereby certify that the foregoing inventory of office furniture and fixtures is complete and correct; is in the possession of the Albuquerque Metropolitan Arroyo Flood Control Authority; has been paid for in full, and that the Authority has full title thereto.

Patrick J. Chavez, Stormwater Quality Engineer
Albuquerque Metropolitan Arroyo Flood Control Authority

30-Jun-24
Date

Telemetry Inventory Over $5000 as of June 30, 2024

Inventory				
Item	***Description***	***Cost***	***Purchased/Accepted Date***	***Comments***
AMAFCA IT	Dell 530 Server	40,164	10/31/2017	
AMAFCA Building	Wifi and and set up	114,815	10/31/2017	
AMAFCA Tower	50 ft tower	128,722	10/31/2017	
Tower Equipment	Equipment on 50 ft tower	132,191	10/31/2017	
Menual telemetry	Telemetry on Menual bridge	21,282	10/31/2017	
Hahn	Structure	42,813	10/31/2017	
Hahn	Camera and Telemetry	56,388	10/31/2017	
NDC - Balloon Fiesta	Structure	34,100	10/31/2017	
NDC - Balloon Fiesta	Camera and Telemetry	18,334	10/31/2017	
Piedras Marcadas	Structure	34,100	10/31/2017	
Piedras Marcadas	Camera and Telemetry	18,334	10/31/2017	
Amole	Structure	34,100	10/31/2017	
Amole	Camera and Telemetry	18,334	10/31/2017	
Raymac	Structure	34,100	10/31/2017	
Raymac	Camera and Telemetry	18,334	10/31/2017	
Don Felipe	Structure	34,100	10/31/2017	
Don Felipe	Camera and Telemetry	18,334	10/31/2017	
McCoy	Structure	34,100	10/31/2017	
McCoy	Camera and Telemetry	18,334	10/31/2017	
VDO	Structure	49,056	3/31/2021	
VDO	Telemetry	40,855	3/31/2021	

Total Inventory as of June 30, 2024 $ 940,890

Deletions 2024 :

NONE			

Total Deletions $0.00

I hereby certify that the foregoing inventory of office furniture and fixtures is complete and correct; is in the possession of the Albuquerque Metropolitan Arroyo Flood Control Authority; has been paid for in full, and that the Authority has full title thereto.

6/18/2024

Esqui Padilla, Engineering Technician Date
Albuquerque Metropolitan Arroyo Flood Control Authority

Summary of AMAFCA's MS4
Dissolved Oxygen Program
FY 2024 (July 1, 2023 – June 30, 2024)

NPDES Permit No. NMR04A000
Part I.C.1.d - Special Conditions, Compliance with Water Quality Standards and
Part I.C.3.a - Endangered Species Act (ESA) Requirements - Dissolved Oxygen Strategy

AMAFCA monitors and evaluates the potential effect of stormwater discharges related to dissolved oxygen (DO) in the Rio Grande. The DO of stormwater discharges to the Rio Grande at the North Diversion Channel (NDC) outfall has been monitored by AMAFCA and cooperative Municipal Separate Storm Sewer System (MS4) agencies, with communication with the United States Fish and Wildlife Service (USFWS) and EPA, since 2004. Several strategies and constructed modifications to the NDC Embayment were implemented from 2011-2016. Currently, in normal river flow conditions, water from the Rio Grande will not stagnate in the NDC Embayment and create low DO conditions. These improvement projects provided control measures to eliminate conditions that cause or contribute to exceedances of applicable DO water quality standards.

In FY 2024, AMAFCA continued to follow the updated quality assurance project plan (QAPP), the field sampling plan (FSP), and related Standard Operating Procedures (SOPs) for AMAFCA's stormwater quality monitoring program. The format and contents of these documents are modeled after the New Mexico Environment Department (NMED) Surface Water Quality Bureau (SWQB) water quality management programs to facilitate sharing of data between the agencies. These documents provide a framework and detailed methods for the collection and analysis of environmental data as well as provide guidance for generating data that is of the precision, accuracy, and completeness necessary for AMAFCA's program.

In accordance with AMAFCA's Stormwater Management Program (SWMP), AMAFCA has and will continue to assess the potential effect of stormwater discharges into the Rio Grande by collecting and evaluating DO data.

AMAFCA MS4 Sonde Program Summary

The purpose of AMAFCA's Sonde Monitoring Program is to obtain surface water quality data within the Rio Grande to support AMAFCA and the cooperative MS4 agencies with the assessment of surface water quality parameters, as required by the Endangered Species Act requirements incorporated into the MS4 Permit. In addition, the Sonde Monitoring Program data supports determination of long-term surface water quality trends, related to stormwater impacts and impairments, within the Middle Rio Grande. The sondes monitor temperature, barometric pressure, pH, turbidity, DO, DO saturation (%), and water depth above each sonde. AMAFCA has improved the Sonde Program through the years with current access to real-time online data using the HydroVu data management application, allowing quicker response and solutions to maintenance issues.

Photos of AMAFCA Sondes

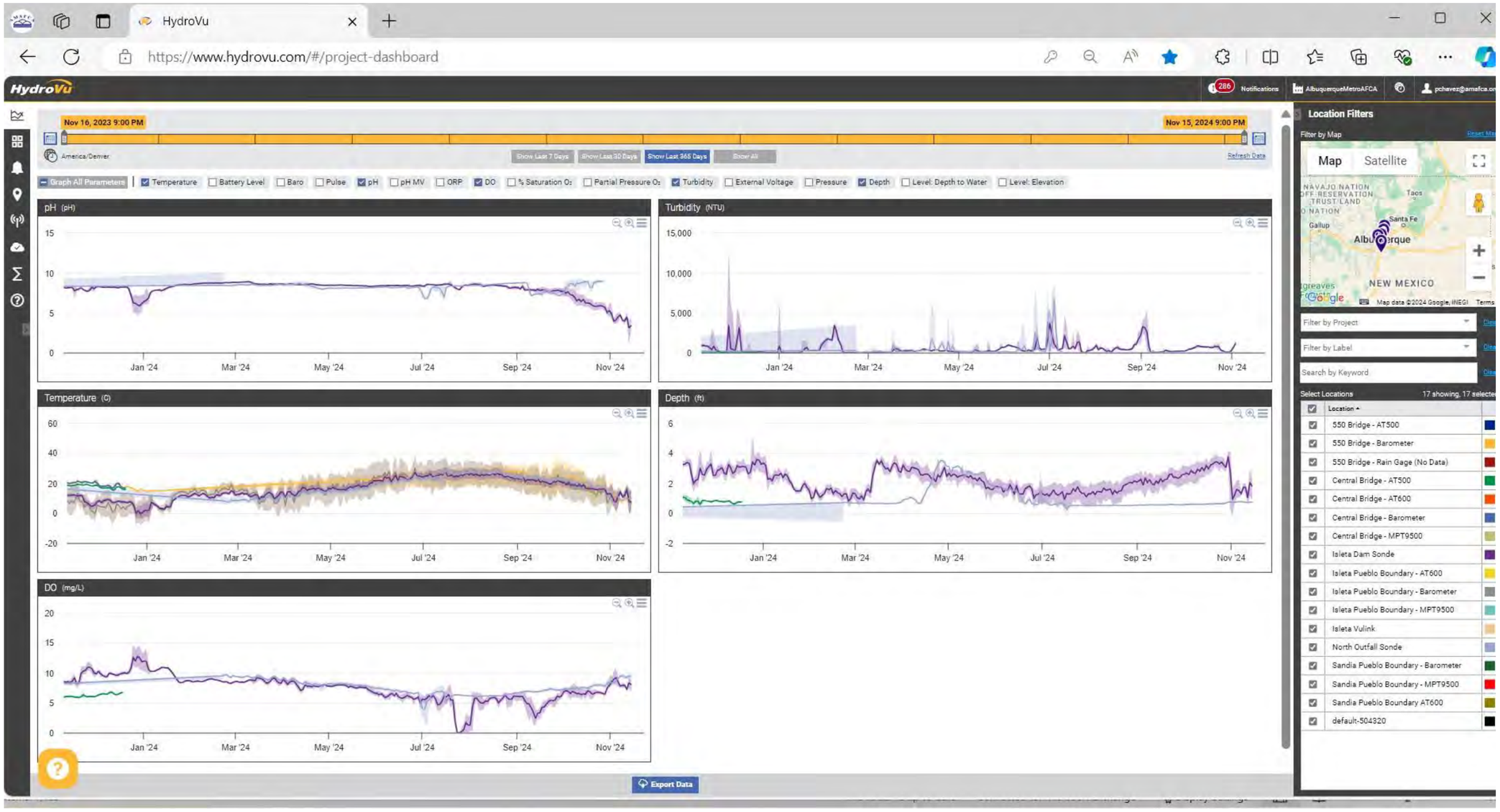


Image of Online HydroVu Portal View.

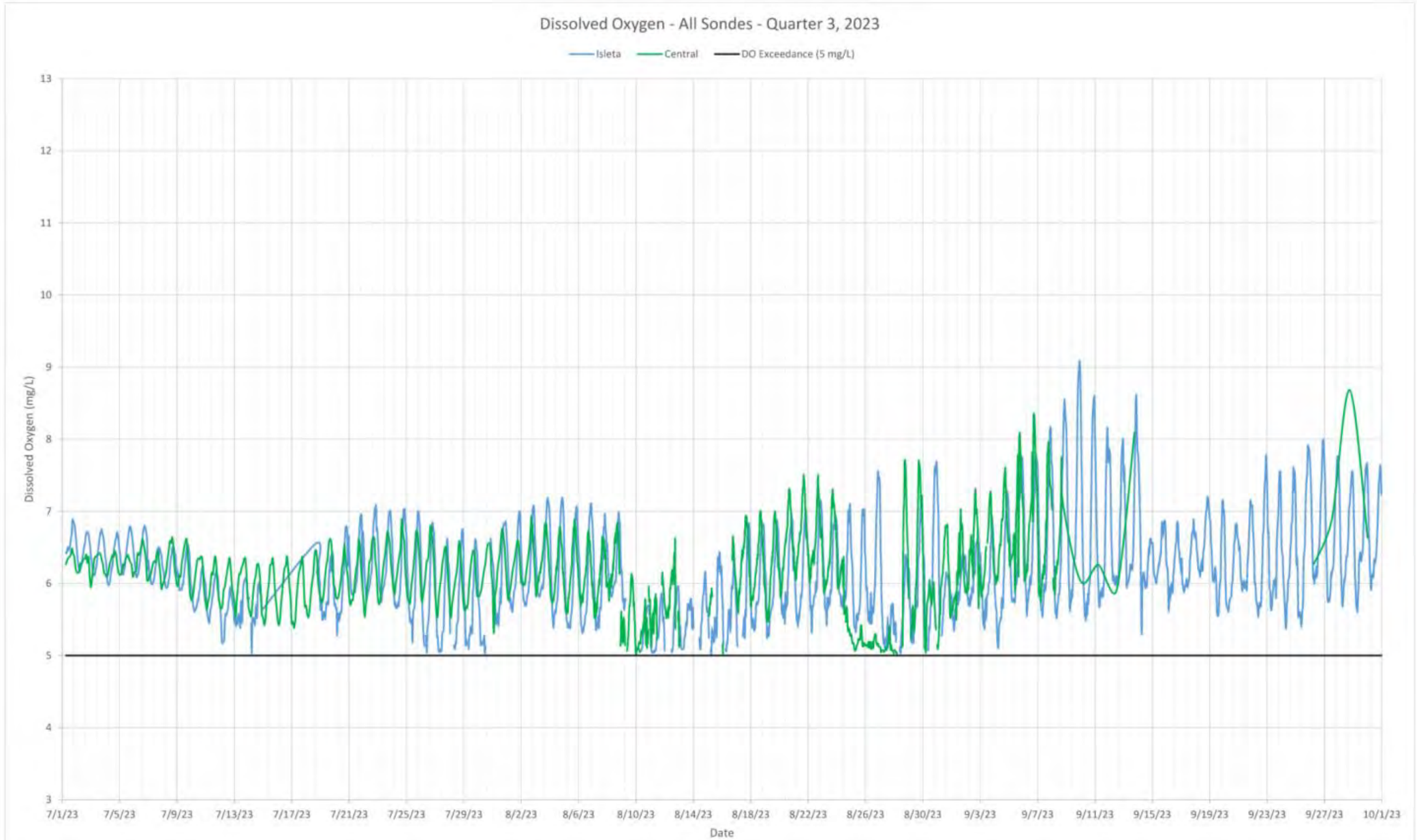
HydroVu Provides AMAFCA with Access to Real-Time Sonde Data in the Rio Grande

From the AMAFCA FY 2024 In-Stream Water Quality Monitoring Memos, which report on the AMAFCA sonde data, the DO fell slightly below 5 mg/L related to storm events within the watershed for the following locations:

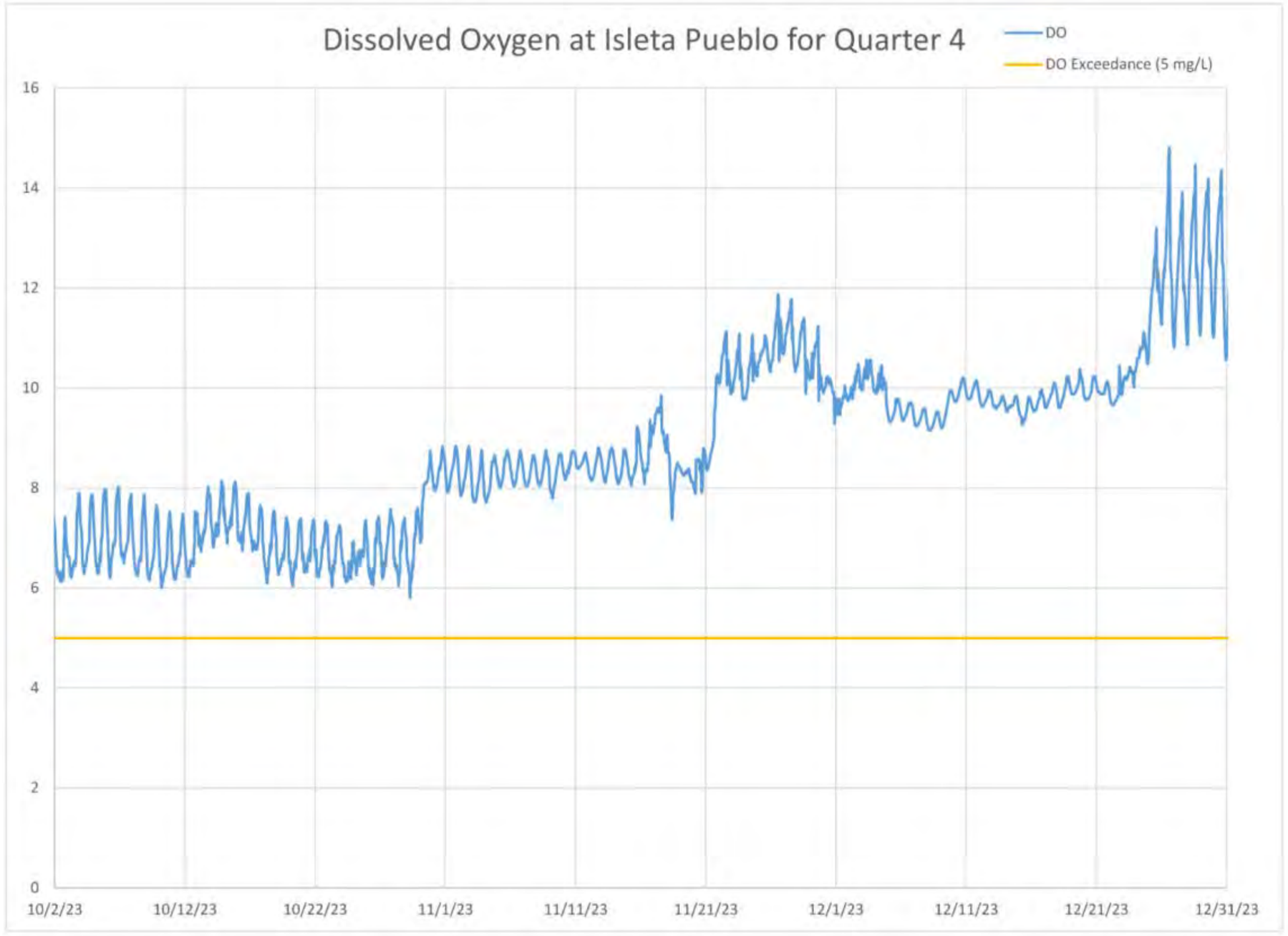
- Sandia Pueblo Boundary – One (1) instance in FY 2024 with DO levels below 5 mg/L (June 30, 2024). This instance represents approximately 6 hours (< 0.1% of the year).

- Central Ave. Bridge – No instances in FY 2024 with DO levels below 5 mg/L at this location. This sonde was offline for maintenance issues from October 2023 – July 2024.

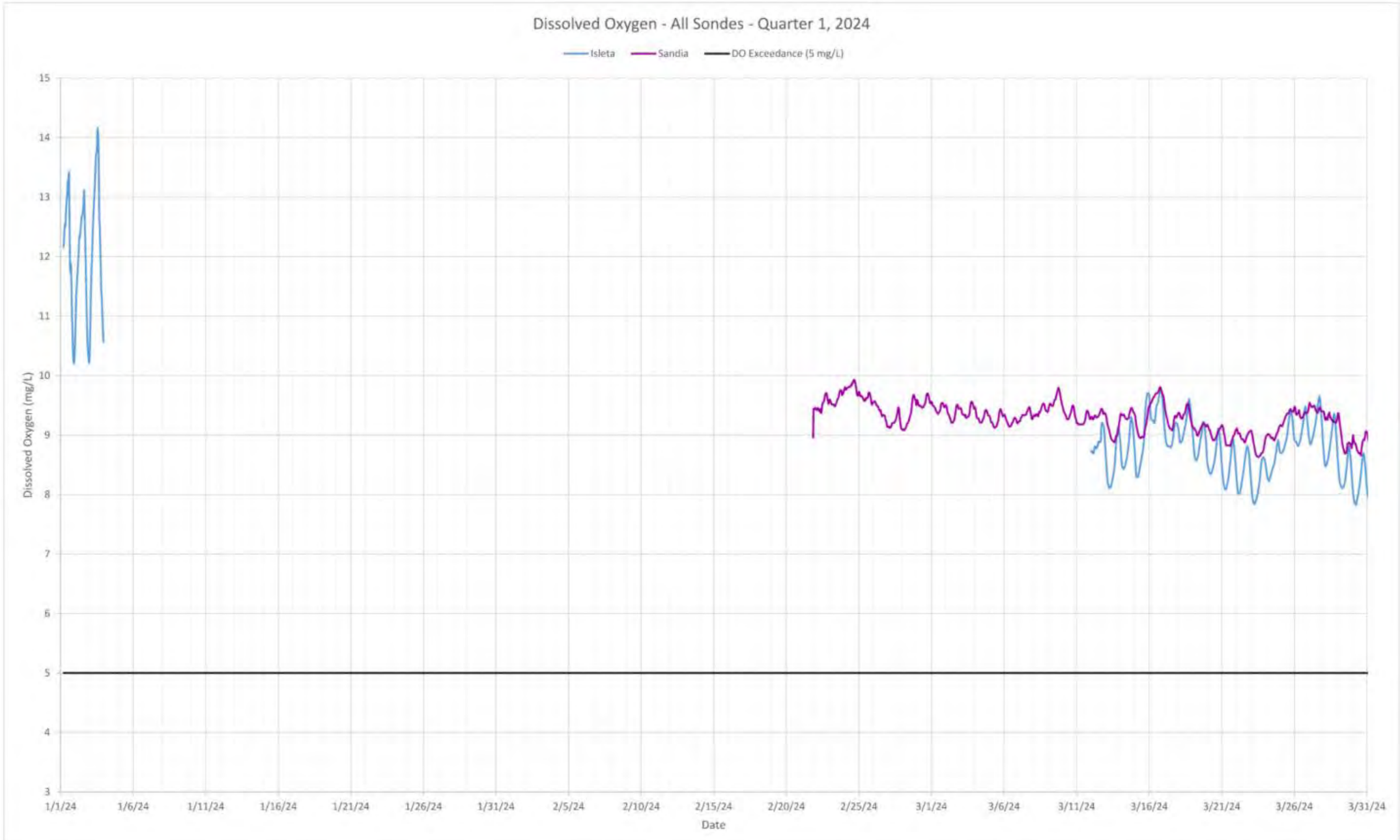
- Isleta Dam – One (1) instance in FY 2024 with DO levels below 5 mg/L (June 30, 2024). This instance represents approximately 6 hours (< 0.1% of the year). This sonde was offline for maintenance issues from January 2024 – March 12, 2024.



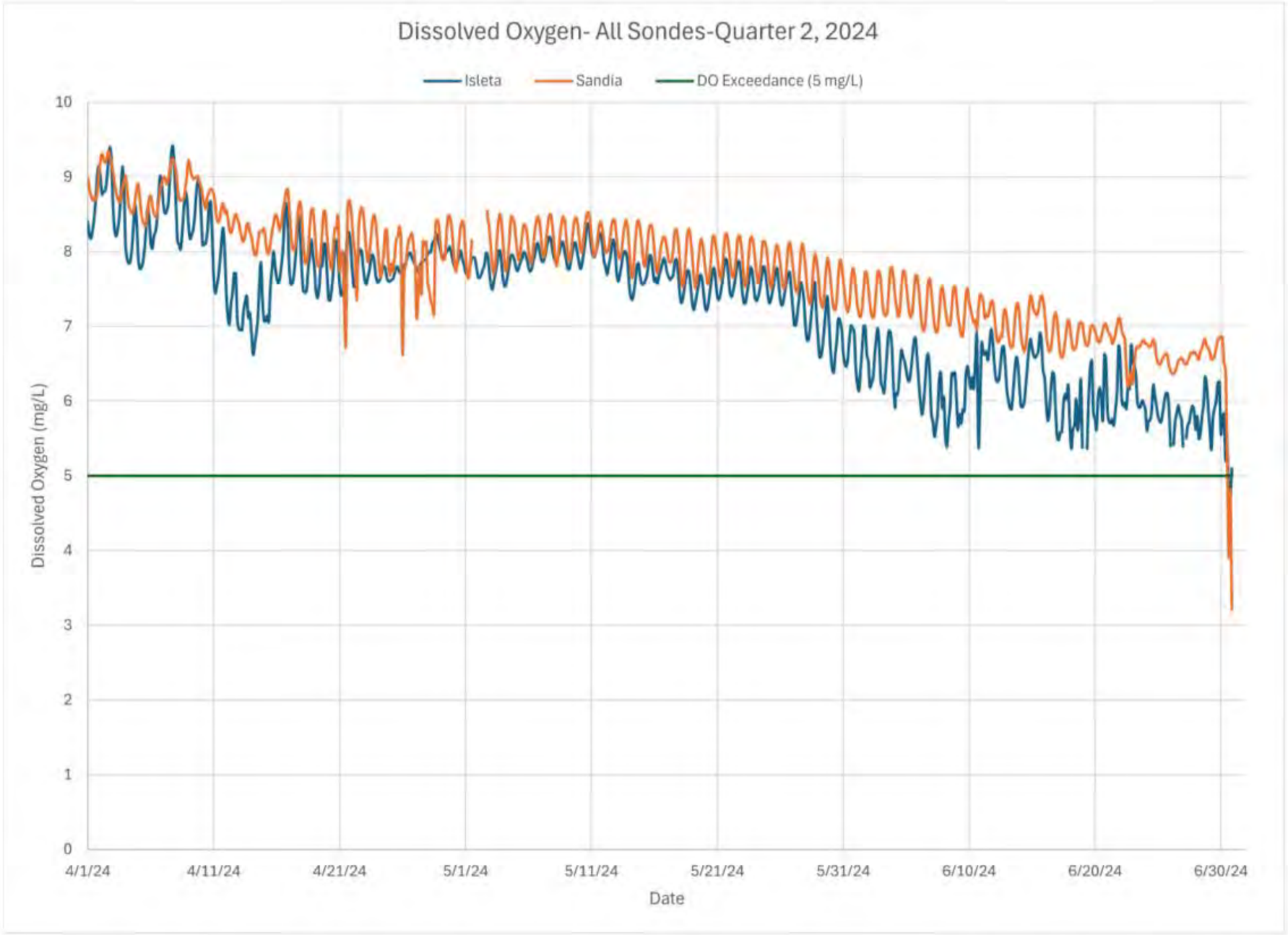
Plot of DO Data Collected From Sondes Deployed During FY 2024 (July – September 2023)



Plot of DO Data Collected From Sonde at Isleta Pueblo Deployed During FY 2024 (October – December 2023)



Plot of DO Data Collected From Sondes Deployed During FY 2024 (January – March 2024)

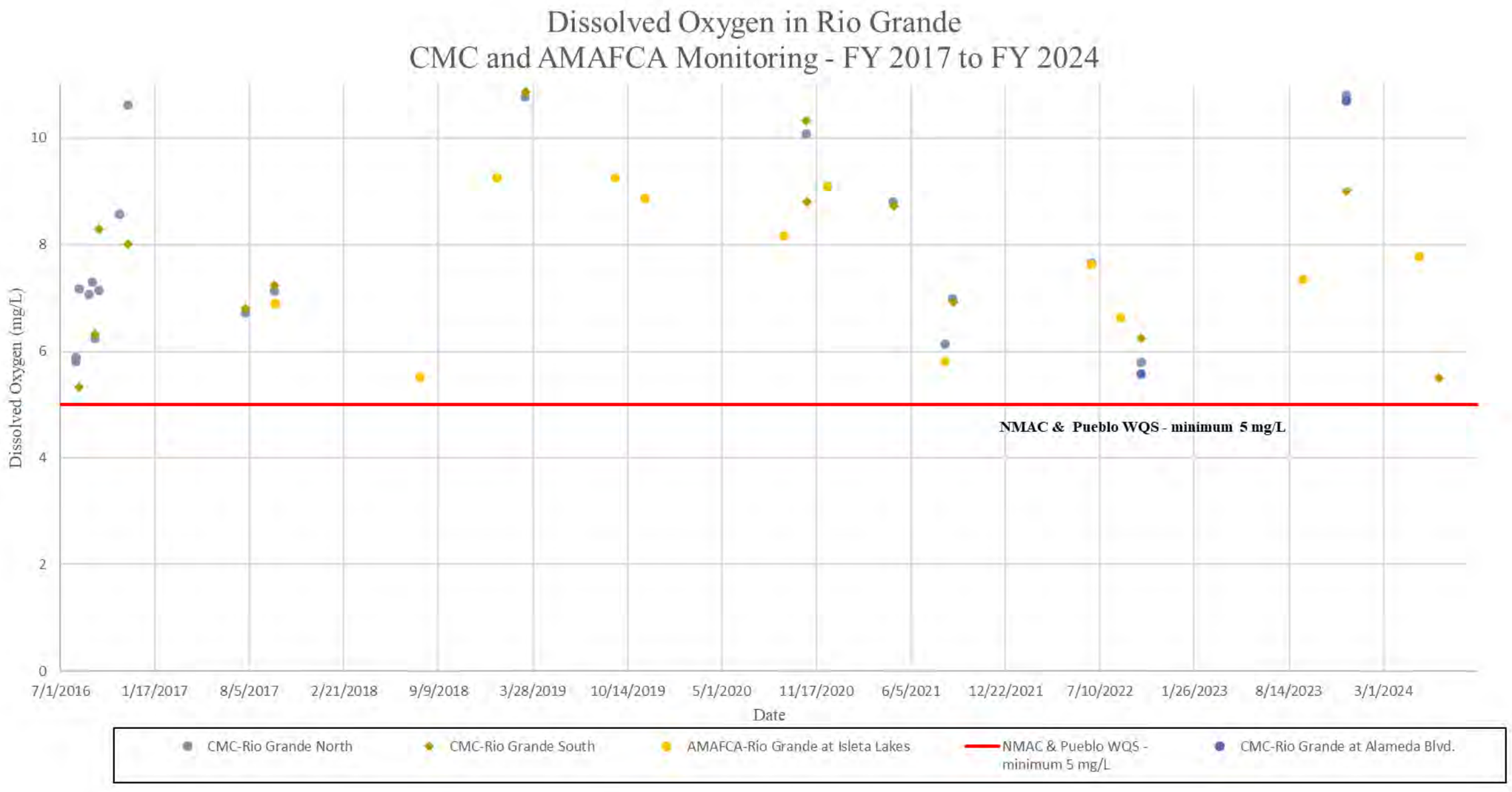


Plot of DO Data Collected From Sondes Deployed During FY 2024 (April – June 2024)

CMC and AMAFCA Water Quality Monitoring Program Summary for DO

In addition to the Sonde Program, both AMAFCA and the Middle Rio Grande Compliance Monitoring Cooperative (CMC) collect grab samples within the Rio Grande during storm events. Field data is measured, including DO, for these samples. For MS4 Permit compliance, the Middle Rio Grande CMC has two monitoring points where DO field measurements are collected, north and south of the urbanized portion of the river. The AMAFCA Monitoring Program collects samples in the Rio Grande at the downstream (south) end of the watershed (Rio Grande at Isleta Lakes). The graph on page 10 shows the DO data from all AMAFCA and CMC samples collected from July 2016 – June 2024. None of the correctly collected field DO data from these programs from 2016 to 2024 have recorded DO in the Rio Grande during stormwater discharge events below the water quality standard of 5 mg/L for the Rio Grande (NMAC 20.6.4).

Collecting a CMC sample from the Rio Grande at Angostura Diversion at the upstream (north) end of the Middle Rio Grande Watershed



Plot of DO Data Collected From Grab Samples in the Rio Grande Through the AMAFCA and CMC Monitoring Programs

AMAFCA Annual Incidental Take Report Summary

The Annual Incidental Take Report estimates the potential Rio Grande Silvery Minnow (RGSM) harassments and lethality near the North Diversion Channel (NDC) outfall, using the method defined by the USFWS for the Biological Opinion (BO) completed in August 2014. This analysis calculates the frequency (number) of anoxic and hypoxic events and determines if the events meet the measurable goals provided in the December 2014 MS4 Permit No. NMR04A000. It also determines the number of RGSM mortalities and harassments using the BO specified methodology.

For FY 2024, there were zero anoxic events and zero hypoxic events identified during the incidental take analysis. For the entire MS4 Permit term up through June 2024, including during administrative continuance, zero anoxic events and one hypoxic event have been identified during the incidental take analysis. During FY 2022, in June 2022, the flow conditions in the Rio Grande through Albuquerque were near dry conditions which led to the first, and only, hypoxic event (on June 22, 2022) reported during the permit term (refer to table below). Hypoxic events occur when the oxygen percent saturation in the river is less than 54.3%. Anoxic events occur when the oxygen percent saturation drop below 8.7%.

MRG Watershed MS4 Permit (issued 2014)	Annual Report Year	Measurable Goals Frequency of Anoxic Events/year	Actual No. of Anoxic Events for Year	Measurable Goals Frequency of Hypoxic Events/year	Actual No. of Hypoxic Events for Year
Permit Year 1	July 2015 - June 2016	18	0	36	0
Permit Year 2	July 2016 - June 2017	18	0	36	0
Permit Year 3	July 2017 - June 2018	9	0	18	0
Permit Year 4	July 2018 - June 2019	9	0	18	0
Permit Year 5	July 2019 - June 2020	9	0	18	0
Admin. Continuance	July 2020 - June 2021	9*	0	18*	0
Admin. Continuance	July 2021 - June 2022	9*	0	18*	1
Admin. Continuance	July 2022 - June 2023	9*	0	18*	0
Admin. Continuance	July 2023 - June 2024	9*	0	18*	0
Values in this table are from Table 1.c from MS4 Permit (p. 21 of part 1).					
* MS4 Permit expired and is in administrative continuance. The same measurable goals as Permit Year 5 are assumed.					

Table Summarizing the Incidental Take Analysis Compared to the MS4 Permit Measurable Goals from FY 2016 – FY 2024

Incidental Take Statement for NDC Discharges to the Rio Grande FY 2024 (July 1, 2023 to June 30, 2024)

NDC Qualifying Storm Event (>250 cfs and V > 13 ac-ft)			$Q_{P\ NDC}$	$Q_{P\ NDC}$	DO_{NDC}	DO Saturation$_{NDC}$ (Sandia Pueblo/North Outfall Sonde)	Barometric Pressure$_{NDC}$ (Airport or Barologger) [1]	Temp$_{NDC}$ (Sandia Pueblo Sonde or nearest sonde)	$DO_{Rio\ Grande}$ Rio Grande at Central or nearest sonde (Isleta)	DO Saturation$_{Rio\ Grande}$ or nearest sonde (Isleta)	$Q_{Daily\ Rio\ Grande}$	$Q_{Daily\ Rio\ Grande}$	No. of RGSM Killed	No. of RGSM Harassed	Was Event Anoxic?	Was Event Hypoxic?
Date	Time	Season (Per BO Table 1)	Actual 08329900	Rounded (Per BO App. A)	(Sandia Pueblo Sonde) (mg/L)	(%)	(mm Hg)	(°C)	(mg/L)	(%)	Actual 08330000	Rounded (Per BO Table 1)	in Lethal Zone DO % Sat < 8.7%, DO <0.7 mg/L	in Impact Area 8.7 %< % DO Sat < 54.3 %, 0.7<DO<4.4 mg/L	Enter '1' if Yes, '0' if No (% Sat <= 8.7%; 50% lethality)	Enter '1' if Yes, '0' if No (8.7% > % Sat <= 54.3%)
09/13/23	3:55:00 PM	Summer	506	500	6.47	89.83	627.89	20.12	8.1	82.97	97	0	N/A	N/A	N/A	N/A
12/14/23	9:50:00 AM	Fall	810	1,000	9.65	103.05	635.25	7.64	9.97	80.21	2160	2,000	N/A	N/A	N/A	N/A
12/23/23	4:50:00 AM	Winter	358	500	10.22	106.87	624.08	6.71	10.22	106.77	654	500	N/A	N/A	N/A	N/A
02/10/24	1:45:00 PM	Winter	322	500	No Data	97.92	622.05	No Data	No Data	97.92	557	500	No Data	No Data	No Data	No Data
04/01/24	5:25:00 PM	Spring	288	500	8.7	94.72	623.32	10.56	9.03	99.83	679	500	N/A	N/A	N/A	N/A
05/16/24	8:50:00 AM	Spring	256	500	7.9	95.47	628.14	15.73	7.68	94.39	2,170	2,000	N/A	N/A	N/A	N/A
06/09/24	5:30:00 PM	Spring	1,640	1,500	7.4	99.65	631.19	20.89	6.35	85.61	919	1,000	N/A	N/A	N/A	N/A
06/22/24	1:25:00 AM	Summer	367	500	7.1	97.69	631.70	23.23	6.31	79.46	369	500	N/A	N/A	N/A	N/A
06/24/24	7:20:00 PM	Summer	388	500	6.8	97.37	628.90	24.00	6.07	84.62	472	500	N/A	N/A	N/A	N/A
06/29/24	9:25:00 PM	Summer	10,400	10,500	6.8	99.73	633.22	27.18	6.26	85.51	1,220	1,000	N/A	N/A	N/A	N/A
												Total #s / Events:	**0**	**0**	**0**	**0**

NOTE: No. of RGSM Killed or Harassed (Columns O and P) is based on lookup tables from BO Appendix A. From BO, p. 72, if stormwater discharges containing less than 0.7 mg/L DO occur during the period of May 15 to 31, then up to 300 larval silvery minnow per year may also die. This did not occur from July 2021 to June 2022.

[1] Sonde and Barologger data for pressure were not available for these dates (or pressured listed were unreasonably high). Pressure for this analysis was taken from NOAA climate data station at Albuquerque International Airport (WBAN: 23050). Data given in inHg, converted to mmHg. Data downloaded from: https://www.ncdc.noaa.gov/cdo-web/datasets/LCD/stations/WBAN:23050/detail

Green Shading	No Incidental Take according to BO; DO in NDC Outfall > 4.4 mg/L and oxygen saturation of 54.3 %. Had sonde data available for complete analysis.
Gray Shading (Sonde Data not available). Incidental Take based on calculated DO concentration or DO saturation (Source: Sonde Data and Program memos from Weston)	The Sandia Pueblo sonde, located just upstream of the North Diversion Channel outfall, was not deployed during the 2023 Third Quarter (July - September 2023). During analysis of the sonde data, data that appeared erroneous was removed from the data set. The majority of the DO data for the sonde located at Central was removed from the data set from 9/10/2023 - 9/20/2023. The sonde data from the Isleta sonde was used for the 9/15/2023 storm analysis.
	The Sandia Pueblo sonde, located just upstream of the North Diversion Channel outfall, was not deployed during the 2023 fourth quarter (October - December 2023). The sonde located at the Central Avenue bridge was not deployed until December 20, 2023. Data was not collected by the sonde at the Central Avenue bridge location during the fourth quarter of 2023. The sonde data from the Isleta sonde was used for the December 2023 storm analyses.
	During the 2024 first quarter (January - March 2024), the Sandia Pueblo boundary, just upstream of the North Diversion Channel outfall, was not deployed until February 21, 2024. The sonde located at the Isleta Dam was removed on January 4, 2024 and deployed on February 21, 2024. Data was not collected by the sonde at the Central Avenue bridge location. There was not any sonde data available to use for the February 10, 2024 storm analysis.
	During the 2024 second quarter (April - May 2024), data was not collected by the sonde at the Central Avenue bridge location. The sonde data from the Sandia Pueblo and Isleta sondes was used for the April - June storm analyses.
Purple Shading	NDC (Sandia Pueblo) Sonde was not deployed or did not report DO concentration, saturation, or temperature, used nearest available Sonde DO concentration data and temperature (Central or Isleta).

No. Events w/ Takes for Year:		**0**	
Estimated Incidental Take			
July 2023 to June 2024		Allowed Per Year	Allowed Over 5-Year Permit Term
Mortalities =	**0**	2,280	10,410
Harassments =	**0**	32,616	163,080

Incidental Take Allowance Source: Biological Opinion for U.S. Environmental Protection Agency General NPDES Permit No. NMR04A000, Aug. 2014, USFWS

MRG Watershed MS4 Permit (issued 2014)	Annual Report Year	Measurable Goals Frequency of Anoxic Events/year	Actual No. of Anoxic Events for Year	Measurable Goals Frequency of Hypoxic Events/year	Actual No. of Hypoxic Events for Year
Permit Year 1	July 2015 - June 2016	18	0	36	0
Permit Year 2	July 2016 - June 2017	18	0	36	0
Permit Year 3	July 2017 - June 2018	9	0	18	0
Permit Year 4	July 2018 - June 2019	9	0	18	0
Permit Year 5	July 2019 - June 2020	9	0	18	0
Admin. Continuance	July 2020 - June 2021	9*	0	18*	0
Admin. Continuance	July 2021 - June 2022	9*	0	18*	1
Admin. Continuance	July 2022 - June 2023	9*	0	18*	0
Admin. Continuance	July 2023 - June 2024	9*	0	18*	0

Values in this table are from Table 1.c from MS4 Permit (p. 21 of part 1).
* MS4 Permit expired and is in administrative continuance. The same measurable goals as Permit Year 5 are assumed.

NDC Outfall Project and DO Program Summary

The potential for low DO discharges to the Rio Grande at the NDC outfall has been a concern which AMAFCA has been addressing, with the USFWS and EPA, since 2004. Several strategies, including various NDC Embayment modifications, have been implemented from 2011-2014. In 2015-2016, AMAFCA completed construction, after coordination with USFWS, of the NDC Outfall Grade Control Structures Modification Project and NDC Embayment Regrading Project.

The NDC Embayment was filled in and regraded in 2015-2016, thereby removing the constant hydraulic connection between the Rio Grande and the NDC Bathtub/Outfall. In normal river flow conditions, water from the Rio Grande will not be able to stagnate in the Embayment and create low DO conditions. These improvement projects provide control measures to eliminate conditions that cause or contribute to exceedances of applicable DO water quality standards.

These NDC projects and this DO Program Strategy were coordinated with the USFWS. On April 13, 2023, AMAFCA received a final *Release from Monitoring* letter from USFWS for the special conditions from USACE for the NDC Embayment to be filled in and revegetated. This letter is included as an attachment to this program summary.

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, ALBUQUERQUE DISTRICT
4101 JEFFERSON PLAZA NE
ALBUQUERQUE, NM 87109-3435

April 13, 2023

Regulatory Division

SUBJECT: Release from Monitoring (SPA-2015-00147)

Albuquerque Metropolitan Arroyo Flood Control Authority
Attn: Jerry Lovato
2600 Prospect NE
Albuquerque, NM 87107
jlovato@amafca.org

Dear Mr. Lovato:

This letter is in reference to the Albuquerque Metropolitan Arroyo Flood Control Authority's (AMAFCA) North Diversion Channel Embayment Project authorized by Regional General Permit 14-01, Stream Stabilization & Water Quality Improvement Projects, dated November 2, 2015 (Action No. SPA-2015-00147).

Special condition No. 10. of the original authorization required site monitoring to track progress of revegetation performance standards outlined in special condition No.'s 5. and 7. A compliance site inspection conducted by U.S. Army Corps of Engineers (Corps) Regulatory Division staff on September 8, 2022, examined the revegetated areas referenced in special condition No.'s 5. and 7. Following the site inspection, Corps staff concluded the site has met the revegetation performance goals. Therefore, AMAFCA is hereby released from any further vegetation monitoring associated to special condition No.'s 5., 7., & 10. outlined in the original authorization.

Please refer to identification number SPA-2015-00147 in any correspondence concerning this project. If you have any questions, please contact me by email at Daniel.i.Delgado@usace.army.mil, or telephone at (719) 555-9405 ext. 1.

Sincerely,

Daniel Delgado
Regulatory Project Manager

Enclosure

DEPARTMENT OF THE ARMY
ALBUQUERQUE DISTRICT, CORPS OF ENGINEERS
4101 JEFFERSON PLAZA NE
ALBUQUERQUE, NEW MEXICO 87109

REPLY TO ATTENTION OF

November 2, 2015

Regulatory Division

SUBJECT: Regional General Permit (RGP) Verification – Action No. SPA-2015-00147-ABQ, North Diversion Channel Embayment Earthwork and Grade Control Structures

Jerry Lovato
Albuquerque Metropolitan Arroyo Flood Control Authority
2600 Prospect NE
Albuquerque, NM 87107

Dear Mr. Lovato,

The U.S. Army Corps of Engineers received your letter dated April 20, 2015, for the proposed North Diversion Channel (NDC) Embayment Earthwork and Grade Control Structures project located at approximately latitude 35.211174, longitude -106.610300, in Bernalillo County, New Mexico. The work, as described in your letter, will consist of filling the embayment area with approximately 29,130 cubic yards (cy) of clean fill material in order to raise the existing grade, and raising three existing grade control structures by adding approximately 2,380 cy of rock rip-rap on top of each structure. The proposed project would impact approximately 7.92 acres of waters of the U.S. We have assigned Action No. SPA-2015-00147-ABQ to this project. Please reference this number in all future correspondence concerning the project.

Based on the information provided, we have determined that the project is authorized by RGP NM-14-01 for Stream Stabilization & Water Quality Improvement Projects within Urban Ephemeral Channels. A summary of this permit is available on our website at http://www.spa.usace.army.mil/Missions/RegulatoryProgramandPermits/RGP.aspx. Please refer to our website at http://www.spa.usace.army.mil/Missions/RegulatoryProgramandPermits/WaterQualityCertification.aspx for specific information regarding compliance with water quality certification (WQC) requirements. The permittee must ensure that the work complies with the terms and conditions of the permit, including conditions of the Pueblo of Sandia WQC, dated October 23, 2015, and the special conditions listed below.

1. The permittee shall notify the Corps Albuquerque District Office, the U.S. Fish and Wildlife Service (USFWS) New Mexico Ecological Services Field Office, and the Pueblo of Sandia in writing of which construction plan, A, B or C, will be implemented, including the construction start date, 7 days prior to the beginning of ground-disturbing activities.

2. The permittee shall not conduct any activity associated with the authorized project between April 15 and August 15 of any given year.

3. The permittee shall implement erosion control measures for all temporarily disturbed areas, including access and staging areas, to prevent upland erosion into waters of the U.S. prior to commencement of ground-disturbing activities and these measures will be properly maintained by the permittee until temporarily disturbed areas are stabilized. Erosion control measures shall be installed and maintained by the permittee in accordance with the approved Stormwater Pollution Prevention Plan.

4. All temporarily impacted areas located adjacent to waters of the U.S. shall be restored by the permittee to pre-construction conditions, including original contours, vegetation composition and density (excluding invasive species), and drainage patterns. The permittee shall submit photos to the Corps Albuquerque District Office that document the success of restoration efforts within 90 days after restoration is complete.

5. The permittee shall conduct invasive plant species management within all temporarily disturbed areas so that invasive plant species comprise no more than 10 % of total plant species cover. The permittee shall submit photos to the Corps Albuquerque District Office that document the success of invasive plant species management by December 31, 2016.

6. Within 60 days after completion of construction of the authorized project, the permittee shall submit as-built drawings and a description of the work conducted to the Corps Albuquerque District Office. The drawings shall include the following:
   a. The Department of the Army Action Number.
   b. A plan view drawing of the location of the authorized work footprint (as shown in permit drawings) with an overlay of the work as constructed in the same scale. The drawing should show all "earth disturbance," aquatic resource impacts, structures, and the boundaries of any on-site and/or off-site avoidance areas. The drawings shall contain, at a minimum, 5-foot topographic contours of the entire site.
   c. Ground photographs of the completed work. The camera positions and view-angles of the ground photographs shall be identified on a map, aerial photograph, or project drawing.
   d. A description of all deviations between the work as authorized by the permit and the work as constructed. Clearly indicate on the as-built drawings the location of any deviations.

7. The permittee shall ensure that the revegetation area achieves the following performance standards by the timeframe described below and documentation of actual performance shall be included in the annual monitoring reports as described in Special Condition 10:
   a. Description of plant diversity based on densities of species planted in the Bosque Seed Mix equal to at least 80% of baseline by year 3 and measured using a published plant diversity index methodology.
   b. Target percent cover of 80% native species planted in the Bosque Seed Mix in the revegetation area are met for herbaceous strata by year 3 and measured by 10 randomly selected metered transects.

8. This Corps permit does not authorize you, the permittee, to take an endangered species, in particular the Rio Grande Silvery Minnow (*Hybognathus amarus*). In order to legally take a listed species, you must have separate authorization under the Endangered Species Act (ESA) (e.g., a permit under section 10 of the ESA, or a biological opinion (BO) under section 7 of the ESA, with "incidental take" provisions with which you must comply). The enclosed U.S. Fish and Wildlife (USFWS) BO for consultation numbers 02ENNM00-2012-F-0005 and 02ENNM00-2015-F-0363 dated October 14, 2015, contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with "incidental take" that is also specified in the BO. Your authorization under this Corps permit is conditional upon your compliance with all of the mandatory terms and conditions associated with incidental take of the enclosed BO, which terms and conditions are incorporated by reference in this permit. Failure to comply with the terms and conditions associated with incidental take of the BO, where a take of the listed species occurs, would constitute an unauthorized take, and it would also constitute non-compliance with your Corps permit. The USFWS is the appropriate authority to determine compliance with the terms and conditions of its BO, and with the ESA.

9. Please note that the USFWS BO includes a section of conservation recommendations, included by reference to previous BOs; that, if implemented, would further minimize the potential impacts of the project on federally listed threatened and endangered species. While these recommendations are not conditions of this authorization, we encourage you to include each of these recommendations in this and future projects that may affect the species in question.

10. The permittee shall submit annual site monitoring reports to the Corps Albuquerque District Office by December 31st of each year, beginning in 2015, for a minimum of 3 years or until the Corps has determined that the revegetation performance standards in Special Conditions 5 and 7 have been met. The monitoring reports shall be prepared in accordance with Corps Regulatory Guidance Letter 08-03 (Minimum Monitoring

Requirements for Compensatory Mitigation Projects Involving the Restoration, Establishment, and/or Enhancement of Aquatic Resources) and current Corps Albuquerque District Mitigation Monitoring Guidelines available at http://www.spa.usace.army.mil/Missions/RegulatoryProgramandPermits/Mitigation.aspx. The monitoring reports shall at a minimum include the following:

a. Comparison of pre-construction site conditions to an as-built survey as submitted in accordance with Special Condition 6.
b. Photographs (minimum 5) from fixed photographic monitoring points with a location reference map indicating camera orientation.
c. All data collected to document whether the revegetation site is achieving performance standards described in Special Conditions 5 and 7, and a narrative discussion of progress made toward meeting performance standards.
d. Fish and wildlife observations at the mitigation site.
e. Summary statement regarding the perceived success of the authorized project and any potential problem areas. Suggestions and a timetable for corrections should be included if it is anticipated that project goals may not be met.
f. Results of water quality monitoring conducted in compliance with the National Pollutant Discharge Elimination System Permit NMR4A000 BO (USFWS 2014).
g. Date(s) of field inspection(s).

11. The permittee shall conduct nesting surveys, using a qualified biologist, for southwestern willow flycatchers (*Empidonax trailii*), western yellow-billed cuckoos (*Coccyzus americanus*), and migratory birds protected under the Migratory Bird Treaty Act prior to commencing construction. If active nests for any of these species are found as a result of the nesting survey, the permittee shall notify the Corps Albuquerque District Office and USFWS New Mexico Ecological Services Field Office in writing and shall not begin any activities associated with this project until both agencies have provided approval, in writing, to proceed.

12. In order to prevent unauthorized impacts to waters of the U.S., prior to the commencement of construction, the permittee shall install a barrier (i.e., flagging, temporary fencing, jersey barriers, etc) around areas to be avoided and protected, such as wetlands and riparian areas, in accordance with the proposed project plans submitted with the pre-construction notification dated April 20, 2015, and the Biological Assessment dated June 2015. The permittee shall submit photo documentation of all barrier installation to the Corps Albuquerque District Office within 30 days of such installation.

Our review of this project also addressed its effects on threatened and endangered species and historic properties in accordance with general conditions 8 and 9. Based on the information provided, we have determined that this project will not affect the New Mexico meadow jumping mouse (*Zapus hudsonius luteus*), or designated critical habitat for Rio Grande Silvery Minnow, southwestern willow flycatcher and proposed critical habitat for western yellow-billed cuckoo. We have determined that this project "may affect, but not likely to adversely affect" southwestern willow flycatcher and western yellow-billed cuckoo. We also determined that this project "may affect, likely to adversely affect" the Rio Grande Silvery Minnow. The Corps completed formal consultation with USFWS under the Endangered Species Act, Sec. 7 for affects to federally-listed species on October 14, 2015. We have determined that this project will result in no potential to effect historic properties based on the scope and location of the proposed work and the results of previous cultural resource surveys conducted within and adjacent to the project area, and in consultation with the Pueblo of Sandia. However, please note that the permittee is responsible for meeting the requirements of general condition 8 on endangered species and general condition 9 on historic properties.

This letter does not constitute approval of the project design features, nor does it imply that the construction is adequate for its intended purpose. This permit does not authorize any injury to property or invasion of rights or any infringement of federal, state or local laws or regulations. The permittee and/or any contractors acting on behalf of the permittee must possess the authority and any other approvals required by law, including property rights, in order to undertake the proposed work.

This permit verification is valid until March 26, 2019, unless the RGP is modified, suspended, revoked or reissued prior to that date. Continued confirmation that an activity complies with the terms and conditions, and any changes to the RGP, is the responsibility of the permittee. Activities that have commenced, or are under contract to commence, in reliance on a RGP will remain authorized provided the activity is completed within 12 months of the date of the RGP's expiration, modification, or revocation.

Within 30 days of project completion, the permittee must fill out the enclosed Certification of Compliance form and return it to our office. The landowner must allow Corps representatives to inspect the authorized activity at any time deemed necessary to ensure that it is being, or has been, accomplished in accordance with the terms and conditions of the RGP.

If you have any questions, please contact me at 505-342-3216 or by e-mail at Kelly.E.Allen@usace.army.mil. At your convenience, please complete a Customer Service Survey on-line available at http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey.

Sincerely,

Kelly E. Allen
Regulatory Project Manager

Enclosure(s)

Copy Furnished:

Scott Bulgrin, Pueblo of Sandia
Joel Lusk, USFWS
Kurt Wagner, AMAFCA

Summary of AMAFCA's MS4 Temperature Program FY 2024 (July 1, 2023 – June 30, 2024)

NPDES Permit No. NMR04A000
Part I.C.1.f - Special Conditions, Compliance with Water Quality Standards

AMAFCA monitors and evaluates the potential effect of stormwater discharges related to temperature in the Rio Grande. AMAFCA and the original Municipal Separate Storm Sewer System (MS4) co-permittees (the City of Albuquerque, New Mexico Department of Transportation, and the University of New Mexico) assembled and analyzed temperature data from 1982 to 2012. This data analysis proved the assertion that the receiving waters of the Rio Grande are not adversely affected by the temperature of stormwater from the Albuquerque MS4. This data was presented in an initial report that was submitted to EPA on May 1, 2012.

Since 2012, the MS4 permittees have continued to collect and submit temperature data, with each Annual Report, showing that the Rio Grande (receiving water for the Middle Rio Grande watershed) is not adversely affected by the temperature of stormwater from the Albuquerque MS4. AMAFCA has collected data from 2012 to 2024 using tidbit probes and sondes. In accordance with AMAFCA's Stormwater Management Program (SWMP), AMAFCA has and will continue to assess the potential effect of stormwater discharges into the Rio Grande by collecting and evaluating additional temperature data.

In FY 2024, AMAFCA continued to follow the updated quality assurance project plan (QAPP), the field sampling plan (FSP), and related Standard Operating Procedures (SOPs) for AMAFCA's stormwater quality monitoring program. The format and contents of these documents are modeled after the New Mexico Environment Department (NMED) Surface Water Quality Bureau (SWQB) water quality management programs to facilitate sharing of data between the agencies. These documents provide a framework and detailed methods for the collection and analysis of environmental data as well as provide guidance for generating data that is of the precision, accuracy, and completeness necessary for AMAFCA's program.

AMAFCA MS4 Sonde Program Summary

The purpose of AMAFCA's Sonde Monitoring Program is to obtain surface water quality data within the Rio Grande to support AMAFCA and the cooperative MS4 agencies with the assessment of surface water quality parameters, as required by the Endangered Species Act requirements incorporated into the MS4 Permit. In addition, the sonde monitoring program data supports determination of long-term surface water quality trends, related to stormwater impacts and impairments, within the Middle Rio Grande. The sondes monitor temperature, barometric pressure, pH, turbidity, dissolved oxygen (DO), DO saturation (%), and water depth above each sonde. AMAFCA has improved the Sonde Program through the years with current access to real-time online data using the HydroVu data management application, allowing quicker response and solutions to maintenance issues.

From the AMAFCA FY 2024 In-Stream Water Quality Monitoring Memos, which report on the AMAFCA sonde data, the temperature was below the water quality standard 32.2℃, which is the maximum temperature water quality standard for Marginal Warmwater Aquatic for the Rio Grande (NMAC 20.6.4) for all recorded sonde data.

Photos of AMAFCA Sondes

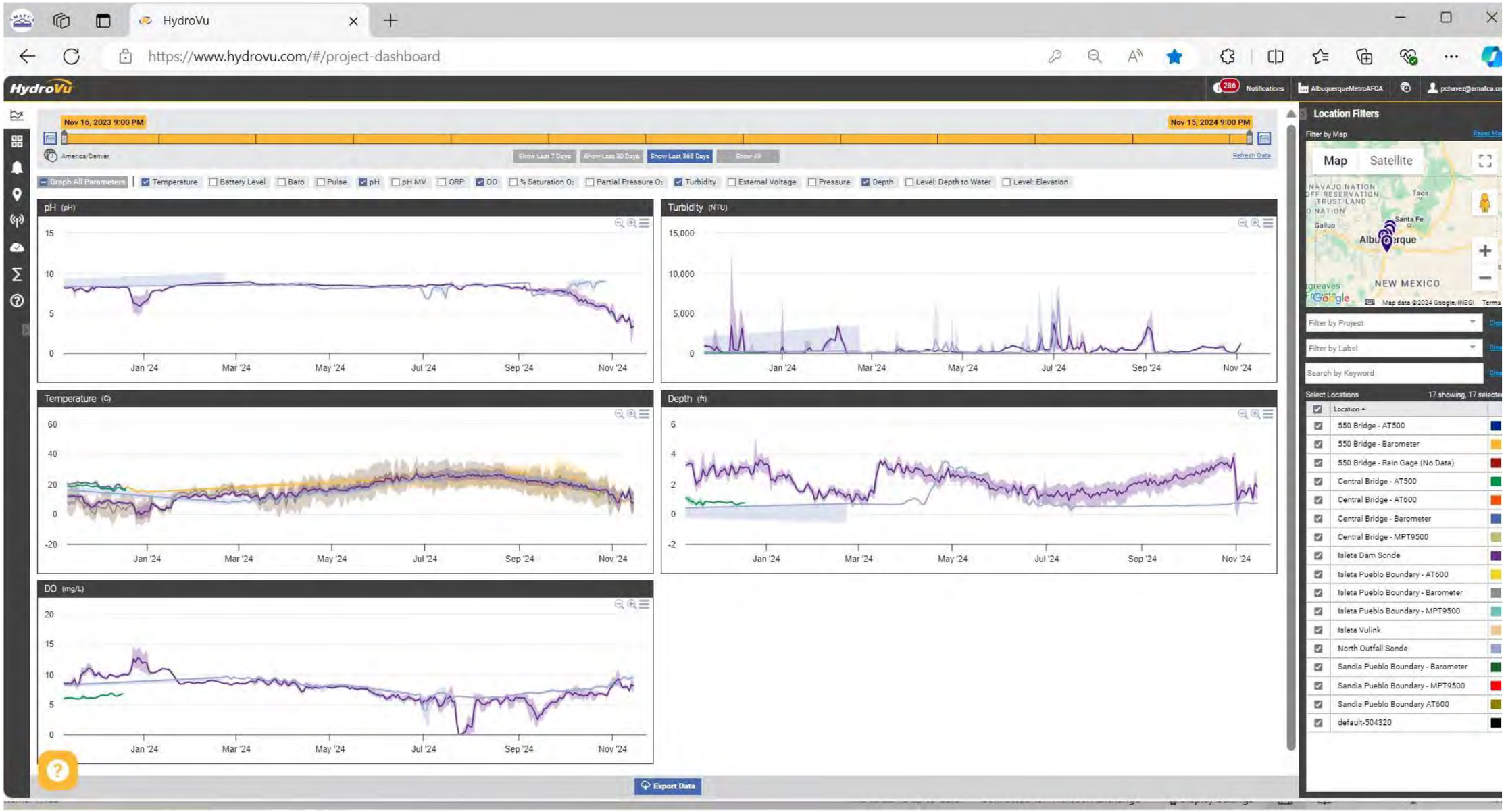
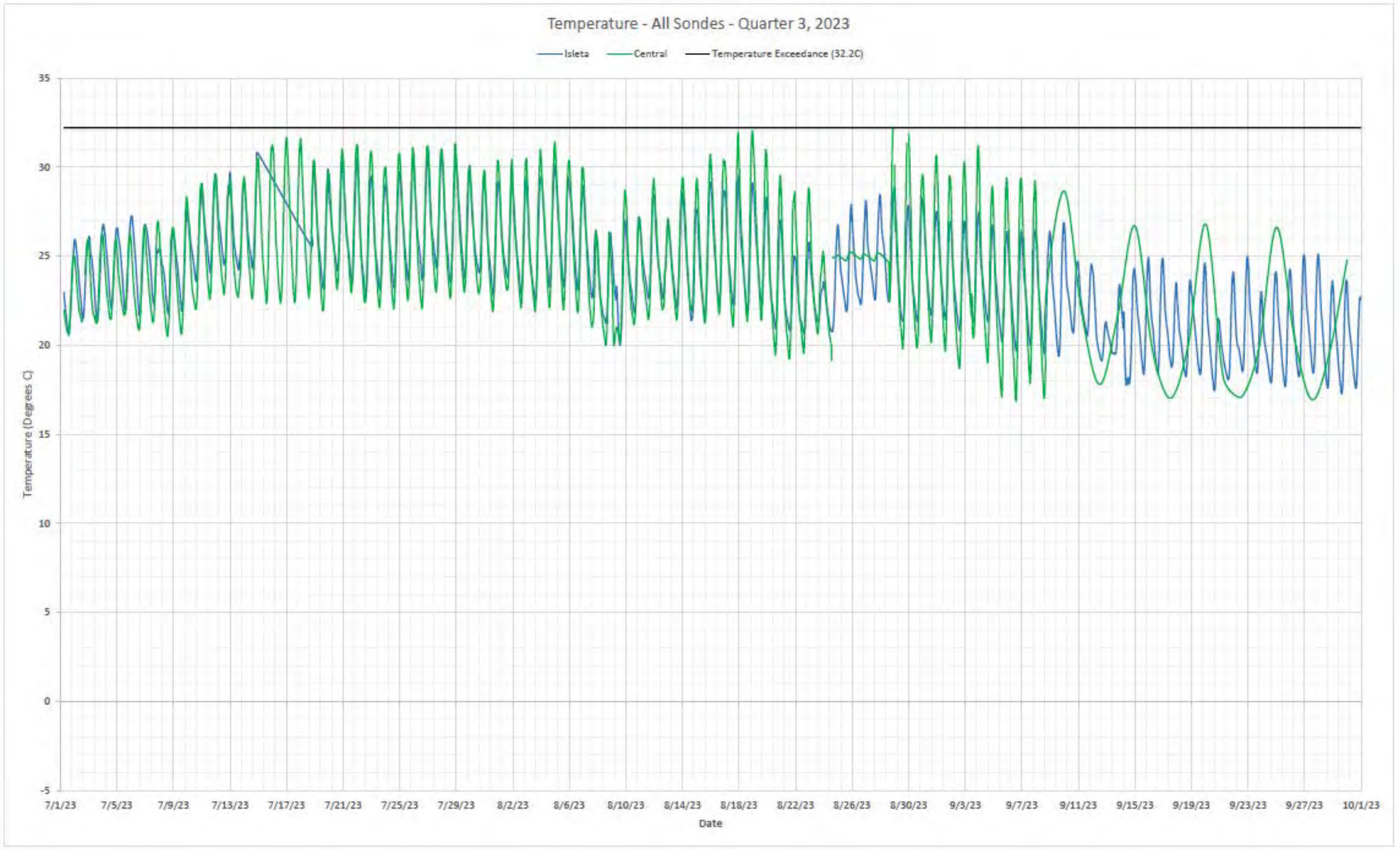
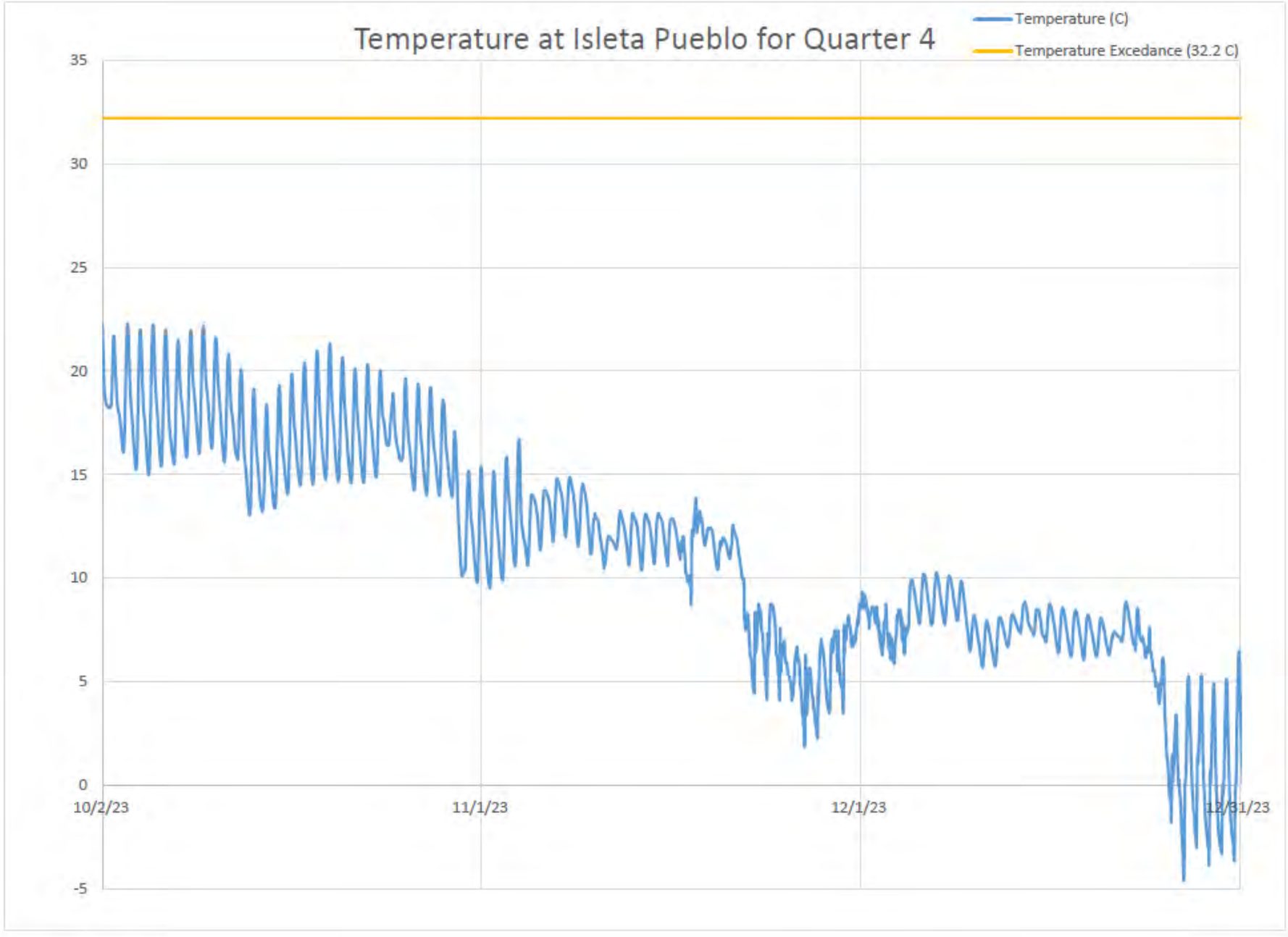


Image of Online HydroVu Portal View.

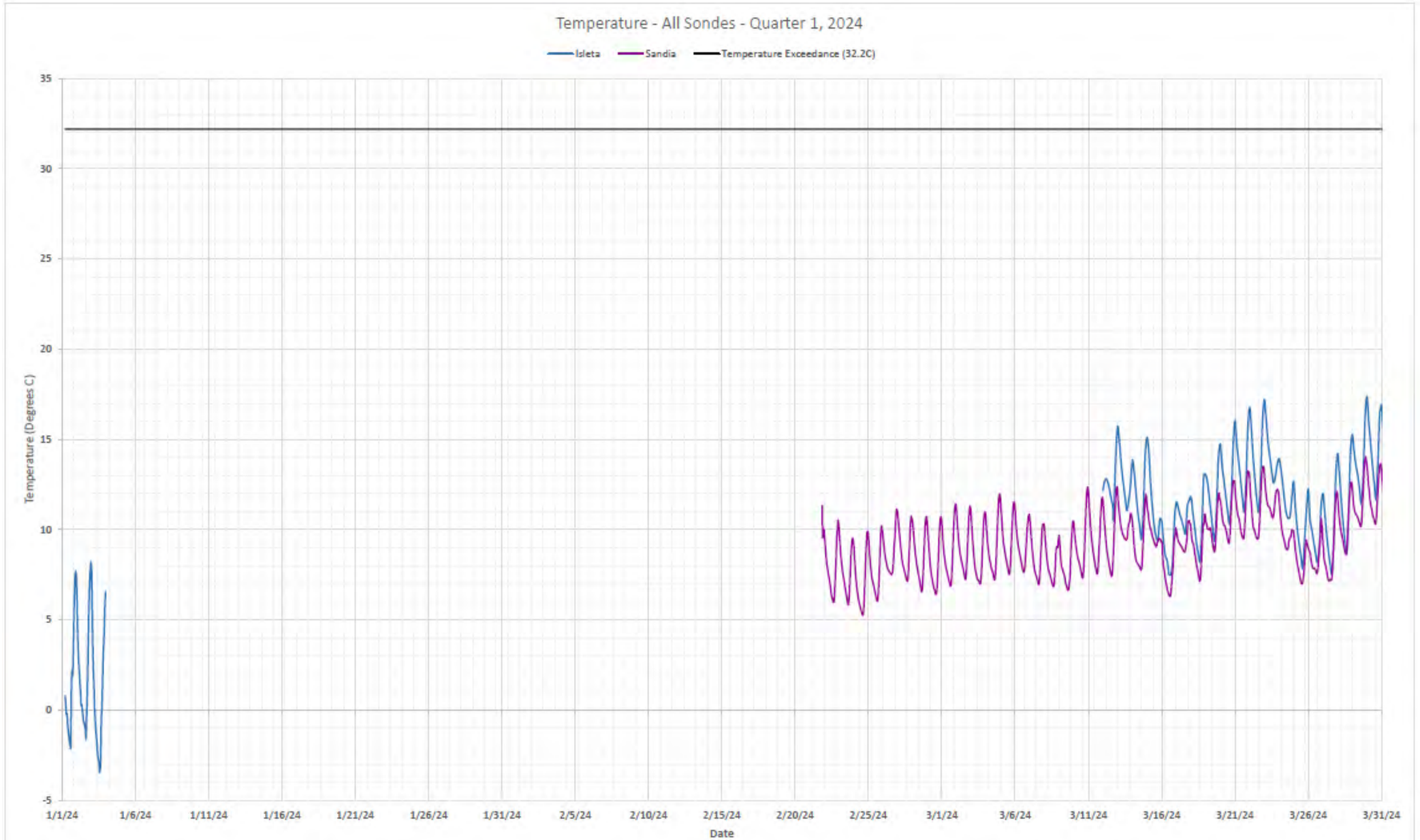
HydroVu Provides AMAFCA with Access to Real-Time Sonde Data in the Rio Grande



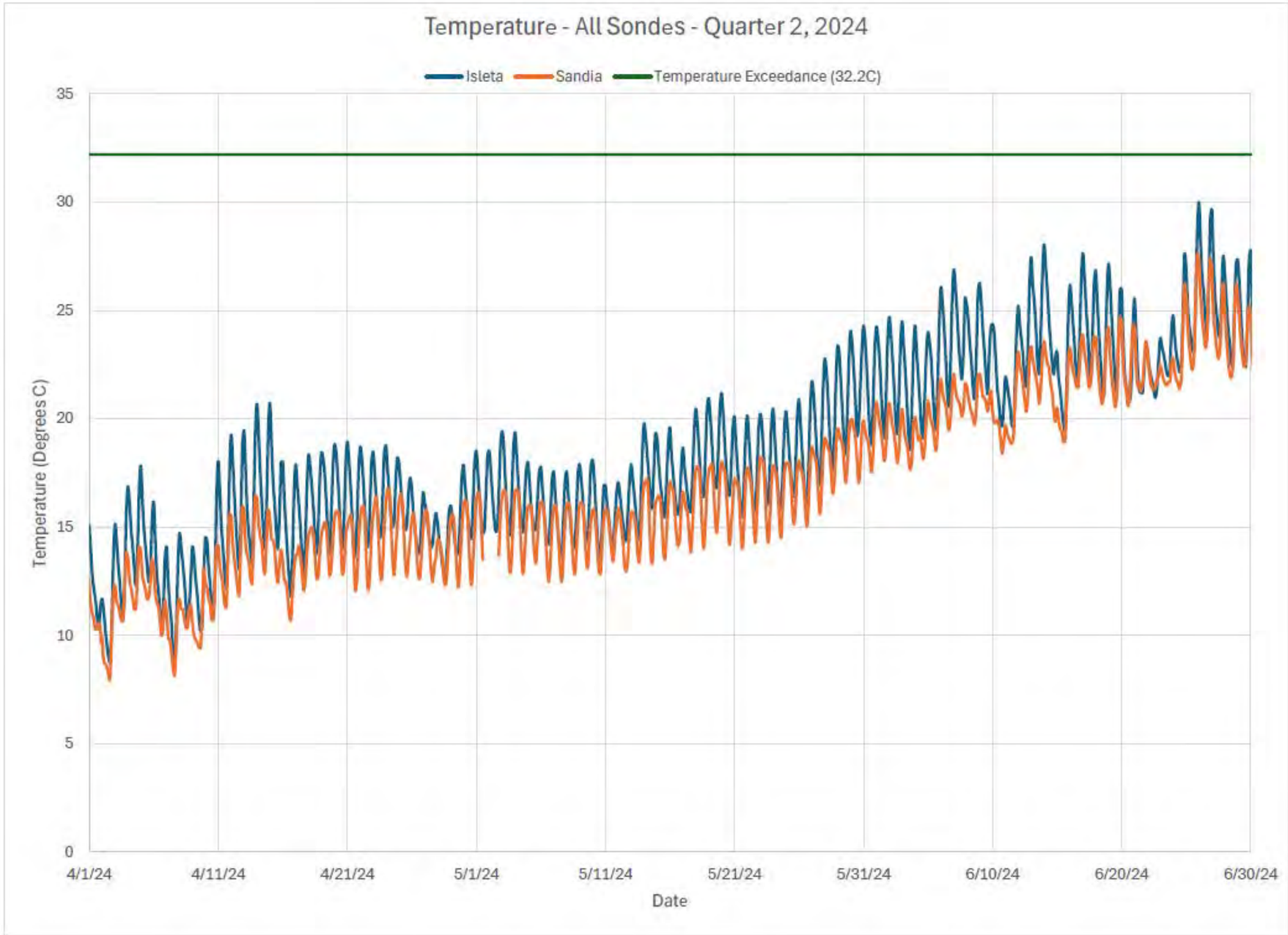
Plot of Temperature Data Collected From Sondes Deployed During FY 2024 (July – September 2023)



Plot of Temperature Data Collected From Isleta Pueblo Sonde Deployed During FY 2024 (October – December 2023)



Plot of Temperature Data Collected From Sondes Deployed During FY 2024 (January – March 2024)

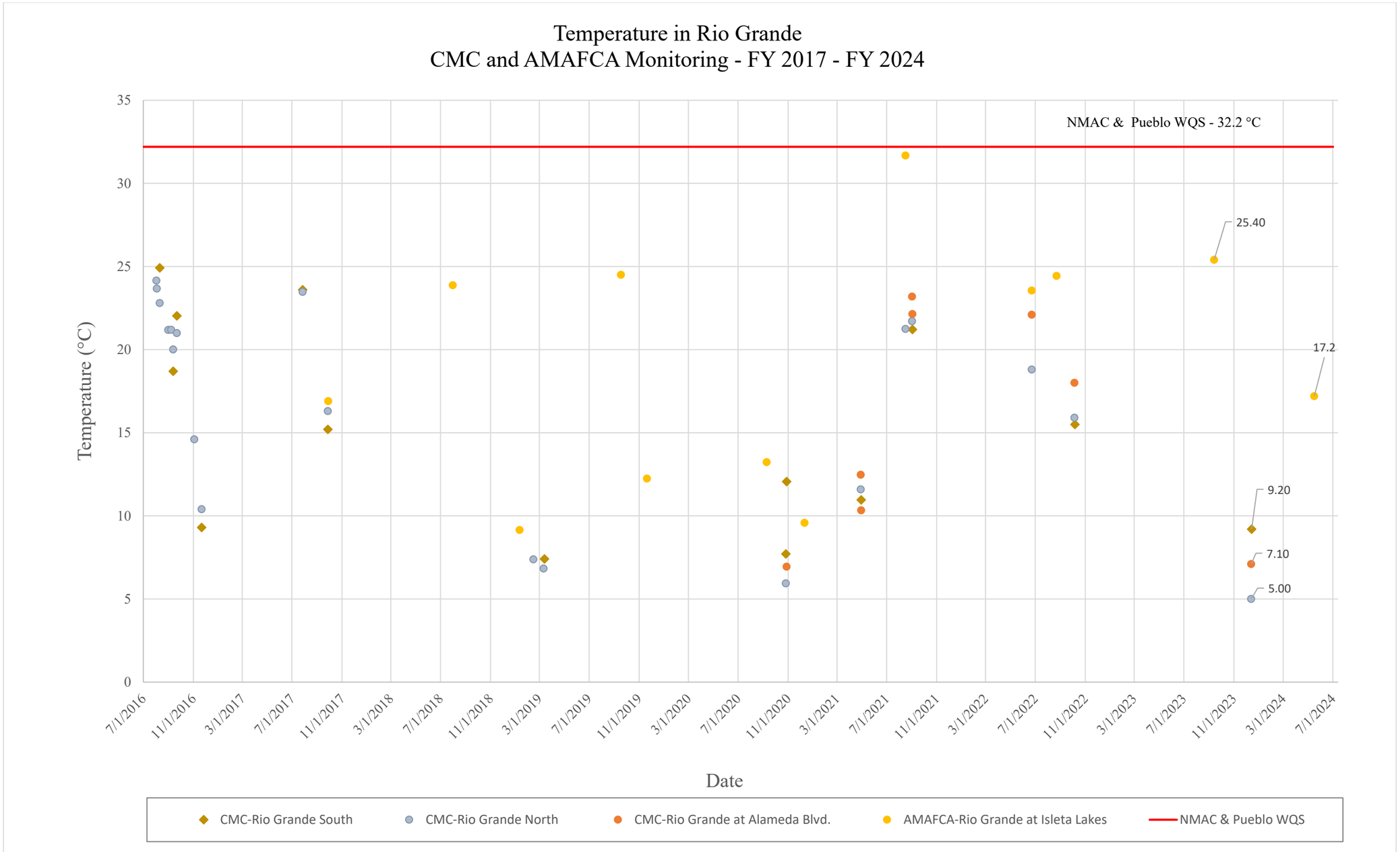


Plot of Temperature Data Collected From Sondes Deployed During FY 2024 (April – June 2024)

CMC and AMAFCA Water Quality Monitoring Program Summary

In addition to the Sonde Program, both AMAFCA and the Middle Rio Grande Compliance Monitoring Cooperative (CMC) collect grab samples within the Rio Grande during storm events. Field data is measured, including temperature, for these samples. For MS4 Permit compliance, the Middle Rio Grande CMC has three (3) monitoring points, north and south of the urbanized portion of the river, as well as at the Alameda Bridge. The AMAFCA Monitoring Program collects samples in the Rio Grande at the downstream (south) end of the watershed (Rio Grande at Isleta Lakes). The graph on page 10 shows the temperature data from all AMAFCA and CMC samples collected from July 2016 through FY 2024. None of the field temperature data collected from these programs have recorded temperature in the Rio Grande during stormwater discharge events above the water quality standard of 32.2℃.

Collecting a CMC sample from the Rio Grande at Angostura Diversion at the upstream (north) end of the Middle Rio Grande Watershed



Plot of Temperature Data Collected From Grab Samples in the Rio Grande Through the AMAFCA and CMC Monitoring Programs

Summary of AMAFCA's MS4 Discharges to Water Quality Impaired Water Bodies with an Approved TMDL Program FY 2024 (July 1, 2023 – June 30, 2024)

NPDES Permit No. NMR04A000

Part I.C.2.b.(i) - Special Conditions, Compliance with Water Quality Standards

Total Maximum Daily Load (TMDL) – E. coli

A Total Maximum Daily Load (TMDL) is the regulatory calculation of the maximum amount of a particular pollutant allowed to enter a water body (like the Rio Grande) so that the water body will continue to meet water quality standards for that particular pollutant. A TMDL can also determine a pollutant reduction target and allocates load reductions necessary to the source(s) of the pollutant.

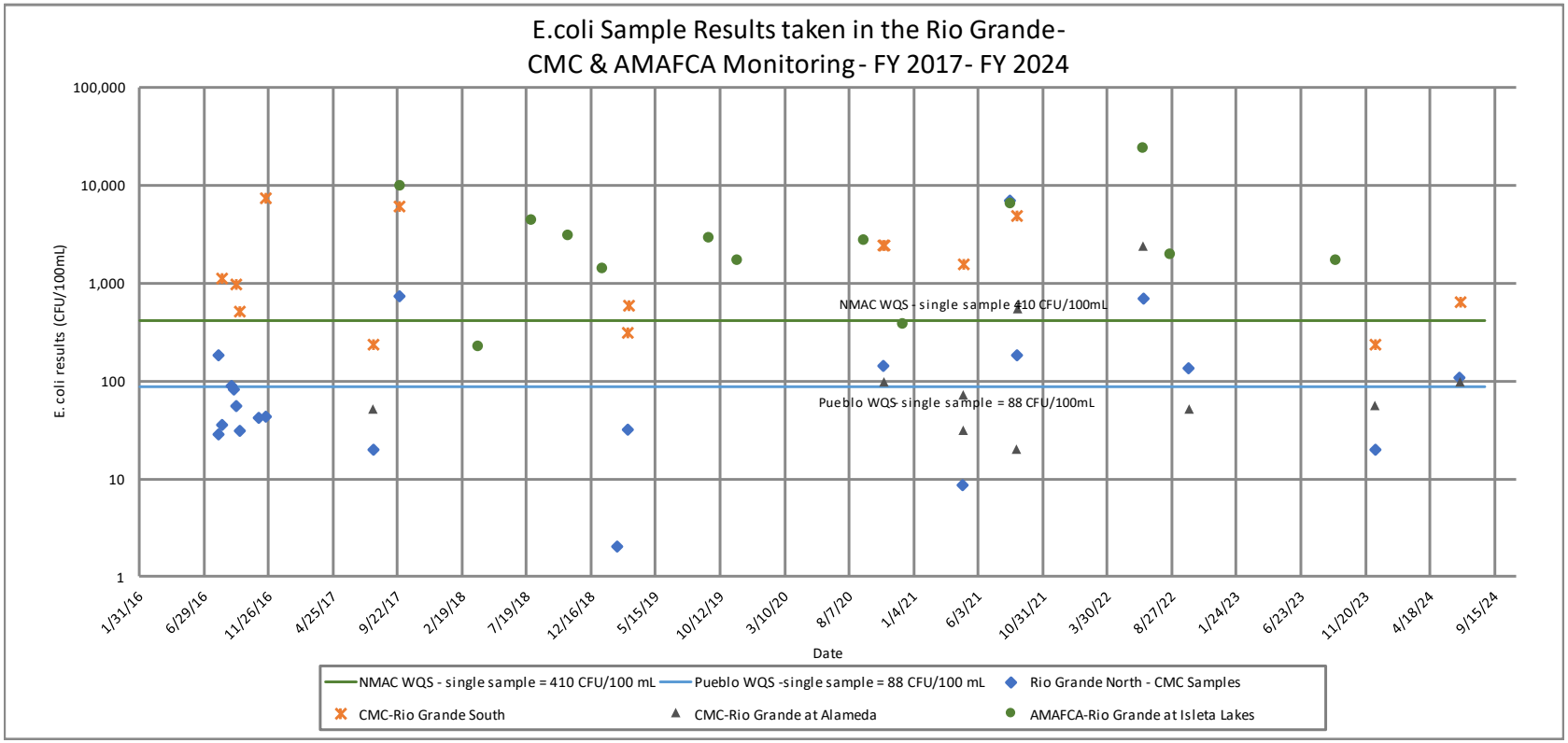
The only TMDL in the Middle Rio Grande (MRG) is Escherichia coliform (E. coli). AMAFCA's required compliance for wet weather stormwater discharges with the Environmental Protection Agency's (EPA) TMDL for E. coli is documented in the Clean Water Act (CWA) 303(d)/305(b) Integrated Report (IR). The IR is updated every 3 years by a review process that is conducted by the New Mexico Environment Department (NMED). For AMAFCA and other Municipal Separate Storm Sewer System (MS4) permittees in the watershed, compliance sampling is done in the Rio Grande at upstream and downstream locations of the urbanized area to determine the collective E. coli load added to the river in response to a given storm's runoff to the water body. This monitoring is done through the Compliance Monitoring Cooperative (CMC), and the FY 2024 Dry Season, Wet Weather Stormwater Monitoring memo is included as an attachment to this Program Summary.

AMAFCA and other MS4s covered under the MS4 Permit are required to comply with water quality standards that are comprised of designated uses for surface waters of the state, associated water quality criteria necessary to protect these uses, and an antidegradation policy. Designated uses in the MRG include aquatic life, fish culture, primary and secondary contact (including cultural, religious, or ceremonial purposes), public water supply, industrial water supply, domestic water supply, irrigation, livestock watering, and wildlife habitat. AMAFCA's stormwater discharges protect these uses and fulfill the requirements set forth in the MS4 Permit. Coordinated water quality sample collection programs through AMAFCA, the Stormwater Quality Team, CMC, and Bosque Ecosystem Monitoring Program (BEMP) have been developed and annually funded to monitor, assess, protect, and restore surface water quality to the MRG watershed.

CMC and AMAFCA Water Quality Monitoring Program for E. coli

Both AMAFCA and the MRG CMC collect grab samples within the Rio Grande during storm events. E. coli is tested for these in-stream samples. For MS4 Permit compliance, the MRG CMC has three monitoring points, north and south of the urbanized portion of the river as well as at the Alameda Bridge. The AMAFCA monitoring program collects samples in the Rio Grande at the downstream (south) end of the watershed (Rio Grande at Isleta Lakes). The graph on page 3 shows the E. coli data from all AMAFCA and CMC samples collected from FY 2017 – FY 2024. Note, there are numerous E. coli results that exceed the applicable surface water quality standards.

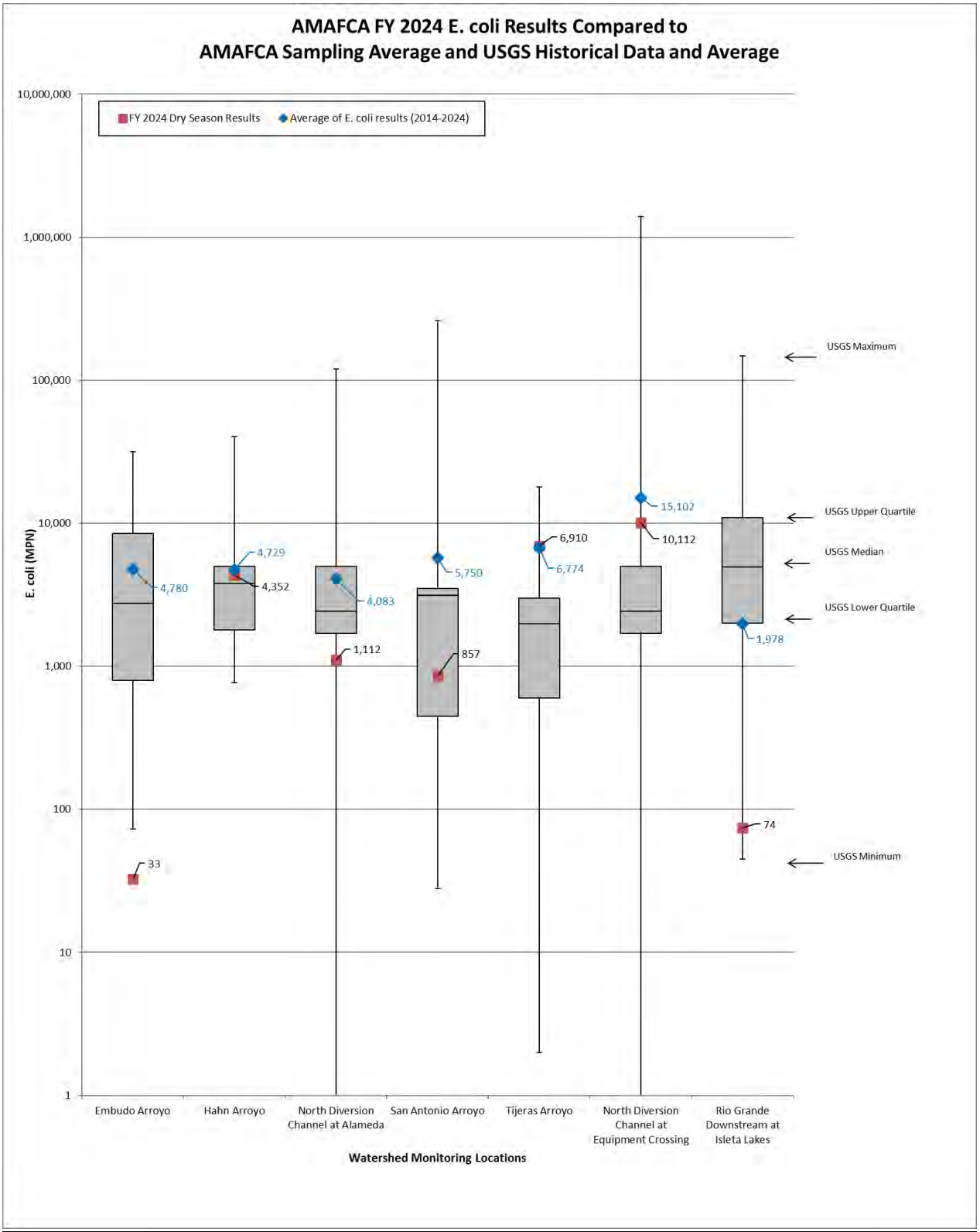
In FY 2024, the CMC collected samples within the Rio Grande on December 13-14, 2023 and June 26-27, 2024, related to the dry season storm events. Details on these samplings and the results are summarized in the CMC memo included as an attachment to this Program Summary. The calculated E. coli loading for the December 13-14, 2023 storm event for both the northern segment (Alameda to Angostura) and the southern segment (Isleta to Alameda) of the Rio Grande were above the Waste Load Allocation (WLA) for the CMC MS4s. The calculated E. coli loading for the June 26-27, 2024 storm event for the southern segment (Isleta to Alameda) of the Rio Grande was above the WLA for the CMC MS4s.



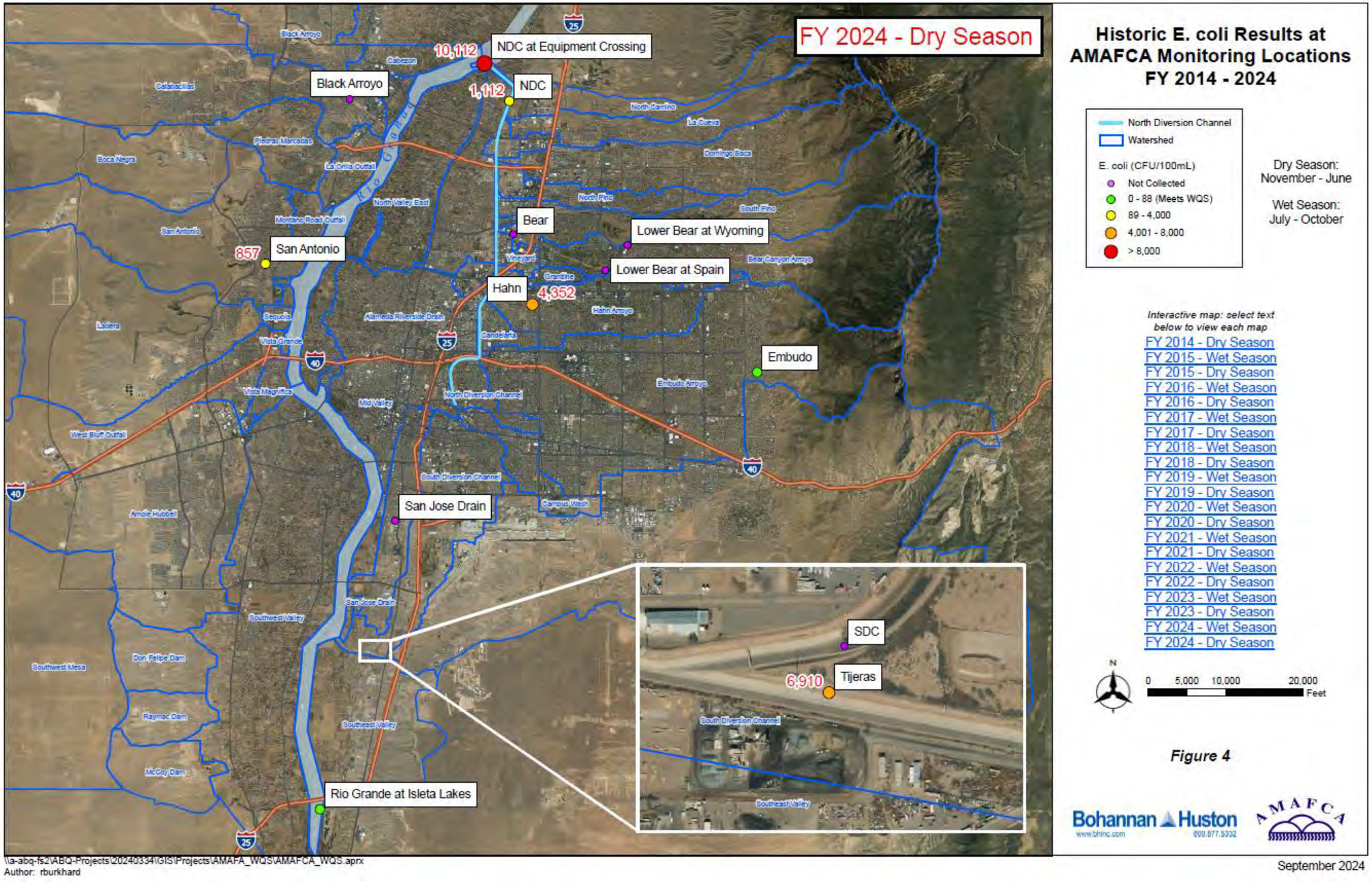
Plot of E. coli Results From Grab Samples in the Rio Grande Through the AMAFCA and CMC Monitoring Programs

AMAFCA Water Quality Monitoring Program for E. coli

The AMAFCA monitoring program also collects and analyzes stormwater runoff from monitoring sites within the watershed, before it reaches the Rio Grande. The results from 2014 – 2024 compared to USGS historical results (maximum, minimum, median, and upper and lower quartile) are shown on page 4. A map showing E. coli data results throughout the North Diversion Watershed from AMAFCA's Water Quality Monitoring Program from FY 2014 through FY 2024 is provided on page 5.



AMAFCA Monitoring Program E. coli Results Within the Watershed (Not Including Samples in the Rio Grande) Compared to AMAFCA Sampling Average and Historical USGS E. coli Data



PDF showing E. coli Data Within the North Diversion Watershed
From AMAFCA's Water Quality Monitoring Program From FY 2014 Through FY 2024.
This is an interactive pdf in the monitoring memos, allowing the user to see the results of prior monitoring seasons.

In FY 2024, AMAFCA continued to follow the recently updated quality assurance project plan (QAPP), the field sampling plan (FSP), and related Standard Operating Procedures (SOPs) for AMAFCA's stormwater quality monitoring program. The format and contents of these documents are modeled after the NMED Surface Water Quality Bureau (SWQB) water quality management programs to facilitate sharing of data between the agencies. These documents provide a framework and detailed methods for the collection and analysis of environmental data as well as provide guidance for generating data that is of the precision, accuracy, and completeness necessary for AMAFCA's program.

Photos of AMAFCA Autosamplers Used for the AMAFCA Monitoring Program

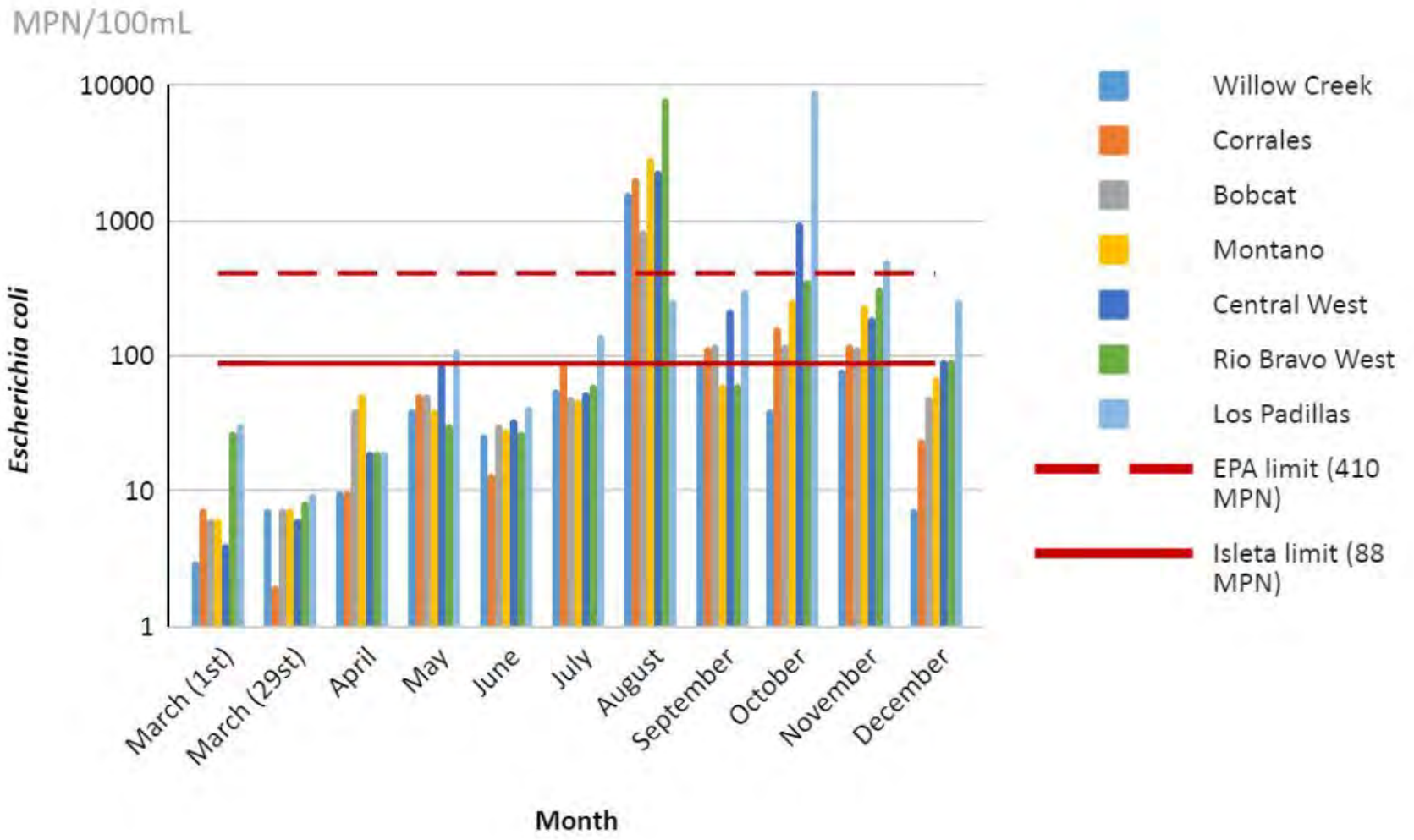
Bosque Ecosystem Monitoring Program (BEMP)

The Bosque Ecosystem Monitoring Program (BEMP) combines long-term ecological research with community outreach by involving K-12 students and their teachers, as well as university students, in monitoring key indicators of structural and functional change in the MRG riparian forest, or "bosque". During the 2023-2024 school year, 5,900 students throughout Bernalillo and Sandoval counties connected with their local watershed through participation in BEMP activities. The students' experiences support science education efforts and help to increase understanding and appreciation of the Rio Grande riparian ecosystem. Students also learn proper monitoring protocols, riparian ecology, and how to use data to answer questions through hands-on science. BEMP findings derived from student-gathered data are used by government agencies to inform multi-million dollar river and riparian management decisions.

The BEMP sampling supports the collection and analysis of E. coli data in the Rio Grande. This program operates on a calendar year and does not follow the fiscal year timeline of this program summary. In FY 2024, BEMP collected quarterly water quality data from seven (7) sample locations in the Rio Grande monthly from July through December 2023. Data collected included E. coli concentrations, dissolved oxygen (DO), turbidity, conductivity, temperature, and pH. The sample locations span from north to south over a 26 mile stretch with the most upstream site located just south of the US 550 bridge (Willow Creek sample location) to the most downstream site located at Los Padillas.

In August 2023, samples exceeded both desired water quality limits (88 MPN/100mL) and EPA water quality limits (410 MPN/100mL) at six (6) sampling locations. The highest E. coli level recorded for August 2023 was at Rio Bravo West with 8,164 MPN/100mL. In October 2023, all BEMP sample locations, except Willow Creek (the most upstream sample location), exceeded the desired water quality limits (88 MPN/100mL), with Central West and Los Padillas sample locations exceeding the EPA water quality limits (410 MPN/100mL). Related to units, in January 2017 the CMC members clarified with NMED that the units MPN/100 mL and CFU/100 mL are considered to be interchangeable for the purposes of this stormwater quality monitoring reporting. The bar graph below, from BEMP's 2023 Annual Stormwater Quality Team Technical Report, shows both the August 2023 and October 2023 E. coli results, as well as results from FY 2023 (March through June 2023).

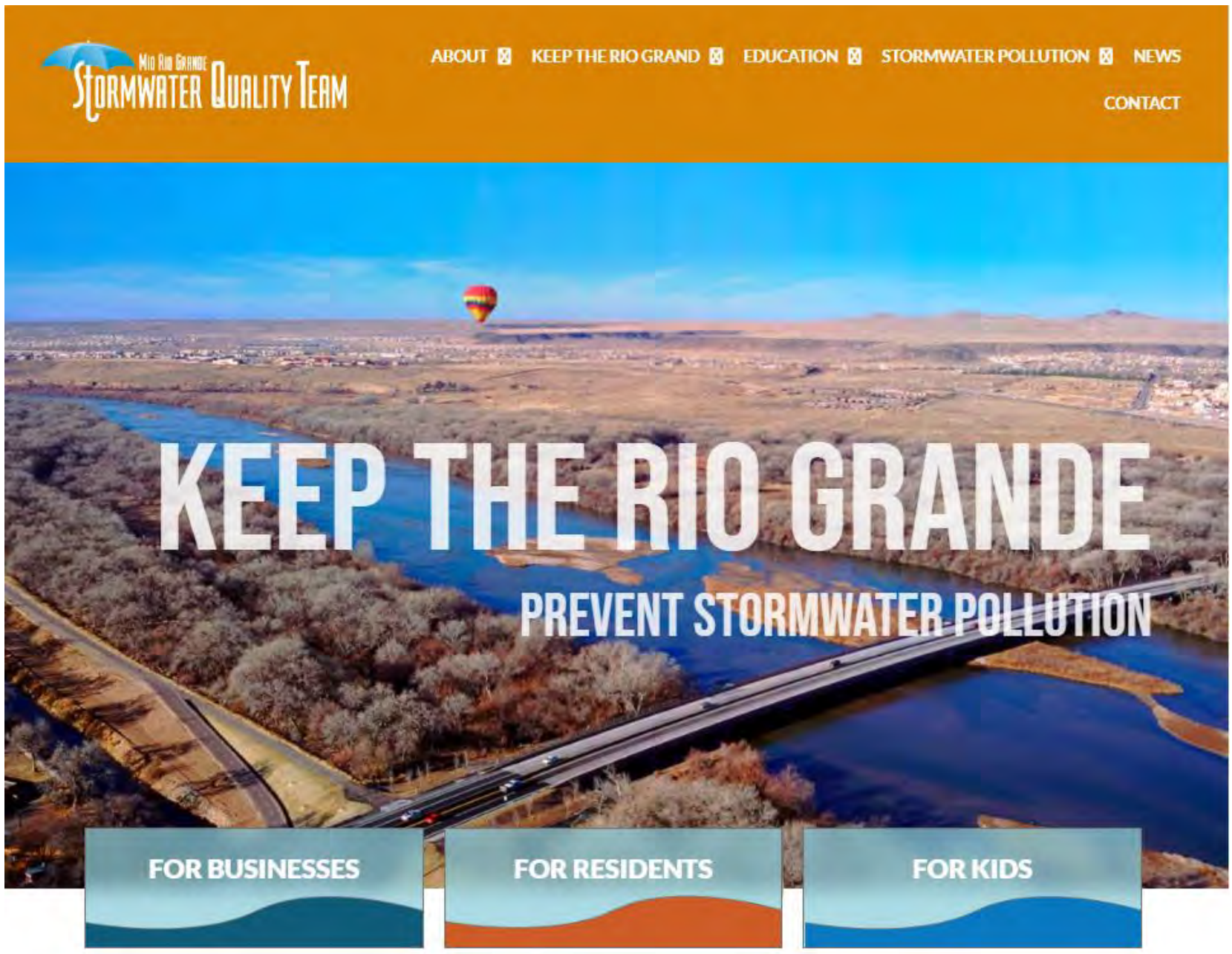
AMAFCA notifies EPA and the Pueblo of Isleta of any water quality standard exceedances at any in-stream sampling locations (within the Rio Grande). AMAFCA also continues to share access to the real-time DO and temperature sonde data in the Rio Grande with the Pueblo of Isleta. Notification of an exceedance is in writing as soon as practicable after receiving the lab report data.



BEMP E. coli Data Plotted on Log 10 Scale at Sampling Sites
FY 2024 Includes July - December 2023 Data
Graph is From the BEMP 2023 Annual Stormwater Quality Team Technical Report

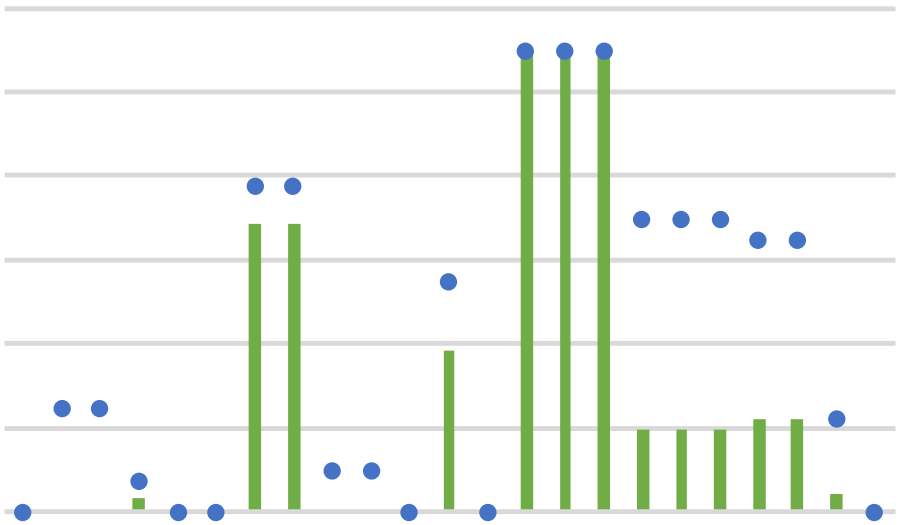
Public Education and Outreach Program

The previous sections of the program summary focus on the monitoring and data collection related to understanding E. coli within the Rio Grande and contributions from the watershed. Non-point source load reduction actions, like those taken by AMAFCA, the Mid Rio Grande Storm Water Quality Team (MRGSQT), and others, are implemented through a wide variety of programs at the state, local and federal level. AMAFCA is a member of the MRGSQT, which has grown to 12 organizations, who leverage their resources to ensure MS4 Permit public education and outreach requirements are met with the goal of preventing and reducing stormwater pollution throughout the watershed from reaching the Rio Grande. These programs may be regulatory, non-regulatory, or incentive-based like a cost-share program. In addition, waterbody restoration can be assisted by voluntary actions on the part of citizen and/or environmental groups. Public education, outreach, involvement, and participation efforts have also been undertaken at the watershed level in the MRG to address the reduction of non-point source loads for the bacterial TMDL (E. coli) and various impairments on New Mexico's 303(d) list. Additional information is available at www.keeptheriogrand.org (see image below).



Mid Rio Grande Stormwater Quality Team Website

In addition, AMAFCA has a Mutt Mitt station program to reduce pet waste and increase public awareness, with the goal of reducing E. coli within the watershed. The Mutt Mitt program information through October 2024 is summarized below.



Total # of Mutt Mitt Bags Given 2016-2024:	*617,000*
Total # of Liner Bags Given 2016 - 2024:	*9,800*
# of Mutt Mitt Bags Given During FY 2024:	*39,200*
# of Liner Bags Given During FY 2024:	*525*
Est. Pounds of Dog Waste Collected FY 2024:	*8,624*

Summary of the AMAFCA Mutt Mitt Stations Available Throughout the Watershed to Promote Pet Waste Collection and Proper Disposal

Bohannan Huston
great people supporting great communities

7500 Jefferson Street NE
Albuquerque, NM 87109
505.823.1000
bhinc.com

MEMORANDUM

DATE: 9/6/2024

TO Patrick Chavez, AMAFCA

FROM: Sarah Ganley, PE, ENV-SP
Savannah Maynard
Emma Adams, EI

SUBJECT: **CMC Dry Season, Wet Weather Stormwater Monitoring**
Data Verification, Analysis Results Database, and Reporting Memo
FY 2024 Dry Season (Nov. 1, 2023 to June 30, 2024)

NOTIFICATION OF IN-STREAM WATER QUALITY EXCEEDANCES

For downstream notification purposes, the following parameters for in-stream samples taken in the Rio Grande for the FY 2024 dry season had results that exceeded applicable water quality standards (WQSs) for four (4) samples of E. coli, two (2) samples of polychlorinated biphenyls (PCBs), and one (1) sample of dissolved copper. Table 1 summarizes the samples and the applicable WQSs that were exceeded. Additional details on the sampling results shown in Table 1 are provided in this memo. In addition, this memo includes a discussion of two (2) sample results with dissolved oxygen (DO) that were below WQSs, likely due to composite field-testing.

Table 1: Parameters Detected Above Applicable Water Quality Standards
CMC FY 2024 Dry Season Monitoring

Sampling Date Location	Parameters, Applicable Water Quality Standard (WQS), and Results Exceeding Applicable WQS		
	E. coli	**PCBs**	**Dissolved Copper**
	WQS: 88 MPN (CFU/100 mL) Pueblo of Isleta Primary Contact Ceremonial & Recreational	**WQS: 0.00017 ug/L** Pueblo of Isleta Human Health Criteria (based on fish consumption only)	**WQS: Acute / Chronic: 8 ug/L / 12 ug/L** Aquatic Life Acute/Chronic Values are based on a hardness for Pueblo of Isleta, Pueblo of Sandia and New Mexico WQSs
12/14/2023 Rio Grande South Isleta Dam	Exceeded 235.9 MPN (CFU/100 mL)	Exceeded 0.0002908 ug/L	No Exceedance
6/26/2024 Rio Grande North Angostura	Exceeded 108 MPN (CFU/100 mL)	No Exceedance	No Exceedance
6/26/2024 Rio Grande at Alameda	Exceeded 97 MPN (CFU/100 mL)	Not Tested	Not Tested
6/27/2024 Rio Grande South Isleta Dam	Exceeded 644 MPN (CFU/100 mL)	Exceeded 0.000323 ug/L	Exceeded 10 ug/L

OVERVIEW OF STORMWATER MONITORING ACTIVITY

Bohannan Huston, Inc. (BHI) has been tasked to perform water quality services for the Compliance Monitoring Cooperative (CMC) Stormwater Data Verification, Database, and Reporting for the Dry Season, Wet Weather Stormwater Quality Monitoring Program for Fiscal Year (FY) 2024 (Nov. 1, 2023 to June 30, 2024). The scope of work for this task includes data verification of the stormwater laboratory analysis results, compiling the analysis results into a database, and calculating the E. coli loading to compare with the Waste Load Allocation (WLA) for qualifying storm events. The stormwater compliance monitoring was conducted separately by Daniel B. Stephens & Associates, Inc. (DBS&A) and is not a part of this BHI task. This task is being conducted to assist the CMC members with their comprehensive

monitoring and assessment program for compliance under the 2014 Middle Rio Grande (MRG) Watershed Based Municipal Separate Storm Sewer System (MS4) Permit, NPDES Permit No. NMR04A000 ("WSB MS4 Permit").

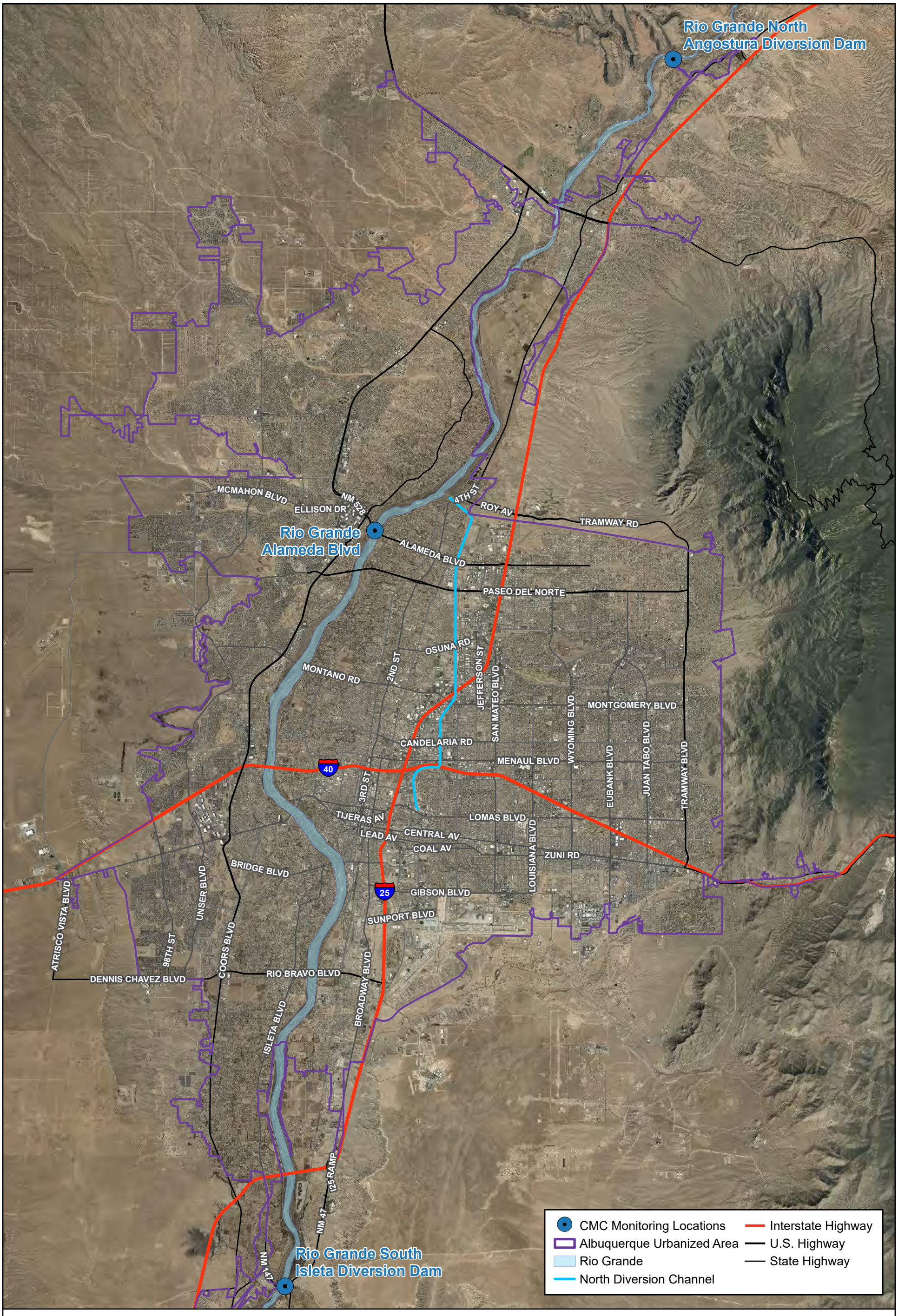
The WSB MS4 Permit entered Administrative Continuance in December 2019 when U.S. Environmental Protection Agency (EPA) Region 6 did not issue a new MS4 Permit before the current WSB MS4 Permit's expiration date. The MRG Technical Advisory Group (TAG) sent EPA a letter dated October 15, 2019, acknowledging Administrative Continuance after the expiration date of the 5-year WSB MS4 Permit term. Until a new WSB MS4 Permit is issued, there are no compliance monitoring requirements for the CMC in the Rio Grande. As identified in the WSB MS4 CMC Monitoring Plan, the WSB MS4 Permit required a minimum of seven (7) storm events be sampled at both the Rio Grande North and Rio Grande South locations (refer to Figure 1, page 4). All MS4 Permit required samples have been obtained by the CMC, as well as six (6) additional samples obtained during Administrative Continuance (FY 2021 through FY 2024); all 13 CMC samples are summarized in Table 2 below.

Table 2: CMC Sample Summary
Compared to WSB MS4 Permit Requirements

Storm Events Required to Sample	CMC-WSB MS4 Permit Required Samples per Season	FY (Date) Samples Obtained for CMC
1	#1 Wet Season	FY 2017 (8/10/2016)
2	#2 Wet Season	FY 2017 (9/12/2016)
3	#3 Wet Season	FY 2017 (9/21/2016)
4	#1 Dry Season	FY 2017 (11/21/2016)
5	#2 Dry Season	FY 2019 (3/13/2019)
6	Any Season	FY 2018 (Wet Season - 7/27/2017)
7	Any Season	FY 2018 (Wet Season - 9/27/2017)
Not Required	Wet Season	FY 2021 (10/28/2020)
Not Required	Dry Season	FY 2021 (4/28/2021)
Not Required	Wet Season	FY 2022 (9/1/2021)
Not Required	Wet Season	FY 2023 (10/5/2022)
Not Required	Dry Season	FY 2024 (12/14/2023)
Not Required	Dry Season	FY 2024 (6/26/2024)

During the WSB MS4 Permit Administrative Continuance, the CMC members chose to continue sampling within the Rio Grande to support their MS4 program needs and gather additional data in support of the future WSB MS4 Permit compliance. This memo reports on the wet weather stormwater monitoring activity for the FY 2024 dry season (Nov. 1, 2023 to June 30, 2024).

The CMC Excel database was updated with the FY 2024 dry season monitoring data as results were received. The database contains sample location, sample date, analyses conducted, methods used, applicable surface WQSs, WSB MS4 Permit required Minimum Qualification Levels (MQLs) and results.



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0 6,250 12,500 25,000 Feet

1 inch = 12,500 feet

CMC Monitoring

Figure 1
Monitoring Locations

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Author: mcrooks

September 2024

SUMMARY OF THE CMC SAMPLING PLAN

Sampling Parameters:

Samples from both the Rio Grande North and Rio Grande South monitoring locations were analyzed for the parameters defined in the EPA approved WSB MS4 CMC Monitoring Plan, May 5, 2016. The parameter list for both locations, which is intended to characterize stormwater discharges into the river, is as follows:

Total Suspended Solids (TSS)
Total Dissolved Solids (TDS)
Chemical Oxygen Demand (COD)
Biological Oxygen Demand – 5-day (BOD_5)
Dissolved Oxygen (DO)
Oil & grease (N-Hexane Extractable Material)
E. coli
pH
Total Kjeldahl Nitrogen (TKN)
Nitrate plus Nitrite
Dissolved Phosphorus
Ammonia as Nitrogen
Nitrogen (Total Nitrogen)
Phosphorous (Total Phosphorous)
Polychlorinated Biphenyls (PCBs - Method 1668A)
Gross Alpha, adjusted
Tetrahydrofuran
Benzo(a)pyrene
Benzo(b)fluoranthene (3, 4 Benzofluoranthene)
Benzo(k)fluoranthene
Chrysene
lndeno (1 ,2,3-cd) Pyrene
Dieldrin
Pentachlorophenol
Benzidine
Benzo(a)anthracene
Dibenzofuran
Dibenzo(a, h)anthracene
Chromium VI (Hexavalent)
Dissolved Copper
Dissolved Lead
Bis (2-ethylhexyl) phthalate
Conductivity
Temperature
Hardness (as $CaCO_3$)
Per-and polyfluoroalkyl substances, known as PFAS

Hardness (as $CaCO_3$) was added to the parameter list to allow dissolved metal results to be compared to the applicable WQSs. Per the WSB MS4 Permit, DO, pH, conductivity, and temperature are required by to be analyzed in the field during sample collection, which was conducted by DBS&A, within 15 minutes of sample collection. All E. coli samples were submitted to the laboratory within eight (8) hours of collection in order to meet the specified hold time. Testing for PFAS was added to the parameter list by the CMC in 2024, and the June 2024 sample included PFAS testing.

Sampling Locations:

The sampling locations are shown in Figure 1, page 4.

Rio Grande North – In-stream sampling within the Rio Grande was performed upstream of the Angostura Diversion Dam at the north end of the watershed. The location is upstream of all inputs from the Urban Area (UA) to the river and provides the background water conditions.

Rio Grande South – In-stream sampling within the Rio Grande was performed at the Isleta Bridge at the south end of the watershed. The location is downstream of all inputs from the UA to the river and provides the downstream water conditions. These locations have been accepted by EPA and the New Mexico Environment Department (NMED) to meet the WSB MS4 Permit requirements in Part III.A.

During this FY 2024 dry season, two (2) E. coli samples were collected within the Rio Grande at Alameda Blvd. This is the location of the NMED defined stream segment divide (refer to Figure 6). This sample point was added after discussion with NMED in February 2017, regarding potential refinements to E. coli loading calculations.

Sample Collection:

As mentioned previously, sample collection for the CMC was conducted by DBS&A (through a separate on-call contract). Since BHI was not involved in the sample collection, this task and memo do not address the details of the methodologies regarding sampling, determining if an event was a qualifying storm event, or determining the timing of the hydrograph at the Rio Grande Alameda and Rio Grande South locations.

DBS&A provided BHI their field notes and field sample data (temperature, DO, specific conductivity, and pH) for the FY 2024 dry season sampling. AMAFCA provided BHI the completed laboratory analysis reports from Eurofins Environment Testing for this monitoring season.

Quality Assurance Project Plan (QAPP):

AMAFCA provided BHI with the Draft Quality Assurance Project Plan (QAPP) for the CMC, dated June 14, 2016. DBS&A followed this QAPP during sample collection. BHI used this QAPP and the included standard operating procedures (SOPs) for the data verification and validation.

MONITORING ACTIVITY & LAB ANALYSIS SUMMARY

The list below provides a summary of the CMC comprehensive monitoring program activities completed for the FY 2024 dry season from November 2023 through June 2024. Two (2) qualifying storm events were sampled and analyzed during the FY 2024 dry season.

- **December 13-14, 2023 – Qualifying Storm Event.** Samples were collected December 13, 2023, at the Rio Grande North and Alameda Blvd. locations beginning at 12:00 p.m. and 1:25 p.m., respectively. These samples were sent to the laboratory for E. coli testing. The CMC determined that the storm event beginning December 13, 2023 was a qualifying storm event. A Rio Grande South sample was collected beginning at 2:45 p.m. on December 14. The samples from the North (collected December 13) and South (collected December 13) locations were taken to Eurofins Environment Testing for full parameter testing.
- **June 26-27, 2024 – Qualifying Storm Event.** Samples were collected June 26, 2024 at the Rio Grande North and Alameda Blvd. locations beginning at 3:05 p.m. and 4:28 p.m., respectively. These samples were sent to the laboratory for E. coli testing. The CMC determined that the storm event beginning June 26, 2024 was a qualifying storm event. A Rio Grande South Sample was collected at 1:10 p.m. on June 27, 2024. The samples from the North (collected June 26) and South (collected June 27) were taken to Eurofins Environment Testing for full parameter testing.

STORMWATER QUALITY DATABASE FOR CMC

As stated previously, there were two (2) qualifying storm events during the FY 2024 dry season, wet weather monitoring sampled by the CMC, which occurred December 13-14, 2023 and June 26-27, 2024. DBS&A's field notes containing DO, pH, conductivity, and temperature measurements, as well as sampling comments have been received, and field results have been added to the database. Additionally, the Eurofins Environment Testing reports for the corresponding time period have been received, added to the database, and are provided with this memo (Attachment 1). The laboratory reports attached to this memo have BHI added comments including the field parameter measurements and other relevant notes related to the laboratory report.

Database Data Entry:

The CMC Excel database was updated with the FY 2024 dry season, wet weather monitoring data. The database contains sample locations, sample date, analyses conducted, methods used, applicable surface water quality standards (WQSs), WSB MS4 Permit required Minimum Quantification Levels (MQL), and analysis results. The database was updated under this task to include the Rio Grande at Alameda sample location. Applicable surface WQSs found in New Mexico Administrative Code (NMAC) 20.6.4, as well as the Pueblo of Isleta WQSs, are entered in the Excel database for comparison purposes with testing results. There is an indicator in the database to show if the monitoring results exceed the applicable surface WQS. An exceedance is not a violation of the WSB MS4 Permit, as the Permit does not have numeric discharge limitations. These ">WQ Standard" flags simply and quickly show the CMC members where the results of the lab data exceed the applicable WQS.

Water quality data was entered into the database upon receipt of the lab reports. All data entered into the database is initially denoted with a "P" to indicate that it is provisional and has not been through the verification and validation process yet. Full parameter analyses of qualifying storm events for both Rio Grande North and Rio Grande South locations were entered respectively into the database. The E. coli only samples from the Rio Grande Alameda location were also entered into the database.

Data Verification and Validation:

The Eurofins Environment Testing analysis reports were provided to BHI by AMAFCA. The lab reports also contain the Chain of Custody for the submitted samples. Field data was requested by and provided to BHI by DBS&A. Data verification and validation (V&V) was conducted by BHI on all field notes, lab reports, and Chain of Custody documents in accordance with the CMC WQS Operating Procedure (SOP) #2, which is part of the existing CMC QAPP Draft, June 14, 2016. These procedures are based on EPA Guidance for Environmental Data Verification and Validation (EPA, 2008).

As stated in the QAPP, the V&V process was completed by a different person than the one who entered the data into the database. The V&V process included use of the *Data Verification and Validation Worksheet* (provided in the QAPP). For this task, field data was verified first, confirming all field notes were complete. BHI handled field parameter questions directly with DBS&A. Chemical data verification began as soon as the lab reports were received, checking that all parameters were tested and looking for any obvious exceedances of WQSs. Other steps listed on the *Data Verification and Validation Worksheet* were completed after all data from the laboratory was received and entered into the database. Sample blank results were reviewed to identify potential contamination during field processing or transport. Replica/duplicate samples were evaluated based on relative percent difference (as described in more detail in the QAPP) to determine the variability of the samples.

All CMC FY 2024 dry season data met the appropriate QA/QC requirements for the December 2023 samples. For the June 2024 samples, the lab reports did not provide results for ammonia or Benzo[a]pyrene. In addition, the June 26-27, 2024 samples had some QA/QC issues, which are documented in the lab reports in Attachment 1 as well as in the data V&V worksheets in Attachment 2. If any data did not meet the appropriate QA/QC requirements, it was assigned an appropriate laboratory qualifier or validation code. A summary of validation codes is provided in the QAPP as well as in the lab reports in Attachment 1.

Once the V&V process was completed, the worksheets were signed. Copies of the V&V worksheets are provided with this memo (Attachment 2). In the database, data that was checked during the V&V process was then changed from being denoted with a "P" for provisional to a "V" for verified, and laboratory qualifiers were added, as needed.

CMC FY 2024 DRY SEASON ASSESSMENT AND EVALUATION OF MONITORING RESULTS

The EPA approved WSB MS4 CMC Monitoring Plan, May 5, 2016, has 33 parameters to monitor at the Rio Grande North and Rio Grande South monitoring locations. This does not include PFAS, which is a new parameter the CMC chose to add. Of these 33 parameters, 15 parameters were not detected in the FY 2024 dry season samples at either the Rio Grande North or South locations. Refer to Table 3 for a list of the parameters that were not detected.

Table 3: Parameters Not Detected
CMC FY 2024 Dry Season Monitoring

Parameters Not Detected	
Oil and Grease (N-Hexane Extractable Material)	Dissolved Lead
Tetrahydrofuran	Dieldrin
Benzo(b)fluoranthene (3, 4 Benzofluoranthene)	Pentachlorophenol
Benzo(k)fluoranthene	Benzidine
Chrysene	Benzo(a)anthracene
Indeno (1,2,3-cd) Pyrene	Dibenzofuran
Bis (2-ethyhexyl) Phthalate (other names: Di(2-ethylhexly)phthalate, DEHP)	Dibenzo(a,h)anthracene
	Chromium VI (Hexavalent)

For the remaining parameters on the CMC monitoring parameter list, three (3) parameters (E. coli, PCBs, and Dissolved Copper) had exceedances of the applicable surface WQS found in New Mexico Administrative Code (NMAC) 20.6.4 and the Pueblo of Isleta WQS during the FY 2024 dry season. Additionally, two (2) samples were showing dissolved oxygen (DO) below WQSs. All exceedances are discussed below in further detail.

E. coli:

The E. coli results collected during the FY 2024 dry season are summarized in Table 4.

Table 4: E. coli Results
CMC FY 2024 Dry Season Monitoring

Date – Rio Grande Location	E. coli Results MPN (CFU/100 mL)
December 13, 2023 – Rio Grande North, Isleta Dam	20
December 13, 2023 – Rio Grande at Alameda	55.6
December 14, 2023 – Rio Grande South, Isleta Dam	235.9
June 26, 2024 – Rio Grande North Angostura	108
June 26, 2024 – Rio Grande at Alameda	97
June 27, 2024 – Rio Grande South, Isleta Dam	644

At the Rio Grande North location (upstream of the Albuquerque UA, at the Angostura Diversion Dam), two (2) samples were collected and tested for E. coli. The lab results for the December 13, 2023 sample showed that the sample had an acceptable E. coli concentration, below the primary contact-single sample Pueblo of Isleta WQS (88 CFU/100 mL). The E. coli result on June 26, 2024 exceeded the primary contact-single sample Pueblo of Isleta WQS (88 CFU/100 mL).

At the Rio Grande South location (downstream of the MS4 UA), two (2) samples were collected and tested for E. coli. The December 14, 2023 sample exceeded the primary contact-single sample Pueblo of Isleta WQS (88 CFU/100 mL) but was below the primary contact-single sample NMAC WQS (410 CFU/100 mL). The June 27, 2024 sample exceeded both the primary contact-single sample Pueblo of Isleta WQS (88 CFU/100 mL) and the primary contact-single sample NMAC WQS (410 CFU/100 mL).

In addition, the CMC collected two (2) E. coli samples in the Rio Grande at Alameda Blvd. during the FY 2024 dry season. The Alameda Blvd. analysis point was based on discussions with NMED in February 2017 on collecting actual E. coli data at the stream segment divide verses using an area percentage (as defined in the TMDL) for E. coli loading calculations. The lab results showed that the sample had an acceptable E. coli concentration below the primary contact-single sample Pueblo of Isleta WQS (88 CFU/100 mL) and the primary contact-single sample NMAC WQS (410 CFU/100 mL) for the December 13, 2023 sample. But for the June 26, 2024 sample, the lab results showed that the sample slightly exceeded the primary contact-single sample Pueblo of Isleta WQS (88 CFU/100 mL) but was below the primary contact-single sample NMAC WQS (410 CFU/100 mL).

As a reminder, in January 2017 the CMC members clarified with NMED that the units MPN/100 mL and CFU/100 mL are considered to be interchangeable for the purposes of this stormwater quality monitoring reporting. The New Mexico and Pueblo of Iselta WQSs for E. coli are currently in units of CFU/100 mL, while the lab reports are typically in units of MPN/100mL. The graph presented in this section uses units of CFU/100 mL to be consistent with the WQS units. Refer to Figure 2 for a graphical representation of E. coli results from December 2023 through June 2024.

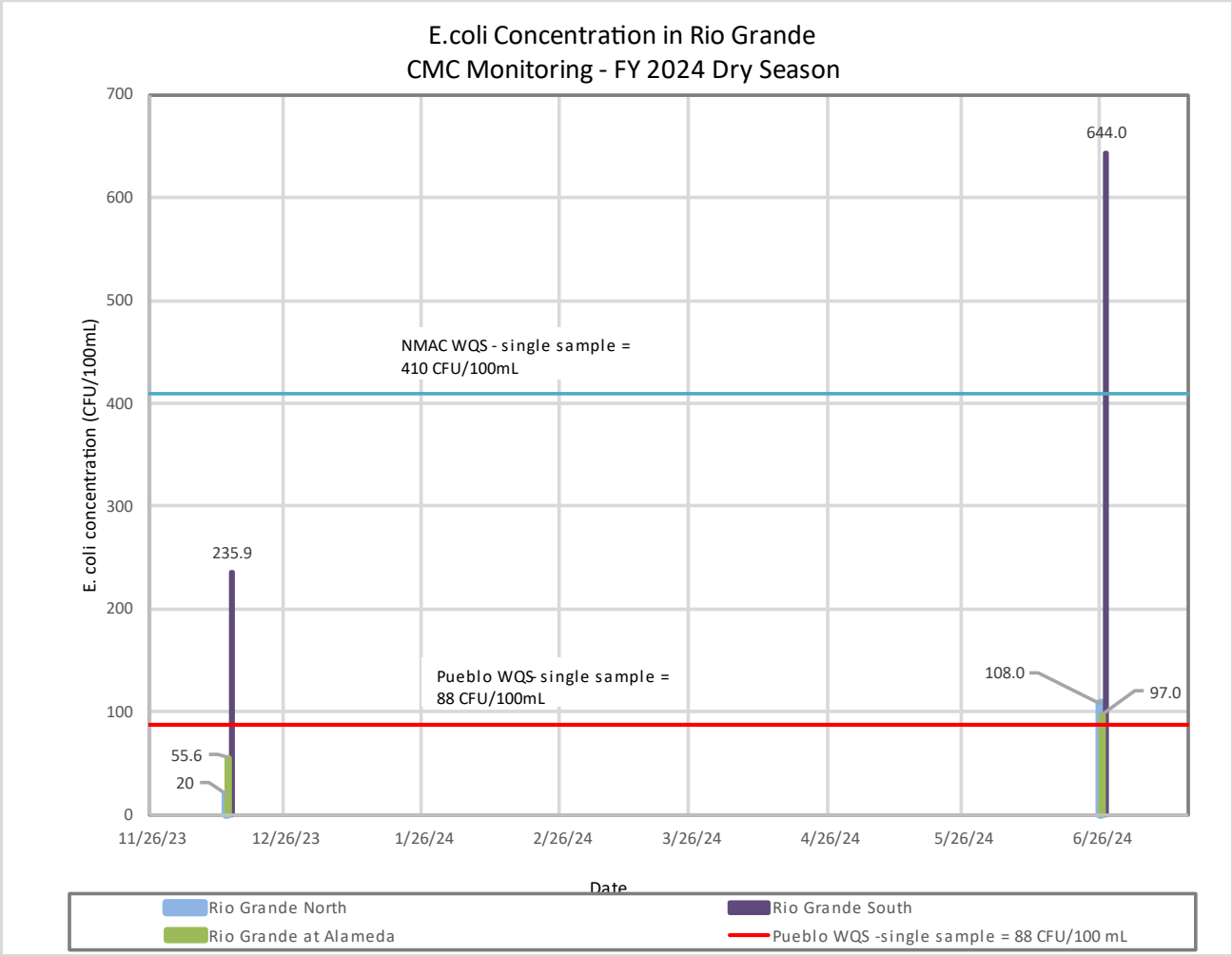


Figure 2: E. coli Monitoring Results in Rio Grande
CMC Monitoring – FY 2024 Dry Season

PCBs:

There are multiple surface WQS values listed for PCBs in both the Pueblo of Isleta and the State of New Mexico standards for the various designated uses. The PCB results for samples collected from the Rio Grande during the FY 2024 dry season stormwater events were below the minimum quantification level (MQL) established in EPA standards for the MS4 NPDES Permit (Appendix F, 0.2 ug/L for PCBs). PCBs were not detected for the both the December 2023 and June 2024 Rio Grande North samples. However, both samples from the Rio Grande South location were above the Pueblo of Isleta human health criteria (based on fish consumption only) WQS for surface waters. The human health-organism only criterion is based upon human consumption of fish and other aquatic life that bioaccumulate contaminants over time. The PCB results from 2016 through 2024 are shown in Figure 3, relative to several of the WQSs for PCBs.

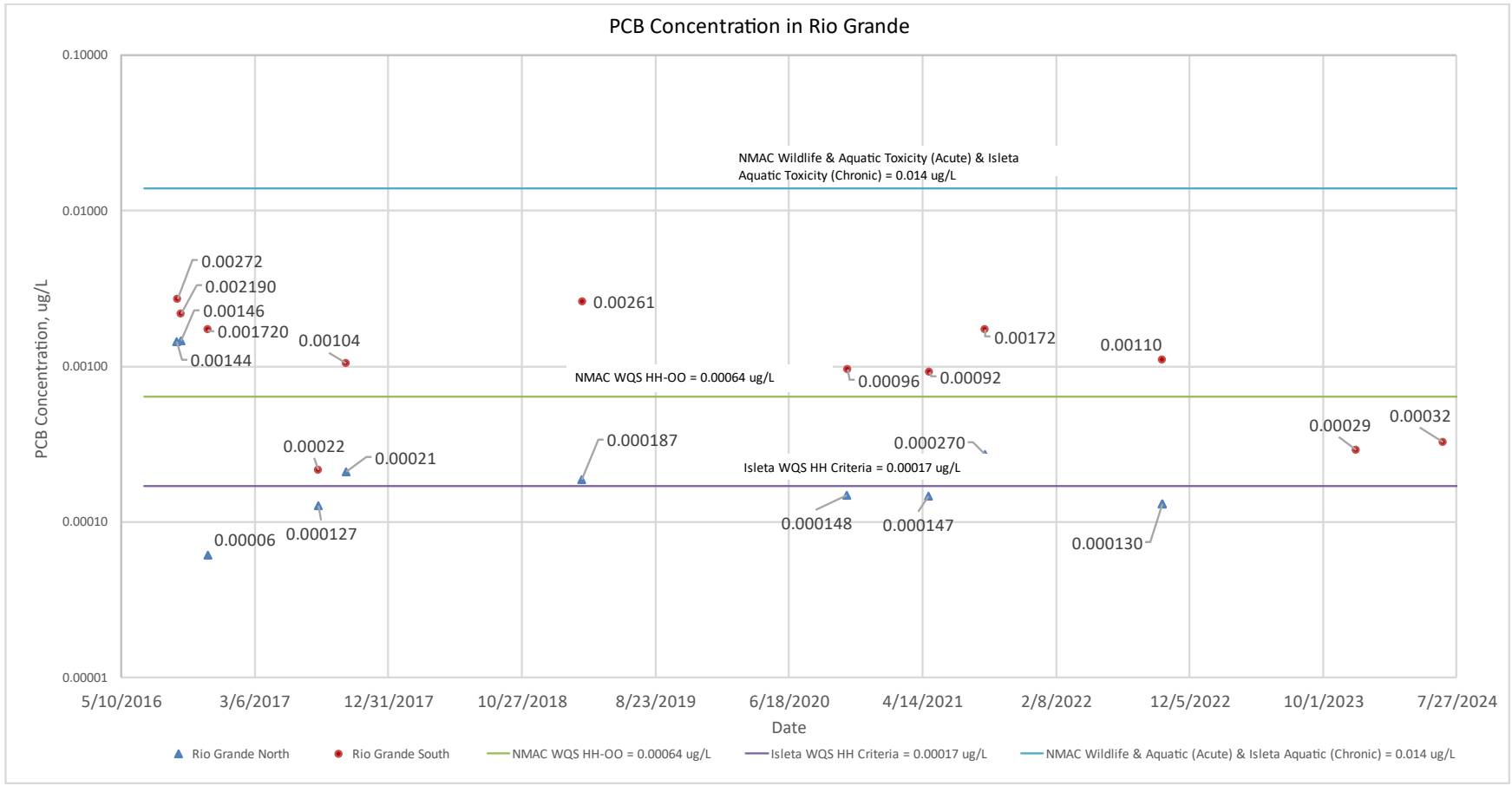


Figure 3: PCB Monitoring Results in Rio Grande
CMC Monitoring – 2016 - 2024

Gross Alpha, Adjusted:

The December 2023 and June 2024 samples did not exceed the New Mexico and Pueblo of Isleta WQSs for gross alpha, adjusted. The WQS for gross alpha, adjusted is the same value for both the NMAC 20.6.4 Water Quality Criterion and Pueblo of Isleta. The WQS of 15 pCi/L ("pCi/L" means picocuries per liter) is a general standard for the Pueblo of Isleta; for New Mexico it is based on Domestic Water Supply and Livestock Watering designated uses.

The last exceedance for gross alpha, adjusted for CMC sampling was reported for the October 6, 2022, Rio Grande South sample. The CMC will continue to closely evaluate this parameter in future samples. If additional exceedances occur, the CMC will discuss the results further and may consult NMED for further guidance.

Dissolved Copper:

The June 27, 2024 sample result of 10 ug/L for the Rio Grande South at Isleta Dam exceeded the New Mexico, Pueblo of Sandia, and Pueblo of Isleta WQS for dissolved copper. The acute WQS for dissolved copper is 8 ug/L for the NMAC 20.6.4 Water Quality Criterion, Pueblo of Sandia, and Pueblo of Isleta; the Aquatic life Acute value is based on hardness of 90 mg/L.

Most dissolved copper CMC results for the Rio Grande South at Isleta Dam have been <1 ug/L. The previous highest result was 1.5 ug/L for CMC sampling reported for September 2, 2021 for the Rio Grande South sample. The CMC will continue to closely evaluate this parameter in future samples. If additional exceedances occur, the CMC will discuss the results further and may consult NMED for further guidance.

Dissolved Oxygen (DO) and Temperature:

Two (2) of the water quality parameters are specifically worth mentioning in this memo because they are listed in the WSB MS4 Permit, Part I.C.1 – Special Conditions: dissolved oxygen (DO) and temperature. The temperature parameter did not have any surface water quality exceedances during the FY 2024 dry season sampling.

DO is a water quality concern in the Rio Grande if it is below 5 mg/L. The samples taken on June 26, 2024 at Rio Grande North and Rio Grande at Alameda had DO values below 5 mg/L. These values were not reported as exceedances because the reported field values were taken from a fifth composite sample when the previous four (4) other samples were above 5 mg/L. From the CMC Sampling data sheet of both the Rio Grande North and the Rio Grande at Alameda, the temperature of the sample increases within the hour of composite testing due to ambient air temperature, and the DO decreases due to the inverse relationship between the two parameters. The DO reported lower than 5 mg/L was not due to the stormwater runoff that occurred but due to the sampling protocol, which impacted the reported DO.

This provides the MS4s with specific monitoring data showing that stormwater did not cause or contribute to exceedances of applicable DO WQSs in the Rio Grande from any of the CMC samples from 2016 to 2024. Refer to Figure 4 for CMC DO results and comparison to applicable WQSs.

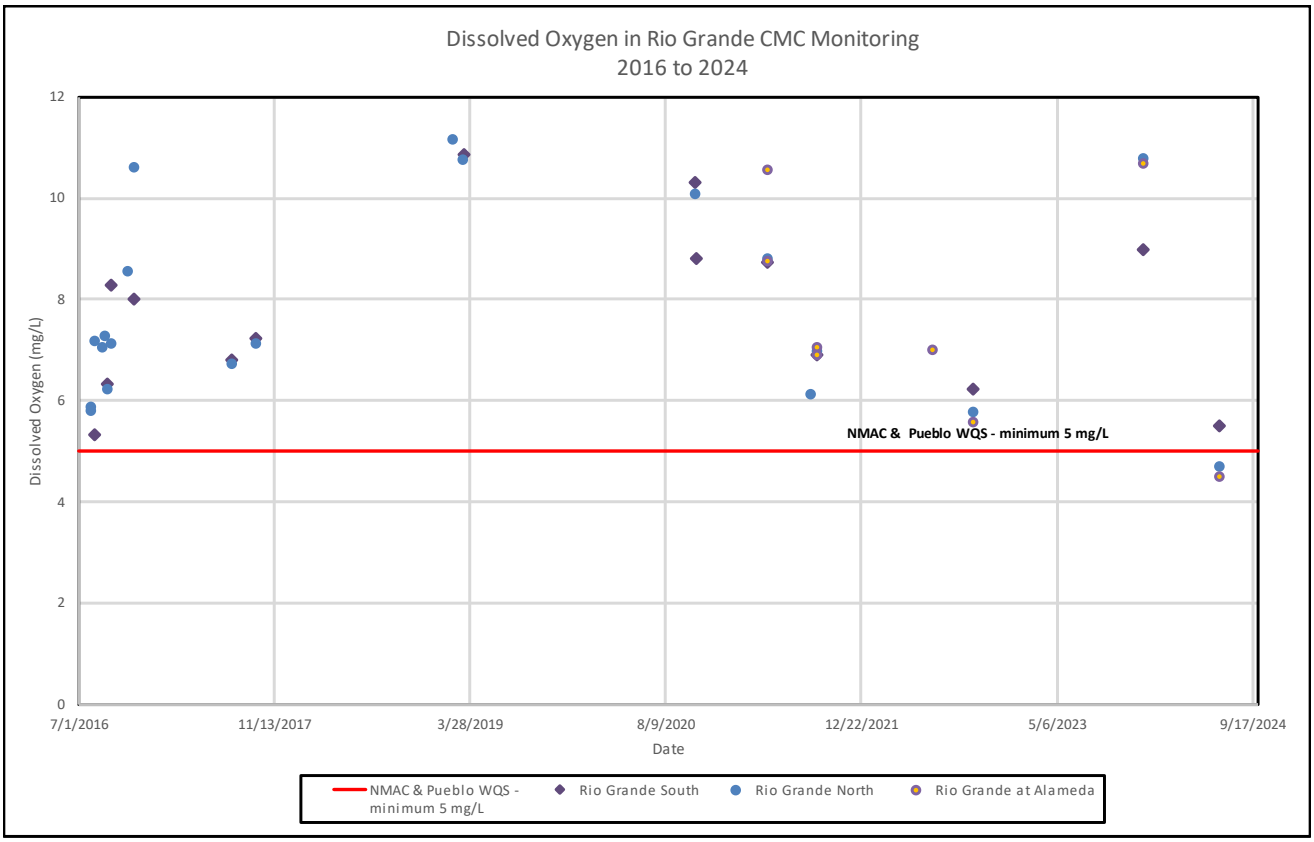


Figure 4: Dissolved Oxygen (DO) Monitoring Results in the Rio Grande CMC Monitoring – 2016 – 2024

Temperature is listed in the WSB MS4 Permit as a special condition (currently only applicable to the City of Albuquerque and AMAFCA). Past data submitted to EPA and NMED by the MS4 permittees have proven that stormwater discharges into the Rio Grande are not raising the Rio Grande temperature above the WQSs. The data collected during this FY 2024 dry season monitoring also supports this conclusion. All the temperature field readings taken in the Rio Grande during the CMC FY 2024 dry season were below 32.2°C (90°F), which is the WQS for the State of New Mexico and for the Isleta and Sandia Pueblos. Refer to Figure 5 for temperature results and comparison to applicable WQSs for all CMC samples taken upstream and downstream of the MRG MS4 area from 2016 to 2024.

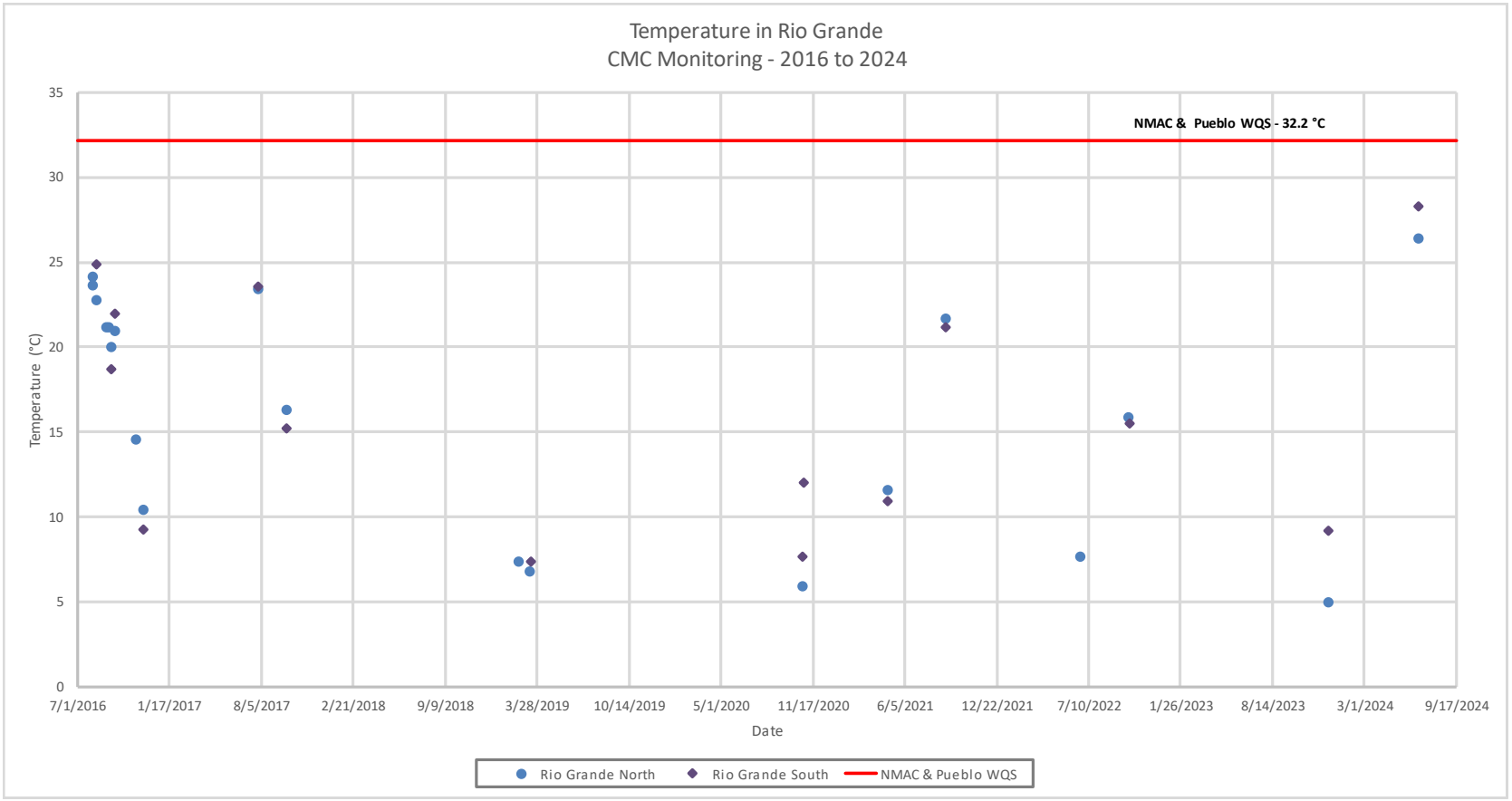


Figure 5: Temperature Monitoring Results in the Rio Grande
CMC Monitoring – 2016 - 2024

CMC FY 2024 DRY SEASON E. COLI LOADING CALCULATIONS AND WASTE LOAD ALLOCATION (WLA)

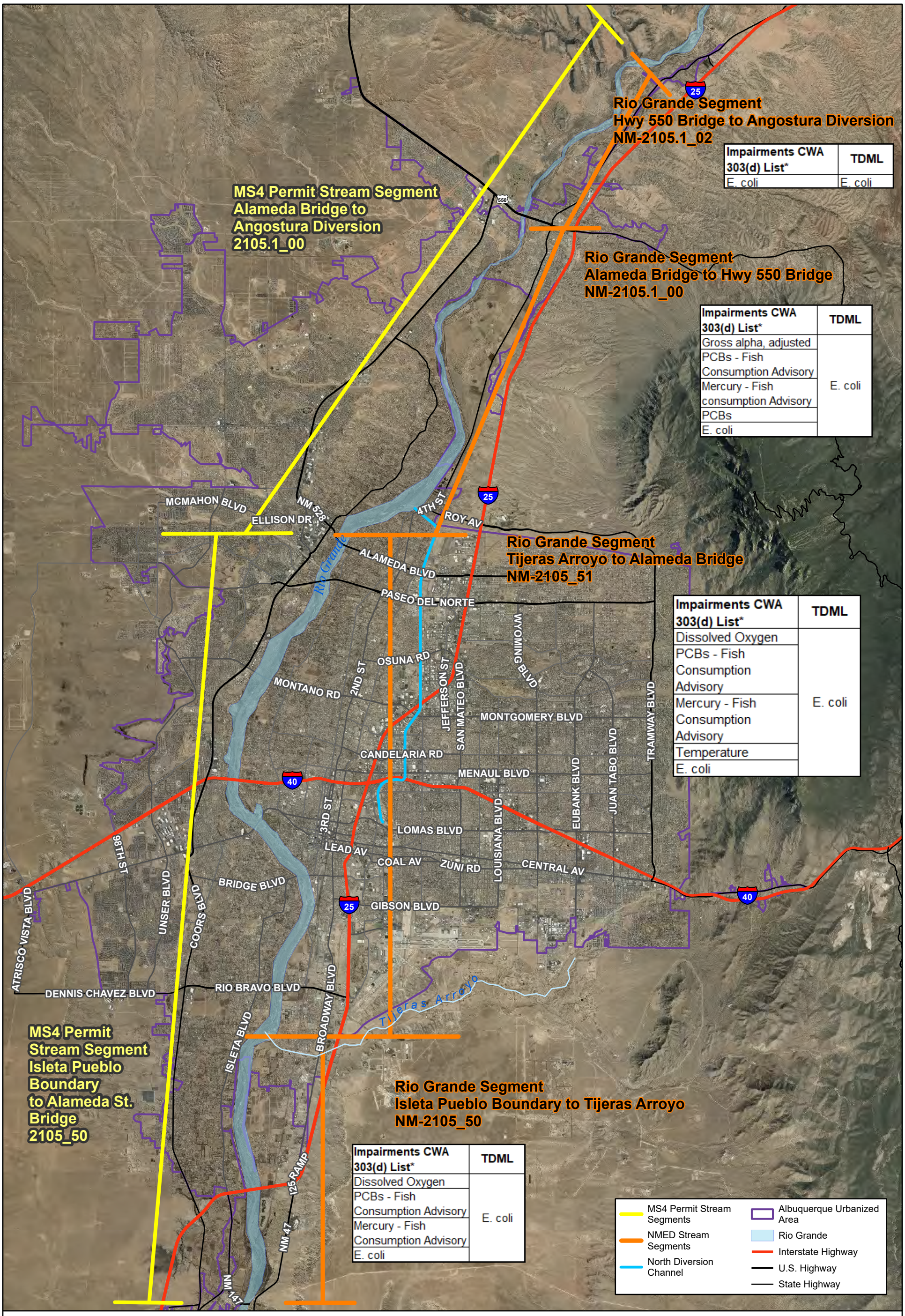
Related to assessing the stormwater results, the E. coli loading was calculated and compared to the aggregate Total Maximum Daily Load (TMDL) Waste Load Allocation (WLA) for the CMC group. A TMDL is the maximum amount of a pollutant (E. coli in this case) that a water body (Rio Grande) can assimilate on a daily basis without violating applicable surface WQSs. The total TMDL for a stream segment consists of the multiple WLAs for point sources, non-point sources, and natural sources, plus a margin of safety. The CMC MS4 allotted WLA was determined in the EPA Approved, *Total Maximum Daily Load for the Middle Rio Grande Watershed*, June 30, 2010, and subsequent communications with NMED. The WLA varies by flow condition in the Rio Grande and by stream segment.

E. coli loading calculations and comparison to the WLA follows the WSB MS4 Permit requirements in *Discharges to Water Quality Impaired Water Bodies with an Approved TMDL*, *Part I.C.2.b.(i).(c).B*, *Appendix B-Total Maximum Daily Loads* (TMDLs) Tables of the WSB MS4 Permit, and the NMED guidance provided to the CMC. Attached to this memo is the WLA Calculation spreadsheet, which steps through the E. coli loading calculations and assumptions comparing the calculated E. coli loading to the CMC aggregate WLA defined by NMED.

There are two (2) stream segments defined in the WSB MS4 Permit (Appendix B): Isleta Pueblo Boundary to Alameda Street Bridge (Stream Segment 2105_50) and Non-Pueblo Alameda Bridge to Angostura Diversion (Stream Segment 2105.1_00). These stream segments differ from NMED's current stream segments defined in the *2022-2024 State of New Mexico Clean Water Act Section 303(d)/Section 305(b) Integrated Report* (NMED, April 2022) and *Draft 2024-2026 State of New Mexico Clean Water Act Section 303(d)/Section 305(b) Integrated Report* (NMED, December 2023). NMED currently has four (4) stream segments instead of the two (2) WSB MS4 stream segments. These various stream segment designations are shown in Figure 6, page 17.

The *NMED 303(d)/305(b) 2022-2024* and *Draft 2024-2026 Integrated Report* tables show the most recent assessment results, and currently all segments of the Rio Grande (Isleta to Angostura Diversion) are impaired for E. coli and have a TMDL for E. coli.

The E. coli daily loading associated with the CMC group and comparison to the NMED WLA was completed for the two (2) qualifying dry season storm events – December 13-14, 2023 and June 26-27, 2024. For these events, the CMC obtained an E. coli sample in the Rio Grande at Alameda and used this to calculate the E. coli loading for the two (2) river segments. Refer to Table 5 on page 18 for a summary of the WLA comparison results. A spreadsheet is attached to this memo that provides the detailed WLA calculations.



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0 12,500 25,000 Feet

1 in = 12,500 ft

CMC Monitoring

Figure 6
Rio Grande Impairments & TMDL Information

* 2024-2026 State of NM Clean Water Act, Section 303(d)/Section 305(b) Integrated Reports

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Author: mcrooks

September 2024

Table 5: Summary of CMC E. Coli Loading Compared to WLA

Date / Stream Segment	Daily Mean Flow (cfs)	Flow Conditions (cfs) *range defined by NMED*	CMC Daily E. coli Loading (CFU/day)	NMED WLA for CMC for Stream Segment and Flow Conditions	Loading Compared to WLA Potential Exceedance or Acceptable
December 13-14, 2023 – Rio Grande North E. coli Concentration 12/13/2023 = 19.7 MPN (CFU/100 mL) Rio Grande at Alameda E. coli Concentration 12/13/2023 = 55.6 MPN (CFU/100 mL) Rio Grande South E. coli Concentration 12/14/2023 = 235.9 MPN (CFU/100 mL)					
Alameda to Angostura	2,250	Moist	1.17E+11	9.09E+10	WLA Potential Exceedance
Isleta to Alameda	2,210	Moist	5.70E+11	6.29E+10	WLA Potential Exceedance
June 26-27, 2024 – Rio Grande North E. coli Concentration 6/26/2024 = 108 MPN (CFU/100 mL) Rio Grande at Alameda E. coli Concentration 6/26/2024 = 97 MPN (CFU/100 mL) Rio Grande South E. coli Concentration 6/27/2024 = 644 MPN (CFU/100 mL)					
Alameda to Angostura	486	Dry	1.17E+11	3.24E+10	WLA Acceptable
Isleta to Alameda	476	Dry	5.70E+11	1.57E+10	WLA Potential Exceedance

As Table 5 illustrates, the calculated E. coli loading for the December 13-14, 2023 storm event for the northern segment (Alameda to Angostura) and the southern segment (Isleta to Alameda) of the Rio Grande were above the WLA for the CMC MS4s. This analysis used the mid-point E. coli sample result obtained in the Rio Grande at Alameda. For June 26-27, 2024, the calculated E. coli loading for the storm event for the northern segment (Alameda to Angostura) was an acceptable WLA for the CMC MS4s. The southern segment (Isleta to Alameda) of the Rio Grande was above the WLA for the CMC MS4s. This analysis used the mid-point E. coli sample result obtained in the Rio Grande at Alameda.

The WSB MS4 Permit implies that the WLA is a measurable goal for the MS4s related to E. coli. Based on extensive review of the EPA Approved, *Total Maximum Daily Load (TMDL) for the Middle Rio Grande Watershed*, June 30, 2010, this seems to be an unattainable goal for MS4s.

Page 40 of the 2010 TMDL Report states, “It is important to remember that the TMDL is a planning tool to be used to achieve water quality standards…Meeting the calculated TMDL may be a difficult objective.” The TMDL/WLA was calculated by NMED to meet the Pueblo (Sandia and Isleta) geometric mean maximum of 47 CFU/100 ml, which was done to be “protective of downstream waters” and “to provide an implicit margin of safety (MOS)”. A single grab sample E. coli result meeting this very low geometric means WQSs will be very difficult for the MS4s to obtain.

The CMC members discussed the difficulty of using the WLA as a measurable goal with NMED on February 1, 2017. NMED explained that exceeding the WLA does not trigger enforcement. However, NMED strongly encouraged the MS4s to document what they are doing once they realize the WLA is potentially exceeded. The meeting on February 1, 2017, and the CMC discussion with NMED on February 16, 2017, demonstrate CMC members are working toward understanding the WLA. In addition, the CMC members began implementing a refinement to the sampling plan discussed with NMED by obtaining an E. coli sample in the Rio Grande at Alameda effective the FY 2018 wet season, as feasible. This demonstrates that the CMC is continuing to investigate the potential exceedances and make improvements to monitor E. coli in the Rio Grande.

DATA ENTRY FOR DISCHARGE MONITORING REPORTS

The WSB MS4 Permit entered Administrative Continuance in December 2019, when EPA Region 6 did not issue a new MS4 Permit before the current MS4 Permit's expiration date. Until a new MS4 Permit is issued, there are no compliance monitoring requirements for the CMC in the Rio Grande. As identified in the WSB MS4 CMC Monitoring Plan, the WSB MS4 Permit required a minimum of seven (7) storm events be sampled at both the Rio Grande North and Rio Grande South locations. All MS4 Permit required samples have been obtained by the CMC and verified stormwater quality data from these required events have been submitted to the EPA using electronic Discharge Monitoring Report (DMR) forms. Data from the DMRs are uploaded to a comprehensive nationwide database that contains discharge data for facilities and other point sources that discharge directly to receiving streams. For this task, BHI has not completed any data entry related to the EPA DMRs for the FY 2024 dry season.

CONCLUSIONS AND PLANNING

During the FY 2024 dry season (Nov. 1, 2023 to June 30, 2024), two (2) qualifying stormwater samples were obtained by the CMC. Lab results were received, and this data has been entered into the CMC Excel database. The lab data entered is marked in the spreadsheet as "V" (verified), and data V&V has been completed (refer to Attachment 2).

To summarize, monitoring results and E. coli loading calculations for the FY 2024 dry season show that:

- The WSB MS4 Permit entered Administrative Continuance in December 2019, when EPA Region 6 did not issue a new MS4 Permit before the current MS4 Permit's expiration date. Until a new MS4 Permit is issued, there are no compliance monitoring requirements for the CMC in the Rio Grande. All MS4 Permit required samples have been obtained by the CMC, as well several samples collected during Administrative Continuance, including the two (2) samples obtained in the FY 2024 dry season, as reported in this memo.
- For the FY 2024 dry season, 15 parameters were not detected in the FY 2024 dry season samples at either the Rio Grande North or South locations for both the December 2023 and June 2024 stormwater samples.
- A few key parameters met the applicable WQSs, as they have for all the CMC samples to date:
    - All temperature results were less than 32.2°C (maximum WQS).
    - All gross alpha, adjusted results were less than 15 pCi/L (maximum WQS).

- The PCB results were below the New Mexico Surface WQSs and Pueblo of Isleta Surface WQSs for designated uses, including drinking water, wildlife habitat, acute aquatic life, and chronic aquatic life. However, the Rio Grande South CMC samples from December 14, 2023 and June 27, 2024, were above the Pueblo of Isleta human health criteria (based on fish consumption only) WQS for surface waters.
- The calculated E. coli loading for the December 13-14, 2023 storm event for the northern segment (Alameda to Angostura) and the southern segment (Isleta to Alameda) of the Rio Grande was above the WLA for the CMC MS4s. This analysis used the mid-point E. coli sample result obtained in the Rio Grande at Alameda.
    - Sources for the E. coli loading measured in the river are not solely attributable to the CMC MS4 members; the E. coli loading calculations serve to provide a reasonable estimate of the CMC contribution to the measured E. coli loading.
- The calculated E. coli loading for the June 26-27, 2024 storm event for the north segment (Alameda to Angostura) was acceptable for the WLA for the CMC MS4s. The southern segment (Isleta to Alameda) of the Rio Grande was above the WLA for the CMC MS4s. This analysis used the mid-point E. coli sample result obtained in the Rio Grande at Alameda.
    - Sources for the E. coli loading measured in the river are not solely attributable to the CMC MS4 members; the E. coli loading calculations serve to provide a reasonable estimate of the CMC contribution to the measured E. coli loading.

These two (2) samples were the only CMC samples obtained in FY 2024. A wet season sample (July 1, 2023 – Oct. 31, 2023) was not obtained by the CMC. Therefore, this is the only reporting memo for CMC members for FY 2024.

SG/ab

Attachments:

Attachment 1 – DBS&A Field Data & Eurofins Environment Testing Environmental Analysis Laboratory Reports with BHI Notes for FY 2024 Dry Season

Attachment 2 – FY 2024 Dry Season Completed Data Verification and Validation (V&V) Forms

Spreadsheets Included Separately:

E. coli Loading and Comparison to Waste Load Allocation (WLA) Excel Spreadsheet

Excel CMC Spreadsheet with FY 2024 Dry Season Stormwater Quality Monitoring Results

ATTACHMENT 1

DBS&A FIELD DATA & EUROFINS ENVIRONMENT TESTING LABORATORY REPORTS WITH BHI NOTES FOR FY 2024 DRY SEASON

CMC Water Quality Results Database
FY 2017 -FY 2024
Date: July 4, 2024
Summary of Lab Results for CMC samples

Parameter	Permit Required Units	Provisional or Verified	2024 CMC SAMPLE NORTH Collection Date 12/13/2023 Dry Season Sample	Qualifier	Check compared to Water Quality Criterion	Provisional or Verified	2024 CMC SAMPLE NORTH Collection Date 6/26/2024 Dry Season Sample	Qualifier	Check compared to Water Quality Criterion	Provisional or Verified	2023 CMC SAMPLE SOUTH Collection Date 12/14/2023 Dry Season Sample	Qualifier	Check compared to Water Quality Criterion	Provisional or Verified	2024 CMC SAMPLE SOUTH Collection Date 6/27/2024 Dry Season Sample	Qualifier	Check compared to Water Quality Criterion	Provisional or Verified	2024 CMC SAMPLE - EXTRA ALAMEDA Collection Date 12/13/23 Dry Season Sample	Qualifier	Check compared to Water Quality Criterion	Provisional or Verified	2024 CMC SAMPLE - EXTRA ALAMEDA Collection Date 6/26/24 Dry Season Sample	Qualifier	Check compared to Water Quality Criterion
Total Suspended Solids (TSS)	mg/L	V	6		--	V	58		--	V	22		--	V	160		--								
Total Dissolved Solids (TDS)	mg/L	V	204		OK	V	250		OK	V	226		OK	V	280		OK								
Chemical Oxygen Demand (COD)	mg/L	V	110		--	V	ND		--	V	ND		--	V	ND		--								
Biochemical Oxygen Demand (BOD_5)	mg/L	V	<2.0	H	--	V	2	*-b	--	V	<2.0		--	V	ND	*-b	--								
Dissolved Oxygen (DO)	mg/L	V	10.8		OK	V	4.7	Refer to comment in previous column	<WQ Standard	V	9		OK	V	5.5		OK	V	10.7		OK	V	4.5	Refer to comment in previous column	<WQ Standard
Oil and Grease (N-Hexane Extractable Material)	mg/L	V	ND		OK	V	ND		OK	V	ND		OK	V	ND		OK								
E. coli	MPN (CFU/100 mL)	V	19.7		OK	V	108.0		>WQ Standard	V	235.9		>WQ Standard	V	644.0		>WQ Standard	V	55.6		OK	V	97.0		>WQ Standard
pH	S.U.	V	8.15		OK	V	8.41		OK	V	8.24		OK	V	8.3		OK	V	7.73		OK	V	8.4		OK
Total Kjedahl Nitrogen (TKN)	mg/L	V	ND		--	V	0.6		--	V	ND		--	V	0.99		--								
Nitrate plus Nitrite	mg/L	V	ND	DF S	OK	V	0.14		OK	V	0.32	J	OK	V	0.62		OK								
Dissolved Phosphorous	mg/L	V	ND		--	V	0.055		--	V	0.065		--	V	0.37		--								
Ammonia (mg/L as N)	mg/L	V	1.1	JD	OK	V		Not reported in lab report	N/A	V	0.84	JD	OK	V		Not reported in lab report	OK								
Total Nitrogen	mg/L	V	ND	D	OK	V	0.74		OK	V	ND	D	OK	V	1.61		OK								
Total Phosphorous	mg/L	V	ND		--	V	0.13		--	V	0.14		--	V	0.38		--								
PCBS - 0.000064 (Method 1668A - sum of all congeners)	µg/L	V	ND		OK	V	ND		OK	V	0.0002908	J q	>WQ Standard	V	0.000323	J q	>WQ Standard								
Gross Alpha, Adjusted	pCi/L	V	2.25 ± 1.72		OK	V	5.25		OK	V	0.945 ± 1.43		OK	V	3.77	U	OK								
Tetrahydrofuran	µg/L	V	ND		--	V	ND	H	--	V	ND		--	V	ND	H	--								
Benzo(a)pyrene	µg/L	V	ND		OK	V		Not reported in lab report	N/A	V	ND		OK	V		Not reported in lab report	OK								
Benzo(b)fluoranthene (other name: 3,4-Benzofluoranthene)	µg/L	V	ND		OK	V	ND	*+	OK	V	ND		OK	V	ND	*+	OK								
Benzo(k)fluoranthene	µg/L	V	ND		OK	V	ND	*+	OK	V	ND		OK	V	ND	*+	OK								
Chrysene	µg/L	V	ND		OK	V	ND	*+	OK	V	ND		OK	V	ND	*+	OK								
Indeno(1,2,3-cd)Pyrene	µg/L	V	ND		OK	V	ND		OK	V	ND		OK	V	ND		OK								
Dieldrin	µg/L	V	ND		OK	V	ND	*+, H	OK	V	ND		OK	V	ND	*+, H	OK								
Pentachlorophenol	µg/L	V	ND		OK	V	ND		OK	V	ND		OK	V	ND		OK								
Benzidine	µg/L	V	ND		OK	V	ND		OK	V	ND		OK	V	ND		OK								
Benzo(a)anthracene	µg/L	V	ND		OK	V	ND	*+	OK	V	ND		OK	V	ND	*+	OK								
Dibenzofuran	µg/L	V	ND		--	V	ND		--	V	ND		--	V	ND		--								
Dibenzo(a,h)anthracene	µg/L	V	ND		OK	V	ND		OK	V	ND		OK	V	ND		OK								
Chromium VI (Hexavalent)	µg/L	V	ND		OK	V	ND		OK	V	ND		OK	V	ND		OK								
Dissolved Copper	µg/L	V	0.55		OK	V	0.95		OK	V	0.75		OK	V	10		>WQ Standard								
Dissolved Lead	µg/L	V	ND		OK	V	ND		OK	V	ND		OK	V	ND		OK								
Bis (2-ethyhexyl) Phthalate (other names: DI(2-ethylhexly)phthalate, DEHP) - 2.2	µg/L	V	ND		OK	V	ND	*+	OK	V	ND		OK	V	ND	*+	OK								
Conductivity	umhos/cm	V	305		--	V	254.1		--	V	338		--	V	337		--	V	310		--	V	272.1		--
Temperature	°C	V	5		OK	V	26.4		OK	V	9.2		OK	V	28.3		OK	V	7.1		OK	V	28.9		OK
Hardness (as $CaCO_3$)	mg/L	V	120		--	V	110		--	V	130		--	V	140		--								
Mercury	µg/l																								
PFA (6)	ppt (ng/L)					P	3.1	J	OK					P	4.1	JI	OK								
PFA (6) (filtered)	ppt (ng/L)					P			OK																

Data Verification/Validation and Qualifier Notes:
(R) The sample results are unusable because certain criteria were not met. The analyte may or may not be present in the sample.
(H) Sample holding time exceeded.
(J) The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
(D) Sample was diluted by Lab due to matrix
(U) Analyte was analyzed for, but not detected above the specified detection limit.

Notes:
1. Wet Season monitoring period - July 1 to October 31 and Dry Season monitoring period - November 1 to June 30 according to the Watershed Based MS4 Permit NMR04A000.
2. Water Quality Criterion from 20.6.4 NMAC; Rio Grande Basin - section 20.6.4.105; For
a mean monthly flow of 100 cfs, monthly average concentration for TDS 1,500 mg/l or
3. Aquatic life criteria for metals are expressed as a function of total hardness (mg/L as
4. According to NMAC 20.6.4, E. coli bacteria for Primary Contact - monthly geometric
5. Water quality criterion for metals is based on dissolved metals, NMAC 20.6.4.900.I
and individual sample results compared to acute toxicity values.
6. Eurofins lab method: SM 9223B Fecal Indicator. Note - lab method for units of
MPN/100 ml, lab report uses units CFU/100 ml, for this analysis assuming two units are
7. PFA 6 is for the sum of 6 PFAS in drinking water; these
compounds are PFOA, PFOS, PFNA, PFHpA, PFHxS and PFDA

ND - analyte not detected above the laboratory method detection limit
NA - not analyzed
Hatching also indicates that parameter was not analyzed

National recommended WQ criteria Human Health
https://www.epa.gov/wqc/national-recommended-water-quality-criteria-human-health-criteria-table

Samplers C. Johannesen, J. Alles

CMC Sampling Data Sheet

Site Identification: RG - North

Notes: YSI Pro 1020 S# 21C102804
Oakton CTSI

Full Suite Sample Date and Time:	12-13-23 1200
Full Sample Identification:	RGNorth-20231213
QC Samples: Duplicate / (None)	QC Sample ID:
QC samples require a DIFFERENT sample time than the environmental sample. QC Sample time:	

Full Suite Collection Point : Animas River Diversion works

Full Suite Sample Volume: 8 gal Collection Time Start: 1115 End: 1200

Field Parameters for each 2-gallon grab

Grab	Time	Temp (°C)	pH	Specific Conductance (µS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)
1	1115	7.3	6.56	337	10.5	102
2	1130	5.0	7.79	302	10.8	99
3	1145	5.7	8.04	304	10.1	95
4	1200	5.1	8.11	313	10.5	98
Composite	1203	5.0	8.15	305	10.8	99

☐Turbid Water ☒Color clear to yellow ☐Solids ☐Oil/Sheen ☐Foam ☐Odor NO

Analytical - see 2021 COC table

☒Site Photo ☐Sample Photo

Samplers C. Johannesen, J. Alles

CMC Sampling Data Sheet

Site Identification: RG-South

Notes: YSI Pro 1020 S# 21C102804

OAKTON CTSI

Full Suite Sample Date and Time:	12/14/23 1445
Full Sample Identification:	RG South- 20231214
QC Samples:	Duplicate / (None) QC Sample ID:
QC samples require a DIFFERENT sample time than the environmental sample. QC Sample time:	

Full Suite Collection Point : Isleta dam

Full Suite Sample Volume: 8 gal Collection Time Start: 1408 End: 1445

Field Parameters for each 2-gallon grab

Grab	Time	Temp (°C)	pH	Specific Conductance (µS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)
1	1400	11.7	7.81	332	7.2	78
2	1415	9.7	8.15	329	8.2	85
3	1430	9.8	8.23	330	9.2	96
4	1445	9.3	8.31	332	8.2	85
Composite	1450	9.2	8.24	338	9.0	92

☒Turbid Water ☐Color BROWN ☒Solids ☐Oil/Sheen ☐Foam ☐Odor NONE

Analytical - see 2021 COC table

☒Site Photo ☒Sample Photo

Samplers C. Johannesen, J. Alles

CMC Sampling Data Sheet

Site Identification: Rio Grande @ Alameda

Notes: YSI Pro 1020 S# 21C102804
Oakton CTSI

Full Suite Sample Date and Time:	12/13/14 1325
Full Sample Identification:	RG Alameda - 20231213
QC Samples: Duplicate / None	QC Sample ID:
QC samples require a DIFFERENT sample time than the environmental sample. QC Sample time:	

Full Suite Collection Point : Pedestrian Bridge

Full Suite Sample Volume: 1L Collection Time Start: 1325 End:

Field Parameters for each 2-gallon grab

Grab	Time	Temp (°C)	pH	Specific Conductance (µS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)
1						
2						
3						
4						
Composite	1325	7.1	7.73	310	10.7	97

☐Turbid Water ☒Color Clear ☒Solids ☐Oil/Sheen ☐Foam ☐Odor_____

Analytical - see 2021 COC table

☒Site Photo ☒Sample Photo

Chain-of-Custody Record

Client: ~~Daniel B. Stephens~~ AMAFCA

Mailing Address: ~~6020 Academy~~

Phone #:

email or Fax#: pchavez@amafca.org

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: CMC

Project #: Dry Season FY24

Project Manager: Patrick Chavez

Sampler: DBSA - C. Johannsen

On Ice: ☒ Yes ☐ No

# of Coolers: 1 4oz

Cooler Temp (Including CF): 5.7+0.1=5.8 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Ecoli - enumeration					
12-13-23	1200	AQ	RG North - 20231213	1													X					
12-13-23	1325	AQ	RG Alameda - 20231213	1													X					

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
12-13-23	1340			ORC	12/13/23	13:54
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Client:

Mailing Address:

Phone #:

email or Fax#: pchavez@amafca.org

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ Rush

Project Name: CMC FY24 Dry

Project #:

Project Manager: Patrick Chavez

Sampler: DBS4 - C. Johanneson

On Ice: ☒ Yes ☐ No

\# of Coolers: 2

Cooler Temp(including CF): See Remarks (°C)

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	ecoli - enumerated	See attached list				
12-13-23	1200	AQ	R6 North-20231213															X				
12-14-23	1445		R6 South-20231214														X	X				

Date:	Time:	Relinquished by:	Received by:	Via: CDO	Date 12/14/23	Time 16:00
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks:
3.9-0=3.9°C
7.7-0=7.7°C
martil

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Samplers IT / EB

CMC Sampling Data Sheet

Site Identification: RG North

Notes: on site 1325

Full Suite Sample Date and Time:	1505 6/26/24
Full Sample Identification:	RG North ~~20240626~~ 20240626
QC Samples: Duplicate / None	QC Sample ID:
QC samples require a DIFFERENT sample time than the environmental sample. QC Sample time:	

Full Suite Collection Point : MRGCD Dam ~~Stack~~ Structure

Full Suite Sample Volume: Collection Time Start: End:

Field Parameters for each 2-gallon grab

Grab	Time	Temp (°C)	pH	Specific Conductance (µS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)
1	1400	24.5	8.06	238.5	5.6	82
2	1415	24.1	8.30	253.9	5.4	76
3	1430	24.3	8.29	254.7	5.7	81
4	1445	24.5	8.26	253.6	5.1	74
Composite	1505	24.4	8.41	254.1	4.7	71

☒ Turbid Water ☒ Color yellowish Brown ☐ Solids ☐ Oil/Sheen ☐ Foam ☒ Odor Biological odor

Analytical - see 2021 COC table

☒ Site Photo ☒ Sample Photo

Samplers IT / EB

CMC Sampling Data Sheet

Site Identification: RG at Alameda

Notes: on site @ 1618

Full Suite Sample Date and Time:	6/26/24 1628
Full Sample Identification:	RG @ [redacted] Alameda 20240626
QC Samples: Duplicate / None	QC Sample ID:
QC samples require a DIFFERENT sample time than the environmental sample. QC Sample time:	

Full Suite Collection Point :

Full Suite Sample Volume: Collection Time Start: End:

Field Parameters for each 2-gallon grab

Grab	Time	Temp (°C)	pH	Specific Conductance (µS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)
1						
2						
3						
4						
Composite	1628	28.9	8.40	272.1	4.5	70

☑ Turbid Water ☑ Color Slightly cloudy ☐ Solids ☐ Oil/Sheen ☐ Foam ☑ Odor Biological odor

Analytical - see 2021 COC table

☑ Site Photo ☑ Sample Photo

Samplers I Torres

CMC Sampling Data Sheet

Site Identification RG South

Notes: Weather mostly Sunny 83°F

Full Suite Sample Date and Time:	6/27/24 1310
Full Sample Identification:	RG South 20240627
QC Samples: Duplicate / None	QC Sample ID:
QC samples require a DIFFERENT sample time than the environmental sample. QC Sample time:	

Full Suite Collection Point :

Full Suite Sample Volume: Collection Time Start: 12:00 End 12:45

Field Parameters for each 2-gallon grab

Grab	Time	Temp (°C)	pH	Specific Conductance (µS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)
1	1200	24.6	7.67	329.3	5.4	79
2	1215	26.9	8.26	337.4	5.4	80
3	1230	27.0	8.26	336.8	5.2	77
4	1245	27.4	8.28	334.9	4.7	70
Composite	1310	28.3	8.30	337.0	5.5	83

☐Turbid Water ☑Color Yellowish Brown ☑Solids Some Solids ☐Oil/Sheen ☐Foam ☑Odor Biological odor

Analytical - see 2021 COC table

☑Site Photo ☑Sample Photo

YSI SONDE CALIBRATION WORKSHEET

Last Revised 01/03/2007

Sonde ID: 21B10053 Date/Time: 6/26/24 / 1334 Technician: I Torres

Reason for Calibration: RG North Sampling & Bastion

Battery Voltage: _____ (6920 & 600 XLM only)

Specific Conductance:

Standard Used (mS) _____

Calibration Values		
Initial	Post Cal.	Cell Constant:*
		(Range: 5 +/- 0.5)

pH

Calibration Values			
	Initial	Post Cal.	mV
7 Buffer: (first)	7.02	7.01	4.7 (Range: 0 mV +/- 50)
4 Buffer: (second)	4.32	4.0	164.2 (Range: +177 from pH 7)
10 Buffer: (third)	9.92	10.01	-167.0 (Range: -177 from pH 7)

Note: Span between pH 7 and pH 4, and pH 7 and pH 10 should be aproximately 165 to 180 mV.

DO % Sat. Membrane Changed? Y/N _____ If yes, run probe at least 15 mins before calibration. Optimally, wait 6 to 8 hrs before calibration / use.

DO Charge _____ (Range: 50 +/- 25)

mm Hg 631.4

Calibration Values %		
Initial	Post Cal.	DO Gain*
77.3	100	(Range: 1 (0.7 to 1.5))

Turbidity Wiper Changed? Y/N _____ Wiper parks ~180 degrees from optic port? Y/N _____

Standards Values (NTUs)	Calibration Values	
	Initial	Post Cal.
Zero (Always First)		

Note: Use longer probe guard with black turb probe; shorter guard with grey probe.

Post Calibration DO Sensor Output Test

Turn off handset (650MDS). Wait 1 minute, turn handset on and enter "Run". DO % Sat. **must** start reading with a high value and descend to the calibration value in 1 to 2 minutes. **If it does not, reject.**

Note: Disregard the first two readings as they may be affected by the warm-up process.

Accept? _____ Reject? _____ See note in comments

Calibration Comments

* Found in: Main Menu –> Sonde Menu –> Advanced –> Calibration Constants

YSI SONDE CALIBRATION WORKSHEET

Revision 01/03/2007

Sonde ID: 21B100553 Date/Time: 6/27/24 1109 Technician: IT / JC

Reason for Calibration: RG Sampling

Battery Voltage: _____ (6920 & 600 XLM only)

Specific Conductance:

Standard Used (mS) _____

Calibration Values		
Initial	Post Cal.	Cell Constant:*
1413	1413	_____

(Range: 5 +/- 0.5)

pH

		Calibration Values			
		Initial	Post Cal.	mV	
7 Buffer:	(first)	4.00	4.01	158.1	(Range: 0 mV +/- 60)
4 Buffer:	(second)	7.00	7.00	1.7	(Range: +177 from pH 7)
10 Buffer:	(third)	10.07	10.07	_____	(Range: -177 from pH 7)

Note: Span between pH 7 and pH 4, and pH 7 and pH 10 should be aproximately 165 to 180 mV.

DO % Sat. Membrane Changed? Y/N _____ If yes, run probe at least 15 mins before calibration. Optimally, wait 6 to 8 hrs before calibration / use.

DO Charge _____ (Range: 50 +/- 25)

mm Hg 636.6

Calibration Values %		
Initial	Post Cal.	DO Gain*
83.8	96	_____

(Range: 1 (0.7 to 1.5))

Turbidity Wiper Changed? Y/N _____ Wiper parks ~180 degrees from optic port? Y/N _____

Standards Values (NTUs)	Calibration Values	
	Initial	Post Cal.
Zero (Always First)		

Note: Use longer probe guard with black turb probe; shorter guard with grey probe.

Post Calibration DO Sensor Output Test

Turn off handset (650MDS). Wait 1 minute, turn handset on and enter "Run". DO % Sat. must start reading with a high value and descend to the calibration value in 1 to 2 minutes. If it does not, reject.

Note: Disregard the first two readings as they may be affected by the warm-up process.

Accept? _____ Reject? _____ See note in comments

Calibration Comments

* Found in: Main Menu --> Sonde Menu --> Advanced --> Calibration Constants

eurofins | Environment Testing

Eurofins Environment Testing South Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

December 22, 2023

12/13/2023: Rio Grande North and Alameda; E.Coli samples only.

Patrick Chavez
AMAFCA
2600 Prospect Ave NE
Albuquerque, NM 87107
TEL: (505) 884-2215
FAX:

RE: CMC

OrderNo.: 2312802

Dear Patrick Chavez:

Eurofins Environment Testing South Central, LLC received 2 sample(s) on 12/13/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please do not hesitate to contact Eurofins Albuquerque for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Field Parameters:
- North
  Temp = 5.0^{0}C
  pH = 8.15
  Conductivity = 305
  Dissolved Oxygen = 10.8
- Alameda
  Temp = 7.1^{0}C
  pH = 7.73
  Conductivity = 310
  Dissolved Oxygen = 10.7

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AMAFCA
Project: CMC
Lab ID: 2312802-001 **Matrix:** AQUEOUS

Client Sample ID: RG North-20231213
Collection Date: 12/13/2023 12:00:00 PM
Received Date: 12/13/2023 1:54:00 PM

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
SM 9223B FECAL INDICATOR: E. COLI MPN							Analyst: **SMS**	
E. Coli	19.7	1.000	1.000		MPN/100	1	12/14/2023 12:33:00 PM	79369

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AMAFCA
Client Sample ID: RG Alameda-20231213
Project: CMC
Collection Date: 12/13/2023 1:25:00 PM
Lab ID: 2312802-002 **Matrix:** AQUEOUS **Received Date:** 12/13/2023 1:54:00 PM

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
SM 9223B FECAL INDICATOR: E. COLI MPN							Analyst: **SMS**	
E. Coli	55.6	1.000	1.000		MPN/100	1	12/14/2023 12:33:00 PM	79369

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

eurofins | Environment Testing

Eurofins Environment Testing South Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: AMAFCA Work Order Number: 2312802 RcptNo: 1

Received By: Juan Rojas 12/13/2023 1:54:00 PM

Completed By: Cheyenne Cason 12/13/2023 3:06:49 PM

Reviewed By: 12/13/23 @ 15:52

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☑ NA ☐
   Samples were collected the same day and chilled.
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☐ No ☐ NA ☑
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: TME 12/13/23

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	8.8	Good	Not Present	Yogi		

Chain-of-Custody Record

Client: ~~Daniel B Stephens~~ AMAFCA

Mailing Address: ~~6020 Academy~~

Phone #:

email or Fax#: pchavez@amafca.org

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ Rush

Project Name: CMC

Project #: Dry season FY24

Project Manager: Patrick Chavez

Sampler: DBSA - C. Johannesen

On Ice: ~~☐~~ Yes ☐ No

# of Coolers: 1 4 oz

Cooler Temp(Including CF): 8.7 +0.1=8.8 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2312802	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Ecoli - enumeration					
12-13-23	1200	AQ	RG North-20231213	1		001											X					
12-13-23	1325	AQ	RG Alameda-20231213	1		002											X					

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
12-13-23	13:34 / 1340			COO	12/13/23	13:54
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

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Eurofins Environment Testing South Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

March 05, 2024

12/13/2023: Rio Grande North and 12/14/2023: Rio Grande South

Patrick Chavez
AMAFCA
2600 Prospect Ave NE
Albuquerque, NM 87107
TEL: (505) 884-2215
FAX:

RE: CMC FY24 Dry

OrderNo.: 2312898

Dear Patrick Chavez:

Eurofins Environment Testing South Central, LLC received 2 sample(s) on 12/14/2023 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued January 26, 2023.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please do not hesitate to contact Eurofins Albuquerque for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Field Parameters:
- North
  Temp = 5.0°C
  pH = 8.15
  Conductivity = 305
  Dissolved Oxygen = 10.8
- South
  Temp = 9.2°C
  pH = 8.24
  Conductivity = 338
  Dissolved Oxygen = 9.0

Eurofins Environment Testing South Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Case Narrative

WO#: **2312898**
Date: **3/5/2024**

CLIENT: AMAFCA
Project: CMC FY24 Dry

Analytical Notes regarding phosphorous:
The “C” fraction contains the results for total phosphorous.
The “D” fraction contains the results for the dissolved phosphorous.

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AMAFCA
Client Sample ID: R6 North-20231213
Project: CMC FY24 Dry
Collection Date: 12/13/2023 12:00:00 PM
Lab ID: 2312898-001B
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
SM5210B: BOD							Analyst: **ejn**	
Biochemical Oxygen Demand	DO Depletion <2.0	2.00	2.00	H	mg/L	1	12/20/2023 9:50:00 AM	79411

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AMAFCA
Project: CMC FY24 Dry
Lab ID: 2312898-001C

Client Sample ID: R6 North-20231213
Collection Date: 12/13/2023 12:00:00 PM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 1664B							Analyst: **AB**	
N-Hexane Extractable Material	ND	8.53	9.58		mg/L	1	12/19/2023 11:40:00 AM	79435

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AMAFCA
Client Sample ID: R6 North-20231213
Project: CMC FY24 Dry
Collection Date: 12/13/2023 12:00:00 PM
Lab ID: 2312898-001D
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: **SNS**	
Nitrate+Nitrite as N	ND	0.11	1.0		mg/L	5	12/19/2023 2:58:45 PM	R10196
SM 4500 NH3: AMMONIA							Analyst: **MCA**	
Nitrogen, Ammonia	1.1	0.57	2.0	JD	mg/L	2	12/21/2023 9:18:00 AM	R10201
SM4500-H+B / 9040C: PH							Analyst: **MCA**	
pH	8.14			H	pH units	1	12/20/2023 1:56:15 PM	R10201
EPA METHOD 365.1: TOTAL PHOSPHOROUS							Analyst: **JMT**	
Phosphorus, Total (As P)	ND	0.050	0.050		mg/L	1	1/6/2024 1:42:00 PM	79761
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: **KS**	
Total Dissolved Solids	204	25.0	50.0		mg/L	1	12/21/2023 7:22:00 PM	79518
EPA 351.2: TKN							Analyst: **MRA**	
Nitrogen, Kjeldahl, Total	ND	0.50	0.50	H	mg/L	1	1/13/2024 3:06:27 PM	79864
SM 2540D: TSS							Analyst: **KS**	
Suspended Solids	6.0	4.0	4.0		mg/L	1	12/21/2023 10:31:00 AM	79522

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AMAFCA
Client Sample ID: R6 North-20231213
Project: CMC FY24 Dry
Collection Date: 12/13/2023 12:00:00 PM
Lab ID: 2312898-001E
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 365.1: TOTAL PHOSPHOROUS							Analyst: **JMT**	
Phosphorus, Total (As P)	ND	0.050	0.050		mg/L	1	1/6/2024 1:46:00 PM	79761

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AMAFCA
Client Sample ID: R6 North-20231213
Project: CMC FY24 Dry
Collection Date: 12/13/2023 12:00:00 PM
Lab ID: 2312898-001F
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: METALS							Analyst: **JRR**	
Calcium	36	0.053	1.0		mg/L	1	1/9/2024 5:14:22 PM	79508
Magnesium	6.6	0.033	1.0		mg/L	1	1/9/2024 5:14:22 PM	79508
SM2340B: HARDNESS							Analyst: **JRR**	
Hardness as CaCO3	120	2.5	6.6		mg/L	1	1/9/2024	R10233

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AMAFCA
Project: CMC FY24 Dry
Lab ID: 2312898-001G

Client Sample ID: R6 North-20231213
Collection Date: 12/13/2023 12:00:00 PM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA 200.8: DISSOLVED METALS							Analyst: **bcv**	
Copper	0.00055	0.000093	0.00050		mg/L	1	12/19/2023 1:35:18 PM	B101952
Lead	ND	0.000032	0.00050		mg/L	1	12/19/2023 1:35:18 PM	B101952

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AMAFCA
Client Sample ID: R6 North-20231213
Project: CMC FY24 Dry
Collection Date: 12/13/2023 12:00:00 PM
Lab ID: 2312898-001H
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
SM5220D: COD							Analyst: **AB**	
Chemical Oxygen Demand	110	50.0	50.0		mg/L	1	1/3/2024 10:26:00 AM	79689

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AMAFCA
Client Sample ID: R6South-20231214
Project: CMC FY24 Dry
Collection Date: 12/14/2023 2:45:00 PM
Lab ID: 2312898-002A
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
SM 9223B FECAL INDICATOR: E. COLI MPN							Analyst: **SMS**	
E. Coli	235.9	1.000	1.000		MPN/100	1	12/15/2023 12:00:00 PM	79402

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AMAFCA
Client Sample ID: R6South-20231214
Project: CMC FY24 Dry
Collection Date: 12/14/2023 2:45:00 PM
Lab ID: 2312898-002B
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
SM5210B: BOD							Analyst: **ejn**	
Biochemical Oxygen Demand	DO Depletion <2.0	2.00	2.00		mg/L	1	12/20/2023 9:50:00 AM	79411

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AMAFCA
Client Sample ID: R6South-20231214
Project: CMC FY24 Dry
Collection Date: 12/14/2023 2:45:00 PM
Lab ID: 2312898-002C
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 1664B							Analyst: **AB**	
N-Hexane Extractable Material	ND	8.73	9.80		mg/L	1	12/19/2023 11:40:00 AM	79435

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AMAFCA
Client Sample ID: R6South-20231214
Project: CMC FY24 Dry
Collection Date: 12/14/2023 2:45:00 PM
Lab ID: 2312898-002D
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: **SNS**	
Nitrate+Nitrite as N	0.32	0.11	1.0	J	mg/L	5	12/19/2023 3:14:28 PM	R10196
SM 4500 NH3: AMMONIA							Analyst: **MCA**	
Nitrogen, Ammonia	0.84	0.57	2.0	JD	mg/L	2	12/21/2023 9:18:00 AM	R10201
SM4500-H+B / 9040C: PH							Analyst: **MCA**	
pH	8.17			H	pH units	1	12/20/2023 2:00:25 PM	R10201
EPA METHOD 365.1: TOTAL PHOSPHOROUS							Analyst: **JMT**	
Phosphorus, Total (As P)	0.14	0.050	0.050		mg/L	1	1/6/2024 1:48:00 PM	79761
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: **KS**	
Total Dissolved Solids	226	25.0	50.0		mg/L	1	12/21/2023 7:22:00 PM	79518
EPA 351.2: TKN							Analyst: **MRA**	
Nitrogen, Kjeldahl, Total	ND	0.50	0.50		mg/L	1	1/13/2024 3:10:57 PM	79864
SM 2540D: TSS							Analyst: **KS**	
Suspended Solids	22	4.0	4.0		mg/L	1	12/22/2023 10:47:00 AM	79546

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AMAFCA
Client Sample ID: R6South-20231214
Project: CMC FY24 Dry
Collection Date: 12/14/2023 2:45:00 PM
Lab ID: 2312898-002E
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 365.1: TOTAL PHOSPHOROUS							Analyst: **JMT**	
Phosphorus, Total (As P)	0.065	0.050	0.050		mg/L	1	1/6/2024 1:49:00 PM	79761

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AMAFCA
Client Sample ID: R6South-20231214
Project: CMC FY24 Dry
Collection Date: 12/14/2023 2:45:00 PM
Lab ID: 2312898-002F
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: METALS							Analyst: **JRR**	
Calcium	39	0.053	1.0		mg/L	1	1/9/2024 5:18:26 PM	79508
Magnesium	7.0	0.033	1.0		mg/L	1	1/9/2024 5:18:26 PM	79508
SM2340B: HARDNESS							Analyst: **JRR**	
Hardness as CaCO3	130	2.5	6.6		mg/L	1	1/9/2024	R10233

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AMAFCA
Client Sample ID: R6South-20231214
Project: CMC FY24 Dry
Collection Date: 12/14/2023 2:45:00 PM
Lab ID: 2312898-002G
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA 200.8: DISSOLVED METALS							Analyst: **bcv**	
Copper	0.00075	0.000093	0.00050		mg/L	1	12/19/2023 1:37:35 PM	B101952
Lead	ND	0.000032	0.00050		mg/L	1	12/19/2023 1:37:35 PM	B101952

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AMAFCA
Client Sample ID: R6South-20231214
Project: CMC FY24 Dry
Collection Date: 12/14/2023 2:45:00 PM
Lab ID: 2312898-002H
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
SM5220D: COD							Analyst: **AB**	
Chemical Oxygen Demand	ND	50.0	50.0		mg/L	1	1/3/2024 10:26:00 AM	79689

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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Client:	Hall Environmental Analysis Lab	Work Order:	MDL0646
Address:	4901 Hawkins NE Suite D	Project:	2312898
	Albuquerque, NM 87109	Reported:	2/19/2024 09:01
Attn:	Andy Freeman		

Analytical Results Report

Sample Location:	2312898-001I (R6 North-20231213)		
Lab/Sample Number:	MDL0646-01	Collect Date:	12/13/23 12:00
Date Received:	12/19/23 14:44	Collected By:	
Matrix:	Water		

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
Volatiles							
Tetrahydrofuran	ND	ug/L	0.500	12/22/23 13:35	BKP	EPA 8260D	
Surrogate: 1,2-Dichlorobenzene-d4	*103%*		*70-130*	*12/22/23 13:35*	*BKP*	*EPA 8260D*	
Surrogate: 4-Bromofluorobenzene	*75.8%*		*70-130*	*12/22/23 13:35*	*BKP*	*EPA 8260D*	
Surrogate: Toluene-d8	*97.6%*		*70-130*	*12/22/23 13:35*	*BKP*	*EPA 8260D*	

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Sample Location:	2312898-001N (R6 North-20231213)		
Lab/Sample Number:	MDL0646-02	Collect Date:	12/13/23 12:00
Date Received:	12/19/23 14:44	Collected By:	
Matrix:	Water		

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
Semivolatiles							
Dieldrin	ND	ug/L	0.0100	12/27/23 20:52	GPB	EPA 608.3	
Surrogate: DCB	*83.6%*		*40-130*	*12/27/23 20:52*	*GPB*	*EPA 608.3*	
Benzidine	ND	ug/L	1.00	12/29/23 0:29	MAH	EPA 625.1	
Benzo[a]anthracene	ND	ug/L	0.500	12/29/23 0:29	MAH	EPA 625.1	
Benzo[a]pyrene	ND	ug/L	0.500	12/29/23 0:29	MAH	EPA 625.1	
Benzo[b]fluoranthene	ND	ug/L	0.500	12/29/23 0:29	MAH	EPA 625.1	
Benzo[k]fluoranthene	ND	ug/L	0.500	12/29/23 0:29	MAH	EPA 625.1	
bis(2-Ethylhexyl)phthalate	ND	ug/L	0.500	12/29/23 0:29	MAH	EPA 625.1	
Chrysene	ND	ug/L	0.500	12/29/23 0:29	MAH	EPA 625.1	
Dibenz[a,h]anthracene	ND	ug/L	0.500	12/29/23 0:29	MAH	EPA 625.1	
Dibenzofuran	ND	ug/L	0.500	12/29/23 0:29	MAH	EPA 625.1	
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.500	12/29/23 0:29	MAH	EPA 625.1	
Pentachlorophenol	ND	ug/L	0.500	12/29/23 0:29	MAH	EPA 625.1	
Surrogate: 2,4,6-Tribromophenol	*92.4%*		*47-122*	*12/29/23 0:29*	*MAH*	*EPA 625.1*	
Surrogate: 2-Fluorobiphenyl	*81.2%*		*49-115*	*12/29/23 0:29*	*MAH*	*EPA 625.1*	
Surrogate: 2-Fluorophenol	*78.6%*		*30-115*	*12/29/23 0:29*	*MAH*	*EPA 625.1*	
Surrogate: Nitrobenzene-d5	*76.2%*		*51-110*	*12/29/23 0:29*	*MAH*	*EPA 625.1*	
Surrogate: Phenol-2,3,4,5,6-d5	*81.2%*		*40-120*	*12/29/23 0:29*	*MAH*	*EPA 625.1*	
Surrogate: Terphenyl-d14	*106%*		*50-130*	*12/29/23 0:29*	*MAH*	*EPA 625.1*	

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Sample Location:	2312898-002I (R6 South-20231214)		
Lab/Sample Number:	MDL0646-03	Collect Date:	12/14/23 14:45
Date Received:	12/19/23 14:44	Collected By:	
Matrix:	Water		

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
Volatiles							
Tetrahydrofuran	ND	ug/L	0.500	12/22/23 14:07	BKP	EPA 8260D	
Surrogate: 1,2-Dichlorobenzene-d4	*104%*		*70-130*	*12/22/23 14:07*	*BKP*	*EPA 8260D*	
Surrogate: 4-Bromofluorobenzene	*76.0%*		*70-130*	*12/22/23 14:07*	*BKP*	*EPA 8260D*	
Surrogate: Toluene-d8	*98.1%*		*70-130*	*12/22/23 14:07*	*BKP*	*EPA 8260D*	

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Sample Location: 2312898-002N (R6 South-20231214)
Lab/Sample Number: MDL0646-04 Collect Date: 12/13/23 12:00
Date Received: 12/19/23 14:44 Collected By:
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
Semivolatiles							
Dieldrin	ND	ug/L	0.0100	12/27/23 21:10	GPB	EPA 608.3	
Surrogate: DCB	*90.2%*		*40-130*	*12/27/23 21:10*	*GPB*	*EPA 608.3*	
Benzidine	ND	ug/L	1.00	12/29/23 0:56	MAH	EPA 625.1	
Benzo[a]anthracene	ND	ug/L	0.500	12/29/23 0:56	MAH	EPA 625.1	
Benzo[a]pyrene	ND	ug/L	0.500	12/29/23 0:56	MAH	EPA 625.1	
Benzo[b]fluoranthene	ND	ug/L	0.500	12/29/23 0:56	MAH	EPA 625.1	
Benzo[k]fluoranthene	ND	ug/L	0.500	12/29/23 0:56	MAH	EPA 625.1	
bis(2-Ethylhexyl)phthalate	ND	ug/L	0.500	12/29/23 0:56	MAH	EPA 625.1	
Chrysene	ND	ug/L	0.500	12/29/23 0:56	MAH	EPA 625.1	
Dibenz[a,h]anthracene	ND	ug/L	0.500	12/29/23 0:56	MAH	EPA 625.1	
Dibenzofuran	ND	ug/L	0.500	12/29/23 0:56	MAH	EPA 625.1	
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.500	12/29/23 0:56	MAH	EPA 625.1	
Pentachlorophenol	ND	ug/L	0.500	12/29/23 0:56	MAH	EPA 625.1	
Surrogate: 2,4,6-Tribromophenol	*90.8%*		*47-122*	*12/29/23 0:56*	*MAH*	*EPA 625.1*	
Surrogate: 2-Fluorobiphenyl	*86.7%*		*49-115*	*12/29/23 0:56*	*MAH*	*EPA 625.1*	
Surrogate: 2-Fluorophenol	*78.2%*		*30-115*	*12/29/23 0:56*	*MAH*	*EPA 625.1*	
Surrogate: Nitrobenzene-d5	*84.8%*		*51-110*	*12/29/23 0:56*	*MAH*	*EPA 625.1*	
Surrogate: Phenol-2,3,4,5,6-d5	*82.5%*		*40-120*	*12/29/23 0:56*	*MAH*	*EPA 625.1*	
Surrogate: Terphenyl-d14	*108%*		*50-130*	*12/29/23 0:56*	*MAH*	*EPA 625.1*	

Authorized Signature,

Justin Doty For Todd Taruscio, Laboratory Manager

PQL	Practical Quantitation Limit
ND	Not Detected
MCL	EPA's Maximum Contaminant Level
Dry	Sample results reported on a dry weight basis
*	Not a state-certified analyte

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Quality Control Data

Semivolatiles

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BDL0839 - Pesticides										
Blank (BDL0839-BLK1)					Prepared: 12/20/2023 Analyzed: 12/27/2023					
Dieldrin	ND		0.0100	ug/L						
Surrogate: DCB			*1.36*	*ug/L*	*1.25*		*109*	*40-130*		
LCS (BDL0839-BS1)					Prepared: 12/20/2023 Analyzed: 12/27/2023					
Dieldrin	0.488		0.0100	ug/L	0.500		97.6	73-136		
Surrogate: DCB			*1.15*	*ug/L*	*1.25*		*91.7*	*40-130*		
Matrix Spike (BDL0839-MS1)		**Source: MDL0646-02**			Prepared: 12/20/2023 Analyzed: 12/27/2023					
Dieldrin	0.494		0.0100	ug/L	0.500	ND	98.7	66-129		
Surrogate: DCB			*1.00*	*ug/L*	*1.25*		*80.1*	*40-130*		
Matrix Spike Dup (BDL0839-MSD1)		**Source: MDL0646-02**			Prepared: 12/20/2023 Analyzed: 12/27/2023					
Dieldrin	0.507		0.0100	ug/L	0.500	ND	101	66-129	2.67	30
Surrogate: DCB			*1.09*	*ug/L*	*1.25*		*86.9*	*40-130*		
Batch: BDL0939 - SVOC Water										
Blank (BDL0939-BLK1)					Prepared: 12/20/2023 Analyzed: 12/28/2023					
Benzidine	ND		1.00	ug/L						
Di (2-ethylhexyl) phthalate	ND		0.500	ug/L						
Indeno(1,2,3-cd)pyrene	ND		0.500	ug/L						
Dibenzofuran	ND		0.500	ug/L						
Dibenz(a,h)anthracene	ND		0.500	ug/L						
Chrysene	ND		0.500	ug/L						
Pentachlorophenol	ND		0.500	ug/L						
Benzo[k]fluoranthene	ND		0.500	ug/L						
Benzo[b]fluoranthene	ND		0.500	ug/L						
Benzo[a]anthracene	ND		0.500	ug/L						
Benzo[a]pyrene	ND		0.500	ug/L						
Surrogate: Phenol-2,3,4,5,6-d5			*43.7*	*ug/L*	*50.0*		*87.5*	*40-120*		
Surrogate: Nitrobenzene-d5			*21.0*	*ug/L*	*25.0*		*84.0*	*51-110*		
Surrogate: Terphenyl-d14			*27.5*	*ug/L*	*25.0*		*110*	*50-130*		
Surrogate: 2-Fluorophenol			*39.5*	*ug/L*	*50.0*		*78.9*	*30-115*		
Surrogate: 2-Fluorobiphenyl			*21.7*	*ug/L*	*25.0*		*86.6*	*49-115*		
Surrogate: 2,4,6-Tribromophenol			*44.8*	*ug/L*	*50.0*		*89.6*	*47-122*		

Quality Control Data
(Continued)

Semivolatiles (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BDL0939 - SVOC Water (Continued)										
LCS (BDL0939-BS1)					Prepared: 12/20/2023 Analyzed: 12/28/2023					
Indeno(1,2,3-cd)pyrene	4.19		0.500	ug/L	5.00		83.8	67-120		
Benzo[k]fluoranthene	5.01		0.500	ug/L	5.00		100	70-122		
Dibenzofuran	4.03		0.500	ug/L	5.00		80.6	70-120		
Dibenz(a,h)anthracene	4.30		0.500	ug/L	5.00		86.0	64-120		
Benzo[a]anthracene	4.61		0.500	ug/L	5.00		92.2	70-120		
Di (2-ethylhexyl) phthalate	4.85		0.500	ug/L	5.00		97.0	61-141		
Benzo[b]fluoranthene	4.63		0.500	ug/L	5.00		92.6	70-120		
Chrysene	4.80		0.500	ug/L	5.00		96.0	70-120		
Benzo[a]pyrene	4.19		0.500	ug/L	5.00		83.8	64-120		
Pentachlorophenol	4.41		0.500	ug/L	5.00		88.2	61-120		
Surrogate: Phenol-2,3,4,5,6-d5			*39.4*	*ug/L*	*50.0*		*78.8*	*40-120*		
Surrogate: Nitrobenzene-d5			*21.2*	*ug/L*	*25.0*		*84.6*	*51-110*		
Surrogate: Terphenyl-d14			*25.7*	*ug/L*	*25.0*		*103*	*50-130*		
Surrogate: 2-Fluorophenol			*34.9*	*ug/L*	*50.0*		*69.7*	*30-115*		
Surrogate: 2-Fluorobiphenyl			*21.9*	*ug/L*	*25.0*		*87.7*	*49-115*		
Surrogate: 2,4,6-Tribromophenol			*43.8*	*ug/L*	*50.0*		*87.7*	*47-122*		
LCS Dup (BDL0939-BSD1)					Prepared: 12/20/2023 Analyzed: 12/28/2023					
Dibenz(a,h)anthracene	4.32		0.500	ug/L	5.00		86.4	64-120	0.464	25
Dibenzofuran	4.36		0.500	ug/L	5.00		87.2	70-120	7.87	25
Indeno(1,2,3-cd)pyrene	4.22		0.500	ug/L	5.00		84.4	67-120	0.713	25
Pentachlorophenol	4.68		0.500	ug/L	5.00		93.6	61-120	5.94	25
Chrysene	4.76		0.500	ug/L	5.00		95.2	70-120	0.837	25
Benzo[a]anthracene	4.56		0.500	ug/L	5.00		91.2	70-120	1.09	25
Di (2-ethylhexyl) phthalate	4.62		0.500	ug/L	5.00		92.4	61-141	4.86	25
Benzo[a]pyrene	4.40		0.500	ug/L	5.00		88.0	64-120	4.89	25
Benzo[b]fluoranthene	4.62		0.500	ug/L	5.00		92.4	70-120	0.216	25
Benzo[k]fluoranthene	5.00		0.500	ug/L	5.00		100	70-122	0.200	25
Surrogate: Phenol-2,3,4,5,6-d5			*46.2*	*ug/L*	*50.0*		*92.4*	*40-120*		
Surrogate: Nitrobenzene-d5			*23.2*	*ug/L*	*25.0*		*92.8*	*51-110*		
Surrogate: Terphenyl-d14			*26.0*	*ug/L*	*25.0*		*104*	*50-130*		
Surrogate: 2-Fluorophenol			*46.5*	*ug/L*	*50.0*		*93.0*	*30-115*		
Surrogate: 2-Fluorobiphenyl			*23.9*	*ug/L*	*25.0*		*95.7*	*49-115*		
Surrogate: 2,4,6-Tribromophenol			*48.7*	*ug/L*	*50.0*		*97.4*	*47-122*		

Quality Control Data
(Continued)

Volatiles

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BDL0895 - VOC										
Blank (BDL0895-BLK1)					Prepared & Analyzed: 12/21/2023					
Tetrahydrofuran	ND		0.500	ug/L						
Surrogate: 4-Bromofluorobenzene			*19.1*	*ug/L*	*20.0*		*95.4*	*70-130*		
Surrogate: Toluene-d8			*19.5*	*ug/L*	*20.0*		*97.7*	*70-130*		
Surrogate: 1,2-Dichlorobenzene-d4			*20.0*	*ug/L*	*20.0*		*100*	*70-130*		
LCS (BDL0895-BS1)					Prepared & Analyzed: 12/22/2023					
Tetrahydrofuran	20.0		0.500	ug/L	20.0		100	80-120		

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Quality Control Data
(Continued)

Volatiles (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BDL0895 - VOC (Continued)										
LCS (BDL0895-BS1)					Prepared & Analyzed: 12/22/2023					
Surrogate: Toluene-d8			*20.0*	*ug/L*	*20.0*		*99.8*	*70-130*		
Surrogate: 4-Bromofluorobenzene			*16.0*	*ug/L*	*20.0*		*80.2*	*70-130*		
Surrogate: 1,2-Dichlorobenzene-d4			*20.0*	*ug/L*	*20.0*		*100*	*70-130*		

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CHAIN OF CUSTODY RECORD

PAGE: 1 OF: 1

MDL0646

Due 01/04/24

SUB CONTRATOR: **Anatek ID**	COMPANY: **Anatek Labs, Inc.**	PHONE: **(208) 883-2839**	FAX: **(208) 882-9246**
ADDRESS: **1282 Alturas Dr**		ACCOUNT #:	EMAIL:
CITY, STATE, ZIP: **Moscow, ID 83843**			

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS
1	2312898-001I	R6 North-20231213	VOAHCL	Aqueous	12/13/2023 12:00:00 PM	3	Tetrahydrofuran by 8260 only
2	2312898-001N	R6 North-20231213	1LAMGU	Aqueous	12/13/2023 12:00:00 PM	2	608, 625 See Attached-
3	2312898-002I	R6South-20231214	VOAHCL	Aqueous	12/14/2023 2:45:00 PM	3	Tetrahydrofuran by 8260 only
4	2312898-002N	R6South-20231214	1LAMGU	Aqueous	12/14/2023 2:45:00 PM	2	608, 625 See Attached-

SPECIAL INSTRUCTIONS / COMMENTS:

Include the LAB ID and CLIENT SAMPLE ID on final reports. Email results to Hall.Lab@et.eurofinsus.com. For Questions email Hall.samplecontrol@et.eurofinsus.com. Please return all coolers and blue ice. Thank you.

Relinquished By:	Date: 12/15/2023	Time: 2:48 PM	Received By:	Date: 12/19/23	Time: 14:44
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

TAT: Standard ☑ **RUSH** Next BD ☐ 2nd BD ☐ 3rd BD ☐

REPORT TRANSMITTAL DESIRED:

☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

FOR LAB USE ONLY

Temp of samples _____ °C Attempt to Cool ? _____

Comments _____

Collaborative Monitoring Cooperative - Analyses List
Attach to Chain of Custody

Analyte (Bold Indicates WQS)	CAS #	Fraction	Method #	MDL (ug/L)
Hardness (Ca + Mg)	NA	Total	200.7	2.4
Lead	7439-92-1	Dissolved	200.8	0.09
Copper	7440-50-8	Dissolved	200.8	1.06
Ammonia + organic nitrogen	7664-41-7	Total	350.1	31.32
Total Kjehldal Nitrogen	17778-88-0	Total	351.2	58.78
Nitrate + Nitrite	14797-55-8	Total	353.2	10.17
Polychlorinated biphenyls (PCBs)	1336-36-3	Total	1668	0.014
Tetrahydrofuran (THF)	109-99-9	Total	8260C	7.9
bis(2-Ethylhexyl)phthalate	117-81-7	Total	8270D	0.2
Dibenzofuran	132-64-9	Total	8270D	0.2
Indeno(1,2,3-cd)pyrene	193-39-5	Total	8270D	0.2
Benzo(b)fluoranthene	205-99-2	Total	8270D	0.1
Benzo(k)fluoranthene	207-08-9	Total	8270D	0.1
Chrysene	218-01-9	Total	8270D	0.2
Benzo(a)pyrene	50-32-8	Total	8270D	0.3
Dibenzo(a,h)anthracene	53-70-3	Total	8270D	0.3
Benzo(a)anthracene	56-55-3	Total	8270D	0.2
Dieldrin	60-57-1	Total	8270D	0.1
Pentachlorophenol	87-86-5	Total	8270D	0.2
Benzidine	92-87-5	Total	8270D	0.1
Chemical Oxygen Demand	E1641638[2]	Total	HACH	5100
Gross alpha (adjusted)	NA	Total	Method 900	0.1 pCi/L
Total Dissolved Solids	E1642222[2]	Total	SM 2540C	60.4
Total Suspended Solids	NA	Total	SM 2540D	3450
Biological Oxygen Demand	N/A	Total	Standard Methods	930
Oil and Grease		Total	1664A	5000
Ecoli			SM 9223B	
pH			SM 4500	
Phosphorus		Dissolved	365.1	100
Phosphorus		Total	365.1	100
Chromium IV		Total	3500Cr C-2011	100

Anatek Labs, Inc.

Sample Receipt and Preservation Form

Client Name: Hall

TAT: (Normal) RUSH: _____ days

Samples Received From: (FedEx) UPS USPS Client Courier Other: —

Custody Seal on Cooler/Box: (Yes) No Custody Seals Intact: (Yes) No N/A

Number of Coolers/Boxes: 1 Type of Ice: Wet Ice (Ice Packs) Dry Ice None

Packing Material: (Bubble Wrap) Bags Foam/Peanuts (Paper) None Other: —

Cooler Temp As Read (°C): 3.8 Cooler Temp Corrected (°C): — Thermometer Used: 125

				Comments:
Samples Received Intact?	(Yes)	No	N/A	
Chain of Custody Present/Complete?	(Yes)	No	N/A	
Labels and Chains Agree?	(Yes)	No	N/A	
Samples Received Within Hold Time?	(Yes)	No	N/A	
Correct Containers Received?	(Yes)	No	N/A	
Anatek Bottles Used?	Yes	(No)	Unknown	
Total Number of Sample Bottles Received: 10				

				Initial pH:	pH Paper ID:
Samples Properly Preserved?	(Yes)	No	N/A	<2 or	
If No, record preservation and pH-after details					
VOC Vials Free of Headspace (<6mm)?	(Yes)	No	N/A		
VOC Trip Blanks Present?	Yes	(No)	N/A		

Record preservatives (and lot numbers, if known) for containers below:

GIL-608/625 x 4

G44 HCl 8260 by Tetrahydrofuran x 6

Notes, comments, etc. (also use this space if contacting the client - record names and date/time)

Received/Inspected By: SM Date/Time: 12/19/23 14:44

ANALYTICAL REPORT

December 27, 2023

Hall Environmental Analysis Laboratory

Sample Delivery Group:	L1689671
Samples Received:	12/19/2023
Project Number:	
Description:	

Report To: Andy Freeman
4901 Hawkins NE
Albuquerque, NM 87109

Entire Report Reviewed By:

John Hawkins
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

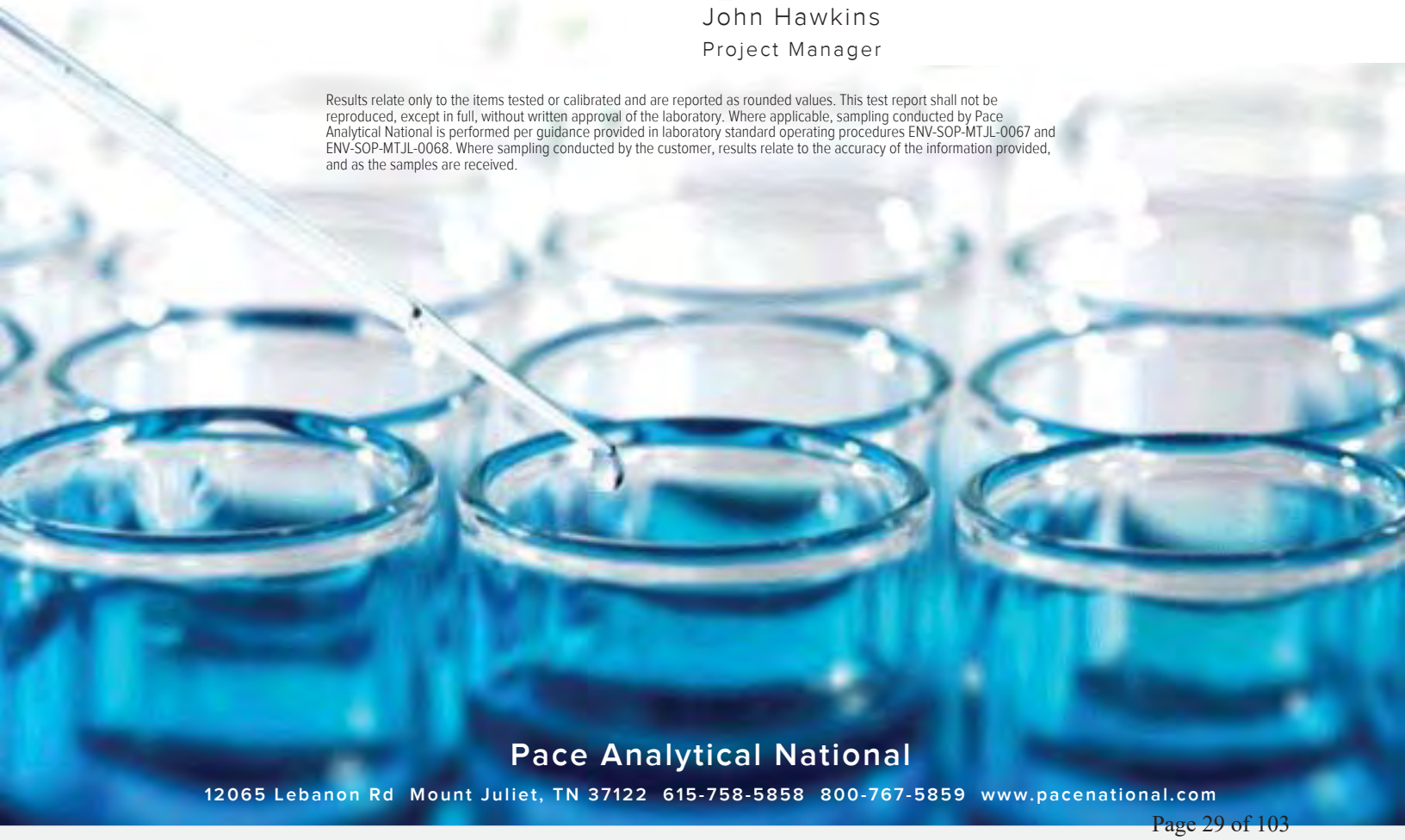

TABLE OF CONTENTS

2312898-001K R6 NORTH-20231213 L1689671-01 GW

Collected by	Collected date/time	Received date/time
	12/13/23 12:00	12/19/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 3500Cr C-2011	WG2192881	1	12/27/23 02:50	12/27/23 02:50	SET	Mt. Juliet, TN

2312898-002K R6SOUTH-20231214 L1689671-02 GW

Collected by	Collected date/time	Received date/time
	12/14/23 14:45	12/19/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 3500Cr C-2011	WG2192881	1	12/27/23 03:01	12/27/23 03:01	SET	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

John Hawkins
Project Manager

Wet Chemistry by Method 3500Cr C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.000500	1	12/27/2023 02:50	WG2192881

Wet Chemistry by Method 3500Cr C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.000500	1	12/27/2023 03:01	WG2192881

Method Blank (MB)

(MB) R4016926-1 12/27/23 01:29

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Hexavalent Chromium	U		0.000150	0.000500

L1688418-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1688418-02 12/27/23 02:06 • (DUP) R4016926-3 12/27/23 02:17

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	0.00166	0.00165	1	0.871		20

L1691175-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1691175-01 12/27/23 04:51 • (DUP) R4016926-5 12/27/23 05:02

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	ND	ND	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R4016926-2 12/27/23 01:40

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Hexavalent Chromium	0.00200	0.00201	101	90.0-110	

L1689942-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1689942-01 12/27/23 03:12 • (MS) R4016926-4 12/27/23 03:23

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Hexavalent Chromium	0.0500	ND	0.0454	90.8	1	90.0-110	

L1691177-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1691177-01 12/27/23 05:35 • (MS) R4016926-6 12/27/23 06:07 • (MSD) R4016926-7 12/27/23 06:18

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Hexavalent Chromium	0.0500	ND	0.0465	0.0463	92.9	92.6	1	90.0-110			0.328	20

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

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CHAIN OF CUSTODY RECORD

PAGE: 1 OF: 1

Eurofins Environment Testing South Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975
FAX: 505-345-4107
Website: www.hallenvironmental.com

SUB CONTRATOR:	Pace TN	COMPANY: PACE TN	PHONE: (800) 767-5859	FAX: (615) 758-5859	
ADDRESS:	12065 Lebanon Rd		ACCOUNT #:	EMAIL:	A120
CITY, STATE, ZIP:	Mt. Juliet, TN 37122				

L1689671

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS
1	2312898-001K	R6 North-20231213	120mL	Aqueous	12/13/2023 12:00:00 PM	1	Cr6 -01
2	2312898-002K	R6South-20231214	120mL	Aqueous	12/14/2023 2:45:00 PM	1	Cr6 -02

Sample Receipt Checklist

COC Seal Present/Intact:	__Y__N	If Applicable	
COC Signed/Accurate:	✓Y__N	VOA Zero Headspace:	__Y__N
Bottles arrive intact:	✓Y__N	Pres. Correct/Check:	__Y__N
Correct bottles used:	✓Y__N		
Sufficient volume sent:	✓Y__N		
RA Screen <0.5 mR/hr:	✓Y__N		

SPECIAL INSTRUCTIONS / COMMENTS:

Include the LAB ID and CLIENT SAMPLE ID on final reports. Email results to Hall.Lab@et.eurofinsus.com. For Questions email Hall.samplecontrol@et.eurofinsus.com. Please return all coolers and blue ice. Thank you.

Relinquished By:	Date: 12/15/2023	Time: 8:45 AM	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date: 12-19-23	Time: 9:00

TAT: Standard ☑ RUSH Next BD ☐ 2nd BD ☐ 3rd BD ☐

REPORT TRANSMITTAL DESIRED:
☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

FOR LAB USE ONLY
Temp of samples MSAB 2.7+0.2.4 °C Attempt to Cool? _____
Comments: 6643 4204 9561

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Data Submittal
EET South Central Hall Environmental Analysis Laboratory
4901 Hawkins NE
Suite D
Albuquerque, New Mexico 87109

Generated 1/18/2024 3:40:00 PM

JOB DESCRIPTION

2312898
2312898

JOB NUMBER

160-52632-1

Eurofins St. Louis
13715 Rider Trail North
Earth City MO 63045

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization

Generated
1/18/2024 3:40:00 PM

Authorized for release by
Erika Jordan, Project Manager
erika.jordan@et.eurofinsus.com
(314)298-8566

Table of Contents

CASE NARRATIVE

Client: Hall Environmental Analysis Laboratory

Project: 2312898

Report Number: 160-52632-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition, all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method.

Eurofins Environment Testing attests to the validity of the laboratory data generated by Eurofins facilities reported herein. All analyses performed by Eurofins Environment Testing facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins Environment Testing's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report.

Calculations are performed before rounding to avoid round-off errors in calculated results.

Proper preservation was noted for the methods performed on these samples, unless otherwise detailed below.

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

The matrix for the Method Blank and LCS/LCSD is as close to the samples as can be reasonably achieved. Detailed information can be found in the most current revision of the associated SOP.

The method blank (MB) z-score is within limits, unless stated otherwise below.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.

Reference the chain of custody and receipt report for any variations on receipt conditions.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

Receipt
The samples were received on 12/19/2023 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved. The temperature of the cooler at receipt time was 5.6°C

Method 200.8 - Metals (ICP/MS)
Samples 2312898-001M/ R6 North-20231213 (52632-1) and 2312898-002M/ R6 South-20231214 (52632-2) were analyzed for Metals (ICP/MS). The samples were prepared on 12/20/2023 and analyzed on 12/21/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method 900.0 - Gross Alpha and Gross Beta Radioactivity
Samples 2312898-001M/ R6 North-20231213 (52632-1) and 2312898-002M/ R6 South-20231214 (52632-2) were analyzed for Gross Alpha and Gross Beta Radioactivity. The samples were prepared on 12/21/2023 and analyzed on 1/12/2024.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Gross Alpha Adj - Gross Alpha Adjusted

Job ID: 160-52632-1 (Continued) Eurofins St. Louis

Samples 2312898-001M/ R6 North-20231213 (52632-1) and 2312898-002M/ R6 South-20231214 (52632-2) were analyzed for Gross Alpha Adjusted. The samples were prepared on 12/20/2023 and analyzed on 12/21/2023 and 1/12/2024.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

eurofins | Environment Testing

CHAIN OF CUSTODY RECORD

PAGE: 1 OF: 1

Eurofins Environment Testing South Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975
FAX: 505-345-4107
Website: www.hallenvironmental.com

SUB CONTRACTOR	**Eurofins St. Louis**	COMPANY	**Eurofins TestAmerica**	PHONE **(314) 298-8566**	FAX **(314) 298-8757**
ADDRESS	**13715 Rider Trail North**			ACCOUNT #	EMAIL
CITY, STATE, ZIP	**Earth City, MO 63045**				

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS
1	2312898-001M	R6 North-20231213	1LHDPEHNO3	Aqueous	12/13/2023 12:00:00 PM	2	Adjusted Gross Alpha -Pease Apply ICO Pricing-
2	2312898-002M	R6South-20231214	1LHDPEHNO3	Aqueous	12/14/2023 2:45:00 PM	2	Adjusted Gross Alpha -Pease Apply ICO Pricing-

160-52632 Chain of Custody

SPECIAL INSTRUCTIONS / COMMENTS:

Include the LAB ID and CLIENT SAMPLE ID on final reports. Email results to Hall.Lab@et.eurofinsus.com. For Questions email Hall.samplecontrol@et.eurofinsus.com. Please return all coolers and blue ice. Thank you.

Relinquished By	Date 12/15/2023	Time 2:49 PM	Received By	Date 12/19/23	Time 0950
Relinquished By	Date	Time	Received By	Date	Time
Relinquished By	Date	Time	Received By	Date	Time

TAT: Standard ☐ **RUSH** Next BD ☐ 2nd BD ☐ 3rd BD ☐

REPORT TRANSMITTAL DESIRED:
☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

FOR LAB USE ONLY
Temp of samples _____ °C Attempt to Cool ? _____
Comments _____

Login Sample Receipt Checklist

Client: EET South Central Hall Environmental Analysis Laboratory

Job Number: 160-52632-1
SDG Number: 2312898

Login Number: 52632
List Number: 1
Creator: Thornley, Richard W

List Source: Eurofins St. Louis

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Method Summary

Client: EET South Central Hall Environmental Analysis Laboratory
Project/Site: 2312898

Job ID: 160-52632-1
SDG: 2312898

Method	Method Description	Protocol	Laboratory
200.8	Metals (ICP/MS)	EPA	EET SL
900.0	Gross Alpha and Gross Beta Radioactivity	EPA	EET SL
Gross Alpha Adj	Gross Alpha Adjusted	SM	EET SL
200.7/200.8	Preparation, Metals	EPA	EET SL
Evaporation	Preparation, Evaporation	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: EET South Central Hall Environmental Analysis Laboratory
Project/Site: 2312898

Job ID: 160-52632-1
SDG: 2312898

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-52632-1	2312898-001M/ R6 North-20231213	Water	12/13/23 12:00	12/19/23 09:30
160-52632-2	2312898-002M/ R6 South-20231214	Water	12/14/23 14:45	12/19/23 09:30

Client Sample ID: 2312898-001M/ R6 North-20231213

Lab Sample ID: 160-52632-1
Date Collected: 12/13/23 12:00
Matrix: Water
Date Received: 12/19/23 09:30

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	2.0		1.0	0.15	ug/L		12/20/23 13:07	12/21/23 18:29	2

Method: EPA 900.0 - Gross Alpha and Gross Beta Radioactivity

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Gross Alpha	3.56		1.67	1.72	3.00	2.17	pCi/L	12/21/23 09:43	01/12/24 07:28	1

Method: SM Gross Alpha Adj - Gross Alpha Adjusted

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Adjusted Gross Alpha	2.25		1.67	1.72	3.00	2.17	pCi/L		01/12/24 07:28	1

Client Sample ID: 2312898-002M/ R6 South-20231214

Lab Sample ID: 160-52632-2
Date Collected: 12/14/23 14:45
Matrix: Water
Date Received: 12/19/23 09:30

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	2.3		1.0	0.15	ug/L		12/20/23 13:07	12/21/23 18:43	2

Method: EPA 900.0 - Gross Alpha and Gross Beta Radioactivity

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Gross Alpha	2.48		1.38	1.40	3.00	1.88	pCi/L	12/21/23 09:43	01/12/24 07:29	1

Method: SM Gross Alpha Adj - Gross Alpha Adjusted

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Adjusted Gross Alpha	0.945	U	1.39	1.43	3.00	1.88	pCi/L		01/12/24 07:29	1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 160-641644/1-A
Matrix: Water
Analysis Batch: 641944
Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641644

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	ND		1.0	0.15	ug/L		12/20/23 13:07	12/21/23 18:01	2

Lab Sample ID: LCS 160-641644/2-A
Matrix: Water
Analysis Batch: 641944
Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641644

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Uranium	1000	1080		ug/L		108	85 - 115

Lab Sample ID: 160-52632-1 MS
Matrix: Water
Analysis Batch: 641944
Client Sample ID: 2312898-001M/ R6 North-20231213
Prep Type: Total/NA
Prep Batch: 641644

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Uranium	2.0		1000	1070		ug/L		107	70 - 130

Lab Sample ID: 160-52632-1 MSD
Matrix: Water
Analysis Batch: 641944
Client Sample ID: 2312898-001M/ R6 North-20231213
Prep Type: Total/NA
Prep Batch: 641644

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Uranium	2.0		1000	1070		ug/L		107	70 - 130	0	20

Method: 900.0 - Gross Alpha and Gross Beta Radioactivity

Lab Sample ID: MB 160-641799/1-A
Matrix: Water
Analysis Batch: 643779
Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641799

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Gross Alpha	-0.09837	U	0.637	0.637	3.00	1.24	pCi/L	12/21/23 09:43	01/10/24 07:42	1

Lab Sample ID: LCS 160-641799/2-A
Matrix: Water
Analysis Batch: 643779
Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641799

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Gross Alpha	49.3	53.21		7.79	3.00	2.08	pCi/L	108	75 - 125

QC Association Summary

Client: EET South Central Hall Environmental Analysis Laboratory
Project/Site: 2312898

Job ID: 160-52632-1
SDG: 2312898

Metals

Prep Batch: 641644

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-52632-1	2312898-001M/ R6 North-20231213	Total/NA	Water	200.7/200.8	
160-52632-2	2312898-002M/ R6 South-20231214	Total/NA	Water	200.7/200.8	
MB 160-641644/1-A	Method Blank	Total/NA	Water	200.7/200.8	
LCS 160-641644/2-A	Lab Control Sample	Total/NA	Water	200.7/200.8	
160-52632-1 MS	2312898-001M/ R6 North-20231213	Total/NA	Water	200.7/200.8	
160-52632-1 MSD	2312898-001M/ R6 North-20231213	Total/NA	Water	200.7/200.8	

Analysis Batch: 641944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-52632-1	2312898-001M/ R6 North-20231213	Total/NA	Water	200.8	641644
160-52632-2	2312898-002M/ R6 South-20231214	Total/NA	Water	200.8	641644
MB 160-641644/1-A	Method Blank	Total/NA	Water	200.8	641644
LCS 160-641644/2-A	Lab Control Sample	Total/NA	Water	200.8	641644
160-52632-1 MS	2312898-001M/ R6 North-20231213	Total/NA	Water	200.8	641644
160-52632-1 MSD	2312898-001M/ R6 North-20231213	Total/NA	Water	200.8	641644

Rad

Prep Batch: 641799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-52632-1	2312898-001M/ R6 North-20231213	Total/NA	Water	Evaporation	
160-52632-2	2312898-002M/ R6 South-20231214	Total/NA	Water	Evaporation	
MB 160-641799/1-A	Method Blank	Total/NA	Water	Evaporation	
LCS 160-641799/2-A	Lab Control Sample	Total/NA	Water	Evaporation	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Reporting Alberquerque
Eurofins Environment Testing South Central LLC
4901 Hawkins NE
Albuquerque, New Mexico 87109

Generated 1/25/2024 10:58:43 AM

JOB DESCRIPTION

2312898

JOB NUMBER

320-108192-1

Eurofins Sacramento
880 Riverside Parkway
West Sacramento CA 95605

See page two for job notes and contact information.

Job Notes

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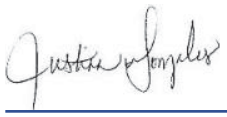

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Authorized for release by
Justinn Gonzales, Project Manager I
Justinn.Gonzales@et.eurofinsus.com
(916)374-4344

Table of Contents

Qualifiers

Dioxin

Qualifier	Qualifier Description
*5-	Isotope dilution analyte is outside acceptance limits, low biased.
G	The reported quantitation limit has been raised due to an exhibited elevated noise or matrix interference
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
q	The reported result is the estimated maximum possible concentration of this analyte, quantitated using the theoretical ion ratio. The measured ion ratio does not meet qualitative identification criteria and indicates a possible interference.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 320-108192-1 Eurofins Sacramento

Job Narrative
320-108192-1

Receipt
The samples were received on 12/19/2023 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.8º C.

Dioxin
Methods 1668A: Ion abundance ratios are outside criteria for the Isotope Dilution Analyte (IDA) associated with the following samples: 2312898-001 - R6 North-20231213 (320-108192-1) and 2312898-002 - R6South-20231214 (320-108192-2). The theoretical area for the IDA was used to quantitate recovery and target concentration.

Methods 1668A: The ion abundance ratio is outside criteria for the Internal Standard PCB-9L associated with the following sample: 2312898-002 - R6South-20231214 (320-108192-2). The theoretical area for the Internal Standard was used to quantitate the related Isotope Dilution Analytes (IDA) recoveries.

Method 1668A: The Isotope Dilution Analyte (IDA) recovery associated with the following samples is below the method recommended limit: 2312898-001 - R6 North-20231213 (320-108192-1) and 2312898-002 - R6South-20231214 (320-108192-2). Generally, data quality is not considered affected if the IDA signal-to-noise ratio is greater than 10:1, which is achieved for all IDA in the samples.

Method 1668A: Ion abundance ratios are outside criteria for the surrogate (SU) associated with the following samples: 2312898-002 - R6South-20231214 (320-108192-2). The theoretical area for the SU was used to quantitate recovery.

Method 1668A: The following sample exhibited elevated noise or matrix interferences for one or more analytes causing elevation of the detection limit (EDL): 2312898-002 - R6South-20231214 (320-108192-2). The reporting limit (RL) for the affected analytes has been raised to be equal to the EDL, and a "G" qualifier applied.

Method 1668A: The Isotope Dilution Analyte (IDA) recovery associated with the following sample is below the method recommended limit: 2312898-001 - R6 North-20231213 (320-108192-1). Generally, data quality is not considered affected if the IDA signal-to-noise ratio is greater than 10:1, which is achieved for all IDA in the sample.

Method 1668A: Ion abundance ratios are outside criteria for the Isotope Dilution Analyte (IDA) associated with the following sample: 2312898-002 - R6South-20231214 (320-108192-2). The theoretical area for the IDA was used to quantitate recovery and target concentration.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Dioxin Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Eurofins Environment Testing South Central LLC
Project/Site: 2312898

Job ID: 320-108192-1

Client Sample ID: 2312898-001 - R6 North-20231213 Lab Sample ID: 320-108192-1

No Detections.

Client Sample ID: 2312898-002 - R6South-20231214 Lab Sample ID: 320-108192-2

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
PCB-44	17	J	120	2.2	pg/L	1		1668A	Total/NA
PCB-47	17	J	120	2.2	pg/L	1		1668A	Total/NA
PCB-49	3.8	J q	42	2.0	pg/L	1		1668A	Total/NA
PCB-52	14	J	100	2.3	pg/L	1		1668A	Total/NA
PCB-65	17	J	120	2.2	pg/L	1		1668A	Total/NA
PCB-69	3.8	J q	42	2.0	pg/L	1		1668A	Total/NA
PCB-85	12	J q	62	1.2	pg/L	1		1668A	Total/NA
PCB-90	11	J q	120	1.5	pg/L	1		1668A	Total/NA
PCB-95	12	J	100	1.7	pg/L	1		1668A	Total/NA
PCB-101	11	J q	120	1.5	pg/L	1		1668A	Total/NA
PCB-113	11	J q	120	1.5	pg/L	1		1668A	Total/NA
PCB-116	12	J q	62	1.2	pg/L	1		1668A	Total/NA
PCB-117	12	J q	62	1.2	pg/L	1		1668A	Total/NA
PCB-118	9.2	J q	42	1.2	pg/L	1		1668A	Total/NA
PCB-129	14	J q	62	0.99	pg/L	1		1668A	Total/NA
PCB-138	14	J q	62	0.99	pg/L	1		1668A	Total/NA
PCB-147	14	J q	42	1.0	pg/L	1		1668A	Total/NA
PCB-149	14	J q	42	1.0	pg/L	1		1668A	Total/NA
PCB-153	11	J	42	0.80	pg/L	1		1668A	Total/NA
PCB-160	14	J q	21	0.99	pg/L	1		1668A	Total/NA
PCB-163	14	J q	62	0.99	pg/L	1		1668A	Total/NA
PCB-168	11	J	42	0.80	pg/L	1		1668A	Total/NA
PCB-180	11	J q	42	1.7	pg/L	1		1668A	Total/NA
PCB-193	11	J q	42	1.7	pg/L	1		1668A	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Eurofins Environment Testing South Central LLC
Project/Site: 2312898

Job ID: 320-108192-1

Client Sample ID: 2312898-001 - R6 North-20231213
Date Collected: 12/13/23 12:00
Date Received: 12/19/23 09:30

Lab Sample ID: 320-108192-1
Matrix: Water

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	ND		98	1.5	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-2	ND		98	1.5	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-3	ND		150	1.6	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-4	ND		98	13	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-5	ND		20	15	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-6	ND		20	14	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-7	ND		39	15	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-8	ND		39	14	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-9	ND		39	15	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-10	ND		39	8.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-11	ND		150	16	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-12	ND		200	16	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-13	ND		200	16	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-14	ND		39	16	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-15	ND		98	12	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-16	ND		39	6.6	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-17	ND		39	6.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-18	ND		39	4.5	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-19	ND		39	6.9	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-20	ND		79	4.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-21	ND		39	4.8	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-22	ND		20	4.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-23	ND		39	4.7	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-24	ND		20	4.8	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-25	ND		20	3.8	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-26	ND		79	4.5	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-27	ND		20	4.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-28	ND		79	4.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-29	ND		79	4.5	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-30	ND		39	4.5	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-31	ND		98	4.6	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-32	ND		20	4.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-33	ND		39	4.8	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-34	ND		20	4.5	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-35	ND		39	4.4	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-36	ND		20	4.6	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-37	ND		20	4.4	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-38	ND		20	4.9	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-39	ND		39	4.5	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-40	ND		39	2.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-41	ND		39	2.9	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-42	ND		39	2.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-43	ND		20	2.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-44	ND		120	1.9	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-45	ND		39	2.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-46	ND		20	2.7	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-47	ND		120	1.9	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-48	ND		20	2.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-49	ND		39	1.8	pg/L		01/10/24 07:52	01/19/24 18:05	1

Client: Eurofins Environment Testing South Central LLC
Project/Site: 2312898

Job ID: 320-108192-1

Client Sample ID: 2312898-001 - R6 North-20231213
Date Collected: 12/13/23 12:00
Date Received: 12/19/23 09:30

Lab Sample ID: 320-108192-1
Matrix: Water

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-50	ND		39	2.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-51	ND		39	2.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-52	ND		98	2.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-53	ND		39	2.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-54	ND		39	1.7	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-55	ND		39	1.8	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-56	ND		20	2.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-57	ND		20	2.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-58	ND		20	1.9	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-59	ND		59	1.7	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-60	ND		39	2.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-61	ND		160	2.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-62	ND		59	1.7	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-63	ND		39	2.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-64	ND		39	1.7	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-65	ND		120	1.9	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-66	ND		39	1.9	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-67	ND		20	1.8	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-68	ND		39	2.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-69	ND		39	1.8	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-70	ND		160	2.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-71	ND		39	2.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-72	ND		20	2.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-73	ND		20	1.6	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-74	ND		160	2.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-75	ND		59	1.7	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-76	ND		160	2.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-77	ND		20	2.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-78	ND		20	2.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-79	ND		39	1.9	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-80	ND		39	1.8	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-81	ND		20	2.5	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-82	ND		20	1.5	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-83	ND		20	1.4	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-84	ND		39	1.7	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-85	ND		59	1.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-86	ND		120	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-87	ND		120	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-88	ND		39	1.6	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-89	ND		39	1.6	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-90	ND		120	1.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-91	ND		39	1.6	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-92	ND		39	1.4	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-93	ND		79	1.4	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-94	ND		39	1.7	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-95	ND		98	1.6	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-96	ND		20	0.71	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-97	ND		120	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-98	ND		39	1.6	pg/L		01/10/24 07:52	01/19/24 18:05	1

Client: Eurofins Environment Testing South Central LLC
Project/Site: 2312898

Job ID: 320-108192-1

Client Sample ID: 2312898-001 - R6 North-20231213
Date Collected: 12/13/23 12:00
Date Received: 12/19/23 09:30

Lab Sample ID: 320-108192-1
Matrix: Water

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-99	ND		39	1.4	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-100	ND		79	1.4	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-101	ND		120	1.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-102	ND		39	1.6	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-103	ND		39	1.4	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-104	ND		39	0.79	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-105	ND		39	1.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-106	ND		39	1.4	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-107	ND		39	0.92	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-108	ND		120	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-109	ND		20	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-110	ND		39	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-111	ND		39	1.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-112	ND		20	1.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-113	ND		120	1.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-114	ND		39	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-115	ND		39	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-116	ND		59	1.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-117	ND		59	1.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-118	ND		39	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-119	ND		120	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-120	ND		20	0.94	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-121	ND		20	0.99	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-122	ND		39	1.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-123	ND		39	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-124	ND		39	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-125	ND		120	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-126	ND		20	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-127	ND		20	1.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-128	ND		79	1.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-129	ND		59	1.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-130	ND		20	1.4	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-131	ND		20	1.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-132	ND		20	1.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-133	ND		20	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-134	ND		39	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-135	ND		39	1.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-136	ND		20	0.86	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-137	ND		20	0.86	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-138	ND		59	1.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-139	ND		39	1.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-140	ND		39	1.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-141	ND		20	1.5	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-142	ND		20	1.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-143	ND		39	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-144	ND		20	1.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-145	ND		20	0.91	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-146	ND		20	0.83	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-147	ND		39	1.1	pg/L		01/10/24 07:52	01/19/24 18:05	1

Client Sample ID: 2312898-001 - R6 North-20231213
Lab Sample ID: 320-108192-1
Date Collected: 12/13/23 12:00
Matrix: Water
Date Received: 12/19/23 09:30

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-148	ND		20	1.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-149	ND		39	1.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-150	ND		20	0.86	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-151	ND		39	1.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-152	ND		20	0.89	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-153	ND		39	0.83	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-154	ND		20	1.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-155	ND		20	1.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-156	ND		39	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-157	ND		39	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-158	ND		20	0.85	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-159	ND		20	1.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-160	ND		20	1.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-161	ND		20	1.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-162	ND		39	1.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-163	ND		59	1.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-164	ND		20	1.4	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-165	ND		20	0.94	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-166	ND		79	1.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-167	ND		39	1.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-168	ND		39	0.83	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-169	ND		20	1.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-170	ND		39	3.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-171	ND		39	2.9	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-172	ND		20	3.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-173	ND		39	2.9	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-174	ND		20	3.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-175	ND		20	1.8	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-176	ND		20	1.5	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-177	ND		20	2.6	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-178	ND		20	2.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-179	ND		20	1.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-180	ND		39	2.4	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-181	ND		20	2.7	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-182	ND		20	1.9	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-183	ND		20	2.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-184	ND		20	1.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-185	ND		39	3.4	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-186	ND		20	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-187	ND		20	1.5	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-188	ND		20	1.7	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-189	ND		20	1.7	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-190	ND		20	2.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-191	ND		39	2.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-192	ND		20	2.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-193	ND		39	2.4	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-194	ND		39	2.5	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-195	ND		20	2.5	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-196	ND		20	2.1	pg/L		01/10/24 07:52	01/19/24 18:05	1

Client: Eurofins Environment Testing South Central LLC
Project/Site: 2312898

Job ID: 320-108192-1

Client Sample ID: 2312898-001 - R6 North-20231213
Date Collected: 12/13/23 12:00
Date Received: 12/19/23 09:30

Lab Sample ID: 320-108192-1
Matrix: Water

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-197	ND		20	1.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-198	ND		39	1.9	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-199	ND		39	1.9	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-200	ND		20	2.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-201	ND		20	1.6	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-202	ND		20	1.6	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-203	ND		20	2.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-204	ND		20	1.5	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-205	ND		20	2.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-206	ND		39	4.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-207	ND		20	3.4	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-208	ND		20	3.5	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-209	ND		39	1.4	pg/L		01/10/24 07:52	01/19/24 18:05	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
PCB-1L	*51*		*15 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-3L	*51*		*15 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-4L	*42*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-15L	*48*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-19L	*45*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-37L	*55*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-54L	*29*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-77L	*55*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-81L	*53*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-104L	*31*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-105L	*55*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-114L	*56*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-118L	*55*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-123L	*57*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-126L	*56*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-155L	*50*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-156L	*99*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-156L/157L	*99*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-157L	*99*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-167L	*98*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-169L	*103*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-188L	*24*	**5-*	*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-189L	*54*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-202L	*43*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-205L	*66*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-206L	*60*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-208L	*54*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-209L	*46*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
PCB-28L	*79*		*30 - 135*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-111L	*86*		*30 - 135*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-178L	*67*		*30 - 135*	*01/10/24 07:52*	*01/19/24 18:05*	*1*

Client: Eurofins Environment Testing South Central LLC
Project/Site: 2312898

Job ID: 320-108192-1

Client Sample ID: 2312898-002 - R6South-20231214
Date Collected: 12/14/23 14:45
Date Received: 12/19/23 09:30

Lab Sample ID: 320-108192-2
Matrix: Water

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	ND		100	1.3	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-2	ND		100	1.3	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-3	ND		160	1.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-4	ND		100	9.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-5	ND	G	22	22	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-6	ND		21	20	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-7	ND		42	22	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-8	ND		42	20	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-9	ND		42	22	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-10	ND		42	6.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-11	ND		160	23	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-12	ND		210	23	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-13	ND		210	23	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-14	ND		42	23	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-15	ND		100	18	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-16	ND		42	6.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-17	ND		42	6.0	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-18	ND		42	4.3	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-19	ND		42	6.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-20	ND		83	4.8	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-21	ND		42	5.3	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-22	ND		21	4.9	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-23	ND		42	5.3	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-24	ND		21	4.6	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-25	ND		21	4.3	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-26	ND		83	5.0	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-27	ND		21	4.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-28	ND		83	4.8	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-29	ND		83	5.0	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-30	ND		42	4.3	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-31	ND		100	5.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-32	ND		21	4.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-33	ND		42	5.3	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-34	ND		21	5.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-35	ND		42	4.9	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-36	ND		21	5.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-37	ND		21	5.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-38	ND		21	5.6	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-39	ND		42	5.0	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-40	ND		42	2.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-41	ND		42	3.3	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-42	ND		42	2.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-43	ND		21	2.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-44	**17**	**J**	120	2.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-45	ND		42	2.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-46	ND		21	3.0	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-47	**17**	**J**	120	2.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-48	ND		21	2.6	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-49	**3.8**	**J q**	42	2.0	pg/L		01/10/24 07:52	01/19/24 19:07	1

Client: Eurofins Environment Testing South Central LLC
Project/Site: 2312898

Job ID: 320-108192-1

Client Sample ID: 2312898-002 - R6South-20231214
Date Collected: 12/14/23 14:45
Date Received: 12/19/23 09:30

Lab Sample ID: 320-108192-2
Matrix: Water

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-50	ND		42	2.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-51	ND		42	2.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-52	**14**	**J**	100	2.3	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-53	ND		42	2.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-54	ND		42	1.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-55	ND		42	1.7	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-56	ND		21	1.9	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-57	ND		21	2.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-58	ND		21	1.8	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-59	ND		62	1.9	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-60	ND		42	2.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-61	ND		170	1.9	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-62	ND		62	1.9	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-63	ND		42	2.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-64	ND		42	1.9	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-65	**17**	**J**	120	2.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-66	ND		42	1.8	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-67	ND		21	1.7	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-68	ND		42	1.8	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-69	**3.8**	**J q**	42	2.0	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-70	ND		170	1.9	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-71	ND		42	2.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-72	ND		21	1.9	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-73	ND		21	1.7	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-74	ND		170	1.9	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-75	ND		62	1.9	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-76	ND		170	1.9	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-77	ND		21	2.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-78	ND		21	2.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-79	ND		42	1.8	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-80	ND		42	1.7	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-81	ND		21	2.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-82	ND		21	1.7	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-83	ND		21	1.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-84	ND		42	1.9	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-85	**12**	**J q**	62	1.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-86	ND		120	1.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-87	ND		120	1.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-88	ND		42	1.7	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-89	ND		42	1.8	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-90	**11**	**J q**	120	1.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-91	ND		42	1.7	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-92	ND		42	1.6	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-93	ND		83	1.6	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-94	ND		42	1.8	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-95	**12**	**J**	100	1.7	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-96	ND		21	0.72	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-97	ND		120	1.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-98	ND		42	1.8	pg/L		01/10/24 07:52	01/19/24 19:07	1

Client Sample ID: 2312898-002 - R6South-20231214
Lab Sample ID: 320-108192-2
Date Collected: 12/14/23 14:45
Matrix: Water
Date Received: 12/19/23 09:30

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-99	ND		42	1.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-100	ND		83	1.6	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-101	**11**	**J q**	120	1.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-102	ND		42	1.8	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-103	ND		42	1.6	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-104	ND		42	0.96	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-105	ND		42	1.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-106	ND		42	1.6	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-107	ND		42	1.0	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-108	ND		120	1.3	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-109	ND		21	1.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-110	ND		42	1.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-111	ND		42	1.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-112	ND		21	1.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-113	**11**	**J q**	120	1.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-114	ND		42	1.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-115	ND		42	1.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-116	**12**	**J q**	62	1.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-117	**12**	**J q**	62	1.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-118	**9.2**	**J q**	42	1.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-119	ND		120	1.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-120	ND		21	1.0	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-121	ND		21	1.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-122	ND		42	1.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-123	ND		42	1.3	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-124	ND		42	1.3	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-125	ND		120	1.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-126	ND		21	1.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-127	ND		21	1.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-128	ND		83	0.98	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-129	**14**	**J q**	62	0.99	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-130	ND		21	1.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-131	ND		21	1.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-132	ND		21	1.3	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-133	ND		21	1.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-134	ND		42	1.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-135	ND		42	1.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-136	ND		21	0.84	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-137	ND		21	0.84	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-138	**14**	**J q**	62	0.99	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-139	ND		42	1.0	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-140	ND		42	1.0	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-141	ND		21	1.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-142	ND		21	1.3	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-143	ND		42	1.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-144	ND		21	1.0	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-145	ND		21	0.88	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-146	ND		21	0.80	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-147	**14**	**J q**	42	1.0	pg/L		01/10/24 07:52	01/19/24 19:07	1

Client Sample ID: 2312898-002 - R6South-20231214
Lab Sample ID: 320-108192-2
Date Collected: 12/14/23 14:45
Matrix: Water
Date Received: 12/19/23 09:30

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-148	ND		21	1.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-149	**14**	**J q**	42	1.0	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-150	ND		21	0.83	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-151	ND		42	1.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-152	ND		21	0.87	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-153	**11**	**J**	42	0.80	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-154	ND		21	1.0	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-155	ND		21	1.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-156	ND		42	1.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-157	ND		42	1.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-158	ND		21	0.83	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-159	ND		21	0.93	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-160	**14**	**J q**	21	0.99	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-161	ND		21	1.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-162	ND		42	1.0	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-163	**14**	**J q**	62	0.99	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-164	ND		21	1.3	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-165	ND		21	0.92	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-166	ND		83	0.98	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-167	ND		42	0.91	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-168	**11**	**J**	42	0.80	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-169	ND		21	0.99	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-170	ND		42	2.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-171	ND		42	2.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-172	ND		21	2.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-173	ND		42	2.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-174	ND		21	2.3	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-175	ND		21	1.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-176	ND		21	0.88	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-177	ND		21	1.9	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-178	ND		21	1.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-179	ND		21	0.75	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-180	**11**	**J q**	42	1.7	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-181	ND		21	1.9	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-182	ND		21	1.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-183	ND		21	1.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-184	ND		21	0.79	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-185	ND		42	2.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-186	ND		21	0.71	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-187	ND		21	0.93	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-188	ND		21	0.93	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-189	ND		21	1.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-190	ND		21	1.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-191	ND		42	1.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-192	ND		21	1.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-193	**11**	**J q**	42	1.7	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-194	ND		42	1.6	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-195	ND		21	1.6	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-196	ND		21	1.6	pg/L		01/10/24 07:52	01/19/24 19:07	1

Client: Eurofins Environment Testing South Central LLC
Project/Site: 2312898

Job ID: 320-108192-1

Client Sample ID: 2312898-002 - R6South-20231214
Date Collected: 12/14/23 14:45
Date Received: 12/19/23 09:30

Lab Sample ID: 320-108192-2
Matrix: Water

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-197	ND		21	0.97	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-198	ND		42	1.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-199	ND		42	1.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-200	ND		21	1.7	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-201	ND		21	1.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-202	ND		21	1.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-203	ND		21	1.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-204	ND		21	1.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-205	ND		21	1.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-206	ND		42	2.0	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-207	ND		21	1.7	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-208	ND		21	1.7	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-209	ND		42	1.7	pg/L		01/10/24 07:52	01/19/24 19:07	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
PCB-1L	*62*		*15 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-3L	*60*		*15 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-4L	*50*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-15L	*55*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-19L	*55*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-37L	*59*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-54L	*32*	*q*	*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-77L	*58*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-81L	*59*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-104L	*33*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-105L	*63*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-114L	*62*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-118L	*61*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-123L	*63*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-126L	*65*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-155L	*54*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-156L	*94*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-156L/157L	*94*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-157L	*94*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-167L	*93*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-169L	*94*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-188L	*27*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-189L	*56*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-202L	*49*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-205L	*69*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-206L	*64*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-208L	*58*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-209L	*53*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
PCB-28L	*88*		*30 - 135*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-111L	*96*		*30 - 135*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-178L	*70*		*30 - 135*	*01/10/24 07:52*	*01/19/24 19:07*	*1*

Surrogate Summary

Client: Eurofins Environment Testing South Central LLC
Project/Site: 2312898

Job ID: 320-108192-1

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	PCB28L (30-135)	PCB111L (30-135)	PCB178L (30-135)
320-108192-1	2312898-001 - R6 North-202312	79	86	67
320-108192-2	2312898-002 - R6South-20231214	88	96	70
MB 320-732336/1-A	Method Blank	83	105	95

Surrogate Legend

PCB28L = PCB-28L
PCB111L = PCB-111L
PCB178L = PCB-178L

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	PCB28L (40-125)	PCB111L (40-125)	PCB178L (40-125)
LCS 320-732336/2-A	Lab Control Sample	75	94	83
LCSD 320-732336/3-A	Lab Control Sample Dup	87	104	90

Surrogate Legend

PCB28L = PCB-28L
PCB111L = PCB-111L
PCB178L = PCB-178L

Isotope Dilution Summary

Client: Eurofins Environment Testing South Central LLC
Job ID: 320-108192-1
Project/Site: 2312898

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PCB1L (15-150)	PCB3L (15-150)	PCB4L (25-150)	PCB15L (25-150)	PCB19L (25-150)	PCB37L (25-150)	PCB54L (25-150)	PCB77L (25-150)
320-108192-1	2312898-001 - R6 North-202312	51	51	42	48	45	55	29	55
320-108192-2	2312898-002 - R6South-20231214	62	60	50	55	55	59	32 q	58
MB 320-732336/1-A	Method Blank	76	77	78	76	73	68	54	81

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PCB81L (25-150)	PCB104L (25-150)	PCB105L (25-150)	PCB114L (25-150)	PCB118L (25-150)	PCB123L (25-150)	PCB126L (25-150)	PCB155L (25-150)
320-108192-1	2312898-001 - R6 North-202312	53	31	55	56	55	57	56	50
320-108192-2	2312898-002 - R6South-20231214	59	33	63	62	61	63	65	54
MB 320-732336/1-A	Method Blank	79	52	89	84	85	85	95	54

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PCB156L (25-150)	156157L (25-150)	PCB157L (25-150)	PCB167L (25-150)	PCB169L (25-150)	PCB188L (25-150)	PCB189L (25-150)	PCB202L (25-150)
320-108192-1	2312898-001 - R6 North-202312	99	99	99	98	103	24 *5-	54	43
320-108192-2	2312898-002 - R6South-20231214	94	94	94	93	94	27	56	49
MB 320-732336/1-A	Method Blank	91	91	91	83	98	41	65	52

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PCB205L (25-150)	PCB206L (25-150)	PCB208L (25-150)	PCB209L (25-150)				
320-108192-1	2312898-001 - R6 North-202312	66	60	54	46				
320-108192-2	2312898-002 - R6South-20231214	69	64	58	53				
MB 320-732336/1-A	Method Blank	85	92	71	98				

Surrogate Legend

PCB1L = PCB-1L
PCB3L = PCB-3L
PCB4L = PCB-4L
PCB15L = PCB-15L
PCB19L = PCB-19L
PCB37L = PCB-37L
PCB54L = PCB-54L
PCB77L = PCB-77L
PCB81L = PCB-81L
PCB104L = PCB-104L
PCB105L = PCB-105L
PCB114L = PCB-114L
PCB118L = PCB-118L
PCB123L = PCB-123L
PCB126L = PCB-126L
PCB155L = PCB-155L
PCB156L = PCB-156L
156157L = PCB-156L/157L
PCB157L = PCB-157L
PCB167L = PCB-167L
PCB169L = PCB-169L
PCB188L = PCB-188L
PCB189L = PCB-189L

Isotope Dilution Summary

Client: Eurofins Environment Testing South Central LLC
Job ID: 320-108192-1
Project/Site: 2312898

PCB202L = PCB-202L
PCB205L = PCB-205L
PCB206L = PCB-206L
PCB208L = PCB-208L
PCB209L = PCB-209L

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PCB1L	PCB3L	PCB4L	PCB15L	PCB19L	PCB37L	PCB54L	PCB77L
Lab Sample ID	Client Sample ID	(15-140)	(15-140)	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)
LCS 320-732336/2-A	Lab Control Sample	66	67	69	66	66	65	52	77
LCSD 320-732336/3-A	Lab Control Sample Dup	76	78	79	77	75	70	59	83

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PCB81L	PCB104L	PCB105L	PCB114L	PCB118L	PCB123L	PCB126L	PCB155L
Lab Sample ID	Client Sample ID	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)
LCS 320-732336/2-A	Lab Control Sample	75	51	84	81	77	79	91	51
LCSD 320-732336/3-A	Lab Control Sample Dup	82	56	92	88	86	86	96	52

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PCB156L	156157L	PCB157L	PCB167L	PCB169L	PCB188L	PCB189L	PCB202L
Lab Sample ID	Client Sample ID	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)
LCS 320-732336/2-A	Lab Control Sample	81	81	81	74	91	41	66	51
LCSD 320-732336/3-A	Lab Control Sample Dup	85	85	85	76	93	44	66	53

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PCB205L	PCB206L	PCB208L	PCB209L				
Lab Sample ID	Client Sample ID	(30-140)	(30-140)	(30-140)	(30-140)				
LCS 320-732336/2-A	Lab Control Sample	85	94	72	103				
LCSD 320-732336/3-A	Lab Control Sample Dup	85	96	72	104				

Surrogate Legend

PCB1L = PCB-1L
PCB3L = PCB-3L
PCB4L = PCB-4L
PCB15L = PCB-15L
PCB19L = PCB-19L
PCB37L = PCB-37L
PCB54L = PCB-54L
PCB77L = PCB-77L
PCB81L = PCB-81L
PCB104L = PCB-104L
PCB105L = PCB-105L
PCB114L = PCB-114L
PCB118L = PCB-118L
PCB123L = PCB-123L
PCB126L = PCB-126L
PCB155L = PCB-155L
PCB156L = PCB-156L
156157L = PCB-156L/157L
PCB157L = PCB-157L
PCB167L = PCB-167L
PCB169L = PCB-169L
PCB188L = PCB-188L
PCB189L = PCB-189L
PCB202L = PCB-202L
PCB205L = PCB-205L

Isotope Dilution Summary

Client: Eurofins Environment Testing South Central LLC
Job ID: 320-108192-1
Project/Site: 2312898

PCB206L = PCB-206L
PCB208L = PCB-208L
PCB209L = PCB-209L

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Lab Sample ID: MB 320-732336/1-A
Matrix: Water
Analysis Batch: 733676

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 732336

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	ND		100	0.79	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-2	ND		100	0.84	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-3	ND		150	0.79	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-4	ND		100	12	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-5	ND		20	6.4	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-6	ND		20	5.4	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-7	ND		40	5.8	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-8	ND		40	4.9	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-9	ND		40	6.0	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-10	ND		40	7.8	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-11	ND		150	6.4	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-12	ND		200	6.2	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-13	ND		200	6.2	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-14	ND		40	6.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-15	ND		100	4.8	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-16	ND		40	1.9	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-17	ND		40	1.9	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-18	ND		40	1.3	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-19	ND		40	2.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-20	ND		80	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-21	ND		40	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-22	ND		20	1.0	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-23	ND		40	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-24	ND		20	1.4	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-25	ND		20	0.89	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-26	ND		80	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-27	ND		20	1.3	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-28	ND		80	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-29	ND		80	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-30	ND		40	1.3	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-31	ND		100	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-32	ND		20	1.3	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-33	ND		40	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-34	ND		20	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-35	ND		40	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-36	ND		20	1.2	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-37	ND		20	1.0	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-38	ND		20	1.2	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-39	ND		40	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-40	ND		40	0.80	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-41	ND		40	1.2	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-42	ND		40	0.88	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-43	ND		20	0.91	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-44	ND		120	0.81	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-45	ND		40	0.94	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-46	ND		20	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-47	ND		120	0.81	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-48	ND		20	0.91	pg/L		01/10/24 07:52	01/14/24 23:52	1

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 320-732336/1-A
Matrix: Water
Analysis Batch: 733676

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 732336

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-49	ND		40	0.74	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-50	ND		40	0.91	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-51	ND		40	0.94	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-52	ND		100	0.84	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-53	ND		40	0.91	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-54	ND		40	0.72	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-55	ND		40	0.95	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-56	ND		20	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-57	ND		20	1.2	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-58	ND		20	0.99	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-59	ND		60	0.69	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-60	ND		40	1.2	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-61	ND		160	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-62	ND		60	0.69	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-63	ND		40	1.2	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-64	ND		40	0.66	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-65	ND		120	0.81	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-66	ND		40	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-67	ND		20	0.95	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-68	ND		40	1.0	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-69	ND		40	0.74	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-70	ND		160	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-71	ND		40	0.80	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-72	ND		20	1.2	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-73	ND		20	0.63	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-74	ND		160	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-75	ND		60	0.69	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-76	ND		160	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-77	ND		20	1.3	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-78	ND		20	1.3	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-79	ND		40	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-80	ND		40	0.96	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-81	ND		20	1.4	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-82	ND		20	1.8	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-83	ND		20	1.7	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-84	ND		40	2.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-85	ND		60	1.4	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-86	ND		120	1.4	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-87	ND		120	1.4	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-88	ND		40	1.8	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-89	ND		40	2.0	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-90	ND		120	1.5	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-91	ND		40	1.8	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-92	ND		40	1.7	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-93	ND		80	1.7	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-94	ND		40	2.0	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-95	ND		100	1.8	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-96	ND		20	0.81	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-97	ND		120	1.4	pg/L		01/10/24 07:52	01/14/24 23:52	1

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 320-732336/1-A
Matrix: Water
Analysis Batch: 733676

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 732336

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-98	ND		40	1.8	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-99	ND		40	1.7	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-100	ND		80	1.7	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-101	ND		120	1.5	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-102	ND		40	1.8	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-103	ND		40	1.6	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-104	ND		40	0.97	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-105	ND		40	1.3	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-106	ND		40	1.5	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-107	ND		40	1.2	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-108	ND		120	1.4	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-109	ND		20	1.4	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-110	ND		40	1.3	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-111	ND		40	1.3	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-112	ND		20	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-113	ND		120	1.5	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-114	ND		40	1.4	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-115	ND		40	1.3	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-116	ND		60	1.4	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-117	ND		60	1.4	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-118	ND		40	1.2	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-119	ND		120	1.4	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-120	ND		20	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-121	ND		20	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-122	ND		40	1.6	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-123	ND		40	1.3	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-124	ND		40	1.4	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-125	ND		120	1.4	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-126	ND		20	1.3	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-127	ND		20	1.4	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-128	ND		80	0.51	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-129	ND		60	0.52	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-130	ND		20	0.69	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-131	ND		20	0.64	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-132	ND		20	0.66	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-133	ND		20	0.62	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-134	ND		40	0.62	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-135	ND		40	0.57	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-136	ND		20	0.42	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-137	ND		20	0.50	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-138	ND		60	0.52	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-139	ND		40	0.56	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-140	ND		40	0.56	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-141	ND		20	0.66	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-142	ND		20	0.67	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-143	ND		40	0.62	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-144	ND		20	0.53	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-145	ND		20	0.43	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-146	ND		20	0.48	pg/L		01/10/24 07:52	01/14/24 23:52	1

Client: Eurofins Environment Testing South Central LLC
Project/Site: 2312898

Job ID: 320-108192-1

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 320-732336/1-A
Matrix: Water
Analysis Batch: 733676

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 732336

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-147	ND		40	0.54	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-148	ND		20	0.55	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-149	ND		40	0.54	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-150	ND		20	0.41	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-151	ND		40	0.57	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-152	ND		20	0.43	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-153	ND		40	0.44	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-154	ND		20	0.51	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-155	ND		20	0.55	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-156	ND		40	0.37	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-157	ND		40	0.37	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-158	ND		20	0.39	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-159	ND		20	0.30	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-160	ND		20	0.52	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-161	ND		20	0.49	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-162	ND		40	0.33	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-163	ND		60	0.52	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-164	ND		20	0.57	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-165	ND		20	0.47	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-166	ND		80	0.51	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-167	ND		40	0.32	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-168	ND		40	0.44	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-169	ND		20	0.34	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-170	ND		40	0.84	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-171	ND		40	0.78	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-172	ND		20	0.84	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-173	ND		40	0.78	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-174	ND		20	0.85	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-175	ND		20	0.58	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-176	ND		20	0.45	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-177	ND		20	0.74	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-178	ND		20	0.62	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-179	ND		20	0.40	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-180	ND		40	0.63	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-181	ND		20	0.74	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-182	ND		20	0.59	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-183	ND		20	0.57	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-184	ND		20	0.41	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-185	ND		40	0.83	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-186	ND		20	0.37	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-187	ND		20	0.49	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-188	ND		20	0.45	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-189	ND		20	0.50	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-190	ND		20	0.57	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-191	ND		40	0.57	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-192	ND		20	0.54	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-193	ND		40	0.63	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-194	ND		40	0.49	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-195	ND		20	0.49	pg/L		01/10/24 07:52	01/14/24 23:52	1

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 320-732336/1-A
Matrix: Water
Analysis Batch: 733676

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 732336

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-196	ND		20	0.52	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-197	ND		20	0.31	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-198	ND		40	0.47	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-199	ND		40	0.47	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-200	ND		20	0.50	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-201	ND		20	0.40	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-202	ND		20	0.38	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-203	ND		20	0.46	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-204	ND		20	0.38	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-205	ND		20	0.44	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-206	ND		40	0.83	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-207	ND		20	0.66	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-208	ND		20	0.72	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-209	ND		40	0.16	pg/L		01/10/24 07:52	01/14/24 23:52	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
PCB-1L	*76*		*15 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-3L	*77*		*15 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-4L	*78*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-15L	*76*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-19L	*73*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-37L	*68*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-54L	*54*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-77L	*81*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-81L	*79*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-104L	*52*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-105L	*89*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-114L	*84*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-118L	*85*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-123L	*85*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-126L	*95*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-155L	*54*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-156L	*91*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-156L/157L	*91*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-157L	*91*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-167L	*83*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-169L	*98*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-188L	*41*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-189L	*65*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-202L	*52*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-205L	*85*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-206L	*92*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-208L	*71*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-209L	*98*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
PCB-28L	*83*		*30 - 135*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-111L	*105*		*30 - 135*	*01/10/24 07:52*	*01/14/24 23:52*	*1*

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 320-732336/1-A
Matrix: Water
Analysis Batch: 733676

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 732336

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-178L	95		30 - 135	01/10/24 07:52	01/14/24 23:52	1

Lab Sample ID: LCS 320-732336/2-A
Matrix: Water
Analysis Batch: 733676

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 732336

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1	2000	2030		pg/L		102	50 - 150
PCB-3	2000	2000		pg/L		100	50 - 150
PCB-4	2000	2190		pg/L		110	50 - 150
PCB-15	2000	1960		pg/L		98	50 - 150
PCB-19	2000	2230		pg/L		112	50 - 150
PCB-37	2000	2090		pg/L		105	50 - 150
PCB-54	2000	2190	q	pg/L		109	50 - 150
PCB-77	2000	2340		pg/L		117	50 - 150
PCB-81	2000	2600		pg/L		130	50 - 150
PCB-104	2000	2920		pg/L		146	50 - 150
PCB-105	2000	2360		pg/L		118	50 - 150
PCB-114	2000	2520		pg/L		126	50 - 150
PCB-118	2000	2390		pg/L		119	50 - 150
PCB-123	2000	2460		pg/L		123	50 - 150
PCB-126	2000	2540		pg/L		127	50 - 150
PCB-155	2000	2840		pg/L		142	50 - 150
PCB-156	4000	4670		pg/L		117	50 - 150
PCB-157	4000	4670		pg/L		117	50 - 150
PCB-167	2000	2400		pg/L		120	50 - 150
PCB-169	2000	2290		pg/L		114	50 - 150
PCB-188	2000	2380		pg/L		119	50 - 150
PCB-189	2000	2120		pg/L		106	50 - 150
PCB-202	2000	2440		pg/L		122	50 - 150
PCB-205	2000	2180		pg/L		109	50 - 150
PCB-206	2000	1990		pg/L		100	50 - 150
PCB-208	2000	2220		pg/L		111	50 - 150
PCB-209	2000	2180		pg/L		109	50 - 150

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
PCB-1L	66		15 - 140
PCB-3L	67		15 - 140
PCB-4L	69		30 - 140
PCB-15L	66		30 - 140
PCB-19L	66		30 - 140
PCB-37L	65		30 - 140
PCB-54L	52		30 - 140
PCB-77L	77		30 - 140
PCB-81L	75		30 - 140
PCB-104L	51		30 - 140
PCB-105L	84		30 - 140
PCB-114L	81		30 - 140

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: LCS 320-732336/2-A
Matrix: Water
Analysis Batch: 733676

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 732336

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
PCB-118L	77		30 - 140
PCB-123L	79		30 - 140
PCB-126L	91		30 - 140
PCB-155L	51		30 - 140
PCB-156L	81		30 - 140
PCB-156L/157L	81		30 - 140
PCB-157L	81		30 - 140
PCB-167L	74		30 - 140
PCB-169L	91		30 - 140
PCB-188L	41		30 - 140
PCB-189L	66		30 - 140
PCB-202L	51		30 - 140
PCB-205L	85		30 - 140
PCB-206L	94		30 - 140
PCB-208L	72		30 - 140
PCB-209L	103		30 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
PCB-28L	75		40 - 125
PCB-111L	94		40 - 125
PCB-178L	83		40 - 125

Lab Sample ID: LCSD 320-732336/3-A
Matrix: Water
Analysis Batch: 733676

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 732336

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1			2000	1970		pg/L		99	50 - 150	3	50
PCB-3			2000	1920		pg/L		96	50 - 150	4	50
PCB-4			2000	2190		pg/L		110	50 - 150	0	50
PCB-15			2000	1940		pg/L		97	50 - 150	1	50
PCB-19			2000	2230		pg/L		112	50 - 150	0	50
PCB-37			2000	2100		pg/L		105	50 - 150	0	50
PCB-54			2000	2300		pg/L		115	50 - 150	5	50
PCB-77			2000	2290		pg/L		114	50 - 150	2	50
PCB-81			2000	2540		pg/L		127	50 - 150	2	50
PCB-104			2000	2900		pg/L		145	50 - 150	1	50
PCB-105			2000	2340		pg/L		117	50 - 150	1	50
PCB-114			2000	2540		pg/L		127	50 - 150	1	50
PCB-118			2000	2310		pg/L		115	50 - 150	3	50
PCB-123			2000	2420		pg/L		121	50 - 150	2	50
PCB-126			2000	2540		pg/L		127	50 - 150	0	50
PCB-155			2000	2830		pg/L		141	50 - 150	0	50
PCB-156			4000	4550		pg/L		114	50 - 150	3	50
PCB-157			4000	4550		pg/L		114	50 - 150	3	50
PCB-167			2000	2400		pg/L		120	50 - 150	0	50
PCB-169			2000	2250		pg/L		112	50 - 150	2	50
PCB-188			2000	2340		pg/L		117	50 - 150	1	50

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: LCSD 320-732336/3-A
Matrix: Water
Analysis Batch: 733676

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 732336

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-189			2000	2100		pg/L		105	50 - 150	1	50
PCB-202			2000	2450		pg/L		123	50 - 150	0	50
PCB-205			2000	2150		pg/L		108	50 - 150	1	50
PCB-206			2000	1930		pg/L		96	50 - 150	3	50
PCB-208			2000	2210		pg/L		110	50 - 150	0	50
PCB-209			2000	2140		pg/L		107	50 - 150	2	50

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
PCB-1L	*76*		*15 - 140*
PCB-3L	*78*		*15 - 140*
PCB-4L	*79*		*30 - 140*
PCB-15L	*77*		*30 - 140*
PCB-19L	*75*		*30 - 140*
PCB-37L	*70*		*30 - 140*
PCB-54L	*59*		*30 - 140*
PCB-77L	*83*		*30 - 140*
PCB-81L	*82*		*30 - 140*
PCB-104L	*56*		*30 - 140*
PCB-105L	*92*		*30 - 140*
PCB-114L	*88*		*30 - 140*
PCB-118L	*86*		*30 - 140*
PCB-123L	*86*		*30 - 140*
PCB-126L	*96*		*30 - 140*
PCB-155L	*52*		*30 - 140*
PCB-156L	*85*		*30 - 140*
PCB-156L/157L	*85*		*30 - 140*
PCB-157L	*85*		*30 - 140*
PCB-167L	*76*		*30 - 140*
PCB-169L	*93*		*30 - 140*
PCB-188L	*44*		*30 - 140*
PCB-189L	*66*		*30 - 140*
PCB-202L	*53*		*30 - 140*
PCB-205L	*85*		*30 - 140*
PCB-206L	*96*		*30 - 140*
PCB-208L	*72*		*30 - 140*
PCB-209L	*104*		*30 - 140*

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
PCB-28L	*87*		*40 - 125*
PCB-111L	*104*		*40 - 125*
PCB-178L	*90*		*40 - 125*

Specialty Organics

Prep Batch: 732336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-108192-1	2312898-001 - R6 North-20231213	Total/NA	Water	HRMS-Sep	
320-108192-2	2312898-002 - R6South-20231214	Total/NA	Water	HRMS-Sep	
MB 320-732336/1-A	Method Blank	Total/NA	Water	HRMS-Sep	
LCS 320-732336/2-A	Lab Control Sample	Total/NA	Water	HRMS-Sep	
LCSD 320-732336/3-A	Lab Control Sample Dup	Total/NA	Water	HRMS-Sep	

Analysis Batch: 733676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 320-732336/1-A	Method Blank	Total/NA	Water	1668A	732336
LCS 320-732336/2-A	Lab Control Sample	Total/NA	Water	1668A	732336
LCSD 320-732336/3-A	Lab Control Sample Dup	Total/NA	Water	1668A	732336

Analysis Batch: 734754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-108192-1	2312898-001 - R6 North-20231213	Total/NA	Water	1668A	732336
320-108192-2	2312898-002 - R6South-20231214	Total/NA	Water	1668A	732336

Lab Chronicle

Client: Eurofins Environment Testing South Central LLC
Project/Site: 2312898

Job ID: 320-108192-1

Client Sample ID: 2312898-001 - R6 North-20231213

Lab Sample ID: 320-108192-1

Date Collected: 12/13/23 12:00
Date Received: 12/19/23 09:30

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	HRMS-Sep			1017.7 mL	20.0 uL	732336	01/10/24 07:52	GSH	EET SAC
Total/NA	Analysis	1668A		1	1 mL	1 mL	734754	01/19/24 18:05	JBC	EET SAC

Client Sample ID: 2312898-002 - R6South-20231214

Lab Sample ID: 320-108192-2

Date Collected: 12/14/23 14:45
Date Received: 12/19/23 09:30

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	HRMS-Sep			961.3 mL	20.0 uL	732336	01/10/24 07:52	GSH	EET SAC
Total/NA	Analysis	1668A		1	1 mL	1 mL	734754	01/19/24 19:07	JBC	EET SAC

Laboratory References:

EET SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Eurofins Environment Testing South Central LLC
Job ID: 320-108192-1
Project/Site: 2312898

Laboratory: Eurofins Sacramento

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-020	02-20-24
ANAB	Dept. of Defense ELAP	L2468	01-20-27
ANAB	Dept. of Energy	L2468.01	01-20-27
ANAB	ISO/IEC 17025	L2468	01-20-24
Arizona	State	AZ0708	08-11-24
Arkansas DEQ	State	88-0691	05-18-24
California	State	2897	01-22-24
Colorado	State	CA00044	08-31-24
Florida	NELAP	E87570	06-30-24
Georgia	State	4040	01-29-24
Hawaii	State	<cert No.>	01-29-24
Illinois	NELAP	200060	03-17-24
Kansas	NELAP	E-10375	10-31-24
Louisiana (All)	NELAP	01944	06-30-24
Maine	State	CA00004	04-14-24
Michigan	State	9947	01-31-24
Nevada	State	CA00044	07-31-24
New Hampshire	NELAP	2997	04-18-24
New Jersey	NELAP	CA005	06-30-24
New York	NELAP	11666	04-01-24
Ohio	State	41252	01-29-24
Oregon	NELAP	4040	01-29-24
Texas	NELAP	T104704399-23-17	05-31-24
US Fish & Wildlife	US Federal Programs	58448	04-30-24
USDA	US Federal Programs	P330-18-00239	02-28-26
Utah	NELAP	CA000442023-16	02-29-24
Virginia	NELAP	460278	03-14-24
Washington	State	C581	05-05-24
West Virginia (DW)	State	9930C	01-31-25
Wisconsin	State	998204680	08-31-24
Wyoming	State Program	8TMS-L	01-28-19 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Eurofins Environment Testing South Central LLC
Project/Site: 2312898

Job ID: 320-108192-1

Method	Method Description	Protocol	Laboratory
1668A	Chlorinated Biphenyl Congeners (HRGC/HRMS)	EPA	EET SAC
HRMS-Sep	Separatory Funnel (Liquid-Liquid) Extraction	EPA	EET SAC

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

EET SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Eurofins Environment Testing South Central LLC
Project/Site: 2312898

Job ID: 320-108192-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-108192-1	2312898-001 - R6 North-20231213	Water	12/13/23 12:00	12/19/23 09:30
320-108192-2	2312898-002 - R6South-20231214	Water	12/14/23 14:45	12/19/23 09:30

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CHAIN OF CUSTODY RECORD

PAGE: 1 OF: 1

Eurofins Environment Testing South Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL. 505-345-3975
FAX 505-345-4107
Website www.hallenvironmental.com

SUB CONTRATOR: **Eurofins Sacramento** COMPANY		PHONE: **(916) 373-5600**	FAX:
ADDRESS: **880 Riverside Parkway**		ACCOUNT #:	EMAIL:
CITY, STATE, ZIP: **West Sacramento, CA 95605**			

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS
1	2312898-001L	R6 North-20231213	1LAMGU	Aqueous	12/13/2023 12 00 00 PM	1	PCBS 1668 -Pease Apply ICO Pricing-
2	2312898-002L	R6South-20231214	1LAMGU	Aqueous	12/14/2023 2.45 00 PM	1	PCBS 1668 -Pease Apply ICO Pricing-

320-108192 Chain of Custody

SPECIAL INSTRUCTIONS / COMMENTS:

Include the LAB ID and CLIENT SAMPLE ID on final reports. Email results to Hall.Lab@et.eurofinsus.com. For Questions email Hall.samplecontrol@et.eurofinsus.com. Please return all coolers and blue ice. Thank you.

0.8°C

Relinquished By:	Date: 12/15/2023	Time: 8:48 AM	Received By: Alexis Hemphill	Date: 12/19/23	Time: 930
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By	Date:	Time:	Received By	Date:	Time:

TAT: Standard ☑ RUSH Next BD ☐ 2nd BD ☐ 3rd BD ☐

REPORT TRANSMITTAL DESIRED:
☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

FOR LAB USE ONLY
Temp of samples _____ °C Attempt to Cool? _____
Comments: _____

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Sacramento Sample Receiving Notes (SSRN)

Loc: 320
108192

Tracking # 7745 2986 7909

Job _____ _____

SO / PO / FO / SAT / 2-Day / Ground / UPS / CDO / Courier
GSL / OnTrac / Goldstreak / USPS / Other_____

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations
File in the job folder with the COC.

Therm. ID: L-09 Corr. Factor: (+/-) NA °C

Ice_____ Wet_____ Gel X Other _____

Cooler Custody Seal NA

Cooler ID. NA

Temp Observed: 0.8 °C Corrected: 0.8 °C
From Temp Blank ☐ Sample ☒

Opening/Processing The Shipment	Yes	No	NA
Cooler compromised/tampered with?	☐	☒	☐
Cooler Temperature is acceptable?	☒	☐	☐
Frozen samples show signs of thaw?	☐	☐	☒

Initials DNH Date 12/19/23

Unpacking/Labeling The Samples	Yes	No	NA
Containers are not broken or leaking?	☑	☐	☐
Samples compromised/tampered with?	☐	☑	☐
COC is complete w/o discrepancies	☑	☐	☐
Sample custody seal?	☐	☑	☐
Sample containers have legible labels?	☑	☐	☐
Sample date/times are provided?	☑	☐	☐
Appropriate containers are used?	☑	☐	☐
Sample bottles are completely filled?	☑	☐	☐
Sample preservatives verified?	☐	☑	☐
Is the Field Sampler's name on COC?	☐	☑	☐
Samples w/o discrepancies?	☑	☐	☐
Zero headspace?*	☐	☐	☑
Alkalinity has no headspace?	☐	☐	☑
Perchlorate has headspace? (Methods 314, 331, 6850)	☐	☐	☑
Multiphasic samples are not present?	☑	☐	☐

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

Initials SP Date 12-19-23

Notes:_____

Trizma Lot #(s): _____

Ammonium Acetate Lot #(s). _____

Login Completion	Yes	No	NA
Receipt Temperature on COC?	☑	☐	☐
NCM Filed?	☐	☐	☑
Samples received within hold time?	☑	☐	☐
Log Release checked in TALS?	☑	☐	☐

Initials SP Date 12-19-23
W4C

Login Sample Receipt Checklist

Client: Eurofins Environment Testing South Central LLC

Job Number: 320-108192-1

Login Number: 108192
List Number: 1
Creator: Oropeza, Salvador

List Source: Eurofins Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	REFER TO SSRN
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	N/A	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	N/A	
Cooler Temperature is recorded.	N/A	
COC is present.	N/A	
COC is filled out in ink and legible.	N/A	
COC is filled out with all pertinent information.	N/A	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	N/A	
Samples are received within Holding Time (excluding tests with immediate HTs)	N/A	
Sample containers have legible labels.	N/A	
Containers are not broken or leaking.	N/A	
Sample collection date/times are provided.	N/A	
Appropriate sample containers are used.	N/A	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	N/A	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312898**

05-Mar-24

Client: AMAFCA

Project: CMC FY24 Dry

Sample ID: **MB-79435**	SampType: **MBLK**	TestCode: **EPA Method 1664B**							
Client ID: **PBW**	Batch ID: **79435**	RunNo: **101935**							
Prep Date: **12/18/2023**	Analysis Date: **12/19/2023**	SeqNo: **3760234**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
N-Hexane Extractable Material	ND	10.0								

Sample ID: **LCS-79435**	SampType: **LCS**	TestCode: **EPA Method 1664B**							
Client ID: **LCSW**	Batch ID: **79435**	RunNo: **101935**							
Prep Date: **12/18/2023**	Analysis Date: **12/19/2023**	SeqNo: **3760235**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
N-Hexane Extractable Material	37.6	10.0	40.00	0	94.0	78	114			

Sample ID: **LCSD-79435**	SampType: **LCSD**	TestCode: **EPA Method 1664B**							
Client ID: **LCSS02**	Batch ID: **79435**	RunNo: **101935**							
Prep Date: **12/18/2023**	Analysis Date: **12/19/2023**	SeqNo: **3760236**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
N-Hexane Extractable Material	36.2	10.0	40.00	0	90.5	78	114	3.79	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312898**

05-Mar-24

Client: AMAFCA

Project: CMC FY24 Dry

Sample ID: **MB-79508**	SampType: **MBLK**	TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW**	Batch ID: **79508**	RunNo: **102210**
Prep Date: **12/19/2023**	Analysis Date: **1/2/2024**	SeqNo: **3773160** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	ND	1.0								
Magnesium	ND	1.0								

Sample ID: **LCSLL-79508**	SampType: **LCSLL**	TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC**	Batch ID: **79508**	RunNo: **102210**
Prep Date: **12/19/2023**	Analysis Date: **1/2/2024**	SeqNo: **3773161** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	0.55	1.0	0.5000	0	110	50	150			J
Magnesium	0.53	1.0	0.5000	0	107	50	150			J

Sample ID: **LCS-79508**	SampType: **LCS**	TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW**	Batch ID: **79508**	RunNo: **102210**
Prep Date: **12/19/2023**	Analysis Date: **1/2/2024**	SeqNo: **3773162** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	54	1.0	50.00	0	109	85	115			
Magnesium	52	1.0	50.00	0	104	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312898**

05-Mar-24

Client: AMAFCA

Project: CMC FY24 Dry

Sample ID: **MB**	SampType: **MBLK**	TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW**	Batch ID: **B101952**	RunNo: **101952**
Prep Date:	Analysis Date: **12/19/2023**	SeqNo: **3760683** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Copper	ND	0.00050								
Lead	ND	0.00050								

Sample ID: **LCSLL**	SampType: **LCSLL**	TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **BatchQC**	Batch ID: **B101952**	RunNo: **101952**
Prep Date:	Analysis Date: **12/19/2023**	SeqNo: **3760684** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.00051	0.00050	0.0005000	0	103	50	150			

Sample ID: **LCS**	SampType: **LCS**	TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **B101952**	RunNo: **101952**
Prep Date:	Analysis Date: **12/19/2023**	SeqNo: **3760686** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Copper	0.024	0.00050	0.02500	0	94.4	85	115			
Lead	0.012	0.00050	0.01250	0	97.8	85	115			

Sample ID: **LCSLLB**	SampType: **LCSLL**	TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **BatchQC**	Batch ID: **B101952**	RunNo: **101952**
Prep Date:	Analysis Date: **12/19/2023**	SeqNo: **3760688** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Copper	0.00052	0.00050	0.0005000	0	104	50	150			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312898**

05-Mar-24

Client: AMAFCA

Project: CMC FY24 Dry

Sample ID: **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R101967**	RunNo: **101967**
Prep Date:	Analysis Date: **12/19/2023**	SeqNo: **3762466** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	ND	0.20								

Sample ID: **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R101967**	RunNo: **101967**
Prep Date:	Analysis Date: **12/19/2023**	SeqNo: **3762467** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	3.5	0.20	3.500	0	100	90	110			

Sample ID: **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R101967**	RunNo: **101967**
Prep Date:	Analysis Date: **12/19/2023**	SeqNo: **3762506** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	ND	0.20								

Sample ID: **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R101967**	RunNo: **101967**
Prep Date:	Analysis Date: **12/19/2023**	SeqNo: **3762508** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	3.4	0.20	3.500	0	97.8	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312898**

05-Mar-24

Client: AMAFCA

Project: CMC FY24 Dry

Sample ID: **MB-79411**	SampType: **MBLK**	TestCode: **SM5210B: BOD**							
Client ID: **PBW**	Batch ID: **79411**	RunNo: **101973**							
Prep Date: **12/15/2023**	Analysis Date: **12/20/2023**	SeqNo: **3762618**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	ND	2.00								

Sample ID: **LCS-79411**	SampType: **LCS**	TestCode: **SM5210B: BOD**							
Client ID: **LCSW**	Batch ID: **79411**	RunNo: **101973**							
Prep Date: **12/15/2023**	Analysis Date: **12/20/2023**	SeqNo: **3762619**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	141	2.00	198.0	0	71.2	84.6	115.4			S

Sample ID: **2312898-002BDUP**	SampType: **DUP**	TestCode: **SM5210B: BOD**							
Client ID: **R6South-20231214**	Batch ID: **79411**	RunNo: **101973**							
Prep Date: **12/15/2023**	Analysis Date: **12/20/2023**	SeqNo: **3762622**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	letion <2.0	2.00						0	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312898**

05-Mar-24

Client: AMAFCA

Project: CMC FY24 Dry

Sample ID: **MB-79689**	SampType: **MBLK**	TestCode: **SM5220D: COD**							
Client ID: **PBW**	Batch ID: **79689**	RunNo: **102200**							
Prep Date: **1/2/2024**	Analysis Date: **1/3/2024**	SeqNo: **3773398**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chemical Oxygen Demand	ND	50.0								

Sample ID: **LCS-79689**	SampType: **LCS**	TestCode: **SM5220D: COD**							
Client ID: **LCSW**	Batch ID: **79689**	RunNo: **102200**							
Prep Date: **1/2/2024**	Analysis Date: **1/3/2024**	SeqNo: **3773399**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chemical Oxygen Demand	487	50.0	500.0	0	97.4	90	110			

Sample ID: **LCSLL-79689**	SampType: **LCSLL**	TestCode: **SM5220D: COD**							
Client ID: **BatchQC**	Batch ID: **79689**	RunNo: **102200**							
Prep Date: **1/2/2024**	Analysis Date: **1/3/2024**	SeqNo: **3773400**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chemical Oxygen Demand	49.8	50.0	50.00	0	99.5	50	150			J

Sample ID: **2312898-001HMS**	SampType: **MS**	TestCode: **SM5220D: COD**							
Client ID: **R6 North-20231213**	Batch ID: **79689**	RunNo: **102200**							
Prep Date: **1/2/2024**	Analysis Date: **1/3/2024**	SeqNo: **3773411**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chemical Oxygen Demand	495	50.0	500.0	110.3	77.0	90	110			S

Sample ID: **2312898-001HMSD**	SampType: **MSD**	TestCode: **SM5220D: COD**							
Client ID: **R6 North-20231213**	Batch ID: **79689**	RunNo: **102200**							
Prep Date: **1/2/2024**	Analysis Date: **1/3/2024**	SeqNo: **3773412**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chemical Oxygen Demand	491	50.0	500.0	110.3	76.2	90	110	0.877	20	S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312898**

05-Mar-24

Client: AMAFCA

Project: CMC FY24 Dry

Sample ID: **MB-79402**	SampType: **MBLK**	TestCode: **SM 9223B Fecal Indicator: E. coli MPN**
Client ID: **PBW**	Batch ID: **79402**	RunNo: **101861**
Prep Date: **12/14/2023**	Analysis Date: **12/15/2023**	SeqNo: **3755840** Units: **MPN/100mL**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
E. Coli	<1	1.000								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312898**

05-Mar-24

Client: AMAFCA

Project: CMC FY24 Dry

Sample ID: **MB**	SampType: **MBLK**	TestCode: **SM 4500 NH3: Ammonia**
Client ID: **PBW**	Batch ID: **R102011**	RunNo: **102011**
Prep Date:	Analysis Date: **12/21/2023**	SeqNo: **3764147** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Ammonia	ND	1.0								

Sample ID: **LCS**	SampType: **LCS**	TestCode: **SM 4500 NH3: Ammonia**
Client ID: **LCSW**	Batch ID: **R102011**	RunNo: **102011**
Prep Date:	Analysis Date: **12/21/2023**	SeqNo: **3764148** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Ammonia	10	1.0	10.00	0	104	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312898**

05-Mar-24

Client: AMAFCA

Project: CMC FY24 Dry

Sample ID: **MB-79761**	SampType: **mblk**	TestCode: **EPA Method 365.1: Total Phosphorous**
Client ID: **PBW**	Batch ID: **79761**	RunNo: **102279**
Prep Date: **1/6/2024**	Analysis Date: **1/6/2024**	SeqNo: **3776277** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phosphorus, Total (As P)	ND	0.050								

Sample ID: **LCS-79761**	SampType: **LCS**	TestCode: **EPA Method 365.1: Total Phosphorous**
Client ID: **LCSW**	Batch ID: **79761**	RunNo: **102279**
Prep Date: **1/6/2024**	Analysis Date: **1/6/2024**	SeqNo: **3776278** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phosphorus, Total (As P)	0.25	0.050	0.2500	0	100	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312898**

05-Mar-24

Client: AMAFCA

Project: CMC FY24 Dry

Sample ID: **MB-79518**	SampType: **MBLK**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **PBW**	Batch ID: **79518**	RunNo: **102025**
Prep Date: **12/20/2023**	Analysis Date: **12/21/2023**	SeqNo: **3764700** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	50.0								

Sample ID: **LCS-79518**	SampType: **LCS**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **LCSW**	Batch ID: **79518**	RunNo: **102025**
Prep Date: **12/20/2023**	Analysis Date: **12/21/2023**	SeqNo: **3764701** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	995	50.0	1000	0	99.5	80	120			

Sample ID: **2312898-001DDUP**	SampType: **DUP**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **R6 North-20231213**	Batch ID: **79518**	RunNo: **102025**
Prep Date: **12/20/2023**	Analysis Date: **12/21/2023**	SeqNo: **3764719** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	202	50.0						0.985	10	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312898**

05-Mar-24

Client: AMAFCA

Project: CMC FY24 Dry

Sample ID: **MB-79864**	SampType: **MBLK**	TestCode: **EPA 351.2: TKN**							
Client ID: **PBW**	Batch ID: **79864**	RunNo: **102531**							
Prep Date: **1/11/2024**	Analysis Date: **1/13/2024**	SeqNo: **3787319**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	0.50								

Sample ID: **LCSLL-79864**	SampType: **LCSLL**	TestCode: **EPA 351.2: TKN**							
Client ID: **BatchQC**	Batch ID: **79864**	RunNo: **102531**							
Prep Date: **1/11/2024**	Analysis Date: **1/13/2024**	SeqNo: **3787320**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	0.28	0	0.5000	0	55.1	50	150			

Sample ID: **LCS-79864**	SampType: **LCS**	TestCode: **EPA 351.2: TKN**							
Client ID: **LCSW**	Batch ID: **79864**	RunNo: **102531**							
Prep Date: **1/11/2024**	Analysis Date: **1/13/2024**	SeqNo: **3787321**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	9.5	0.50	10.00	0	95.2	90	110			

Sample ID: **2312898-001DMS**	SampType: **MS**	TestCode: **EPA 351.2: TKN**							
Client ID: **R6 North-20231213**	Batch ID: **79864**	RunNo: **102531**							
Prep Date: **1/11/2024**	Analysis Date: **1/13/2024**	SeqNo: **3787323**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	0.50	10.00	0	102	90	110			H

Sample ID: **2312898-001DMSD**	SampType: **MSD**	TestCode: **EPA 351.2: TKN**							
Client ID: **R6 North-20231213**	Batch ID: **79864**	RunNo: **102531**							
Prep Date: **1/11/2024**	Analysis Date: **1/13/2024**	SeqNo: **3787324**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	11	0.50	10.00	0	106	90	110	3.87	20	H

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312898**

05-Mar-24

Client: AMAFCA

Project: CMC FY24 Dry

Sample ID: **MB-79522**	SampType: **MBLK**	TestCode: **SM 2540D: TSS**							
Client ID: **PBW**	Batch ID: **79522**	RunNo: **102014**							
Prep Date: **12/20/2023**	Analysis Date: **12/21/2023**	SeqNo: **3764409**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Suspended Solids	ND	4.0								

Sample ID: **LCS-79522**	SampType: **LCS**	TestCode: **SM 2540D: TSS**							
Client ID: **LCSW**	Batch ID: **79522**	RunNo: **102014**							
Prep Date: **12/20/2023**	Analysis Date: **12/21/2023**	SeqNo: **3764410**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Suspended Solids	97	4.0	91.90	0	106	83.89	119.7			

Sample ID: **MB-79546**	SampType: **MBLK**	TestCode: **SM 2540D: TSS**							
Client ID: **PBW**	Batch ID: **79546**	RunNo: **102038**							
Prep Date: **12/21/2023**	Analysis Date: **12/22/2023**	SeqNo: **3765815**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Suspended Solids	ND	4.0								

Sample ID: **LCS-79546**	SampType: **LCS**	TestCode: **SM 2540D: TSS**							
Client ID: **LCSW**	Batch ID: **79546**	RunNo: **102038**							
Prep Date: **12/21/2023**	Analysis Date: **12/22/2023**	SeqNo: **3765816**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Suspended Solids	87	4.0	91.90	0	94.7	83.89	119.7			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

eurofins | Environment Testing

Eurofins Environment Testing South Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: AMAFCA Work Order Number: 2312898 RcptNo: 1

Received By: Tracy Casarrubias 12/14/2023 4:00:00 PM

Completed By: Cheyenne Cason 12/14/2023 4:12:03 PM

Reviewed By: TMC 12/14/23 16:47 12/15/23

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☑ NA ☐
   Samples were collected the same day and chilled.
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
12. Are matrices correctly identified on Chain of Custody? ~~Yes ☑~~ No ☐ NV 12/19/23
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: 14 (<2 or >12 unless noted)
Adjusted? NO
Checked by: TMC 12/15/23

BOD/coliform : 12/14/23

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.8	Good	Not Present	Morty		
2	7.7	Good	Not Present	Morty	Samples collected the same day & chilled. NV 12/19/23	

Chain-of-Custody Record

Client: AMAFCA

Mailing Address:

Phone #:

email or Fax#: pchavez@amafca.org

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: CMC FY24 Dry

Project #:

Project Manager: Patrick Chavez

Sampler: DBS A - C. Johanneson

On Ice: ☒ Yes ☐ No

# of Coolers: 2

Cooler Temp (Including CF): See Remarks (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2312898	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	ecoli - enumerated	See attached list				
12-13-23	1200	AQ	R6 North-20231213			001												X				
12-14-23	1445		R6 South-20231214			002											X	X				
		TMC 12/14/23	~~Trip Blank~~ JM 12/14/23																			
			~~per sample bottle~~ JM 12/15/23																			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
12/14/23	16:01	[signature]	[signature]	CDO	12/14/23	16:00
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks:
3.8±0=3.8°c
7.7±0=7.7°c
morty

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Collaborative Monitoring Cooperative - Analyses List
Attach to Chain of Custody

Analyte (Bold Indicates WQS)	CAS #	Fraction	Method #	MDL (µg/L)
Hardness (Ca + Mg)	NA	Total	200.7	2.4
Lead	7439-92-1	Dissolved	200.8	0.09
Copper	7440-50-8	Dissolved	200.8	1.06
Ammonia + organic nitrogen	7664-41-7	Total	350.1	31.32
Total Kjehldal Nitrogen	17778-88-0	Total	351.2	58.78
Nitrate + Nitrite	14797-55-8	Total	353.2	10.17
Polychlorinated biphenyls (PCBs)	1336-36-3	Total	1668	0.014
Tetrahydrofuran (THF)	109-99-9	Total	8260C	7.9
bis(2-Ethylhexyl)phthalate	117-81-7	Total	8270D	0.2
Dibenzofuran	132-64-9	Total	8270D	0.2
Indeno(1,2,3-cd)pyrene	193-39-5	Total	8270D	0.2
Benzo(b)fluoranthene	205-99-2	Total	8270D	0.1
Benzo(k)fluoranthene	207-08-9	Total	8270D	0.1
Chrysene	218-01-9	Total	8270D	0.2
Benzo(a)pyrene	50-32-8	Total	8270D	0.3
Dibenzo(a,h)anthracene	53-70-3	Total	8270D	0.3
Benzo(a)anthracene	56-55-3	Total	8270D	0.2
Dieldrin	60-57-1	Total	8270D	0.1
Pentachlorophenol	87-86-5	Total	8270D	0.2
Benzidine	92-87-5	Total	8270D	0.1
Chemical Oxygen Demand	E1641638[2]	Total	HACH	5100
Gross alpha (adjusted)	NA	Total	Method 900	0.1 pCi/L
Total Dissolved Solids	E1642222[2]	Total	SM 2540C	60.4
Total Suspended Solids	NA	Total	SM 2540D	3450
Biological Oxygen Demand	N/A	Total	Standard Methods	930
Oil and Grease		Total	1664A	5000
Ecoli			SM 9223B	
pH			SM 4500	
Phosphorus		Dissolved	365.1	100
Phosphorus		Total	365.1	100
Chromium IV		Total	3500Cr C-2011	100

Appendix F - Minimum Quantification Levels (MQL's)

The following Minimum Quantification Levels (MQL's) are to be used for reporting pollutant data for NPDES permit applications and/or compliance reporting.

POLLUTANTS	MQL µg/l	POLLUTANTS	MQL µg/l
METALS, RADIOACTIVITY, CYANIDE and CHLORINE			
Aluminum	2.5	Molybdenum	10
Antimony	60	Nickel	0.5
Arsenic	0.5	Selenium	5
Barium	100	Silver	0.5
Beryllium	0.5	Thalllium	0.5
Boron	100	Uranium	0.1
Cadmium	1	Vanadium	50
Chromium	10	Zinc	20
Cobalt	50	Cyanide	10
Copper	0.5	Cyanide, weak acid dissociable	10
Lead	0.5	Total Residual Chlorine	33
Mercury (*)	0.0005 0.005		
DIOXIN			
2,3,7,8-TCDD	0.00001		
VOLATILE COMPOUNDS			
Acrolein	50	1,3-Dichloropropylene	10
Acrylonitrile	20	Ethylbenzene	10
Benzene	10	Methyl Bromide	50
Bromoform	10	Methylene Chloride	20
Carbon Tetrachloride	2	1,1,2,2-Tetrachloroethane	10
Chlorobenzene	10	Tetrachloroethylene	10
Clorodibromomethane	10	Toluene	10
Chloroform	50	1,2-trans-Dichloroethylene	10
Dichlorobromomethane	10	1,1,2-Trichloroethane	10
1,2-Dichloroethane	10	Trichloroethylene	10
1,1-Dichloroethylene	10	Vinyl Chloride	10
1,2-Dichloropropane	10		
ACID COMPOUNDS			
2-Chlorophenol	10	2,4-Dinitrophenol	50
2,4-Dichlorophenol	10	Pentachlorophenol	5
2,4-Dimethylphenol	10	Phenol	10
4,6-Dinitro-o-Cresol	50	2,4,6-Trichlorophenol	10

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ANALYTICAL REPORT

PREPARED FOR

Attn: Patrick Chavez
Albuquerque Metropolitan Arroyo Flood Control Authority
2600 Prospect Ave NE
Albuquerque, New Mexico 87107

Generated 7/1/2024 11:06:42 AM

JOB DESCRIPTION

CMC

JOB NUMBER

885-6986-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.

myEOL

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization

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7/1/2024 11:06:42 AM

Authorized for release by
Erin Munoz, Project Manager
Erin.Munoz@et.eurofinsus.com
(505)345-3975

Table of Contents

Definitions/Glossary

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-6986-1
Project/Site: CMC

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
885-6986-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 6/26/2024 4:49 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 26.3°C.

Biology
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

06/26/2024: Rio Grande North and Rio Grande at Alameda E. coli tested.

Field Parameters:
- North
  Temp = 26.4^{0}C
  pH = 8.41
  Conductivity = 254.1
  Dissolved Oxygen = 4.7
- Alameda
  Temp = 28.9^{0}C
  pH = 8.40
  Conductivity = 272.1
  Dissolved Oxygen = 4.5

Client Sample Results

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-6986-1
Project/Site: CMC

Client Sample ID: RG- North 20240626
Lab Sample ID: 885-6986-1
Date Collected: 06/26/24 15:05
Matrix: Water
Date Received: 06/26/24 16:49

Method: SM 9223B - Coliforms, Total, and E.Coll (Colilert - Quanti Tray)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Escherichia coli	108.0		10.0	10.0	MPN/100mL			06/26/24 18:09	1

Client Sample Results

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-6986-1
Project/Site: CMC

Client Sample ID: RG- Alameda 20240626
Lab Sample ID: 885-6986-2
Date Collected: 06/26/24 16:28
Matrix: Water
Date Received: 06/26/24 16:49

Method: SM 9223B - Coliforms, Total, and E.Coll (Colilert - Quanti Tray)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Escherichia coli	97.0		10.0	10.0	MPN/100mL			06/26/24 18:09	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Project/Site: CMC

Job ID: 885-6986-1

Method: 9223B - Coliforms, Total, and E.Coll (Colilert - Quanti Tray)

Lab Sample ID: MB 885-7444/1
Matrix: Water
Analysis Batch: 7444

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
0. cherichia coli	ND		1rh	1rh	MPN/1LL2 4			L6/E6/Ef 18:L9	1

0urosin. Albuquerque

7/1/2024

Biology

Analysis Batch: 7444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6986-1	RG- North 20240626	Total/NA	Water	9223B	
885-6986-2	RG- Alameda 20240626	Total/NA	Water	9223B	
MB 885-7444/1	Method Blank	Total/NA	Water	9223B	

Lab Chronicle

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-6986-1
Project/Site: CMC

Client Sample ID: RG- North 20240626
Lab Sample ID: 885-6986-1
Date Collected: 06/26/24 15:05
Matrix: Water
Date Received: 06/26/24 16:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9223B		1	7444	KH	EET ALB	06/26/24 18:09

Client Sample ID: RG- Alameda 20240626
Lab Sample ID: 885-6986-2
Date Collected: 06/26/24 16:28
Matrix: Water
Date Received: 06/26/24 16:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9223B		1	7444	KH	EET ALB	06/26/24 18:09

Laboratory References:
EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-6986-1
Project/Site: CMC

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	NM100001	02-26-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
9223B		Water	Escherichia coli

Chain-of-Custody Record

Client: AMAFCA

Mailing Address:

Phone #:

email or Fax#: pcaver@AMAFCA.org

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: CMC

Project #:

Project Manager: Patrick Chaver

Sampler: I Torres

On Ice: ☑ Yes ☐ No

# of Coolers: 1 (yoyi)

Cooler Temp (including CF): 26.3 ±0=26.3 (°C)

HALL ENVIRONMENTAL ANALYSIS LAB

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM

Tel. 505-345-3975 Fax 505-345-4107

885-6986 COC

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
6/24	1505	AQ	RG-North 20240626	1 Bottle	NA Thio	
1	1620	1	RG-Alameda 20240626	1	1	

Analysis Request

BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	E.coli Enumeration					
										X					
										X					

Date	Time	Relinquished by	Received by	Via	Date	Time
6/26/24	1647			CPO	6/26/24	16:49
Date	Time	Relinquished by	Received by	Via	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories This serves as notice of this possibility Any sub-contracted data will be clearly notated on the analytical report.

Login Sample Receipt Checklist

Client: Albuquerque Metropolitan Arroyo Flood Control Authority

Job Number: 885-6986-1

Login Number: 6986
List Number: 1
Creator: McQuiston, Steven

List Source: Eurofins Albuquerque

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	False	Received same day of collection; chilling process has begun.
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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1 2 3 4 5 6 7 8 9 10 11 12 13 14

ANALYTICAL REPORT

PREPARED FOR

Attn: Patrick Chavez
Albuquerque Metropolitan Arroyo Flood Control Authority
2600 Prospect Ave NE
Albuquerque, New Mexico 87107

Generated 7/31/2024 2:26:56 PM

JOB DESCRIPTION

CMC

JOB NUMBER

885-7077-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.

myEOL

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization

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7/31/2024 2:26:56 PM

Authorized for release by
Erin Munoz, Project Manager
Erin.Munoz@et.eurofinsus.com
(505)345-3975

Table of Contents

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.

GC/MS Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
S1+	Surrogate recovery exceeds control limits, high biased.

GC Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

LCMS

Qualifier	Qualifier Description
I	Value is EMPC (estimated maximum possible concentration).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Dioxin

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
q	The reported result is the estimated maximum possible concentration of this analyte, quantitated using the theoretical ion ratio. The measured ion ratio does not meet qualitative identification criteria and indicates a possible interference.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
b	Result Detected in the Unseeded Control blank (USB).
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.

Rad

Qualifier	Qualifier Description
G	The Sample MDC is greater than the requested RL.
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
885-7077-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 6/27/2024 2:37 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.9°C and 10.4°C.

Subcontract Work
Method Hexavalent Chromium: This method was subcontracted to Pace Analytical Services LLC. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

GC/MS VOA
Method 624.1: The following samples were received outside of holding time: RG-North20240626 (885-7077-1) and RG-South20240627 (885-7077-2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC/MS Semi VOA
Method 625.1_QQQ: Surrogate recovery for the following sample was outside the upper control limit: RG-North20240626 (885-7077-1). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 625.1_QQQ: Six surrogates are used for this analysis. The laboratory's SOP allows one base and one acid of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: RG-South20240627 (885-7077-2). These results have been reported and qualified.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Pesticides
Method 8081B_LL: The surrogate recovery for the blank associated with preparation batch 860-169461 and analytical batch 860-169649 was outside the upper control limits.

Method 8081B_LL: The surrogate recovery for the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) associated with preparation batch 860-169461 and analytical batch 860-169649 was outside the upper control limits.

(LCS 860-169461/2-A) and (LCSD 860-169461/3-A)

Method 8081B_LL: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 860-169461 and analytical batch 860-169649 recovered outside control limits for the following analytes: Dieldrin. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Pesticides/PCBs
Method 608.3: The Tetrachloro-m-xylene surrogate recovery for the following samples was outside acceptance limits (high biased) on the primary column: (LCS 860-169312/2-A), (LCSD 860-169312/3-A) and (MB 860-169312/1-A). The recovery is within acceptance limits on the other column, indicating that the extraction process was in control.

Job ID: 885-7077-1 (Continued) Eurofins Albuquerque

Method 608.3: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 860-169312 and analytical batch 860-169369 recovered outside control limits for the following analytes: Dieldrin. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 608.3: The surrogate recovery for the blank associated with preparation batch 860-169818 and analytical batch 860-169920 was outside the upper control limits.

(MB 860-169818/1-A)

Method 608.3: The surrogate recovery for the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) associated with preparation batch 860-169818 and analytical batch 860-169920 was outside the upper control limits.

(LCS 860-169818/2-A) and (LCSD 860-169818/3-A)

Method 608.3: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 860-169818 and analytical batch 860-169920 recovered outside control limits for the following analytes: Dieldrin. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 608.3: Surrogate recovery for the following samples were outside the upper control limit: RG-North20240626 (885-7077-1) and RG-South20240627 (885-7077-2). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 608.3: The following samples were prepared outside of preparation holding time due to surrogate recovery outside control limits (low biased) for original extraction: RG-North20240626 (885-7077-1) and RG-South20240627 (885-7077-2).

Method 608.3: Surrogate recovery for the following sample was outside control limits: RG-North20240626 (885-7077-1). Re-extraction and/or re-analysis was performed and surrogate recovery was outside control limits.

Method 608.3: Surrogate recovery for the following samples were outside control limits: RG-North20240626 (885-7077-1) and RG-South20240627 (885-7077-2). Re-extraction and/or re-analysis was performed and surrogate recovery was outside control limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

PFAS
Method 1633: The following samples in preparation batch 320-779486 were observed to have a thin layer of sediment present in the bottom of the bottle prior to extraction. RG-North20240626 (885-7077-1) and RG-South20240627 (885-7077-2)

Method 1633: The following samples in preparation batch 320-779486 were brown in color prior to extraction. RG-North20240626 (885-7077-1) and RG-South20240627 (885-7077-2)

Method 1633: The following samples in preparation batch 320-779486 were yellow in color following extraction. RG-North20240626 (885-7077-1) and RG-South20240627 (885-7077-2)

Method 1633: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 320-779486.

Method 1633: The following samples were received preserved with Trizma. Preservation was not added to batch QC samples. RG-North20240626 (885-7077-1), RG-South20240627 (885-7077-2) and EB-20240627 (885-7077-3)

Method 1633: The "I" qualifier means the transition mass ratio for the indicated analyte was outside the established ratio limits. The qualitative identification of the analyte has some degree of uncertainty. However, analyst judgment was used to positively identify the analyte: RG-North20240626 (885-7077-1) and RG-South20240627 (885-7077-2).

Method 1633: The continuing calibration verification (CCV) associated with batch 320-780306 recovered above the upper control limit for Perfluoroheptanesulfonic acid (PFHpS), 4,8-Dioxa-3H-perfluorononanoic acid (ADONA), 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS), 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) and 3-Perfluoroheptylpropanoic acid (7:3 FTCA). The samples associated with this CCV were non-detects for the affected analytes;

therefore, the data have been reported. RG-North20240626 (885-7077-1), RG-South20240627 (885-7077-2), EB-20240627 (885-7077-3) and (CCV 320-780306/1).

Method 1633: The continuing calibration verification (CCV) associated with batch 320-780306 recovered above the upper control limit for 1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS), 4,8-Dioxa-3H-perfluorononanoic acid (ADONA), 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS) and 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. RG-North20240626 (885-7077-1), RG-South20240627 (885-7077-2), EB-20240627 (885-7077-3) and (CCV 320-780306/10).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Hi-Res PCBs
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method SM5210B_BODCalc: The glucose-glutamic acid standard (LCS) recovered outside the recovery limits specified in the method in batch 885-7579. The method holding time had expired, therefore the analysis was not repeated. The data was qualified and reported.

Method SM5210B_BODCalc: The method blank result associated with batch 885-7579 was higher than the method-required limit of 0.2 mg/L.

Method SM5210B_BODCalc: Chlorine was present in the following sample and treated per Method/SOP: RG-North20240626 (885-7077-1). Results may be biased low.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Gas Flow Proportional Counter
Method 900.0: Gross Alpha Beta prep batch 160-669229:

The detection goal was not met for the following samples due to a reduction of the sample size attributed to high residual mass: RG-North20240626 (885-7077-1), RG-South20240627 (885-7077-2) and (885-7077-K-2-D DU). Analytical results are reported with the detection limit achieved.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Rad
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Biology
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

06/26/2024: Rio Grande North and 06/27/2024 Rio Grande South; both full suite of testing.

Field Parameters:
- North
  Temp = 26.4^{0}C
  pH = 8.41
  Conductivity = 254.1
  Dissolved Oxygen = 4.7
- South
  Temp = 28.3^{0}C
  pH = 8.30
  Conductivity = 337.0
  Dissolved Oxygen = 5.5

Client Sample ID: RG-North20240626
Lab Sample ID: 885-7077-1
Date Collected: 06/26/24 15:05
Matrix: Water
Date Received: 06/27/24 14:37

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	ND	H	0.010	0.0018	mg/L			07/03/24 02:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*63 - 144*		*07/03/24 02:47*	*1*
4-Bromofluorobenzene (Surr)	*105*		*74 - 124*		*07/03/24 02:47*	*1*
Dibromofluoromethane (Surr)	*106*		*75 - 131*		*07/03/24 02:47*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*07/03/24 02:47*	*1*

Method: EPA 625.1 - Semivolatile Organic Compounds (GC-MS/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzidine	ND		1.2	0.091	ug/L		07/02/24 12:40	07/03/24 19:01	1
Benzo[a]anthracene	ND	*+	0.12	0.0096	ug/L		07/02/24 12:40	07/03/24 19:01	1
Benzo[b]fluoranthene	ND	*+	0.58	0.067	ug/L		07/02/24 12:40	07/03/24 19:01	1
Bis(2-ethylhexyl) phthalate	ND	*+	2.9	1.4	ug/L		07/02/24 12:40	07/03/24 19:01	1
Chrysene	ND	*+	0.58	0.082	ug/L		07/02/24 12:40	07/03/24 19:01	1
Dibenz(a,h)anthracene	ND		0.12	0.051	ug/L		07/02/24 12:40	07/03/24 19:01	1
Dibenzofuran	ND		0.58	0.11	ug/L		07/02/24 12:40	07/03/24 19:01	1
Indeno[1,2,3-cd]pyrene	ND		0.58	0.10	ug/L		07/02/24 12:40	07/03/24 19:01	1
Pentachlorophenol	ND		1.2	1.0	ug/L		07/02/24 12:40	07/03/24 19:01	1
Benzo[k]fluoranthene	ND	*+	0.58	0.048	ug/L		07/02/24 12:40	07/03/24 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*103*		*43 - 130*	*07/02/24 12:40*	*07/03/24 19:01*	*1*
2-Fluorophenol (Surr)	*107*		*19 - 120*	*07/02/24 12:40*	*07/03/24 19:01*	*1*
Nitrobenzene-d5 (Surr)	*151*	*S1+*	*37 - 133*	*07/02/24 12:40*	*07/03/24 19:01*	*1*
Phenol-d5 (Surr)	*77*		*8 - 124*	*07/02/24 12:40*	*07/03/24 19:01*	*1*
p-Terphenyl-d14 (Surr)	*98*		*47 - 130*	*07/02/24 12:40*	*07/03/24 19:01*	*1*
2,4,6-Tribromophenol (Surr)	*115*		*35 - 130*	*07/02/24 12:40*	*07/03/24 19:01*	*1*

Method: EPA 608.3 - Organochlorine Pesticides/PCBs in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dieldrin	ND	*+	0.000052	0.000018	mg/L		07/02/24 22:42	07/03/24 14:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*24*	*S1-*	*45 - 115*	*07/02/24 22:42*	*07/03/24 14:47*	*1*
Tetrachloro-m-xylene	*138*	*S1+*	*41 - 110*	*07/02/24 22:42*	*07/03/24 14:47*	*1*

Method: SW846 8081B_LL - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dieldrin	ND	*+	0.000010	0.00000081	mg/L		07/03/24 13:50	07/05/24 11:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*107*		*15 - 136*	*07/03/24 13:50*	*07/05/24 11:41*	*1*
Tetrachloro-m-xylene	*104*		*18 - 126*	*07/03/24 13:50*	*07/05/24 11:41*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate	**0.14**		0.10	0.020	mg/L			06/28/24 11:40	1
Nitrite	ND		0.10	0.012	mg/L			06/28/24 11:40	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: RG-North20240626
Lab Sample ID: 885-7077-1
Date Collected: 06/26/24 15:05
Matrix: Water
Date Received: 06/27/24 14:37

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		14	3.4	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluoropentanoic acid (PFPeA)	ND		6.8	1.7	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluorohexanoic acid (PFHxA)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluoroheptanoic acid (PFHpA)	1.5	J	3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluorooctanoic acid (PFOA)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluorononanoic acid (PFNA)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluorodecanoic acid (PFDA)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluoroundecanoic acid (PFUnA)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluorododecanoic acid (PFDoA)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluorotridecanoic acid (PFTrDA)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluorotetradecanoic acid (PFTeDA)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluoropentanesulfonic acid (PFPeS)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluorohexanesulfonic acid (PFHxS)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluorooctanesulfonic acid (PFOS)	1.6	J I	3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluorononanesulfonic acid (PFNS)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluorodecanesulfonic acid (PFDS)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluorododecanesulfonic acid (PFDoS)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		14	3.4	ng/L		07/15/24 11:26	07/16/24 19:22	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		14	3.4	ng/L		07/15/24 11:26	07/16/24 19:22	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		14	3.4	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluorooctanesulfonamide (PFOSA)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		34	8.5	ng/L		07/15/24 11:26	07/16/24 19:22	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		34	8.5	ng/L		07/15/24 11:26	07/16/24 19:22	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		14	3.4	ng/L		07/15/24 11:26	07/16/24 19:22	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		14	3.4	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		6.8	1.7	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		6.8	1.7	ng/L		07/15/24 11:26	07/16/24 19:22	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		6.8	1.7	ng/L		07/15/24 11:26	07/16/24 19:22	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	ND		14	3.4	ng/L		07/15/24 11:26	07/16/24 19:22	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: RG-North20240626
Lab Sample ID: 885-7077-1
Date Collected: 06/26/24 15:05
Matrix: Water
Date Received: 06/27/24 14:37

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		14	3.4	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		6.8	1.7	ng/L		07/15/24 11:26	07/16/24 19:22	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		17	4.3	ng/L		07/15/24 11:26	07/16/24 19:22	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		85	21	ng/L		07/15/24 11:26	07/16/24 19:22	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		85	21	ng/L		07/15/24 11:26	07/16/24 19:22	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*89.0*		*5 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
13C5 PFPeA	*95.3*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
13C5 PFHxA	*85.5*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
13C4 PFHpA	*104*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
13C8 PFOA	*96.2*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
13C9 PFNA	*88.0*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
13C6 PFDA	*96.9*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
13C7 PFUnA	*84.5*		*30 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
13C2 PFDoA	*86.7*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
13C2 PFTeDA	*67.2*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
13C3 PFHxS	*78.0*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
13C8 PFOS	*98.1*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
13C8 PFOSA	*89.4*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
d3-NMeFOSAA	*106*		*40 - 170*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
d5-NEtFOSAA	*104*		*25 - 135*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
13C2 4:2 FTS	*99.5*		*40 - 200*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
13C2 6:2 FTS	*116*		*40 - 200*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
13C2 8:2 FTS	*101*		*40 - 300*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
13C3 HFPO-DA	*85.6*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
d7-N-MeFOSE-M	*68.6*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
d9-N-EtFOSE-M	*66.5*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
d5-NEtPFOSA	*68.4*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
d3-NMePFOSA	*70.3*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	**0.89**	**J**	3.4	0.85	ng/L		07/15/24 11:26	07/17/24 15:03	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 PFBS	*71.5*		*40 - 135*	*07/15/24 11:26*	*07/17/24 15:03*	*1*

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	ND		21	20	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-2	ND		210	17	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-3	ND		62	49	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-4	ND		41	25	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-5	ND		210	11	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-6	ND		210	25	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-7	ND		210	19	pg/L		07/08/24 12:40	07/12/24 04:49	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: RG-North20240626
Lab Sample ID: 885-7077-1
Date Collected: 06/26/24 15:05
Matrix: Water
Date Received: 06/27/24 14:37

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-8	ND		210	27	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-9	ND		210	13	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-10	ND		210	16	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-11	ND		210	150	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-12	ND		410	31	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-13	ND		410	31	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-14	ND		210	72	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-15	ND		41	22	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-16	ND		210	7.0	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-17	ND		210	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-18	ND		410	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-19	ND		21	9.6	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-20	ND		410	21	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-21	ND		410	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-22	ND		210	7.5	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-23	ND		210	8.2	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-24	ND		210	9.9	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-25	ND		210	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-26	ND		410	9.6	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-27	ND		210	9.9	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-28	ND		410	21	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-29	ND		410	9.6	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-30	ND		410	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-31	ND		210	21	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-32	ND		210	9.8	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-33	ND		410	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-34	ND		210	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-35	ND		210	8.3	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-36	ND		210	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-37	ND		21	13	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-38	ND		210	13	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-39	ND		210	10	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-40	ND		410	12	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-41	ND		210	8.6	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-42	ND		210	8.4	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-43	ND		210	12	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-44	ND		620	36	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-45	ND		410	7.9	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-46	ND		210	11	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-47	ND		620	36	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-48	ND		210	10	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-49	ND		410	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-50	ND		410	11	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-51	ND		410	8.0	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-52	ND		210	25	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-53	ND		410	11	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-54	ND		21	8.6	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-55	ND		210	7.8	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-56	ND		210	6.8	pg/L		07/08/24 12:40	07/12/24 04:49	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: RG-North20240626
Lab Sample ID: 885-7077-1
Date Collected: 06/26/24 15:05
Matrix: Water
Date Received: 06/27/24 14:37

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-57	ND		210	13	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-58	ND		210	16	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-59	ND		620	13	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-60	ND		210	9.7	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-61	ND		820	20	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-62	ND		620	13	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-63	ND		210	10	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-64	ND		210	9.6	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-65	ND		620	36	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-66	ND		210	11	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-67	ND		210	13	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-68	ND		210	9.4	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-69	ND		410	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-70	ND		820	20	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-71	ND		410	12	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-72	ND		210	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-73	ND		210	5.4	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-74	ND		820	20	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-75	ND		620	13	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-76	ND		820	20	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-77	ND		21	17	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-78	ND		210	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-79	ND		210	8.3	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-80	ND		210	8.3	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-81	ND		21	17	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-82	ND		210	13	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-83	ND		410	9.6	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-84	ND		210	10	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-85	ND		620	17	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-86	ND		1200	30	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-87	ND		1200	30	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-88	ND		410	9.2	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-89	ND		210	8.5	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-90	ND		620	17	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-91	ND		410	9.2	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-92	ND		210	12	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-93	ND		410	11	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-94	ND		210	11	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-95	ND		210	32	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-96	ND		210	16	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-97	ND		1200	30	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-98	ND		410	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-99	ND		410	8.2	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-100	ND		410	11	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-101	ND		620	17	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-102	ND		410	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-103	ND		210	8.9	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-104	ND		21	13	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-105	ND		21	9.5	pg/L		07/08/24 12:40	07/12/24 04:49	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: RG-North20240626
Lab Sample ID: 885-7077-1
Date Collected: 06/26/24 15:05
Matrix: Water
Date Received: 06/27/24 14:37

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-106	ND		210	8.5	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-107	ND		210	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-108	ND		410	30	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-109	ND		1200	5.1	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-110	ND		410	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-111	ND		210	8.9	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-112	ND		210	6.4	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-113	ND		620	17	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-114	ND		21	7.9	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-115	ND		410	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-116	ND		620	17	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-117	ND		620	17	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-118	ND		21	9.1	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-119	ND		1200	30	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-120	ND		210	5.8	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-121	ND		210	11	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-122	ND		210	8.3	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-123	ND		21	10	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-124	ND		410	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-125	ND		1200	30	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-126	ND		21	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-127	ND		210	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-128	ND		410	10	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-129	ND		820	16	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-130	ND		210	11	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-131	ND		210	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-132	ND		210	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-133	ND		210	11	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-134	ND		410	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-135	ND		410	10	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-136	ND		210	6.3	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-137	ND		210	12	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-138	ND		820	16	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-139	ND		410	9.6	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-140	ND		410	9.6	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-141	ND		210	7.4	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-142	ND		210	13	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-143	ND		410	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-144	ND		210	6.3	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-145	ND		210	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-146	ND		210	7.3	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-147	ND		410	9.6	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-148	ND		210	6.8	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-149	ND		410	9.6	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-150	ND		210	12	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-151	ND		410	10	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-152	ND		210	5.6	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-153	ND		410	9.6	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-154	ND		210	5.9	pg/L		07/08/24 12:40	07/12/24 04:49	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: RG-North20240626
Lab Sample ID: 885-7077-1
Date Collected: 06/26/24 15:05
Matrix: Water
Date Received: 06/27/24 14:37

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-155	ND		21	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-156	ND		41	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-157	ND		41	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-158	ND		210	11	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-159	ND		210	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-160	ND		820	7.5	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-161	ND		210	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-162	ND		210	9.2	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-163	ND		820	16	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-164	ND		210	21	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-165	ND		210	13	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-166	ND		410	10	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-167	ND		21	7.9	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-168	ND		410	9.6	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-169	ND		21	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-170	ND		210	19	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-171	ND		410	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-172	ND		210	16	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-173	ND		410	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-174	ND		210	17	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-175	ND		210	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-176	ND		210	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-177	ND		210	16	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-178	ND		210	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-179	ND		210	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-180	ND		410	10	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-181	ND		210	20	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-182	ND		210	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-183	ND		210	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-184	ND		210	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-185	ND		210	12	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-186	ND		210	16	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-187	ND		210	19	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-188	ND		21	10	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-189	ND		21	16	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-190	ND		210	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-191	ND		210	20	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-192	ND		210	17	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-193	ND		410	10	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-194	ND		210	9.0	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-195	ND		210	18	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-196	ND		210	16	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-197	ND		210	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-198	ND		410	8.0	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-199	ND		410	8.0	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-200	ND		210	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-201	ND		210	13	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-202	ND		21	12	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-203	ND		210	14	pg/L		07/08/24 12:40	07/12/24 04:49	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: RG-North20240626
Lab Sample ID: 885-7077-1
Date Collected: 06/26/24 15:05
Matrix: Water
Date Received: 06/27/24 14:37

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-204	ND		210	13	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-205	ND		21	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-206	ND		21	8.5	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-207	ND		210	5.6	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-208	ND		21	12	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-209	ND		21	12	pg/L		07/08/24 12:40	07/12/24 04:49	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
PCB-1L	*70*		*15 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-3L	*72*		*15 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-4L	*66*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-15L	*76*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-19L	*76*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-37L	*67*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-54L	*57*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-77L	*76*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-81L	*74*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-104L	*52*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-105L	*73*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-114L	*72*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-118L	*73*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-123L	*72*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-126L	*77*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-155L	*59*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-156L	*96*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-156L/157L	*96*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-157L	*96*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-167L	*93*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-169L	*96*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-188L	*55*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-189L	*73*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-202L	*65*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-205L	*79*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-206L	*74*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-208L	*65*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-209L	*71*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
PCB-28L	*68*		*30 - 135*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-111L	*75*		*30 - 135*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-178L	*85*		*30 - 135*	*07/08/24 12:40*	*07/12/24 04:49*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	33		1.0	0.053	mg/L		07/02/24 13:43	07/10/24 15:01	1
Magnesium	6.4		1.0	0.033	mg/L		07/02/24 13:43	07/08/24 12:07	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	1.5		1.0	0.15	ug/L		07/16/24 15:34	07/19/24 14:39	2

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: RG-North20240626
Lab Sample ID: 885-7077-1
Date Collected: 06/26/24 15:05
Matrix: Water
Date Received: 06/27/24 14:37

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.00050	0.000083	mg/L			07/09/24 10:31	1
Copper	0.00095		0.00050	0.00012	mg/L			07/09/24 10:31	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	110		6.6	2.5	mg/L			07/09/24 15:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease) (1664B)	ND		5.0	4.4	mg/L			07/08/24 09:19	1
Total Dissolved Solids (SM 2540C)	250		50	25	mg/L			07/02/24 14:21	1
Nitrogen, Total Kjeldahl (EPA 351.2)	0.60		0.50	0.50	mg/L		07/08/24 11:40	07/09/24 13:01	1
Total Phosphorus as P (EPA 365.1)	0.13		0.050	0.050	mg/L		07/11/24 08:30	07/16/24 09:30	1
Chemical Oxygen Demand (SM 5220D)	ND		50	50	mg/L			07/09/24 14:14	1
Total Suspended Solids (SM 2540D)	58		4.0	4.0	mg/L			07/02/24 16:35	1
pH (SM 4500 H+ B)	8.1	HF	0.1	0.1	SU			07/09/24 22:21	1
Biochemical Oxygen Demand (SM5210B)	2.0	*- b	2.0	2.0	mg/L			06/28/24 11:05	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P (EPA 365.1)	0.055		0.050	0.050	mg/L		07/11/24 08:30	07/16/24 09:32	1

Method: EPA 900.0 - Gross Alpha and Gross Beta Radioactivity

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Gross Alpha	6.25	G	2.76	2.85	3.00	3.55	pCi/L	07/03/24 08:58	07/18/24 17:21	1
Gross Beta	5.30		1.17	1.28	4.00	1.26	pCi/L	07/03/24 08:58	07/18/24 17:21	1

Method: SM Gross Alpha Adj - Gross Alpha Adjusted

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Adjusted Gross Alpha	5.25				3.00	3.55	pCi/L		07/19/24 14:39	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: RG-South20240627
Lab Sample ID: 885-7077-2
Date Collected: 06/27/24 13:10
Matrix: Water
Date Received: 06/27/24 14:37

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	ND	H	0.010	0.0018	mg/L			07/03/24 03:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*63 - 144*		*07/03/24 03:08*	*1*
4-Bromofluorobenzene (Surr)	*105*		*74 - 124*		*07/03/24 03:08*	*1*
Dibromofluoromethane (Surr)	*105*		*75 - 131*		*07/03/24 03:08*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*07/03/24 03:08*	*1*

Method: EPA 625.1 - Semivolatile Organic Compounds (GC-MS/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzidine	ND		1.1	0.090	ug/L		07/02/24 12:40	07/05/24 15:46	1
Benzo[a]anthracene	ND	*+	0.11	0.0095	ug/L		07/02/24 12:40	07/05/24 15:46	1
Benzo[b]fluoranthene	ND	*+	0.57	0.066	ug/L		07/02/24 12:40	07/05/24 15:46	1
Bis(2-ethylhexyl) phthalate	ND	*+	2.8	1.4	ug/L		07/02/24 12:40	07/05/24 15:46	1
Chrysene	ND	*+	0.57	0.081	ug/L		07/02/24 12:40	07/05/24 15:46	1
Dibenz(a,h)anthracene	ND		0.11	0.051	ug/L		07/02/24 12:40	07/05/24 15:46	1
Dibenzofuran	ND		0.57	0.11	ug/L		07/02/24 12:40	07/05/24 15:46	1
Indeno[1,2,3-cd]pyrene	ND		0.57	0.10	ug/L		07/02/24 12:40	07/05/24 15:46	1
Pentachlorophenol	ND		1.1	1.0	ug/L		07/02/24 12:40	07/05/24 15:46	1
Benzo[k]fluoranthene	ND	*+	0.57	0.047	ug/L		07/02/24 12:40	07/05/24 15:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*123*		*43 - 130*	*07/02/24 12:40*	*07/05/24 15:46*	*1*
2-Fluorophenol (Surr)	*87*		*19 - 120*	*07/02/24 12:40*	*07/05/24 15:46*	*1*
Nitrobenzene-d5 (Surr)	*144*	*S1+*	*37 - 133*	*07/02/24 12:40*	*07/05/24 15:46*	*1*
Phenol-d5 (Surr)	*61*		*8 - 124*	*07/02/24 12:40*	*07/05/24 15:46*	*1*
p-Terphenyl-d14 (Surr)	*89*		*47 - 130*	*07/02/24 12:40*	*07/05/24 15:46*	*1*
2,4,6-Tribromophenol (Surr)	*153*	*S1+*	*35 - 130*	*07/02/24 12:40*	*07/05/24 15:46*	*1*

Method: EPA 608.3 - Organochlorine Pesticides/PCBs in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dieldrin	ND	*+	0.000053	0.000018	mg/L		07/02/24 22:42	07/03/24 14:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*29*	*S1-*	*45 - 115*	*07/02/24 22:42*	*07/03/24 14:58*	*1*
Tetrachloro-m-xylene	*145*	*S1+*	*41 - 110*	*07/02/24 22:42*	*07/03/24 14:58*	*1*

Method: SW846 8081B_LL - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dieldrin	ND	*+	0.000010	0.0000000 81	mg/L		07/03/24 13:50	07/05/24 12:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*103*		*15 - 136*	*07/03/24 13:50*	*07/05/24 12:10*	*1*
Tetrachloro-m-xylene	*111*		*18 - 126*	*07/03/24 13:50*	*07/05/24 12:10*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate	**0.62**		0.10	0.020	mg/L			06/28/24 12:29	1
Nitrite	ND		0.10	0.012	mg/L			06/28/24 12:29	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: RG-South20240627
Lab Sample ID: 885-7077-2
Date Collected: 06/27/24 13:10
Matrix: Water
Date Received: 06/27/24 14:37

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	3.8	J	12	3.0	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluoropentanoic acid (PFPeA)	3.1	J	6.1	1.5	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluorohexanoic acid (PFHxA)	2.2	J	3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluoroheptanoic acid (PFHpA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluorooctanoic acid (PFOA)	1.5	J	3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluorononanoic acid (PFNA)	1.0	J	3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluorodecanoic acid (PFDA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluoroundecanoic acid (PFUnA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluorododecanoic acid (PFDoA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluorotridecanoic acid (PFTrDA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluorotetradecanoic acid (PFTeDA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluoropentanesulfonic acid (PFPeS)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluorohexanesulfonic acid (PFHxS)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluorooctanesulfonic acid (PFOS)	1.6	J I	3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluorononanesulfonic acid (PFNS)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluorodecanesulfonic acid (PFDS)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluorododecanesulfonic acid (PFDoS)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		12	3.0	ng/L		07/15/24 11:26	07/16/24 19:39	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		12	3.0	ng/L		07/15/24 11:26	07/16/24 19:39	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		12	3.0	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluorooctanesulfonamide (PFOSA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		30	7.6	ng/L		07/15/24 11:26	07/16/24 19:39	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		30	7.6	ng/L		07/15/24 11:26	07/16/24 19:39	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		12	3.0	ng/L		07/15/24 11:26	07/16/24 19:39	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		12	3.0	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		6.1	1.5	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		6.1	1.5	ng/L		07/15/24 11:26	07/16/24 19:39	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		6.1	1.5	ng/L		07/15/24 11:26	07/16/24 19:39	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	ND		12	3.0	ng/L		07/15/24 11:26	07/16/24 19:39	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: RG-South20240627
Lab Sample ID: 885-7077-2
Date Collected: 06/27/24 13:10
Matrix: Water
Date Received: 06/27/24 14:37

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		12	3.0	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		6.1	1.5	ng/L		07/15/24 11:26	07/16/24 19:39	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		15	3.8	ng/L		07/15/24 11:26	07/16/24 19:39	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		76	19	ng/L		07/15/24 11:26	07/16/24 19:39	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		76	19	ng/L		07/15/24 11:26	07/16/24 19:39	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*95.6*		*5 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
13C5 PFPeA	*102*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
13C5 PFHxA	*96.9*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
13C4 PFHpA	*110*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
13C8 PFOA	*96.8*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
13C9 PFNA	*87.6*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
13C6 PFDA	*94.8*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
13C7 PFUnA	*94.3*		*30 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
13C2 PFDoA	*86.3*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
13C2 PFTeDA	*71.2*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
13C3 PFHxS	*82.6*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
13C8 PFOS	*105*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
13C8 PFOSA	*94.1*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
d3-NMeFOSAA	*104*		*40 - 170*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
d5-NEtFOSAA	*111*		*25 - 135*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
13C2 4:2 FTS	*99.0*		*40 - 200*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
13C2 6:2 FTS	*117*		*40 - 200*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
13C2 8:2 FTS	*107*		*40 - 300*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
13C3 HFPO-DA	*93.1*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
d7-N-MeFOSE-M	*66.7*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
d9-N-EtFOSE-M	*63.5*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
d5-NEtPFOSA	*65.1*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
d3-NMePFOSA	*67.6*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	**4.1**		3.0	0.76	ng/L		07/15/24 11:26	07/17/24 15:21	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 PFBS	*78.6*		*40 - 135*	*07/15/24 11:26*	*07/17/24 15:21*	*1*

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	ND		21	20	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-2	ND		210	17	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-3	ND		62	50	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-4	ND		41	25	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-5	ND		210	11	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-6	ND		210	26	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-7	ND		210	19	pg/L		07/08/24 12:40	07/12/24 05:52	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: RG-South20240627
Lab Sample ID: 885-7077-2
Date Collected: 06/27/24 13:10
Matrix: Water
Date Received: 06/27/24 14:37

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-8	ND		210	27	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-9	ND		210	13	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-10	ND		210	16	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-11	ND		210	150	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-12	ND		410	32	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-13	ND		410	32	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-14	ND		210	73	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-15	ND		41	22	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-16	ND		210	7.1	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-17	ND		210	16	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-18	ND		410	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-19	ND		21	9.7	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-20	ND		410	22	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-21	ND		410	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-22	ND		210	7.6	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-23	ND		210	8.3	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-24	ND		210	10	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-25	ND		210	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-26	ND		410	9.7	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-27	ND		210	10	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-28	ND		410	22	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-29	ND		410	9.7	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-30	ND		410	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-31	ND		210	21	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-32	ND		210	9.9	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-33	ND		410	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-34	ND		210	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-35	ND		210	8.4	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-36	ND		210	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-37	ND		21	13	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-38	ND		210	13	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-39	ND		210	10	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-40	ND		410	12	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-41	ND		210	8.7	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-42	ND		210	8.5	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-43	ND		210	12	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-44	ND		620	36	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-45	ND		410	8.0	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-46	ND		210	12	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-47	ND		620	36	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-48	ND		210	10	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-49	ND		410	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-50	ND		410	11	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-51	ND		410	8.1	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-52	ND		210	25	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-53	ND		410	11	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-54	ND		21	8.6	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-55	ND		210	7.9	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-56	ND		210	6.9	pg/L		07/08/24 12:40	07/12/24 05:52	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: RG-South20240627
Lab Sample ID: 885-7077-2
Date Collected: 06/27/24 13:10
Matrix: Water
Date Received: 06/27/24 14:37

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-57	ND		210	13	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-58	ND		210	16	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-59	ND		620	13	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-60	ND		210	9.9	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-61	ND		830	20	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-62	ND		620	13	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-63	ND		210	10	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-64	ND		210	9.8	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-65	ND		620	36	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-66	ND		210	11	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-67	ND		210	13	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-68	ND		210	9.5	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-69	ND		410	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-70	ND		830	20	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-71	ND		410	12	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-72	ND		210	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-73	ND		210	5.5	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-74	ND		830	20	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-75	ND		620	13	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-76	ND		830	20	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-77	ND		21	17	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-78	ND		210	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-79	ND		210	8.4	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-80	ND		210	8.4	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-81	ND		21	17	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-82	ND		210	13	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-83	ND		410	9.7	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-84	ND		210	10	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-85	ND		620	17	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-86	ND		1200	30	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-87	ND		1200	30	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-88	ND		410	9.3	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-89	ND		210	8.6	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-90	ND		620	17	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-91	ND		410	9.3	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-92	ND		210	12	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-93	ND		410	11	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-94	ND		210	11	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-95	ND		210	33	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-96	ND		210	16	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-97	ND		1200	30	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-98	ND		410	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-99	ND		410	8.3	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-100	ND		410	11	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-101	ND		620	17	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-102	ND		410	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-103	ND		210	9.0	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-104	ND		21	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-105	ND		21	9.6	pg/L		07/08/24 12:40	07/12/24 05:52	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Project/Site: CMC

Job ID: 885-7077-1

Client Sample ID: RG-South20240627
Date Collected: 06/27/24 13:10
Date Received: 06/27/24 14:37

Lab Sample ID: 885-7077-2
Matrix: Water

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-106	ND		210	8.6	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-107	ND		210	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-108	ND		410	30	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-109	ND		1200	5.2	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-110	**21**	**J q**	410	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-111	ND		210	9.0	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-112	ND		210	6.5	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-113	ND		620	17	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-114	ND		21	8.0	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-115	**21**	**J q**	410	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-116	ND		620	17	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-117	ND		620	17	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-118	**13**	**J q**	21	9.2	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-119	ND		1200	30	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-120	ND		210	5.8	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-121	ND		210	11	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-122	ND		210	8.4	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-123	ND		21	10	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-124	ND		410	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-125	ND		1200	30	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-126	ND		21	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-127	ND		210	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-128	ND		410	10	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-129	**28**	**J q**	830	16	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-130	ND		210	11	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-131	ND		210	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-132	ND		210	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-133	ND		210	11	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-134	ND		410	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-135	ND		410	10	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-136	ND		210	6.3	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-137	ND		210	13	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-138	**28**	**J q**	830	16	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-139	ND		410	9.7	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-140	ND		410	9.7	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-141	ND		210	7.5	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-142	ND		210	13	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-143	ND		410	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-144	ND		210	6.4	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-145	ND		210	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-146	ND		210	7.4	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-147	**23**	**J q**	410	9.7	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-148	ND		210	6.9	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-149	**23**	**J q**	410	9.7	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-150	ND		210	12	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-151	ND		410	10	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-152	ND		210	5.7	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-153	**26**	**J**	410	9.7	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-154	ND		210	6.0	pg/L		07/08/24 12:40	07/12/24 05:52	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Project/Site: CMC

Job ID: 885-7077-1

Client Sample ID: RG-South20240627
Date Collected: 06/27/24 13:10
Date Received: 06/27/24 14:37

Lab Sample ID: 885-7077-2
Matrix: Water

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-155	ND		21	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-156	ND		41	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-157	ND		41	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-158	ND		210	12	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-159	ND		210	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-160	**28**	**J q**	830	7.6	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-161	ND		210	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-162	ND		210	9.4	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-163	**28**	**J q**	830	16	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-164	ND		210	21	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-165	ND		210	13	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-166	ND		410	10	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-167	ND		21	7.9	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-168	**26**	**J**	410	9.7	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-169	ND		21	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-170	ND		210	20	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-171	ND		410	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-172	ND		210	16	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-173	ND		410	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-174	ND		210	17	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-175	ND		210	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-176	ND		210	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-177	ND		210	16	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-178	ND		210	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-179	ND		210	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-180	**29**	**J**	410	10	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-181	ND		210	20	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-182	ND		210	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-183	ND		210	16	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-184	ND		210	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-185	ND		210	13	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-186	ND		210	16	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-187	ND		210	20	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-188	ND		21	10	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-189	ND		21	16	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-190	ND		210	16	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-191	ND		210	21	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-192	ND		210	18	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-193	**29**	**J**	410	10	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-194	ND		210	9.1	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-195	ND		210	19	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-196	ND		210	16	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-197	ND		210	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-198	ND		410	8.1	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-199	ND		410	8.1	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-200	ND		210	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-201	ND		210	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-202	ND		21	12	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-203	ND		210	15	pg/L		07/08/24 12:40	07/12/24 05:52	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: RG-South20240627
Lab Sample ID: 885-7077-2
Date Collected: 06/27/24 13:10
Matrix: Water
Date Received: 06/27/24 14:37

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-204	ND		210	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-205	ND		21	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-206	ND		21	8.6	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-207	ND		210	5.6	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-208	ND		21	12	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-209	ND		21	12	pg/L		07/08/24 12:40	07/12/24 05:52	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
PCB-1L	*72*		*15 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-3L	*74*		*15 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-4L	*65*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-15L	*72*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-19L	*76*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-37L	*70*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-54L	*62*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-77L	*79*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-81L	*76*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-104L	*53*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-105L	*70*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-114L	*68*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-118L	*67*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-123L	*68*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-126L	*72*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-155L	*62*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-156L	*96*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-156L/157L	*96*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-157L	*96*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-167L	*94*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-169L	*95*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-188L	*53*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-189L	*64*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-202L	*60*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-205L	*72*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-206L	*62*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-208L	*63*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-209L	*70*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
PCB-28L	*75*		*30 - 135*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-111L	*78*		*30 - 135*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-178L	*93*		*30 - 135*	*07/08/24 12:40*	*07/12/24 05:52*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	41		1.0	0.053	mg/L		07/02/24 13:43	07/10/24 15:03	1
Magnesium	8.3		1.0	0.033	mg/L		07/02/24 13:43	07/08/24 12:11	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	1.6		1.0	0.15	ug/L		07/16/24 15:34	07/19/24 15:03	2

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: RG-South20240627
Lab Sample ID: 885-7077-2
Date Collected: 06/27/24 13:10
Matrix: Water
Date Received: 06/27/24 14:37

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	0.010		0.00050	0.00012	mg/L			07/09/24 10:34	1
Lead	ND		0.00050	0.000083	mg/L			07/09/24 10:34	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	140		6.6	2.5	mg/L			07/09/24 15:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease) (1664B)	ND		4.9	4.4	mg/L			07/08/24 09:19	1
Total Dissolved Solids (SM 2540C)	280		100	50	mg/L			07/03/24 12:52	1
Nitrogen, Total Kjeldahl (EPA 351.2)	0.99		0.50	0.50	mg/L		07/08/24 11:40	07/09/24 13:02	1
Total Phosphorus as P (EPA 365.1)	0.38		0.050	0.050	mg/L		07/11/24 08:30	07/16/24 09:34	1
Chemical Oxygen Demand (SM 5220D)	ND		50	50	mg/L			07/23/24 14:19	1
Total Suspended Solids (SM 2540D)	160		8.0	8.0	mg/L			07/02/24 16:35	1
pH (SM 4500 H+ B)	8.2	HF	0.1	0.1	SU			07/09/24 22:10	1
Biochemical Oxygen Demand (SM5210B)	ND	*- b	2.0	2.0	mg/L			06/28/24 11:05	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P (EPA 365.1)	0.37		0.050	0.050	mg/L		07/11/24 08:30	07/16/24 09:36	1

Method: EPA 900.0 - Gross Alpha and Gross Beta Radioactivity

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Gross Alpha	4.84	G	3.13	3.18	3.00	4.46	pCi/L	07/03/24 08:58	07/18/24 17:21	1
Gross Beta	7.45		1.73	1.88	4.00	1.91	pCi/L	07/03/24 08:58	07/18/24 17:21	1

Method: SM Gross Alpha Adj - Gross Alpha Adjusted

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Adjusted Gross Alpha	3.77	U			3.00	4.46	pCi/L		07/19/24 15:03	1

Method: SM 9223B - Coliforms, Total, and E.Coll (Colilert - Quanti Tray)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Escherichia coli	644.0		10.0	10.0	MPN/100mL			06/27/24 17:12	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: EB-20240627
Lab Sample ID: 885-7077-3
Date Collected: 06/27/24 11:50
Matrix: Water
Date Received: 06/27/24 14:37

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		12	3.0	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluoropentanoic acid (PFPeA)	ND		6.1	1.5	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluorohexanoic acid (PFHxA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluoroheptanoic acid (PFHpA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluorooctanoic acid (PFOA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluorononanoic acid (PFNA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluorodecanoic acid (PFDA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluoroundecanoic acid (PFUnA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluorododecanoic acid (PFDoA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluorotridecanoic acid (PFTrDA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluorotetradecanoic acid (PFTeDA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluoropentanesulfonic acid (PFPeS)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluorohexanesulfonic acid (PFHxS)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluorooctanesulfonic acid (PFOS)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluorononanesulfonic acid (PFNS)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluorodecanesulfonic acid (PFDS)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluorododecanesulfonic acid (PFDoS)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		12	3.0	ng/L		07/15/24 11:26	07/16/24 19:57	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		12	3.0	ng/L		07/15/24 11:26	07/16/24 19:57	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		12	3.0	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluorooctanesulfonamide (PFOSA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		30	7.6	ng/L		07/15/24 11:26	07/16/24 19:57	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		30	7.6	ng/L		07/15/24 11:26	07/16/24 19:57	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		12	3.0	ng/L		07/15/24 11:26	07/16/24 19:57	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		12	3.0	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		6.1	1.5	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		6.1	1.5	ng/L		07/15/24 11:26	07/16/24 19:57	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		6.1	1.5	ng/L		07/15/24 11:26	07/16/24 19:57	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	ND		12	3.0	ng/L		07/15/24 11:26	07/16/24 19:57	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		12	3.0	ng/L		07/15/24 11:26	07/16/24 19:57	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: EB-20240627
Lab Sample ID: 885-7077-3
Date Collected: 06/27/24 11:50
Matrix: Water
Date Received: 06/27/24 14:37

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		6.1	1.5	ng/L		07/15/24 11:26	07/16/24 19:57	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		15	3.8	ng/L		07/15/24 11:26	07/16/24 19:57	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		76	19	ng/L		07/15/24 11:26	07/16/24 19:57	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		76	19	ng/L		07/15/24 11:26	07/16/24 19:57	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*89.6*		*5 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
13C5 PFPeA	*96.9*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
13C5 PFHxA	*89.9*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
13C4 PFHpA	*106*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
13C8 PFOA	*96.1*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
13C9 PFNA	*88.8*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
13C6 PFDA	*99.9*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
13C7 PFUnA	*97.0*		*30 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
13C2 PFDoA	*90.4*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
13C2 PFTeDA	*74.0*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
13C3 PFHxS	*79.9*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
13C8 PFOS	*95.1*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
13C8 PFOSA	*80.2*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
d3-NMeFOSAA	*98.6*		*40 - 170*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
d5-NEtFOSAA	*98.9*		*25 - 135*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
13C2 4:2 FTS	*81.5*		*40 - 200*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
13C2 6:2 FTS	*110*		*40 - 200*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
13C2 8:2 FTS	*95.1*		*40 - 300*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
13C3 HFPO-DA	*96.3*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
d7-N-MeFOSE-M	*64.2*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
d9-N-EtFOSE-M	*64.8*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
d5-NEtPFOSA	*64.9*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
d3-NMePFOSA	*66.7*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/17/24 15:38	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 PFBS	*74.9*		*40 - 135*	*07/15/24 11:26*	*07/17/24 15:38*	*1*

Isotope Dilution Summary

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFBA	PFPeA	13C5PHA	C4PFHA	C8PFOA	C9PFNA	C6PFDA	13C7PUA
Lab Sample ID	Client Sample ID	(5-130)	(40-130)	(40-130)	(40-130)	(40-130)	(40-130)	(40-130)	(30-130)
885-7077-1	RG-North20240626	89.0	95.3	85.5	104	96.2	88.0	96.9	84.5
885-7077-2	RG-South20240627	95.6	102	96.9	110	96.8	87.6	94.8	94.3
885-7077-3	EB-20240627	89.6	96.9	89.9	106	96.1	88.8	99.9	97.0
LCS 320-779486/3-A	Lab Control Sample	92.1	97.5	95.3	110	96.2	87.6	99.7	109
LCSD 320-779486/4-A	Lab Control Sample Dup	90.7	96.1	93.8	111	88.0	103	101	99.1
LLCS 320-779486/2-A	Lab Control Sample	95.3	100	98.9	113	99.9	79.9	91.0	84.8
MB 320-779486/1-A	Method Blank	102	107	102	117	102	103	106	119

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFDoA	PFTDA	C3PFHS	C8PFOS	PFOSA	d3NMFOS	d5NEFOS	M242FTS
Lab Sample ID	Client Sample ID	(10-130)	(10-130)	(40-130)	(40-130)	(40-130)	(40-170)	(25-135)	(40-200)
885-7077-1	RG-North20240626	86.7	67.2	78.0	98.1	89.4	106	104	99.5
885-7077-2	RG-South20240627	86.3	71.2	82.6	105	94.1	104	111	99.0
885-7077-3	EB-20240627	90.4	74.0	79.9	95.1	80.2	98.6	98.9	81.5
LCS 320-779486/3-A	Lab Control Sample	102	88.1	85.2	89.5	83.7	94.8	97.4	81.3
LCSD 320-779486/4-A	Lab Control Sample Dup	99.9	86.8	83.5	92.0	88.4	105	103	81.3
LLCS 320-779486/2-A	Lab Control Sample	85.0	84.0	87.2	98.8	99.4	101	103	80.8
MB 320-779486/1-A	Method Blank	123	111	93.5	100	101	101	104	91.6

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		M262FTS	M282FTS	HFPODA	NMFM	NEFM	d5NPFSA	d3NMFSA	
Lab Sample ID	Client Sample ID	(40-200)	(40-300)	(40-130)	(10-130)	(10-130)	(10-130)	(10-130)	
885-7077-1	RG-North20240626	116	101	85.6	68.6	66.5	68.4	70.3	
885-7077-2	RG-South20240627	117	107	93.1	66.7	63.5	65.1	67.6	
885-7077-3	EB-20240627	110	95.1	96.3	64.2	64.8	64.9	66.7	
LCS 320-779486/3-A	Lab Control Sample	98.3	84.9	90.7	74.1	78.3	75.7	74.2	
LCSD 320-779486/4-A	Lab Control Sample Dup	97.3	86.6	91.8	80.2	85.0	78.0	76.3	
LLCS 320-779486/2-A	Lab Control Sample	106	92.8	92.4	89.4	91.8	84.5	85.9	
MB 320-779486/1-A	Method Blank	115	96.6	96.7	92.3	94.4	87.2	86.3	

Surrogate Legend

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
13C5PHA = 13C5 PFHxA
C4PFHA = 13C4 PFHpA
C8PFOA = 13C8 PFOA
C9PFNA = 13C9 PFNA
C6PFDA = 13C6 PFDA
13C7PUA = 13C7 PFUnA
PFDoA = 13C2 PFDoA
PFTDA = 13C2 PFTeDA
C3PFHS = 13C3 PFHxS
C8PFOS = 13C8 PFOS
PFOSA = 13C8 PFOSA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
M242FTS = 13C2 4:2 FTS
M262FTS = 13C2 6:2 FTS
M282FTS = 13C2 8:2 FTS
HFPODA = 13C3 HFPO-DA
NMFM = d7-N-MeFOSE-M

Isotope Dilution Summary

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

NEFM = d9-N-EtFOSE-M
d5NPFSA = d5-NEtPFOSA
d3NMFSA = d3-NMePFOSA

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)
		C3PFBS
Lab Sample ID	Client Sample ID	(40-135)
885-7077-1 - RA	RG-North20240626	71.5
885-7077-2 - RA	RG-South20240627	78.6
885-7077-3 - RA	EB-20240627	74.9
LCS 320-779486/3-A - RA	Lab Control Sample	78.1
LCSD 320-779486/4-A - RA	Lab Control Sample Dup	75.3
LLCS 320-779486/2-A - RA	Lab Control Sample	75.8
MB 320-779486/1-A - RA	Method Blank	82.7

Surrogate Legend

C3PFBS = 13C3 PFBS

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PCB1L	PCB3L	PCB4L	PCB15L	PCB19L	PCB37L	PCB54L	PCB77L
Lab Sample ID	Client Sample ID	(15-150)	(15-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)
885-7077-1	RG-North20240626	70	72	66	76	76	67	57	76
885-7077-2	RG-South20240627	72	74	65	72	76	70	62	79
MB 320-777390/1-A	Method Blank	74	75	68	80	79	77	68	88

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PCB81L	PCB104L	PCB105L	PCB114L	PCB118L	PCB123L	PCB126L	PCB155L
Lab Sample ID	Client Sample ID	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)
885-7077-1	RG-North20240626	74	52	73	72	73	72	77	59
885-7077-2	RG-South20240627	76	53	70	68	67	68	72	62
MB 320-777390/1-A	Method Blank	89	64	80	77	80	80	84	73

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PCB156L	156157L	PCB157L	PCB167L	PCB169L	PCB188L	PCB189L	PCB202L
Lab Sample ID	Client Sample ID	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)
885-7077-1	RG-North20240626	96	96	96	93	96	55	73	65
885-7077-2	RG-South20240627	96	96	96	94	95	53	64	60
MB 320-777390/1-A	Method Blank	107	107	107	106	110	58	70	61

		Percent Isotope Dilution Recovery (Acceptance Limits)			
		PCB205L	PCB206L	PCB208L	PCB209L
Lab Sample ID	Client Sample ID	(25-150)	(25-150)	(25-150)	(25-150)
885-7077-1	RG-North20240626	79	74	65	71
885-7077-2	RG-South20240627	72	62	63	70
MB 320-777390/1-A	Method Blank	75	65	60	62

Surrogate Legend

PCB1L = PCB-1L
PCB3L = PCB-3L
PCB4L = PCB-4L
PCB15L = PCB-15L
PCB19L = PCB-19L
PCB37L = PCB-37L
PCB54L = PCB-54L

PCB77L = PCB-77L
PCB81L = PCB-81L
PCB104L = PCB-104L
PCB105L = PCB-105L
PCB114L = PCB-114L
PCB118L = PCB-118L
PCB123L = PCB-123L
PCB126L = PCB-126L
PCB155L = PCB-155L
PCB156L = PCB-156L
156157L = PCB-156L/157L
PCB157L = PCB-157L
PCB167L = PCB-167L
PCB169L = PCB-169L
PCB188L = PCB-188L
PCB189L = PCB-189L
PCB202L = PCB-202L
PCB205L = PCB-205L
PCB206L = PCB-206L
PCB208L = PCB-208L
PCB209L = PCB-209L

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PCB1L	PCB3L	PCB4L	PCB15L	PCB19L	PCB37L	PCB54L	PCB77L
Lab Sample ID	Client Sample ID	(15-140)	(15-140)	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)
LCS 320-777390/2-A	Lab Control Sample	74	75	70	81	79	79	69	89
LCSD 320-777390/3-A	Lab Control Sample Dup	74	77	69	83	81	80	69	92

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PCB81L	PCB104L	PCB105L	PCB114L	PCB118L	PCB123L	PCB126L	PCB155L
Lab Sample ID	Client Sample ID	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)
LCS 320-777390/2-A	Lab Control Sample	88	68	84	83	82	83	87	81
LCSD 320-777390/3-A	Lab Control Sample Dup	91	67	86	86	88	85	89	70

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PCB156L	156157L	PCB157L	PCB167L	PCB169L	PCB188L	PCB189L	PCB202L
Lab Sample ID	Client Sample ID	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)
LCS 320-777390/2-A	Lab Control Sample	110	110	110	112	114	60	75	65
LCSD 320-777390/3-A	Lab Control Sample Dup	104	104	104	104	104	61	76	66

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PCB205L	PCB206L	PCB208L	PCB209L				
Lab Sample ID	Client Sample ID	(30-140)	(30-140)	(30-140)	(30-140)				
LCS 320-777390/2-A	Lab Control Sample	77	67	65	68				
LCSD 320-777390/3-A	Lab Control Sample Dup	77	70	63	68				

Surrogate Legend

PCB1L = PCB-1L
PCB3L = PCB-3L
PCB4L = PCB-4L
PCB15L = PCB-15L
PCB19L = PCB-19L
PCB37L = PCB-37L
PCB54L = PCB-54L
PCB77L = PCB-77L
PCB81L = PCB-81L

Isotope Dilution Summary

Client: Albuquerque Metropolitan Arroyo Flood Control Authority

Job ID: 885-7077-1

Project/Site: CMC

PCB104L = PCB-104L
PCB105L = PCB-105L
PCB114L = PCB-114L
PCB118L = PCB-118L
PCB123L = PCB-123L
PCB126L = PCB-126L
PCB155L = PCB-155L
PCB156L = PCB-156L
156157L = PCB-156L/157L
PCB157L = PCB-157L
PCB167L = PCB-167L
PCB169L = PCB-169L
PCB188L = PCB-188L
PCB189L = PCB-189L
PCB202L = PCB-202L
PCB205L = PCB-205L
PCB206L = PCB-206L
PCB208L = PCB-208L
PCB209L = PCB-209L

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 860-169234/9
Matrix: Water
Analysis Batch: 169234

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	ND		0.010	0.0018	mg/L			07/02/24 20:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*63 - 144*		*07/02/24 20:38*	*1*
4-Bromofluorobenzene (Surr)	*102*		*74 - 124*		*07/02/24 20:38*	*1*
Dibromofluoromethane (Surr)	*103*		*75 - 131*		*07/02/24 20:38*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*07/02/24 20:38*	*1*

Lab Sample ID: LCS 860-169234/3
Matrix: Water
Analysis Batch: 169234

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Tetrahydrofuran			0.100	0.0923		mg/L		92	75 - 125		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*63 - 144*
4-Bromofluorobenzene (Surr)	*99*		*74 - 124*
Dibromofluoromethane (Surr)	*98*		*75 - 131*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: LCSD 860-169234/4
Matrix: Water
Analysis Batch: 169234

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Tetrahydrofuran			0.100	0.0984		mg/L		98	75 - 125	6	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*63 - 144*
4-Bromofluorobenzene (Surr)	*100*		*74 - 124*
Dibromofluoromethane (Surr)	*97*		*75 - 131*
Toluene-d8 (Surr)	*99*		*80 - 120*

Method: 608.3 - Organochlorine Pesticides/PCBs in Water

Lab Sample ID: MB 860-169312/1-A
Matrix: Water
Analysis Batch: 169369

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 169312

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dieldrin	ND		0.000050	0.000017	mg/L		07/02/24 22:40	07/03/24 11:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*55*		*45 - 115*	*07/02/24 22:40*	*07/03/24 11:25*	*1*
Tetrachloro-m-xylene	*107*		*41 - 110*	*07/02/24 22:40*	*07/03/24 11:25*	*1*

Method: 608.3 - Organochlorine Pesticides/PCBs in Water (Continued)

Lab Sample ID: LCS 860-169312/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 169369
Prep Batch: 169312

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Dieldrin			0.00125	0.00150	*+	mg/L		120	57 - 107		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*56*		*45 - 115*
Tetrachloro-m-xylene	*101*		*41 - 110*

Lab Sample ID: LCSD 860-169312/3-A
Client Sample ID: Lab Control Sample Dup
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 169369
Prep Batch: 169312

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dieldrin			0.00125	0.00149	*+	mg/L		119	57 - 107	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*56*		*45 - 115*
Tetrachloro-m-xylene	*99*		*41 - 110*

Lab Sample ID: MB 860-169818/1-A
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 169920
Prep Batch: 169818

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dieldrin	ND		0.000050	0.000017	mg/L		07/05/24 21:47	07/13/24 11:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*90*		*45 - 115*	*07/05/24 21:47*	*07/13/24 11:39*	*1*
Tetrachloro-m-xylene	*129*	*S1+*	*41 - 110*	*07/05/24 21:47*	*07/13/24 11:39*	*1*

Lab Sample ID: LCS 860-169818/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 169920
Prep Batch: 169818

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Dieldrin			0.00125	0.00186	*+	mg/L		149	57 - 107		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*91*		*45 - 115*
Tetrachloro-m-xylene	*124*	*S1+*	*41 - 110*

Lab Sample ID: LCSD 860-169818/3-A
Client Sample ID: Lab Control Sample Dup
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 169920
Prep Batch: 169818

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dieldrin			0.00125	0.00187	*+	mg/L		150	57 - 107	0	30

Method: 608.3 - Organochlorine Pesticides/PCBs in Water (Continued)

Lab Sample ID: LCSD 860-169818/3-A
Matrix: Water
Analysis Batch: 169920

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 169818

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*91*		*45 - 115*
Tetrachloro-m-xylene	*124*	*S1+*	*41 - 110*

Method: 8081B_LL - Organochlorine Pesticides (GC)

Lab Sample ID: MB 860-169461/1-A
Matrix: Water
Analysis Batch: 169649

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 169461

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dieldrin	ND		0.000010	0.0000000 81	mg/L		07/03/24 13:50	07/05/24 10:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*141*	*S1+*	*15 - 136*	*07/03/24 13:50*	*07/05/24 10:04*	*1*
Tetrachloro-m-xylene	*125*		*18 - 126*	*07/03/24 13:50*	*07/05/24 10:04*	*1*

Lab Sample ID: LCS 860-169461/2-A
Matrix: Water
Analysis Batch: 169649

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 169461

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Dieldrin			0.000100	0.000132	*+	mg/L		132	46 - 127		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*139*	*S1+*	*15 - 136*
Tetrachloro-m-xylene	*123*		*18 - 126*

Lab Sample ID: LCSD 860-169461/3-A
Matrix: Water
Analysis Batch: 169649

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 169461

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dieldrin			0.000100	0.000139	*+	mg/L		139	46 - 127	5	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*146*	*S1+*	*15 - 136*
Tetrachloro-m-xylene	*122*		*18 - 126*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-7687/10
Matrix: Water
Analysis Batch: 7687

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate	ND		0.10	0.020	mg/L			06/28/24 10:22	1
Nitrite	ND		0.10	0.012	mg/L			06/28/24 10:22	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 885-7687/58
Matrix: Water
Analysis Batch: 7687

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate	ND		0.10	0.020	mg/L			06/28/24 20:19	1
Nitrite	ND		0.10	0.012	mg/L			06/28/24 20:19	1

Lab Sample ID: LCS 885-7687/11
Matrix: Water
Analysis Batch: 7687

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate	2.50	2.58		mg/L		103	90 - 110
Nitrite	1.00	0.986		mg/L		99	90 - 110

Lab Sample ID: LCS 885-7687/59
Matrix: Water
Analysis Batch: 7687

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate	2.50	2.54		mg/L		102	90 - 110
Nitrite	1.00	0.969		mg/L		97	90 - 110

Lab Sample ID: MRL 885-7687/9
Matrix: Water
Analysis Batch: 7687

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate	0.100	0.111		mg/L		111	50 - 150
Nitrite	0.0999	0.103		mg/L		103	50 - 150

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Lab Sample ID: MB 320-779486/1-A
Matrix: Water
Analysis Batch: 780306

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 779486

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		8.0	2.0	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluoropentanoic acid (PFPeA)	ND		4.0	1.0	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluorotridecanoic acid (PFTrDA)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluorotetradecanoic acid (PFTeDA)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluoropentanesulfonic acid (PFPeS)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: MB 320-779486/1-A
Matrix: Water
Analysis Batch: 780306

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 779486

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluorononanesulfonic acid (PFNS)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluorododecanesulfonic acid (PFDoS)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		8.0	2.0	ng/L		07/15/24 11:26	07/16/24 18:11	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		8.0	2.0	ng/L		07/15/24 11:26	07/16/24 18:11	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		8.0	2.0	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluorooctanesulfonamide (PFOSA)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		20	5.0	ng/L		07/15/24 11:26	07/16/24 18:11	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		20	5.0	ng/L		07/15/24 11:26	07/16/24 18:11	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		8.0	2.0	ng/L		07/15/24 11:26	07/16/24 18:11	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		8.0	2.0	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		4.0	1.0	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		4.0	1.0	ng/L		07/15/24 11:26	07/16/24 18:11	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		4.0	1.0	ng/L		07/15/24 11:26	07/16/24 18:11	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	ND		8.0	2.0	ng/L		07/15/24 11:26	07/16/24 18:11	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		8.0	2.0	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		4.0	1.0	ng/L		07/15/24 11:26	07/16/24 18:11	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		10	2.5	ng/L		07/15/24 11:26	07/16/24 18:11	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		50	13	ng/L		07/15/24 11:26	07/16/24 18:11	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		50	13	ng/L		07/15/24 11:26	07/16/24 18:11	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*102*		*5 - 130*	*07/15/24 11:26*	*07/16/24 18:11*	*1*
13C5 PFPeA	*107*		*40 - 130*	*07/15/24 11:26*	*07/16/24 18:11*	*1*
13C5 PFHxA	*102*		*40 - 130*	*07/15/24 11:26*	*07/16/24 18:11*	*1*
13C4 PFHpA	*117*		*40 - 130*	*07/15/24 11:26*	*07/16/24 18:11*	*1*
13C8 PFOA	*102*		*40 - 130*	*07/15/24 11:26*	*07/16/24 18:11*	*1*
13C9 PFNA	*103*		*40 - 130*	*07/15/24 11:26*	*07/16/24 18:11*	*1*

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: MB 320-779486/1-A
Matrix: Water
Analysis Batch: 780306

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 779486

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C6 PFDA	106		40 - 130	07/15/24 11:26	07/16/24 18:11	1
13C7 PFUnA	119		30 - 130	07/15/24 11:26	07/16/24 18:11	1
13C2 PFDoA	123		10 - 130	07/15/24 11:26	07/16/24 18:11	1
13C2 PFTeDA	111		10 - 130	07/15/24 11:26	07/16/24 18:11	1
13C3 PFHxS	93.5		40 - 130	07/15/24 11:26	07/16/24 18:11	1
13C8 PFOS	100		40 - 130	07/15/24 11:26	07/16/24 18:11	1
13C8 PFOSA	101		40 - 130	07/15/24 11:26	07/16/24 18:11	1
d3-NMeFOSAA	101		40 - 170	07/15/24 11:26	07/16/24 18:11	1
d5-NEtFOSAA	104		25 - 135	07/15/24 11:26	07/16/24 18:11	1
13C2 4:2 FTS	91.6		40 - 200	07/15/24 11:26	07/16/24 18:11	1
13C2 6:2 FTS	115		40 - 200	07/15/24 11:26	07/16/24 18:11	1
13C2 8:2 FTS	96.6		40 - 300	07/15/24 11:26	07/16/24 18:11	1
13C3 HFPO-DA	96.7		40 - 130	07/15/24 11:26	07/16/24 18:11	1
d7-N-MeFOSE-M	92.3		10 - 130	07/15/24 11:26	07/16/24 18:11	1
d9-N-EtFOSE-M	94.4		10 - 130	07/15/24 11:26	07/16/24 18:11	1
d5-NEtPFOSA	87.2		10 - 130	07/15/24 11:26	07/16/24 18:11	1
d3-NMePFOSA	86.3		10 - 130	07/15/24 11:26	07/16/24 18:11	1

Lab Sample ID: LCS 320-779486/3-A
Matrix: Water
Analysis Batch: 780306

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 779486

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	128	123		ng/L		96	70 - 140
Perfluoropentanoic acid (PFPeA)	64.0	58.8		ng/L		92	65 - 135
Perfluorohexanoic acid (PFHxA)	32.0	29.1		ng/L		91	70 - 145
Perfluoroheptanoic acid (PFHpA)	32.0	28.4		ng/L		89	70 - 150
Perfluorooctanoic acid (PFOA)	32.0	28.2		ng/L		88	70 - 150
Perfluorononanoic acid (PFNA)	32.0	32.1		ng/L		100	70 - 150
Perfluorodecanoic acid (PFDA)	32.0	35.7		ng/L		111	70 - 140
Perfluoroundecanoic acid (PFUnA)	32.0	29.9		ng/L		93	70 - 145
Perfluorododecanoic acid (PFDoA)	32.0	27.8		ng/L		87	70 - 140
Perfluorotridecanoic acid (PFTrDA)	32.0	32.9		ng/L		103	65 - 140
Perfluorotetradecanoic acid (PFTeDA)	32.0	31.6		ng/L		99	60 - 140
Perfluoropentanesulfonic acid (PFPeS)	30.1	27.3		ng/L		91	65 - 140
Perfluorohexanesulfonic acid (PFHxS)	29.2	30.8		ng/L		105	65 - 145
Perfluoroheptanesulfonic acid (PFHpS)	30.5	33.5		ng/L		110	70 - 150
Perfluorooctanesulfonic acid (PFOS)	29.8	28.3		ng/L		95	55 - 150
Perfluorononanesulfonic acid (PFNS)	30.8	28.9		ng/L		94	65 - 145
Perfluorodecanesulfonic acid (PFDS)	30.8	27.2		ng/L		88	60 - 145
Perfluorododecanesulfonic acid (PFDoS)	31.0	24.8		ng/L		80	50 - 145

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 320-779486/3-A
Matrix: Water
Analysis Batch: 780306

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 779486

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	120	128		ng/L		107	70 - 145
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	122	123		ng/L		101	65 - 155
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	123	134		ng/L		109	60 - 150
Perfluorooctanesulfonamide (PFOSA)	32.0	24.5		ng/L		77	70 - 145
N-methylperfluorooctane sulfonamide (NMeFOSA)	32.0	28.8		ng/L		90	60 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	32.0	29.2		ng/L		91	65 - 145
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	32.0	31.5		ng/L		98	50 - 140
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	32.0	27.6		ng/L		86	70 - 145
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	320	301		ng/L		94	70 - 145
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	320	303		ng/L		95	70 - 135
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	128	119		ng/L		93	70 - 140
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	121	144		ng/L		119	65 - 145
Perfluoro-3-methoxypropanoic acid (PFMPA)	64.0	65.0		ng/L		101	55 - 140
Perfluoro-4-methoxybutanoic acid (PFMBA)	64.0	56.1		ng/L		88	60 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	64.0	58.2		ng/L		91	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	120	132		ng/L		111	70 - 155
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	121	136		ng/L		113	55 - 160
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	57.1	52.8		ng/L		92	70 - 140
3-Perfluoropropylpropanoic acid (3:3 FTCA)	160	161		ng/L		101	65 - 130
3-Perfluoropentylpropanoic acid (5:3 FTCA)	799	806		ng/L		101	70 - 135
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	799	887		ng/L		111	50 - 145

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*92.1*		*5 - 130*
13C5 PFPeA	*97.5*		*40 - 130*
13C5 PFHxA	*95.3*		*40 - 130*
13C4 PFHpA	*110*		*40 - 130*
13C8 PFOA	*96.2*		*40 - 130*
13C9 PFNA	*87.6*		*40 - 130*
13C6 PFDA	*99.7*		*40 - 130*
13C7 PFUnA	*109*		*30 - 130*

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 320-779486/3-A
Matrix: Water
Analysis Batch: 780306

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 779486

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C2 PFDoA	102		10 - 130
13C2 PFTeDA	88.1		10 - 130
13C3 PFHxS	85.2		40 - 130
13C8 PFOS	89.5		40 - 130
13C8 PFOSA	83.7		40 - 130
d3-NMeFOSAA	94.8		40 - 170
d5-NEtFOSAA	97.4		25 - 135
13C2 4:2 FTS	81.3		40 - 200
13C2 6:2 FTS	98.3		40 - 200
13C2 8:2 FTS	84.9		40 - 300
13C3 HFPO-DA	90.7		40 - 130
d7-N-MeFOSE-M	74.1		10 - 130
d9-N-EtFOSE-M	78.3		10 - 130
d5-NEtPFOSA	75.7		10 - 130
d3-NMePFOSA	74.2		10 - 130

Lab Sample ID: LCSD 320-779486/4-A
Matrix: Water
Analysis Batch: 780306

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 779486

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)			128	131		ng/L		102	70 - 140	6	30
Perfluoropentanoic acid (PFPeA)			64.0	63.5		ng/L		99	65 - 135	8	30
Perfluorohexanoic acid (PFHxA)			32.0	31.4		ng/L		98	70 - 145	7	30
Perfluoroheptanoic acid (PFHpA)			32.0	30.1		ng/L		94	70 - 150	6	30
Perfluorooctanoic acid (PFOA)			32.0	29.5		ng/L		92	70 - 150	4	30
Perfluorononanoic acid (PFNA)			32.0	29.3		ng/L		91	70 - 150	9	30
Perfluorodecanoic acid (PFDA)			32.0	32.8		ng/L		102	70 - 140	9	30
Perfluoroundecanoic acid (PFUnA)			32.0	33.5		ng/L		105	70 - 145	11	30
Perfluorododecanoic acid (PFDoA)			32.0	31.5		ng/L		99	70 - 140	13	30
Perfluorotridecanoic acid (PFTrDA)			32.0	35.8		ng/L		112	65 - 140	8	30
Perfluorotetradecanoic acid (PFTeDA)			32.0	34.6		ng/L		108	60 - 140	9	30
Perfluoropentanesulfonic acid (PFPeS)			30.1	29.0		ng/L		96	65 - 140	6	30
Perfluorohexanesulfonic acid (PFHxS)			29.2	33.6		ng/L		115	65 - 145	9	30
Perfluoroheptanesulfonic acid (PFHpS)			30.5	32.4		ng/L		106	70 - 150	3	30
Perfluorooctanesulfonic acid (PFOS)			29.8	29.6		ng/L		99	55 - 150	4	30
Perfluorononanesulfonic acid (PFNS)			30.8	28.9		ng/L		94	65 - 145	0	30
Perfluorodecanesulfonic acid (PFDS)			30.8	27.6		ng/L		90	60 - 145	2	30
Perfluorododecanesulfonic acid (PFDoS)			31.0	27.4		ng/L		88	50 - 145	10	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)			120	139		ng/L		116	70 - 145	8	30

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCSD 320-779486/4-A
Matrix: Water
Analysis Batch: 780306

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 779486

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)			122	128		ng/L		105	65 - 155	4	30
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)			123	150		ng/L		122	60 - 150	11	30
Perfluorooctanesulfonamide (PFOSA)			32.0	27.0		ng/L		84	70 - 145	10	30
N-methylperfluorooctane sulfonamide (NMeFOSA)			32.0	31.0		ng/L		97	60 - 150	7	30
N-ethylperfluorooctane sulfonamide (NEtFOSA)			32.0	32.3		ng/L		101	65 - 145	10	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)			32.0	30.4		ng/L		95	50 - 140	3	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)			32.0	29.0		ng/L		91	70 - 145	5	30
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)			320	321		ng/L		100	70 - 145	6	30
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)			320	316		ng/L		99	70 - 135	4	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)			128	135		ng/L		105	70 - 140	12	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)			121	156		ng/L		129	65 - 145	8	30
Perfluoro-3-methoxypropanoic acid (PFMPA)			64.0	70.2		ng/L		110	55 - 140	8	30
Perfluoro-4-methoxybutanoic acid (PFMBA)			64.0	60.1		ng/L		94	60 - 150	7	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)			64.0	63.6		ng/L		99	50 - 150	9	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)			120	137		ng/L		115	70 - 155	3	30
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)			121	146		ng/L		121	55 - 160	7	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)			57.1	55.8		ng/L		98	70 - 140	5	30
3-Perfluoropropylpropanoic acid (3:3 FTCA)			160	169		ng/L		106	65 - 130	5	30
3-Perfluoropentylpropanoic acid (5:3 FTCA)			799	851		ng/L		107	70 - 135	5	30
3-Perfluoroheptylpropanoic acid (7:3 FTCA)			799	925		ng/L		116	50 - 145	4	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C4 PFBA	*90.7*		*5 - 130*
13C5 PFPeA	*96.1*		*40 - 130*
13C5 PFHxA	*93.8*		*40 - 130*
13C4 PFHpA	*111*		*40 - 130*
13C8 PFOA	*88.0*		*40 - 130*
13C9 PFNA	*103*		*40 - 130*
13C6 PFDA	*101*		*40 - 130*
13C7 PFUnA	*99.1*		*30 - 130*
13C2 PFDoA	*99.9*		*10 - 130*
13C2 PFTeDA	*86.8*		*10 - 130*

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCSD 320-779486/4-A
Matrix: Water
Analysis Batch: 780306

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 779486

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C3 PFHxS	83.5		40 - 130
13C8 PFOS	92.0		40 - 130
13C8 PFOSA	88.4		40 - 130
d3-NMeFOSAA	105		40 - 170
d5-NEtFOSAA	103		25 - 135
13C2 4:2 FTS	81.3		40 - 200
13C2 6:2 FTS	97.3		40 - 200
13C2 8:2 FTS	86.6		40 - 300
13C3 HFPO-DA	91.8		40 - 130
d7-N-MeFOSE-M	80.2		10 - 130
d9-N-EtFOSE-M	85.0		10 - 130
d5-NEtPFOSA	78.0		10 - 130
d3-NMePFOSA	76.3		10 - 130

Lab Sample ID: LLCS 320-779486/2-A
Matrix: Water
Analysis Batch: 780306

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 779486

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	12.8	11.9		ng/L		93	70 - 140
Perfluoropentanoic acid (PFPeA)	6.40	5.78		ng/L		90	65 - 135
Perfluorohexanoic acid (PFHxA)	3.20	2.86		ng/L		89	70 - 145
Perfluoroheptanoic acid (PFHpA)	3.20	3.01		ng/L		94	70 - 150
Perfluorooctanoic acid (PFOA)	3.20	2.72		ng/L		85	70 - 150
Perfluorononanoic acid (PFNA)	3.20	3.48		ng/L		109	70 - 150
Perfluorodecanoic acid (PFDA)	3.20	2.99		ng/L		93	70 - 140
Perfluoroundecanoic acid (PFUnA)	3.20	3.09		ng/L		97	70 - 145
Perfluorododecanoic acid (PFDoA)	3.20	2.73		ng/L		85	70 - 140
Perfluorotridecanoic acid (PFTrDA)	3.20	3.56		ng/L		111	65 - 140
Perfluorotetradecanoic acid (PFTeDA)	3.20	3.14		ng/L		98	60 - 140
Perfluoropentanesulfonic acid (PFPeS)	3.01	2.46		ng/L		82	65 - 140
Perfluorohexanesulfonic acid (PFHxS)	2.92	3.02		ng/L		104	65 - 145
Perfluoroheptanesulfonic acid (PFHpS)	3.05	3.07		ng/L		101	70 - 150
Perfluorooctanesulfonic acid (PFOS)	2.98	2.68		ng/L		90	55 - 150
Perfluorononanesulfonic acid (PFNS)	3.08	2.94		ng/L		96	65 - 145
Perfluorodecanesulfonic acid (PFDS)	3.08	2.72		ng/L		88	60 - 145
Perfluorododecanesulfonic acid (PFDoS)	3.10	2.46		ng/L		79	50 - 145
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	12.0	13.7		ng/L		114	70 - 145
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	12.2	11.9		ng/L		97	65 - 155

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 320-779486/2-A
Matrix: Water
Analysis Batch: 780306

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 779486

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	12.3	11.9		ng/L		97	60 - 150
Perfluorooctanesulfonamide (PFOSA)	3.20	2.38		ng/L		74	70 - 145
N-methylperfluorooctane sulfonamide (NMeFOSA)	3.20	2.63		ng/L		82	60 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	3.20	2.84		ng/L		89	65 - 145
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	3.20	3.00		ng/L		94	50 - 140
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	3.20	2.44		ng/L		76	70 - 145
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	32.0	28.4		ng/L		89	70 - 145
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	32.0	29.1		ng/L		91	70 - 135
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	12.8	11.5		ng/L		90	70 - 140
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	12.1	13.9		ng/L		115	65 - 145
Perfluoro-3-methoxypropanoic acid (PFMPA)	6.40	6.24		ng/L		98	55 - 140
Perfluoro-4-methoxybutanoic acid (PFMBA)	6.40	5.41		ng/L		85	60 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	6.40	5.10		ng/L		80	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	12.0	11.2		ng/L		94	70 - 155
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	12.1	13.3		ng/L		110	55 - 160
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	5.71	4.89		ng/L		86	70 - 140
3-Perfluoropropylpropanoic acid (3:3 FTCA)	16.0	15.2		ng/L		95	65 - 130
3-Perfluoropentylpropanoic acid (5:3 FTCA)	79.9	70.5		ng/L		88	70 - 135
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	79.9	85.7		ng/L		107	50 - 145

Isotope Dilution	*LLCS %Recovery*	*LLCS Qualifier*	*Limits*
13C4 PFBA	*95.3*		*5 - 130*
13C5 PFPeA	*100*		*40 - 130*
13C5 PFHxA	*98.9*		*40 - 130*
13C4 PFHpA	*113*		*40 - 130*
13C8 PFOA	*99.9*		*40 - 130*
13C9 PFNA	*79.9*		*40 - 130*
13C6 PFDA	*91.0*		*40 - 130*
13C7 PFUnA	*84.8*		*30 - 130*
13C2 PFDoA	*85.0*		*10 - 130*
13C2 PFTeDA	*84.0*		*10 - 130*
13C3 PFHxS	*87.2*		*40 - 130*
13C8 PFOS	*98.8*		*40 - 130*

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 320-779486/2-A
Matrix: Water
Analysis Batch: 780306

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 779486

Isotope Dilution	LLCS %Recovery	LLCS Qualifier	Limits
13C8 PFOSA	99.4		40 - 130
d3-NMeFOSAA	101		40 - 170
d5-NEtFOSAA	103		25 - 135
13C2 4:2 FTS	80.8		40 - 200
13C2 6:2 FTS	106		40 - 200
13C2 8:2 FTS	92.8		40 - 300
13C3 HFPO-DA	92.4		40 - 130
d7-N-MeFOSE-M	89.4		10 - 130
d9-N-EtFOSE-M	91.8		10 - 130
d5-NEtPFOSA	84.5		10 - 130
d3-NMePFOSA	85.9		10 - 130

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - RA

Lab Sample ID: MB 320-779486/1-A
Matrix: Water
Analysis Batch: 780601

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 779486

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS) - RA	ND		2.0	0.50	ng/L		07/15/24 11:26	07/17/24 13:53	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFBS - RA	82.7		40 - 135	07/15/24 11:26	07/17/24 13:53	1

Lab Sample ID: LCS 320-779486/3-A
Matrix: Water
Analysis Batch: 780601

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 779486

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Perfluorobutanesulfonic acid (PFBS) - RA			28.4	26.7		ng/L		94	60 - 145		

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C3 PFBS - RA	78.1		40 - 135

Lab Sample ID: LCSD 320-779486/4-A
Matrix: Water
Analysis Batch: 780601

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 779486

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanesulfonic acid (PFBS) - RA			28.4	28.9		ng/L		102	60 - 145	8	30

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C3 PFBS - RA	75.3		40 - 135

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - RA (Continued)

Lab Sample ID: LLCS 320-779486/2-A
Matrix: Water
Analysis Batch: 780601

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 779486

Analyte			Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Perfluorobutanesulfonic acid (PFBS) - RA			2.84	2.50		ng/L		88	60 - 145		

Isotope Dilution	*LLCS %Recovery*	*LLCS Qualifier*	*Limits*
13C3 PFBS - RA	*75.8*		*40 - 135*

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Lab Sample ID: MB 320-777390/1-A
Matrix: Water
Analysis Batch: 778376

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 777390

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	ND		20	19	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-2	ND		200	16	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-3	ND		60	48	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-4	ND		40	24	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-5	ND		200	11	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-6	ND		200	25	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-7	ND		200	18	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-8	ND		200	26	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-9	ND		200	12	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-10	ND		200	15	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-11	ND		200	150	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-12	ND		400	31	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-13	ND		400	31	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-14	ND		200	70	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-15	ND		40	21	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-16	ND		200	6.8	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-17	ND		200	15	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-18	ND		400	15	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-19	ND		20	9.4	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-20	ND		400	21	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-21	ND		400	15	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-22	ND		200	7.3	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-23	ND		200	8.0	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-24	ND		200	9.6	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-25	ND		200	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-26	ND		400	9.4	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-27	ND		200	9.7	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-28	ND		400	21	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-29	ND		400	9.4	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-30	ND		400	15	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-31	ND		200	20	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-32	ND		200	9.6	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-33	ND		400	15	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-34	ND		200	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-35	ND		200	8.1	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-36	ND		200	14	pg/L		07/08/24 12:40	07/12/24 01:41	1

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 320-777390/1-A
Matrix: Water
Analysis Batch: 778376

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 777390

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-37	ND		20	13	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-38	ND		200	13	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-39	ND		200	10	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-40	ND		400	12	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-41	ND		200	8.4	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-42	ND		200	8.2	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-43	ND		200	11	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-44	ND		600	35	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-45	ND		400	7.7	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-46	ND		200	11	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-47	ND		600	35	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-48	ND		200	9.8	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-49	ND		400	13	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-50	ND		400	11	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-51	ND		400	7.8	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-52	ND		200	25	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-53	ND		400	11	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-54	ND		20	8.3	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-55	ND		200	7.6	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-56	ND		200	6.6	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-57	ND		200	13	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-58	ND		200	16	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-59	ND		600	12	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-60	ND		200	9.5	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-61	ND		800	20	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-62	ND		600	12	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-63	ND		200	10	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-64	ND		200	9.4	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-65	ND		600	35	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-66	ND		200	10	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-67	ND		200	13	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-68	ND		200	9.2	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-69	ND		400	13	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-70	ND		800	20	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-71	ND		400	12	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-72	ND		200	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-73	ND		200	5.3	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-74	ND		800	20	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-75	ND		600	12	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-76	ND		800	20	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-77	ND		20	16	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-78	ND		200	15	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-79	ND		200	8.1	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-80	ND		200	8.1	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-81	ND		20	17	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-82	ND		200	13	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-83	ND		400	9.4	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-84	ND		200	9.8	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-85	ND		600	16	pg/L		07/08/24 12:40	07/12/24 01:41	1

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 320-777390/1-A
Matrix: Water
Analysis Batch: 778376

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 777390

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-86	ND		1200	29	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-87	ND		1200	29	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-88	ND		400	8.9	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-89	ND		200	8.3	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-90	ND		600	17	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-91	ND		400	8.9	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-92	ND		200	12	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-93	ND		400	10	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-94	ND		200	10	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-95	ND		200	31	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-96	ND		200	15	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-97	ND		1200	29	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-98	ND		400	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-99	ND		400	8.0	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-100	ND		400	10	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-101	ND		600	17	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-102	ND		400	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-103	ND		200	8.7	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-104	ND		20	13	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-105	ND		20	9.2	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-106	ND		200	8.3	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-107	ND		200	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-108	ND		400	29	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-109	ND		1200	5.0	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-110	ND		400	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-111	ND		200	8.7	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-112	ND		200	6.3	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-113	ND		600	17	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-114	ND		20	7.7	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-115	ND		400	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-116	ND		600	16	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-117	ND		600	16	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-118	ND		20	8.9	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-119	ND		1200	29	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-120	ND		200	5.6	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-121	ND		200	11	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-122	ND		200	8.1	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-123	ND		20	9.8	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-124	ND		400	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-125	ND		1200	29	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-126	ND		20	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-127	ND		200	15	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-128	ND		400	9.9	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-129	ND		800	16	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-130	ND		200	11	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-131	ND		200	13	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-132	ND		200	13	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-133	ND		200	10	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-134	ND		400	15	pg/L		07/08/24 12:40	07/12/24 01:41	1

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 320-777390/1-A
Matrix: Water
Analysis Batch: 778376

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 777390

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-135	ND		400	9.8	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-136	ND		200	6.1	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-137	ND		200	12	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-138	ND		800	16	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-139	ND		400	9.3	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-140	ND		400	9.3	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-141	ND		200	7.3	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-142	ND		200	12	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-143	ND		400	15	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-144	ND		200	6.2	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-145	ND		200	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-146	ND		200	7.2	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-147	ND		400	9.3	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-148	ND		200	6.6	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-149	ND		400	9.3	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-150	ND		200	11	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-151	ND		400	9.8	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-152	ND		200	5.5	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-153	ND		400	9.3	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-154	ND		200	5.8	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-155	ND		20	13	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-156	ND		40	13	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-157	ND		40	13	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-158	ND		200	11	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-159	ND		200	15	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-160	ND		800	7.3	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-161	ND		200	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-162	ND		200	9.0	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-163	ND		800	16	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-164	ND		200	20	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-165	ND		200	12	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-166	ND		400	9.9	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-167	ND		20	7.7	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-168	ND		400	9.3	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-169	ND		20	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-170	ND		200	19	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-171	ND		400	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-172	ND		200	16	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-173	ND		400	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-174	ND		200	17	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-175	ND		200	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-176	ND		200	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-177	ND		200	16	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-178	ND		200	13	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-179	ND		200	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-180	ND		400	10	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-181	ND		200	20	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-182	ND		200	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-183	ND		200	15	pg/L		07/08/24 12:40	07/12/24 01:41	1

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 320-777390/1-A
Matrix: Water
Analysis Batch: 778376

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 777390

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-184	ND		200	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-185	ND		200	12	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-186	ND		200	15	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-187	ND		200	19	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-188	ND		20	10	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-189	ND		20	16	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-190	ND		200	15	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-191	ND		200	20	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-192	ND		200	17	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-193	ND		400	10	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-194	ND		200	8.8	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-195	ND		200	18	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-196	ND		200	15	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-197	ND		200	13	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-198	ND		400	7.8	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-199	ND		400	7.8	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-200	ND		200	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-201	ND		200	13	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-202	ND		20	11	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-203	ND		200	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-204	ND		200	13	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-205	ND		20	15	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-206	ND		20	8.3	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-207	ND		200	5.4	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-208	ND		20	12	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-209	ND		20	11	pg/L		07/08/24 12:40	07/12/24 01:41	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
PCB-1L	*74*		*15 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-3L	*75*		*15 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-4L	*68*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-15L	*80*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-19L	*79*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-37L	*77*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-54L	*68*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-77L	*88*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-81L	*89*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-104L	*64*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-105L	*80*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-114L	*77*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-118L	*80*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-123L	*80*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-126L	*84*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-155L	*73*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-156L	*107*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-156L/157L	*107*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-157L	*107*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-167L	*106*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-169L	*110*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 320-777390/1-A
Matrix: Water
Analysis Batch: 778376

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 777390

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-188L	58		25 - 150	07/08/24 12:40	07/12/24 01:41	1
PCB-189L	70		25 - 150	07/08/24 12:40	07/12/24 01:41	1
PCB-202L	61		25 - 150	07/08/24 12:40	07/12/24 01:41	1
PCB-205L	75		25 - 150	07/08/24 12:40	07/12/24 01:41	1
PCB-206L	65		25 - 150	07/08/24 12:40	07/12/24 01:41	1
PCB-208L	60		25 - 150	07/08/24 12:40	07/12/24 01:41	1
PCB-209L	62		25 - 150	07/08/24 12:40	07/12/24 01:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-28L	80		30 - 135	07/08/24 12:40	07/12/24 01:41	1
PCB-111L	85		30 - 135	07/08/24 12:40	07/12/24 01:41	1
PCB-178L	98		30 - 135	07/08/24 12:40	07/12/24 01:41	1

Lab Sample ID: LCS 320-777390/2-A
Matrix: Water
Analysis Batch: 778376

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 777390

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1	2000	1870		pg/L		94	50 - 150
PCB-3	2000	1860		pg/L		93	50 - 150
PCB-4	2000	1830		pg/L		91	50 - 150
PCB-15	2000	1710		pg/L		85	50 - 150
PCB-19	2000	1800		pg/L		90	50 - 150
PCB-37	2000	1970		pg/L		98	50 - 150
PCB-54	2000	1790		pg/L		90	50 - 150
PCB-77	2000	1900		pg/L		95	50 - 150
PCB-81	2000	1980		pg/L		99	50 - 150
PCB-104	2000	2340		pg/L		117	50 - 150
PCB-105	2000	1810		pg/L		90	50 - 150
PCB-114	2000	2250		pg/L		113	50 - 150
PCB-118	2000	2020		pg/L		101	50 - 150
PCB-123	2000	2200		pg/L		110	50 - 150
PCB-126	2000	2130		pg/L		106	50 - 150
PCB-155	2000	2520		pg/L		126	50 - 150
PCB-156	4000	3770		pg/L		94	50 - 150
PCB-157	4000	3770		pg/L		94	50 - 150
PCB-167	2000	1930		pg/L		96	50 - 150
PCB-169	2000	1860		pg/L		93	50 - 150
PCB-188	2000	1870		pg/L		94	50 - 150
PCB-189	2000	1910		pg/L		96	50 - 150
PCB-202	2000	1960		pg/L		98	50 - 150
PCB-205	2000	1990		pg/L		100	50 - 150
PCB-206	2000	1830		pg/L		92	50 - 150
PCB-208	2000	2010		pg/L		100	50 - 150
PCB-209	2000	1780		pg/L		89	50 - 150

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
PCB-1L	74		15 - 140

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: LCS 320-777390/2-A
Matrix: Water
Analysis Batch: 778376

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 777390

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
PCB-3L	75		15 - 140
PCB-4L	70		30 - 140
PCB-15L	81		30 - 140
PCB-19L	79		30 - 140
PCB-37L	79		30 - 140
PCB-54L	69		30 - 140
PCB-77L	89		30 - 140
PCB-81L	88		30 - 140
PCB-104L	68		30 - 140
PCB-105L	84		30 - 140
PCB-114L	83		30 - 140
PCB-118L	82		30 - 140
PCB-123L	83		30 - 140
PCB-126L	87		30 - 140
PCB-155L	81		30 - 140
PCB-156L	110		30 - 140
PCB-156L/157L	110		30 - 140
PCB-157L	110		30 - 140
PCB-167L	112		30 - 140
PCB-169L	114		30 - 140
PCB-188L	60		30 - 140
PCB-189L	75		30 - 140
PCB-202L	65		30 - 140
PCB-205L	77		30 - 140
PCB-206L	67		30 - 140
PCB-208L	65		30 - 140
PCB-209L	68		30 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
PCB-28L	80		40 - 125
PCB-111L	82		40 - 125
PCB-178L	91		40 - 125

Lab Sample ID: LCSD 320-777390/3-A
Matrix: Water
Analysis Batch: 778376

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 777390

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1			2000	1890		pg/L		94	50 - 150	1	50
PCB-3			2000	1830		pg/L		91	50 - 150	2	50
PCB-4			2000	1900		pg/L		95	50 - 150	4	50
PCB-15			2000	1680		pg/L		84	50 - 150	1	50
PCB-19			2000	1800		pg/L		90	50 - 150	0	50
PCB-37			2000	1950		pg/L		98	50 - 150	1	50
PCB-54			2000	1880		pg/L		94	50 - 150	4	50
PCB-77			2000	1880		pg/L		94	50 - 150	1	50
PCB-81			2000	2070		pg/L		103	50 - 150	4	50
PCB-104			2000	2370		pg/L		118	50 - 150	1	50

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: LCSD 320-777390/3-A
Client Sample ID: Lab Control Sample Dup
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 778376
Prep Batch: 777390

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-105			2000	1860		pg/L		93	50 - 150	3	50
PCB-114			2000	2140		pg/L		107	50 - 150	5	50
PCB-118			2000	1920		pg/L		96	50 - 150	5	50
PCB-123			2000	2170		pg/L		108	50 - 150	1	50
PCB-126			2000	2080		pg/L		104	50 - 150	2	50
PCB-155			2000	2640		pg/L		132	50 - 150	5	50
PCB-156			4000	3740		pg/L		94	50 - 150	1	50
PCB-157			4000	3740		pg/L		94	50 - 150	1	50
PCB-167			2000	1900		pg/L		95	50 - 150	2	50
PCB-169			2000	1950		pg/L		97	50 - 150	5	50
PCB-188			2000	1910		pg/L		95	50 - 150	2	50
PCB-189			2000	1910		pg/L		96	50 - 150	0	50
PCB-202			2000	1970		pg/L		98	50 - 150	0	50
PCB-205			2000	2080		pg/L		104	50 - 150	4	50
PCB-206			2000	1730		pg/L		87	50 - 150	5	50
PCB-208			2000	2020		pg/L		101	50 - 150	1	50
PCB-209			2000	1800		pg/L		90	50 - 150	1	50

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
PCB-1L	*74*		*15 - 140*
PCB-3L	*77*		*15 - 140*
PCB-4L	*69*		*30 - 140*
PCB-15L	*83*		*30 - 140*
PCB-19L	*81*		*30 - 140*
PCB-37L	*80*		*30 - 140*
PCB-54L	*69*		*30 - 140*
PCB-77L	*92*		*30 - 140*
PCB-81L	*91*		*30 - 140*
PCB-104L	*67*		*30 - 140*
PCB-105L	*86*		*30 - 140*
PCB-114L	*86*		*30 - 140*
PCB-118L	*88*		*30 - 140*
PCB-123L	*85*		*30 - 140*
PCB-126L	*89*		*30 - 140*
PCB-155L	*70*		*30 - 140*
PCB-156L	*104*		*30 - 140*
PCB-156L/157L	*104*		*30 - 140*
PCB-157L	*104*		*30 - 140*
PCB-167L	*104*		*30 - 140*
PCB-169L	*104*		*30 - 140*
PCB-188L	*61*		*30 - 140*
PCB-189L	*76*		*30 - 140*
PCB-202L	*66*		*30 - 140*
PCB-205L	*77*		*30 - 140*
PCB-206L	*70*		*30 - 140*
PCB-208L	*63*		*30 - 140*
PCB-209L	*68*		*30 - 140*

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: LCSD 320-777390/3-A
Matrix: Water
Analysis Batch: 778376

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 777390

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
PCB-28L	*79*		*40 - 125*
PCB-111L	*83*		*40 - 125*
PCB-178L	*91*		*40 - 125*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MRL 885-8057/14
Matrix: Water
Analysis Batch: 8057

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	0.500	0.515	J	mg/L		103	50 - 150
Magnesium	0.500	0.520	J	mg/L		104	50 - 150

Lab Sample ID: MRL 885-8191/13
Matrix: Water
Analysis Batch: 8191

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	0.500	0.548	J	mg/L		110	50 - 150
Magnesium	0.500	0.560	J	mg/L		112	50 - 150

Lab Sample ID: MB 885-7782/1-A
Matrix: Water
Analysis Batch: 8057

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 7782

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1.0	0.053	mg/L		07/02/24 13:43	07/08/24 09:51	1
Magnesium	ND		1.0	0.033	mg/L		07/02/24 13:43	07/08/24 09:51	1

Lab Sample ID: LCS 885-7782/6-A
Matrix: Water
Analysis Batch: 8057

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 7782

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	50.0	52.5		mg/L		105	85 - 115
Magnesium	50.0	51.7		mg/L		103	85 - 115

Lab Sample ID: LLCS 885-7782/5-A
Matrix: Water
Analysis Batch: 8057

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 7782

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	0.500	0.524	J	mg/L		105	50 - 150
Magnesium	0.500	0.511	J	mg/L		102	50 - 150

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 160-670850/1-A
Matrix: Water
Analysis Batch: 671639

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 670850

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	ND		1.0	0.15	ug/L		07/16/24 15:34	07/19/24 14:22	2

Lab Sample ID: LCS 160-670850/2-A
Matrix: Water
Analysis Batch: 671639

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 670850

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Uranium	1000	963		ug/L		96	85 - 115

Lab Sample ID: 885-7077-1 MS
Matrix: Water
Analysis Batch: 671639

Client Sample ID: RG-North20240626
Prep Type: Total/NA
Prep Batch: 670850

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Uranium	1.5		1000	993		ug/L		99	70 - 130

Lab Sample ID: 885-7077-1 MSD
Matrix: Water
Analysis Batch: 671639

Client Sample ID: RG-North20240626
Prep Type: Total/NA
Prep Batch: 670850

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Uranium	1.5		1000	994		ug/L		99	70 - 130	0	20

Lab Sample ID: 885-7077-2 MS
Matrix: Water
Analysis Batch: 671639

Client Sample ID: RG-South20240627
Prep Type: Total/NA
Prep Batch: 670850

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Uranium	1.6		1000	1020		ug/L		101	70 - 130

Lab Sample ID: 885-7077-2 MSD
Matrix: Water
Analysis Batch: 671639

Client Sample ID: RG-South20240627
Prep Type: Total/NA
Prep Batch: 670850

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Uranium	1.6		1000	1010		ug/L		100	70 - 130	1	20

Lab Sample ID: MB 885-8085/19
Matrix: Water
Analysis Batch: 8085

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		0.00050	0.00012	mg/L			07/09/24 09:56	1
Lead	ND		0.00050	0.000083	mg/L			07/09/24 09:56	1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 885-8085/20
Matrix: Water
Analysis Batch: 8085

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	0.0250	0.0242		mg/L		97	85 - 115
Lead	0.0125	0.0125		mg/L		100	85 - 115

Lab Sample ID: MRL 885-8085/17
Matrix: Water
Analysis Batch: 8085

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Lead	0.000500	0.000507		mg/L		101	50 - 150

Lab Sample ID: MRL 885-8085/18
Matrix: Water
Analysis Batch: 8085

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Copper	0.000500	0.000476	J	mg/L		95	50 - 150

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 885-7985/1
Matrix: Water
Analysis Batch: 7985

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	ND		5.0	4.5	mg/L			07/08/24 09:19	1

Lab Sample ID: LCS 885-7985/2
Matrix: Water
Analysis Batch: 7985

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
HEM (Oil & Grease)	40.0	33.2		mg/L		83	78 - 114

Lab Sample ID: LCSD 885-7985/3
Matrix: Water
Analysis Batch: 7985

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
HEM (Oil & Grease)	40.0	36.2		mg/L		91	78 - 114	9	20

Method: 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 885-7815/1
Matrix: Water
Analysis Batch: 7815

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		50	25	mg/L			07/02/24 14:21	1

Method: 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 885-7815/2
Matrix: Water
Analysis Batch: 7815

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000	1020		mg/L		102	80 - 120

Lab Sample ID: MB 885-7881/1
Matrix: Water
Analysis Batch: 7881

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		50	25	mg/L			07/03/24 12:52	1

Lab Sample ID: LCS 885-7881/2
Matrix: Water
Analysis Batch: 7881

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000	999		mg/L		100	80 - 120

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 885-8010/3-A
Matrix: Water
Analysis Batch: 8585

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8010

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Total Kjeldahl	ND		0.50	0.50	mg/L		07/08/24 11:40	07/09/24 12:26	1

Lab Sample ID: LCS 885-8010/5-A
Matrix: Water
Analysis Batch: 8585

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8010

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrogen, Total Kjeldahl	10.0	10.4		mg/L		104	90 - 110

Lab Sample ID: LLCS 885-8010/4-A
Matrix: Water
Analysis Batch: 8585

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8010

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrogen, Total Kjeldahl	0.500	0.623		mg/L		125	50 - 150

Method: 365.1 - Phosphorus, Total

Lab Sample ID: MB 885-8218/1-A
Matrix: Water
Analysis Batch: 8500

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8218

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P	ND		0.050	0.050	mg/L		07/11/24 08:30	07/16/24 09:23	1

Method: 365.1 - Phosphorus, Total (Continued)

Lab Sample ID: LCS 885-8218/2-A
Matrix: Water
Analysis Batch: 8500

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8218

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Phosphorus as P	0.250	0.239		mg/L		95	90 - 110

Lab Sample ID: MRL 885-8218/7-A
Matrix: Water
Analysis Batch: 8500

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8218

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Total Phosphorus as P	0.0500	0.0529		mg/L		106	50 - 150

Method: 5220D - COD

Lab Sample ID: MB 885-8084/4
Matrix: Water
Analysis Batch: 8084

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		50	50	mg/L			07/09/24 14:14	1

Lab Sample ID: LCS 885-8084/5
Matrix: Water
Analysis Batch: 8084

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	500	511		mg/L		102	90 - 110

Lab Sample ID: MRL 885-8084/6
Matrix: Water
Analysis Batch: 8084

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	50.0	62.6		mg/L		125	50 - 150

Lab Sample ID: MB 885-9076/4
Matrix: Water
Analysis Batch: 9076

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		50	50	mg/L			07/23/24 14:19	1

Lab Sample ID: LCS 885-9076/5
Matrix: Water
Analysis Batch: 9076

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	500	520		mg/L		104	90 - 110

Method: 5220D - COD (Continued)

Lab Sample ID: MRL 885-9076/6
Matrix: Water
Analysis Batch: 9076

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	50.0	60.5		mg/L		121	50 - 150

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 885-7827/1
Matrix: Water
Analysis Batch: 7827

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			07/02/24 16:35	1

Lab Sample ID: LCSSRM 885-7827/2
Matrix: Water
Analysis Batch: 7827

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	104		mg/L		104.0	77.1 - 110.0

Method: SM 4500 H+ B - pH

Lab Sample ID: 885-7077-2 DU
Matrix: Water
Analysis Batch: 8154

Client Sample ID: RG-South20240627
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	8.2	HF	8.2		SU		0	20

Method: SM5210B - BOD, 5 Day

Lab Sample ID: USB 885-7579/1
Matrix: Water
Analysis Batch: 7579

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND	*-	2.0	2.0	mg/L			06/28/24 11:05	1

Lab Sample ID: LCS 885-7579/2
Matrix: Water
Analysis Batch: 7579

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Biochemical Oxygen Demand	198	136	*-	mg/L		69	85 - 115

Method: 900.0 - Gross Alpha and Gross Beta Radioactivity

Lab Sample ID: MB 160-669229/1-A
Matrix: Water
Analysis Batch: 671234

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 669229

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Gross Alpha	0.05317	U	0.636	0.636	3.00	1.19	pCi/L	07/03/24 08:58	07/18/24 17:23	1
Gross Beta	0.3346	U	0.541	0.542	4.00	0.910	pCi/L	07/03/24 08:58	07/18/24 17:23	1

Lab Sample ID: LCS 160-669229/2-A
Matrix: Water
Analysis Batch: 671234

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 669229

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Gross Alpha	49.5	51.70		7.58	3.00	1.87	pCi/L	104	75 - 125

Lab Sample ID: LCSB 160-669229/3-A
Matrix: Water
Analysis Batch: 671234

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 669229

Analyte	Spike Added	LCSB Result	LCSB Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Gross Beta	71.2	68.60		7.38	4.00	0.769	pCi/L	96	75 - 125

Lab Sample ID: 885-7077-2 MS
Matrix: Water
Analysis Batch: 671234

Client Sample ID: RG-South20240627
Prep Type: Total/NA
Prep Batch: 669229

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Gross Alpha	4.84	G	109	112.0		16.8	3.00	5.42	pCi/L	98	60 - 140

Lab Sample ID: 885-7077-2 MSBT
Matrix: Water
Analysis Batch: 671234

Client Sample ID: RG-South20240627
Prep Type: Total/NA
Prep Batch: 669229

Analyte	Sample Result	Sample Qual	Spike Added	MSBT Result	MSBT Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Gross Beta	7.45		156	165.5		17.7	4.00	2.22	pCi/L	101	60 - 140

Lab Sample ID: 885-7077-2 DU
Matrix: Water
Analysis Batch: 671234

Client Sample ID: RG-South20240627
Prep Type: Total/NA
Prep Batch: 669229

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Gross Alpha	4.84	G	3.147	U G	3.06	3.00	4.81	pCi/L	0.27	1
Gross Beta	7.45		8.810		2.12	4.00	2.25	pCi/L	0.34	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Method: 9223B - Coliforms, Total, and E.Coll (Colilert - Quanti Tray)

Lab Sample ID: MB 885-7536/1
Matrix: Water
Analysis Batch: 7536

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Escherichia coli	ND		1.0	1.0	MPN/100mL			06/27/24 17:12	1

GC/MS VOA

Analysis Batch: 169234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	624.1	
885-7077-2	RG-South20240627	Total/NA	Water	624.1	
MB 860-169234/9	Method Blank	Total/NA	Water	624.1	
LCS 860-169234/3	Lab Control Sample	Total/NA	Water	624.1	
LCSD 860-169234/4	Lab Control Sample Dup	Total/NA	Water	624.1	

GC/MS Semi VOA

Prep Batch: 169191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	3511	
885-7077-2	RG-South20240627	Total/NA	Water	3511	

Analysis Batch: 169359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	625.1	169191

Analysis Batch: 169694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-2	RG-South20240627	Total/NA	Water	625.1	169191

GC Semi VOA

Prep Batch: 169312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	3511	
885-7077-2	RG-South20240627	Total/NA	Water	3511	
MB 860-169312/1-A	Method Blank	Total/NA	Water	3511	
LCS 860-169312/2-A	Lab Control Sample	Total/NA	Water	3511	
LCSD 860-169312/3-A	Lab Control Sample Dup	Total/NA	Water	3511	

Analysis Batch: 169369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	608.3	169312
885-7077-2	RG-South20240627	Total/NA	Water	608.3	169312
MB 860-169312/1-A	Method Blank	Total/NA	Water	608.3	169312
LCS 860-169312/2-A	Lab Control Sample	Total/NA	Water	608.3	169312
LCSD 860-169312/3-A	Lab Control Sample Dup	Total/NA	Water	608.3	169312

Prep Batch: 169461

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	3510C	
885-7077-2	RG-South20240627	Total/NA	Water	3510C	
MB 860-169461/1-A	Method Blank	Total/NA	Water	3510C	
LCS 860-169461/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 860-169461/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 169649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	8081B_LL	169461
885-7077-2	RG-South20240627	Total/NA	Water	8081B_LL	169461
MB 860-169461/1-A	Method Blank	Total/NA	Water	8081B_LL	169461

GC Semi VOA (Continued)

Analysis Batch: 169649 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 860-169461/2-A	Lab Control Sample	Total/NA	Water	8081B_LL	169461
LCSD 860-169461/3-A	Lab Control Sample Dup	Total/NA	Water	8081B_LL	169461

Prep Batch: 169818

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	3511	
885-7077-2	RG-South20240627	Total/NA	Water	3511	
MB 860-169818/1-A	Method Blank	Total/NA	Water	3511	
LCS 860-169818/2-A	Lab Control Sample	Total/NA	Water	3511	
LCSD 860-169818/3-A	Lab Control Sample Dup	Total/NA	Water	3511	

Analysis Batch: 169920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 860-169818/1-A	Method Blank	Total/NA	Water	608.3	169818
LCS 860-169818/2-A	Lab Control Sample	Total/NA	Water	608.3	169818
LCSD 860-169818/3-A	Lab Control Sample Dup	Total/NA	Water	608.3	169818

Analysis Batch: 170091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	608.3	169818
885-7077-2	RG-South20240627	Total/NA	Water	608.3	169818

HPLC/IC

Analysis Batch: 7687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	300.0	
885-7077-2	RG-South20240627	Total/NA	Water	300.0	
MB 885-7687/10	Method Blank	Total/NA	Water	300.0	
MB 885-7687/58	Method Blank	Total/NA	Water	300.0	
LCS 885-7687/11	Lab Control Sample	Total/NA	Water	300.0	
LCS 885-7687/59	Lab Control Sample	Total/NA	Water	300.0	
MRL 885-7687/9	Lab Control Sample	Total/NA	Water	300.0	

LCMS

Prep Batch: 779486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	1633	
885-7077-1 - RA	RG-North20240626	Total/NA	Water	1633	
885-7077-2	RG-South20240627	Total/NA	Water	1633	
885-7077-2 - RA	RG-South20240627	Total/NA	Water	1633	
885-7077-3 - RA	EB-20240627	Total/NA	Water	1633	
885-7077-3	EB-20240627	Total/NA	Water	1633	
MB 320-779486/1-A	Method Blank	Total/NA	Water	1633	
MB 320-779486/1-A - RA	Method Blank	Total/NA	Water	1633	
LCS 320-779486/3-A - RA	Lab Control Sample	Total/NA	Water	1633	
LCS 320-779486/3-A	Lab Control Sample	Total/NA	Water	1633	
LCSD 320-779486/4-A - RA	Lab Control Sample Dup	Total/NA	Water	1633	
LCSD 320-779486/4-A	Lab Control Sample Dup	Total/NA	Water	1633	
LLCS 320-779486/2-A - RA	Lab Control Sample	Total/NA	Water	1633	
LLCS 320-779486/2-A	Lab Control Sample	Total/NA	Water	1633	

LCMS

Analysis Batch: 780306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	Draft-4 1633	779486
885-7077-2	RG-South20240627	Total/NA	Water	Draft-4 1633	779486
885-7077-3	EB-20240627	Total/NA	Water	Draft-4 1633	779486
MB 320-779486/1-A	Method Blank	Total/NA	Water	Draft-4 1633	779486
LCS 320-779486/3-A	Lab Control Sample	Total/NA	Water	Draft-4 1633	779486
LCSD 320-779486/4-A	Lab Control Sample Dup	Total/NA	Water	Draft-4 1633	779486
LLCS 320-779486/2-A	Lab Control Sample	Total/NA	Water	Draft-4 1633	779486

Analysis Batch: 780601

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1 - RA	RG-North20240626	Total/NA	Water	Draft-4 1633	779486
885-7077-2 - RA	RG-South20240627	Total/NA	Water	Draft-4 1633	779486
885-7077-3 - RA	EB-20240627	Total/NA	Water	Draft-4 1633	779486
MB 320-779486/1-A - RA	Method Blank	Total/NA	Water	Draft-4 1633	779486
LCS 320-779486/3-A - RA	Lab Control Sample	Total/NA	Water	Draft-4 1633	779486
LCSD 320-779486/4-A - RA	Lab Control Sample Dup	Total/NA	Water	Draft-4 1633	779486
LLCS 320-779486/2-A - RA	Lab Control Sample	Total/NA	Water	Draft-4 1633	779486

Specialty Organics

Prep Batch: 777390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	HRMS-Sep	
885-7077-2	RG-South20240627	Total/NA	Water	HRMS-Sep	
MB 320-777390/1-A	Method Blank	Total/NA	Water	HRMS-Sep	
LCS 320-777390/2-A	Lab Control Sample	Total/NA	Water	HRMS-Sep	
LCSD 320-777390/3-A	Lab Control Sample Dup	Total/NA	Water	HRMS-Sep	

Analysis Batch: 778376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	1668A	777390
885-7077-2	RG-South20240627	Total/NA	Water	1668A	777390
MB 320-777390/1-A	Method Blank	Total/NA	Water	1668A	777390
LCS 320-777390/2-A	Lab Control Sample	Total/NA	Water	1668A	777390
LCSD 320-777390/3-A	Lab Control Sample Dup	Total/NA	Water	1668A	777390

Metals

Prep Batch: 7782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total Recoverable	Water	200.2	
885-7077-2	RG-South20240627	Total Recoverable	Water	200.2	
MB 885-7782/1-A	Method Blank	Total Recoverable	Water	200.2	
LCS 885-7782/6-A	Lab Control Sample	Total Recoverable	Water	200.2	
LLCS 885-7782/5-A	Lab Control Sample	Total Recoverable	Water	200.2	

Analysis Batch: 8057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total Recoverable	Water	200.7 Rev 4.4	7782
885-7077-2	RG-South20240627	Total Recoverable	Water	200.7 Rev 4.4	7782
MB 885-7782/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	7782
LCS 885-7782/6-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	7782

Metals (Continued)

Analysis Batch: 8057 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LLCS 885-7782/5-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	7782
MRL 885-8057/14	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	

Analysis Batch: 8085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Dissolved	Water	200.8	
885-7077-2	RG-South20240627	Dissolved	Water	200.8	
MB 885-8085/19	Method Blank	Total/NA	Water	200.8	
LCS 885-8085/20	Lab Control Sample	Total/NA	Water	200.8	
MRL 885-8085/17	Lab Control Sample	Total/NA	Water	200.8	
MRL 885-8085/18	Lab Control Sample	Total/NA	Water	200.8	

Analysis Batch: 8100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total Recoverable	Water	SM 2340B	
885-7077-2	RG-South20240627	Total Recoverable	Water	SM 2340B	

Analysis Batch: 8191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total Recoverable	Water	200.7 Rev 4.4	7782
885-7077-2	RG-South20240627	Total Recoverable	Water	200.7 Rev 4.4	7782
MRL 885-8191/13	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	

Prep Batch: 670850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	200.7/200.8	
885-7077-2	RG-South20240627	Total/NA	Water	200.7/200.8	
MB 160-670850/1-A	Method Blank	Total/NA	Water	200.7/200.8	
LCS 160-670850/2-A	Lab Control Sample	Total/NA	Water	200.7/200.8	
885-7077-1 MS	RG-North20240626	Total/NA	Water	200.7/200.8	
885-7077-1 MSD	RG-North20240626	Total/NA	Water	200.7/200.8	
885-7077-2 MS	RG-South20240627	Total/NA	Water	200.7/200.8	
885-7077-2 MSD	RG-South20240627	Total/NA	Water	200.7/200.8	

Analysis Batch: 671639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	200.8	670850
885-7077-2	RG-South20240627	Total/NA	Water	200.8	670850
MB 160-670850/1-A	Method Blank	Total/NA	Water	200.8	670850
LCS 160-670850/2-A	Lab Control Sample	Total/NA	Water	200.8	670850
885-7077-1 MS	RG-North20240626	Total/NA	Water	200.8	670850
885-7077-1 MSD	RG-North20240626	Total/NA	Water	200.8	670850
885-7077-2 MS	RG-South20240627	Total/NA	Water	200.8	670850
885-7077-2 MSD	RG-South20240627	Total/NA	Water	200.8	670850

General Chemistry

Analysis Batch: 7579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	SM5210B	
885-7077-2	RG-South20240627	Total/NA	Water	SM5210B	

General Chemistry (Continued)

Analysis Batch: 7579 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
USB 885-7579/1	Method Blank	Total/NA	Water	SM5210B	
LCS 885-7579/2	Lab Control Sample	Total/NA	Water	SM5210B	

Analysis Batch: 7815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	2540C	
MB 885-7815/1	Method Blank	Total/NA	Water	2540C	
LCS 885-7815/2	Lab Control Sample	Total/NA	Water	2540C	

Analysis Batch: 7827

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	SM 2540D	
885-7077-2	RG-South20240627	Total/NA	Water	SM 2540D	
MB 885-7827/1	Method Blank	Total/NA	Water	SM 2540D	
LCSSRM 885-7827/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Analysis Batch: 7881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-2	RG-South20240627	Total/NA	Water	2540C	
MB 885-7881/1	Method Blank	Total/NA	Water	2540C	
LCS 885-7881/2	Lab Control Sample	Total/NA	Water	2540C	

Analysis Batch: 7985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	1664B	
885-7077-2	RG-South20240627	Total/NA	Water	1664B	
MB 885-7985/1	Method Blank	Total/NA	Water	1664B	
LCS 885-7985/2	Lab Control Sample	Total/NA	Water	1664B	
LCSD 885-7985/3	Lab Control Sample Dup	Total/NA	Water	1664B	

Prep Batch: 8010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	351.2	
885-7077-2	RG-South20240627	Total/NA	Water	351.2	
MB 885-8010/3-A	Method Blank	Total/NA	Water	351.2	
LCS 885-8010/5-A	Lab Control Sample	Total/NA	Water	351.2	
LLCS 885-8010/4-A	Lab Control Sample	Total/NA	Water	351.2	

Analysis Batch: 8084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	5220D	
MB 885-8084/4	Method Blank	Total/NA	Water	5220D	
LCS 885-8084/5	Lab Control Sample	Total/NA	Water	5220D	
MRL 885-8084/6	Lab Control Sample	Total/NA	Water	5220D	

Analysis Batch: 8154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	SM 4500 H+ B	
885-7077-2	RG-South20240627	Total/NA	Water	SM 4500 H+ B	
885-7077-2 DU	RG-South20240627	Total/NA	Water	SM 4500 H+ B	

General Chemistry

Prep Batch: 8218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Dissolved	Water	365.2/365.3/365	
885-7077-1	RG-North20240626	Total/NA	Water	365.2/365.3/365	
885-7077-2	RG-South20240627	Dissolved	Water	365.2/365.3/365	
885-7077-2	RG-South20240627	Total/NA	Water	365.2/365.3/365	
MB 885-8218/1-A	Method Blank	Total/NA	Water	365.2/365.3/365	
LCS 885-8218/2-A	Lab Control Sample	Total/NA	Water	365.2/365.3/365	
MRL 885-8218/7-A	Lab Control Sample	Total/NA	Water	365.2/365.3/365	

Analysis Batch: 8500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Dissolved	Water	365.1	8218
885-7077-1	RG-North20240626	Total/NA	Water	365.1	8218
885-7077-2	RG-South20240627	Dissolved	Water	365.1	8218
885-7077-2	RG-South20240627	Total/NA	Water	365.1	8218
MB 885-8218/1-A	Method Blank	Total/NA	Water	365.1	8218
LCS 885-8218/2-A	Lab Control Sample	Total/NA	Water	365.1	8218
MRL 885-8218/7-A	Lab Control Sample	Total/NA	Water	365.1	8218

Analysis Batch: 8585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	351.2	8010
885-7077-2	RG-South20240627	Total/NA	Water	351.2	8010
MB 885-8010/3-A	Method Blank	Total/NA	Water	351.2	8010
LCS 885-8010/5-A	Lab Control Sample	Total/NA	Water	351.2	8010
LLCS 885-8010/4-A	Lab Control Sample	Total/NA	Water	351.2	8010

Analysis Batch: 9076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-2	RG-South20240627	Total/NA	Water	5220D	
MB 885-9076/4	Method Blank	Total/NA	Water	5220D	
LCS 885-9076/5	Lab Control Sample	Total/NA	Water	5220D	
MRL 885-9076/6	Lab Control Sample	Total/NA	Water	5220D	

Rad

Prep Batch: 669229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	Evaporation	
885-7077-2	RG-South20240627	Total/NA	Water	Evaporation	
MB 160-669229/1-A	Method Blank	Total/NA	Water	Evaporation	
LCS 160-669229/2-A	Lab Control Sample	Total/NA	Water	Evaporation	
LCSB 160-669229/3-A	Lab Control Sample	Total/NA	Water	Evaporation	
885-7077-2 MS	RG-South20240627	Total/NA	Water	Evaporation	
885-7077-2 MSBT	RG-South20240627	Total/NA	Water	Evaporation	
885-7077-2 DU	RG-South20240627	Total/NA	Water	Evaporation	

Biology

Analysis Batch: 7536

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-2	RG-South20240627	Total/NA	Water	9223B	
MB 885-7536/1	Method Blank	Total/NA	Water	9223B	

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: RG-North20240626
Lab Sample ID: 885-7077-1
Date Collected: 06/26/24 15:05
Matrix: Water
Date Received: 06/27/24 14:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	169234	NA	EET HOU	07/03/24 02:47
Total/NA	Prep	3511			169191	DR	EET HOU	07/02/24 12:40
Total/NA	Analysis	625.1		1	169359	PXS	EET HOU	07/03/24 19:01
Total/NA	Prep	3511			169312	DS	EET HOU	07/02/24 22:42
Total/NA	Analysis	608.3		1	169369	WP	EET HOU	07/03/24 14:47
Total/NA	Prep	3511			169818	DS	EET HOU	07/05/24 21:47
Total/NA	Analysis	608.3		1	170091	WP	EET HOU	07/14/24 13:40
Total/NA	Prep	3510C			169461	BH	EET HOU	07/03/24 13:50
Total/NA	Analysis	8081B_LL		1	169649	WP	EET HOU	07/05/24 11:41
Total/NA	Analysis	300.0		1	7687	JT	EET ALB	06/28/24 11:40
Total/NA	Prep	1633			779486	ATB	EET SAC	07/15/24 11:26
Total/NA	Analysis	Draft-4 1633		1	780306	SS	EET SAC	07/16/24 19:22
Total/NA	Prep	1633	RA		779486	ATB	EET SAC	07/15/24 11:26
Total/NA	Analysis	Draft-4 1633	RA	1	780601	SS	EET SAC	07/17/24 15:03
Total/NA	Prep	HRMS-Sep			777390	BLR	EET SAC	07/08/24 12:40
Total/NA	Analysis	1668A		1	778376	KT	EET SAC	07/12/24 04:49
Total Recoverable	Prep	200.2			7782	TM	EET ALB	07/02/24 13:43
Total Recoverable	Analysis	200.7 Rev 4.4		1	8057	JR	EET ALB	07/08/24 12:07
Total Recoverable	Prep	200.2			7782	TM	EET ALB	07/02/24 13:43
Total Recoverable	Analysis	200.7 Rev 4.4		1	8191	JR	EET ALB	07/10/24 15:01
Dissolved	Analysis	200.8		1	8085	ES	EET ALB	07/09/24 10:31
Total/NA	Prep	200.7/200.8			670850	JSM	EET SL	07/16/24 15:34
Total/NA	Analysis	200.8		2	671639	CGB	EET SL	07/19/24 14:39
Total Recoverable	Analysis	SM 2340B		1	8100	JF	EET ALB	07/09/24 15:25
Total/NA	Analysis	1664B		1	7985	CO	EET ALB	07/08/24 09:19
Total/NA	Analysis	2540C		1	7815	KB	EET ALB	07/02/24 14:21
Total/NA	Prep	351.2			8010	DL	EET ALB	07/08/24 11:40
Total/NA	Analysis	351.2		1	8585	DL	EET ALB	07/09/24 13:01
Dissolved	Prep	365.2/365.3/365			8218	ES	EET ALB	07/11/24 08:30
Dissolved	Analysis	365.1		1	8500	ES	EET ALB	07/16/24 09:32
Total/NA	Prep	365.2/365.3/365			8218	ES	EET ALB	07/11/24 08:30
Total/NA	Analysis	365.1		1	8500	ES	EET ALB	07/16/24 09:30
Total/NA	Analysis	5220D		1	8084	KH	EET ALB	07/09/24 14:14
Total/NA	Analysis	SM 2540D		1	7827	KS	EET ALB	07/02/24 16:35
Total/NA	Analysis	SM 4500 H+ B		1	8154	DL	EET ALB	07/09/24 22:21
Total/NA	Analysis	SM5210B		1	7579	CO	EET ALB	06/28/24 11:05
Total/NA	Prep	Evaporation			669229	KAC	EET SL	07/03/24 08:58
Total/NA	Analysis	900.0		1	671146	CMM	EET SL	07/18/24 17:21
Total/NA	Analysis	Gross Alpha Adj		1	671821	FLC	EET SL	07/19/24 14:39

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: RG-South20240627
Lab Sample ID: 885-7077-2
Date Collected: 06/27/24 13:10
Matrix: Water
Date Received: 06/27/24 14:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	169234	NA	EET HOU	07/03/24 03:08
Total/NA	Prep	3511			169191	DR	EET HOU	07/02/24 12:40
Total/NA	Analysis	625.1		1	169694	EM	EET HOU	07/05/24 15:46
Total/NA	Prep	3511			169312	DS	EET HOU	07/02/24 22:42
Total/NA	Analysis	608.3		1	169369	WP	EET HOU	07/03/24 14:58
Total/NA	Prep	3511			169818	DS	EET HOU	07/05/24 21:47
Total/NA	Analysis	608.3		1	170091	WP	EET HOU	07/14/24 13:51
Total/NA	Prep	3510C			169461	BH	EET HOU	07/03/24 13:50
Total/NA	Analysis	8081B_LL		1	169649	WP	EET HOU	07/05/24 12:10
Total/NA	Analysis	300.0		1	7687	JT	EET ALB	06/28/24 12:29
Total/NA	Prep	1633			779486	ATB	EET SAC	07/15/24 11:26
Total/NA	Analysis	Draft-4 1633		1	780306	SS	EET SAC	07/16/24 19:39
Total/NA	Prep	1633	RA		779486	ATB	EET SAC	07/15/24 11:26
Total/NA	Analysis	Draft-4 1633	RA	1	780601	SS	EET SAC	07/17/24 15:21
Total/NA	Prep	HRMS-Sep			777390	BLR	EET SAC	07/08/24 12:40
Total/NA	Analysis	1668A		1	778376	KT	EET SAC	07/12/24 05:52
Total Recoverable	Prep	200.2			7782	TM	EET ALB	07/02/24 13:43
Total Recoverable	Analysis	200.7 Rev 4.4		1	8057	JR	EET ALB	07/08/24 12:11
Total Recoverable	Prep	200.2			7782	TM	EET ALB	07/02/24 13:43
Total Recoverable	Analysis	200.7 Rev 4.4		1	8191	JR	EET ALB	07/10/24 15:03
Dissolved	Analysis	200.8		1	8085	ES	EET ALB	07/09/24 10:34
Total/NA	Prep	200.7/200.8			670850	JSM	EET SL	07/16/24 15:34
Total/NA	Analysis	200.8		2	671639	CGB	EET SL	07/19/24 15:03
Total Recoverable	Analysis	SM 2340B		1	8100	JF	EET ALB	07/09/24 15:25
Total/NA	Analysis	1664B		1	7985	CO	EET ALB	07/08/24 09:19
Total/NA	Analysis	2540C		1	7881	KS	EET ALB	07/03/24 12:52
Total/NA	Prep	351.2			8010	DL	EET ALB	07/08/24 11:40
Total/NA	Analysis	351.2		1	8585	DL	EET ALB	07/09/24 13:02
Dissolved	Prep	365.2/365.3/365			8218	ES	EET ALB	07/11/24 08:30
Dissolved	Analysis	365.1		1	8500	ES	EET ALB	07/16/24 09:36
Total/NA	Prep	365.2/365.3/365			8218	ES	EET ALB	07/11/24 08:30
Total/NA	Analysis	365.1		1	8500	ES	EET ALB	07/16/24 09:34
Total/NA	Analysis	5220D		1	9076	KH	EET ALB	07/23/24 14:19
Total/NA	Analysis	SM 2540D		1	7827	KS	EET ALB	07/02/24 16:35
Total/NA	Analysis	SM 4500 H+ B		1	8154	DL	EET ALB	07/09/24 22:10
Total/NA	Analysis	SM5210B		1	7579	CO	EET ALB	06/28/24 11:05
Total/NA	Prep	Evaporation			669229	KAC	EET SL	07/03/24 08:58
Total/NA	Analysis	900.0		1	671146	CMM	EET SL	07/18/24 17:21
Total/NA	Analysis	Gross Alpha Adj		1	671821	FLC	EET SL	07/19/24 15:03
Total/NA	Analysis	9223B		1	7536	SS	EET ALB	06/27/24 17:12

Lab Chronicle

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: EB-20240627
Lab Sample ID: 885-7077-3

Date Collected: 06/27/24 11:50
Matrix: Water

Date Received: 06/27/24 14:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1633			779486	ATB	EET SAC	07/15/24 11:26
Total/NA	Analysis	Draft-4 1633		1	780306	SS	EET SAC	07/16/24 19:57
Total/NA	Prep	1633	RA		779486	ATB	EET SAC	07/15/24 11:26
Total/NA	Analysis	Draft-4 1633	RA	1	780601	SS	EET SAC	07/17/24 15:38

Laboratory References:

= Mount Juliet, 12065 Lebanon Road, Mount Juliet, TN 37122

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

EET SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Accreditation/Certification Summary

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	NM100001	02-26-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
351.2	351.2	Water	Nitrogen, Total Kjeldahl
5220D		Water	Chemical Oxygen Demand
9223B		Water	Escherichia coli
SM5210B		Water	Biochemical Oxygen Demand

Laboratory: Eurofins Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-00759	08-03-24
Florida	NELAP	E871002	06-30-25
Louisiana (All)	NELAP	03054	06-30-25
Oklahoma	NELAP	1306	08-31-24
Oklahoma	State	2023-139	08-31-24
Texas	NELAP	T104704215	06-30-25
Texas	TCEQ Water Supply	T104704215	12-28-25
USDA	US Federal Programs	525-23-79-79507	03-20-26

Laboratory: Eurofins Sacramento

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-020	02-20-27
ANAB	Dept. of Defense ELAP	L2468	01-20-27
ANAB	Dept. of Energy	L2468.01	01-20-27
ANAB	ISO/IEC 17025	L2468	01-20-27
Arizona	State	AZ0708	08-11-24
Arkansas DEQ	State	88-0691	05-18-25
California	State	2897	01-31-26
Colorado	State	CA00044	08-31-24
Florida	NELAP	E87570	06-30-25
Georgia	State	4040	01-29-25
Hawaii	State	Eurofins Sacramento	01-29-25
Illinois	NELAP	200060	03-31-25
Kansas	NELAP	E-10375	10-31-25
Louisiana	NELAP	01944	06-30-25
Louisiana (All)	NELAP	01944	06-30-25
Maine	State	CA00004	04-14-26
Michigan	State	9947	01-29-25
Nevada	State	CA00044	07-31-25
New Hampshire	NELAP	2997	04-19-25
New Jersey	NELAP	CA005	06-30-25
New York	NELAP	11666	04-01-25
Ohio	State	41252	01-29-25
Oregon	NELAP	4040	01-29-25
Texas	NELAP	T104704399-23-17	05-31-25

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Laboratory: Eurofins Sacramento (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
US Fish & Wildlife	US Federal Programs	A22139	04-30-25
USDA	US Federal Programs	P330-18-00239	02-28-26
Utah	NELAP	CA000442023-16	02-28-25
Virginia	NELAP	460278	03-14-25
Washington	State	C581	05-05-25
West Virginia (DW)	State	9930C	01-31-25
Wisconsin	State	998204680	08-31-25
Wyoming	State Program	8TMS-L	01-28-19 *

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-25
ANAB	Dept. of Defense ELAP	L2305	04-06-25
ANAB	Dept. of Energy	L2305.01	04-08-25
ANAB	ISO/IEC 17025	L2305	04-06-25
Arizona	State	AZ0813	07-28-24
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-24 *
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-25
Illinois	NELAP	200023	11-30-24
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-24
Kentucky (DW)	State	KY90125	12-31-24
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-24
Louisiana	NELAP	04080	06-30-22 *
Louisiana (All)	NELAP	04080	06-30-25
Louisiana (DW)	State	LA011	12-31-24
Maryland	State	310	09-30-24
Massachusetts	State	M-MO054	06-30-25
MI - RadChem Recognition	State	9005	06-30-24 *
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-24
New Jersey	NELAP	MO002	06-30-25
New Mexico	State	MO00054	10-01-24
New York	NELAP	11616	03-31-25
North Carolina (DW)	State	29700	07-31-24
Oklahoma	NELAP	9997	08-31-24
Oregon	NELAP	4157	09-01-24
Pennsylvania	NELAP	68-00540	02-28-25
South Carolina	State	85002001	06-30-24 *
Texas	NELAP	T104704193	07-31-24
US Fish & Wildlife	US Federal Programs	058448	07-31-24
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO00054	07-31-24
Virginia	NELAP	460230	06-14-25
Washington	State	C592	08-30-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
West Virginia DEP	State	381	10-31-24

ANALYTICAL REPORT

July 09, 2024

Eurofins - Albuquerque, NM

Sample Delivery Group:	L1752635
Samples Received:	07/02/2024
Project Number:	
Description:	

Report To: Erin Munoz
4901 Hawkins NE
Albuquerque, NM 87109

Entire Report Reviewed By:

Jordan N Zito
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

TABLE OF CONTENTS

RG-NORTH20240626 (885-7077-1) L1752635-01 GW

Collected by	Collected date/time	Received date/time
	06/26/24 15:05	07/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2315989	1	07/09/24 03:03	07/09/24 03:03	SET	Mt. Juliet, TN

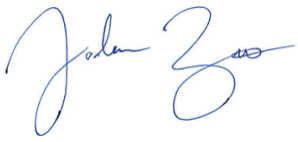
RG-SOUTH20240627 (885-7077-2) L1752635-02 GW

Collected by	Collected date/time	Received date/time
	06/27/24 13:10	07/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2315989	1	07/09/24 03:14	07/09/24 03:14	SET	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Jordan N Zito
Project Manager

Sample Delivery Group (SDG) Narrative

The following analysis were performed from an unpreserved, insufficiently or inadequately preserved sample.

Lab Sample ID	Project Sample ID	Method
L1752635-01	RG-NORTH20240626 (885-7077-1)	7199
L1752635-02	RG-SOUTH20240627 (885-7077-2)	7199

Wet Chemistry by Method 7199

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Hexavalent Chromium-Low Level	ND		0.000100	1	07/09/2024 03:03	WG2315989

Wet Chemistry by Method 7199

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Hexavalent Chromium-Low Level	ND		0.000100	1	07/09/2024 03:14	WG2315989

Method Blank (MB)

(MB) R4091510-1 07/09/24 02:36

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Hexavalent Chromium-Low Level	U		0.0000400	0.000100

L1753184-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1753184-04 07/09/24 04:19 • (DUP) R4091510-5 07/09/24 04:52

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium-Low Level	0.000379	0.000392	1	3.48		20

L1753184-16 Original Sample (OS) • Duplicate (DUP)

(OS) L1753184-16 07/09/24 07:35 • (DUP) R4091510-8 07/09/24 07:46

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium-Low Level	ND	ND	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R4091510-2 07/09/24 02:47

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Hexavalent Chromium-Low Level	0.00200	0.00206	103	90.0-110	

L1753184-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1753184-01 07/09/24 03:25 • (MS) R4091510-3 07/09/24 03:36 • (MSD) R4091510-4 07/09/24 03:47

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Hexavalent Chromium-Low Level	0.00100	0.000107	0.00108	0.00107	96.9	95.9	1	90.0-110			0.868	20

L1753184-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1753184-14 07/09/24 06:30 • (MS) R4091510-6 07/09/24 07:03 • (MSD) R4091510-7 07/09/24 07:14

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Hexavalent Chromium-Low Level	0.00100	ND	0.000978	0.000944	97.8	94.4	1	90.0-110			3.47	20

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque, NM 87109
Phone: 505-345-3975 Fax: 505-345-4107

Chain of Custody Record

eurofins | Environment Testing

G233

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Munoz, Erin	Carrier Tracking No(s):	COC No: 885-1125.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Erin.Munoz@et.eurofinsus.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Pace Analytical Services LLC		Accreditations Required (See note): NELAP - Oregon		Job #: 885-7077-1
Address: 12065 Lebanon Road, ,	Due Date Requested: 7/22/2024			
City: Mount Juliet	TAT Requested (days):			
State, Zip: TN, 37122				
Phone:	PO #:			
Email:	WO #:			
Project Name: CMC	Project #: 88500567			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

Other: L1752635

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Hexavalent Chromium)/ Hexavalent Chromium	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
RG-North20240626 (885-7077-1)	6/26/24	15:05 Mountain		Water			X	1	See Attached Instructions -01
RG-South20240627 (885-7077-2)	6/27/24	13:10 Mountain		Water			X	1	See Attached Instructions -02

ABO 07/02/2024
DPA 7 ~~2.7~~ 2.3 2.6 T771 6011 6559

Sample Receipt Checklist
COC Seal Present Intact: X Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
RA Screen <0.5 mR/hr: X Y N
If Applicable
VOA Zero Headspace: Y N
Pres. Correct/Check: Y N
Containers: 2

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:				
Relinquished by:	Date/Time: 7/1/24 1350	Company	Received by:	Date/Time: 07/02/2024 0900	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

ICOC No:
885-1125

Containers

Count	Container Type	Preservative
2	Other Client Container - preserved	None

L1752635

Subcontract Method Instructions

Sample IDs	Method	Method Description	Method Comments
1, 2	SUBCONTRACT	SUB (Hexavalent Chromium)/ Hexavalent Chromium	CR6

1. Select the 'Print' button to print 1 copy of each label.
2. The Return Shipment instructions, which provide your recipient with information on the returns process, will be printed with the label(s).
3. After printing, select your next step by clicking one of the displayed buttons.

Note: To review or print individual labels, select the Label button under each label image above.

U175235

Return Shipment Instructions

L1752635

FedEx

Return Shipment Instructions

1. Place the shipping label on the container's most visible side away from seams.

2. Ship your package one of three ways:

- **Use your regular scheduled pickup.**
- **Drop off at FedEx.** Find your closest location at **fedex.com/locate** or by calling 1.800.GoFedEx 1.800.463.3339
- **Schedule a pickup.** No account number required but label information may be needed. Go to **fedex.com/returnpickup** for FedEx Ground labels with "G" or "PRP" or call 1.800.GoFedEx 1.800.463.3339 and say:
  - "Return Manager" or "PRP" for FedEx Ground labels with "G" or "PRP"
  - "Express Return" for FedEx Express labels with "E" or "Billable Stamp"

Prepare Your Package With Care.

- Use an appropriate container, cushioning materials and at least three strips of packing tape.
- If reusing packaging, remove or black out old shipping labels including their barcode(s).

Special Instructions from the merchant:

Chain-of-Custody Record

Client: AMAFCA

Mailing Address:

Phone #:

email or Fax#: pchaver@AMAFCA.org

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name: CMC

Project #:

Project Manager: Patrick Chaver

Sampler: I Torres

On Ice: ☑ Yes ☐ No

# of Coolers: 2

Cooler Temp(including CF): 10.3+0.1=10.4(°C) 1.8+0.1=1.9

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

885-7077 COC

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	See attached list
6/26/24	1505	AQ	RG-NORTH20240626	2U	VARIOUS	1											X
6/27/24	1310	|	RG-South20240627	2U	Various	2											
6/27/24	1150	|	EB-20240627	2 Bottles	Various	3											

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
6/27/24	1437			DOO	6/27/24	14:37
Date	Time	Relinquished by:	Received by:	Via:	Date	Time

Remarks: SEE attached list.

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories This serves as notice of this possibility Any sub-contracted data will be clearly notated on the analytical report

Page 87 of 97

7/31/2024

Collaborative Monitoring Cooperative - Analyses List
Attach to Chain of Custody

Please refer to attached NPDES Permit No. NMR04A00 Appendix F. Methods and minimum quantification levels (MQL's) will be those approved under 40 CFR 136 and specified in the attached permit

Hardness (Ca + Mg)	NA	Total	200.7	2.4
Lead	7439-92-1	Dissolved	200.8	0.09
Copper	7440-50-8	Dissolved	200.8	1.06
Ammonia + organic nitrogen	7664-41-7	Total	350.1	31.32
Total Kjehldal Nitrogen	17778-88-0	Total	351.2	58.78
Nitrate + Nitrite	14797-55-8	Total	353.2	10.17
Polychlorinated biphenyls (PCBs)	1336-36-3	Total	1668	0.014
Tetrahydrofuran (THF)	109-99-9	Total	624.1	7.9
bis(2-Ethylhexyl)phthalate	117-81-7	Total	625.1	0.2
Dibenzofuran	132-64-9	Total	625.1	0.2
Indeno(1,2,3-cd)pyrene	193-39-5	Total	610	0.2
Benzo(b)fluoranthene	205-99-2	Total	610	0.1
Benzo(k)fluoranthene	207-08-9	Total	610	0.1
Chrysene	218-01-9	Total	610	0.2
Benzo(a)pyrene	50-32-8	Total	610	0.3
Dibenzo(a,h)anthracene	**53-70-3**	**Total**	**610**	**0.3**
Benzo(a)anthracene	56-55-3	Total	610	0.2
Dieldrin	60-57-1	Total	625.1	0.1
Pentachlorophenol	87-86-5	Total	604	0.2
Benzidine	92-87-5	Total	604	0.1
Chemical Oxygen Demand	E1641638[2]	Total	HACH	5100
Gross alpha (adjusted)	NA	Total	Method 900	0.1 pCi/L
Total Dissolved Solids	E1642222[2]	Total	SM 2540C	60.4
Total Suspended Solids	NA	Total	SM 2540D	3450
Biological Oxygen Demand	N/A	Total	Standard Methods	930
~~Oil and Grease~~		Total	1664A	5000
Ecoli Enumeration			SM 9223B	
~~pH~~			SM 4500	
Phosphorus		Dissolved	365.1	100
Phosphorus		Total	365.1	100
Chromium IV		Total	3500Cr C-2011	100
~~Per- and polyfluorinated alkyl substances (PFAS)~~			537.1	

PFAS

Appendix F - Minimum Quantification Levels (MQL's)

The following Minimum Quantification Levels (MQL's) are to be used for reporting pollutant data for NPDES permit applications and/or compliance reporting.

POLLUTANTS	MQL µg/l	POLLUTANTS	MQL µg/l
METALS, RADIOACTIVITY, CYANIDE and CHLORINE			
Aluminum	2.5	Molybdenum	10
Antimony	60	Nickel	0.5
Arsenic	0.5	Selenium	5
Barium	100	Silver	0.5
Beryllium	0.5	Thalllium	0.5
Boron	100	Uranium	0.1
Cadmium	1	Vanadium	50
Chromium	10	Zinc	20
Cobalt	50	Cyanide	10
Copper	0.5	Cyanide, weak acid dissociable	10
Lead	0.5	Total Residual Chlorine	33
Mercury (*)	0.0005 0.005		
DIOXIN			
2,3,7,8-TCDD	0.00001		
VOLATILE COMPOUNDS			
Acrolein	50	1,3-Dichloropropylene	10
Acrylonitrile	20	Ethylbenzene	10
Benzene	10	Methyl Bromide	50
Bromoform	10	Methylene Chloride	20
Carbon Tetrachloride	2	1,1,2,2-Tetrachloroethane	10
Chlorobenzene	10	Tetrachloroethylene	10
Clorodibromomethane	10	Toluene	10
Chloroform	50	1,2-trans-Dichloroethylene	10
Dichlorobromomethane	10	1,1,2-Trichloroethane	10
1,2-Dichloroethane	10	Trichloroethylene	10
1,1-Dichloroethylene	10	Vinyl Chloride	10
1,2-Dichloropropane	10		
ACID COMPOUNDS			
2-Chlorophenol	10	2,4-Dinitrophenol	50
2,4-Dichlorophenol	10	Pentachlorophenol	5
2,4-Dimethylphenol	10	Phenol	10
4,6-Dinitro-o-Cresol	50	2,4,6-Trichlorophenol	10

POLLUTANTS	MQL µg/l	POLLUTANTS	MQL µg/l
		BASE/NEUTRAL	
Acenaphthene	10	Dimethyl Phthalate	10
Anthracene	10	Di-n-Butyl Phthalate	10
Benzidine	50	2,4-Dinitrotoluene	10
Benzo(a)anthracene	5	1,2-Diphenylhydrazine	20
Benzo(a)pyrene	5	Fluoranthene	10
3,4-Benzofluoranthene	10	Fluorene	10
Benzo(k)fluoranthene	5	Hexachlorobenzene	5
Bis(2-chloroethyl)Ether	10	Hexachlorobutadiene	10
Bis(2-chloroisopropyl)Ether	10	Hexachlorocyclopentadiene	10
Bis(2-ethylhexyl)Phthalate	10	Hexachloroethane	20
Butyl Benzyl Phthalate	10	Indeno(1,2,3-cd)Pyrene	5
2-Chloronapthalene	10	Isophorone	10
Chrysene	5	Nitrobenzene	10
Dibenzo(a,h)anthracene	5	n-Nitrosodimethylamine	50
1,2-Dichlorobenzene	10	n-Nitrosodi-n-Propylamine	20
1,3-Dichlorobenzene	10	n-Nitrosodiphenylamine	20
1,4-Dichlorobenzene	10	Pyrene	10
3,3'-Dichlorobenzidine	5	1,2,4-Trichlorobenzene	10
Diethyl Phthalate	10		
		PESTICIDES AND PCBS	
Aldrin	0.01	Beta-Endosulfan	0.02
Alpha-BHC	0.05	Endosulfan sulfate	0.02
Beta-BHC	0.05	Endrin	0.02
Gamma-BHC	0.05	Endrin Aldehyde	0.1
Chlordane	0.2	Heptachlor	0.01
4,4'-DDT and derivatives	0.02	Heptachlor Epoxide	0.01
Dieldrin	0.02	PCBs **	0.2
Alpha-Endosulfan	0.01	Toxaphene	0.3

(MQL's Revised November 1, 2007)

(*) Default MQL for Mercury is 0.005 unless Part I of your permit requires the more sensitive Method 1631 (Oxidation / Purge and Trap / Cold vapor Atomic Fluorescence Spectrometry), then the MQL shall be 0.0005.

(**) EPA Method 1668 should be utilized when PCB water column monitoring is conducted to determine compliance with permit requirements. Either the Arochlor test (EPA Method 8082) or USGS test method (8093) may be utilized for purposes of sediment sampling as part of a screening program, but must use EPA Method 1668 (latest revision) for confirmation and determination of specific PCB levels at that location.

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque, NM 87109
Phone: 505-345-3975 Fax: 505-345-4107

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Munoz, Erin	Carrier Tracking No(s):	COC No: 885-1129.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Erin.Munoz@et.eurofinsus.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 885-7077-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 7/24/2024			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: CMC	Project #: 88500567			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
-

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	900.0/Evaporation Standard Target List	GrAlAdjUnc_Calc	200.8/200_2%P Uranium	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
RG-North20240626 (885-7077-1)	6/26/24	15:05 Mountain		Water			X	X	X	1	
RG-South20240627 (885-7077-2)	6/27/24	13:10 Mountain		Water			X	X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:				
Relinquished by:	Date/Time: 7/1/24 1425	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: M. Pinette	Date/Time: JUL 02 2024 0900	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 04/02/2024

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109
Phone: 505-345-3975 Fax: 505-345-4107

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Munoz, Erin	Carrier Tracking No(s):	COC No: 885-1126.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Erin.Munoz@et.eurofinsus.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Environment Testing Northern Ca		Accreditations Required (See note): NELAP Oregon		Job #: 885-7077 1
Address: 880 Riverside Parkway	Due Date Requested: 7/25/2024			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: CMC	Project #: 88500567			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

Other:

Sample Identification Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1633/1633_SPE EPA 1633 Method List	1668A/HRMS_Sep_P Full List (209)	Total Number of containers	Special Instructions/Note
			Preservation Code:							
RG-North20240626 (885-7077 1)	6/26/24	15:05 Mountain		Water			X	X	4	J and MDL
RG-South20240627 (885-7077-2)	6/27/24	13.10 Mountain		Water			X	X	4	J and MDL
EB-20240627 (885-7077-3)	6/27/24	11 50 Mountain		Water			X		2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I II III IV Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		7/1/24 1405			7.2.24 830	
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:
	Seal	3.4c

Ver: 04/02/2024

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Sacramento Sample Receiving Notes (SSRN)

Tracking # 777160373090

Job ____

885-7077 Field Sheet

SO / PO / FO / SAT / 2-Day / Ground / UPS / CDO / Courier

GSL / OnTrac / Goldstreak / USPS / Other ____

Use this form to record Sample Custody Seal Cooler Custody Seal, Temperature & corrected Temperature & other observations.
File in the job folder with the COC.

Therm ID 111 Corr Factor (+ / -) ____ °C

Ice ____ Wet ____ Gel 1 Other ____

Cooler Custody Seal: Seal

Cooler ID: ____

Temp Observed 3.4 °C Corrected 3.4 °C

From Temp Blank ☐ Sample ☑

Opening/Processing The Shipment	Yes	No	NA
Cooler compromised/tampered with?	☐	☑	☐
Cooler Temperature is acceptable?	☑	☐	☐
Frozen samples show signs of thaw?	☐	☐	☑

Initials: ____ Date: 7.2.24

Unpacking/Labeling The Samples	Yes	No	NA
Containers are not broken or leaking?	☑	☐	☐
Samples compromised/tampered with?	☐	☑	☐
COC is complete w/o discrepancies	☑	☐	☐
Sample custody seal?	☐	☐	☑
Sample containers have legible labels?	☑	☐	☐
Sample date/times are provided?	☑	☐	☐
Appropriate containers are used?	☑	☐	☐
Sample bottles are completely filled?	☑	☐	☐
Sample preservatives verified?	☐	☐	☑
Is the Field Sampler's name on COC?	☐	☐	☑
Samples w/o discrepancies?	☑	☐	☐
Zero headspace?*	☐	☐	☑
Alkalinity has no headspace?	☐	☐	☑
Perchlorate has headspace? (Methods 314, 331, 6850)	☐	☐	☑
Multiphasic samples are not present?	☑	☐	☐

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

Initials: ____ Date: 7.2.24

Notes ____

Trizma Lot #(s) 0000279288

Ammonium Acetate Lot #(s) ____

Login Completion	Yes	No	NA
Receipt Temperature on COC?	☑	☐	☐
NCM Filed?	☐	☐	☑
Samples received within hold time?	☐	☐	☑
Log Release checked in TALS?	☐	☐	☑

Initials: ____ Date: 7.2.24

Login Sample Receipt Checklist

Client: Albuquerque Metropolitan Arroyo Flood Control Authority

Job Number: 885-7077-1

Login Number: 7077

List Number: 1

Creator: Cason, Cheyenne

List Source: Eurofins Albuquerque

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Albuquerque Metropolitan Arroyo Flood Control Authority

Job Number: 885-7077-1

Login Number: 7077
List Number: 2
Creator: Torrez, Lisandra

List Source: Eurofins Houston
List Creation: 07/02/24 10:56 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

Login Sample Receipt Checklist

Client: Albuquerque Metropolitan Arroyo Flood Control Authority

Job Number: 885-7077-1

Login Number: 7077
List Number: 4
Creator: Simmons, Jason C

List Source: Eurofins Sacramento
List Creation: 07/02/24 12:15 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	Seal
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.4c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Albuquerque Metropolitan Arroyo Flood Control Authority

Job Number: 885-7077-1

Login Number: 7077
List Number: 3
Creator: Pinette, Meadow L

List Source: Eurofins St. Louis
List Creation: 07/02/24 01:31 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ATTACHMENT 2

FY 2024 DRY SEASON COMPLETED DATA VERIFICATION AND VALIDATION (V&V) FORMS

Attachment 1.1 Water Quality Sample Data Verification and Validation Worksheet

Study Name: Compliance Monitoring Cooperative (CMC)
Year: FY 2024 (December 2023 – Dry Season Sample)
Project Coordinator: For Data Review and Reporting – SJG, BHI
V&V Reviewer: SJG
Data covered by this worksheet: Alameda – 12/13/2023– E. coli Only Sample
Version of Verification/Validation Procedures: QAPP –AMAFCA SOP #5 (7/2022)

Step 1: Verify Field Data

A. Are all Field Data forms present and complete? ☒ Yes ☐ No

If yes, proceed; if no, attempt to locate missing forms, then indicate any remaining missing forms and action taken.

Missing Field Data Forms	Action Taken
_____	_____
_____	_____

Total number of occurrences: 0

B. Are station name and ID, and sampling date and time on forms consistent with database? ☒ Yes ☐ No
If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify.

Station and Parameter	Action Taken	Re-verified?
_____	_____	_____
_____	_____	_____

Total number of occurrences: 0

C. Are field data on forms consistent with database? ☒ Yes ☐ No
If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify.

Station	Sampling Date	Parameter(s) Corrected	Re-verified?
_____	_____	_____	_____
_____	_____	_____	_____

Total number of occurrences: 0

D. Are RIDs correct and associated with the correct analytical suite, media subdivision (e.g. surface water, municipal waste, etc.) and activity type (e.g. Field observation, Routine sample, QA sample etc.)?
☒ Yes ☐ No

If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify

Station/RID	Sampling Date	RID Corrected	Re-verified?
______	______	______	_________
______	______	______	_________

Total number of occurrences: **0**

☒ **Step 1 Completed** ***Initials:*** SJG ***Date:*** 2/6/2024

- -

Step 2: Verify Data Deliverables

A. Have all data in question been delivered? ☒ Yes ☐ No

If yes, proceed; if no, indicate RIDs with missing data (samples or blanks) or attach report with applicable RIDs highlighted. Contact data source and indicate action taken. Complete this step upon receipt of all missing data.

RID	Submittal Date	Missing Data/Parameters	Date of Initial Verification	Date Missing Data Were Received
______	______	______	______	______

Total number of occurrences: **0**

B. Do all of the analytical suites have the correct number and type of analytes. ☒ Yes ☐ No

If yes, proceed; if no, indicate RIDs with missing or incorrect analyte(s) or attach report with applicable RIDs highlighted. Contact data source and indicate action taken.

RID	Submittal Date	Missing or Incorrect Parameters	Action Taken	Re-verified?
______	______	______	______	______

☒ **Step 2 Completed** ***Initials:*** SJG ***Date:*** 2/6/2024

- -

Step 3: Verify Flow Data

*Note – Not Applicable – no flow data provided with CMC sample collection

A._Identify incorrect or missing data on the flow calculation spreadsheet and correct errors.

Station	Sampling Date	Flow data missing or incorrect?
______	______	__________
______	______	__________

Total number of occurrences: 0

B. Identify incorrect or missing discharge measurements, correct errors in database and re-verify.

Station	Sampling Date	Flow data missing or incorrect?	Re-verified?
______	______	__________	_________
______	______	__________	_________

Total number of occurrences: 0

_Not Applicable

☐ **Step 3 Completed** ***Initials:*** SJG ***Date:*** 2/6/2024

- -

Step 4: Verify Analytical Results for Missing Information or Questionable Results

Were any results with missing/questionable information identified? ☐ Yes ☒ No

If no, proceed; if yes, indicate results with missing information or questionable results or attach report. Contact data source and indicate action taken. Complete this step upon receipt of missing information or clarification of questionable results (clarify questionable results only, DO NOT change results without written approval (from lab or QA officer) and associated documentation).

RID	Sample Date	Missing or Questionable Information/Results	Action Taken

Total number of occurrences: 0

☒ **Step 4 Completed** ***Initials:*** SJG ***Date:*** 2/6/2024

- -

Step 5: Validate Blanks Results
Were any analytes of concern detected in blank samples? ☐ Yes ☒ No

If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager, with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes have been added to database correctly.

RID	Sample Date	Parameter	[Blank]	[Sample]	Validation Code/Flag Applied	Code/Flag verified in database? *

*See validation procedures to determine which associated data need to be flagged and include on *Validation Codes Form*.

Total number of occurrences: 0

☒ **Step 5 Completed** ***Initials:*** SJG ***Date:*** 2/6/2024

Step 6: Validate Holding Times Violations
Were any samples submitted that did not meet specified holding times? ☐ Yes ☒ No

If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes/flags have been added to database.

RID	Sample Date	Parameter	[Blank]	[Sample]	Validation Code/Flag Applied	Code/Flag verified in database to ALL associated data?*

*See validation procedures to determine which associated data need to be flagged.
Total number of occurrences: 0

☒ **Step 6 Completed** ***Initials:*** SJG ***Date:*** 2/6/2024

Step 7: Validate Replicate/Duplicate Results (if applicable)
Were any replicate/duplicate pairs submitted outside of the established control limit of 20%?
☐ Yes ☒ No

If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes/flags have been added to database.

RID Pairs		Replicate or Duplicate?	Sample Date	Parameter	RPD	Validation Code/Flag Applied	Code/Flag verified in database applied?*
_____	_____	_____	_____	_____	_____		_____
_____	_____	_____	_____	_____	_____		_____

N/A – no duplicate/replicate results

Total number of occurrences: 0

☒ **Step 7 Completed** ***Initials:*** SJG ***Date:*** 2/6/2024

****

After all of the above steps have been completed, save and print the worksheet, attach all applicable supplemental information and sign below.

I acknowledge that the data verification and validation process has been completed for the data identified above in accordance with the procedures described in the CMC QAPP, SOP #2

2/6/24

Data Verifier/Validator Signature Date

COMPLETION OF DATA VERIFICATION AND VALIDATION PROCESS

Once the data verification and validation process has been completed for the entire study (note: if the worksheet is for a subset of the data from a study, be sure ALL the data for the entire study is included before final completion of the data verification and validation process), notify the NMSQUID administrator that the process is complete and request that “V V in STORET” be added to the project title.

Once all data have been verified and validated for a study provide copies of ALL *Data Verification and Validation Worksheets* and attachments associated with the study to the Quality Assurance Officer and retain originals in the project binder.

Attachment 1.2 SWQB Validation Codes

When deficiencies are identified through the data verification and validation process, AMAFCA documents or "flags" the deficiencies by assigning validation codes. All data collected from the last compliant QC sample and up to the next compliant QC sample are assigned validation codes. The validation code alerts the data user that the results are outside QA control limits and may require re-sampling or a separate, qualitative analysis based on professional judgment.

Validation Code	Definition	WQX Equivalent
A1	Sample not collected according to SOP	
B1	Chemical was detected in the field blank at a concentration less than 5% of the sample concentration.	
BN	Blanks NOT collected during sampling run	
BU	Detection in blank. Analyte was not detected in this sample above the method's sample detection limit.	BU
RB1	Chemical was detected in the field blank at a concentration greater than or equal to 5% of the sample concentration. Results for this sample are rejected because they may be the result of contamination; the results may not be reported or used for regulatory compliance purposes.	B
R1	Rejected due to incorrect sample preservation	R
R2	Rejected due to equipment failure in the field	R
R3	Rejected based on best professional judgment	R
D1	Spike recovery not within method acceptance limits	
F1	Sample filter time exceeded	
J1	Estimated: the analyte was positively identified and the associated value is an approximate concentration of the analyte in the sample	J
K1	Holding time violation	H
Ea	Estimated-Incubation temperature between 35.5 and 38.0° Celsius	
Er	Rejected-Incubation temperature < 34.5 or >38.0° Celsius	
PD1	Percent difference between duplicate samples excessive	
S1	Per SLD, uncertainties (sigmas) are expressed as one standard deviation, i.e. one standard error. Small negative or positive values that are less than two standard deviations should be interpreted as "less than the detection limit."	
S2	Data are suspect but deemed usable based on best professional judgment; documentation of justification is required and should be included in the Data Verification and Validation Packet and reported with results	
Z1	Macroinvertebrate data did not meet QC criteria specified in Section 2.5 of QAPP	
H1	Habitat data did not meet QC criteria specified in Section 2.5 of QAPP	

Attachment 1.1 Water Quality Sample Data Verification and Validation Worksheet

Study Name: Compliance Monitoring Cooperative (CMC)
Year: FY 2024 (December 2023 – Dry Season Sample)
Project Coordinator: For Data Review and Reporting – SJG, BHI
V&V Reviewer: SJG
Data covered by this worksheet: Rio Grande North – 12/13/2023
Version of Verification/Validation Procedures: QAPP –AMAFCA SOP #5 (7/2022)

Step 1: Verify Field Data

A. Are all Field Data forms present and complete? ☒ Yes ☐ No

If yes, proceed; if no, attempt to locate missing forms, then indicate any remaining missing forms and action taken.

Missing Field Data Forms	Action Taken
_____	_____
_____	_____

Total number of occurrences: 0

B. Are station name and ID, and sampling date and time on forms consistent with database? ☒ Yes ☐ No
If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify.

Station and Parameter	Action Taken	Re-verified?
_____	_____	_____
_____	_____	_____

Total number of occurrences: 0

C. Are field data on forms consistent with database? ☒ Yes ☐ No
If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify.

Station	Sampling Date	Parameter(s) Corrected	Re-verified?
_____	_____	_____	_____
_____	_____	_____	_____

Total number of occurrences: 0

D. Are RIDs correct and associated with the correct analytical suite, media subdivision (e.g. surface water, municipal waste, etc.) and activity type (e.g. Field observation, Routine sample, QA sample etc.)?
☒ Yes ☐ No

If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify

Station/RID	Sampling Date	RID Corrected	Re-verified?
______	______	______	_________
______	______	______	_________

Total number of occurrences: 0

☒ **Step 1 Completed** ***Initials:*** SJG ***Date:*** 12/12/2024

- -

Step 2: Verify Data Deliverables

A. Have all data in question been delivered? ☒ Yes ☐ No

If yes, proceed; if no, indicate RIDs with missing data (samples or blanks) or attach report with applicable RIDs highlighted. Contact data source and indicate action taken. Complete this step upon receipt of all missing data.

RID	Submittal Date	Missing Data/Parameters	Date of Initial Verification	Date Missing Data Were Received
______	______	______	______	______

Total number of occurrences: 0

B. Do all of the analytical suites have the correct number and type of analytes. ☐ Yes ☒ No

If yes, proceed; if no, indicate RIDs with missing or incorrect analyte(s) or attach report with applicable RIDs highlighted. Contact data source and indicate action taken.

RID	Submittal Date	Missing or Incorrect Parameters	Action Taken	Re-verified?
	.			
______	______	______	______	______

Total number of occurrences: 0

☒ **Step 2 Completed** ***Initials:*** SJG ***Date:*** 2/12/2024

- -

Step 3: Verify Flow Data
*Note – Not Applicable – no flow data provided with CMC sample collection
A. Identify incorrect or missing data on the flow calculation spreadsheet and correct errors.

Station	Sampling Date	Flow data missing or incorrect?

Total number of occurrences: 0

B. Identify incorrect or missing discharge measurements, correct errors in database and re-verify.

Station	Sampling Date	Flow data missing or incorrect?	Re-verified?

Total number of occurrences: 0

Not Applicable
☐ **Step 3 Completed** ***Initials:*** SJG ***Date:*** 2/12/2024

- -

Step 4: Verify Analytical Results for Missing Information or Questionable Results

Were any results with missing/questionable information identified? ☒ Yes ☐ No

If no, proceed; if yes, indicate results with missing information or questionable results or attach report. Contact data source and indicate action taken. Complete this step upon receipt of missing information or clarification of questionable results (clarify questionable results only, DO NOT change results without written approval (from lab or QA officer) and associated documentation).

RID	Sample Date	Missing or Questionable Information/Results	Action Taken
Rio Grande North	12/13/2023	Lab report lists two Total Phosphorous results and the dissolved	BHI emailed AMAFCA on 2/7/24 and added note to the lab report.

		and total are not clear in the reporting.	

Eurofins lab report number 2312898.

Total number of occurrences: 1

☒ **Step 4 Completed** ***Initials:*** SJG ***Date:*** 2/12/2024

- -

Step 5: Validate Blanks Results

Were any analytes of concern detected in blank samples? ☐ Yes ☒ No

If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager, with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes have been added to database correctly.

RID	Sample Date	Parameter	[Blank]	[Sample]	Validation Code/Flag Applied	Code/Flag verified in database? *
____	_____	_____	_____	_____		________
_____	_____	_____	_____	_____		________

*See validation procedures to determine which associated data need to be flagged and include on *Validation Codes Form*.

Total number of occurrences: 0

☒ **Step 5 Completed** ***Initials:*** SJG ***Date:*** 2/12/2024

- -

Step 6: Validate Holding Times Violations

Were any samples submitted that did not meet specified holding times? ☐ Yes ☒ No

If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes/flags have been added to database.

RID	Sample Date	Parameter	[Blank]	[Sample]	Validation Code/Flag Applied	Code/Flag verified in database to ALL associated data?*
_____	_____	_____	_____	_____		________

*See validation procedures to determine which associated data need to be flagged.

*Note – Lab reports lists pH with hold time flag. Database uses field data reported pH, so this is hold time is not applicable.

The BOD has a hold time flag. The Rio Grande North sample was held until the CMC was sure the monitoring event was a qualifying storm event. This led to the hold time flag for BOD.

Total number of occurrences: 0

☒ **Step 6 Completed** ***Initials:*** SJG ***Date:*** 2/12/2024

- -

Step 7: Validate Replicate/Duplicate Results (if applicable)

Were any replicate/duplicate pairs submitted outside of the established control limit of 20%?

☐ Yes ☒ No

If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes/flags have been added to database.

RID Pairs		Replicate or Duplicate?	Sample Date	Parameter	RPD	Validation Code/Flag Applied	Code/Flag verified in database applied?*

Total number of occurrences: 0

☒ **Step 7 Completed** ***Initials:*** SJG ***Date:*** 2/12/2024

****

After all of the above steps have been completed, save and print the worksheet, attach all applicable supplemental information and sign below.

I acknowledge that the data verification and validation process has been completed for the data identified above in accordance with the procedures described in the CMC QAPP, SOP #2

2/12/24

Data Verifier/Validator Signature Date

COMPLETION OF DATA VERIFICATION AND VALIDATION PROCESS

Once the data verification and validation process has been completed for the entire study (note: if the worksheet is for a subset of the data from a study, be sure ALL the data for the entire study is included before final completion of the data verification and validation process), notify the NMSQUID administrator that the process is complete and request that “V V in STORET” be added to the project title.

Once all data have been verified and validated for a study provide copies of ALL *Data Verification and Validation Worksheets* and attachments associated with the study to the Quality Assurance Officer and retain originals in the project binder.

Attachment 1.2 SWQB Validation Codes

When deficiencies are identified through the data verification and validation process, AMAFCA documents or "flags" the deficiencies by assigning validation codes. All data collected from the last compliant QC sample and up to the next compliant QC sample are assigned validation codes. The validation code alerts the data user that the results are outside QA control limits and may require re-sampling or a separate, qualitative analysis based on professional judgment.

Validation Code	Definition	WQX Equivalent
A1	Sample not collected according to SOP	
B1	Chemical was detected in the field blank at a concentration less than 5% of the sample concentration.	
BN	Blanks NOT collected during sampling run	
BU	Detection in blank. Analyte was not detected in this sample above the method's sample detection limit.	BU
RB1	Chemical was detected in the field blank at a concentration greater than or equal to 5% of the sample concentration. Results for this sample are rejected because they may be the result of contamination; the results may not be reported or used for regulatory compliance purposes.	B
R1	Rejected due to incorrect sample preservation	R
R2	Rejected due to equipment failure in the field	R
R3	Rejected based on best professional judgment	R
D1	Spike recovery not within method acceptance limits	
F1	Sample filter time exceeded	
J1	Estimated: the analyte was positively identified and the associated value is an approximate concentration of the analyte in the sample	J
K1	Holding time violation	H
Ea	Estimated-Incubation temperature between 35.5 and 38.0° Celsius	
Er	Rejected-Incubation temperature < 34.5 or >38.0° Celsius	
PD1	Percent difference between duplicate samples excessive	
S1	Per SLD, uncertainties (sigmas) are expressed as one standard deviation, i.e. one standard error. Small negative or positive values that are less than two standard deviations should be interpreted as "less than the detection limit."	
S2	Data are suspect but deemed usable based on best professional judgment; documentation of justification is required and should be included in the Data Verification and Validation Packet and reported with results	
Z1	Macroinvertebrate data did not meet QC criteria specified in Section 2.5 of QAPP	
H1	Habitat data did not meet QC criteria specified in Section 2.5 of QAPP	

Attachment 1.1 Water Quality Sample Data Verification and Validation Worksheet

Study Name: Compliance Monitoring Cooperative (CMC)
Year: FY 2024 (December 2023 – Dry Season Sample)
Project Coordinator: For Data Review and Reporting – SJG, BHI
V&V Reviewer: SJG
Data covered by this worksheet: Rio Grande South – 12/14/2023
Version of Verification/Validation Procedures: QAPP –AMAFCA SOP #5 (7/2022)

Step 1: Verify Field Data

A. Are all Field Data forms present and complete? ☒ Yes ☐ No

If yes, proceed; if no, attempt to locate missing forms, then indicate any remaining missing forms and action taken.

Missing Field Data Forms	Action Taken
_____	_____
_____	_____

Total number of occurrences: 0

B. Are station name and ID, and sampling date and time on forms consistent with database? ☒ Yes ☐ No
If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify.

Station and Parameter	Action Taken	Re-verified?
_____	_____	_____
_____	_____	_____

Total number of occurrences: 0

C. Are field data on forms consistent with database? ☒ Yes ☐ No
If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify.

Station	Sampling Date	Parameter(s) Corrected	Re-verified?
_____	_____	_____	_____
_____	_____	_____	_____

Total number of occurrences: 0

D. Are RIDs correct and associated with the correct analytical suite, media subdivision (e.g. surface water, municipal waste, etc.) and activity type (e.g. Field observation, Routine sample, QA sample etc.)?

☒ Yes ☐ No

If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify

Station/RID	Sampling Date	RID Corrected	Re-verified?
______	______	______	_________
______	______	______	_________

Total number of occurrences: 0

☒ **Step 1 Completed** ***Initials:*** SJG ***Date:*** 2/12/2024

- -

Step 2: Verify Data Deliverables

A. Have all data in question been delivered? ☒ Yes ☐ No

If yes, proceed; if no, indicate RIDs with missing data (samples or blanks) or attach report with applicable RIDs highlighted. Contact data source and indicate action taken. Complete this step upon receipt of all missing data.

RID	Submittal Date	Missing Data/Parameters	Date of Initial Verification	Date Missing Data Were Received
______	______	______	______	______

Total number of occurrences: 0

B. Do all of the analytical suites have the correct number and type of analytes. ☐ Yes ☒ No

If yes, proceed; if no, indicate RIDs with missing or incorrect analyte(s) or attach report with applicable RIDs highlighted. Contact data source and indicate action taken.

RID	Submittal Date	Missing or Incorrect Parameters	Action Taken	Re-verified?

☒ **Step 2 Completed** ***Initials:*** SJG ***Date:*** 2/12/2024

- -

Step 3: Verify Flow Data
*Note – Not Applicable – no flow data provided with CMC sample collection
A._Identify incorrect or missing data on the flow calculation spreadsheet and correct errors.

Station	Sampling Date	Flow data missing or incorrect?
______	______	__________
______	______	__________

Total number of occurrences: 0

B. Identify incorrect or missing discharge measurements, correct errors in database and re-verify.

Station	Sampling Date	Flow data missing or incorrect?	Re-verified?
______	______	__________	__________
______	______	__________	__________

Total number of occurrences: 0

Not Applicable
☐ **Step 3 Completed** ***Initials:*** SJG ***Date:*** 2/12/2024

- -

Step 4: Verify Analytical Results for Missing Information or Questionable Results

Were any results with missing/questionable information identified? ☒ Yes ☐ No

If no, proceed; if yes, indicate results with missing information or questionable results or attach report. Contact data source and indicate action taken. Complete this step upon receipt of missing information or clarification of questionable results (clarify questionable results only, DO NOT change results without written approval (from lab or QA officer) and associated documentation).

RID	Sample Date	Missing or Questionable Information/Results	Action Taken
Rio Grande South	12/14/2023	Lab report lists two Total Phosphorous results and the dissolved	BHI emailed AMAFCA on 2/7/24 and BHI added note to the lab report.

		and total are not clear in the reporting.	
Rio Grande South	12/14/2023	Lab report has mis-labeled the Rio Grande South Semivolatile data as Rio Grande North.	BHI emailed AMAFCA on 2/7/24 to ask that they clarify this with the lab and BHI added note to the lab report.

*Note – Eurofins lab report number 2312898.

Total number of occurrences: 2

☒ **Step 4 Completed** ***Initials:*** SJG ***Date:*** 2/12/2024

- -

Step 5: Validate Blanks Results
Were any analytes of concern detected in blank samples? ☐ Yes ☒ No

If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager, with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes have been added to database correctly.

RID	Sample Date	Parameter	[Blank]	[Sample]	Validation Code/Flag Applied	Code/Flag verified in database? *

*See validation procedures to determine which associated data need to be flagged and include on *Validation Codes Form*.

Total number of occurrences: 0

☒ **Step 5 Completed** ***Initials:*** SJG ***Date:*** 2/12/2024

- -

Step 6: Validate Holding Times Violations
Were any samples submitted that did not meet specified holding times? ☐ Yes ☒ No

If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes/flags have been added to database.

RID	Sample Date	Parameter	[Blank]	[Sample]	Validation Code/Flag Applied	Code/Flag verified in database to ALL associated data?*
______	______	______	______	______		_________

*See validation procedures to determine which associated data need to be flagged.
*Note – Lab reports lists pH with hold time flag. Database uses field data reported pH, so this is hold time is not applicable.
Total number of occurrences: 0

☒ **Step 6 Completed** ***Initials:*** SJG ***Date:*** 2/12/2024

- -

Step 7: Validate Replicate/Duplicate Results (if applicable)
Were any replicate/duplicate pairs submitted outside of the established control limit of 20%?
☐ Yes ☒ No
If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes/flags have been added to database.

RID Pairs		Replicate or Duplicate?	Sample Date	Parameter	RPD	Validation Code/Flag Applied	Code/Flag verified in database applied?*
______	______	______	______	______	______		_________
______	______	______	______	______	______		_________

Total number of occurrences: 0

☒ **Step 7 Completed** ***Initials:*** SJG ***Date:*** 2/12/2024

****

After all of the above steps have been completed, save and print the worksheet, attach all applicable supplemental information and sign below.

I acknowledge that the data verification and validation process has been completed for the data identified above in accordance with the procedures described in the CMC QAPP, SOP #2

2/12/24

Data Verifier/Validator Signature Date

COMPLETION OF DATA VERIFICATION AND VALIDATION PROCESS

Once the data verification and validation process has been completed for the entire study (note: if the worksheet is for a subset of the data from a study, be sure ALL the data for the entire study is included before final completion of the data verification and validation process), notify the NMSQUID administrator that the process is complete and request that “V V in STORET” be added to the project title.

Once all data have been verified and validated for a study provide copies of ALL *Data Verification and Validation Worksheets* and attachments associated with the study to the Quality Assurance Officer and retain originals in the project binder.

Attachment 1.2 SWQB Validation Codes

When deficiencies are identified through the data verification and validation process, AMAFCA documents or "flags" the deficiencies by assigning validation codes. All data collected from the last compliant QC sample and up to the next compliant QC sample are assigned validation codes. The validation code alerts the data user that the results are outside QA control limits and may require re-sampling or a separate, qualitative analysis based on professional judgment.

Validation Code	Definition	WQX Equivalent
A1	Sample not collected according to SOP	
B1	Chemical was detected in the field blank at a concentration less than 5% of the sample concentration.	
BN	Blanks NOT collected during sampling run	
BU	Detection in blank. Analyte was not detected in this sample above the method's sample detection limit.	BU
RB1	Chemical was detected in the field blank at a concentration greater than or equal to 5% of the sample concentration. Results for this sample are rejected because they may be the result of contamination; the results may not be reported or used for regulatory compliance purposes.	B
R1	Rejected due to incorrect sample preservation	R
R2	Rejected due to equipment failure in the field	R
R3	Rejected based on best professional judgment	R
D1	Spike recovery not within method acceptance limits	
F1	Sample filter time exceeded	
J1	Estimated: the analyte was positively identified and the associated value is an approximate concentration of the analyte in the sample	J
K1	Holding time violation	H
Ea	Estimated-Incubation temperature between 35.5 and 38.0° Celsius	
Er	Rejected-Incubation temperature < 34.5 or >38.0° Celsius	
PD1	Percent difference between duplicate samples excessive	
S1	Per SLD, uncertainties (sigmas) are expressed as one standard deviation, i.e. one standard error. Small negative or positive values that are less than two standard deviations should be interpreted as "less than the detection limit."	
S2	Data are suspect but deemed usable based on best professional judgment; documentation of justification is required and should be included in the Data Verification and Validation Packet and reported with results	
Z1	Macroinvertebrate data did not meet QC criteria specified in Section 2.5 of QAPP	
H1	Habitat data did not meet QC criteria specified in Section 2.5 of QAPP	

Attachment 1.1 Water Quality Sample Data Verification and Validation Worksheet

Study Name: Compliance Monitoring Cooperative (CMC)
Year: FY 2024 (June 2024 – Dry Season Sample)
Project Coordinator: For Data Review and Reporting – SJG, BHI
V&V Reviewer: SJG
Data covered by this worksheet: Rio Grande South – 6/27/2024
Version of Verification/Validation Procedures: QAPP –AMAFCA SOP #5 (7/2022)

Step 1: Verify Field Data

A. Are all Field Data forms present and complete? ☒ Yes ☐ No

If yes, proceed; if no, attempt to locate missing forms, then indicate any remaining missing forms and action taken.

Missing Field Data Forms	Action Taken
_____	_____
_____	_____

Total number of occurrences: 0

B. Are station name and ID, and sampling date and time on forms consistent with database? ☒ Yes ☐ No
If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify.

Station and Parameter	Action Taken	Re-verified?
_____	_____	_____
_____	_____	_____

Total number of occurrences: 0

C. Are field data on forms consistent with database? ☒ Yes ☐ No
If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify.

Station	Sampling Date	Parameter(s) Corrected	Re-verified?
_____	_____	_____	_____
_____	_____	_____	_____

Total number of occurrences: 0

D. Are RIDs correct and associated with the correct analytical suite, media subdivision (e.g. surface water, municipal waste, etc.) and activity type (e.g. Field observation, Routine sample, QA sample etc.)?
☒ Yes ☐ No

If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify

Station/RID	Sampling Date	RID Corrected	Re-verified?
______	______	______	_________
______	______	______	_________

Total number of occurrences: **0**

☒ **Step 1 Completed** ***Initials:*** SJG ***Date:*** 8/23/2024

- -

Step 2: Verify Data Deliverables

A. Have all data in question been delivered? ☒ Yes ☐ No

If yes, proceed; if no, indicate RIDs with missing data (samples or blanks) or attach report with applicable RIDs highlighted. Contact data source and indicate action taken. Complete this step upon receipt of all missing data.

RID	Submittal Date	Missing Data/Parameters	Date of Initial Verification	Date Missing Data Were Received

Total number of occurrences: **0**

B. Do all of the analytical suites have the correct number and type of analytes. ☐ Yes ☒ No

If yes, proceed; if no, indicate RIDs with missing or incorrect analyte(s) or attach report with applicable RIDs highlighted. Contact data source and indicate action taken.

RID	Submittal Date	Missing or Incorrect Parameters	Action Taken	Re-verified?
		Refer to Step 4 for list and missing analytes.		

☒ **Step 2 Completed** ***Initials:*** SJG ***Date:*** 8/23/2024

- -

Step 3: Verify Flow Data

*Note – Not Applicable – no flow data provided with CMC sample collection

A._Identify incorrect or missing data on the flow calculation spreadsheet and correct errors.

Station	Sampling Date	Flow data missing or incorrect?
______	______	__________

Total number of occurrences: 0

B. Identify incorrect or missing discharge measurements, correct errors in database and re-verify.

Station	Sampling Date	Flow data missing or incorrect?	Re-verified?
______	______	__________	_________

Total number of occurrences: 0

Not Applicable

☐ **Step 3 Completed** ***Initials:*** SJG ***Date:*** 8/23/2024

- -

Step 4: Verify Analytical Results for Missing Information or Questionable Results

Were any results with missing/questionable information identified? ☒ Yes ☐ No

If no, proceed; if yes, indicate results with missing information or questionable results or attach report. Contact data source and indicate action taken. Complete this step upon receipt of missing information or clarification of questionable results (clarify questionable results only, DO NOT change results without written approval (from lab or QA officer) and associated documentation).

RID	Sample Date	Missing or Questionable Information/Results	Action Taken
Rio Grande South	6/27/2024	DO field data, collection protocol may have resulted in low DO reading.	Have reached out to the sampler there was a delay during sampling that could account for the low DO reading.
Rio Grande South	6/27/2024	Lab report did not include results for Ammonia (mg/L as N)	Notified AMAFCA (CMC member) of the missing parameter.

Rio Grande South	6/27/2024	Lab report did not include results for Benzo[a]pyrene	Notified AMAFCA (CMC member) of the missing parameter.

*Note – Eurofins Job ID: 885-7077-1.

Total number of occurrences: 3

☒ **Step 4 Completed** ***Initials:*** SJG ***Date:*** 8/23/2024

- -

Step 5: Validate Blanks Results
Were any analytes of concern detected in blank samples? ☐ Yes ☒ No

If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager, with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes have been added to database correctly.

RID	Sample Date	Parameter	[Blank]	[Sample]	Validation Code/Flag Applied	Code/Flag verified in database?*

*See validation procedures to determine which associated data need to be flagged and include on *Validation Codes Form*.

Total number of occurrences: 0

☒ **Step 5 Completed** ***Initials:*** SJG ***Date:*** 8/23/2024

- -

Step 6: Validate Holding Times Violations
Were any samples submitted that did not meet specified holding times? ☒ Yes ☐ No

If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes/flags have been added to database.

RID	Sample Date	Parameter	[Blank]	[Sample]	Validation Code/Flag Applied	Code/Flag verified in database to ALL associated data?*

Rio Grande South	6/272024	Tetrahydro-furan		yes	H	Yes
Rio Grande South	6/272024	Dieldrin		yes	H	Yes

*See validation procedures to determine which associated data need to be flagged.
*Note – Lab reports lists pH with hold time flag. Database uses field data reported pH, so this is hold time is not applicable.
Total number of occurrences: 2

☒ **Step 6 Completed** ***Initials:*** SJG ***Date:*** 8/23/2024

- -

Step 7: Validate Replicate/Duplicate Results (if applicable)
Were any replicate/duplicate pairs submitted outside of the established control limit of 20%?
☒ Yes ☐ No
If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes/flags have been added to database.

RID Pairs		Replicate or Duplicate?	Sample Date	Parameter	RPD	Validation Code/Flag Applied	Code/Flag verified in database applied?*
Rio Grande South	Lab Duplicate	Lab Duplicate	6/27/2024	Dieldrin		yes	*+
Rio Grande South	Lab Duplicate	Lab Duplicate	6/27/2024	5 Semivolatile Organic Compounds		yes	*+

Total number of occurrences: 6

☒ **Step 7 Completed** ***Initials:*** SJG ***Date:*** 8/23/2024

****

After all of the above steps have been completed, save and print the worksheet, attach all applicable supplemental information and sign below.

I acknowledge that the data verification and validation process has been completed for the data identified above in accordance with the procedures described in the CMC QAPP, SOP #2

8/23/2024

Data Verifier/Validator Signature Date

COMPLETION OF DATA VERIFICATION AND VALIDATION PROCESS

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B1	Chemical was detected in the field blank at a concentration less than 5% of the sample concentration.	
BN	Blanks NOT collected during sampling run	
BU	Detection in blank. Analyte was not detected in this sample above the method's sample detection limit.	BU
RB1	Chemical was detected in the field blank at a concentration greater than or equal to 5% of the sample concentration. Results for this sample are rejected because they may be the result of contamination; the results may not be reported or used for regulatory compliance purposes.	B
R1	Rejected due to incorrect sample preservation	R
R2	Rejected due to equipment failure in the field	R
R3	Rejected based on best professional judgment	R
D1	Spike recovery not within method acceptance limits	
F1	Sample filter time exceeded	
J1	Estimated: the analyte was positively identified and the associated value is an approximate concentration of the analyte in the sample	J
K1	Holding time violation	H
Ea	Estimated-Incubation temperature between 35.5 and 38.0° Celsius	
Er	Rejected-Incubation temperature < 34.5 or >38.0° Celsius	
PD1	Percent difference between duplicate samples excessive	
S1	Per SLD, uncertainties (sigmas) are expressed as one standard deviation, i.e. one standard error. Small negative or positive values that are less than two standard deviations should be interpreted as "less than the detection limit."	
S2	Data are suspect but deemed usable based on best professional judgment; documentation of justification is required and should be included in the Data Verification and Validation Packet and reported with results	
Z1	Macroinvertebrate data did not meet QC criteria specified in Section 2.5 of QAPP	
H1	Habitat data did not meet QC criteria specified in Section 2.5 of QAPP	

Attachment 1.1 Water Quality Sample Data Verification and Validation Worksheet

Study Name: Compliance Monitoring Cooperative (CMC)
Year: FY 2024 (June 2024 – Dry Season Sample)
Project Coordinator: For Data Review and Reporting – SJG, BHI
V&V Reviewer: SJG
Data covered by this worksheet: Rio Grande (RG) North – 6/26/2024
Version of Verification/Validation Procedures: QAPP –AMAFCA SOP #5 (7/2022)

Step 1: Verify Field Data

A. Are all Field Data forms present and complete? ☒ Yes ☐ No

If yes, proceed; if no, attempt to locate missing forms, then indicate any remaining missing forms and action taken.

Missing Field Data Forms	Action Taken
_____	_____
_____	_____

Total number of occurrences: 0

B. Are station name and ID, and sampling date and time on forms consistent with database? ☒ Yes ☐ No
If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify.

Station and Parameter	Action Taken	Re-verified?
_____	_____	_____
_____	_____	_____

Total number of occurrences: 0

C. Are field data on forms consistent with database? ☒ Yes ☐ No
If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify.

Station	Sampling Date	Parameter(s) Corrected	Re-verified?
_____	_____	_____	_____
_____	_____	_____	_____

Total number of occurrences: 0

D. Are RIDs correct and associated with the correct analytical suite, media subdivision (e.g. surface water, municipal waste, etc.) and activity type (e.g. Field observation, Routine sample, QA sample etc.)?
☒ Yes ☐ No

If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify

Station/RID	Sampling Date	RID Corrected	Re-verified?
______	______	______	_________

Total number of occurrences: 0

☒ **Step 1 Completed** ***Initials:*** SJG ***Date:*** 8/21/2024

- -

Step 2: Verify Data Deliverables

A. Have all data in question been delivered? ☒ Yes ☐ No

If yes, proceed; if no, indicate RIDs with missing data (samples or blanks) or attach report with applicable RIDs highlighted. Contact data source and indicate action taken. Complete this step upon receipt of all missing data.

RID	Submittal Date	Missing Data/Parameters	Date of Initial Verification	Date Missing Data Were Received
______	______	______	______	______

Total number of occurrences: 0

B. Do all of the analytical suites have the correct number and type of analytes. ☐ Yes ☒ No

If yes, proceed; if no, indicate RIDs with missing or incorrect analyte(s) or attach report with applicable RIDs highlighted. Contact data source and indicate action taken.

RID	Submittal Date	Missing or Incorrect Parameters	Action Taken	Re-verified?
	.	Refer to Step 4 for list and missing analytes.		

Total number of occurrences: 0

☒ **Step 2 Completed** ***Initials:*** SJG ***Date:*** 8/21/2024

- -

Step 3: Verify Flow Data

*Note – Not Applicable – no flow data provided with CMC sample collection

A. Identify incorrect or missing data on the flow calculation spreadsheet and correct errors.

Station	Sampling Date	Flow data missing or incorrect?
_____	_____	_____

Total number of occurrences: 0

B. Identify incorrect or missing discharge measurements, correct errors in database and re-verify.

Station	Sampling Date	Flow data missing or incorrect?	Re-verified?
_____	_____	_____	_____

Total number of occurrences: 0

Not Applicable

☐ **Step 3 Completed** ***Initials:*** SJG ***Date:*** 8/21/2024

- -

Step 4: Verify Analytical Results for Missing Information or Questionable Results

Were any results with missing/questionable information identified? ☒ Yes ☐ No

If no, proceed; if yes, indicate results with missing information or questionable results or attach report. Contact data source and indicate action taken. Complete this step upon receipt of missing information or clarification of questionable results (clarify questionable results only, DO NOT change results without written approval (from lab or QA officer) and associated documentation).

RID	Sample Date	Missing or Questionable Information/Results	Action Taken
Rio Grande North	6/26/2024	DO field data, collection protocol may have resulted in low DO reading.	Have reached out to the sampler there was a delay during sampling that could account for the low DO reading.
Rio Grande North	6/26/2024	Lab report did not include results for Ammonia (mg/L as N)	Notified AMAFCA (CMC member) of the missing parameter.
Rio Grande North	6/26/2024	Lab report did not include results for Benzo[a]pyrene	Notified AMAFCA (CMC member) of the missing parameter.

Eurofins Job ID: 885-7077-1.
Total number of occurrences: 3

☒ **Step 4 Completed** ***Initials:*** SJG ***Date:*** 8/21/2024

- -

Step 5: Validate Blanks Results
Were any analytes of concern detected in blank samples? ☐ Yes ☒ No

If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager, with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes have been added to database correctly.

RID	Sample Date	Parameter	[Blank]	[Sample]	Validation Code/Flag Applied	Code/Flag verified in database? *

*See validation procedures to determine which associated data need to be flagged and include on *Validation Codes Form*.

Total number of occurrences: 0

☒ **Step 5 Completed** ***Initials:*** SJG ***Date:*** 8/21/2024

- -

Step 6: Validate Holding Times Violations
Were any samples submitted that did not meet specified holding times? ☒ Yes ☐ No

If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes/flags have been added to database.

RID	Sample Date	Parameter	[Blank]	[Sample]	Validation Code/Flag Applied	Code/Flag verified in database to ALL associated data?*
Rio Grande North	6/26/2024	Tetrahydro-furan		yes	H	Yes
Rio Grande North	6/26/2024	Dieldrin		yes	H	Yes

*See validation procedures to determine which associated data need to be flagged.

*Note – Lab reports lists pH with hold time flag. Database uses field data reported pH, so this is hold time is not applicable.
The BOD has a hold time flag. The Rio Grande North sample was held until the CMC was sure the monitoring event was a qualifying storm event. This led to the hold time flag for BOD.

Total number of occurrences: **2**

☒ **Step 6 Completed** ***Initials:*** SJG ***Date:*** 8/21/2024

- -

Step 7: Validate Replicate/Duplicate Results (if applicable)
Were any replicate/duplicate pairs submitted outside of the established control limit of 20%?
☒ Yes ☐ No
If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes/flags have been added to database.

RID Pairs		Replicate or Duplicate?	Sample Date	Parameter	RPD	Validation Code/Flag Applied	Code/Flag verified in database applied?*
Rio Grande North	Lab Duplicate	Lab Duplicate	6/26/2024	Dieldrin		yes	*+
Rio Grande North	Lab Duplicate	Lab Duplicate	6/26/2024	5 Semivolatile Organic Compounds		yes	*+

Total number of occurrences: **6**

☒ **Step 7 Completed** ***Initials:*** SJG ***Date:*** 8/21/2024

****

After all of the above steps have been completed, save and print the worksheet, attach all applicable supplemental information and sign below.

I acknowledge that the data verification and validation process has been completed for the data identified above in accordance with the procedures described in the CMC QAPP, SOP #2

8/21/2024

Data Verifier/Validator Signature Date

COMPLETION OF DATA VERIFICATION AND VALIDATION PROCESS

Once the data verification and validation process has been completed for the entire study (note: if the worksheet is for a subset of the data from a study, be sure ALL the data for the entire study is included before final completion of the data verification and validation process), notify the NMSQUID administrator that the process is complete and request that “V V in STORET” be added to the project title.

Once all data have been verified and validated for a study provide copies of ALL *Data Verification and Validation Worksheets* and attachments associated with the study to the Quality Assurance Officer and retain originals in the project binder.

Attachment 1.2 SWQB Validation Codes

When deficiencies are identified through the data verification and validation process, AMAFCA documents or "flags" the deficiencies by assigning validation codes. All data collected from the last compliant QC sample and up to the next compliant QC sample are assigned validation codes. The validation code alerts the data user that the results are outside QA control limits and may require re-sampling or a separate, qualitative analysis based on professional judgment.

Validation Code	Definition	WQX Equivalent
A1	Sample not collected according to SOP	
B1	Chemical was detected in the field blank at a concentration less than 5% of the sample concentration.	
BN	Blanks NOT collected during sampling run	
BU	Detection in blank. Analyte was not detected in this sample above the method's sample detection limit.	BU
RB1	Chemical was detected in the field blank at a concentration greater than or equal to 5% of the sample concentration. Results for this sample are rejected because they may be the result of contamination; the results may not be reported or used for regulatory compliance purposes.	B
R1	Rejected due to incorrect sample preservation	R
R2	Rejected due to equipment failure in the field	R
R3	Rejected based on best professional judgment	R
D1	Spike recovery not within method acceptance limits	
F1	Sample filter time exceeded	
J1	Estimated: the analyte was positively identified and the associated value is an approximate concentration of the analyte in the sample	J
K1	Holding time violation	H
Ea	Estimated-Incubation temperature between 35.5 and 38.0° Celsius	
Er	Rejected-Incubation temperature < 34.5 or >38.0° Celsius	
PD1	Percent difference between duplicate samples excessive	
S1	Per SLD, uncertainties (sigmas) are expressed as one standard deviation, i.e. one standard error. Small negative or positive values that are less than two standard deviations should be interpreted as "less than the detection limit."	
S2	Data are suspect but deemed usable based on best professional judgment; documentation of justification is required and should be included in the Data Verification and Validation Packet and reported with results	
Z1	Macroinvertebrate data did not meet QC criteria specified in Section 2.5 of QAPP	
H1	Habitat data did not meet QC criteria specified in Section 2.5 of QAPP	

Attachment 1.1 Water Quality Sample Data Verification and Validation Worksheet

Study Name: Compliance Monitoring Cooperative (CMC)
Year: FY 2024 (June 2024 – Dry Season Sample)
Project Coordinator: For Data Review and Reporting – SJG, BHI
V&V Reviewer: SJG
Data covered by this worksheet: Alameda – 6/26/2024– E. coli Only Sample
Version of Verification/Validation Procedures: QAPP –AMAFCA SOP #5 (7/2022)

Step 1: Verify Field Data
A. Are all Field Data forms present and complete? ☒ Yes ☐ No

If yes, proceed; if no, attempt to locate missing forms, then indicate any remaining missing forms and action taken.

Missing Field Data Forms	Action Taken
_____	_____
_____	_____

Total number of occurrences: 0

B. Are station name and ID, and sampling date and time on forms consistent with database? ☒ Yes ☐ No
If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify.

Station and Parameter	Action Taken	Re-verified?
_____	_____	_____
_____	_____	_____

Total number of occurrences: 0

C. Are field data on forms consistent with database? ☒ Yes ☐ No
If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify.

Station	Sampling Date	Parameter(s) Corrected	Re-verified?
_____	_____	_____	_____
_____	_____	_____	_____

Total number of occurrences: 0

D. Are RIDs correct and associated with the correct analytical suite, media subdivision (e.g. surface water, municipal waste, etc.) and activity type (e.g. Field observation, Routine sample, QA sample etc.)?
☒ Yes ☐ No

If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify

Station/RID	Sampling Date	RID Corrected	Re-verified?
______	______	______	_________
______	______	______	_________

Total number of occurrences: **0**

☒ **Step 1 Completed** ***Initials:*** SJG ***Date:*** 8/13/2024

- -

Step 2: Verify Data Deliverables

A. Have all data in question been delivered? ☒ Yes ☐ No

If yes, proceed; if no, indicate RIDs with missing data (samples or blanks) or attach report with applicable RIDs highlighted. Contact data source and indicate action taken. Complete this step upon receipt of all missing data.

RID	Submittal Date	Missing Data/Parameters	Date of Initial Verification	Date Missing Data Were Received
______	______	______	______	______

Total number of occurrences: **0**

B. Do all of the analytical suites have the correct number and type of analytes. ☒ Yes ☐ No

If yes, proceed; if no, indicate RIDs with missing or incorrect analyte(s) or attach report with applicable RIDs highlighted. Contact data source and indicate action taken.

RID	Submittal Date	Missing or Incorrect Parameters	Action Taken	Re-verified?
______	______	______	______	______

☒ **Step 2 Completed** ***Initials:*** SJG ***Date:*** 8/13/2024

- -

Step 3: Verify Flow Data

*Note – Not Applicable – no flow data provided with CMC sample collection

A._Identify incorrect or missing data on the flow calculation spreadsheet and correct errors.

Station	Sampling Date	Flow data missing or incorrect?
_____	_____	_________
_____	_____	_________

Total number of occurrences: 0

B. Identify incorrect or missing discharge measurements, correct errors in database and re-verify.

Station	Sampling Date	Flow data missing or incorrect?	Re-verified?
_____	_____	_________	________
_____	_____	_________	________

Total number of occurrences: 0

Not Applicable

☐ **Step 3 Completed** ***Initials:*** SJG ***Date:*** 8/13/2024

- -

Step 4: Verify Analytical Results for Missing Information or Questionable Results

Were any results with missing/questionable information identified? ☐ Yes ☒ No

If no, proceed; if yes, indicate results with missing information or questionable results or attach report. Contact data source and indicate action taken. Complete this step upon receipt of missing information or clarification of questionable results (clarify questionable results only, DO NOT change results without written approval (from lab or QA officer) and associated documentation).

RID	Sample Date	Missing or Questionable Information/Results	Action Taken
	6/26/2024	DO field data, collection protocol may have resulted in low DO reading.	Have reached out to the sampler to determine if there were any issues during sampling that could account for the low DO reading.

Total number of occurrences: 1

☒ **Step 4 Completed** ***Initials:*** SJG ***Date:*** 8/13/2024

- -

Step 5: Validate Blanks Results
Were any analytes of concern detected in blank samples? ☐ Yes ☒ No

If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager, with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes have been added to database correctly.

RID	Sample Date	Parameter	[Blank]	[Sample]	Validation Code/Flag Applied	Code/Flag verified in database?*

*See validation procedures to determine which associated data need to be flagged and include on *Validation Codes Form*.

Total number of occurrences: 0

☒ **Step 5 Completed** ***Initials:*** SJG ***Date:*** 8/13/2024

- -

Step 6: Validate Holding Times Violations
Were any samples submitted that did not meet specified holding times? ☐ Yes ☒ No

If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes/flags have been added to database.

RID	Sample Date	Parameter	[Blank]	[Sample]	Validation Code/Flag Applied	Code/Flag verified in database to ALL associated data?*

*See validation procedures to determine which associated data need to be flagged.
Total number of occurrences: 0

☒ **Step 6 Completed** ***Initials:*** SJG ***Date:*** 8/13/2024

- -

Step 7: Validate Replicate/Duplicate Results (if applicable)
Were any replicate/duplicate pairs submitted outside of the established control limit of 20%?
☐ Yes ☒ No
If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes/flags have been added to database.

RID Pairs		Replicate or Duplicate?	Sample Date	Parameter	RPD	Validation Code/Flag Applied	Code/Flag verified in database applied?*
_____	_____	_____	_____	_____	_____		_____
_____	_____	_____	_____	_____	_____		_____

N/A – no duplicate/replicate results

Total number of occurrences: 0

☒ **Step 7 Completed** ***Initials:*** SJG ***Date:*** 8/13/2024

****

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I acknowledge that the data verification and validation process has been completed for the data identified above in accordance with the procedures described in the CMC QAPP, SOP #2

Sarah Cannon 8/13/24

Data Verifier/Validator Signature Date

COMPLETION OF DATA VERIFICATION AND VALIDATION PROCESS

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R1	Rejected due to incorrect sample preservation	R
R2	Rejected due to equipment failure in the field	R
R3	Rejected based on best professional judgment	R
D1	Spike recovery not within method acceptance limits	
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K1	Holding time violation	H
Ea	Estimated-Incubation temperature between 35.5 and 38.0° Celsius	
Er	Rejected-Incubation temperature < 34.5 or >38.0° Celsius	
PD1	Percent difference between duplicate samples excessive	
S1	Per SLD, uncertainties (sigmas) are expressed as one standard deviation, i.e. one standard error. Small negative or positive values that are less than two standard deviations should be interpreted as "less than the detection limit."	
S2	Data are suspect but deemed usable based on best professional judgment; documentation of justification is required and should be included in the Data Verification and Validation Packet and reported with results	
Z1	Macroinvertebrate data did not meet QC criteria specified in Section 2.5 of QAPP	
H1	Habitat data did not meet QC criteria specified in Section 2.5 of QAPP	

Summary of AMAFCA's MS4 Discharges to Water Quality Impaired Water Bodies without an Approved TMDL Program FY 2024 (July 1, 2023 – June 30, 2024)

NPDES Permit No. NMR04A000

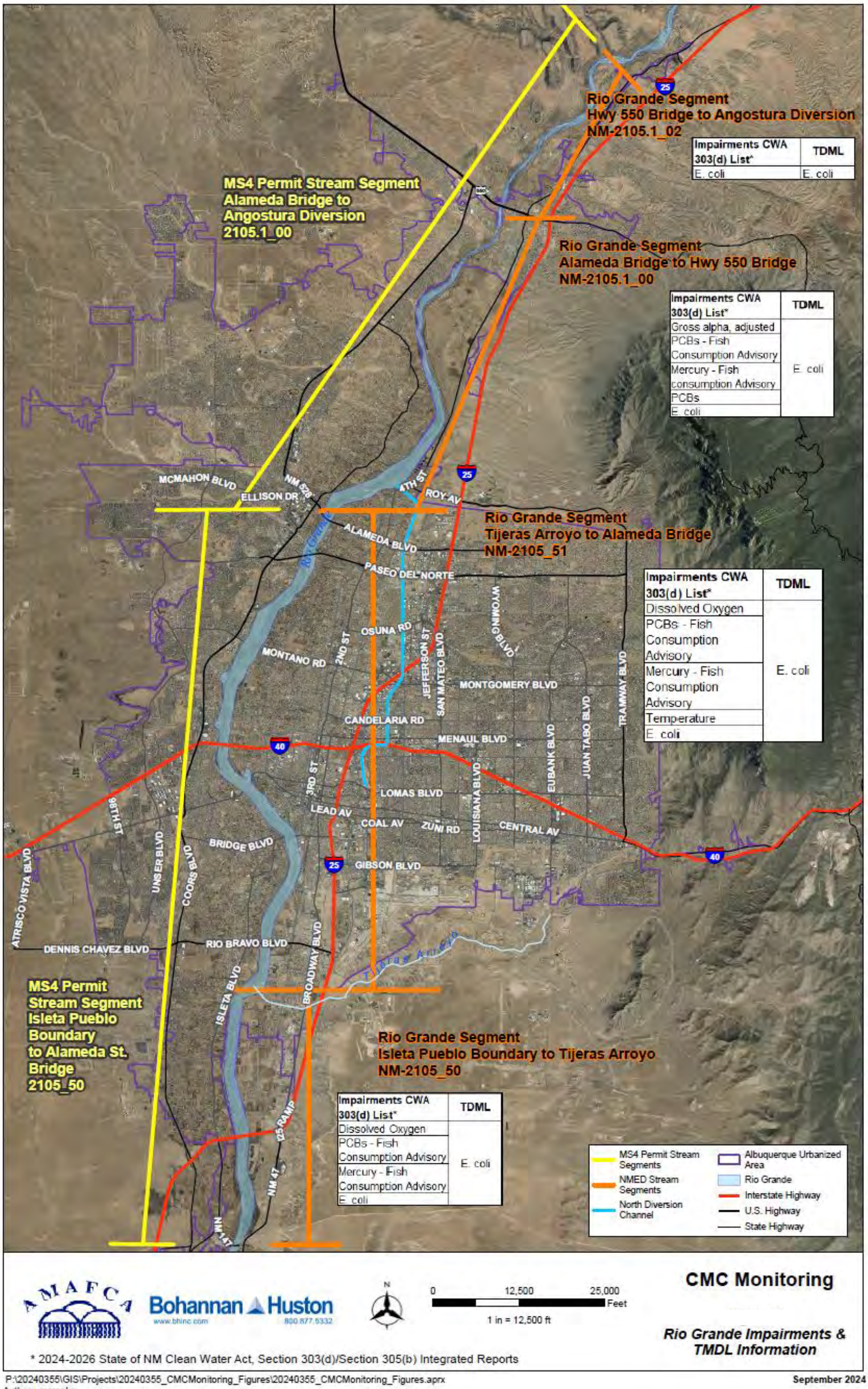
Part I.C.2.b.(ii) - Special Conditions, Compliance with Water Quality Standards

Impairments without Approved TMDLs

Impairments for the Rio Grande are documented in the Clean Water Act (CWA) 303(d)/305(b) Integrated Report (IR). The IR is updated every three years by a review process that is conducted by the New Mexico Environment Department (NMED). For AMAFCA and other Municipal Separate Storm Sewer System (MS4) permittees in the watershed, compliance sampling is done in the Rio Grande at upstream and downstream locations of the urbanized area for impairment parameters, as well as other parameters identified in the MS4 Permit.

AMAFCA and other MS4s covered under the MS4 Permit are required to comply with water quality standards that are comprised of designated uses for surface waters of the state, associated water quality criteria necessary to protect these uses, and an antidegradation policy. Designated uses in the Middle Rio Grande include aquatic life, fish culture, primary and secondary contact (including cultural, religious, or ceremonial purposes), public water supply, industrial water supply, domestic water supply, irrigation, livestock watering, and wildlife habitat. Impairments are identified when sampling results show that the water quality is not meeting the designated uses requirements. Once an impairment is identified; a Total Maximum Daily Load (TMDL) may be considered in the future if continued monitoring does not show improvement. AMAFCA's stormwater discharges protect these uses and fulfill the requirements set forth in the MS4 Permit. Coordinated water quality sample collection programs through AMAFCA, the Stormwater Quality Team, Compliance Monitoring Cooperative (CMC), and Bosque Ecosystem Monitoring Program (BEMP) have been developed and are annually funded to monitor, assess, protect, and restore surface water quality to the Middle Rio Grande watershed.

The current impairments for the Rio Grande stream segments are shown in the figure below.



Impairments in the Rio Grande Segments in the Middle Rio Grande Through Albuquerque

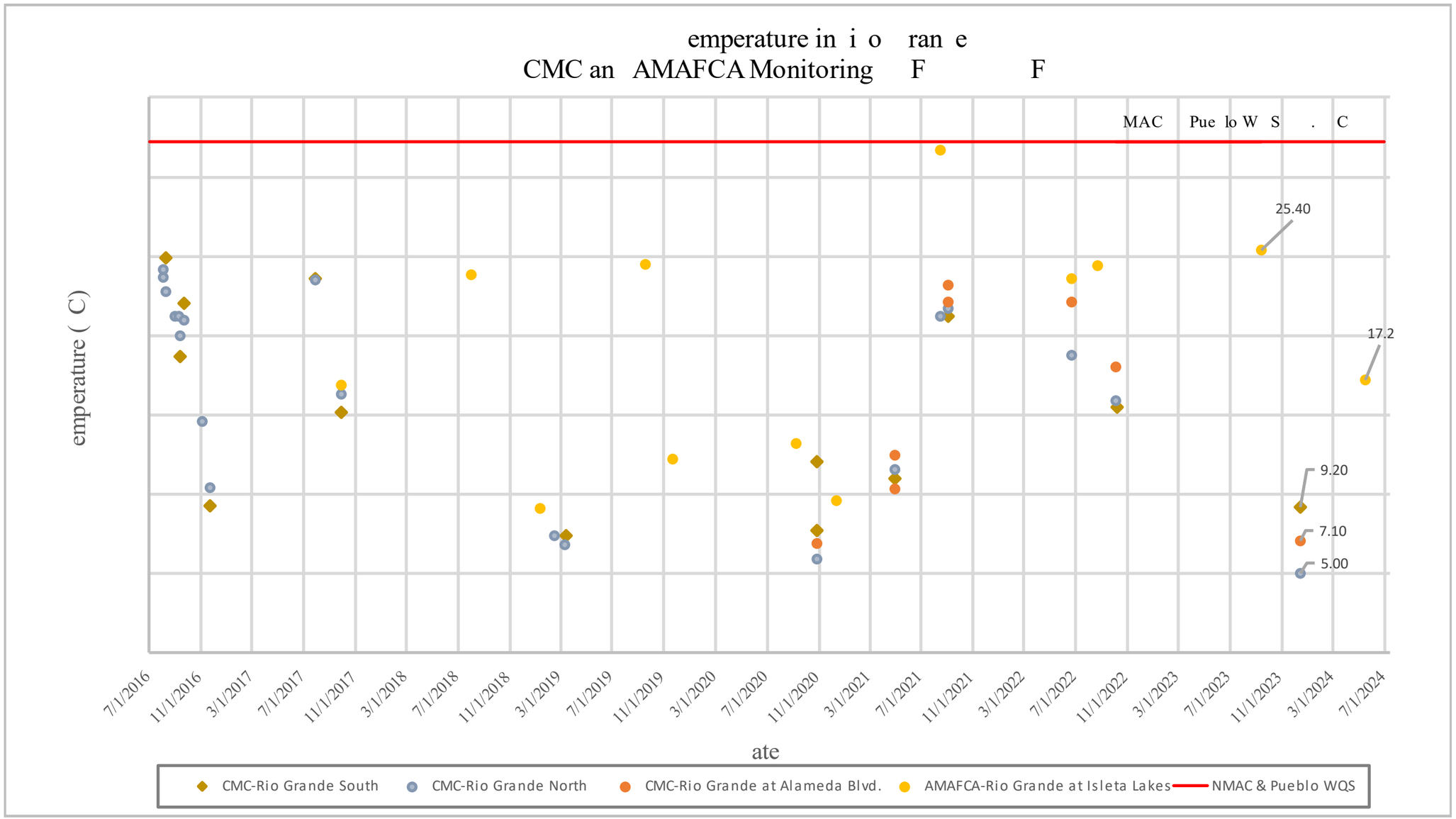
CMC and AMAFCA Water Quality Monitoring Program for Temperature, Gross Alpha, Mercury, and PCBs

Both AMAFCA and the Middle Rio Grande Compliance Monitoring Cooperative (CMC) collect grab samples within the Rio Grande during storm events. Parameters, including the identified impaired parameters, are tested for these in-stream samples. For MS4 Permit compliance, the Middle Rio Grande CMC has monitoring points north and south of the urbanized portion of the river. The AMAFCA monitoring program collects samples in the Rio Grande at the downstream (south) end of the watershed (Rio Grande at Isleta Lakes). The graphs below show the Temperature and Gross Alpha from AMAFCA and CMC samples collected from 2016 – 2024.

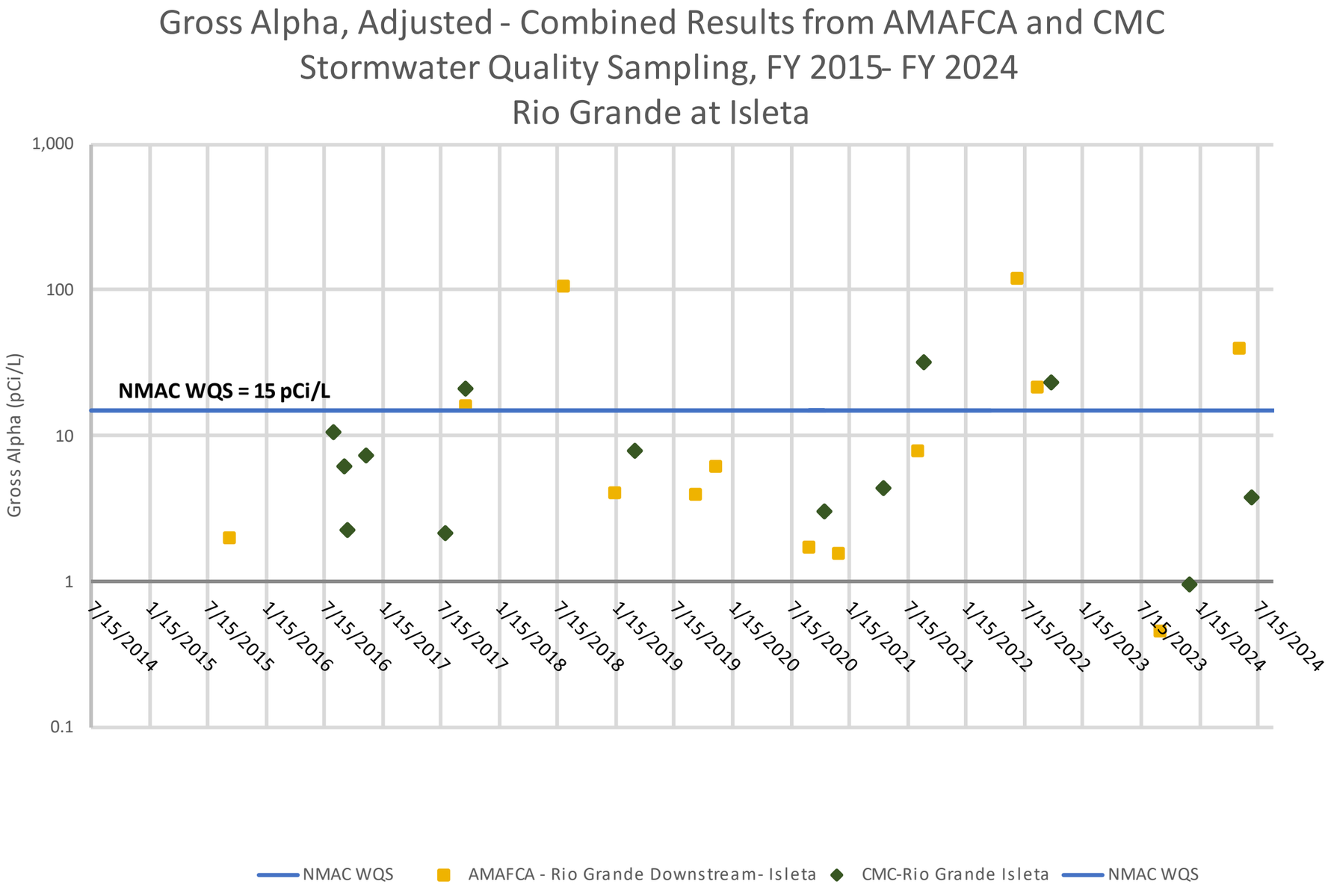
AMAFCA monitors and evaluates the potential effect of stormwater discharges related to temperature in the Rio Grande. AMAFCA and the original MS4 co-permittees (the City of Albuquerque, New Mexico Department of Transportation, and the University of New Mexico) assembled and analyzed temperature data from 1982 to 2012. This data analysis proved the assertion that the receiving waters of the Rio Grande are not adversely affected by the temperature of stormwater from the Albuquerque MS4. This data was presented in an initial report that was submitted to EPA on May 1, 2012.

Since 2012, the MS4 permittees have continued to collect and submit temperature data, with each Annual Report showing that the Rio Grande (receiving water for the Middle Rio Grande watershed) is not adversely affected by the temperature of stormwater from the Albuquerque MS4. AMAFCA has collected data from 2012 to 2024 using tidbit probes and sondes. In accordance with AMAFCA's Stormwater Management Program (SWMP), AMAFCA has assessed and will continue to assess the potential effect of stormwater discharges into the Rio Grande by collecting and evaluating additional temperature data. Additional information is available in the Dissolved Oxygen and Temperature Program summary documents.

In FY 2024, AMAFCA continued to follow the recently updated quality assurance project plan (QAPP), the field sampling plan (FSP), and related Standard Operating Procedures (SOPs) for AMAFCA's stormwater quality monitoring program. The format and contents of these documents are modeled after the NMED Surface Water Quality Bureau (SWQB) water quality management programs to facilitate sharing of data between the agencies. These documents provide a framework and detailed methods for the collection and analysis of environmental data as well as provide guidance for generating data with the precision, accuracy, and completeness necessary for AMAFCA's program.



Plot of Temperature Data Collected From Grab Samples in the Rio Grande Through the AMAFCA and CMC Monitoring Programs

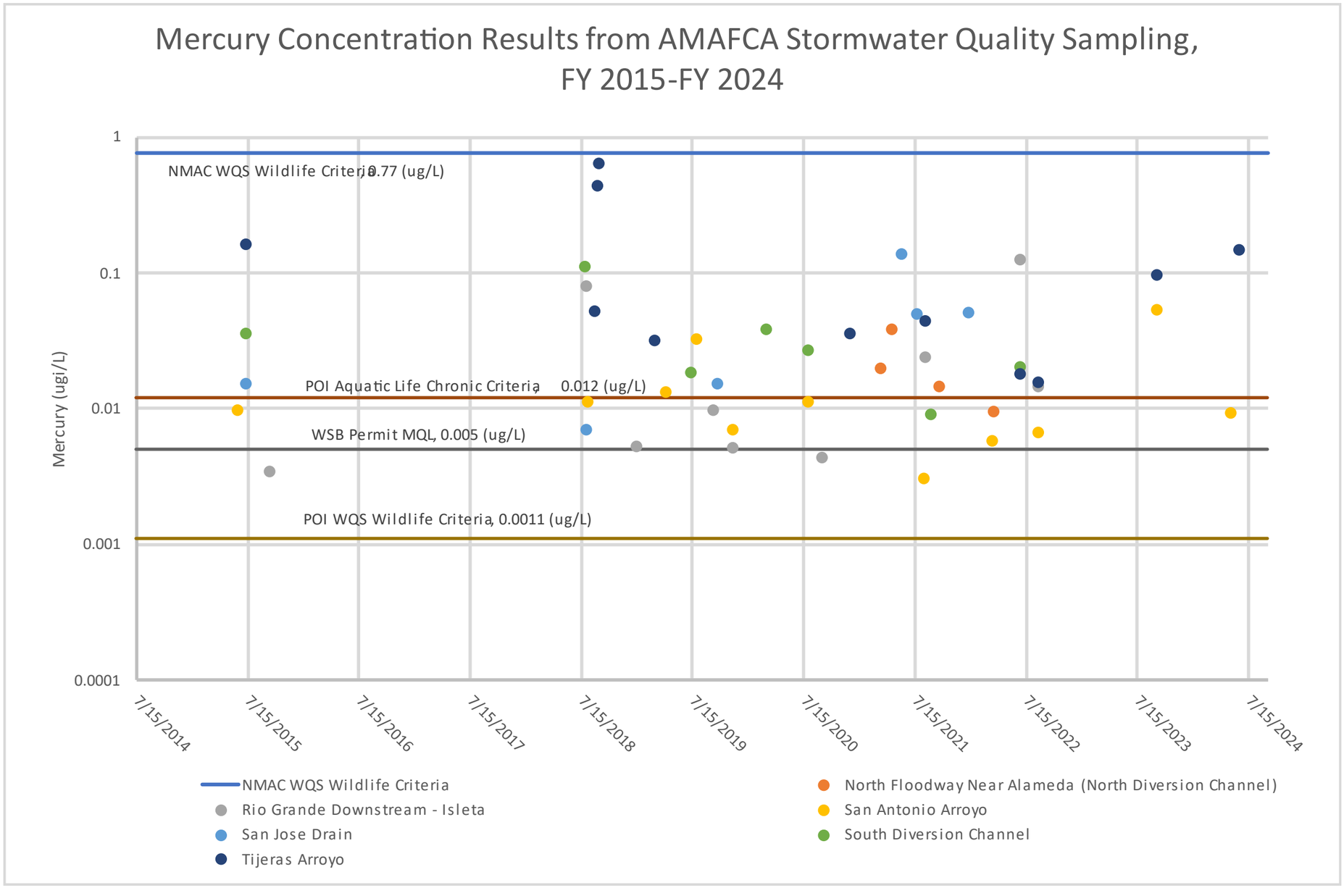


Gross Alpha Results From Grab Samples in the Rio Grande Through the AMAFCA and CMC Monitoring Programs

AMAFCA has been monitoring for mercury in stormwater samples and the graph on page 7 shows results obtained throughout the watershed. The CMC has not been monitoring for mercury, as it is not a required parameter in the MS4 Permit. Mercury levels reported as exceeding applicable in-stream water quality standard (WQS) values relate to 'Wil li fe Usage' W S for the Pue lo of Isleta; this WQS value is an order of magnitude lower than other mercury WQSs – refer to the table below. AMAFCA has discussed the concern about the magnitude difference and potential error of this WQS with the Pueblo of Isleta related to their Triennial Review.

Water Quality Standards for Mercury for the Middle Rio Grande

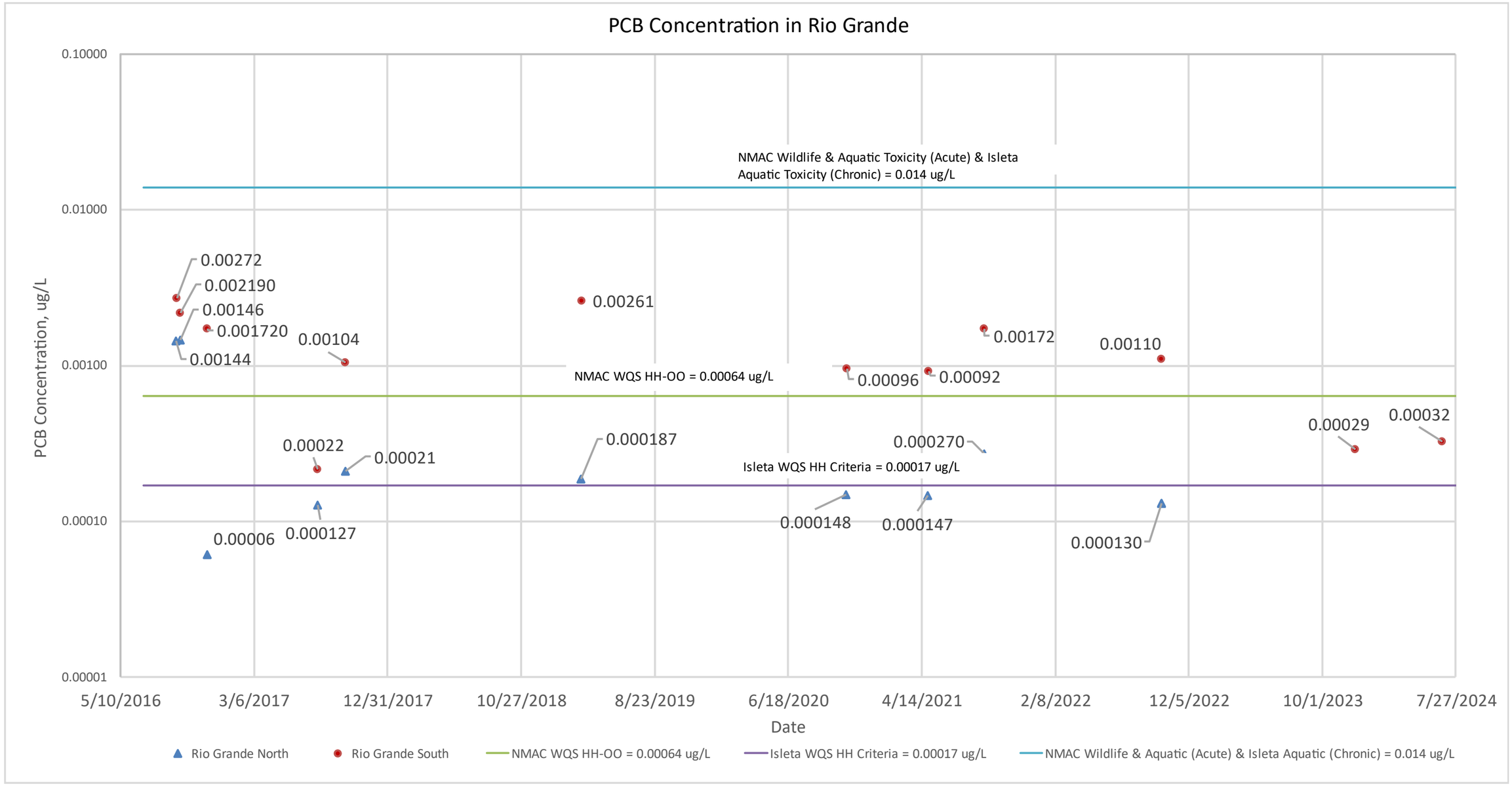
Mercury **Pueblo of Isleta** ***Wildlife Usage Criteria***	**Mercury** ***Pueblo of Isleta & Sandia, Fresh Water Aquatic Life Chronic Toxicity***	**Mercury** **State of NM NMAC 20.6.4** ***Wildlife Habitat***	**Mercury** **State of NM NMAC 20.6.4** ***Drinking Water Supply***	**Mercury** ***Pueblo of Isleta & Sandia, Fresh Water Aquatic Life Acute Toxicity***
WQS: 0.0011 ug/L	WQS: 0.012 ug/L	WQS: 0.77 ug/L	WQS: 2 ug/L	WQS: 2.4 ug/L



Mercury Results From Stormwater Samples Collected in the Watershed Through the AMAFCA Monitoring Program

AMAFCA and the CMC have been monitoring for PCBs in stormwater samples. The current AMAFCA watershed screening (also referred to as non-compliance sampling) is using Method 608 to test for PCBs. If results are detected with the screening method, AMAFCA would then sample and test with Method 1668. Method 608 tests for both PCBs and pesticides. All AMAFCA screening tests for PCBs have been non detect.

The CMC tests all samples for PCBs using Method 1668. This is the required PCB testing methodology for stormwater compliance permit requirements, as is stated in the MS4 Permit, p. 6 of Part III. There are multiple surface WQS values listed for PCBs in both the Pueblo of Isleta and the State of New Mexico standards for the various designated uses. PCBs measured in samples collected from the Rio Grande during the FY 2024 storm events were all below the minimum quantification level (MQL) established in EPA standards for the MS4 NPDES Permit (Appendix F, 0.2 ug/L for PCBs). The PCB results were also well below the New Mexico Surface WQSs and Pueblo of Isleta Surface WQSs for designated uses, including drinking water (0.5 ug/L) and wildlife habitat, acute aquatic life, and chronic aquatic life (0.014 ug/L). However, the CMC samples from the Rio Grande North (pre-storm) and South (post-storm) locations were above the Pueblo of Isleta human health criteria (based on fish consumption only) WQS for surface waters. The human health-organism only criterion is based upon human consumption of fish and other aquatic life that bioaccumulate contaminants over time. The PCB results from FY 2017 through FY 2024 are shown below relative to several of the WQSs for PCBs.



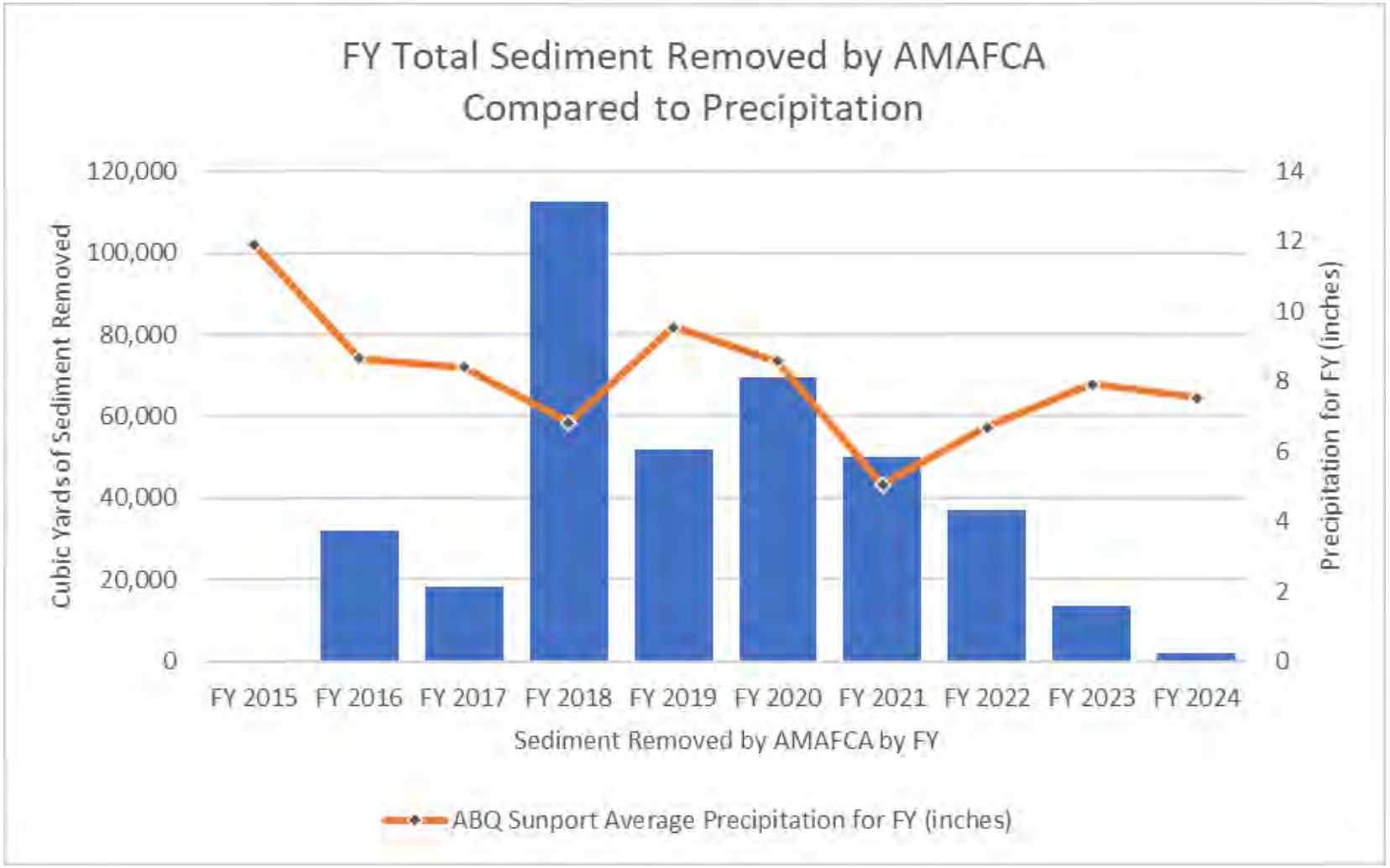
PCB Results From Stormwater Samples Collected in the Rio Grande Through the CMC

Summary of AMAFCA's MS4
Sediment Pollutant Load Reduction Program
FY 2024 (July 1, 2023 – June 30, 2024)

NPDES Permit No. NMR04A000
Part I.C.3.b - Endangered Species Act (ESA) Requirements –
Sediment Pollutant Load Reduction Strategy

The purpose of this program is to establish a procedure for AMAFCA to develop, implement, and evaluate a sediment pollutant load reduction strategy within the Municipal Separate Storm Sewer System (MS4). All AMAFCA projects are regional flood control or water quality projects. Stormwater runoff from other MS4s enter AMAFCA facilities, which function as both regional flood control facilities and Best Management Practices (BMPs) to remove sediment from stormwater before the stormwater continues to the Rio Grande. All of these facilities can be seen on the AMAFCA Maintenance Map which can be found on AMAFCA's website (at https://amafca.org/documents/Maintenance_Map.pdf).

In the Middle Rio Grande MS4 area, AMAFCA is not adversely contributing to the sediment pollutant load, but rather functioning to capture the sediment pollutant load generated throughout the watershed by MS4s contributing runoff to AMAFCA facilities. A large portion of AMAFCA's routine Operation and Maintenance (O&M) activities include sediment removal from its facilities. AMAFCA has implemented a crew tracking system to measure the sediment removal quantities at all of its facilities. This tracks sediment removal at each AMAFCA facility and within each defined watershed in the Albuquerque urban area.



Graph Highlighting the Watershed-Wide Sediment Removed by AMAFCA Operations

FY 2024 Sediment, Debris, and Vegetation Removal from AMAFCA Facilities

July 1, 2023 to June 30, 2024

AMAFCA Facility	Total Sediment Removed (CY)	Total Debris Removed (CY) *	Total Vegetation Removed (CY)
00089 - Zuni-Dallas Regional Pond	0	0	0
10000 - No Project	0	0	0
10001 - Shop	0	4	1
10002 - Misc. Projects	0	52	0
10010 - Amole Dam, Channel. & WQ Ponds	0	60	3
10012 - AMAFCA Yard	0	2	0
10015 - Baca Channel	0	0	0
10020 - Bear Canyon Arroyo	0	3	6
10025 - Bear Canyon Training Dike	0	0	0
10030 - Bear Canyon Tributary Diversion	0	0	0
10035 - Black Arroyo Dam & Channel	407	0	0
10045 - Boca Negra Dam & Atrisco Storm Drain	0	0	0
10050 - Borrega Dam & Channel	0	7	0
10060 - Calabacillas Main Arroyo & Drop Structures	0	5	0
10065 - Corrales Main/Calabacillas/La Orilla	0	0	26
10070 - Camino Channel	0	0	0
10075 - Candelaria Inlet & WQ Pond	0	2	0
10085 - Don Felipe Dam & Pajarito Diversion	0	0	0
10086 - Domingo Baca WQ Structure	24	5	1
10090 - East Amole Surge Pond & Channels (Shamrock & Tempur)	0	0	0
10100 - Embudo Channel	234	14	1
10105 - Fountain Hills Pond	0	0	0
10110 - Grandmas Pond - Paseo del Norte & Coors	0	0	0
10115 - Grantline Inlet & WQ Pond	0	0	0
10120 - Hahn Channel	0	6	42
10125 - Hubbell Dam & Spillway	174	3	0
10130 - John B. Robert Dam	0	0	0
10135 - Kinney Dam	0	0	0
10140 - La Cueva System & WQ Features	0	5	0
10145 - La Cueva Training Dike	0	0	0
10160 - Ladera Channel @ 98th Street	0	0	0
10165 - Ladera System - Dams & Mirehaven	12	21	25
10170 - Ladera Training Dike	0	0	24
10171 - La Presa	0	4	0
10175 - Las Ventanas Dam & North Piedras Marcadas Channel	0	18	1
10180 - Los Indios Diversion Channel & Sediment Basin	0	0	0
10195 - McCoy Dam	0	0	0
10200 - McCoy Diversion Channels	0	0	0
10210 - Mariposa Diversion Channel	0	4	84
10220 - North Camino - Sunset Hills	0	0	0
10225 - North Diversion Channel	1,140	960	53

Example of FY 2024 AMAFCA Sediment, Debris, and Vegetation Removal Tracking Spreadsheet




Photos of AMAFCA Sediment Removal & AMAFCA Maintenance Activities

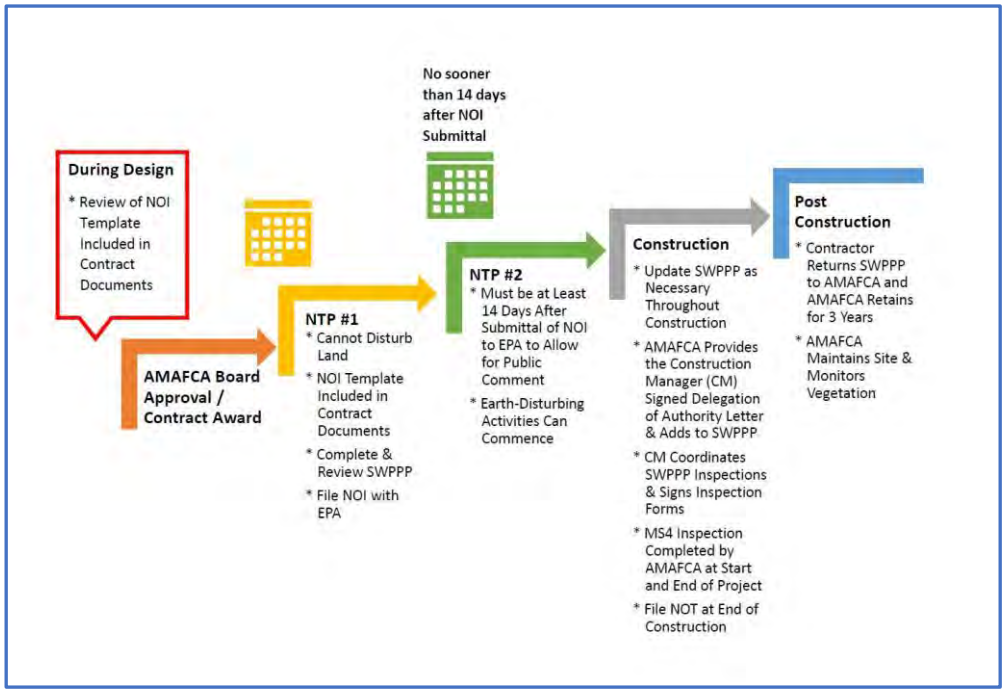
Summary of AMAFCA's MS4
Construction Site Stormwater Runoff Control Program
FY 2024 (July 1, 2023 – June 30, 2024)

NPDES Permit No. NMR04A000

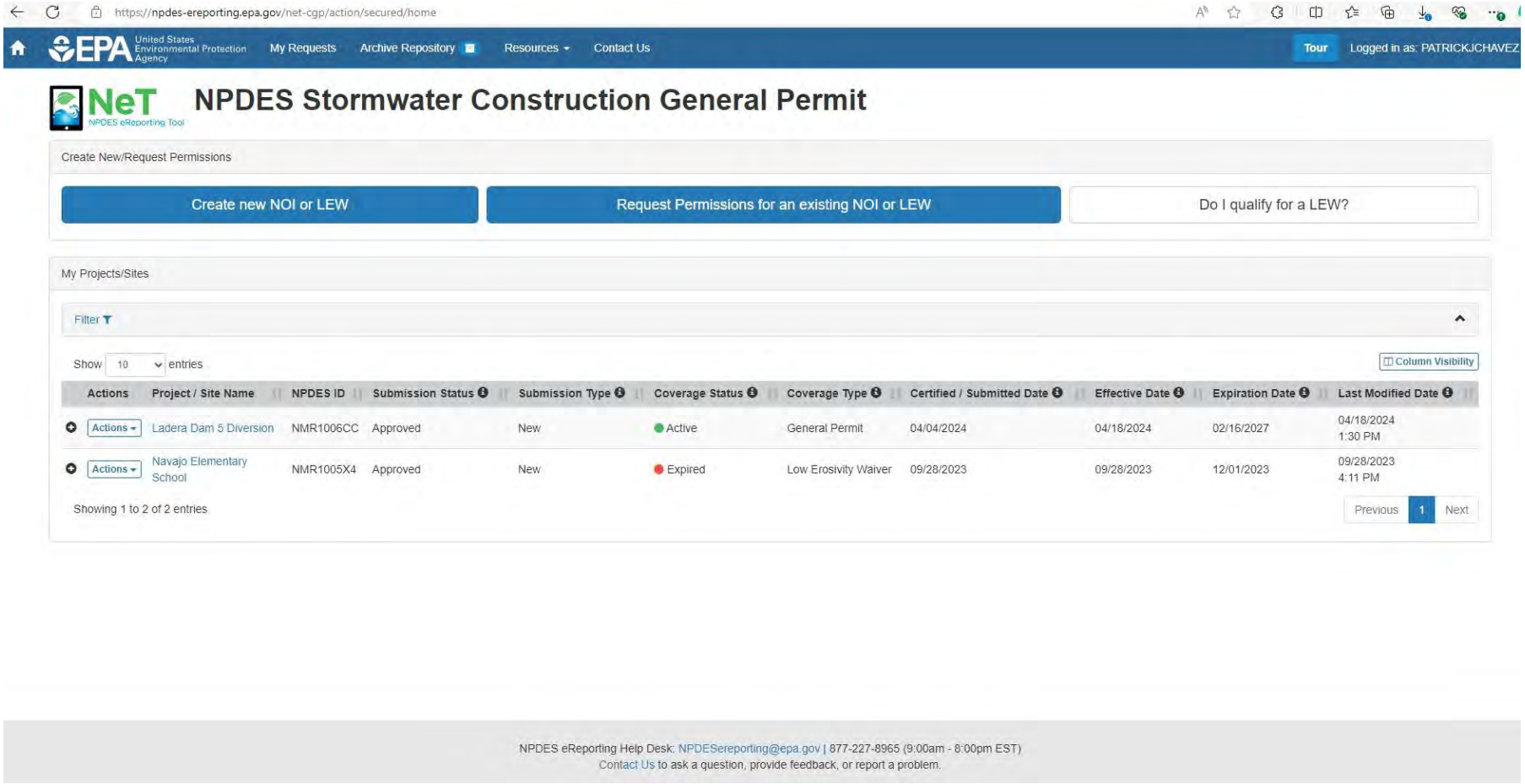
Part I.D.5.a - Construction Site Stormwater Runoff Control Program

Construction site stormwater runoff control is intended to control polluted stormwater runoff from a construction site to Municipal Separate Storm Sewer Systems (MS4s) that is ultimately discharged into local rivers and streams. Sediment is usually the main pollutant of concern for construction site stormwater runoff. Sediment runoff rates from construction sites are typically 10 to 20 times greater than those of agricultural lands, and 1,000 to 2,000 times greater than those of forest lands. During a short period of time, construction sites can contribute more sediment to streams than can be deposited naturally during several decades. In accordance with AMAFCA's Stormwater Management Program (SWMP), AMAFCA has continued and will continue to follow its program to control construction site stormwater runoff.

AMAFCA files Notice of Intent (NOI) documents for a Construction General Permit (CGP) for each of their construction sites that is greater than 1 acre in size. AMAFCA also requires contractors to file CGP NOI documents for any AMAFCA construction sites that are greater than 1 acre in size. AMAFCA reviews each contractor provided Stormwater Pollution Prevention Plan (SWPPP) document to determine their compliance with permit requirements. AMAFCA's timeline related to the CGP requirements, developed as part of the program to control construction site stormwater runoff, is shown below. The second image shows the active AMAFCA construction sites in FY 2024.



AMAFCA's Timeline Related to the CGP Requirements



Screen Shot From EPA's Net NPDES Tool Showing Active AMAFCA CGP NOIs

EPA published the final 2022 CGP in January 2022. AMAFCA worked closely with area MS4s to develop and submit comments on the draft 2022 CGP during FY 2021. AMAFCA attended an EPA webinar on February 24, 2022, as well as a New Mexico Environment Department (NMED) webinar on April 21, 2022, on the final 2022 CGP requirements. These webinars assisted with AMAFCA's training and knowledge of the new CGP requirements. During FY 2023 and FY 2024, AMAFCA continued to refine and update their program to control construction site stormwater runoff to reflect the new 2022 CGP requirements. These efforts included an update of the Template & Instructions for Electronic CGP Notice of Intent (NOI) or Low Erosivity Waiver (LEW) Application for AMAFCA Projects, which AMAFCA provides with its construction contract documents to assist contractors and AMAFCA with meeting CGP requirements. AMAFCA's Notice of Intent (NOI) or Low Erosivity Waiver (LEW) Application for AMAFCA Projects template is included as an attachment to this Program Summary.

In the fall of 2022, EPA released a new Construction Inspection Training Course for CGP Operators. Construction site operators permitted under EPA's 2022 CGP are required to ensure that any individual conducting site inspections is a "qualified person". The 2022 CGP includes new requirements for qualified persons that apply to all sites that receive permit coverage on or after February 17, 2023. Patrick Chavez, AMAFCA's Storm Water Quality Engineer, completed the EPA course and passed the exam and is considered qualified to conduct inspections under Part 4 of the 2022 CGP. Documentation showing Mr. Chavez's successful completion of the EPA course is shown below.

CERTIFICATE
OF COMPLETION

presented to

Patrick J. Chavez, MSCE, PE,
LEED AP+

who has successfully completed EPA's Construction General Permit (CGP) Site Inspector Training Course
and passed the final exam

Chris Kloss, Water Permits Division Director

Date Certified: 9/22/2022

Expiration Date: May 17, 2027

By completing this course and passing the final exam, Patrick J. Chavez, MSCE, PE, LEED AP+ has complied with the CGP Part 6.3.a training requirements for conducting construction inspections under the 2022 CGP.

EPA
United States
Environmental Protection
Agency

Mr. Chavez successfully completed the EPA CPG Site Inspector Training Course

Template for Electronic Construction General Permit (CGP) Notice of Intent (NOI) or Low Erosivity Waiver (LEW) Application for AMAFCA Projects

Instructions:

This template is for informational purposes only and is intended to assist with completing the AMAFCA Electronic Construction General Permit (CGP) Notice of Intent (NOI) or Low Erosivity Waiver (LEW) Application for EPA. The Construction General Permit (CGP) Notice of Intent (NOI) or Low Erosivity Waiver (LEW) must be completed on the Environmental Protection Agency's (EPA's) NPDES eReporting Tool (NeT) - https://cdxnodengn.epa.gov/oeca-cgp-web/action/secured/home. **Before you can complete the NOI, a Stormwater Pollution Prevention Plan (SWPPP) must be completed**. The online application and this template include checking if the construction project qualifies for a LEW. This NOI/LEW Template will be completed by AMAFCA and/or their consultants and provided to the project contractor to assure that the project NOIs are completed in a consistent manner.

When completing this template, refer to the Instructions for Template for Electronic Construction General Permit (CGP) Notice of Intent (NOI) or Low Erosivity Waiver (LEW) Application for AMAFCA Projects for more information.

When starting an NOI or LEW application online: Choose the "Create New NOI or LEW" blue button in the top left of the NeT page. Then, type your information into the NeT CGP Project/Site search. Upon performing a search, the "Create New Project" button will activate, and you may then choose the "Create New Project/Site" blue button.

As a reminder, construction activities cannot begin at a site until the CGP authorization date – which is 14 days after EPA notifies the permittee that it has received a complete NOI. If you are filing a LEW, there is not a waiting period and construction can begin immediately.

1 Permit Information

1. Select the state/territory to which your project/site is discharging:	New Mexico

2. Is your project/site located on federally recognized Indian Country lands?	

***Typically, "No". If "Yes", answer Question 2a below.*

2a. Select Indian Tribe associate with the area of Indian Country, as recognized by the Bureau of Indian Affairs.	*Choose appropriate Indian Tribe from drop-down list on online form.*

3. Are you a "Federal Operator" or a "Federal Facility" as defined in Appendix A of the CGP?	

**Typically, "No" - AMAFCA is not a Federal Operator or a Federal Facility.*

4. Is construction activity at the project site less than five (5) acres?	

**If "No", continue to Question 5. If "Yes", the online application will walk you through several questions to determine if you are eligible for a Low Erosivity Waiver (LEW).*

4a. Is your Rainfall Erosivity Factor (R-Factor) less than 5?	

**If "No" (R-Factor is greater than 5), continue to Question 5. If "Yes", follow the directions on the website to apply for a LEW. A LEW requires certification that construction activity at the project site specified shall disturb less than five (5) acres and shall take place during a period when the rainfall erosivity factor is less than 5.*

Rainfall Erosivity Factor, **R-Factor** link - https://lew.epa.gov/ - will help you determine the R-Factor. This link is also available in the EPA on-line NOI/LEW form.

The R-Factor Calculator for Small Construction Sites, accessed by the above link, requires that you enter:

1. *Project Start Date*
2. *Project End Date*
3. *Address or Latitude/Longitude or choose location from online map widget*

Refer to the Instructions for Template for Electronic Construction General Permit (CGP) Notice of Intent (NOI) or Low Erosivity Waiver (LEW) Application for AMAFCA Projects (referred to as Instructions for NOI/LEW Template) for additional information.

5. Have stormwater discharges from your current construction site been covered previously under an NPDES permit?	

*****Typically, "No". If "Yes", answer Question 5a below.*

5a. Provide your most current NPDES ID if you had coverage under EPA's 2017 CGP or an individual NPDES permit.	

6. Will you use polymers, flocculants, or other treatment chemicals at your construction site?	

*****Typically, "No" - continue to Question 7. If "Yes", continue to Question 6a below.*

6a. Will you use cationic treatment chemicals at your construction site?	

*******If "No", continue to Question 7. If "Yes", continue to Question 6b below.*

6b. Have you been authorized to use cationic treatment chemicals by your applicable EPA Regional Office in advance of filing your NOI?	

***If "No", You Cannot Proceed with your NOI**. Please refer to the Instructions for NOI/LEW Template for additional information. If "Yes", at the end of the application process you will be required to provide documentation of the appropriate controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards; proceed to Question 7.*

7. Has a Stormwater Pollution Prevention Plan (SWPPP) been prepared in advance of filing this NOI, as required?	

If "Yes", proceed to Question 8. **If "No", you may not submit your NOI for coverage under the CGP. For information about what is required in your SWPPP, see Part 7 of the CGP.*

8. Are you able to demonstrate that you meet one (1) of the criteria listed in Appendix D with respect to protection of threatened or endangered species listed under the Endangered Species Act (ESA) and federally designated critical habitat?	

If "Yes", more information will be required on endangered species protection later in this NOI/LEW template; proceed to Question 9. **If "No", you may not submit your NOI for coverage under the CGP, you must meet one (1) of the criteria listed in Appendix D to be eligible to be covered by this CGP. See Section 6 of the Instructions for NOI/LEW Template for additional information.*

9. Have you completed the screening process in Appendix E relating to the protection of historic properties?	

If "Yes", you will be required to provide more information on historic properties screening later in this NOI/LEW template; proceed to the confirmation statement. **If "No", you may not submit your NOI for coverage under the CGP; you must complete the screening process as required in Appendix E to be eligible to be covered by this CGP.*

Confirmation Statement:

By indicating "Yes" below, I confirm that I understand that the CGP only authorized the allowable stormwater discharges in Part 1.2.1 of the CGP and the allowable non-stormwater discharges listed in Part 1.2.2 of the CGP. Any discharges not expressly authorized in this permit cannot become authorized or shielded from liability under the Clean Water Act (CWA) section 402(k) by disclosure to EPA, state or local authorities after issuance of this permit via any means, including the Notice of Intent (NOI) to be covered by the permit, the SWPPP, during an inspection, etc. If any discharges requiring NPDES permit coverage other than the allowable stormwater and non-stormwater discharges listed in Parts 1.2.1 and 1.2.2 will be discharged, they must be covered under another NPDES permit.

Yes

**"Yes" is required to continue. After you toggle "Yes" you will be asked to enter the legal name of the Operator and the Project/Site name.*

What is the legal name of the Operator as defined in Appendix A of the CGP?

Albuquerque Metropolitan Arroyo Flood Control Authority

**The input shown above is for AMAFCA. Contractor will enter their own legal name as an Operator.*

What is the name of your project/Site as defined in Appendix A of the CGP?

When you click NEXT you will see a pop-up box stating: “Warning: After clicking next, questions which have determined your eligibility for this form will be locked. If these responses must be changed, you may be required to create a new form.”

At the end of this Section, you will see a green pop-up box stating: “Draft Notice of Intent (NOI) Created” notification. You have created a draft Notice of Intent (NOI) for the construction project/site. **This form is not complete. The form must be filled in and certified in order to complete the submission process.** Select the Assign Manager button to assign a manager who can grant other users access to the project/site and the option to assign this to a manager, grant access to this form, or continue with filling out the form. To continue filling out the form select “Go to Form with No Manager”.

2 Operator Information

Operator Name

Albuquerque Metropolitan Arroyo Flood Control Authority

**The input shown above is for AMAFCA. Contractor will enter their own legal name as an Operator.*

Operator Mailing Address

Address Line 1

2600 Prospect Ave. NE

Address Line 2

City

Albuquerque

State

New Mexico

Zip Code

87107

County or Similar Division

BERNALILLO

**The input shown above is for AMAFCA. Contractor will enter their own information as an Operator.*

Operator Point of Contact Information

First Name	Middle Initial	Last Name
Patrick	*J*	*Chavez*

Title

Stormwater Quality Engineer

Phone	Ext:
505-884-2215	

Email

pchavez@amafca.org

**The input shown above is for AMAFCA. Contractor will enter their own information as an Operator.*

NOI Preparer Information

Make sure to check (toggle) the box that this NOI is being prepared by someone other than the certifier if someone else at your organization is the certifier. At AMAFCA, the AMAFCA Executive Engineer/Director is the certifier.

☑ *This NOI is being prepared by someone other than the certifier.*

Once you toggle this box, you will need to fill in your preparer information. You can click “Fill in my CDX Information” and it will populate the required text boxes with your registered information.

3 Project/Site Information

Project/Site Name

Project/Site Address

Address Line 1

Address Line 2

City

State

New Mexico

Zip Code

County or Similar Division

BERNALILLO

Latitude and Longitude

Please use the latitude and longitude entered on the AMAFCA NOI/LEW Template included as part of the project specifications and contract documents.

Latitude (°N)

Longitude (°W)

Latitude/Longitude Data Source

**Please use "Map", which uses the NOI map widget available in online NOI form.*

Map GPS Other

Other Data Source:

Horizontal Reference Datum

**NOI Map Widget uses WGS 84.*

NAD 27 NAD 83 WGS 84

Project Start Date	Estimated Project End Date	Estimated Area to be Disturbed

*To the nearest quarter acre

***Project Start Date**: The project start date must be at least 14 days after certifying and submitting your NOI for EPA review. If you are filing a LEW, there is not a waiting period and construction can begin immediately.*

The information entered on the AMAFCA NOI/LEW Template included as part of the project specifications and contract documents may not be applicable if the contracting process caused any delay in the construction start date. If unsure of the date to use, please ask the AMAFCA project manager. There is a drop-down calendar in the NOI online form to choose the start date.

***Estimated Project End Date**: Please use the information entered on the AMAFCA NOI/LEW Template included as part of the project specifications and contract documents. If unsure of the date to use, please ask the AMAFCA project manager. There is a drop-down calendar in the NOI online form to choose the end date.*

***Estimated Area to be Disturbed**: The unit for this is acres. Area must be reported to the nearest quarter acre.*

Type of Construction Site

- ○ Single-Family Residential
- ○ Multi-Family Residential
- ○ Commercial
- ○ Industrial
- ○ Institutional
- ○ Highway or Road
- ○ Utility
- ◉ Other

Typically, AMAFCA projects fall into the "Other" category. Please use the information entered on the AMAFCA NOI/LEW Template included as part of the project specifications and contract documents. If choosing "Other", use enough detail to describe the site, for example, Arroyo, Concrete Channel, Dam. or Vegetated Pond. The "Other" description is limited to 100 characters, with spaces counted.

1. Will there be demolition of any structure that was built or renovated before January 1, 1980?	

*If "Yes", answer Question 1a below; otherwise proceed to Question 2.

1a. Do any of the structures being demolished have at least 10,000 square feet of floor space?	

2. Will you be discharging dewatering water from your site?	

Please consider this question carefully.

**Dewatering in the CGP refers to both surface water dewatering for draining accumulated stormwater AND ground water dewatering for water discharged from well development, well pump tests, or pumping of ground water from a construction area. Please see the Instructions for NOI/LEW Template.*

****Answering "Yes" to this question may add turbidity testing requirements to your project.***

3. Was the pre-development land use used for agriculture?	

**For definition of "agricultural land", see Instructions for NOI/LEW Template.*

4. Are there other operators that are covered under this permit for the same project site?	

**This will typically be "Yes" – AMAFCA and the Contractor. Answer "No" if there are no other operators or if there are other operators but you do not have the other operators' NPDES ID(s) available yet (they still need to file their NOI). If "Yes", answer Question 4a below. If "No", proceed to Question 5.*

**All operators will need to inform each other of their NPDES ID number for the project, when it is available, and will need to go back into EPA's CDX system and modify the NOI answer to this question to "Yes" and add the other operators' NPDES ID(s).*

4a. If yes, provide the NPDES ID number for all other operators at the site who have coverage under this permit:	

**Other operators will receive an email with the subject line; "EPA NeT CGP Coverage Status: Active: Project Name" (refer to Instructions for NOI/LEW Template). This email is typically included in the SWPPP. Other operators will then use the NPDES number associated with this email to answer Question 4a.*

5. Have earth-disturbing activities commenced on the project/site?	

**If "Yes", answer Question 5a below. If "No", proceed to Question 6.*

****Reminder:** No earth disturbing activity should begin at a project site until a CGP NOI is obtained, unless it is related to an emergency project.*

5a. If yes, is your project an *"emergency-related project"*?	

**See Instructions for NOI/LEW Template for the definition of "emergency-related project".*

6. Is your project/site located on federally recognized Indian Country land:	

**If "Yes", answer Question 6a below. If "No", proceed to Question 7.*

6a. Select Indian Tribe associated with the area of Indian Country, as recognized by the Bureau of Indian Affairs.	*If selected previously in the Permit Information, this field will be filled out and unable to be edited.*

6b. Enter the name of the Indian reservation or other Indian Country land:	*Retype answer from Question 6a.*

7. Is your project/site located on a property of religious or cultural significance to an Indian tribe?	

**See Instructions for NOI/LEW Template for additional information.*
**If "Yes", answer 7a below and proceed to next section. If "No", proceed to next section.*

7a. Select Indian Tribe associated with the area of Indian Country, as recognized by the Bureau of Indian Affairs.	*Choose appropriate Indian Tribe from drop-down list on online form.*

4 Discharge Information

1. Does your project/site discharge stormwater into a Municipal Separate Storm Sewer System (MS4)?	*Yes*

**Your answer should be "Yes" – AMAFCA is an MS4, so all AMAFCA projects are within and discharge into a MS4.*

2. Are there any waters of the U.S. within 50 feet of your project's earth disturbances?	

**For assistance in determining the receiving water for your site, EPA has developed a discharge mapping tool that is available at* https://www.epa.gov/npdes/epas-stormwater-discharge-mapping-tools

3. Are any of the waters of the U.S. to which you discharge designated by the state or tribal authority under its antidegradation policy as a Tier 2 (Tier 2.5) water (water quality exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water) or as a Tier 3 water (Outstanding National Resource Water)?	

**See Resources, Tools and Templates, which will send you to this link*: List of Tier 2 and Tier 3 waters (epa.gov)

**Tier 1 if receiving water is listed on the CWA 303(d) list OR if it is ephemeral (flows only occur during and immediately after rain). The Rio Grande within AMAFCA's jurisdiction is considered Tier 1 since it is listed on the CWA 303(d) list.*

**Tier 2 if receiving water is intermittent or perennial AND it is not listed on the CWA 303(d) list.*

**There are no Tier 2.5 designations in New Mexico.*

**There are currently no Tier 3 waters in the Albuquerque area.*

Receiving Waters Information Section:

List all of the stormwater points of discharge from the project. *At least one (1) discharge point must be designated. For assistance in determining whether your site discharges to impaired waters, EPA has developed a discharge mapping tool that is available at* https://www.epa.gov/npdes/epas-stormwater-discharge-mapping-tools.

Click on the "New Discharge Point" blue button to add a discharge point. Each point of discharge must be identified by a unique 3-digit ID (e.g., 001, 002). This information does not need to be updated in the NOI if the points of discharge change during the project.

Point of Discharge ID **Online form automatically populates with 001. Can modify if needed.*	
Description (Optional):	
Latitude/Longitude **Please use the latitude and longitude entered on the AMAFCA NOI/LEW Template included as part of the project specifications and contract documents.*	
Receiving Water Name **Provide the name of the* receiving water *that receives stormwater directly from the point of discharge and/or from the MS4 that the point of discharge discharges to.*	
Is this receiving water impaired (on the CWA 303(d) list)? **Please use the following EPA tool available to determine the impairments:* https://www.epa.gov/npdes/epas-stormwater-discharge-mapping-tools. **Additional information on impairments can be found here:* https://www.env.nm.gov/surface-water-quality/303d-305b/.	
List of pollutants causing the impairment ******If "Yes" was answered above you will need to enter the list of pollutants. The EPA discharge mapping tool will provide this list of "causes of impairments". The electronic NOI form will search for and automatically enter the pollutants as you type them in.*	

Has a TMDL been completed for the receiving waterbody? ** The EPA discharge mapping tool will provide this list of TMDLs.* **If the receiving water is the Rio Grande, your answer will be "Yes".* • *TMDL ID: Enter 001.* • *TMDL Name: Enter E. coli. - E. coli is the only TMDL in the Albuquerque area and it applies to each segment of the Middle Rio Grande through Albuquerque.* • *Pollutants: For Albuquerque, E. coli is the only TMDL and it applies to each segment of the Middle Rio Grande through Albuquerque.*	
Tier Designation **Tier 1 if receiving water is listed on the CWA 303(d) list OR if it is ephemeral (flows only occur during and immediately after rain). The Rio Grande within AMAFCA's jurisdiction is considered Tier 1 since it is listed on the CWA 303(d) list.* **Tier 2 if receiving water is intermittent or perennial AND it is not listed on the CWA 303(d) list.* **There are no Tier 2.5 designations in New Mexico.* **There are currently no Tier 3 waters in the Albuquerque area.*	

5 Stormwater Pollution Prevention Plan

1. Will all required personnel, including those conducting inspections at your site, meet the training requirements in Part 6 of this permit?	*Yes*

**Must be "Yes"* or cannot submit form.

SWPPP Contact Information

First Name: *Patrick*

Middle Initial: *J*

Last Name: *Chavez*

Title: *Stormwater Quality Engineer*

Phone: *505-884-2215*

Ext.:

Email: *pchavez@amafca.org*

**The input shown above is for AMAFCA. Contractor will enter their own information as an Operator.*

6 Endangered Species Protection

Instructions:

Use the instructions and worksheet in Appendix D of the CGP to determine which criterion listed below you are eligible for coverage under this permit. You must consider Endangered Species Act listed threatened or endangered species (ESA-listed) and/or designated critical habitat(s) under the jurisdiction of both the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) and select the most conservative criterion that applies. More detailed instructions and a worksheet for this section can be found in the CGP Appendix D Link.

The recommended first step is to determine the project action area. The project action area will be determined using engineering judgement along with coordination with AMAFCA. The decision on the action area will be documented and provided to AMAFCA.

Action Area Definition: Action area refers to all areas to be affected directly or indirectly by the federal action and not merely the immediate project area. For the purposes of the CGP and for application of the Endangered Species Act requirements, the following areas are included in the definition of action area:

- The **areas on the construction site** where stormwater discharges originate and flow toward the point of discharge into the receiving waters - including areas where excavation, site development, or other ground disturbance activities occur. As an example, where a bald eagle nest is located in a tree that is on or bordering a construction site and could be disturbed by the construction activity. As a second example, where grading causes stormwater to flow into a small wetland or other habitat that is on the site and contains listed species.
- The areas where stormwater controls will be constructed and operated, including any areas where stormwater flows to and from the stormwater controls. As an example, the area where a stormwater retention pond would be built.
- The areas in the **vicinity of the construction site** where stormwater discharges flow from the construction site to one or more points of discharge into receiving waters. As an example, where stormwater flows into a ditch, swale, or gully that leads to receiving waters and where listed species (such as listed amphibians) are found in the ditch, swale, or gully.
- The **extent of the receiving water** potentially affected by stormwater discharges from your construction site through alteration of water chemistry, turbidity, temperature, or bank structure (i.e., erosive flow), regardless of whether the construction stie is adjacent to the receiving water.

The following questions will help you in selecting and documenting your eligibility criteria with respect to the protection of federally listed threatened or endangered species and federally designated "critical habitat" under the Endangered Species Act from discharges and discharge-related activities authorized under this permit. A reminder that you must consider Endangered Species Act (ESA) listed threatened or endangered species (ESA-listed) and/or designated critical habitat(s) under the jurisdiction of both the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) and select the most conservative criterion that applies. When evaluating the potential effects of your activities, you must consider effects to listed species or designated critical habitats within the "action area" of your construction activity as identified by the USFWS Information for Planning and Consultation (IPaC) - https://ipac.ecosphere.fws.gov/ and/or NOAA Species Directory - https://www.fisheries.noaa.gov/species-directory.

Determine ESA Eligibility Criterion

1. Are your discharges and discharge-related activities already addressed in another operator's valid certification of eligibility for your "action area" under the current 2022 CGP?	

**If "Yes", continue to Question 1a. If "No", proceed to Question 2.*

1a. I have confirmed that the other operator's certification of eligibility accounted for my action area and that the eligibility certification was valid.	

**If "True", continue to Question 1b. If "False", proceed to Question 2.*

1b. There has been no lapse of NPDES permit coverage in the other operator's certification.	

**If "True", continue to Question 1c. If "False", proceed to Question 2.*

1c. I will comply with all measures that formed the basis of the other operator's valid certification of eligibility.	

If "True", you are eligible under **Criterion B. Proceed to **Criterion B** below. If "False", continue to Question 2.*

2. Has consultation between you, a Federal Agency, and the USFWS and/or the NMFS under section 7 of the Endangered Species Act (ESA) concluded?	

*Note: Consultations can be either formal or informal, and would have occurred only as a result of a **separate federal action** (e.g., during application for an individual wastewater discharge permit or the issuance of a wetlands dredge and fill permit), and the consultation must have addressed the effects of your construction activity's discharges and discharge-related activities on ESA-listed species and/or designated critical habitat under the jurisdiction of USFWS and/or NMFS in your action area.*

**If "Yes", continue to Question 2a. If "No", proceed to Question 3.*

2a. The result of this consultation was:	○ **Option i:** A biological opinion currently in effect that determined that the action in question (taking into account the effects of your site's discharges and discharge-related activities) is likely to adversely affect, but is not likely to jeopardize, the continued existence of listed species or result in the destruction or adverse modification of critical habitat. The biological opinion must have included the effects of your site's discharges and discharge-related activities on all the listed species and designated critical habitat in your action area under the jurisdiction of each Service, as appropriate. To be eligible under this option, any reasonable and prudent measures specified in the incidental take statement must be implemented; ○ **Option ii:** Written concurrence (e.g., letter of concurrence) from the applicable Service(s) with a determination that your site's discharges and discharge-related activities are not likely to adversely affect ESA-listed species and/or designated critical habitat. The concurrence letter must have included the effects of your site's discharges and discharge-related activities on all the ESA-listed species and/or designated critical habitat on your species list(s) acquired from USFWS and/or NMFS as part of this worksheet. ◉ Neither

If choosing **Option i or **Option ii**, provide an answer to Question 2b. If "Neither", proceed to Question 3.*

2b. The consultation does not warrant reinitiation under 50 CFR 402.16; or, if reinitiation of consultation is required (e.g., due to new species listing, critical habitat designation, or new information), the federal action agency has reinitiated the consultation and the result of the consultation is consistent with the statements above. Include any reinitiation documentation from the Services or consulting federal agency with your NOI.	

If "True", you are eligible under **Criterion E. Proceed to **Criterion E** below. If "False", continue to Question 3.*

3. Are your construction activities the subject of a permit under section 10 of the ESA by the USFWS and/or NMFS, and this authorization addresses the effects of your site's discharges and discharge-related activities on ESA-listed species and/or designated critical habitat?	

If "Yes", continue to Question 3a. If "No", proceed to **Determine your Action Area section below.*

3a. A permit or permits have been issued under section 10 of the ESA. The permit authorization specifically addresses the effects of my site's discharges and discharge-related activities (if applicable) on all ESA-listed species and/or designated critical habitat in my action area.	

If "True", you are eligible under **Criterion F. Proceed to **Criterion F** below. If "False", continue to **Determine your Action Area**.*

Determine Your Action Area

You must determine whether species listed as either threatened or endangered, or their critical habitat(s), are located in your site's action area (i.e., all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action, including areas beyond the footprint of the site that are likely to be affected by stormwater discharges, discharge-related activities, and authorized non-stormwater discharges).

You must consider the following in determining the action area for your site, and confirm that all the following are **True**:

In determining my "action area", I have considered that discharges of pollutants into downstream areas can expand the action area well beyond the footprint of my site and the discharge point(s). I have taken into account the controls I will be implementing to minimize pollutants and the receiving waterbody characteristics (e.g., perennial, intermittent, ephemeral) in determining the extent of physical, chemical, and/or biotic effects of the discharges. I confirm that all receiving waterbodies that could receive pollutants from my site are included in my action area.	*True*

Must confirm this statement is **True before continuing forward and submitting form.*

In determining my "action area", I have considered that discharge-related activities must also be accounted for. I understand that discharge-related activities are any activities that cause, contribute to, or result in stormwater and authorized non-stormwater point source discharges, and measures such as the siting, construction timing, and operation of stormwater controls to control, reduce, or prevent pollutants from being discharged. I understand that any new or modified stormwater controls that will have noise or other similar effects, and any disturbances associated with construction of controls, are part of my action area.	*True*

Must confirm this statement is **True before continuing forward and submitting form. Continue to **Determine if ESA-listed species and/or designated critical habitat are in your site action area**.*

Determine if ESA-listed species and/or designated critical habitat are in your site action area.

ESA-listed species and designated critical habitat are under the purview of the NMFS and the USFWS, and in many cases, you will need to acquire species and critical habitat lists from both federal agencies.

National Marine Fisheries Service (NMFS)

https://www.epa.gov/npdes/construction-general-permit-threatened-and-endangered-species

I have checked the webpage listed above and confirmed that:	◉ There are no NMFS-protected species and/or designated critical habitat in my action area. ○ There are NMFS-protected species and/or designated critical habitat in my action area.

If "There are **no NMFS-protected species and/or designated critical habitat", continue to USFWS question. The National Marine Fisheries Service does not apply to Albuquerque, New Mexico.*

U.S. Fish and Wildlife Service (USFWS)

https://www.epa.gov/npdes/construction-general-permit-threatened-and-endangered-species

I have checked the webpage listed above and confirmed that:	◉ There are no USFWS-protected species and/or designated critical habitat in my action area. ○ There are USFWS-protected species and/or designated critical habitat in my action area.

If "There are **no USFWS-protected species and/or designated critical habitat", you are eligible under **Criterion A**. Proceed to **Criterion A** below. If "There **are** USFWS-protected species and/or designated critical habitat", you may be eligible under Criterion C and must upload the full printout from your IPaC query/Official Species List. Continue with the additional Criterion Eligibility questions.*

1. Discharges not likely to result in any short- or long-term adverse effects to ESA-listed and/or designated critical habitat.	

Note: ESA-listed species and/or designated critical habitat(s) under the jurisdiction of the USFWS and/or NMFS are likely to occur in or near your site's "action area", and you certify to EPA that your site's discharges and discharge-related activities are not likely to result in any short- or long-term adverse effects to ESA-listed threatened or endangered species and/or designated critical habitat. This certification may include consideration of any stormwater controls and/or management practices you will adopt to ensure that your site's discharges and discharge-related activities are not likely to result in any short- or long-term adverse effects to ESA-listed species and/or designated critical habitat.

If "True**", you are eligible under **Criterion C.** Proceed to **Criterion C** below. If "**False**", read the following:*

If you make a preliminary decision in that short- or long-term adverse effects from your construction activity's discharges or discharge-related activities are likely to occur, you can still receive coverage under eligibility Criterion C of the CGP if appropriate measures are undertaken to avoid or eliminate the likelihood of short- or long-term adverse effects prior to applying for CGP coverage.

These measures may involve relatively simple changes to construction activities such as re-routing a stormwater discharge to bypass an area where species are located, relocating stormwater controls, or by modifying the "footprint" of the construction activity. If you are unable to ascertain which measures to implement to avoid the likelihood of short- or long-term adverse effects, you must coordinate with USFWS and/or NMFS and should respond "False" to Question 2 below.

2. I am able to install and implement appropriate measures to avoid the likelihood of short- or long-term adverse effects.	

If "True", you are eligible under **Criterion C. Proceed to Questions 9 and 10 under **Criterion C** below. If "False", you may be eligible under **Criterion D**. Since you were unable to determine which measures to implement to avoid the likelihood of adverse effects, you must contact USFWS and/or NMFS. You may still be eligible for CGP coverage if likely adverse effects can be addressed. If you are not eligible for **Criterion D** you will need to contact your EPA Regional office to apply for an individual permit.*

3. Coordination with USFWS and/or NMFS has successfully concluded.	

Note: Coordination between you and the USFWS and/or NMFS has concluded if the coordination has addressed the effects of your site's discharges and discharge-related activities on ESA-listed species and/or designated critical habitat under the jurisdiction of USFWS and/or NMFS, and resulted in a written confirmation from USFWS and/or NMFS that the effects of your site's discharges and discharge-related activities are not likely to result in short- or long-term adverse effects for ESA-listed species and/or designated critical habitat in your action area. By certifying eligibility under this criterion, you agree to comply with any conditions you must meet for your site's discharges and discharge-related activities to not likely result in any short- or long-term adverse effects. You must include copies of the correspondence with the participating agencies in your SWPPP and your NOI.

If "True", you are eligible under **Criterion D. Proceed to **Criterion D** below. If "False", coordination with USFWS and/or NMFS must conclude before the NOI is submitted.*

Criterion A

1. Identify the USFWS information sources used (Note: state resources are not acceptable):	

Note: If your Official Species List from USFWS indicated no species or designated habitat were present in your action area, include the full consultation tracking code at the top of your Official Species List in your NOI in the basis statement for Criterion A. If an Official Species List was not available on IPaC, list the contact date and name of the Service staff with whom you corresponded to verify no USFWS species or designated critical habitat were present in your action area.

2. Identify the NMFS information sources used (Note: state resources are not acceptable):	

3. You must attach: O **Aerial image(s) of the site.** O **A printout of the species' list(s) showing no ESA-listed species or designated critical habitat in my action area.**	*Upload files up to 20 MB; total attachments per attachment location must be less than 60 MB.*

4. Have you attached aerial image(s) of the site?	*Yes*

Must answer "Yes**" to submit form.*

5. Have you attached a printout of the species' list(s) showing no ESA-listed species or designated critical habitat in my action area?	*Yes*

Must answer "Yes**" to submit form.*

6. Have you provided documentation in your SWPPP supporting your eligibility under Criterion A?	*Yes*

For USFWS species, include the full printout from your IPaC query/Official Species List. You can include the map from your IPaC query. For NMFS species, include the full printout from the Species Directory with the correct Region selected. Must answer "Yes**" and provide documentation in your SWPPP before submitting the form.*

Criterion B

1. Provide the NPDES ID from the other CGP operator's NOI authorized under this permit:	

2. Identify the eligibility criterion of the other CGP NOI:	☐ Criterion A ☐ Criterion C ☐ Criterion D ☐ Criterion E ☐ Criterion F

**No additional information is required for A, D, E, and F.*

*If you choose **Criterion C,** answer the following questions:*

What federally listed species and/or designated critical habitat are located in your "action area"?	

What is the distance between your site and the listed species and/or designated critical habitat (in miles)?	

3. Provide the authorization date of the other CGP NOI:	

4. List any measures that formed the basis of the other operator's valid certification of eligibility that you will comply with (or enter "N/A" if none exist):	

5. Have you provided documentation in your SWPPP supporting your eligibility under Criterion B, including any of the terms and conditions, as well as the other operator's basis for establishing eligibility?	*Yes*

Must answer "Yes**" and provide documentation in your SWPPP before submitting the form.*

Criterion C

1. I confirm that both ESA-listed species and designated critical habitat under the jurisdiction of the USFWS and/or NMFS were considered in my evaluation.	*Yes*

Must answer "Yes**" before submitting the form.*

2. Provide the USFWS information resources and expertise used to arrive at this criterion selection:	

3. Provide the NMFS information resources and expertise used to arrive at this criterion selection:	

4. You must provide a list of all ESA-listed species and/or designated critical habitat that are located in your "action area".	*Select one of the options below and provide the required information.* ◯ Option 1: Enter ESA-listed species ◯ Option 2: Attach the species list(s)

5. What is the distance between your site and the ESA-listed species and/or designated critical habitat within the action area (in miles, state "on site" if the ESA-listed species and/or designated critical habitat is within the area to be disturbed)?	

**You must enter a value to submit form. Make sure the value entered is in miles.*

6. Provide the rationale describing specifically how adverse effects to ESA-listed species will be avoided from the discharge and discharge-related activities.	

7. Attach a copy of your site map showing the upland and in-water extent of your "action area".	*Upload files up to 20 MB; total attachments per attachment location must be less than 60 MB.*

Note: A copy of this site map must also be included with your SWPPP.

8. Have you provided documentation in your SWPPP supporting your eligibility under Criterion C?	*Yes*

Must answer "Yes**" to submit form.*

Questions 9 and 10 will be asked if you answered "**True**" to "**I am able to install and implement appropriate measures to avoid the likelihood of short- or long-term adverse effects."** in the 'Determine if ESA-listed species and/or designated critical habitat are in your site action area' section above.

9. I confirm that I have installed or will install and implement appropriate measures to avoid the likelihood of any short- or long-term adverse effects to ESA-listed threatened or endangered species or their designated critical habitat.	*Yes*

Must answer "Yes**" to submit form.*

10. Provide a description of the measures installed/to be installed and implemented to avoid likelihood of any short- or long-term adverse effects.	

Criterion D

1. Identify the federal action agency(ies) involved:	☐ U.S. Fish and Wildlife Service ☐ National Marine Fisheries Service

**At least one (1) agency is required.*

2. Identify the field and/or regional office(s) providing the coordination:	

3. Provide the date the coordination concluded:	

4. Attach copies of any letters or other correspondence with USFWS or NMFS documenting concurrence.	*Upload files up to 20 MB; total attachments per attachment location must be less than 60 MB.*

5. Have you provided documentation in your SWPPP supporting your eligibility under Criterion D?	*Yes*

Must answer "Yes**" and provide documentation in your SWPPP before submitting the form.*

Criterion E

1. Identify the federal action agency or agencies involved (i.e., the federal agencies seeking coverage):	

2. Identify the Service(s) field or regional offices providing the consultation:	

3. Identify any tracking numbers associated with the consultation (e.g., IPaC number, ECO number):	

4. Provide the date the consultation was granted:	

5. Attach correspondence with USFWS and/or NMFS documenting the Biological Opinion, conference opinion (IPaC and/or ECO tracking number) or concurrence.	*Upload files up to 20 MB; total attachments per attachment location must be less than 60 MB.*

6. Have you provided documentation in your SWPPP supporting your eligibility under Criterion E, including copies of the correspondence between yourself and the Services?	*Yes*

Must answer "Yes**" and provide documentation in your SWPPP before submitting the form.*

Criterion F

1. Which Service provided the section 10 permit? (check all that apply):	☐ U.S. Fish and Wildlife Service ☐ National Marine Fisheries Service
2. Identify the field or regional offices providing the permit(s):	
3. Identify any tracking numbers associated with the consultation (e.g., IPaC number, ECO number):	
4. Provide the date the permit was granted:	
5. Do you have a second permit data from a different agency?	

**If "Yes", add second Permit Date. If "No", continue to Question 6.*

6. Attach correspondence with USFWS and/or NMFS and a copy of the section 10 permit or relevant tracking number(s) (IPaC and/or ECO number).	*Upload files up to 20 MB; total attachments per attachment location must be less than 60 MB.*
7. Have you attached correspondence with USFWS and/or NMFS and a copy of the section 10 permit or relevant tracking number(s) (IPaC and/or ECO number)?	*Yes*

Must answer "Yes**" and provide correspondence and copy of permit before submitting the form.*

8. Have you provided documentation in your SWPPP supporting your eligibility under Criterion F, including a copy of the section 10 permit and copies of the correspondence between yourself and the Service(s)?	*Yes*

Must answer "Yes**" and provide documentation in your SWPPP before submitting the form.*

7 Historic Preservation

1. Are you installing any stormwater controls that require subsurface earth disturbance? *(CGP Appendix E, Step 1)*	

***If "Yes", answer Question 1a below; otherwise proceed to Section 8, Certification Information, in this NOI/LEW Template. For the following questions, more detailed instructions can be found in Appendix E of the CGP.*

1a. Have prior surveys or evaluations conducted on the site already determined historic properties do not exist, or that have prior disturbances precluded the existence of historic properties? *(CGP Appendix E, Step 2)*	

**If "No", answer Question 1b below. If "Yes", proceed to Section 8, Certification Information, in this NOI/LEW Template.*

1b. Have you determined that your installation of subsurface earth-disturbing stormwater controls will have no effect on historic properties? (*CGP Appendix E, Step 3)*	

**If "No", answer Question 1c below. If "Yes", proceed to Section 8, Certification Information, in this NOI/LEW Template.*

1c. Did the SHPO, THPO, or other tribal representative (whichever applies) respond to you within the 15 calendar days to indicate whether the subsurface earth disturbances caused by the installation of stormwater controls affect historic properties? *(CGP Appendix E, Step 4)*	

**If "Yes", answer Question 1d below. If "No", proceed to Section 8, Certification Information, in this NOI/LEW Template.*

1d. Describe the nature of their response:	○ Written indication that no historic properties will be affected by the installation of stormwater controls. ○ Written indication that adverse effects to historic properties from the installation of stormwater controls can be mitigated by agreed upon actions. ○ No agreement has been reached regarding measures to mitigate affects to historic properties from the installation of stormwater controls. ○ Other:

8 Certification Information

You have two (2) choices – Lock and Flag your form for certification, or take no action at this time, which keeps the document in draft form.

After locking and flagging for certification, AMAFCA's Certifier (AMAFCA Executive Engineer/Director) will be notified that this is ready for their action.

For the Contractor, this section will be completed using the Contractor's Certifier.

Prior to sending the NOI, the Certifier will have set up their own separate account on EPA's NPDES eReporting Website, and the information below is required to find and send the NOI to the contact person.

Certifier or Preparer Contact Information

First Name | Middle Initial | Last Name

Organization | Email

Address

This is the final step for the required information in the online NOI form. The next two items (Section 9 – Construction Dewatering Requirements and Section 10 – Sediment and Erosion Control Requirement) are not part of the EPA CDX NOI – they provide information needed for CGP compliance and SWPPP preparation.

9 Construction Dewatering Requirements

This section has information required in the CGP but is not specifically required in the NOI form. For any construction project that anticipates any dewatering activities, the current CGP requires detailed information to be documented in the SWPPP.

"Dewatering" is defined in Appendix A of the CGP as "the act of draining accumulated stormwater and/or groundwater from building foundations, vaults, and trenches, or other similar points of accumulation." The requirements in this section apply to any dewatering activity, including draining accumulated stormwater and/or groundwater from the site.

Is dewatering expected for your project area?	

**If "Yes", see Section 9 of the Instructions for NOI/LEW Template for more detailed information about how to proceed with dewatering activities.*

If there are dewatering activities anticipated with construction, please contact NMED Surface Water Bureau at (505) 827-0187 for more information on how to proceed with this requirement.

Per Section 9.6.1.b of the CGP, the State of New Mexico, except Indian country, must follow detailed steps if dewatering is anticipated at the project location.

These actions include referring to the NMED GWQB Mapper at https://gis.web.env.nm.gov/GWQB/ (to check for nearby Leaking Underground Storage Tanks, Voluntary Remediation Sites, Brownfield Sites, open Abatement Sites [currently referred to as State Cleanup Program Sites] and Superfund Sites), and the PSTB Mapper (Go Mapper) at https://www.epa.gov/cleanups/cleanups-my-community (to check for RCRA Corrective Action Sites – also has Leaking Underground Storage Tanks and Superfund Sites) to check if the list of sources in the CGP are located within the noted distance from the anticipated construction site groundwater dewatering activity.

Briefly describe the reasoning for your dewatering expectation:	

If dewatering activities occur but were not anticipated or originally identified in the NOI, please contact NMED Surface Water Bureau at (505) 827-0187 for more information on how to proceed with this requirement.

10 Sediment and Erosion Control Requirements

Per Section 9.6.1.c of the CGP, the State of New Mexico, except for Indian country, has information required but is not specifically required in the NOI form. For sites greater than five (5) acres in size, the BMP selection specified in the SWPPP must be made based on the use of appropriate soil loss prediction model, such as the RUSLE 2 program. Refer to Section 10 of the Instructions for NOI/LEW Template for more detailed information.

When AMAFCA reviews the Contractor SWPPP for sites greater than 5 acres, they should look for documentation in the SWPPP of the use of appropriate soil loss prediction model, such as the RUSLE 2 program.

Is the project area greater than 5 acres?	

**If "Yes", see Section 10 of the Instructions for NOI/LEW Template for more detailed information. An appropriate soil loss prediction model will need to be utilized and referenced in the SWPPP.*

Summary of AMAFCA's MS4
Post-Construction Stormwater Management Program
FY 2024 (July 1, 2023 – June 30, 2024)

NPDES Permit No. NMR04A000
Part I.D.5.b - Post-Construction Stormwater Management in
New Development and Re-development

Post-construction stormwater runoff is the stormwater that would flow from a project site to the Municipal Separate Storm Sewer System (MS4) after completion of a new development or redevelopment (not during the project construction). Controls for this type of runoff are necessary to maintain or restore stable hydrology in receiving waters by limiting surface runoff rates and volumes and reducing pollutant loadings from sites that undergo development or significant redevelopment.

Post-construction stormwater management in areas undergoing new development or redevelopment is necessary because runoff from these areas has been shown to significantly affect receiving water bodies. The intent of the Post-Construction Stormwater Management requirements in the MS4 Permit, according to the Environmental Protection Agency (EPA), are to:

- Prevent or reduce pollutants in stormwater discharges from reaching the Rio Grande;
- Mimic predevelopment hydrology; and
- Reduce impacts on natural channels and flow paths due to changes in hydrology.

AMAFCA, in conjunction with the area MS4 through the Mid Rio Grande (MRG) Stormwater Quality Team, completed a review and recommendations memo for post-construction stormwater quality design standards in the MRG Watershed in April 2021. Currently, the MRG MS4 permittees approach the stormwater quality design standard slightly differently.

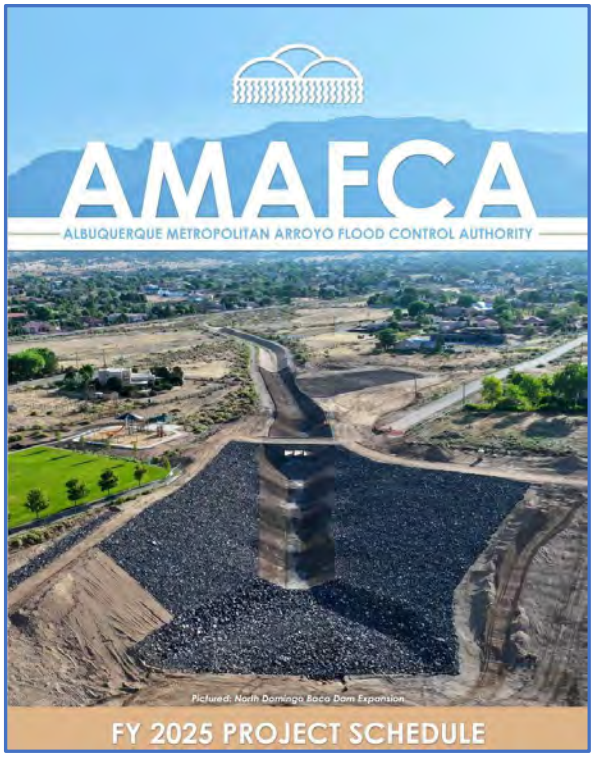
The Post-Construction Stormwater Quality Volume Calculation (SWQV) Comparison Tool was created as part of this task to assist the MRG MS4 permittees with comparing the stormwater quality design standards used within the MRG watershed related to post-construction stormwater management. It was recommended that developers be encouraged to include green stormwater infrastructure (GSI) and low impact development (LID) as well as increased landscape areas to reduce the total impervious area of a site, thereby reducing the required SWQV. It was also recommended that water quality and detention inspections include a review of the original impervious area used in the SWQV calculation to ensure that site modifications have not increased the impervious area of a site. The extent of the application and/or adoption of these recommendations for post-construction stormwater quality design standards and inspections will be determined and implemented by each MS4 permittee. Based on analysis from this document and discussions with New Mexico Environment Department (NMED) and EPA, Bernalillo issued a memorandum on May 12, 2021, that within 30 calendar days, all new development and County

redevelopment projects that disturb equal to or greater than 1 acre or are part of a larger common plan of development, will be required to use the rainfall depth to calculate the SWQV for impervious areas (including compacted areas) – this is available on the Bernalillo County website: https://www.bernco.gov/public-works/wp-content/uploads/sites/76/2021/05/SWQV_Calculation_memo_051221_encrypted.pdf

AMAFCA's Drainage Management Plans (DMPs) calculate flood protection and water quality volumes for a given subwatershed's facilities that can accommodate the SWQV independent of the rainfall/runoff numbers used to calculate required on-site retention. AMAFCA's planning documents comply with the MS4 Permit by limiting the discharge from within a subwatershed to the pre-development flow condition. AMAFCA's facilities are designed to attenuate the runoff from a storm event such that the river's flow conditions are essentially unaffected by new development and/or redevelopment.

AMAFCA's development engineer participates in area development reviews and often has the opportunity to comment on and request water quality components for projects. In addition, the AMAFCA Storm Water Quality Engineer participates in reviews subdivision reviews completed by Ciudad Soil and Water Conservation District, in accordance with their authority [47-6-11(F)(4) NMSA]. These reviews often cross-check with area terrain management plans and focus on post-construction runoff quantity, stormwater retention ponds, GSI/LID options, post-construction velocities, and maintenance requirements.

The AMAFCA Project schedule (2025 AMAFCA Project Schedule Report.pdf) identifies future planning efforts, joint funding initiatives, and design and construction projects that AMAFCA hopes to accomplish over the next 6 years. Planned stormwater quality projects are prioritized as required by the MS4 Permit. The prioritization assists AMAFCA and its Board of Directors in its mission to protect life and property. Projects subject to this scoring have a strong affinity towards water quality improvements, however, projects included in the Project Schedule which are not scored for water quality may still include water quality aspects as part of their scope. The figures below provide a summary of the scoring criteria, priority screening, and water quality facilities costs.



Total Cost	Points
Less than $1M	2
Greater than $1M but less than $2M	1
Greater than $2M	0

Total project cost will ultimately determine the feasibility of a proposed project. As such, projects will be scored based on their total estimated project cost. The point scale below describes how points are assigned based on total project cost.

Flow Path to the Rio Grande	Points
Project only WQ Facility in path	3
Provides Opportunity for future WQ Project	2
Project Downstream of existing WQ Facility	1
Project Upstream of existing WQ Facility	1

Location along a flow path to the Rio Grande was also taken into consideration when assigning points to each project. Projects are scored higher if they are the only stormwater quality facility along the flow path to the Rio Grande, and lower if there is a facility(ies) above or below the proposed project. The point scale below describes points are assigned based on this location.

Bosque Bonus	Points
Within Bosque	2
Not Within Bosque	0

If a stormwater quality facility is located within the Bosque - the forested area surrounding the riparian zone of the Rio Grande floodplain - the project was awarded a "bonus" for being the ultimate water quality control measure before stormwater reaches the Rio Grande. The point scale below describes how the bonus points were assigned based on the above criteria.

Total Points Scale: 1-7

AMAFCA Project Schedule Water Quality Facility Scoring Criteria

AMAFCA FY25 Project Schedule Priority Scoring for WATER QUALITY (as required by EPA's MS4 Permit)				
Project	**Cost**	**Flow Path**	**Bosque Bonus**	**Total Points**
Agency and Area Wide	0	2	0	2
AMAFCA Dam EAP's	2	0	0	2
AMAFCA Drainage Master Plan Updates	1	1	0	2
AMAFCA Telemetry Phase 2	1	2	0	3
Amole Arroyo & Hubbell Channel Modifications	0	1	0	1
Black Mesa Phase 1 Manhole Upgrades	1	3	2	6
Calabacillas GCS	0	1	0	1
Desert & 2nd Street Pond	0	1	0	1
Grantline Water Quality Lining	2	1	0	3
Hubbell Dam Expansion	0	0	0	0
Industry Way Storm Drain	0	1	0	1
Internation District Library Pond	2	1	0	3
Misc. Construction Projects	0	2	0	2
Misc. Real Estate Acquisition	0	2	0	2
NDC/SDC Channel Surveys	2	0	0	2
North ABQ Acres	2	0	0	2
North Unser Pond	1	1	0	2
Paradise West Dam	0	1	0	1
Piedras Marcadas Dam Outfall	0	1	2	3
Pino Dam Aux. Spillway Modificaitons	0	0	0	0
Pond E	0	1	0	1
Pond E Outfall	2	1	0	3
Reading & 2nd Street Pond	0	1	0	1
Reading & 2nd Street Pond Outfall	1	1	0	2
SDC Access Project	2	3	0	5
Swinburne Dam Main Branch Drop	0	1	0	1
Swinburne Dam West Branch Drop	0	1	0	1
Trails Drainage Plan Update	2	0	0	2
Zuni-Penn Pond	0	1	0	1

AMAFCA Project Schedule Water Quality Facility Priority Scoring

Facility Name	Lead Agency	Total Est. Cost	AMAFCA Est. Cost	FY25	FY26	FY27	FY28	FY29	FY30	Est. Design Cost	Est. Construction Cost	Partner Agency	Outside Stakeholder(s)
Agency & Area-Wide Flood Control Rehabilitation	AMAFCA	$ 7,500,000	$ 7,500,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 750,000	$ 6,750,000	-	COA, Other Gov. Agencies
AMAFCA Dam EAPs & Inundation Mapping	AMAFCA	$ 600,000	$ 600,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 600,000		-	EMs, OSE
AMAFCA Drainage Master Plan Updates	AMAFCA	$ 1,800,000	$ 1,800,000	$ 300,000	$ 300,000	$ 300,000	$ 300,000	$ 300,000	$ 300,000	$ 1,800,000		-	COA, BC, Priv. Dev.
AMAFCA Telemetry Phase 2	AMAFCA	$ 1,300,000	$ 1,300,000	$ 200,000		$ 50,000	$ 500,000	$ 50,000	$ 500,000	$ 300,000	$ 1,000,000	-	COA, BC, EMs
Amole Arroyo & Hubbell Channel Modifications	AMAFCA	$ 9,500,000	$ 9,500,000			$ 700,000	$ 4,400,000	$ 4,400,000		$ 1,650,000	$ 7,850,000	-	
Black Mesa Phase 1 Manhole Upgrades	AMAFCA	$ 1,600,000	$ 1,600,000				$ 160,000	$ 1,440,000		$ 160,000	$ 1,440,000	-	USACE, BC
Calabacillas GCS 3a1, 3b1, and Bank Protection	AMAFCA	$ 5,775,000	$ 5,775,000		$ 5,775,000					$ 275,000	$ 5,500,000	-	COA
Desert & 2nd Street Pond	AMAFCA	$ 5,400,000	$ 5,400,000		$ 575,000	$ 4,825,000				$ 575,000	$ 4,825,000	BC	BC
Grantline Water Quality Lining*	AMAFCA	$ 540,000	$ 540,000									-	NMDOT
Hubbell Dam Expansion	AMAFCA	$ 9,250,000	$ 9,250,000	$ 900,000	$ 7,200,000	$ 1,150,000				$ 1,500,000	$ 7,750,000	-	BC, COA, MRGCD, OSE
Industry Way Storm Drain	BC	$ 6,177,000	$ -							$ 660,000	$ 5,516,000	BC	AMAFCA
International District Library Pond & Storm Drain Modifications	COA	$ 800,000	$ 400,000		$ 400,000						$ 400,000	AMAFCA	AMAFCA
Miscellaneous Construction Projects	AMAFCA	$ 2,700,000	$ 2,700,000	$ 450,000	$ 450,000	$ 450,000	$ 450,000	$ 450,000	$ 450,000	$ 600,000	$ 2,100,000	-	
Miscellaneous Real Estate Acquisition	AMAFCA	$ 1,800,000	$ 1,800,000			$ 450,000	$ 450,000	$ 450,000	$ 450,000	$ 1,800,000		-	
North & South Diversion Channel Surveys	AMAFCA	$ 250,000	$ 250,000	$ 250,000						$ 250,000		-	
North Albuquerque Acres - Sandia Heights Hydraulic Analyses	AMAFCA	$ 300,000	$ 150,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 150,000		BC	BC
North Unser Pond	COA	$ 1,650,000	$ 825,000	$ 825,000							$ 825,000	AMAFCA	AMAFCA, NMDOT
Paradise West Dam	AMAFCA	$ 9,300,000	$ 9,300,000	$ 2,250,000					$ 1,000,000	$ 1,500,000	$ 7,800,000	-	OSE
Piedras Marcadas Dam Outfall	AMAFCA	$ 5,100,000	$ 5,100,000			$ 400,000	$ 4,700,000			$ 575,000	$ 4,525,000	-	MRGCD, OSE
Pino Dam Auxiliary Spillway Modifications	AMAFCA	$ 5,103,000	$ 5,103,000				$ 300,000	$ 4,360,000	$ 443,000	$ 560,000	$ 4,543,000	-	OSE
Pond E	AMAFCA	$ 4,200,000	$ 4,200,000						$ 450,000	$ 450,000	$ 3,750,000	BC	BC, MRGCD, BNSF
Pond E Outfall	AMAFCA	$ 1,000,000	$ 1,000,000				$ 300,000	$ 700,000		$ 150,000	$ 850,000	BC	BC, BNSF
Reading & 2nd Street Pond	AMAFCA	$ 3,050,000	$ 3,050,000						$ 350,000	$ 350,000	$ 2,700,000	BC	BC, MRGCD, BNSF
Reading & 2nd Street Pond Outfall	AMAFCA	$ 1,200,000	$ 1,200,000				$ 300,000		$ 900,000	$ 150,000	$ 1,050,000	BC	BC, BNSF
South Diversion Channel Access Project	Priv. Dev.	$ 150,000										AMAFCA	AMAFCA, NMDOT
Swinburne Dam Main Branch Drop Structure	AMAFCA	$ 4,400,000	$ 4,400,000	$ 200,000	$ 4,200,000					$ 400,000	$ 4,000,000	-	COA
Swinburne Dam West Branch Drop Structure	AMAFCA	$ 3,500,000	$ 3,500,000	$ 200,000		$ 3,300,000				$ 400,000	$ 3,100,000	-	COA
Trails Drainage Master Plan Update	AMAFCA	$ 250,000	$ 250,000	$ 250,000						$ 250,000		COA	COA, Priv. Dev.
Zuni-Penn Pond	AMAFCA	$ 9,700,000	$ 4,850,000	$ 2,000,000	$ 6,000,000	$ 1,700,000					$ 9,700,000	COA	COA
Total Cost for all Projects		$ 103,895,000	$ 91,343,000	AMAFCA Cost for all Projects									

BC - Bernalillo County
BNSF - Burlington Northern Santa Fe Railway
COA - City of Albuquerque
EMs - Emergency Managers/Responders
MRGCD - Middle Rio Grande Conservancy District
NMDOT - NM Department of Transportation
OSE - NM Office of the State Engineer - Dam Safety Bureau
USACE - US Army Corps of Engineers

*Costs are assumed to be partially or totally expended in FY24

AMAFCA Project Schedule Water Quality Facility Costs

In addition, AMAFCA has been a supporter of the annual Land and Water Summit in the Albuquerque area. The Land and Water Summit was created in 1986 by the Xeriscape Council of New Mexico. Developed to bring together design professionals, construction and management companies, agencies, farmers, artists, teachers, hydrologists, ranchers, climatologists, wildlife advocates, homeowners, and policy makers to find sustainable ways to protect and share our state's water and resources, the event is now hosted by Ciudad Soil and Water Conservation District, which serves as the event's fiscal agent. The group's primary goal is to educate the public about resource conservation and best practices for improving and protecting local landscapes – which ties well with the MS4 Post-Construction Stormwater Management education requirements. AMAFCA continued to be a financial sponsor as well as an active member on the planning committee (refer to images on the next two pages). For information on the 2024 Land and Water Summit, please visit the conference website: [The 2024 Land and Water Summit ‣ The Land and Water Summit (landandwatersummitnm.org)]

April 1, 2024

Dear AMAFCA,

On behalf of the Land and Water Summit Planning Committee, Ciudad Soil & Water Conservation District would like to take this opportunity to thank you for the generous sponsorship in the amount of $1,000 that was provided for the 2024 Land and Water Summit Conference. As the host of the Land and Water Summit, Ciudad SWCD is pleased to report that the AMAFCA charitable **Stream Level** sponsor contribution assisted with the planning efforts and implementation of the conference.

Through AMAFCA's sponsorship, the Land and Water Summit hosted a pre-conference field trip with 55 registered attendees and a conference with 186 registered attendees, 132 in-person and 54 remote viewers, and 21 sponsors receiving 31,684 impressions. Additionally, this year, for the first time ever, the Summit featured a poster session.

The 2024 Land and Water Summit brought together a diverse lineup of speakers focused on driving change in our arid environment, with particular emphasis on nature-based solutions and green stormwater infrastructure in urban areas. Collaboration and innovation were central themes, stressing the necessity of community engagement in decision making processes. The conference highlighted the importance of drawing upon local knowledge and value while seeking forward-thinking approaches to complex natural resources issues.

The Land and Water Summit annual conference plays a vital role in continuing education about resource conservation and best practices for safeguarding and enhancing local landscapes. The event would not be possible without AMAFCA's financial contribution. The Land and Water Summit Planning Committee and Ciudad SWCD are immensely grateful for your generous support and sponsorship of the conference.

Sincerely,

J. Steven Glass
Land and Water Summit Planning Committee, Co-Chair
Ciudad Soil & Water Conservation District, Board Chair

2024 Land and Water Summit Sponsorship Letter to AMAFCA

Thanks for Your Support!

Committee Members:

- **Steve Glass, Chair** • *Ciudad Soil and Water Conservation District*
- **Erin Blaz** • *Ciudad Soil and Water Conservation District*
- **Kali Bronson** • *Bernalillo County*
- **Patrick Chavez** • *Albuquerque Metropolitan Arroyo Flood Control Authority*
- **Sarah Ganley** • *Bohannan Huston, Inc.*
- **David Gatterman** • *Southern Sandoval County Arroyo Flood Control Authority*
- **Megan Marsee** • *Bernalillo County*
- **joni palmer** • *UNM Southwest Environmental Finance Center*
- **Richard Perce** • *Groundwork Studio*
- **George Radnovich** • *Sites Southwest*
- **Carla Salazar** • *Southern Sandoval County Arroyo Flood Control Authority*
- **Phyllis Baker, Consultant** • *Baker Creative*

2024 Land and Water Summit Planning Committee

Summary of AMAFCA's MS4
Pollution Prevention/Good Housekeeping Program
& Control of Floatables Program
FY 2024 (July 1, 2023 – June 30, 2024)

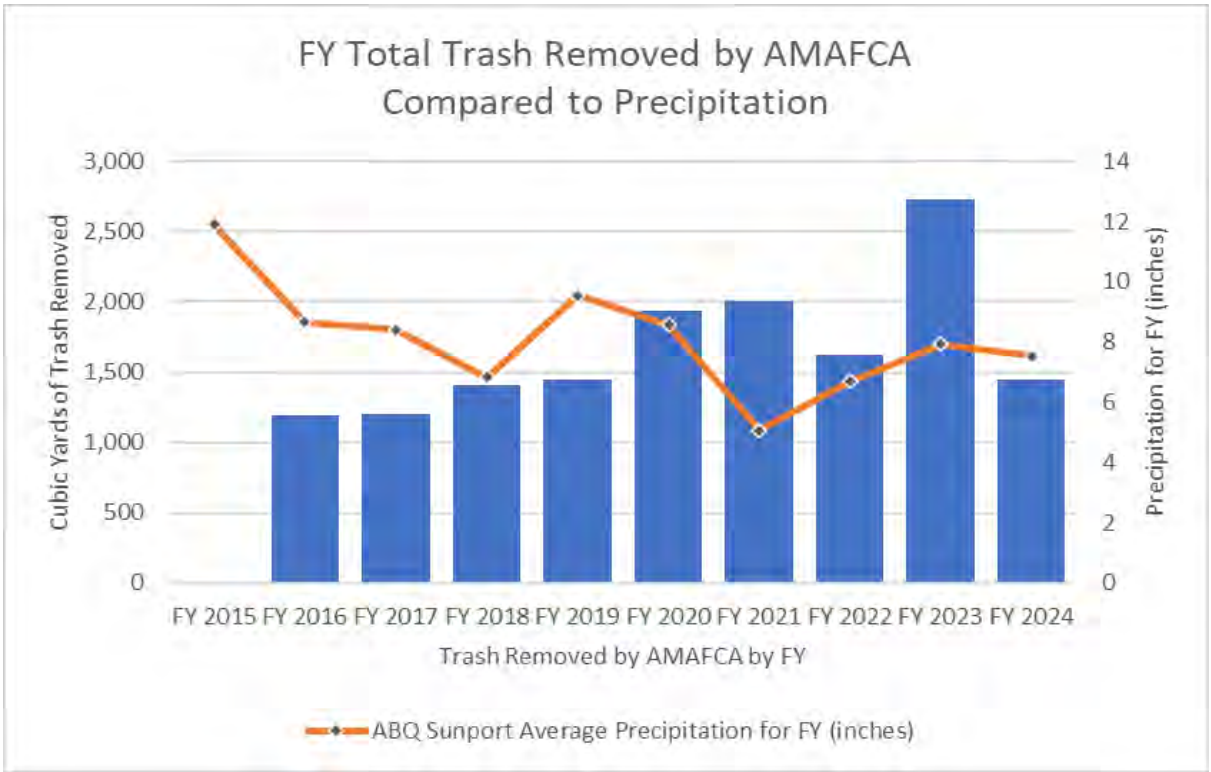
NPDES Permit No. NMR04A000
Part I.D.5.c - Pollution Prevention/Good Housekeeping for Municipal/Co-permittee Operations
and Part I.D.5.f - Control of Floatables Discharges

AMAFCA, from its elected Board to its Executive Director to its maintenance crew, prioritizes the maintenance, operations, and aesthetics of its facilities. As a result, pollution prevention, good housekeeping, and control of floatables are inherent to AMAFCA activities and are part of the AMAFCA culture. With AMAFCA being a non-traditional Municipal Separate Storm Sewer System (MS4), its pollution prevention and good housekeeping program differs from other MS4s in the community in that its program extends throughout the watershed rather than focusing primarily on industrial-type facilities. In accordance with AMAFCA's Stormwater Management Program (SWMP), AMAFCA has followed and will continue to follow its program practices. AMAFCA's pollution prevention, good housekeeping, and control of floatables practices pertain to all AMAFCA facilities.

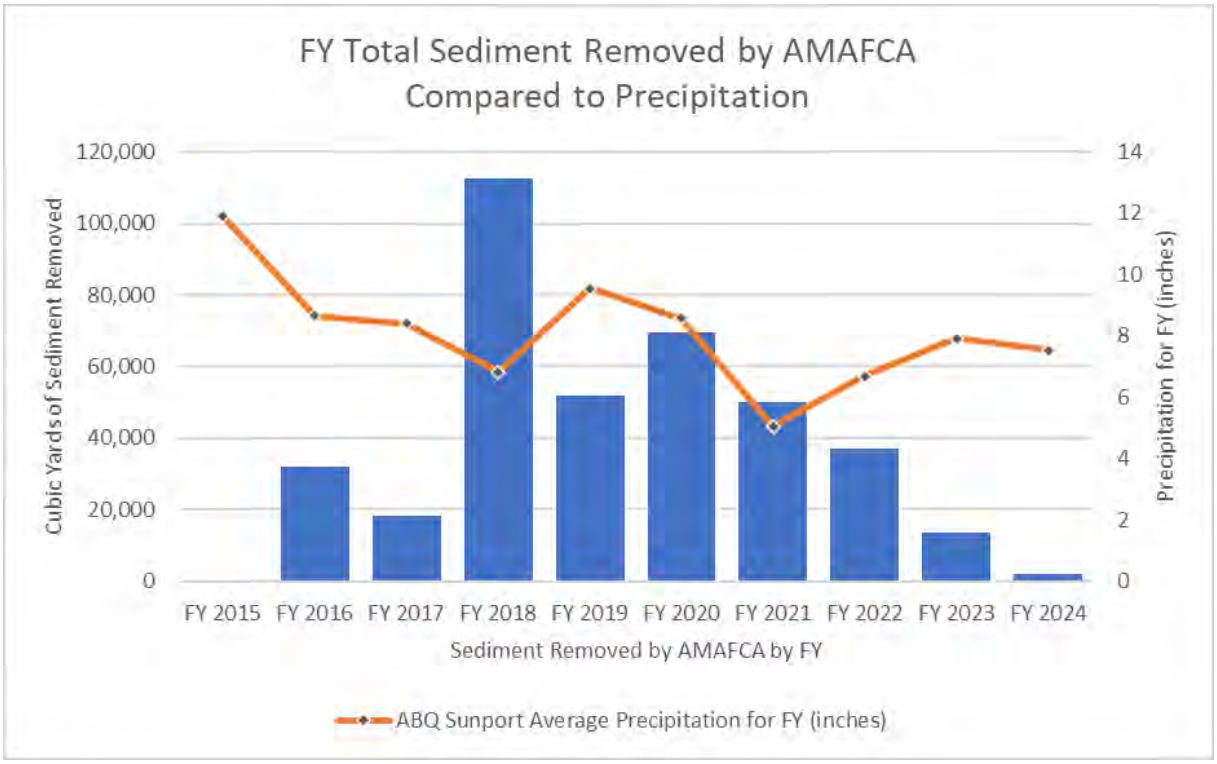
For example, as part of this MS4 Program and through regular business operations, AMAFCA conducts regular inspections and maintenance throughout the watershed for infrastructure that includes 22 flood control dams, 55 smaller flood- control ponds, 78 miles of arroyo channels, 130 water quality structures, 11 miles of underground conduit structures, and 12 miles of dikes and diversion structures. Related to infrastructure, AMAFCA has become a regional leader in integrating flood control infrastructure and stormwater quality facilities. AMAFCA stormwater quality and debris removal facilities annually collect an average of 48,000 cubic yards of sediment and 1,700 cubic yards of trash/floatables from stormwater before the runoff enters the Rio Grande. The Watershed Based MS4 Permit has an additional minimum control measure (MCM) from the typical six MCMs in MS4 Permits that focuses on the control of floatables. Control of floatables ties into pollution prevention and good housekeeping measures and is another area where AMAFCA programs have a widespread, positive impact to the watershed.

AMAFCA utilizes a detailed crew tracking system to document the AMAFCA crew maintenance and operations activities, many of which support these MS4 Program activities. The tracking includes a list of all AMAFCA facilities, organized by drainage basin. The photos and graphs below highlight the watershed-wide trash, debris, and sediment removed by AMAFCA operations.

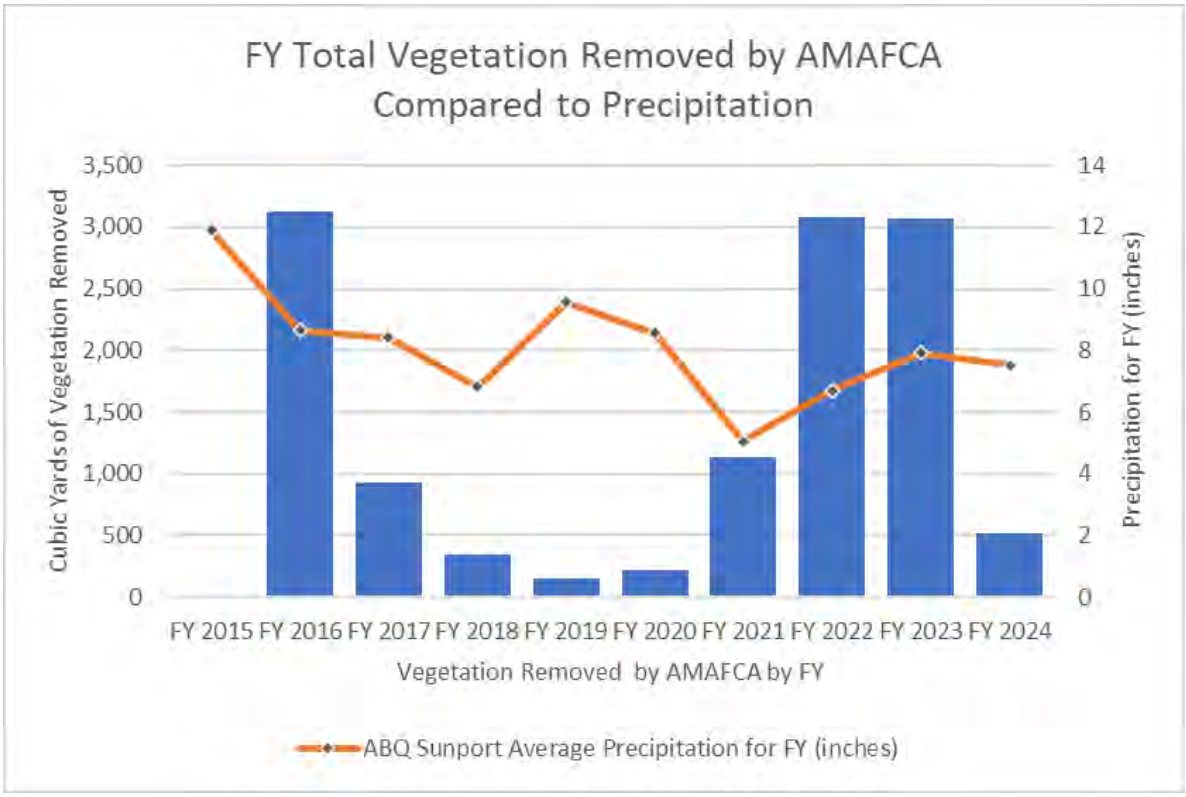
AMAFCA Maintenance Capturing Pollutants in AMAFCA Facilities Before They Enter the Rio Grande



Graph Highlighting the Watershed-Wide Trash Removed by AMAFCA Operations



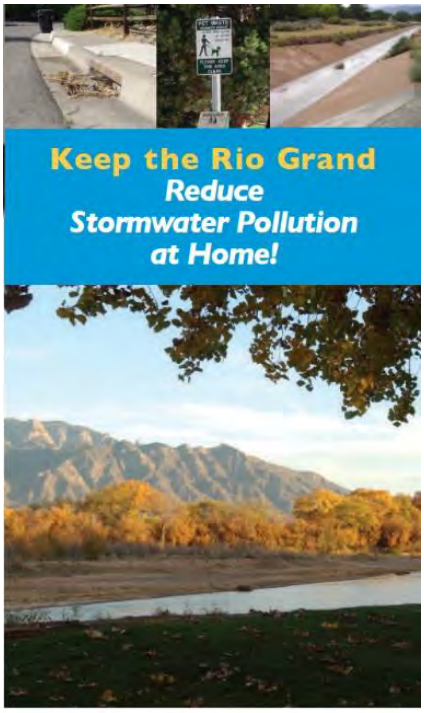
Graph Highlighting the Sediment Removed by AMAFCA Operations



Graph Highlighting the Vegetation Removed by AMAFCA Operations

AMAFCA Vegetation Removal Activities – Including Use of Local Tumbleweeds to Create the Famous Annual AMAFCA Snowman

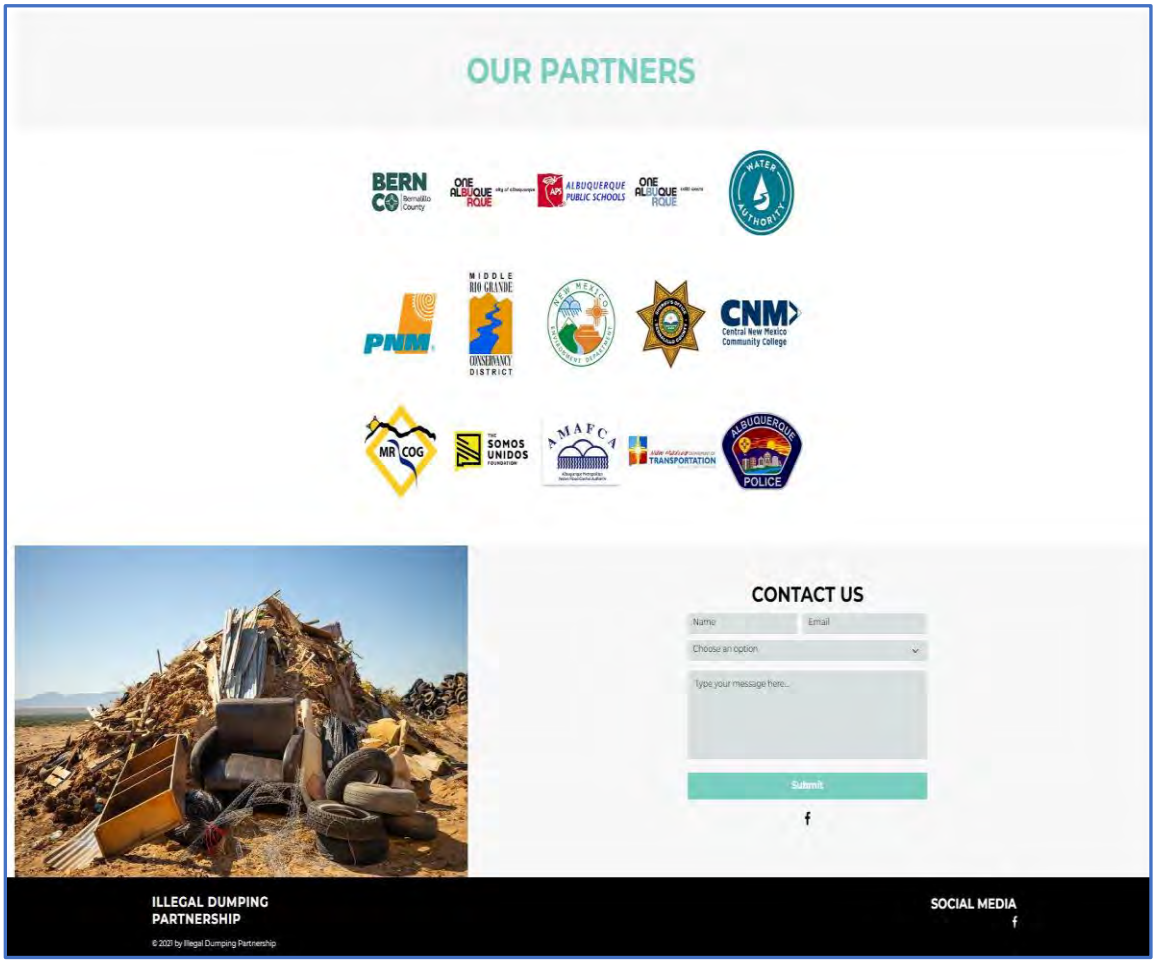
The Pollution Prevention/Good Housekeeping Program & Control of Floatables Program require a litter source control program, including a public awareness campaign and employee training. AMAFCA is a member of the Mid Rio Grande Stormwater Quality Team (MRGSQT – https://keeptheriogrand.org/), which has grown to 12 organizations who leverage their resources to ensure MS4 Permit public education and outreach requirements are met with the goal of preventing and reducing stormwater pollution throughout the watershed from reaching the Rio Grande. AMAFCA will continue to collaborate with the MRGSQT and MS4 permittees for the existing litter source control program, including a targeted public awareness campaign as well as coordinated training programs.



Mid Rio Grande
Stormwater Quality Team
www.keeptheriogrand.org

MRGSQT Outreach Examples – Kiosk and Brochure

AMAFCA is also a partner in the watershed's Illegal Dumping Partnership (IDP), a multi-agency task force founded to help combat illegal dumping (https://www.ihavetrash.com/ and https://www.bernco.gov/planning/let-s-talk-trash-.aspx).



Screen Shots from IDP Website

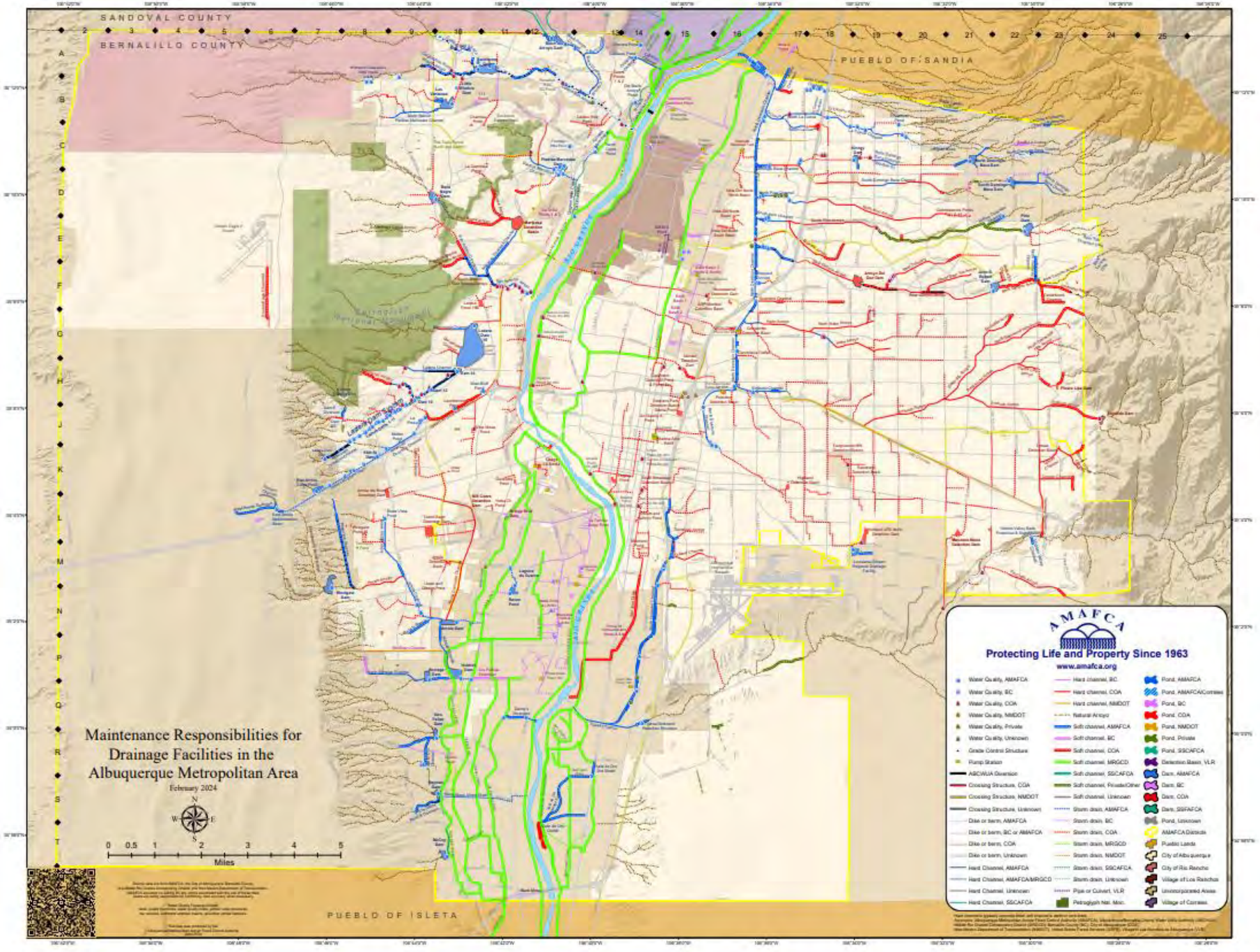
Summary of AMAFCA's MS4
Illicit Discharges and Improper Disposal Program
FY 2024 (July 1, 2023 – June 30, 2024)

NPDES Permit No. NMR04A000
Part I.D.5.e - Illicit Discharge and Improper Disposal

AMAFCA's successful Illicit Discharge and Improper Disposal Control Program depends on strong collaborative programs and community relationships, as well as AMAFCA's commitment to addressing illicit discharges. AMAFCA has teamed with the City of Albuquerque on its 311 Community Contact Center hotline (includes website and phone app) for reporting illicit discharges. All AMAFCA staff are trained to address illicit discharge reports. AMAFCA has created forms and procedures for this program, as well as provided staff education. In accordance with AMAFCA's Stormwater Management Plan (SWMP), AMAFCA has and will continue to follow its procedures and practices to detect and eliminate illicit discharges.

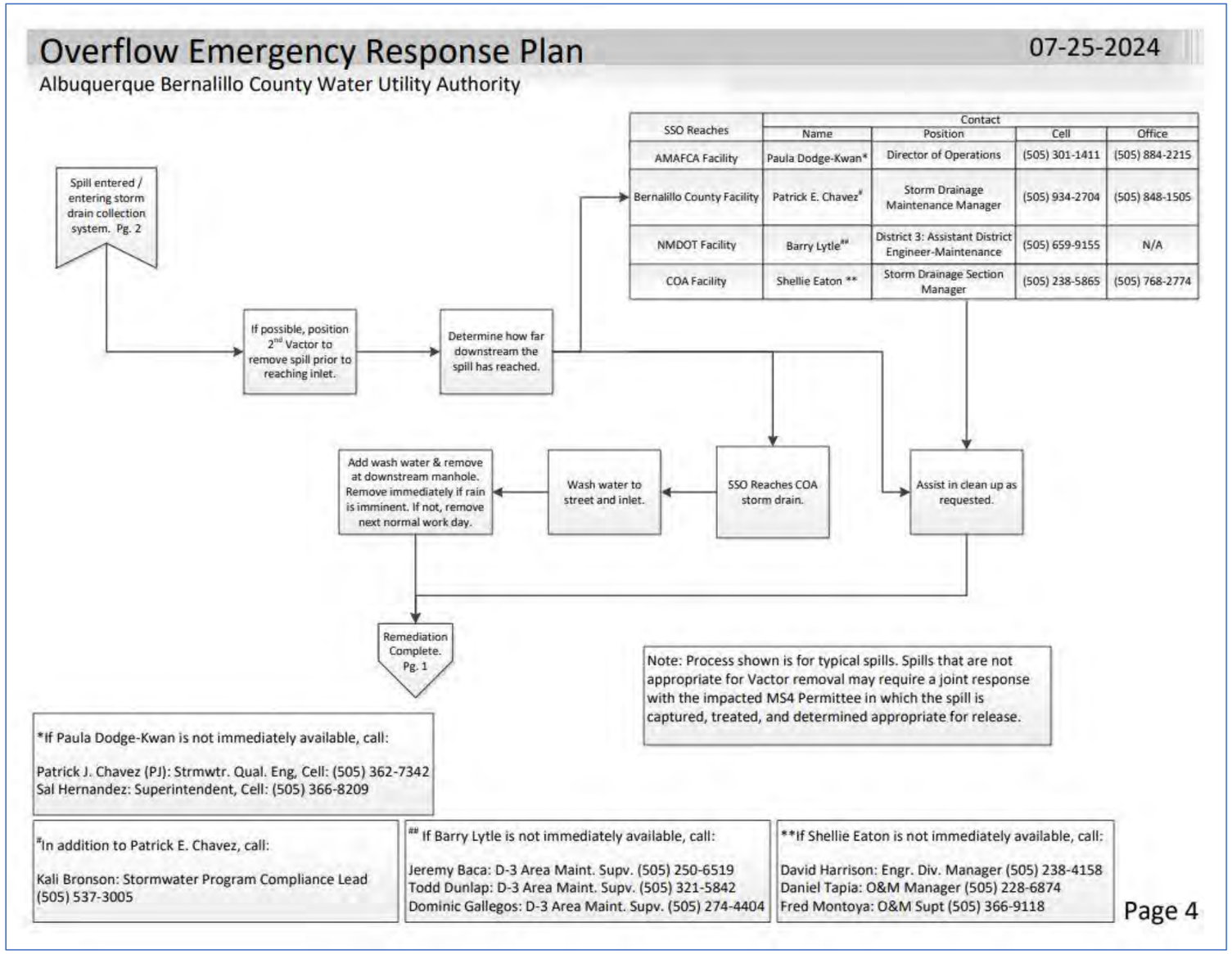
This program uses GIS to track illicit discharge reports and identify areas of concern where additional public outreach and education may be needed. AMAFCA is the leader in the watershed for its Maintenance Responsibilities for Drainage Facilities in the Albuquerque Metropolitan Area. The AMAFCA map on page 2 represents facilities throughout the Albuquerque Metropolitan Area for multiple agencies and is essential for ensuring that proper organizations are contacted and involved in any illicit discharge reports, assessment, removal, and/or enforcement. This AMAFCA map meets MS4 Permit requirements in Section I.D.5.e.(i)(a).

AMAFCA also continuously looks for opportunities to add dry weather screening to assist with identifying potential illicit discharges to its numerous projects, leveraging opportunities where staff or consultants are already out in the field. AMAFCA has the added benefit of professional on-staff maintenance crew members who are working throughout their jurisdiction and are equipped and educated to detect illicit discharges. The visual screening is important to ensure AMAFCA meets the MS4 Permit requirements in I.D.5.e.(i)(c)(A).



AMAFCA's Maintenance Responsibilities for Drainage Facilities in the Albuquerque Metropolitan Area Map
https://amafca.org/documents/Maintenance_Map.pdf

Related to collaborative programs and community relationships, AMAFCA continues to coordinate closely with the Albuquerque Bernalillo County Water Utility Authority (ABCWUA) as well as other area agencies, as shown in the ABCWUA's Collection System Overflow Emergency Response Plan (one page included below – full plan available online: https://www.abcwua.org/wp-content/uploads/2024/07/OERP_07-25-2024_Final.pdf). This plan helps ensure that the community responds to and cleans up spills that enter the storm drain collection system.



Overflow Emergency Response Plan

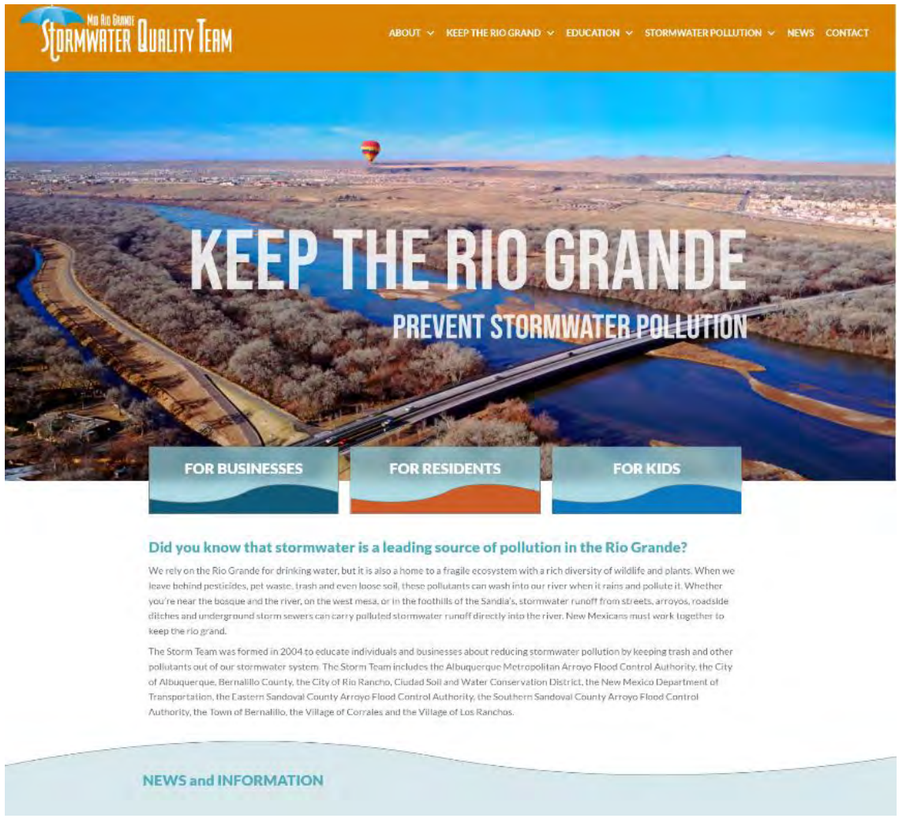
07-25-2024

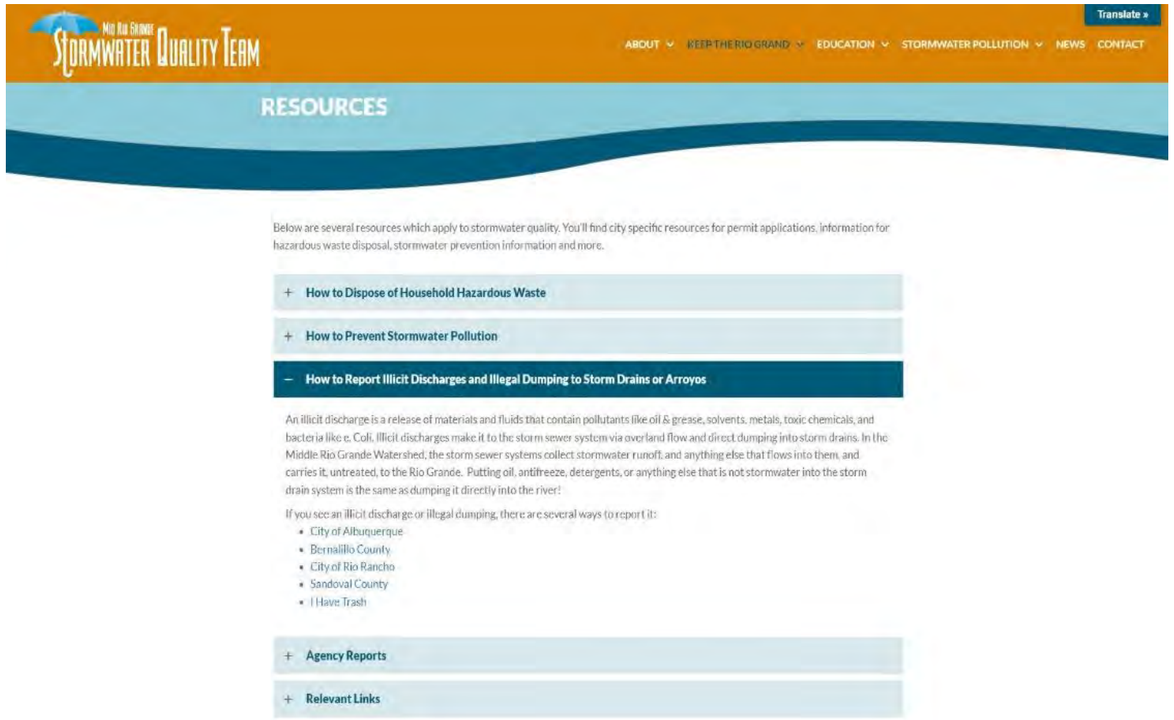
Albuquerque Bernalillo County Water Utility Authority

SSO Reaches	Contact			
	Name	Position	Cell	Office
AMAFCA Facility	Paula Dodge-Kwan*	Director of Operations	(505) 301-1411	(505) 884-2215
Bernalillo County Facility	Patrick E. Chavez#	Storm Drainage Maintenance Manager	(505) 934-2704	(505) 848-1505
NMDOT Facility	Barry Lytle##	District 3: Assistant District Engineer-Maintenance	(505) 659-9155	N/A
COA Facility	Shellie Eaton **	Storm Drainage Section Manager	(505) 238-5865	(505) 768-2774

Page From ABCWUA's Overflow Emergency Response Program

In addition, AMAFCA is a member in the cooperative Municipal Separate Storm Sewer System (MS4) Technical Advisory Group (TAG), which facilitates cooperation and coordination with other MS4s in the Middle Rio Grande related to the illicit discharge and improper disposal control program. AMAFCA is also a member of the Mid Rio Grande Stormwater Quality Team (MRGSQT – https://keeptheriogrand.org/), which has grown to 12 organizations who leverage their resources to ensure MS4 Permit public education and outreach requirements are met with the goal of preventing and reducing stormwater pollution throughout the watershed from reaching the Rio Grande. The MRGSQT provides educational information regarding stormwater quality to the community, including information that facilitates public reporting of illicit connections or discharges and educational programs that inform the public of hazards associated with illicit discharges and improper waste disposal, as well as proper ways to dispose of hazardous wastes.





Web View of Links Related to Illicit Discharge and Improper Disposal on the MRGSQT Keep The Rio Grande! Website

Summary of AMAFCA's MS4 Public Education, Outreach, Involvement, and Participation Program FY 2024 (July 1, 2023 - June 30, 2024)

NPDES Permit No. NMR04A000
Part I.D.5.g - Public Education and Outreach on Stormwater Impacts and
Part I.D.5.h - Public Involvement and Participation

Outcome Report

for Fiscal Year 2024

(July 1, 2023 to June 30, 2024)

Albuquerque Metropolitan Arroyo Flood Control Authority (AMAFCA) • City of Albuquerque • Bernalillo County • Town of Bernalillo • Village of Corrales • Ciudad Soil and Water Conservation District • Eastern Sandoval County Arroyo Flood Control Authority (ESCAFCA) • Village of Los Ranchos de Albuquerque • Department of Transportation (NMDOT) • City of Rio Rancho • Sandoval County • Southern Sandoval County Arroyo Flood Control Authority (SSCAFCA)

PRESENTED BY

SUNNY505

Introduction

The outcomes report is designed to illustrate the collective successes of the Middle Rio Grande Stormwater Quality team. In fiscal year 2024, the Storm Team reached over 1,000,000 individuals in the Albuquerque Metro area through special events, educational efforts, as well as digital promotions through YouTube, ConnectedTV, Social Media Advertising, the KeepTheRioGrande.org website and more.

The Storm Team is a collaborative organization made of of the following: The Albuquerque Metropolitan Arroyo Flood Control Authority, the City of Albuquerque, Bernalillo County, the City of Rio Rancho, Ciudad Soil and Water Conservation District, the New Mexico Department of Transportation, the Southern Sandoval County Arroyo Flood Control Authority, the Town of Bernalillo, the Village of Corrales and the Village of Los Ranchos.

Mid Rio Grande Stormwater Quality Team

Albuquerque Metropolitan Arroyo Flood Control Authority (AMAFCA) • City of Albuquerque • Bernalillo County • Town of Bernalillo • Village of Corrales • Ciudad Soil and Water Conservation District • Eastern Sandoval County Arroyo Flood Control Authority (ESCAFCA) • Village of Los Ranchos de Albuquerque • Department of Transportation (NMDOT) • City of Rio Rancho • Sandoval County • Southern Sandoval County Arroyo Flood Control Authority (SSCAFCA)

Table of Contents

SUPPORTING DOCUMENTS

Bernalillo County

Public Outreach and Education Tracking

FY2024: July 1, 2023 – June 30, 2024

Date	Location	Event Topic	Description of Education/Outreach Event Program/Materials	NRS Programs	Partner Organizations	Parti-cipants	Source for Participant Count
QI							
7/9/2023	25 Frost Rd.	HHW	HHW Collection Event	Stormwater Quality	Clean Harbors	58	sign in sheet
7/20/2023	Wilson & Co.	GSI/LID Standards Lunch & Learn	Lunch and a presentation about the new Bernalillo County Green Stormwater Infrastructure / Low Impact Development (GSI/LID) Standards for staff that work on Bernalillo County public and private development projects.	Stormwater / Review & Permitting		20	estimate
7/23/2023	Whispering Pines Community Center	HHW	HHW Collection Event	Stormwater Quality	Clean Harbors	17	sign in sheet
7/26/2023	GovDelivery news bulletin	Bulletin advertising 8/12/23 Passive Rainwater Harvesting Workshop	Natural Resources Services table in Bernalillo County tent. Provided information to educate County residents on stormwater quality, water conservation methods and incentive programs, and groundwater monitoring program.	Water Conservation, Stormwater Quality			GovDelivery subscribers
8/12/2023	Carlito Springs Open Space	Passive Rainwater Harvesting Workshop for Homeowners	Workshop for homeowners providing an overview of design, installation, and maintenance of residential-scale passive rainwater harvesting features, promoting Passive Rainwater Harvesting Field Guide	Stormwater Quality, Water Conservation	BernCo. Open Space	33	headcount at event
8/19/2023	Dennison Park	HHW	HHW Collection Event	Stormwater Quality	Clean Harbors	19	sign in sheet
8/23/2023	Virtual	GSI/LID Standards Lunch & Learn	Lunch and a presentation about the new Bernalillo County Green Stormwater Infrastructure / Low Impact Development (GSI/LID) Standards for staff that work on Bernalillo County public and private development projects.	Stormwater / Review & Permittin	Wilson & Co	54	Virtual meeting attendance count

8/28 & 8/30/2023	Smith Brasher Hall on CNM Campus	Rainwater Harvesting Workshop for ABC Tree Stewards	GSI Walk and Talk with ABC Tree Stewards at CNM Smith-Brasher Hall. Discussed GSI on site and how similar GSI/RWH features could be done at homes. Presentation promoted and content was drawn from Bernco Passive Water Harvesting Field Guide; attendees received free 55-gallon rain barrel.	Water Conservation, Stormwater Quality	ABC Tree Stewards, Tree New Mexico	20	headcount at event
8/31/2023	2023 StormCon, Dallas	GSI/LID Standards Lunch & Learn	Lunch and a presentation about the new Bernalillo County Green Stormwater Infrastructure / Low Impact Development (GSI/LID) Standards for staff that work on Bernalillo County public and private development projects.	Stormwater / Review & Permitting	BHI	50	estimage
9/1/2023	GovDelivery news bulletin	Bulletin advertising 9/16/23 L2L Graywater Workshop		Water Conservation			GovDelivery subscribers
9/5 – 9/15/2023	NM State Fair Grounds (300 San Pedro NE, Albuquerque, NM 87108)	Irrigation Efficiency Exhibit at the State Fair	Presented 6 display boards on irrigation efficiency and hands-on drip irrigation exhibit in collaboration with ABQ Master Gardeners	Water Conservation	ABQ Master Gardeners	20,000	Estimate of exhibit visitors provided by ABQ Master Gardeners
9/9/2023	McGrane Public Safety Complex	East Mountain Coalition of Neighborhoood Associations Fall meeting	Presented updates to the program and status of groundwater in EM	Groundwater		25	sign in sheet
9/10/2023	Fox Hills Property Owners Association Community Building	Presentation on Water Conservation Program for Fox Hills Property Owners Association	Overview of assistance provided to Bernalillo County residents including water efficiency consultations and water conservation incentive programs at request of Fox Hills Property Owners Association in East Mountains	Water Conservation		20	Headcount at event
9/16/202	Carlito Springs Open Space	L2L Graywater Workshop	Introduction to design, installation, and maintenance of laundry-to-landscape graywater systems, graywater regulations, and Bernalillo County's Graywater Incentive Program	Water Conservation		16	sign in sheet
9/21/2023	Los Vecinos	Vista Grande PROS Public Meeting	PROS outreach event- presented information on the Tijeras Creek Watershed Restoration Project	Stormwater	PROS	20	estimate
9/23/2023	108 Edelweiss (domestic household)	Annual neighborhood meeting	presented updates to the program and status of groundwater in EM, hydrogeological analysis of Heatherland Hills	Groundwater		30	Headcount at event

Q2							
10/1/2023	Corrales	Corrales harvest fest	Tabling event for Stormwater Quality Team; information about stormwater quality	Stormwater	Middle Rio Grande Stormwater Quality Team		
10/3/2023	Tijeras Creek Watershed Restoration Project	Urban Waters Tour of TCWRP	Presentation and walking tour of upcoming watershed restoration activities	Stormwater	Urban Waters, Ciudad SWCD, NMED	15	headcount at event
10/8/2023	Polk Middle School	HHW	HHW collection event	Stormwater	Clean Harbors	16	sign in sheet
10/19/2023	Fox Hills Neighborhood	Groundwater	Discussed Madera aquifer they source water from, among other water topics in the region	Groundwater		5	headcount at event
10/21/2023	Valle de Oro NWR	Passive Rainwater Harvesting at Home	Workshop on passive rainwater harvesting for homeowners at Build Your Backyard Refuge Day	Water Conservation, Stormwater Quality	ABQ Backyard Refuge Program	40	headcount at event
11/4/2023	Marble Open Space	Ribbon-cutting ceremony	Tabling event for Natural Resource Services	Water Conservation, Stormwater Quality	Open Space		sign in sheet
11/7/2023	East Central Ministries	Water-Smart Urban Gardens	Presentation for BernCo Urban Ag Program	Water Conservation	Open Space	10	headcount at event
11/14/2023	McGrane Public Safety Complex	Groundwater Focus Group	Focus group to discuss Hydrogeology initatives for FY2025–2030	Groundwater		6	sign in sheet
11/15/2023	NMDOT Outfall	Volunteer Cleanup	PDS organized cleanup of floatables – 1.72 tons	Stormwater	BernCo PDS	20	sign in sheet
11/15/2023	North Domingo Baca Multigenerational Center	Groundwater Focus Group	Focus group to discuss Hydrogeology initatives for FY2025–2030	Groundwater		15	sign in sheet + headcount
11/16/2023	McGrane Public Safety Complex	Groundwater Focus Group	Focus group to discuss Hydrogeology initatives for FY2025–2030	Groundwater		4	sign in sheet
Q3							
1/24/2024	Mountain View Community Center	Sustainability Project Public Meeting	Presented and solicited public input on proposed South Valley Street Tree and GSI Pilot Project	Water Conservation, Stormwater Quality	City of Albuquerque	16	sign in sheet
1/25/2024	Valle de Oro NWR	Valle de Oro Community Update Night	Tabled and solicited public input on proposed South Valley Street Tree and GSI Pilot Project	Water Conservation, Stormwater Quality			

1/30/2024	Westside Community Center	Sustainability Project Public Meeting	Presented and solicited public input on proposed South Valley Street Tree and GSI Pilot Project	Water Conservation, Stormwater Quality	City of Albuquerque	20	sign in sheet
2/1/2024	Los Padillas Community Center	Sustainability Project Public Meeting	Presented and solicited public input on proposed South Valley Street Tree and GSI Pilot Project	Water Conservation, Stormwater Quality	City of Albuquerque	17	sign in sheet
2/6/2024	Paradise Hills Community Center	Sustainability Project Public Meeting	Presented and solicited public input on proposed South Valley Street Tree and GSI Pilot Project	Water Conservation, Stormwater Quality	City of Albuquerque	15	sign in sheet
2/7/2024	Los Vecinos Community Center	Sustainability Project Public Meeting	Presented and solicited public input on proposed South Valley Street Tree and GSI Pilot Project	Water Conservation, Stormwater Quality	City of Albuquerque	38	sign in sheet
2/13/2024	Vista Grande Community Center	Groundwater impacts on gardening	East Mountain Gardeners Club meeting	Groundwater		25	sign in sheet from group
2/15/2024	El Nido Farm	Hands-On Rain Barrel and Passive Rainwater Harvesting Workshop for Tree Stewards	Hands-on workshop on how to install a rain barrel and passive rainwater harvesting features. NRS providing instruction for ABC Tree Steward's workshop.	Water Conservation, Stormwater Quality			sign in sheet
2/21/2024	Raymond G. Sanchez Community Center	Parks, Recreation, and Open Space Community Update Meeting	Presented and solicited public input on proposed South Valley Street Tree and GSI Pilot Project	Water Conservation, Stormwater Quality		unknown	
2/24/2024	El Nido Farm	Hands-On Rain Barrel and Passive Rainwater Harvesting Workshop for Tree Stewards	Hands-on workshop on how to install a rain barrel and passive rainwater harvesting features. NRS providing instruction for ABC Tree Steward's workshop.	Water Conservation, Stormwater Quality			
3/2/2024	113 Rio Bravo Blvd. SW (Rail Runner site)	HHW		Stormwater Quality	Clean Harbors		
3/6/2024	Gutierrez Hubbell House	Pajarito NA Meeting	South Valley Street Tree & GSI Project Presentation	Water Conservation, Stormwater Quality			

3/6–3/8/2024	Indian Pueblo Cultural Center	Land and Water Summit	Hybrid conference on protection of land and water resources in arid Southwest and GSI Project Tour. 2024 theme is “Catalyzing Change: Innovating and Adapting.”	Water Conservation, Stormwater Quality			
3/23/2024	Valle de Oro NWR	Build Your Backyard Refuge Day tabling	Presentation of table-top residential GSI model and passive rainwater harvesting field guide (handed out 50+ guides)	Water Conservation, Stormwater Quality			
3/30/2024	Rio Grande High School (Student Parking Lot) 2300 Arenal Rd SW	HHW		Stormwater Quality	Clean Harbors		
Q4							
4/17/2024	2400 Broadway – Land Management	PP/GH	Internal staff training with 20 Land Management field crew	Stormwater		20	sign in sheet
4/21/2024	Balloon Fiesta Park	Earth Day Festival	Passive rainwater harvesting workshop and tabling for Water Conservation and Stormwater Quality Programs	Water Conservation, Stormwater Quality	Arid LID Coalition		
4/27/2024	Raymond G Sanchez	HHW	HHW collection event	Stormwater Quality	Clean Harbors		
4/28/2024	Westside Community Center	South Valley Pride Day	Tabling for Water Conservation, Stormwater Quality, and Hydrogeology Programs at District 2 Community Event	Water Conservation, Stormwater Quality, Hydrogeology			
4/30/2024	Albuquerque Garden Center	Passive Rainwater Harvesting workshop	Workshop for Albuquerque Master Gardeners on design, installation, and maintenance of residential-scale passive rainwater harvesting features, promoting Passive Rainwater Harvesting Field Guide.	Water Conservation, Stormwater Quality			
5/1/2024	ABCWUA Mission	WaterSmart Academy GSI maintenance training	GSI maintenance training for landscape maintenance practitioners	Water Conservation, Stormwater Quality	ABCWUA	7	Headcount at event

5/4/2024	El Nido Farm	Hands-On Rain Barrel and Passive Rainwater Harvesting Installation Workshop for Tree Stewards & Rainwater Harvesting Ambassadors	Hands-on workshop on how to install a rain barrel and passive rainwater harvesting features. NRS providing instruction for ABC Tree Steward's workshop.	Water Conservation, Stormwater Quality	ABC Tree Stewards, Tree NM, Arid LID Coalition		
5/18/2024	Ben Greiner Field	HHW	HHW collection event	Stormwater Quality	Clean Harbors		
5/18/2024	East Central Ministries	Passive rainwater harvesting workshop	Workshop on design, installation, and maintenance of residential-scale passive rainwater harvesting features, promoting Passive Rainwater Harvesting Field Guide. Passive rainwater harvesting kits consisting of plants and mulch provided to participants. 10 am – 12 pm.	Water Conservation, Stormwater Quality	BernCo Open Space (Urban Ag Program), Arid LID Coalition		
6/1/2024	GHH	Flood Irrigation 101	Workshop coordinated by NRS and presented by MRGCD on efficient flood irrigation operations and infrastructure	Water Conservation	MRGCD		
6/8/2024	GHH	Drip Irrigation for Trees workshop	Workshop on how to efficiently irrigate trees with drip irrigation. Participants receive free tree drip irrigation kits.	Water Conservation	BernCo Open Space (Backyard Farming Series)		
6/15/2024	805 Barton Rd, Edgewood, NM (Route 66 Elementry School)	HHW	HHW collection event	Stormwater Quality	Clean Harbors		
6/15/2024	Gutierrez Hubbell House	Laundry-to-Landscape Graywater Systems workshop	Introduction to design, installation, and maintenance of laundry-to-landscape graywater systems, graywater regulations, and Bernalillo County's Graywater Incentive Program (10 am – 12 pm).	Water Conservation	BernCo Open Space (Backyard Farming Series & Urban Ag Program)		
6/15/2024	Carlito Springs Open Space	Carlito Springs Open Space Hydrogeology Walk and Talk	Carlito Springs Open Space Hydrogeology Walk and Talk – Discuss updates and history of the area. How a changing climate is affecting spring flow.	Groundwater	BernCo Open Space (Master Naturalist Program)	40	Headcount at event
6/25/2024	Carlito Springs Open Space	Carlito Springs Open Space Hydrogeology Walk and Talk	Carlito Springs Open Space Hydrogeology Walk and Talk – Discuss updates and history of the area. How a changing climate is affecting spring flow.	Groundwater	BernCo Open Space (Master Naturalist Program), East Mountain Gardners	15	Headcount at event
6/25/2024	25 Frost Rd.	HHW	HHW collection event	Stormwater Quality	Clean Harbors		


ONE ALBUQUERQUE
city of albuquerque

City of Albuquerque

Public Participation Numbers

The City of Albuquerque has provided the following in support of the MS4 permit in fiscal year 2024:

City of Albuquerque MS4 Training:

SWPPP Test: 250 employees

SPCC Test: 63 employees

COA Parks and Open Space

	Volunteers	*Trash (yards)*
Día del Rio	33	3.3
Make a Difference Day	14	1.1
Six Spring Cleanup Days	282	17
National River Clean-up Day	79	24.5
National Trails Day	76	0.5
Total	**484**	**46.4**

COA Solid Waste

Number of people who have dropped off material at Household Hazardous Waste	13,096
Total lbs dropped off at HHW center	541,139
Total lbs recycled at HHW center	429,454
Total lbs re-used at HHW Material Reuse Center	12,414
Number of people re-using materials	1,674
Parti cipants in HHW/DMD Collecti on Event	152
Total lbs collected at Collection Event	13,425

AMAFCA

Albuquerque Metropolitan Arroyo Flood Control Authority

Educational and training opportunities provided to adult college students in the watershed.

March 27, 2024

Guest Presenter UNM Landscape Architecture Bear Arroyo Studio

April 16, 2024

What: Happy Hour celebrating the unanimous passage of the Complete Streets Ordinance
Where: Bow and Arrow Brewery, 608 McKnight Ave NW
When: TONIGHT 5:30–7:30pm

April 17, 2024

UNM SASLA & APA UNM is hosting a Lunch and Learn tomorrow from 12–1 pm in George Pearl Hall, Room 133. It will be Jon Pena, PE with NV5. He'll be discussing the importance of site drainage, collaboration and working across disciplines. This one is really oriented toward students and new professionals.

SUNDAY, April 21, 2024

What: Earth Day Festival
Where: Balloon Fiesta Park
When: Sunday April 21, 10am–4pm
Tickets: $5/person or you can volunteer for Arid LID and get in FREE!

Friday, April 26th, 2024

What: National Arbor Day Celebration
Where: Civic Plaza, Albuquerque
When: 9:30am–1pm
NOTE: Tree Giveaways at 10:30am!!!!

May 6th, 2024

Guest Reviewer UNM Landscape Architecture Studio Final Projects

New Mexico Department of Transportation

Public Meetings FY24

CN A302370

- Project Name: S-Curve Area Study
- Date: November 15, 2023 (1st Meeting)
- Date: April 24, 2024 (2nd Meeting)

A301890

- Project Name: Gibson Interchange Reconstruction Project
- Date: February 22, 2024

A302380

- Project Name: I-40 Bridges over Tijeras Arroyo
- Date: May 16, 2024

Southern Sandoval County Arroyo Flood Control Authority

2023-2024 SSCAFCA Sediment Removal (CY)

Facility ID	Faclity Name	Removed (2024)
BA_F0016	Campus Dam aka Upper SLO Dam	100
BL_F0013	Sunset Pond & Aldaba Storm Drain	80
BL_F0026	Montego court	10
BL_F0040	Athens Court	20
MO_F0078	Tierra De Corrales Pond	90
VE_F0010	Enchanted Hills Dam	3000
VE_F0013	Santiago Channel	50
BL_F0034	Spur Channel	70
CW_F0010	Upper Tree Farm Pond	250
VE_F0024	Encantado Channel North	2400
	Total CY Removed	**6070**

Trash and IDDE removal report:

During the 2024 reporting year, 663 30-gallon trash bags worth of trash were removed from SSCAFCA-owned or operated facilities. This volume is Higher than in previous years. Although the monsoon season has been limited resulting in less runoff to our facilities, there was an increase in the number of trash and debris from homeless individuals living in SSCAFCA arroyos.

Facility ID	Faclity Name	Estimated Bags Removed (30 Gallon)
BL_F0003	Gateway Pond	2
BL_F0004	Tract 17 Pond	75 [1]
BL_F0009	Trevino Channel (Golf Course to Nicklaus Park)	1
BL_F0015	Stallion Channel (powerline easement to Western Hills)	121 [1]
BL_F0022	West Nicklaus Channel (Fairway to Casper)	1
BL_F0023	Black Arroyo Water Quality Pond	14
BL_F0034	Spur Channel	24 [2]
BL_F0036	Lisbon Channel (Tarpoon to Southern)	1
BL_F0037	Lisbon Channel (Southern to Black Arroyo Trail Bridge)	216 [1]
BL_F0038	Black Arroyo Wildlife Park	1
CA_F0010	Calabacillas Arroyo Northern to Southern	1
MO_F0002	Sportsplex Dam	1
MO_F0037	Dulcelina Curtis Channel	1
MO_F0041	Sierra Norte Channel North Hills	2
MO_F0048	Cielo Norte Pond and Outfall Michelle Dr Pond	1
MO_F0057	Flat Iron Pond Northern Meadows	1
MO_F0058	Havasua Falls Pond Northern Meadows	1
MO_F0060	Sunny Meadows Pond	1
NM_F0003	Roskos Field Pond	5
RA_F0002	Rainbow Channel (Vancouver to Pecos Loop)	44 [3]
VE_F0010	Enchanted Hills Dam	144 [1]
VE_F0024	Encantado Channel North	5
	Total	**663**

[1] Trash removed by trailer load - 72 bags/trailer

[2] Matress and Box springs -12 bags for queen size box or mattress

[3] Misc. Household items - furniture, toys

SSCAFCA 2023-2024 Dog Waste Removals (LBS)

Date:	TFP A	Sportsplex	Lisbon	Black Arroyo Trail
7/5/2023	5	9	2	6
7/12/2023	5	10	1	7
7/19/2023	5	12	2	7
7/26/2023	7	10	1	4
8/2/2023	4	12	2	13
8/9/2023	4	9	1	6
8/16/2023	3	10	1	4
8/23/2023	3	9	1	8
8/30/2023	5	7	2	5
9/6/2023	9	12	2	8
9/13/2023	5	8	2	6
9/20/2023	8	10	1	3
9/27/2023	6	9	2	5
10/4/2023	5	11	1	7
10/11/2023	4	7	2	6
10/18/2023	7	12	1	3
10/25/2023	3	7	1	4
11/1/2023	3	11	2	8
11/8/2023	7	10	1	4
11/15/2023	6	8	2	5
11/22/2023	8	11	2	7
11/29/2023	5	9	4	7
12/6/2023	5	8	2	7
12/13/2023	3	5	3	6
12/20/2023	8	6	2	4
1/10/2024	14	16	5	10
1/17/2024	10	7	2	8
1/24/2024	5	7	2	6
1/31/2024	11	8	3	7
2/7/2024	5	6	1	7
2/14/2024	10	6	2	4
2/21/2024	10	9	2	7
2/28/2024	8	6	2	5
3/6/2024	5	12	1	9
3/13/2024	6	9	3	4
3/20/2024	8	6	2	7
3/27/2024	8	6	2	4
4/3/2024	11	9	2	8
4/10/2024	3	5	2	4
4/17/2024	4	6	2	5
4/24/2024	9	5	3	4
5/1/2024	12	10	2	9
5/8/2024	10	8	1	6

SSCAFCA 2023-2024 Dog Waste Removals (LBS)

Date:	TFP A	Sportsplex	Lisbon	Black Arroyo Trail
5/15/2024	4	5	1	5
5/22/2024	8	6	2	5
5/29/2024	3	6	1	4
6/5/2024	5	6	1	5
6/12/2024	6	9	1	5
6/19/2024	3	8	2	4
6/26/2024	8	10	2	7
Totals	**319**	**423**	**92**	**299**
Total Removed all Channels				**1133**

23-24 OUTREACH

July, 2023 - Arroyo Awareness Month

July 6, - Arroyo Awareness Month – Town of Bernalillo Council Meeting

July 11 – Arroyo Awareness Month – Ivory Channel Ribbon Cutting

July 13 – Arroyo Awareness Month – Mariposa Neighborhood Association Meeting

July 26 – Arroyo Awareness Month – Alegria Neighborhood Association Meeting

July 26 – Arroyo Awareness Month – Sandoval County Commission Meeting

August 30th – Sandoval County Master Gardner's Tour of Harvey Jones

September 14 – Community Center Field Trip to Harvey Jones

October 21 – Rio Rancho Fall Festival

November 7 – Field Trip for New Mexico Flood Plain Mangers to various facilities

December 13 – Cleveland High School Presentation

March 5 – Tour of the Harvey Jones for LWCS

May 10 – Interview with Environmental Journalist Nik Kowsar

May 8 – RRHS Presentation

May 16 – Lomitas Negras Field Trip for City of Santa Fe Parks and Rec

On-Going/Year Long- Social Media Posts

SSCAFCA Facility listing and tasks completed 2023–2024

Facility ID	Watershed	Faclity Name	Sediment Removal on Earthen Structures	Sediment Removal on Concrete Structures	Erosion Repair and Control	Structural/Concrete Repairs	Vegetation Removal/ Management	Manual Trash Removal	Access Control	Bank Restoration
BA_F0016	La Barranca	Campus Dam aka Upper SLO Dam	X		X	X	X	X	X	X
BL_F0013	Black Arroyo	Sunset Pond & Aldaba Storm Drain	X		X		X	X	X	X
BL_F0026	Black Arroyo	Montego court	X		X		X	X	X	X
BL_F0040	Black Arroyo	Athens Court	X				X	X		X
MO_F0017	Montoyas	Lomitas Negras Phase 1	X	X	X	X	X	X	X	X
MO_F0064	Montoyas	Tin Cup Pond	X		X		X	X	X	
MO_F0078	Montoyas	Tierra De Corrales Pond	X		X		X	X	X	
VE_F0010	Venada	Enchanted Hills Dam	X	X	X	X	X	X	X	X
VE_F0013	Venada	Santiago Channel	X	X	X	X	X	X	X	X
BL_F0034	Black Arroyo	Spur Channel		X	X	X	X	X	X	X
BL_F0035	Black Arroyo	Lisbon Channel (Tulip to Tarpon)	X	X	X	X	X	X	X	X
CW_F0010	Corrales	Upper Tree Farm Pond	X	X	X	X	X	X	X	X
MO_F0021	Montoyas	Lower MO water quality facility	X	X	X	X	X	X	X	X
VE_F0024	Venada	Encantado Channel North		X		X		X	X	X
BL_F0002	Black Arroyo	Sunset Channel	X		X		X	X	X	X
BL_F0003	Black Arroyo	Gateway Pond	X		X	X	X	X	X	X
BL_F0004	Black Arroyo	Tract 17 Pond	X		X	X	X	X	X	X
BL_F0006	Black Arroyo	Sugar Channel	X		X		X	X		X

X = activity authorized by LOP
Highligted = activity completed this reporting year

SSCAFCA Facility listing and tasks completed 2023–2024

Facility ID	Watershed	Faclity Name	Sediment Removal on Earthen Structures	Sediment Removal on Concrete Structures	Erosion Repair and Control	Structural/Concrete Repairs	Vegetation Removal/ Management	Manual Trash Removal	Access Control	Bank Restoration
BL_F0008	Black Arroyo	East Branch Cabezon Channel		X		X	X	X	X	
BL_F0009	Black Arroyo	Trevino Channel (Golf Course to Nicklaus Park)	X		X		X	X		X
BL_F0014	Black Arroyo	Ivory Channel	X	X		X	X	X		X
BL_F0014	Black Arroyo	Ivory Channel	X	X		X	X	X	X	X
BL_F0015	Black Arroyo	Stallion Channel (powerline easement to Western Hills)	X		X		X	X	X	
BL_F0020	Black Arroyo	West Nicklaus Channel (Bogie to Lema)	X		X		X	X		X
BL_F0020	Black Arroyo	West Nicklaus Channel (Bogie to Lema)	X		X		X	X		X
BL_F0022	Black Arroyo	West Nicklaus Channel (Fairway to Casper)	X		X		X	X		X
BL_F0022	Black Arroyo	West Nicklaus Channel (Fairway to Casper)	X		X		X	X		X
BL_F0023	Black Arroyo	Black Arroyo Water Quality Pond	X		X		X	X		
BL_F0029	Black Arroyo	Arkansas Channel	X		X	X	X	X	X	
BL_F0030	Black Arroyo	Rodeo Channel	X		X		X	X		X
BL_F0031	Black Arroyo	Pecos Channel	X		X		X	X		X
BL_F0031	Black Arroyo	Pecos Channel	X	X	X	X	X	X	X	X
BL_F0032	Black Arroyo	Baltic Channel	X		X		X	X		X
BL_F0033	Black Arroyo	Bali Channel	X		X		X	X		X
BL_F0036	Black Arroyo	Lisbon Channel (Tarpoon to Southern)	X		X		X	X	X	X
BL_F0037	Black Arroyo	Lisbon Channel (Southern to Black Arroyo Trail Bridge)	X		X		X	X	X	X

X = activity authorized by LOP
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SSCAFCA Facility listing and tasks completed 2023–2024

Facility ID	Watershed	Faclity Name	Sediment Removal on Earthen Structures	Sediment Removal on Concrete Structures	Erosion Repair and Control	Structural/Concrete Repairs	Vegetation Removal/ Management	Manual Trash Removal	Access Control	Bank Restoration
BL_F0038	Black Arroyo	Black Arroyo Wildlife Park			X		X	X	X	X
BL_F0039	Black Arroyo	Landing Trail Pond	X		X		X	X	X	X
CA_F0008	Callabacillas	Redwood Pond	X		X		X	X	X	X
CA_F0010	Calabacillas Arroyo	Calabacillas Arroyo Northern to Southern	X		X		X	X	X	X
CA_F0013	Callabacillas	Cholla Pond							X	
CO_F0002	Coronado	Bosque de Bernalillo Water Quality Facility	X		X		X	X	X	X
CO_F0005	Coronado	Joiner Pond Unit 20 Industrial Park		X	X	X	X	X	X	
CW_F0009	Corrales	Lower Tree Farm Pond	X		X		X	X	X	
CW_F0011	Corrales	Urban Pond - Stephanie Rd	X		X		X	X	X	
CW_F0013	Corrales	lower urban pond	X		X		X	X	X	
MO_F0002	Montoyas	Sportsplex Dam	X		X	X	X	X	X	
MO_F0010	Montoyas	Lomitas Negras Phase 2	X	X	X	X	X	X	X	X
MO_F0012	Montoyas	Harvey Jones Channel Corrales Rd to River	X	X	X	X	X	X	X	
MO_F0015	Montoyas	Corrales Heights Dam	X	X	X	X	X	X	X	X
MO_F0029	Montoyas	Lower MO Water Quality Facility to NM 528	X		X		X	X	X	X
MO_F0037	Montoyas	Dulcelina Curtis Channel		X		X	X	X	X	
MO_F0040	Montoyas	Harvey Jones Channel Inlet to Corrales Rd		X		X		X	X	X
MO_F0041	Montoyas	Sierra Norte Channel North Hills	X	X	X	X	X	X	X	X

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Highligted = activity completed this reporting year

SSCAFCA Facility listing and tasks completed 2023–2024

Facility ID	Watershed	Faclity Name	Sediment Removal on Earthen Structures	Sediment Removal on Concrete Structures	Erosion Repair and Control	Structural/Concrete Repairs	Vegetation Removal/ Management	Manual Trash Removal	Access Control	Bank Restoration
MO_F0042	Montoyas	Acadia Court Pond	X		X	X	X	X	X	
MO_F0043	Montoyas	Loma Pinon Loop Pond	X		X	X	X	X	X	
MO_F0045	Montoyas	Sundt Pond	X		X		X	X	X	
MO_F0046	Montoyas	Pam's Pond	X		X		X	X	X	
MO_F0047	Montoyas	Pond 116	X		X		X	X	X	X
MO_F0048	Montoyas	Cielo Norte Pond and Outfall Michelle Dr Pond	X		X	X	X	X	X	X
MO_F0049	Montoyas	Wilpett Pond 1 Northern Meadows	X		X		X	X	X	
MO_F0050	Montoyas	Wilpett Pond 2 Northern Meadows	X		X	X	X	X	X	
MO_F0051	Montoyas	Wilpett Pond 3 Northern Meadows	X		X		X	X	X	
MO_F0052	Montoyas	Wilpett Pond 4 Northern Meadows	X		X		X	X	X	
MO_F0053	Montoyas	Wilpett Pond 5 Northern Meadows	X		X		X	X	X	
MO_F0055	Montoyas	Clear Creek Pond Northern Meadows	X		X	X	X	X	X	
MO_F0056	Montoyas	Desert Willow Pond Northern Meadows	X		X		X	X	X	
MO_F0057	Montoyas	Flat Iron Pond Northern Meadows	X		X		X	X	X	
MO_F0057	Montoyas	Flat Iron Pond Northern Meadows	X		X		X	X	X	
MO_F0058	Montoyas	Havasua Falls Pond Northern Meadows	X		X		X	X	X	
MO_F0058	Montoyas	Havasua Falls Pond Northern Meadows	X		X		X	X	X	
MO_F0060	Montoyas	Sunny Meadows Pond	X		X		X	X	X	

X = activity authorized by LOP
Highligted = activity completed this reporting year

SSCAFCA Facility listing and tasks completed 2023–2024

Facility ID	Watershed	Faclity Name	Sediment Removal on Earthen Structures	Sediment Removal on Concrete Structures	Erosion Repair and Control	Structural/Concrete Repairs	Vegetation Removal/ Management	Manual Trash Removal	Access Control	Bank Restoration
MO_F0060	Montoyas	Sunny Meadows Pond	X		X		X	X	X	
MO_F0062	Montoyas	King Blvd Pond Northern Meadows	X		X		X	X	X	
MO_F0063	Montoyas	Marlow Meadows Pond	X		X		X	X	X	X
MO_F0065	Montoyas	Paseo Vista Pond	X		X		X	X	X	
MO_F0068	Montoyas	Sierra Norte Park	X		X	X	X	X	X	X
MO_F0069	Montoyas	Zia Pond		X	X	X	X	X	X	
MO_F0071	Walter Road Pond	Walter Road Pond	X		X		X	X	X	
MO_F0072	Montoyas	26th Ave Pond	X		X		X	X	X	
MO_F0072	Montoyas	26th Ave Pond	X		X		X	X	X	X
MO_F0073	Montoyas	25th Ave Pond	X		X		X	X	X	
MO_F0074	Montoyas	Inca Pond	X		X		X	X	X	
MO_F0075	Montoyas	Serene Pond	X		X	X	X	X	X	
MO_F0076	Montoyas	Rio Oso Pond	X		X		X	X	X	
MO_F0079	Montoyas	Copperton Pond	X		X		X	X	X	
MO_F0080	Montoyas	Angel Pond	X		X		X	X	X	
MO_F0081	Montoyas	Jade Pond	X		X		X	X	X	
NM_F0003	NM 528	Roskos Field Pond	X	X	X	X	X	X		
RA_F0001	Rainbow	Rainbow Pond	X		X	X	X	X	X	X

X = activity authorized by LOP
Highligted = activity completed this reporting year

SSCAFCA Facility listing and tasks completed 2023–2024

Facility ID	Watershed	Faclity Name	Sediment Removal on Earthen Structures	Sediment Removal on Concrete Structures	Erosion Repair and Control	Structural/Concrete Repairs	Vegetation Removal/ Management	Manual Trash Removal	Access Control	Bank Restoration
RA_F0001	Rainbow	Rainbow Pond	X		X	X	X	X	X	X
RA_F0002	Rainbow	Rainbow Channel (Vancouver to Pecos Loop)	X		X	X	X	X	X	X
VE_F0026	Venada	Santa Fe Hills Pond	X		X		X	X	X	
VE_F0027	Venada	Sprint Pond	X		X		X	X	X	

X = activity authorized by LOP
Highligted = activity completed this reporting year

Village of Corrales

The Village of Corrales has no municipal storm sewer system. To handle stormwater flows from development, engineered grading and drainage (G & D) plans are required prior to any residential construction that will disturb more than 1,000 square feet. Engineers may design berms, swales, retention ponds and other aspects to keep new impervious surface (roofed or paved) stormwater flows on the subject property and not running into streets or adjacent properties.

Within the Commercial zone, stormwater retention areas must be built into Site Development Plan drawings before those applications can be heard by the Planning and Zoning Commission.

In FY24, the Village saw 22 residential grading and drainage plans prior to issuing building permits. There were three Commercial Site Development Plans that incorporated drainage (primarily retention ponding) into their designs, as required by Village Code.

The Public Works Department installed an underground stormwater conveyance near Burlbaw Lane, which has an extreme slope throughout the entire neighborhood. Traditionally this has been a trouble area where stormwater would race down the properties and across Loma Larga, one of Corrales' main north/south corridors, temporarily closing the road. A new, deeper retention area that is part of the project will now keep the flows from flooding the road, ditch, and ultimately the Rio Grande.

This fiscal year, the Corrales Bosque Advisory Commission in conjunction with the Corrales Fire Department continued their efforts to encourage dog waste pick-up along popular pedestrian areas into the Bosque and elsewhere in the Village. There are nine waste bag stations and trash receptacles located at Bosque access gates, Camino de la Tierra (entrance to popular Sand Dunes walking area) and at Quirks Lane. CBAC provided approximately 8500 dog poop bags in/near the Bosque, and an additional 500 bags at the other location, same as last fiscal. This will greatly reduce the amount of dog waste otherwise in danger of polluting the acequias, canals or Rio Grande.

The glass recycling area continues to operate. This fiscal, the Village recycled another 80.5 TONS of glass.

The Village is continuing the twice-a-year (spring and fall) community "Clean-Up" days, accepting nonhazardous and yard waste. Approximately 200 households per year participate. Our Code Enforcement Officer works with citizens throughout the year to have them remove trash, non-functional vehicles and other items that could leak fluids into the groundwater. There is no municipal water system; all structures are serviced by wells.

Every year during the Corrales Harvest Festival, which is attended by folks from throughout the metro, a Stormwater Team booth educates the public on the importance of keeping waste, oils, floatables and other items out of the river.

Burlbaw Lane retention project

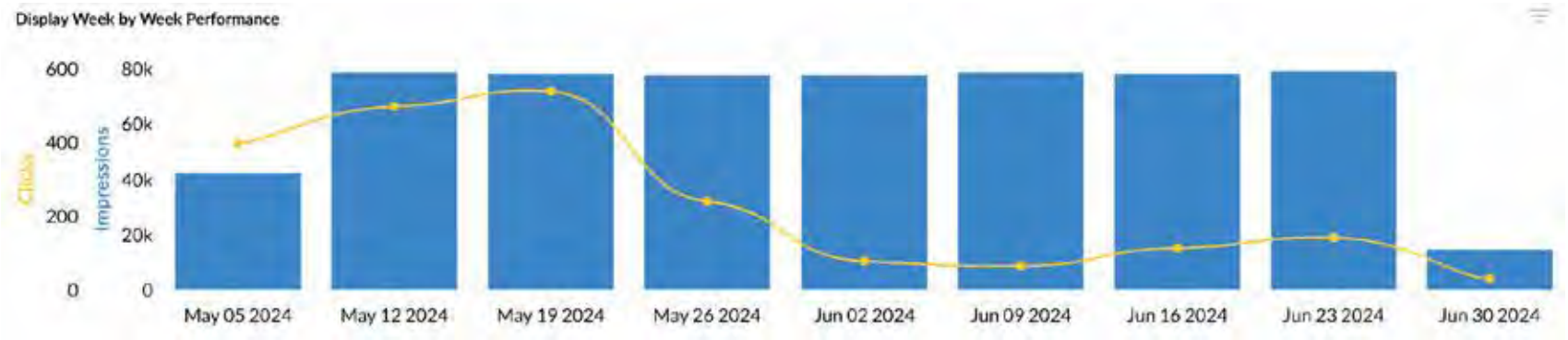
Stormwater Quality

Digital Media Performance

Campaign:
4/15/2024 - 6/30/2024

Programmatic Display

IMPRESSIONS DELIVERED	CLICKS	CTR
602,986	2,084	0.35%



HIGHEST PERFORMING AD SIZES

Mobile 320x50
Impressions: 114,852
Clicks: 372
CTR: 0.32%

728x90
Impressions: 60,567
Clicks: 206
CTR: 0.34%

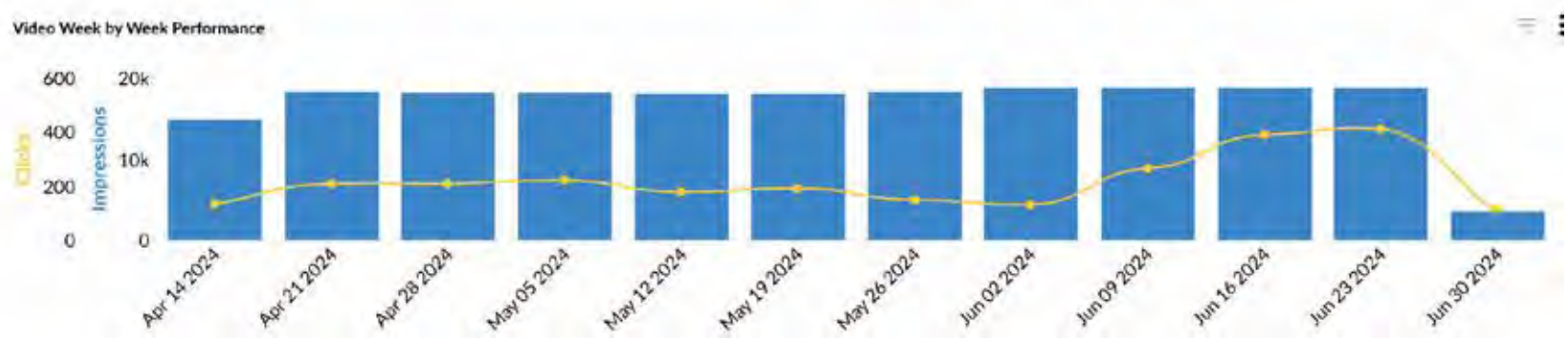
National average CTR for Display: 0.07%

SUNNY505

Mid Rio Grande Stormwater Quality Team

Pre-Roll Video

IMPRESSIONS DELIVERED	CLICKS	CTR	VIEW COMPLETION RATE
202,000	2,585	1.28%	75.31%



National average CTR for Pre-Roll: 0.12%

National average VCR for Pre-Roll: 35%

SUNNY505

Mid Rio Grande Stormwater Quality Team

OTT

VIEW COMPLETION RATES

IMPRESSIONS DELIVERED	50% COMPLETED	75% COMPLETED	100% COMPLETED
101,084	99.98%	99.84%	99.59%

DEVICE EXPOSURE

Smart TV

Set Top Box

Game Console

SUNNY505

Mid Rio Grande Stormwater Quality Team

Paid Social

USERS REACHED	IMPRESSIONS DELIVERED	CLICKS	CTR
94,654	460,702	6,771	1.47%

National average CTR for Paid Social: 1%

SUNNY505

Mid Rio Grande Stormwater Quality Team

YouTube

IMPRESSIONS DELIVERED	CLICKS	CTR
159,664	1,829	1.15%

DEVICE EXPOSURE

Desktop Device

Mobile Device

Tablet Device

National average CTR for YouTube Ads: 0.65%

SUNNY505

Mid Rio Grande Stormwater Quality Team

Children's Water Festival

Rio Rancho, 2023

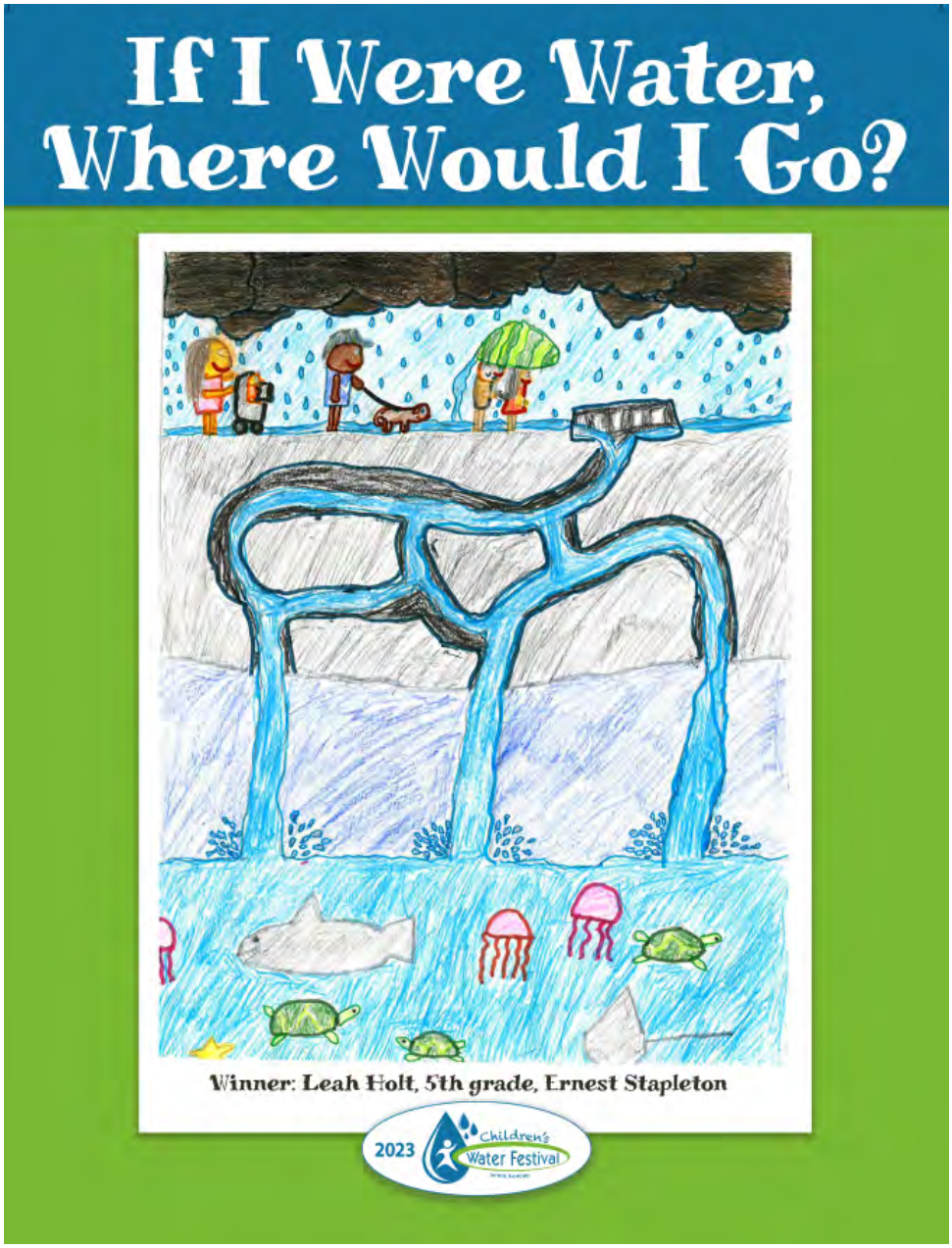


Table of Contents

Executive Summary

The 2023 Children's Water Festival (Festival) was held on Monday, October 23rd and Tuesday, October 24th at the Rio Rancho Events Center in Rio Rancho. Due to the pandemic, changes were made to the size and structure of the Festival to better accommodate the students and to give them a better all-around experience. Historically, fourth grade students attended the Festival. There was a change in school curriculum and for the past two years fifth grade students were invited to better fit into the schools' science learning objectives. Additionally, students attended from one-half of the Rio Rancho elementary schools' students, as the other half of the Rio Rancho elementary schools attended in 2022. Over 780 students from 34 classrooms, from Enchanted Hills, Vista Grande, Ernest Stapleton, St. Thomas Aquinas, Sandia Vista, Colinas Del Norte, and Cielo Azul Elementary Schools participated. Each class attend 4, 25-minute presentations. Seventeen hands-on presentations taught water-related ideas and concepts to the students.

The Festival had 49 presenters/associates and 18 volunteers to guide the classes to the assigned activity.

The seventeen presentations represented professional organizations that ranged from federal, state, regional governments, and private industry. The organizations all have water interests and focused on subjects such as the water cycle, water quantity and conservation, water distribution, wastewater and water quality/pollution.

Students were evaluated on basic water knowledge after the Festival. There were eight questions asked of the students and they averaged between 55% to 90% correct on the questions. A more detailed breakdown is found in the Student Post-test Scores section.

The Festival costs an estimated $26,516.63. The City of Rio Rancho contributed $10,000 to the Festival and additional funding was raised through Ciudad Soil & Water Conservation District. Festival sponsors include: TLC Plumbing, Jacobs, Waste Management, Southern Sandoval County Arroyo Flood Control Authority, Carollo Engineering, Resource Wise, Daniel B. Stephens & Associates, Bright Ideas Promotional Products, and CWA Strategic Communications.

Introduction

The Children's Water Festival (Festival) has been held in Rio Rancho since 2007. The 2010 Festival was the first event hosted by the City of Rio Rancho's Water Conservation Office. This report is for the 2023 Festival; the twelfth event hosted by the Water Conservation Office. There was a two-year hiatus because of the Covid-19 Pandemic. As in years past, the Festival was held at the Rio Rancho Events Center and about 780 students attended from 34 fifth grade classrooms from Rio Rancho Public Schools and one private school. The event was held on Monday, October 23rd and Tuesday, October 24th.

Purpose and Intent

The principal focus of the Festival is to educate fifth grade school children about water and its relationship to humans, animals and other natural resources in a fun and interactive atmosphere. The Festival's vision is to:

- Introduce students and teachers to new ideas, options, and solutions so they will conserve and protect water for the future,
- Lay the foundation for further learning, and
- Reach as many students and teachers as possible.

Public participation is essential to successful water conservation, and educating the public promotes better water conservation planning and implementation. Early education influences the future acceptance of water conservation concepts. This early education experience also has shown that training efforts affected behavioral changes and improved water use practices. Water conservation goals are only as effective as water users' willingness to adopt and implement appropriate water conservation measures. Through special training activities, water users are taught proper water use practices and techniques. Efficient use of water supplies decreases waste and prevents degradation of water quality leading to healthier ecosystems for fish and wildlife, including locally listed endangered species, such as, the Rio Grande Silvery Minnow (*Hybognathus amarus)* and the Southwestern Willow Flycatcher (*Empidonax traillii extimus*).

The Festival was designed specifically to introduce and explain new and unfamiliar water management tools to present and future water users and managers. Research concerning water conservation education indicates the targeted group of the Festival, fifth grade students, is ideal for achieving long-term goals. Through sharing water conservation and water quality tools at home and with extended family, the estimated 800 participants (students, teachers, and chaperones) represent a potential audience of 10,000 to 15,000 people for the Festival program.

A series of activities that cover a wide range of core curriculum areas were presented at the Festival. These activities included language arts, mathematics, science, social studies, visual arts, and health/wellness; all of which are tied to water conservation, water quality, and water quantity in the arid Southwest desert.

The updated Water Resources Management Plan (Plan), adopted by the City of Rio Rancho Governing Body in 2020, details water efficiencies and water conservation measures to be taken by the City to better manage the existing water supplies. Policy E.5 of the Plan sets forth this initiative: "Continue consulting with and improving the partnership with Rio Rancho Public Schools to implement a robust water resources educational curriculum."

Additionally, the City of Rio Rancho Strategic Plan was formally adopted by the City of Rio Rancho Governing Body on March 25, 2009 and updated in September 28, 2023. One important element of the Infrastructure Strategies section of the Strategic Plan pertains to water sustainability and conservation to support growth and development of the City.

Funds

Festival Cost

The Festival costs are listed in the table below. Please note that the cost for the Rio Rancho Events Center is only for the personnel time, including two police officers per day for security. The pipe and drape for the booth setup was bought by the Festival in previous years so there is no pipe and drape rental. A private bus company is used because there has been issues in the past with the public-school buses not arriving at the schools on time to pick up the students and deliver them to the Festival.

Cost Description	**Amount**
Rio Rancho Events Center	$3,080.25
Catering for volunteers & presenters	$3,494.18
Buses (Herrera Coaches)	$11,029.00
T-shirts with art/logos (805 shirts)	$7,295.00
Supplies (paper, postage, thank you cards, etc.)	$618.20
Fiscal Partner	$1,000.00
Total	**$26,516.63**

Sponsorships

Through its fiscal partner, Ciudad Soil & Water Conservation District, the City of Rio Rancho was able to secure several sponsors to fund the Festival. Additionally, the City sponsored $10,000 for the Festival.

A heartfelt "thank you" to these valuable Festival partners!

Steering Committee

The Festival was directed by a diverse steering committee. The core group contained members from:

- City of Rio Rancho's Water Conservation Office
- New Mexico Environment Department – Surface Water Quality Bureau
- Citizen volunteers

Design of Festival

Students attended four presentations at the Water Festival.

Pre-Festival Activities

- Each school provides a lead fifth grade teacher who confirms their commitment to participate, provides the number and names of the teacher/classes and the number of anticipated students for each.
- Elementary schools are provided the information on how to participate in the student T-shirt artwork project; student art work is submitted to the Water Conservation Office and a winner is selected by the committee.
- Teachers received the T-shirts prior to the event in order for students to wear them to the festival.
- Students take a pre-test in order to gauge their knowledge prior to the event. A post-test is given after the event to see how much students learn. More information can be found in the Post-Test section of this report.

Rio Rancho Children's Water Festival Event

- The Water Festival functioned from 10 a.m. through 12 p.m.
- Students attending the Festival boarded on buses at 9:30 a.m. at their school.
- Each class was met by a guide/timekeeper who escorted them to each of their four assigned presentations.
- Presentations lasted 25 minutes and topics included: water quality, water conservation, water cycle, watersheds, wastewater, historical water use, ecosystems, weather, and built water infrastructure.
- All students received a Festival T-shirt. Leah Holt from Ernest Stapleton Elementary, was the winner of the T-shirt student artwork contest. Her design was displayed on the front of the T-shirt and Festival sponsor logos were on the back.

Leah Holt – T-shirt artwork winner from Ernest Stapleton Elementary class

Post-Festival Activities

- Teachers will receive a copy of this report.

All aspects of the Festival planning and implementation were created with the *Big Water Questions* in mind. Each presentation addressed at least one of the *Big Water Questions*, as well as the Festival's mission and objectives. The long-term outcome goal is that all elementary school students will be able to provide reasonable answers to these questions by the time they reach middle school.

Big Water Questions

- Why is water so important to life?
- How do all living things depend on each other?
- What is the water cycle?
- What is a watershed?
- Where does my drinking water come from?
- What makes water dirty?
- How much water does my family use?
- Who are the other water users in our society?
- How can *I* protect our water?
- Where does my wastewater go?

Schools Attending the Festival

The following table outlines which schools attended.

Elementary School	**Number of Classes**
Enchanted Hills Elementary	5
Vista Grande Elementary	6
Ernest Stapleton Elementary	6
St. Thomas Aquinas Elementary	2
Sandia Vista Elementary	5
Colinas Del Norte Elementary	4
Cielo Azul Elementary	6
Totals	**34**

Festival Presentations

"Backyard Bass Fishing" activity. Students learned how water quality impacts aquatic life. Correct fishing technique was also taught and practiced.

Each year the Festival relies on numerous professionals who volunteer their expertise and presentation time. These professionals represent federal, state and regional government entities, local engineering firms, and the school district. They choose presentations that represent their missions or specialties. A description of all the presentations, the presenters and their contact information has been provided in Appendix A.

Volunteers

The Festival could not be held without the assistance of a number of volunteers, presenters, and steering committee members. Volunteers were required to use the City's on-line application process to have a background check.

Lessons Learned

Steering Committee Comments from the Festival

There were only a few comments from the steering committee including:

Event Aspect	Overall Performance	Areas of Improvement
Communication/coordinating with schools	Good overall	Continue to prioritize meetings with the teachers early on regarding Water Festival logistics. It would be beneficial to contact teachers as soon as school year starts.
Transportation	Went well	Some buses were a little late picking up the students from school or from the event center. We will need direct contact with bus drivers going forward.
Presentations	Presenters were enthusiastic	Make sure to go over the key words/concepts. Give presenters the schedule ahead of time. Presenters should have enough material (or filler) to engage the students so they don't finish too early. Ensure that presenters are speaking at an appropriate volume for students and teachers to hear.
Transition between presentations	Average	More detailed trainings for guides. The guides had blue vests this year which made them easy to locate. Students should stay at current stations until end of allotted time.
Food	Good overall	Due to labor and food costs increasing, some items were adjusted to fit the budget.
Logistics (Public safety, RREC)	Good overall	Need sign in sheets for Master Gardeners. Also need separate sign in sheets for volunteers and presenters. Decorations were added this year- less balloons and more streamers going forward. Utilize the facility capabilities by using lights, banners, and sound system.

Break (20 minutes)	N/A	There was no break this year as we had morning sessions only for two days.
T-shirts	Above average	Order majority mediums and fewer smalls next year. Larger sizes were in demand this year – mostly large.
Training of guides/teachers, etc.	Could be better	No student should be by themselves. They need to be accompanied by teachers. Reminder should be announced at beginning of event.
General		Set up should be done many hours in advance so presenters can easily locate their station. Presenters swapped stations this year which made the map inaccurate and guides confused. This should be avoided next year and if it occurs, the map should be updated immediately. Have a media person help with medial release. Have a Water Festival webpage (need to discuss with city management). "Thank You" banner for sponsor did not fit our stand – we will need to adjust this for next year.

Action Items:

- Need to replenish the supply of SWAG – bags, fans, stress balls etc.

Festival Event

The two days of the Festival ran very smooth. A private bus company was used because of issues with RRPS buses the past several years.

We did not have a dedicated photographer this year. Volunteers and Staff took many photos asking the teachers what students to not photograph. Teachers were in charge of the photo release forms so they informed us of what students did not return the form. Photo release forms were collected the day of the event.

Appendix A - Working Timeline

The following was used to ensure that steps of the Festival preparation were completed in a timely manner.

- June 30 - Ask for sponsors
- July 30 - Update VIP list
- July 30 – Reach out to presenters
- August 1 – PO for RR Sponsorship
- August 1 – PO for Buses
- August 8 – RR schools starts
- August 20 – Design poster with the theme
- August 20 - Email teachers about CWF date and artwork delivery
- August 22 – Drop off artwork paperwork, poster, photo release forms
- September 6 – Email volunteers
- September 6 - Email reminder to teachers including schedule
- September 6 – Pick up artwork, photo release forms
- September 13 – Meeting to select the winner
- September 13 – Artwork to Rio Rancho T Shirts
- September 15 - Update VIP list and mail invitations
- September 20 - Meet with RREC about food, etc.
- October 13 – Pick up T Shirts
- October 15 - Email layout to RREC
- October 18 – Meeting to pack bags of t-shirts
- October 20 – Drop off bags this day
- October 23rd and 24th – Water Festival
- October 27– Remind teachers about post-test and teacher evaluation sheets. Volunteer feedback forms also sent out.

Appendix B – Festival Presentations

This appendix lists all of the Festival presentations and contacts. For each section, there is the name of the presentation, a brief description of the activity, the contact information of the presenter and if available, where the teacher can locate a similar presentation if they would like to teach it in the classroom.

****

Basic Surface Water Treatment

Students learn about processes used to clean water in a contemporary water treatment facility through an interactive process. This activity teaches children about the importance of water quality for drinking water.

Carollo Engineers
Rob Buss rbuss@carollo.com

****

Incredible Journey

During this activity, students become water molecules and move through the water cycle. They learn about the movement and distribution of water – as well as pollution – on the earth.

NM Environment Department, Surface Water Quality Bureau
Heidi Henderson heidi.henderson@state.nm.us

A similar activity found on web: Incredible Journey, Project WET http://files.dnr.state.mn.us/education_safety/education/project_wet/sample_activity.pdf

****

Keep the Rio Grande

Keep the Rio Grande Activity is an interactive game where the students become an arroyo supplying stormwater to the Rio Grande. The stormwater picks up a variety of items as the flow increases creating a flood of raindrops, trash, pet waste, bacteria, and plastics as the students pass the items down to the river. The students learn about stormwater quality and the impact we have on water in our neighborhoods and town. After the rain has stopped, students discuss the water and debris on the ground around them and at the end of the line the river. Then they are tasked with sorting all of the items to bins labeled: trash, compost, recycle and rain.

Middle Rio Grande Stormwater Quality Team
Xavier Pettes (505) 891-5045 xpettes@rrnm.gov

****

Leaky Faucet

Students create a water leak and scientifically measure the leak using graduated cylinders over three tests. The students then compute the average milliliters of water leaked over one minute to the number of gallons of water leaked and wasted over one year.

Resource Wise
Lonnie Burke (505) 453-0027 lburke@resource-wise.com

A similar activity found on web: Leaky Faucet, Utah Education Network http://www.uen.org/Lessonplan/preview.cgi?LPid=27247

****

Let's Settle This Outside

Students become wastewater operators and learn how the wastewater treatment plant cleans dirty water. They then create wastewater using everyday materials and clean the wastewater by sorting it into three stations: water, sludge, and trash.

Jacobs

Bill Jaquez	(505) 891-5024	billy.jaquez@jacobs.com
Eric Jacquez	(505) 537-1712	Eric.Jaquez@jacobs.com

A similar activity found on web: Wastewater: We Treat it Right, City of Boise	http://bee.cityofboise.org/media/216580/43385_Wastewater.pdf

****

Rolling River

How does a river work? Students interact with a model watershed and watch the cause and effects of precipitation as it flows down-gradient from urban and rural environments. Students learn about "pervious" and "impervious" surfaces and their relationship with the water cycle, including pollutant transport and increased erosion. Students learn that their personal actions can protect their watershed.

Ciudad Soil and Water Conservation District

Steve Glass jstvglass@gmail.com

A similar activity found on web: Protecting Our Water Resources, Midwest Research Institute (See Level 2)
http://www.stormwater.ucf.edu/toolkit/vol3/Contents/pdfs/Student%20Activities/student_activities.pdf

****

Sustainable Tomorrow

WM of New Mexico host a giant pong game designed to help students learn how to Reduce, Reuse and Recycle as ways to help conserve water and other natural resources. Following a short interactive presentation, students step up to a collection of mini basketballs labeled with different materials such as Plastic Water Bottle, Cardboard Box, Blue Jeans, etc. The object of the game is to get the material (noted on the basketball) into the correct bucket – either Recycle, Reuse or Reduce. In action, the game offers the dual challenge of learning what the greenest option for different materials was and then getting the bouncing ball into the right 3-gallon bucket.

Waste Management

Anne Spitza aspitza@wm.com

****

Olla Olé

Students learn the history of collecting water in the ancient southwestern United States using clay pots. They also learn how ollas (clay pots) were used as an irrigation technique for crops and then the students make a mini olla to take home for use.

Citizen

Cheri Vogel and Teresa Harner cheri_vogel@yahoo.com and tjarner@comcast.net

****

Wateropoly

Modeled after the game Monopoly, a board game that teaches children ways to conserve water and how water is wasted. The game involves math – adding, subtracting, multiplying and using fractions. Students will see how many gallons of water they have remaining at the end of the game.

City of Rio Rancho

Matthew Gachupin mgachupin@rrnm.gov

****

My Water Footprint

A Water Footprint represents how a person uses water to meet their needs (direct uses) and the water that others such as growers manufacturers, processors use (indirect uses) to provide products we purchase and use every day. The activity teaches the importance of water and introduces/explains the terms direct and indirect water use and challenges students to think of ways to conserve water. The students also create a collage that illustrates their water needs by incorporating both direct and indirect water use along with ways to conserve water.

New Mexico Office of the State Engineer, Water Conservation Bureau

Ariana Gagnon arianna.gagnon@ose.nm.gov

****

Stormwater and Watersheds

Students learn about watersheds by examining and manipulating watershed models. They learn that a watershed is the land area that drains to a water body such as a river or lake. They see for themselves how watersheds can influence water quality.

Sandia National Laboratories
John Kay (505) 344-7240 jtkay@sandia.gov

A similar activity found on web: Protecting Our Water Resources, Midwest Research Institute (See Level 2) http://www.stormwater.ucf.edu/toolkit/vol3/Contents/pdfs/Student%20Activities/student_activities.pdf

****

Water Jeopardy

Students learn basic concepts and differences about groundwater vs. surface water supply for potable drinking water. The concepts are reinforced by participation in a Jeopardy game where students compete to determine the correct water "question" for a series of given "answers" (like the TV show).

Bohannon Huston, Inc.
Nathan Roberts (505) 823-1000
nroberts@bhinc.com

A similar activity found on web: The Water Cycle Jeopardy, Super Teacher Tools (online Flash game for up to 5 teams) http://www.superteachertools.com/jeopardy/usergames/Jan201205/game1327973751.php

****

Flash Flooding

This activity demonstrates several ways flash flooding can occur utilizing our flood model. We allow the kids to use a pitcher of water to demonstrate rainfall and how rain-rate affects flash flooding. The model uses sponges to show how the ground can soak up a lot of that rainwater but eventually it runs off into the streams, arroyos and eventually rivers. If the ground or sponge is saturated, then all the rainfall runs off into the drainage areas. We have toy houses to show what happens to houses in flood prone areas and how to build levees to protect structures. We could change out the sponges or ground for a flat plexiglass surface to represent concrete. We could show how the "concrete" does not catch any rainfall and it immediately runs off causing flooding. We also demonstrate by moving our rain catcher how flooding changes with moving storms or how it changes with the speed of storms. These demonstrations let us have conversations with the kids and teachers about flood safety and preparedness.

National Oceanic & Atmospheric Administration, National Weather Service
Scott Overpeck scott.overpeck@noaa.gov

****

Build a Wastewater System

Students learn about the wastewater system and how they operate in a community. They learn how wastewater is generate in their homes and travels through piping to the wastewater treatment plant. Information regarding water treatment plants and pipe sizing is incorporated. Students build their own wastewater system by using different sized noodles for piping, and drawing their own city including homes, businesses and treatment plants.

City of Rio Rancho
Ethan Demello edemello@rrnm.gov

****

Water Cycle Paper Plates

Students discuss all aspects of the water cycle and the role it plays in water conservation. Paper plates will be used to visualize each step of the water cycle.

Albuquerque Open Space
Ellie Althoff ealthoff@cabq.gov

****

Watershed Ecology
Students learn about the plants, mammals, arthropods, and water table along the Bosque and how they are all supported by water in the Rio Grande.

Bosque Eco System Monitoring Program
Zoe.Wadkins@bemp.org

****

Pump It Up! All About Aquifers
Students learn about the important role aquifers play in supplying water. Logistics of how aquifers work will be discussed and students will get to be their own aquifer on a smaller scale through soap push pumps.

United States Geological Survey
Lydia Coenen lcoenen@usgs.gov

****

Backyard Bass Fishing
What is fishing without fish? Students learn the importance of water quality and its affect on aquatic life. Proper and safe fishing techniques will also be taught and students will be able to practice.

New Mexico Department of Game and Fish
Dennis Segura dennis.segura@dgf.nm.gov

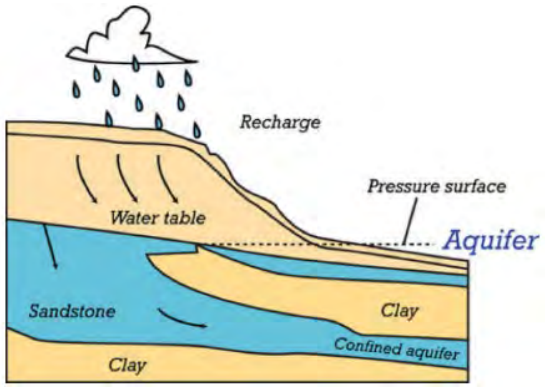
Appendix C - Post Test

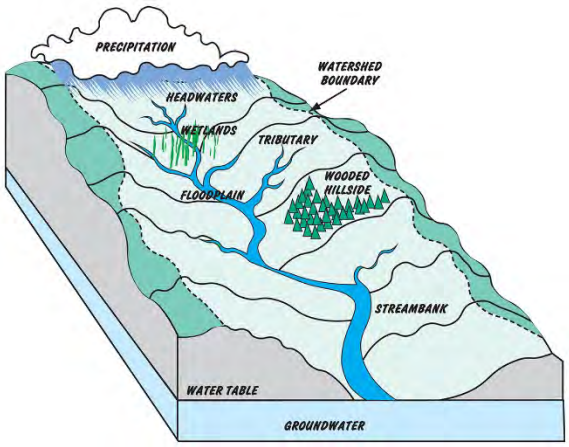
The Festival steering committee rewrote the student test in 2017; diagrams and pictures were added to help the students visualize the concepts. In 2019, Google Forms was used with the Rio Rancho students to take the tests. These tests were without diagrams and pictures.

The tests were written in Google Forms to be used and diagrams and pictures were added. Point values were assigned to the test questions based on teacher recommendation.

1. Many substances and objects can make river water dirty. Which of the following items can make the Rio Grande dirty?
   a) Trash
   b) Dog poop
   c) Leaky cars
   d) All the above

2. An **aquifer** is a layer of water-saturated porous rock. It lies below the water table. Most people who live in New Mexico get drinking water from a well drilled into an aquifer. If you live in Rio Rancho, is the water coming from your faucet from an aquifer?
   a) True
   b) False



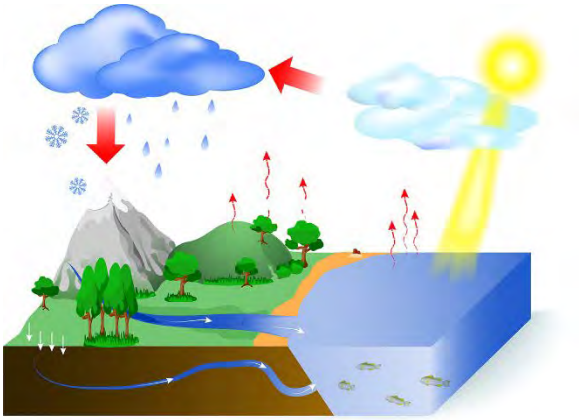


3. A **watershed** is an area of land that drains all the streams and rainfall to a common outlet such as the outflow of a reservoir, mouth of a bay, or any point along a stream channel. Is the following statement true or false: We all live in a watershed?
   a) False
   b) True

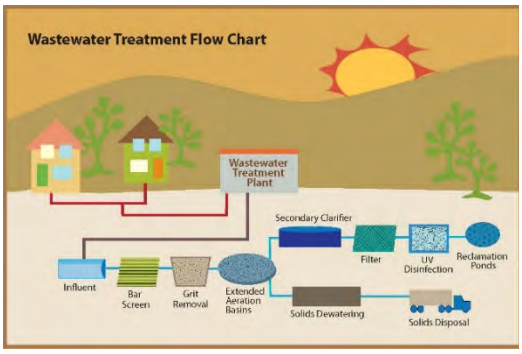
4. Everyone in Rio Rancho uses, on average, about 65 gallons of water per person per day. If you have four people in your home, what is your family's daily average water use?
   a) 260 gallons of water per day
   b) 200 gallons of water per day
   c) 2,600 gallons of water per day

5. Water users in our state include plants, animals, and people. Why is water so important to life?
   a) People need it to survive
   b) Plants need it to survive
   c) The river needs it to support nature
   d) All the above

6. The **water cycle** happens as the earth is warmed by the sun and water circulates between the earth's oceans, atmosphere, and land. Which of the following are terms associated with the water cycle?
   a) Pumping, Treatment, Delivery
   b) Evaporation, Condensation, Precipitation
   c) River, stream, aquifer



7. How can we protect our water?
   a) Litter
   b) Tell your parents when you see a leak
   c) Pour chemicals on the ground



8. **Wastewater** (or sewer water) is the used water from toilets, showers, and clothes washers and it is too dirty to go straight into the river or into the ground. Septic tanks and wastewater treatment plants clean the water before it goes to the river or into the ground.
   a) True
   b) False

Appendix D – Student Tests Scores

The following table shows the percentage of correct answers on both the pre and post-test. The test was given through Google Forms and there was no distinction between specific classes. Not every student from every school provided pre and post-tests. The questions are in the same order as in Appendix C.

Post-Test Scores:

Question	Elementary School Name					
	Enchanted Hills	Cielo Azul	Ernest Stapleton	Sandia Vista	Vista Grande	Average
What makes water dirty?	74%	68%	92%	86%	78%	79%
Is water from the aquifer?	96%	88%	92%	84%	92%	90%
Do we live in a watershed?	46%	54%	65%	47%	65%	55%
How much water is used? (math equation)	90%	78%	80%	78%	82%	82%
Why is water important to life	77%	75%	80%	82%	84%	80%
Water cycle	64%	72%	65%	62%	64%	65%
How can we protect water?	90%	86%	95%	93%	88%	90%
What is wastewater?	77%	90%	87%	86%	85%	85%

*Note there was no data for St. Thomas Aquinas as they do not use the Google Forms format.

As in year's past, the students do not have a good understanding of what a watershed is or the fact that we all live in a watershed. They also had problems with what is the water cycle.

Pre-Tests Scores:

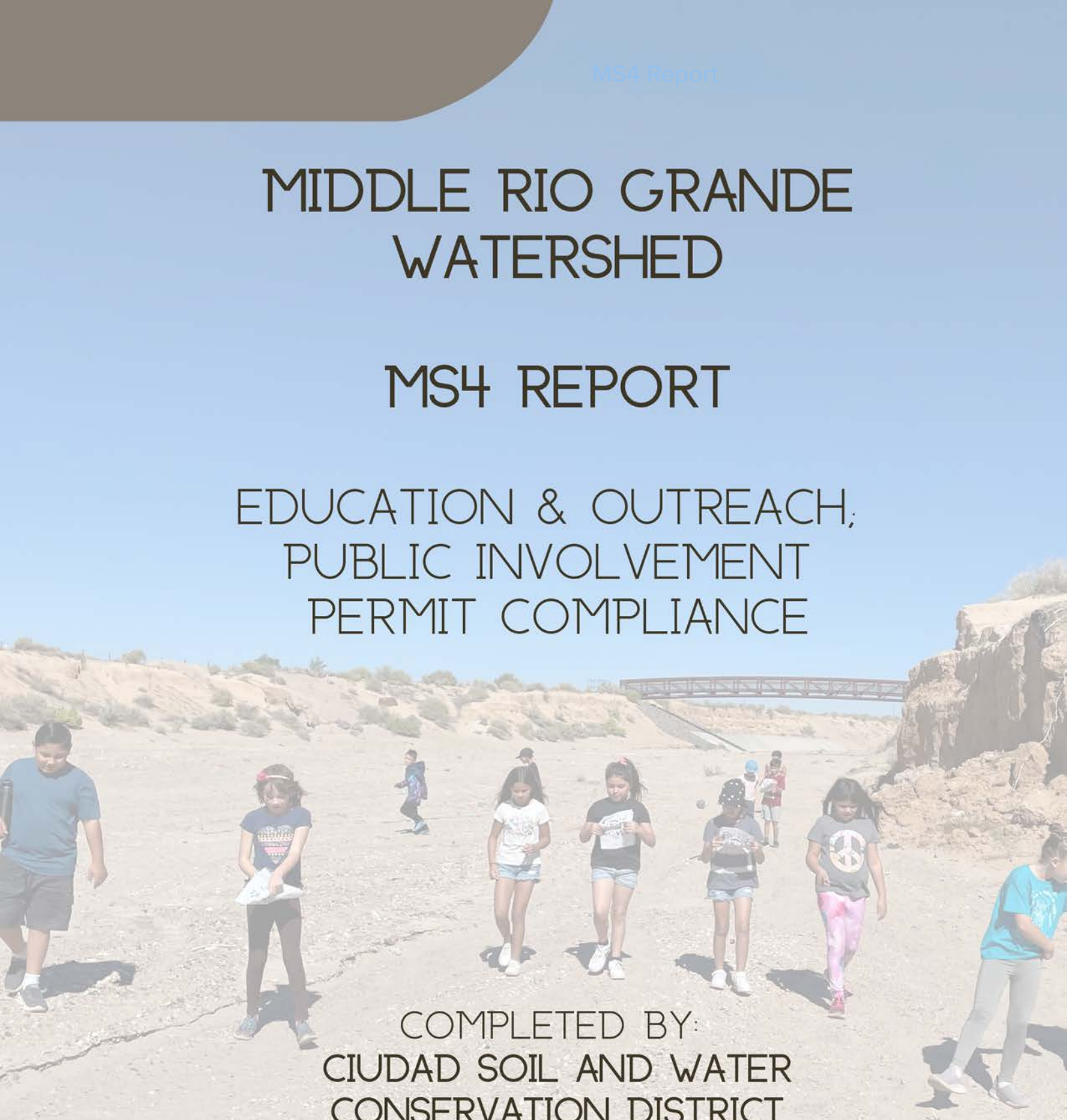
Question	Elementary School Name					
	Enchanted Hills	Cielo Azul	Ernest Stapleton	Sandia Vista	Vista Grande	Average
What makes water dirty?	71%	N/A	70%	69%	57%	66%
Is water from the aquifer?	76%	N/A	80%	72%	80%	77%
Do we live in a watershed?	42%	N/A	45%	45%	33%	41%
How much water is used? (math equation)	87%	N/A	71%	66%	66%	72%
Why is water important to life	80%	N/A	75%	74%	70%	74%
Water cycle	53%	N/A	62%	52%	54%	55%
How can we protect water?	83%	N/A	92%	84%	77%	84%
What is wastewater?	78%	N/A	84%	75%	79%	79%

*Cielo Azul only had one student take the pre-test so data percentage per answer was not calculated.

MIDDLE RIO GRANDE WATERSHED

MS4 REPORT

EDUCATION & OUTREACH; PUBLIC INVOLVEMENT PERMIT COMPLIANCE



COMPLETED BY:
CIUDAD SOIL AND WATER CONSERVATION DISTRICT

JULY 2023-JUNE 2024

CIUDAD SOIL & WATER CONSERVATION DISTRICT

Introduction

For fiscal year 2024, The Middle Rio Grande Stormwater Quality Team (MRGSQT) and Southern Sandoval County Arroyo Flood Control Authority (SSCAFCA) provided Ciudad Soil and Water Conservation District (Ciudad SWCD) with a total $101,651.00 in funding to provide educational services in accordance with the requirements set forth in the EPA Municipal Separate Storm Sewer System Permit No. NMR04A000 (the MS4 Permit) for Education & Outreach and Public Involvement compliance. The funding provided by MRGSQT and SSCAFCA support the RiverXchange and Arroyo Classroom youth education programs, however Ciudad SWCD also provides additional educational services within the watershed outside the funding agreement that contributes to MS4 permit compliance. Ciudad SWCD is deeply invested in education and outreach programs as a strategy to address areas of natural resource concerns outlined in Ciudad SWCD's long-range action plan and demonstrates this commitment with years of successful educational programming. Ciudad SWCD is also a non-permittee member of the MRGSQT and our role is to promote collaborative, effective partnerships within the watershed. This report encompasses Ciudad SWCD's programs, activities and projects that contributed to the education and stewardship of watershed health in the Middle Rio Grande Watershed, reaching 7,319 individuals this fiscal year.

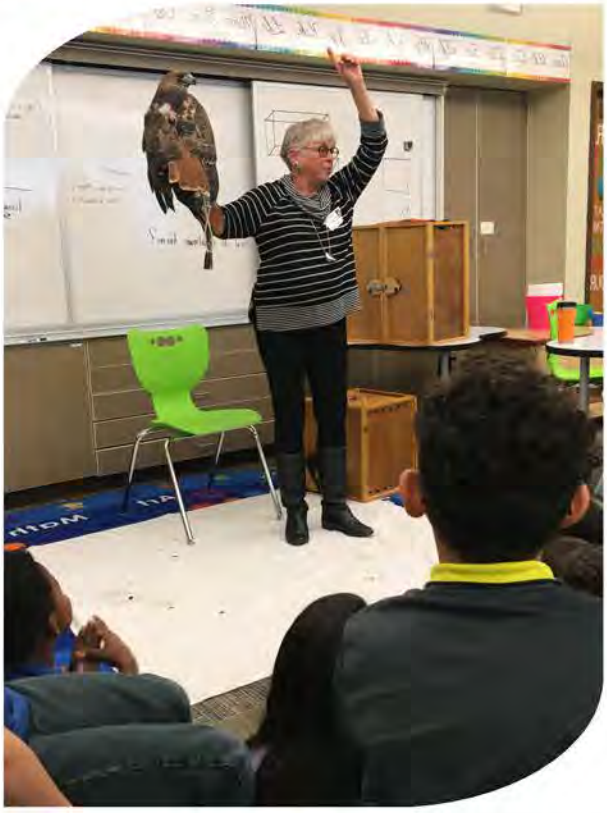
MRGSQT & SSCAFCA
FUNDED YOUTH PROGRAMS

RiverXchange®

RiverXchange® is a watershed education program for 5th graders which is comprised of guest speakers, hands-on activities and a conservation field trip with a class-led action project that incorporates the EarthForce organization's process for Environmental Action Civics. The EarthForce process is an educational approach where youth and adults work in partnership to identify a local environmental issue and engage with community members to take action by advocating for systemic changes to policies or practices. The EarthForce process aligns strongly with RiverXchange® objectives as it allows students and teachers to understand more deeply and think critically about watershed issues, while engaging a larger audience in taking action for change. RiverXchange® is appealing to teachers because it addresses many grade-level Next Generation Science Standards, social studies benchmarks, as well as Common Core Language Arts Standards and promotes project-based learning and access to outdoor learning.

Arroyo Classroom

The Arroyo Classroom program, for 3rd graders, consists of a four-part series of lessons utilizing the arroyos as outdoor classrooms. The lessons teach students about local desert plant and animal species, their physiological adaptations and their role in the environment by means of walking field trips and live wildlife visits to classrooms. All lessons include a component about conservation and arroyo safety, including discussions on ATV use, removal of pet waste, trash/debris and impacts on arroyo inhabitants and stormwater quality, set to grade-level science standards and age appropriate messages. Arroyo Classroom also supports the Next Generation Science Standards and increases access to outdoor learning.



"Students were engaged and learned a lot in the process. They felt that they actually could make a difference with their actions." -Beer, Cochiti ES, RiverXchange teacher

RIVERXCHANGE® 2023-2024

EDUCATION FOR UNDERSTANDING AND PROTECTING WATERSHED HEALTH

Executive Summary

During the 2023-2024 school year, RiverXchange® served **897** 5th grade students and **41** teachers across **13** schools, 10 of which were Title I schools. Each student engaged with a minimum of 10 hours of programming provided by Ciudad SWCD staff and partners. Classrooms who completed an action project engaged in an addition 5-10 hours of the program. Contributions from partner time, and student and adult volunteers on the conservation field trip provided a total of **$105,871.00 of in-kind match** this school year. MRSSQT provided $48,477.00 and SSCAFCA provided $22,374.00 for a total of **$70,851.00 in cash** for program coordination, bus costs, teacher stipends and materials.

41 Teachers

Teacher Professional Development

Teachers are invaluable participants in RiverXchange® and are a key audience for the program. RiverXchange® serves teachers by providing a teacher workshop that helps strengthen their own understanding of watershed health through experiencing science and project-based activities they can use in the classroom to support RiverXchange®, the Action Project, and other curriculum. Teachers learn from other teachers, partners and RiverXchange® staff at the teacher workshop and receive a stipend for attending, along with other materials and resources for their classrooms.

Post Program Teacher Feedback

Upon completion of the program, teachers are asked to fill out a survey providing feedback about the program. 27 participants responded, with overwhelmingly positive feedback. **97% of respondents said students had made meaningful connections between human actions, stormwater and pollution** with evidence such as "children [are] thinking about [the] use of various pollutants, and trying to keep things clean *'so they wouldn't get into the river'."*(Carty, Seven Bar ES)

"The greatest learning outcomes for my class as participants in RiverXchange was focusing on the **importance of water in our ecosystem**. Another **big learning outcome was to be stewards within our school community**. Many students were able to **discuss bigger issues they see towards the end of program compared to the beginning**." Martinez, Valle Vista ES

"My students are **more invested now** in taking care of the environment, protecting natural resources and **being more responsible stewards of their community**." Ortiz y Martinez, Chaparral ES

RIVERXCHANGE® CURRICULUM

EDUCATION FOR UNDERSTANDING AND PROTECTING WATERSHED HEALTH

The RiverXchange® Curriculum introduces a wide range of water resource topics with the goal of bringing awareness to their role in protecting watershed health. Within the curriculum, all *897 students engaged with grade-level appropriate lessons that covered the following required MS4 topics*:

897 Students

- PET WASTE MANAGEMENT
- PROPER DISPOSAL OF OIL, HOUSEHOLD HAZARDOUS WASTE
- PROPER DISPOSAL OF PESTICIDES, HERBICIDES AND FERTILIZERS
- IMPAIRED WATERS IN THE CITY/STATE
- WATERSHED MANAGEMENT

Presentations

Each class in RiverXchange® experienced presentations on Drinking Water, Wastewater, Stormwater and River History. Students in Rio Rancho Public schools also received an Agriculture & Water presentation.

Partners that provided these presentations are:

- Albuquerque Bernalillo County Water Utility Authority
- Sandia Labs
- City of Rio Rancho Utilities Department
- Sandoval County Cooperative Extension Services
- City of Albuquerque Open Space Division
- Ciudad Soil and Water Conservation District Board Chair, Steven Glass

303 trees planted

41 shrubs planted

Conservation Field Trip

Thanks to a long-standing partnership with City of Albuquerque Open Space Division, RiverXchange® students are able to participate in the Conservation Field Trip where they help to restore the Bosque riparian ecosystem by planting native species such as Cottonwood, Coyote Willow, Four Wing Saltbush, New Mexico Olive and seed native grasses. In addition to the **749 students** recorded in attendance across December through March this year, **112 adults** joined in the effort to steward the Bosque by learning restoration practices guided by Open Space and Ciudad SWCD staff.

RIVERXCHANGE® ACTION PROJECT

EDUCATION FOR UNDERSTANDING AND PROTECTING WATERSHED HEALTH

The RiverXchange® Action Project is a process by which students and teachers work together to determine an issue of concern, engage with stakeholders, decision-makers and community members to research their issue, and take informed action with the goal of changing or positively influencing a policy or practice to improve an environmental outcome.

Criteria for Action Projects to be submitted for an award:

- Student Voice and Participation
- Practicality
- Civic Engagement

4,471

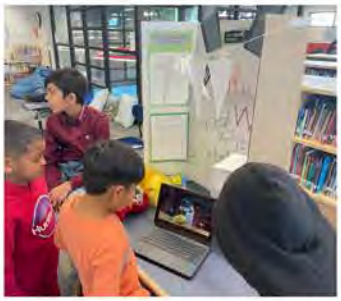
individuals impacted by action projects

News reports are a great tool to share student voices with other classes on campus!

Action Project Submissions

14 classes officially submitted their Action Projects for the reward of a pizza party, however, more teachers reported doing an Action Project in the teacher feedback. Of those who submitted, the projects varied from campus clean-ups, trash to treasure campaigns, water conservation campaigns, the creation of bilingual resources, and public service announcements. In total, teachers reported reaching 4,471 individuals through their projects, mostly from school-wide efforts by RiverXchange® students to educate others and change community practices such as littering. A few examples of the amazing RiverXchange® students are shared here!

STUDENTS INVESTIGATE ISSUES AND USE THEIR VOICE TO SHARE THEIR KNOWLEDGE



Shown above are students who investigated the Villain of the Water Supply by doing literature research, talking to experts, and then presented their findings in an exhibition with over 50 members of community, families, and school admin in attendance. Each presentation included a proposed solution or action to take to address their issue of concern, like adding more "grates" to storm drains to filter out trash (above right).

"'Dear Person in Power, We believe that litter is a villain to Albuquerque's water supply. Are you aware of the litter in Albuquerque, New Mexico's water supply. Litter is poisoning the water supply. What goes into the storm drain goes into the Rio Grande River. When trash and dog poop and other things go in the storm drain all of that goes into the River."
-Excerpt of student letter from "Villian" exhibition

STUDENTS CREATE INVENTIVE WAYS TO ENGAGE PEERS IN THEIR CAMPAIGNS FOR CHANGE - "TRASH TO TREASURE"

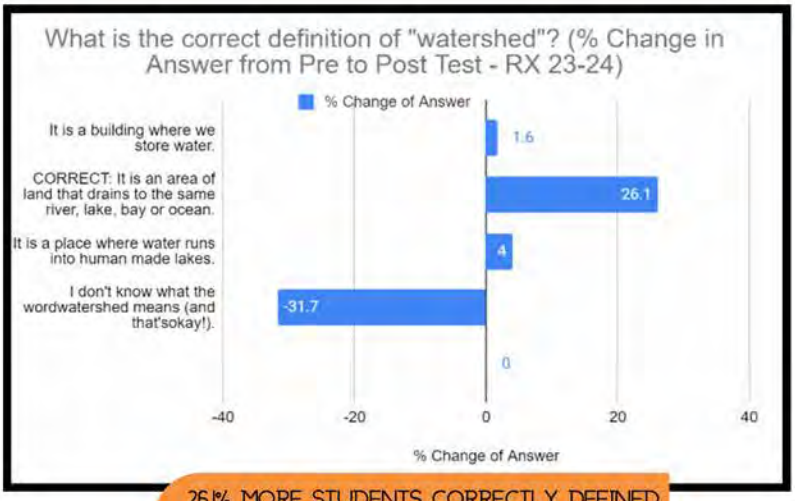
Pictured to the left are students who completed the action project process by completing a campus walk to identify environmental issues, talked with teachers and admin about concerns, selected litter as their issue, developed a plan to reduce litter, conducted a school survey to determine effective methods for change and created a Trash to Treasure recycling program to encourage recycling and teach about the impacts of litter!

RIVERXCHANGE®

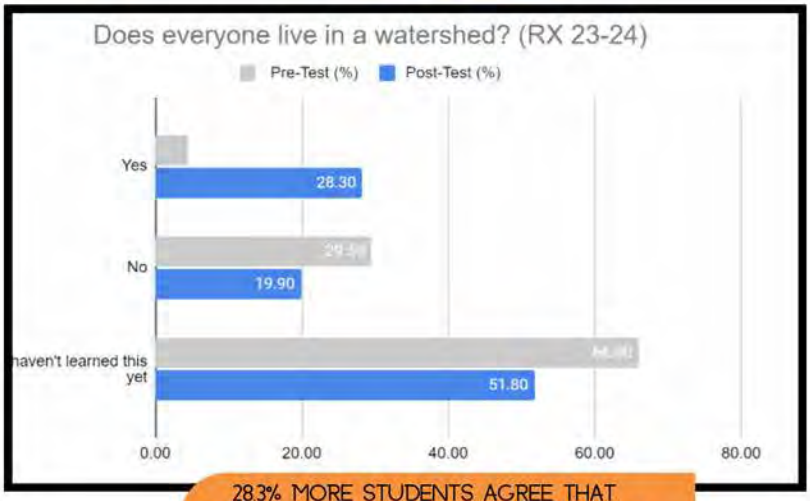
EDUCATION FOR UNDERSTANDING AND PROTECTING WATERSHED HEALTH

Program Evaluation

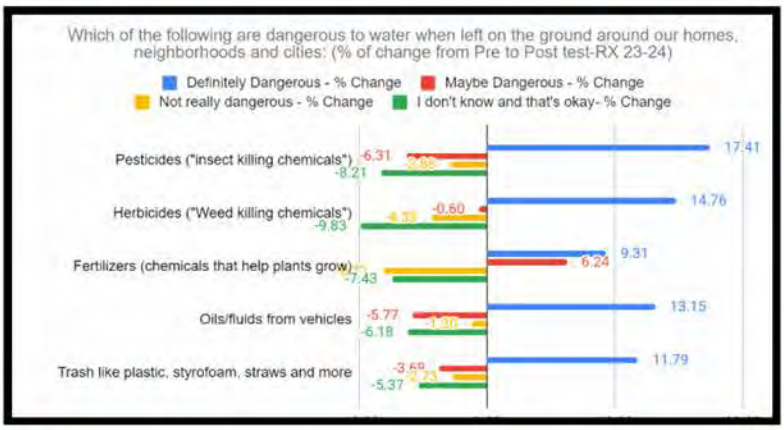
Qualitative evaluation of the program is compiled via teacher feedback through short answer questions, which concludes that the program was successful in helping students make connections between their actions, stormwater and watershed health and that the program was a positive experience for teachers. Quantitative evaluation is conducted through pre and post student surveys. The metrics of these surveys demonstrate a positive percentage change of correctly identifying the definition of a watershed and the impacts of pollution on water quality (i.e. pet waste, pesticides, herbicides, fertilizers, oils, and trash). 732 students completed the pre-survey and 492 students completed the post-survey.



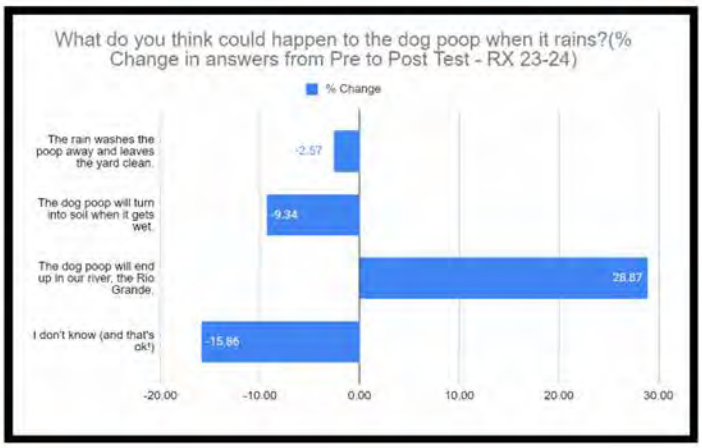
26.1% MORE STUDENTS CORRECTLY DEFINED "WATERSHED" AFTER THE PROGRAM



28.3% MORE STUDENTS AGREE THAT EVERYONE LIVES IN A WATERSHED AFTER THE PROGRAM



APPROXIMATELY 10%-20% MORE STUDENTS IDENTIFY THE ABOVE MS4 TOPICS AS DANGEROUS TO WATER AFTER THE PROGRAM



28.87% MORE STUDENTS IDENTIFY THAT DOG WASTE CAN END UP IN THE RIVER AFTER THE PROGRAM

ARROYO CLASSROOM 2023-2024

LOCAL WILDLIFE, HABITAT & ARROYO EDUCATION

Executive Summary

During the 2023-2024 school year, Arroyo Classroom served 715 3rd grade students and 36 teachers across 7 schools in Rio Rancho, 5 of which were Title I schools. Each student engaged in 4 hours of programming provided by Ciudad SWCD staff and contractors. SSCAFCA provided a total of **$30,800.00 in cash** for program coordination and delivery and a contract with Hawks Aloft Inc. for live wildlife presentations. Within the curriculum, *all 715 students engaged with grade level appropriate lessons that covered the following required MS4 topics*:

715 Students

- PET WASTE MANAGEMENT
- PROPER DISPOSAL OF PESTICIDES, HERBICIDES AND FERTILIZERS
- IMPAIRED WATERS IN THE CITY/STATE
- WATERSHED MANAGEMENT

Presentations

Arroyo Walk

The Arroyo Walk takes students out into the field to look for evidence of wildlife such as tracks, scat, exoskeletons and of course- live animals! Students also do plant adaptation investigations through sensory observations of plants. Throughout the walk, students naturally make observations of pollution and human impacts in the environment and discussions about ways to improve the environment through our own actions always take place. (Middle and top right images above)

Local Reptiles and Arthropods

Much like the bird presentation, the reptile and arthropod presentation introduces students to these local creatures, their key roles in the ecosystem and educates students about the importance to protect organisms who are often misunderstood, feared and considered pests. The presentation also focuses on how pollution and human behaviors can impact the habitat in which these creatures rely on to survive.(Bottom left image)

Local Birds

Hawks Aloft Inc. brings a wonderful experience to students with a visit of educational avian ambassadors to the classroom. Some of the birds that visit are: (depending on availability and cultural sensitivities) American Kestrels, Peregrine Falcons, Swansons Hawks, Burrowing Owls, Great Horned Owls or Turkey Vultures. Hawks Aloft help students understand how pollution and human behaviors can impact these birds and what they can do to protect these wonderful creatures. (Bottom right image)

Watershed Lesson

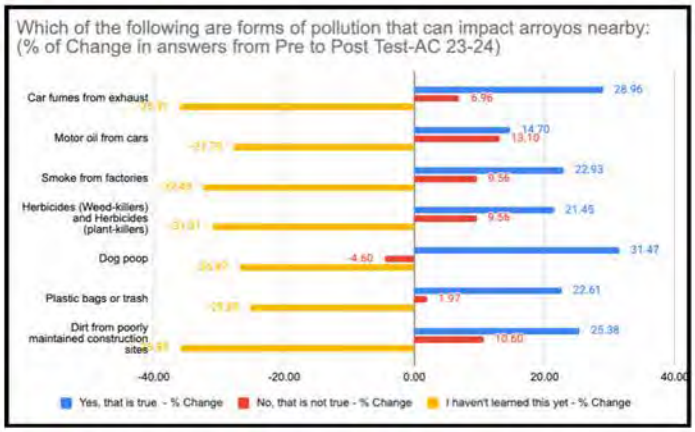
The watershed lesson help students build an understanding of how the water cycle interacts with the land. Working in groups, students use paper to mimic topography of the land and make it rain to see how water gathers in lakes and rivers. They they mimic adding pollution to the watershed to see where it ends up! (Top left image above)

ARROYO CLASSROOM 2023-2024

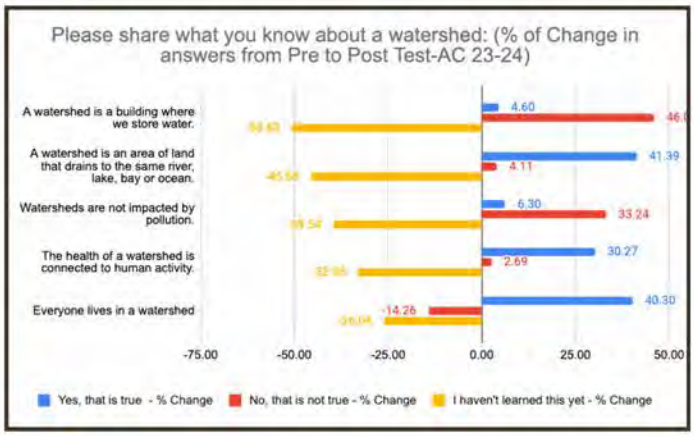
LOCAL WILDLIFE, HABITAT & ARROYO EDUCATION

Program Evaluation

Qualitative evaluation of the program is compiled via teacher feedback (13 respondents) through short answer questions, which concludes that the program was successful in helping students make connections between their actions and impacts on local wildlife and their habitats (arroyos). Teachers also note this program helps them meet 3rd grade science standards. Quantitative evaluation is conducted through pre and post student surveys. The metrics of these surveys demonstrate a positive percentage change of correctly identifying the the impacts of pollution on the arroyo habitat and watershed (i.e. pet waste, pesticides, herbicides, fertilizers, oils, and trash). Additionally, students demonstrate growth in understanding arroyo safety. 481 students completed the pre-survey and 422 students completed the post-survey.



STUDENTS DEMONSTRATE AN INCREASE RANGING BETWEEN 15%-31% IN CORRECTLY IDENTIFYING COMMON POLLUTANTS IN THE LOCAL ENVIRONMENTAL



STUDENTS DEMONSTRATE AN INCREASE OF 30%-46% IN CORRECTLY UNDERSTANDING WATERSHED HEALTH CONCEPTS

APPROXIMATELY 30% MORE STUDENTS MADE AN IMPORTANT DISTINCTION THAT FLASH FLOODS HAPPEN IN ARROYOS AND CONCRETE ARROYOS ARE NEVER SAFE.

Post Program Teacher Feedback Quotes

What where the greatest learning outcomes for your class?

"They were fully engaged in the material and learning experiences, and retained that information. They really enjoyed learning about watersheds and were able to actively discuss topics concerning watersheds and our environment throughout the year." -Reed, Colinas Del Norte ES

"The students absolutely loved it, and gained new knowledge about outdoor observations. It also was a great prequel to our ecology unit later in the year!" - Schnittke, Sandia Vista ES

Students learning, applying and sharing their experiences with family." - Begay, Maggie Cordova ES

"Appreciating our environment and influencing them to respect arroyos and desert plants and environment." - Burns, Cielo Azul ES

2023-2024
CIUDAD SWCD EDUCATION PROGRAMS
(GRANTS FROM OTHER FUNDERS)

Watershed Stewards

- Funding Provided by SSCAFCA, considered on a fiscal year basis.
- Objective: Local Conservation Education for Adult and Senior Citizens with a focus on MS4 topics.

Sponge City Middle and High School Stewardship Program

- Funding Provided by NM Soil and Water Conservation Commision via the Water Quality and Conservation Grant FY2024.
- Objective: Green Stormwater Infrastructure Education Program that aims to inspire students to visualize and implement GSI on their school campus.

Rolling River

- Funding provided by intergovernmental agreements with City of Albuquerque Open Space and Bernalillo County Open Space, and direct booking fees.
- Objective: The Rolling River is a mobile model of a watershed where we demonstrate MS4 topics to the public at school, community and other public events.

APS School Garden Conference

- Funding provided through an EPA subaward through the Bosque Ecosystem Monitoring Program.
- Objective: Support teacher professional development in watershed education.

WATERSHED STEWARDS 2023-2024

CONSERVATION EDUCATION FOR ADULTS AND SENIORS

Executive Summary

During the 2023-2024 fiscal year, the Watershed Stewards program engaged 267 participants in education and outreach opportunities across 19 events and certified 12 residences as an ABQ Backyard Refuge. The program's events were primarily held in the Rio Rancho area and Corrales, but also included field trips to the ABQ BioPark with Meadowlark Senior Center. The program benefited greatly this year from increased collaboration between Keep Rio Rancho Beautiful (under City of Rio Rancho Parks, Recreation and Community Services department), City of Rio Rancho Public Libraries, Sandoval County Master Gardeners, Ciudad SWCDs contract with ABQ Backyard Refuge (a program of Valle De Oro National Wildlife Refuge) and support from Rio Grande Return and other subject matter experts. Working with these partners to engage audiences in SSCAFCA's jurisdictional boundaries has proven to be beneficial in developing a program that truly encourages stewardship through education, training and community engagement.

Program Highlights

Ciudad SWCD chose to contract directly with ABQ Backyard Refuge for the program this year, as past years of hosting ABQ Backyard Refuge for Watershed Stewards programming demonstrated how an program like Backyard Refuge provides an anchor for residents to learn about how to implement voluntary conservation practices at home. By working with ABQ Backyard Refuge, we were able to provide a diverse set of learning opportunities with a clear goal; to increase ABQ Backyard Refuge certifications within SSCAFCA's boundaries. Presentations ranged from native plant selection and care, designing a backyard refuge, local wildlife, adapting to climate change, tree care and pruning, and rainwater harvesting. Regardless of the presentation or field trip, Ciudad SWCD, ABQ Backyard Refuge and Keep Rio Rancho Beautiful consistently promote awareness of MS4 topics and provide resources and opportunities to implement conservation practices that benefit the watershed.

SOUTHERN SANDOVAL COUNTY ARROYO FLOOD CONTROL AUTHORITY

267 participants

12 certified backyard wildlife refuges

- PET WASTE MANAGEMENT
- PROPER DISPOSAL OF OIL, HOUSEHOLD HAZARDOUS WASTE
- PROPER DISPOSAL OF PESTICIDES, HERBICIDES AND FERTILIZERS
- IMPAIRED WATERS IN THE CITY/STATE
- WATERSHED MANAGEMENT

PARTNERS:

RioRancho
Keep Rio Rancho Beautiful
KEEP AMERICA BEAUTIFUL AFFILIATE

ABQ Backyard Refuge Program

SPONGE CITY 2023-2024

MIDDLE AND HIGH SCHOOL STEWARDSHIP PROGRAM

35 students

Executive Summary

The Sponge City Program aimed to work with middle and high school students to promote an understanding of watershed health and the use of rainwater harvesting in an urban environment as a design approach to improve watershed health. The program was delivered across 3 visits with each participating class: an introductory classroom lesson, a field trip to an important watershed feature, and a walking field trip in the urban environment. Two classes participated; one 8th grade gardening class from Mountain Mahogany and a 9th-12th grade permaculture class from Amy Biehl, for a total of 35 students. To ensure student engagement, the program was tailored to each class's needs. The 8th graders focused more on campus stewardship by implementing soil sponges and berms. The Amy Biehl class was able to complete a design proposal for an outdoor green space that included rainwater harvesting features. Each class was able to participate in stewardship activities, either at their school or a restoration site.

AMY BIEHL CHARTER HS

Top images across are from field trips to the Tijeras Bio-Zone Education Center, where students practiced building one rock dams and soil sponges while learning about watersheds. Pictured left and below are student working on and presenting their green space designs.

The Amy Biehl green space project aims to build an outdoor classroom, gardens, and rainwater harvesting features around the school that would replace concrete with permeable surfaces and tree canopy and tie into a GSI street project on Gold Ave. More funding is needed for the next phase.

MOUNTAIN MAHOGANY COMMUNITY SCHOOL

Pictured left, students build soil sponges. Pictured below is small basin students dug out and filled with "sponge" materials to capture and absorb rainwater from a downspout for a Mountain Mahogany.

Sponsored by:

STATE OF NEW MEXICO
NEW MEXICO SOIL & WATER CONSERVATION DEPARTMENT OF AGRICULTURE

- PET WASTE MANAGEMENT
- PROPER DISPOSAL OF OIL, HOUSEHOLD HAZARDOUS WASTE
- PROPER DISPOSAL OF PESTICIDES, HERBICIDES AND FERTILIZERS
- IMPAIRED WATERS IN THE CITY/STATE
- WATERSHED MANAGEMENT

ROLLING RIVER 2023-2024
MOBILE WATERSHED MODEL

880 VISITORS
12 EVENTS

The Rolling River is a mobile watershed education trailer that provides a hands-on opportunity for the public to observe and manipulate how how human impacts, like urban development and pollution, can create impaired waters in the Rio Grande.

Participants are asked to develop the natural watershed with farms, neighborhoods, and impervious surfaces, like paved parking lots and streets. They then "make it rain" on the watershed to see what happens to the water. Finally, we discuss how we can protect the watershed through conservation practices that prevent pollution of stormwater and water waste to improve water quality, wildlife habitat and protection of resources.

- PET WASTE MANAGEMENT
- PROPER DISPOSAL OF OIL, HOUSEHOLD HAZARDOUS WASTE
- PROPER DISPOSAL OF PESTICIDES, HERBICIDES AND FERTILIZERS
- IMPAIRED WATERS IN THE CITY/STATE
- WATERSHED MANAGEMENT

APS GARDEN CONFERENCE

Ciudad SWCD was able to support the APS School Garden this year thanks to a sub-award from BEMP's EE EPA grant. Ciudad SWCD helped to coordinate the conference and provided a Rainwater Harvesting presentation to 20 teachers, focused on the passive rainwater harvesting opportunities on school campuses to both teach about, and improve, watershed health in our city. Across the conference, 54 teachers engaged with outdoor learning practices, science curriculum, and local traditional ecological knowledge. Teachers also received garden materials and resources, and Ciudad SWCD was able to provide presenters with honorariums for their attendance with the sub- award.

54 TEACHERS
2 DAYS

ACKNOWLEDGEMENTS

Ciudad SWCD acknowledges the important contributions of the following organizations, municipalities and individuals who supported the outreach completed this year. Without these partnerships, we could not do what we do so effectively. We are endlessly grateful for our communities' support to educate about, and protect the Middle Rio Grande Watershed.

City of Albuquerque Open Space Division
Bernalillo County Open Space Division
Bernalillo County Natural Resource Services
City of Rio Rancho Parks, Recreation and Community Services
Keep Rio Rancho Beautiful
City of Rio Rancho Utilities Department
Albuquerque Bernalillo County Water Utility Authority
Sandia National Laboratories
Hawks Aloft Inc.
BEMP
Valle de Oro National Wildlife Refuge
Laurel Ladwig, Albuquerque Backyard Refuge Program
Shelby Stimson, Arid LID Coalition
Cameron Weber, Rio Grande Return
Judith Phillips, Design Oasis
Hunter Ten Broeck, WaterWise Landscapes Inc.
Mario Nuño-Whelan, Arid LID Coaltion
Joran Viers, JVHC Inc.
Mikal Deese, On a Wing and A Prayer
Corva Rose, Tree School NM
Nissa Patterson, Mountain Mahogany Community School
Sandra Mack, Amy Biehl Charter High School
Allison Martin, TOTAL NM
Susan Schipull, APS Garden Resources
Travis McKenzie, APS Polk MS

Sponsored by:

Mid Rio Grande Stormwater Quality Team
www.keeptheriograndg.org

Southern Sandoval County Arroyo Flood Control Authority

Ciudad SWCD Contacts

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THERESA ARAGON, EDUCATION COORDINATOR
theresa@ciudadswcd.org

Ciudad Soil & Water Conservation District

CIUDAD SOIL & WATER CONSERVATION DISTRICT
PO BOX PO Box 93463, Albuquerque, NM 87199

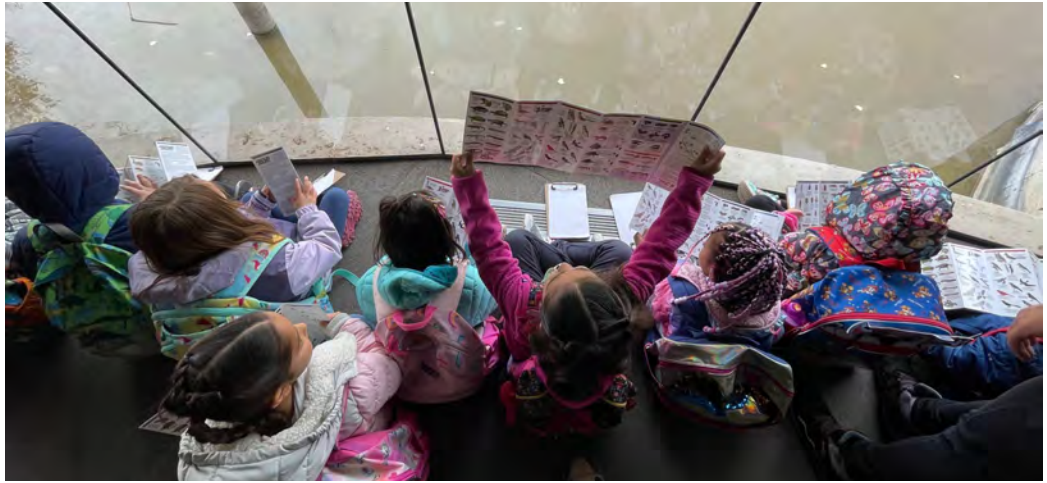
2023 - 2024 STORMWATER SCIENCE

BEMP • Zoe Wadkins Daniels
Education Director

Mid Rio Grande Stormwater Quality Team

BEMP
Bosque Ecosystem Monitoring Program

"Students have gained skills in working with new people, adults and children, and they have gained an understanding of river systems and human impacts on those systems." – Coyote Willow Family School Teacher



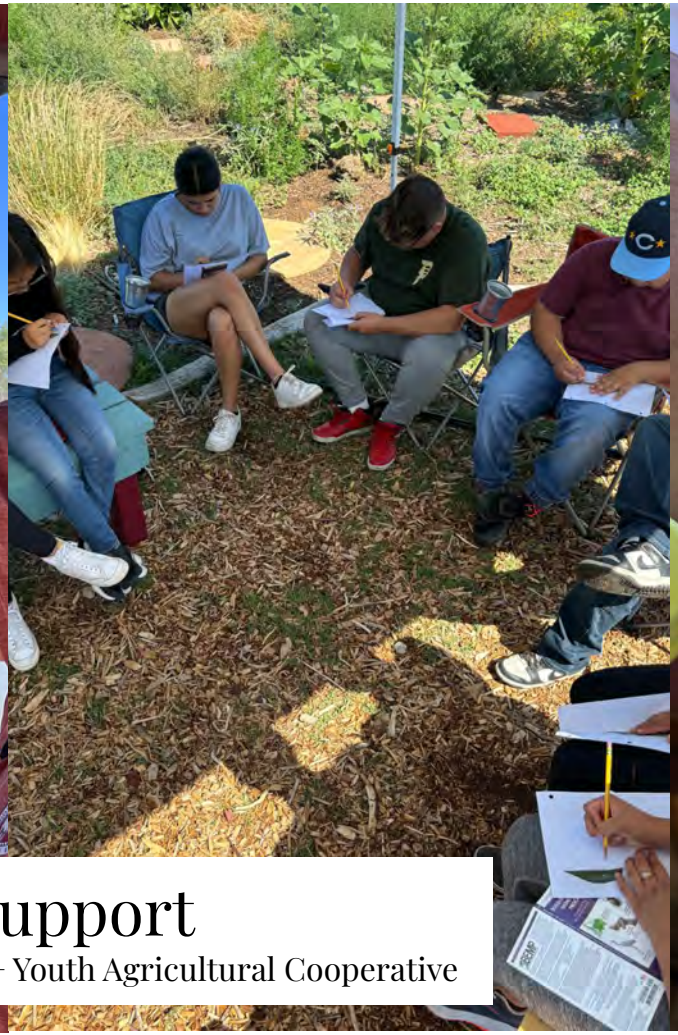
16,395 students.
63 schools and community organizations.
389 hours of education.

In-person & Synchronous Learning

4,140 students

Monthly Monitoring

Study Trips

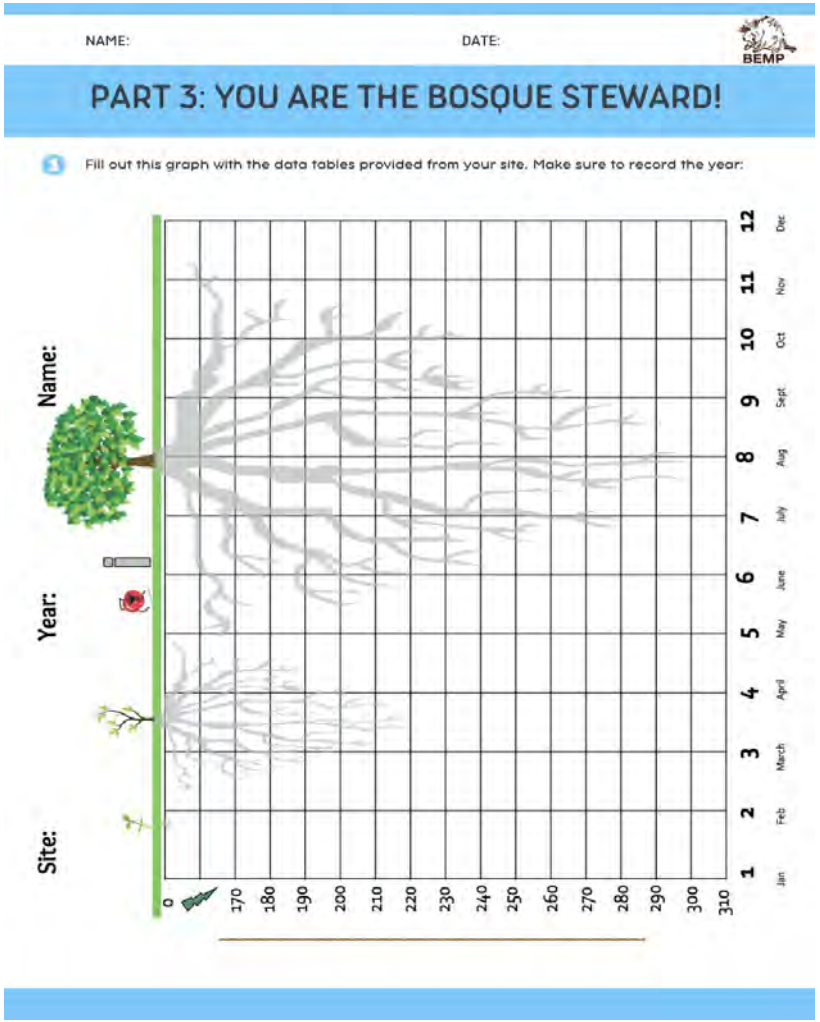


Summer Learning Support

Horizons ABQ + Project Feed the Hood + Youth Agricultural Cooperative

New Lessons

7th grade program



NAME: DATE:

BEMP

PART 3: YOU ARE THE BOSQUE STEWARD!

1. Fill out this graph with the data tables provided from your site. Make sure to record the year:

Name:

Year:

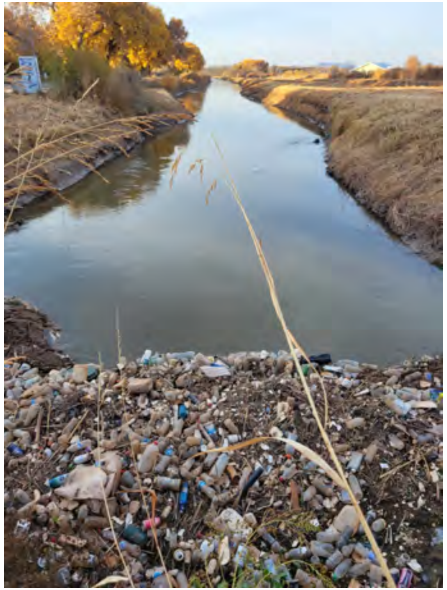
Site:

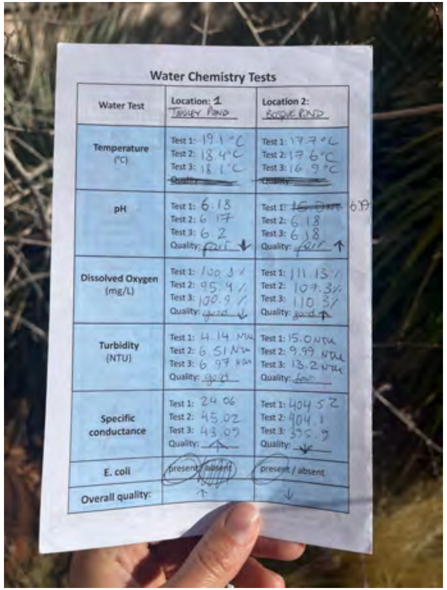
0 170 180 190 200 210 220 230 240 250 260 270 280 290 300 310

1 Jan 2 Feb 3 March 4 April 5 May 6 June 7 July 8 Aug 9 Sept. 10 Oct 11 Nov 12 Dec

IN THEIR OWN WORDS...

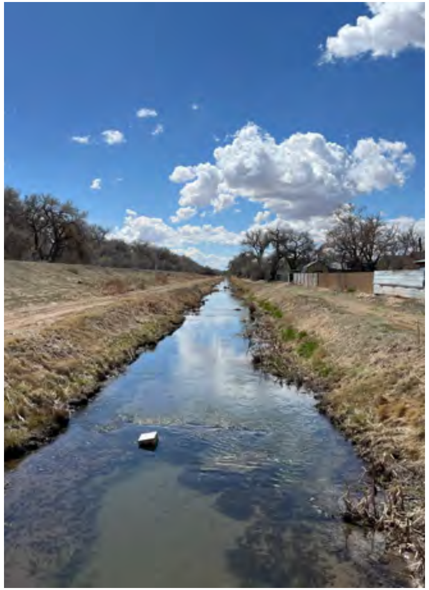
“I’m humbled to count myself as one of Cliff’s many cottonwood saplings along the vegetation transect line of BEMP’s history – a datapoint that serves as a constant reminder of the importance of local action in the global fight for environmental justice. The spirit of a BEMP alumni is a champion for the Middle Rio Grande, its students, and all the plants and animals – humans, coyotes, the Rio Grande Silvery Minnow, and many more - that depend on its waters for life.” - BEMP Alumnus and volunteer.





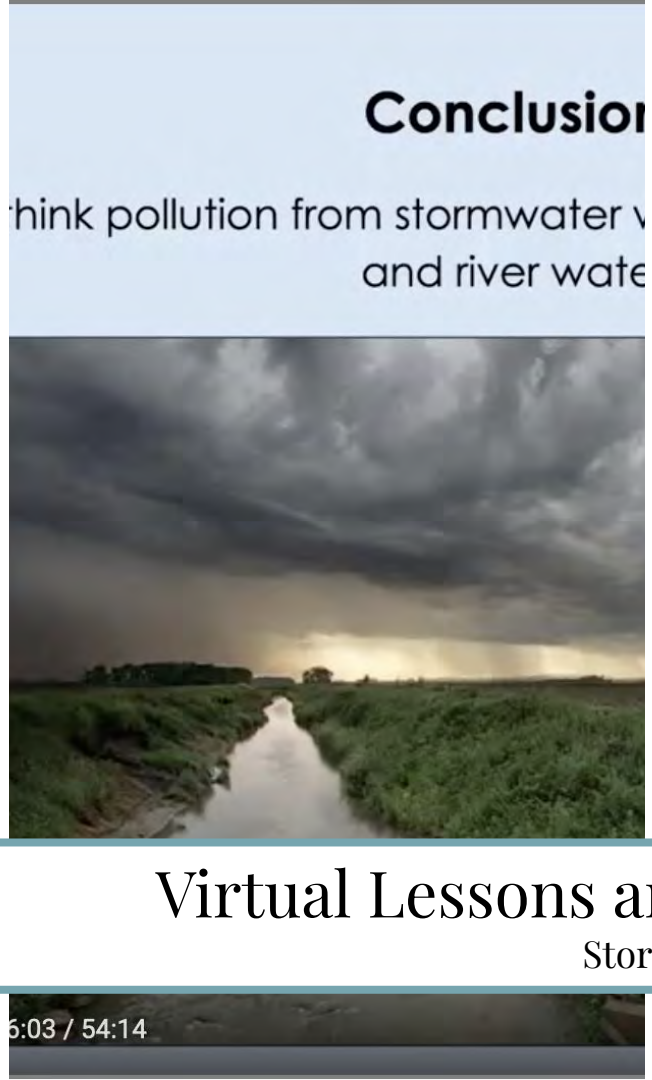
Water Chemistry Tests

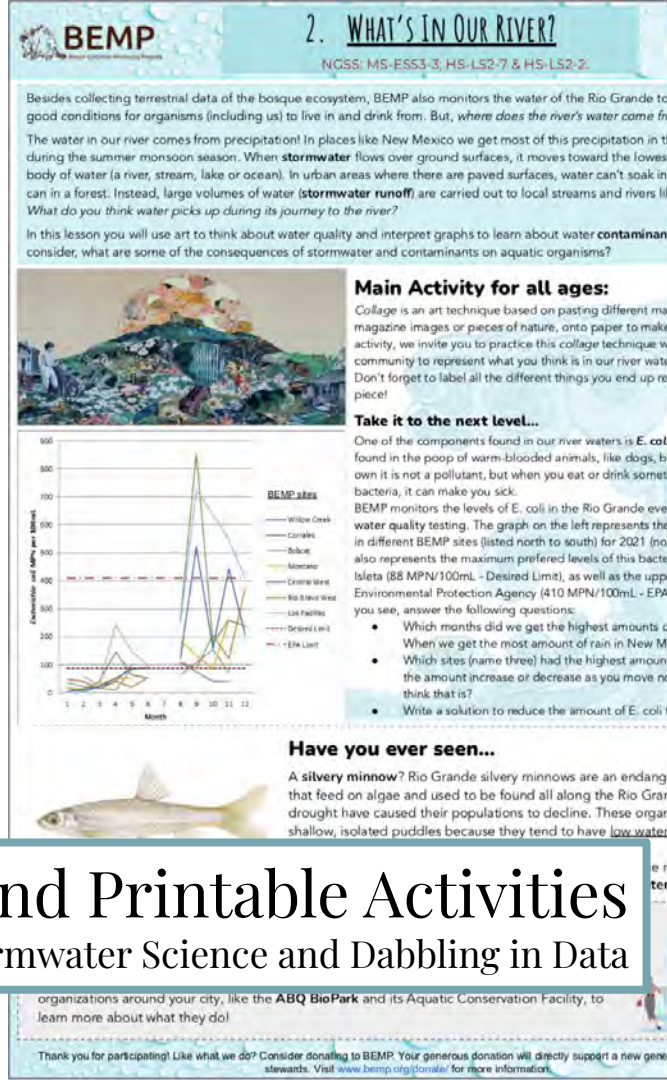
Water Test	Location: 1 TINGLEY POND	Location 2: BOSQUE POND
Temperature (°C)	Test 1: 19.1°C Test 2: 18.4°C Test 3: 18.1°C ~~Quality:~~	Test 1: 17.7°C Test 2: 17.6°C Test 3: 16.9°C ~~Quality:~~
pH	Test 1: 6.18 Test 2: 6.17 Test 3: 6.2 Quality: fair ↓	Test 1: ~~[illegible]~~ 6.19 Test 2: 6.18 Test 3: 6.18 Quality: fair ↑
Dissolved Oxygen (mg/L)	Test 1: 100.3% Test 2: 95.4% Test 3: 100.9% Quality: good ↓	Test 1: 111.13% Test 2: 107.3% Test 3: 110.3% Quality: good ↑
Turbidity (NTU)	Test 1: 4.14 NTU Test 2: 6.51 NTU Test 3: 6.97 NTU Quality: good	Test 1: 15.0 NTU Test 2: 9.99 NTU Test 3: 13.2 NTU Quality: fair
Specific conductance	Test 1: 24.06 Test 2: 45.02 Test 3: 43.09 Quality: ↑	Test 1: 404.52 Test 2: 404.1 Test 3: 395.9 Quality: ↓
E. coli	present / absent	present / absent
Overall quality:	↑	↓



Asynchronous Learning

11,600 students served





Virtual Lessons and Printable Activities

Stormwater Science and Dabbling in Data

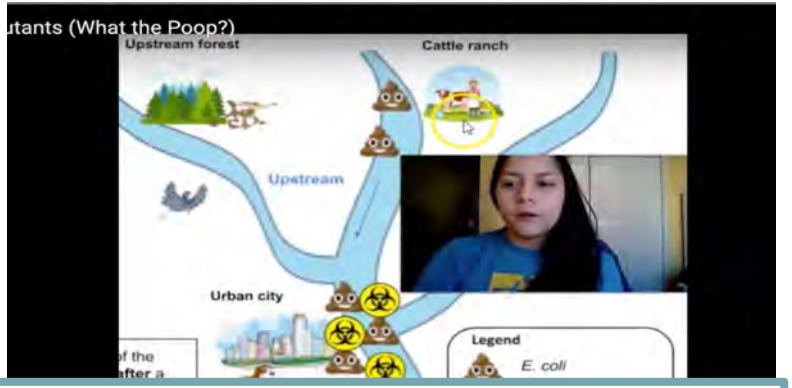
Social Media and Youtube Videos

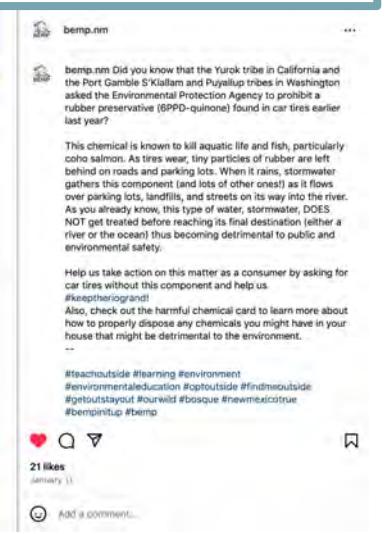
127,486 Reaches

Background Information

For this project we did tap water vs stormwater and how it affects the plants. We decided to do this because we were curious on how the plants Would react to stormwater, and if it will drastically change how to plant grows.

Para este proyecto analizamos el agua del grifo versus el agua de lluvia y plantas al agua de lluvia y si cambiaría drásticamente la forma de crecer las plantas.



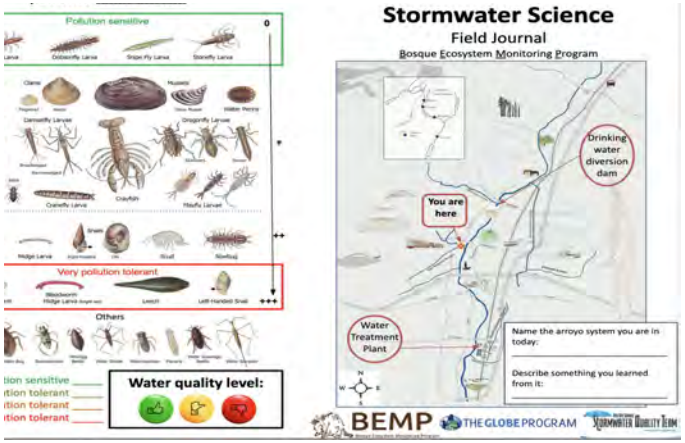


Events

Children's Water Festival, Luquillo-Sevilleta Virtual Symposium & Crawford Symposium - 655 participants

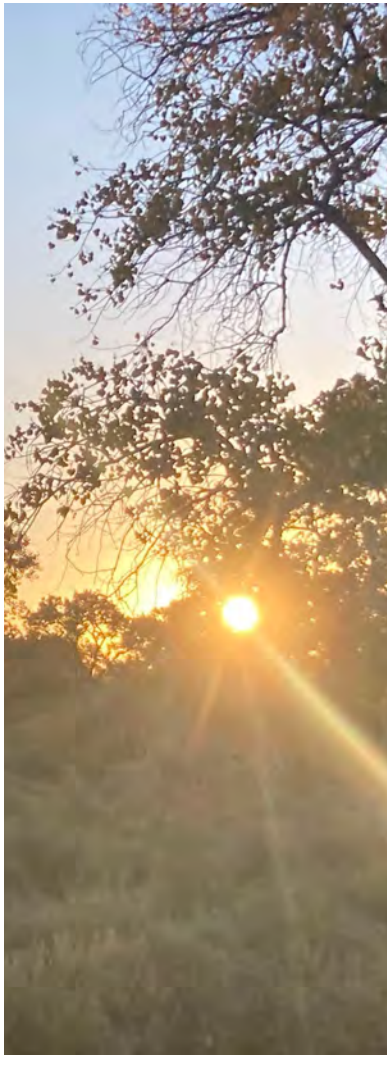
Watershed Education Collaboration Group

Connect our community by providing equitable access to watershed health *principles* and *education* by increasing awareness, scaffolding student learning and creating meaningful experiences to inspire a future generation.



Teacher Workshop Collaboration

Environmental Justice Community Days



Future movement 2024-2025:

Strengthen **relationships** with Title I schools.

Continue to provide both remote and in-person **learning experiences** to best fit all audiences.

Continue to provide **Stormwater Science concepts** during our Monthly Monitoring collections.

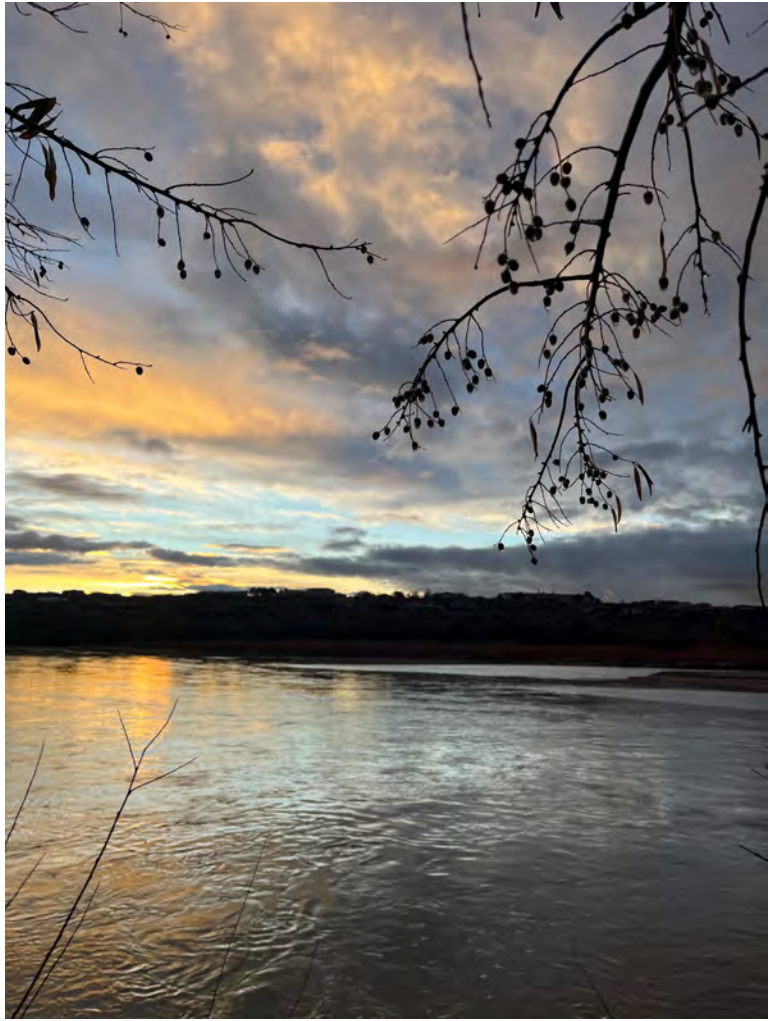
Expand Stormwater Science concepts to other lessons, especially our 7th grade program.

Expand our web of influence and focus on **community science** and **stewardship** components through collaboration with other organizations.

Strengthen **collaborations** with other organizations, reinforcing a water focus.

Offer **field work**, **data analysis**, and **public speaking** experience for students.

Continue to **increase accessibility** with Spanish translations.



THANK YOU!

BEMP PROPOSED BUDGET for FY25

Partial funding of BEMP Educator/Biologist staff (curriculum development, prep, program delivery in classroom, field, summer, and monthly monitoring)	**$25,500**
Partial funding of BEMP Education Manager staff for program oversight education outreach events (planning and coordination)	**$3,240**
Transportation costs for student participation in field study trips and outreach events, including translation costs & expenses for virtual materials	**$4,500**
Program materials (e.g., water testing kits, printing, poster boards)	**$500**
Administrative overhead costs at 18% of above total	**$6,073.2**
	TOTAL · $39,813.2

eurofins | Environment Testing

1 2 3 4 5 6 7 8 9 10 11

ANALYTICAL REPORT

PREPARED FOR

Attn: Matthew Leister
Bosque Ecosystem Monitoring Program
1 University of New Mexico
Albuquerque, New Mexico 87106

Generated 6/24/2024 10:56:16 AM

JOB DESCRIPTION

BEMP

JOB NUMBER

885-6670-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.

myEOL

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization

Generated
6/24/2024 10:56:16 AM

Authorized for release by
Colleen McNamara, Project Manager
colleen.McNamara@et.eurofinsus.com
(505)345-3975

Table of Contents

Definitions/Glossary

Client: Bosque Ecosystem Monitoring Program
Project/Site: BEMP

Job ID: 885-6670-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 885-6670-1 — Eurofins Albuquerque

Job Narrative
885-6670-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 6/20/2024 3:40 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 13.8°C.

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

Biology
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Bosque Ecosystem Monitoring Program
Project/Site: BEMP

Job ID: 885-6670-1

Client Sample ID: Willow Creek

Date Collected: 06/20/24 10:12
Date Received: 06/20/24 15:40

Lab Sample ID: 885-6670-1

Matrix: Water

Method: SM 9223B - Coliforms, Total, and E.Coll (Colilert - Quanti Tray)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Escherichia coli	ND		10.0		MPN/100mL			06/20/24 17:04	1

Client Sample Results

Client: Bosque Ecosystem Monitoring Program
Project/Site: BEMP

Job ID: 885-6670-1

Client Sample ID: Corrales

Date Collected: 06/20/24 11:16
Date Received: 06/20/24 15:40

Lab Sample ID: 885-6670-2

Matrix: Water

Method: SM 9223B - Coliforms, Total, and E.Coll (Colilert - Quanti Tray)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Escherichia coli	63.0		10.0		MPN/100mL			06/20/24 17:04	1

Client Sample Results

Client: Bosque Ecosystem Monitoring Program
Project/Site: BEMP

Job ID: 885-6670-1

Client Sample ID: Bobcat

Date Collected: 06/20/24 11:54
Date Received: 06/20/24 15:40

Lab Sample ID: 885-6670-3

Matrix: Water

Method: SM 9223B - Coliforms, Total, and E.Coll (Colilert - Quanti Tray)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Escherichia coli	30.0		10.0		MPN/100mL			06/20/24 17:04	1

Client Sample Results

Client: Bosque Ecosystem Monitoring Program
Project/Site: BEMP

Job ID: 885-6670-1

Client Sample ID: Montano

Date Collected: 06/20/24 12:39
Date Received: 06/20/24 15:40

Lab Sample ID: 885-6670-4

Matrix: Water

Method: SM 9223B - Coliforms, Total, and E.Coll (Colilert - Quanti Tray)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Escherichia coli	52.0		10.0		MPN/100mL			06/20/24 17:04	1

Client Sample Results

Client: Bosque Ecosystem Monitoring Program
Project/Site: BEMP

Job ID: 885-6670-1

Client Sample ID: Central West

Date Collected: 06/20/24 13:35
Date Received: 06/20/24 15:40

Lab Sample ID: 885-6670-5

Matrix: Water

Method: SM 9223B - Coliforms, Total, and E.Coli (Colilert - Quanti Tray)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Escherichia coli	134.0		10.0		MPN/100mL			06/20/24 17:04	1

Client Sample Results

Client: Bosque Ecosystem Monitoring Program
Project/Site: BEMP

Job ID: 885-6670-1

Client Sample ID: Rio Bravo West

Date Collected: 06/20/24 14:14
Date Received: 06/20/24 15:40

Lab Sample ID: 885-6670-6

Matrix: Water

Method: SM 9223B - Coliforms, Total, and E.Coll (Colilert - Quanti Tray)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Escherichia coli	161.0		10.0		MPN/100mL			06/20/24 17:04	1

Client Sample Results

Client: Bosque Ecosystem Monitoring Program
Project/Site: BEMP

Job ID: 885-6670-1

Client Sample ID: Los Padillas

Date Collected: 06/20/24 14:47
Date Received: 06/20/24 15:40

Lab Sample ID: 885-6670-7

Matrix: Water

Method: SM 9223B - Coliforms, Total, and E.Coll (Colilert - Quanti Tray)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Escherichia coli	305.0		10.0		MPN/100mL			06/20/24 17:04	1

Client: Bosque Ecosystem Monitoring Program
Project/Site: BEMP

Job ID: 885-6670-1

Client Sample ID: Blank
Date Collected: 06/20/24 15:00
Date Received: 06/20/24 15:40

Lab Sample ID: 885-6670-8
Matrix: Water

Method: SM 9223B - Coliforms, Total, and E.Coll (Colilert - Quanti Tray)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Escherichia coli	ND		1.0		MPN/100mL			06/20/24 17:04	1

Client: Bosque Ecosystem Monitoring Program
Project/Site: BEMP

Job ID: 885-6670-1

Method: 9223B - Coliforms, Total, and E.Coll (Colilert - Quanti Tray)

Lab Sample ID: MB 885-7126/1
Matrix: Water
Analysis Batch: 7126

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Escherichia coli	ND		1.0		MPN/100mL			06/20/24 17:04	1

QC Association Summary

Client: Bosque Ecosystem Monitoring Program
Project/Site: BEMP

Job ID: 885-6670-1

Biology

Analysis Batch: 7126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6670-1	Willow Creek	Total/NA	Water	9223B	
885-6670-2	Corrales	Total/NA	Water	9223B	
885-6670-3	Bobcat	Total/NA	Water	9223B	
885-6670-4	Montano	Total/NA	Water	9223B	
885-6670-5	Central West	Total/NA	Water	9223B	
885-6670-6	Rio Bravo West	Total/NA	Water	9223B	
885-6670-7	Los Padillas	Total/NA	Water	9223B	
885-6670-8	Blank	Total/NA	Water	9223B	
MB 885-7126/1	Method Blank	Total/NA	Water	9223B	

Lab Chronicle

Client: Bosque Ecosystem Monitoring Program
Project/Site: BEMP

Job ID: 885-6670-1

Client Sample ID: Willow Creek
Lab Sample ID: 885-6670-1
Date Collected: 06/20/24 10:12
Matrix: Water
Date Received: 06/20/24 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9223B		1	7126	SS	EET ALB	06/20/24 17:04

Client Sample ID: Corrales
Lab Sample ID: 885-6670-2
Date Collected: 06/20/24 11:16
Matrix: Water
Date Received: 06/20/24 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9223B		1	7126	SS	EET ALB	06/20/24 17:04

Client Sample ID: Bobcat
Lab Sample ID: 885-6670-3
Date Collected: 06/20/24 11:54
Matrix: Water
Date Received: 06/20/24 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9223B		1	7126	SS	EET ALB	06/20/24 17:04

Client Sample ID: Montano
Lab Sample ID: 885-6670-4
Date Collected: 06/20/24 12:39
Matrix: Water
Date Received: 06/20/24 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9223B		1	7126	SS	EET ALB	06/20/24 17:04

Client Sample ID: Central West
Lab Sample ID: 885-6670-5
Date Collected: 06/20/24 13:35
Matrix: Water
Date Received: 06/20/24 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9223B		1	7126	SS	EET ALB	06/20/24 17:04

Client Sample ID: Rio Bravo West
Lab Sample ID: 885-6670-6
Date Collected: 06/20/24 14:14
Matrix: Water
Date Received: 06/20/24 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9223B		1	7126	SS	EET ALB	06/20/24 17:04

Client Sample ID: Los Padillas
Lab Sample ID: 885-6670-7
Date Collected: 06/20/24 14:47
Matrix: Water
Date Received: 06/20/24 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9223B		1	7126	SS	EET ALB	06/20/24 17:04

Lab Chronicle

Client: Bosque Ecosystem Monitoring Program
Project/Site: BEMP

Job ID: 885-6670-1

Client Sample ID: Blank

Date Collected: 06/20/24 15:00
Date Received: 06/20/24 15:40

Lab Sample ID: 885-6670-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9223B		1	7126	SS	EET ALB	06/20/24 17:04

Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Bosque Ecosystem Monitoring Program
Job ID: 885-6670-1
Project/Site: BEMP

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-26-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
9223B		Water	Escherichia coli

Oregon	NELAP	NM100001	02-26-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
9223B		Water	Escherichia coli

Chain-of-Custody Record

Client: Bosque Ecosystem Monitoring Program (BEMP)
Mailing Address: 1 University, MSC 032020 Alb. NM 87131
Phone #: (505) 206-3767
email or Fax#: Matt.Leister@BEMP.org
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance ☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: BEMP
Project #:
Project Manager: Matt Leister
Sampler:
On Ice: ☒ Yes ☐ No
# of Coolers: 1
Cooler Temp (including CF): 13.8 ± 0 = 13.8 (°C)

HALL ENVIRONMENTAL ANALYSIS LABO
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87
Tel. 505-345-3975 Fax 505-345-4107
885-6670 COC

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	E Coli. Coliform Enumer					
06/20/24	10:12	Surface Water	Willow Creek			2406971											X					
06/20/24	11:16	Surface Water	Corrales														X					
06/20/24	11:54	Surface Water	Bobcat														X					
06/20/24	12:39	Surface Water	Montaño														X					
06/20/24	13:35	Surface Water	Central West														X					
06/20/24	14:14	Surface Water	Rio Bravo West														X					
06/20/24	14:47	Surface Water	Los Padillas														X					
06/20/24	15:00	D.I. Water	Blank														X					

Date	Time:	Relinquished by.	Received by	Via	Date	Time
06/20/24	15:19	McKenzie Williams		COD	Jun 20, 2024	1540
Date	Time	Relinquished by.	Received by	Via	Date	Time

Remarks:

Login Sample Receipt Checklist

Client: Bosque Ecosystem Monitoring Program

Job Number: 885-6670-1

Login Number: 6670
List Number: 1
Creator: Dominguez, Desiree

List Source: Eurofins Albuquerque

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	False	Received same day of collection; chilling process has begun.
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Refer to Job Narrative for details.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
TCEQ Mtd 1005 soil sample was frozen/delivered for prep within 48H of sampling.	N/A	

In partnership with the University of New Mexico and Sevilleta LTER

BOSQUE ECOSYSTEM MONITORING PROGRAM (BEMP)

SITE MONITORING REPORT FOR 2023

2023 ANNUAL SITE MONITORING TECHNICAL REPORT

Submitted

04/29/2024

2023 Final Report submitted to:

US Army Corps of Engineers, USACE Contract #: W912PP18C0023

US Bureau of Reclamation, Grant NO R21AP10166

Key personnel and contact information:

Dr. Kim Eichhorst, Program Director, kimde@unm.edu

Matt Leister, Science Director, matt.leister@bemp.org

Zoe Wadkins, Education Director, zoe.wadkins@bemp.org

Dr. Ara Winter, Information Manager, akooser@unm.edu

Contents

1 Introduction

Objective

To collect and analyze abiotic and biotic data at BEMP sites in the Rio Grande Bosque while involving K-12 and university students in learning about and monitoring this ecosystem.
All data and reports are available on the BEMP website, www.BEMP.org.

Scope of Work (updated from previous reports)

The Bosque Ecosystem Monitoring Program (BEMP) combines long-term ecological research with community outreach by involving K-12 teachers, their students, and students from the University of New Mexico in monitoring key indicators of structural and functional change in the Rio Grande riparian forest, or "bosque." In 1996, BEMP began as a program of the University of New Mexico's Department of Biology (under NSF Grant No. DEB-9420510, Amendment No. 004) and quickly became a collaboration between the University of New Mexico and Bosque School in Albuquerque, with fewer than 200 participants in its first year. Before the COVID-19 pandemic, BEMP was averaging approximately 9,000 participants annually. The BEMP outdoor education experience builds science skills, educates the community about the bosque ecosystem, and helps create a constituency for stewardship of the bosque. BEMP findings derived from student-gathered data are used by government agencies to inform multi-million dollar management decisions that impact the riparian corridor.

The 2023 reporting period covers 33 BEMP sites along 250 miles of the Rio Grande, including 32 sites within the Middle Rio Grande (Figure 1.1 and Table 1.1). Through the stakeholder driven and strategic location of these sites, BEMP studies the ecological drivers and effects of fire, flooding, climate change, and human alteration on the bosque ecosystem. Two-thirds of BEMP sites were installed by BEMP staff at the request of natural resource and water managers to monitor the long-term ecological impacts of restoration projects such as mechanical clearing, wood chipping, bank-lowering, and more recently, post burn recovery. The other third were installed to facilitate research opportunities or at the request of schools or other partners.

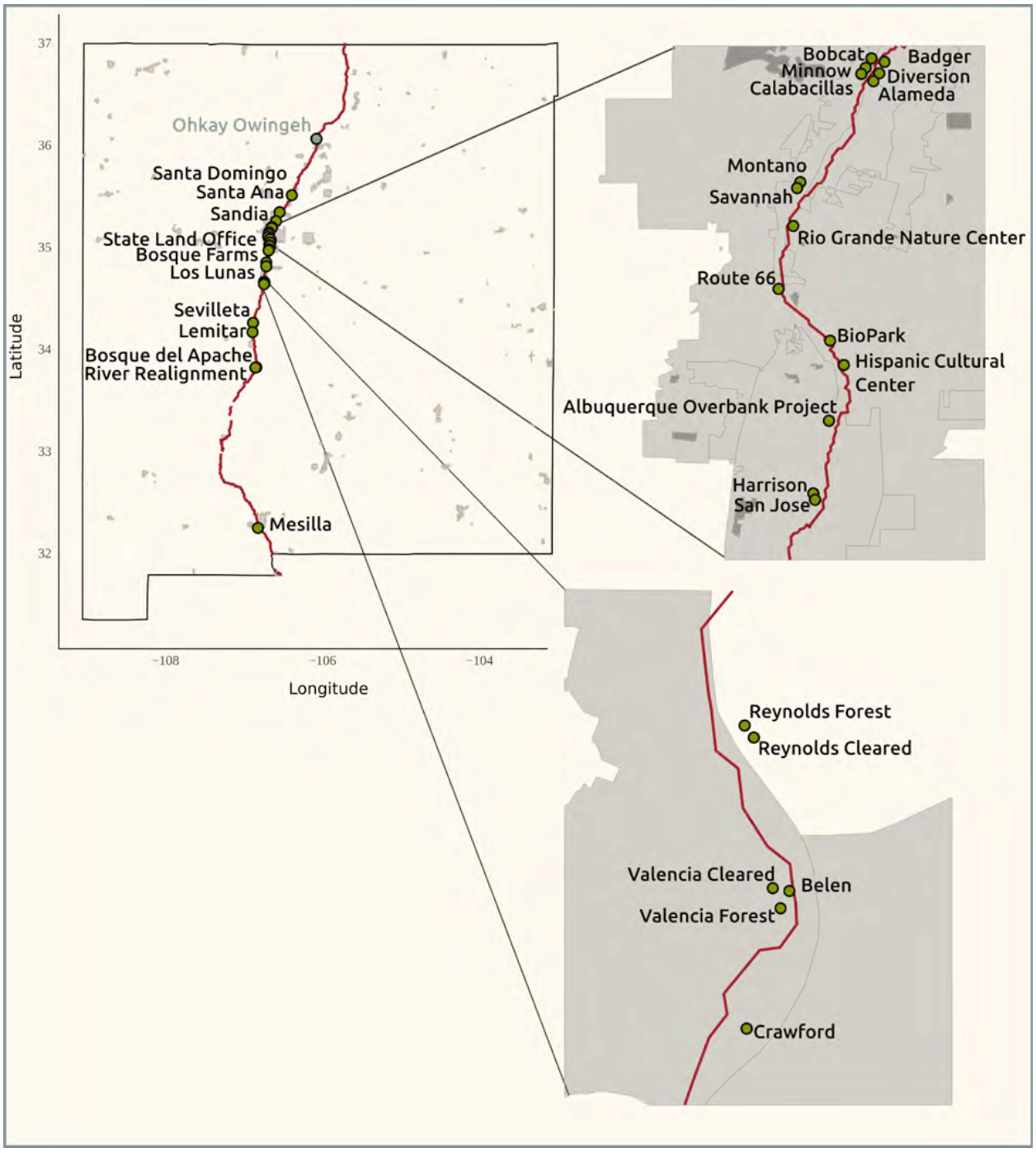


Figure 1.1. Map of 33 active BEMP sites along the Rio Grande; Ohkay Owingeh was not an active site for all of 2023.

Table 1.1. BEMP sites and locations along the Rio Grande by Reach, listed from north to south.
* denotes inactive site (either no longer active or temporarily inactive)

Site number	Site name	Latitude	Longitude	Reach
9	Ohkay Owingeh*	36.0618	-106.0761	Cochiti
24	Santo Domingo*	35.50989	-106.3896	Cochiti
5	Santa Ana	35.34284	-106.5458	Angostura
32	Sandia	35.255	-106.5907	Angostura
22	Bobcat	35.19705633	-106.6439494	Angostura
21	Badger	35.1956	-106.6402	Angostura
12	Minnow	35.19315094	-106.646915	Angostura
10	Diversion	35.1908	-106.6429	Angostura
11	Calabacillas	35.19056822	-106.6491626	Angostura
1	Alameda	35.1875	-106.6459	Angostura
17	Montano	35.14528819	-106.6803699	Angostura
6	Savannah	35.14285294	-106.6819814	Angostura
2	Rio Grande Nature Center (RGNC)	35.127	-106.6854	Angostura
20	Route 66	35.1006408	-106.6914783	Angostura
23	BioPark	35.079	-106.668	Angostura
8	Hispanic Cultural Center (HCC)	35.06881267	-106.6580575	Angostura
29	Albuquerque Overbank Project (AOP)	35.04546	-106.6657	Angostura

13	Harrison	35.01505603	-106.6736953	Angostura
31	San Jose	35.012375	-106.6728	Angostura
28	Valle de Oro	34.97895	-106.6801	Angostura
30	State Land Office (SLO)	34.96785	-106.6856	Angostura
27	Bosque Farm	34.848851	-106.714722	Isleta
3	Los Lunas	34.81236936	-106.714458	Isleta
19	Reynolds Forest	34.66054583	-106.7429525	Isleta
18	Reynolds Cleared	34.65966431	-106.7421328	Isleta
15	Valencia Cleared	34.64863444	-106.7391728	Isleta
4	Belen	34.6484315	-106.7377022	Isleta
16	Valencia Forest	34.64716225	-106.738482	Isleta
25	Crawford	34.63835	-106.74277	Isleta
14	Sevilleta	34.25834233	-106.8831845	San Acacia
7	Lemitar	34.16703188	-106.8899486	San Acacia
34	River Realignment	33.8227	-106.8419	San Acacia
33	Bosque del Apache (BDA)	33.8197	-106.8539	San Acacia
26	Mesilla	32.248328	-106.821014	South of San Marcial

BEMP monitors biotic and abiotic variables at our research sites. Our abiotic datasets include: depth to groundwater; water level in ditches and drains; precipitation; above- and below-ground temperature; and water quality in the Rio Grande. Our biotic datasets include litterfall; vegetation cover; surface-active arthropod richness and abundance; and tamarisk leaf beetle distribution, abundance and impact.

Timing of Data Collection (from previous reports)

Depth to groundwater, water level in nearby ditches and/or drains, precipitation, and litterfall are collected monthly, during the week of the third Tuesday of each month. Surface-active arthropods are collected three times each year, in the spring, summer, and fall. Vegetation cover is surveyed once each year in August-September. Tamarisk leaf beetle monitoring is conducted during the week of monthly monitoring from May-August, with some sites collected through September. BEMP collects other datasets as funding permits, including water quality of the river, ditches, and groundwater; fuel load/woody debris; cottonwood sex and diameter at breast height; cottonwood phenology; sunflower phenology; and seedling counts.

Site Updates

High river flows from May through early July, 2023 resulted in the inundation of numerous sites by overbank and seep flooding. Flooded sites were (north to south): in Bernalillo County: Minnow (Site #12), Diversion (Site #10), Alameda (Site #1), Route 66 (Site #20), Bio Park (Site #23), Hispanic Cultural Center (Site #8), Albuquerque Overbank Project (Site #29), Harrison (Site #13), San Jose (Site #31) and State Land Office (Site #30); in Valencia County: Bosque Farms (Site #27), Los Lunas (Site # 3), Reynolds Cleared (Site #18), Reynolds Forest (Site #19), Valencia Cleared (Site #15), Valencia Forest (Site #16), Belen (Site #4), and Crawford (Site #25) and in Socorro County: Bosque del Apache (Site #33) and River Realignment (Site #34). Collections were modified to accommodate the amount of flood water at each site while maintaining field crew safety. BEMP was unable to secure permission to monitor Santo Domingo (Site #24) from the local tribal authorities starting in June 2023.

In February 2023, there was a small, rapidly-contained fire at the Los Lunas BEMP site. The fire was primarily in the center of the site, scorching the center well and burning B, D, and E litterfall tubs and a few pitfall traps. The fire scorched the ground and a few cottonwoods but it was a low severity fire. This area flooded in April of 2023 and remained inundated through June. This allows for a comparison of post-fire recovery following flooding. Pictures and data visualizations of the Reynolds Forest and Los Lunas sites post-fire are in the last section of 6 Litterfall and Vegetation Cover, post-burn assessment.

2 Importance of long-term data, community science, and education outreach (from previous reports)

BEMP's mission is community science, education, and stewardship: equitable and inclusive hands-on student research essential to the management of the Rio Grande ecosystem.

The long-term data generated by BEMP have been used in informing predictive models, assessing restoration projects, tracking shifts in native and exotic vegetation, understanding bosque response to different ecosystem drivers (e.g., fire, flooding, clearing, impacts of climate change, introduction of biocontrol species), determining what ecotones are present, and how to transition former riparian areas to sustainable semi-arid ecosystems. Long-term monitoring of these sites is critical for understanding how the ecosystem responds to land management strategies and climate variability under rapidly changing means and variances. Long term data is necessary for effectively applying adaptive management and developing best practices strategies.

BEMP involves community members and students of all ages, from pre-K through high school, college, and graduate school to life-long learners volunteering in the program. Our primary focus is on elementary, middle , and high school students that participate in monthly fieldwork (long term educational engagement) to collect groundwater, precipitation, and litterfall data, as well as going out once or twice each year to participate in monitoring arthropods. Students have opportunities to participate in other data collections, including water quality, tamarisk leaf beetle, and monitoring fuel load. BEMP involves UNM undergraduate and graduate students in a semester-long internship experience through an upper division biology BEMP course, BIOL 408/508, where they learn about the bosque ecosystem, develop independent projects applying BEMP data, work with K-12 students and teachers, and play an integral role in regular field and lab work. The work of K-12 students in the field is facilitated and quality controlled by BEMP staff as well as the UNM interns. Having now played a role in our community for a couple of decades, we are starting to see the long-term impacts of our programming. Each year, there are a few UNM students in the BEMP course that had previously participated in BEMP as elementary, middle, and/or high school students. These students are often reconnected to their former schools and sites. BEMP has been part of a meaningful story for many students and community members. BEMP helps students connect with their local landscape, learn science through hands-on research, and communicate or present their understanding through math, writing, art, and other forms of expression. Several former BEMP students now have jobs with our partner agencies, including Bernalillo County

Water Utility Authority, City of Albuquerque Open Space, Middle Rio Grande Conservancy District, and New Mexico Interstate Stream Commission.

3 Outreach

BEMP hosted two events during 2023 to present new data, visualizations, and analyses: the Crawford Symposium and the Luquillo-Sevilleta Virtual Spanish Symposium. Both of these events feature student presentations. BEMP staff and students present BEMP data to managers, professionals, and students several times throughout the year depending on conference availability. In 2023, BEMP data were shared at conferences and workshops including the RiversEdge West Planting for the Future Conference, Climate Adaptation Science Center Fall Science Meeting, Audubon, Sevilleta All Hands Meeting, and the Rio Grande Basin Study. BEMP staff co-hosted a tour with the Rio Grande Basin Study of sites in the San Acacia and Isleta Reaches in June 2023. BEMP participated in multiple workshops, addressing issues around water, climate, fire, and vegetation, including workshops through the MRG Endangered Species Collaborative Program, Whitfield Wildlife Conservation Area, Rio Grande Basin Study, Valle de Oro National Wildlife Refuge and EJ-40 Air Network, Wetland Stakeholder Work Group, and San Acacia Science Forum.

STEM pathways and workforce development through BEMP

Over the last several years, the COVID-19 pandemic has had an unprecedented effect on the educational (and broader) sphere. Despite the many variations of learning that schools, teachers and community partners readjusted to, BEMP education did its best to meet our community's needs at every turn. Taking all necessary precautions to ensure public health and safety, BEMP education reached 5,900 students and adults through in-person contacts alone, engaging 56 different schools and community organizations throughout April of last year to today.

Instruction was provided in-person and remotely at field locations and in outdoor and on campus classrooms, through field monitoring collections, and in study-trips. We also offered an ongoing array of educational programming provided online through printable and electronic platforms, including self-led activities and video lessons. Through lessons focused on water quality and storm impacts, phenological observation, ecosystem monitoring, climate change, scientific processes, graphing and data analysis, students obtained a deeper understanding of nature while developing career-based skills in the sciences, public-speaking and presentation delivery. Moreover, university students participating in the Biology 408/508 internship course

conducted field and lab work during this time, engaging in an array of scientific, procedural and collection based skill sets as well as educating younger students and expanding their professional experience as Albuquerque's upcoming workforce.

If this time has taught us anything, it is the deep value of engaging audiences through our broader ecosystem, encouraging us all to see ourselves connected to, rather than separate from, one another and our more-than-human world.

4 Temperature

During the 2022-2023 reporting period, we collected data from OnSet temperature loggers at nine BEMP sites. Three loggers were initially installed at each selected site: a canopy air temperature logger attached to a tree near the canopy rain gauge, a canopy subsurface logger buried underground near the canopy rain gauge, and an open subsurface logger buried near the open rain gauge. Temperature data are logged hourly and downloaded annually by BEMP staff.

Complete temperature monitoring methodology can be found online at: https://secureservercdn.net/45.40.146.38/659.541.myftpupload.com/wp-content/uploads/2017/09/TempLoggerDownloadandDeploy.pdf

Data were run through a visual QA/QC to make sure plots follow the general expected seasonal patterns and historical trends. The data were then checked for the number of NA (missing data points) by site over time and for any points more than three standard deviations (SD) away from the z-score transformed data. The number of data points flagged as outside the three SD were minimal given the volume of data. Data points collected on the same day as the logger was handled for download were eliminated as they did not account for the full day, and as the logger position was disturbed in the download process.

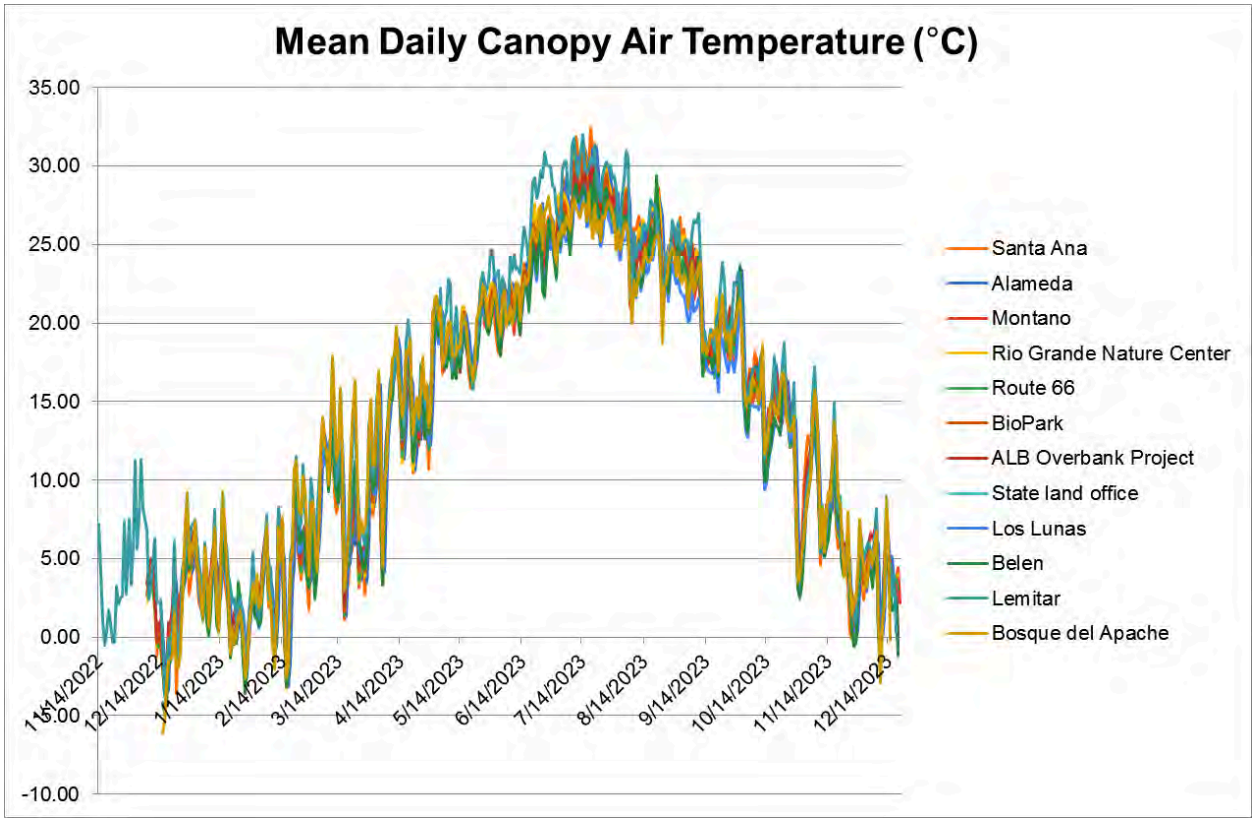


Figure 4.1. Mean daily air temperature (°C) under a canopy from December 2022 through December 2023 at Santa Ana, Albuquerque sites (Alameda, Montano, Rio Grande Nature Center, Route 66, BioPark, and State Land Office), Los Lunas, Belen, Lemitar, and Bosque del Apache.

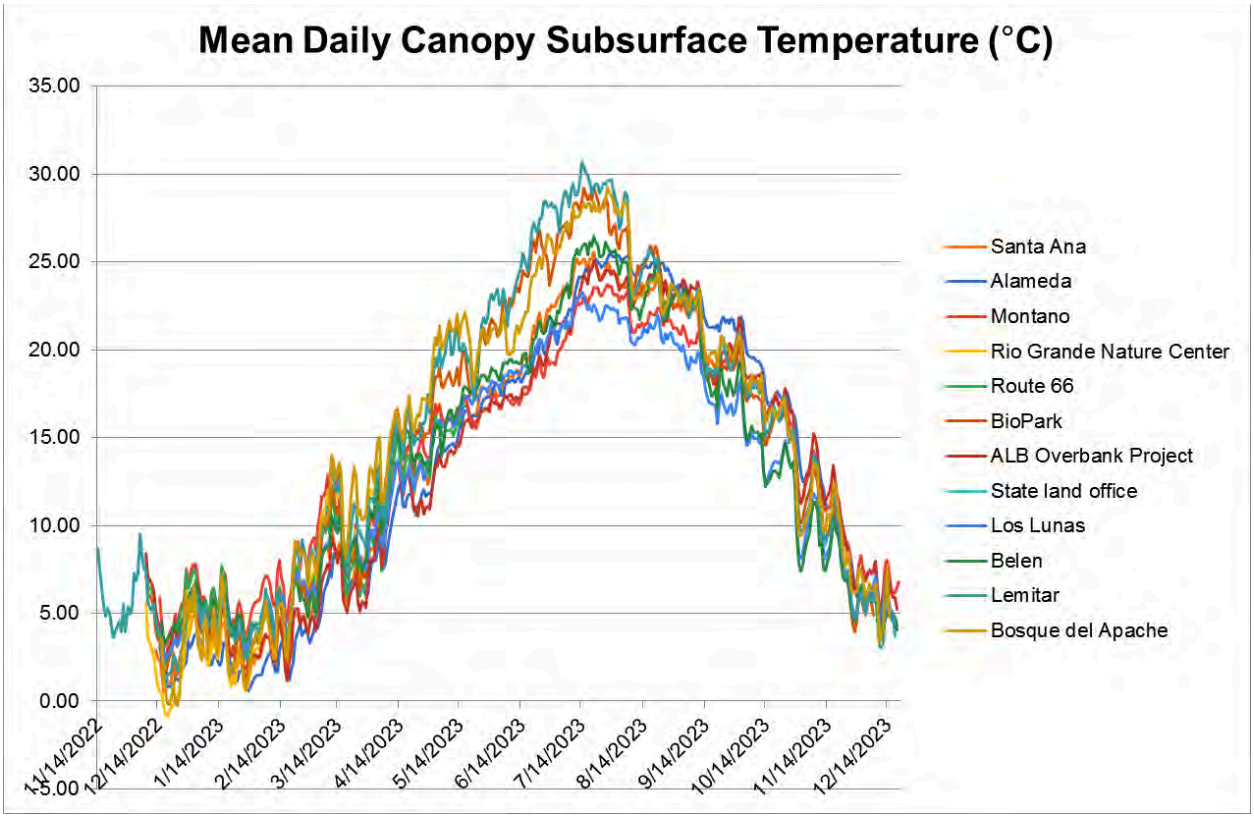


Figure 4.2 Mean daily subsurface temperature (°C) under a canopy from December 2022 through December 2023 at Santa Ana, Albuquerque sites (Alameda, Montano, Rio Grande Nature Center, Route 66, BioPark, and State Land Office), Los Lunas, Belen, Lemitar, and Bosque del Apache.

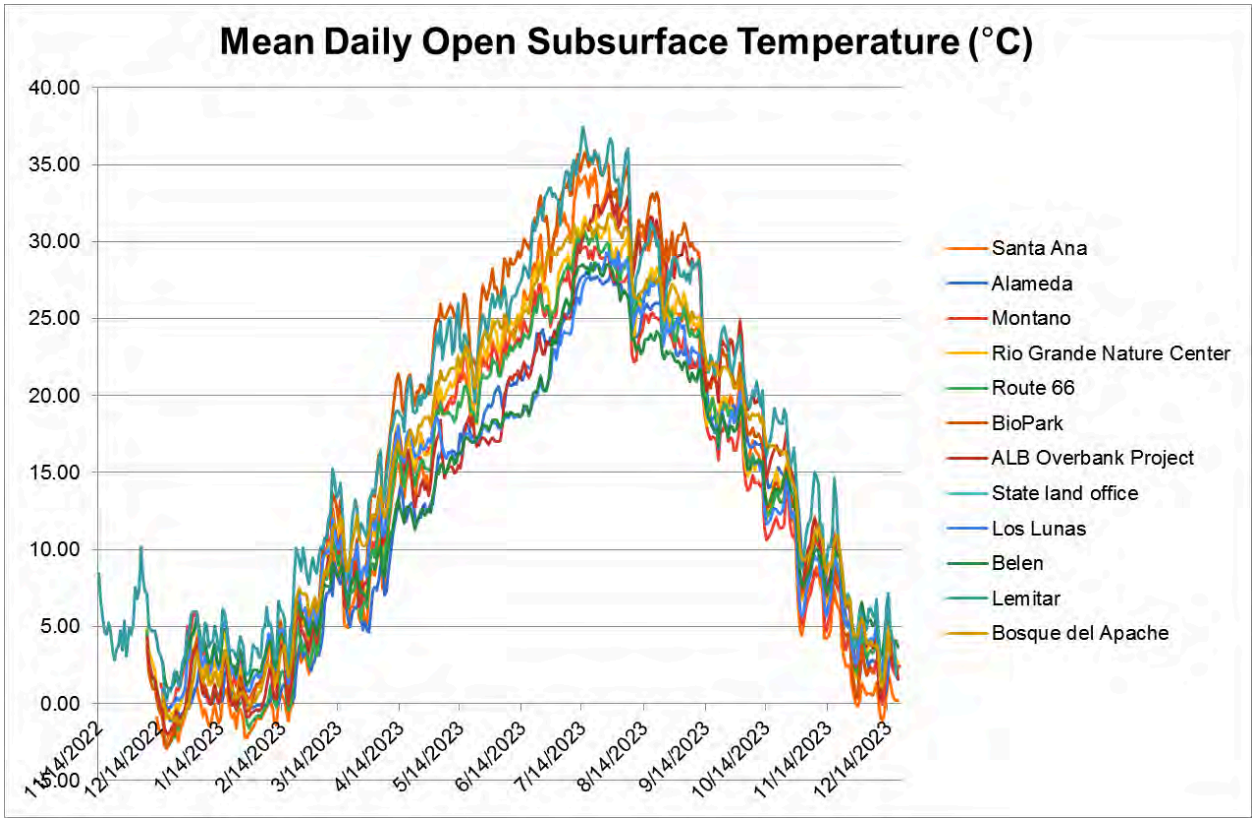


Figure 4.3 Mean daily subsurface temperature (°C) in the open from December 2022 through December 2023 at Santa Ana, Albuquerque sites (Alameda, Montano, Rio Grande Nature Center, Route 66, BioPark, and State Land Office), Los Lunas, Belen, Lemitar, and Bosque del Apache.

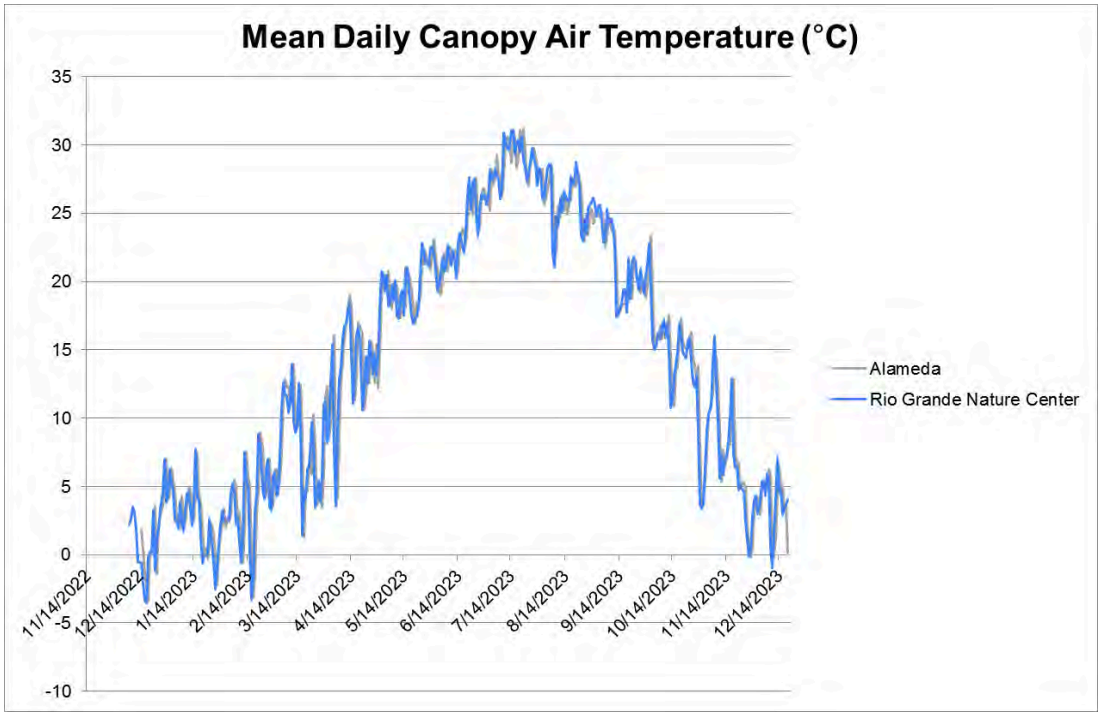


Figure 4.4 Mean air temperatures at Alameda (high canopy cover) and RGNC (low canopy cover) in Albuquerque.

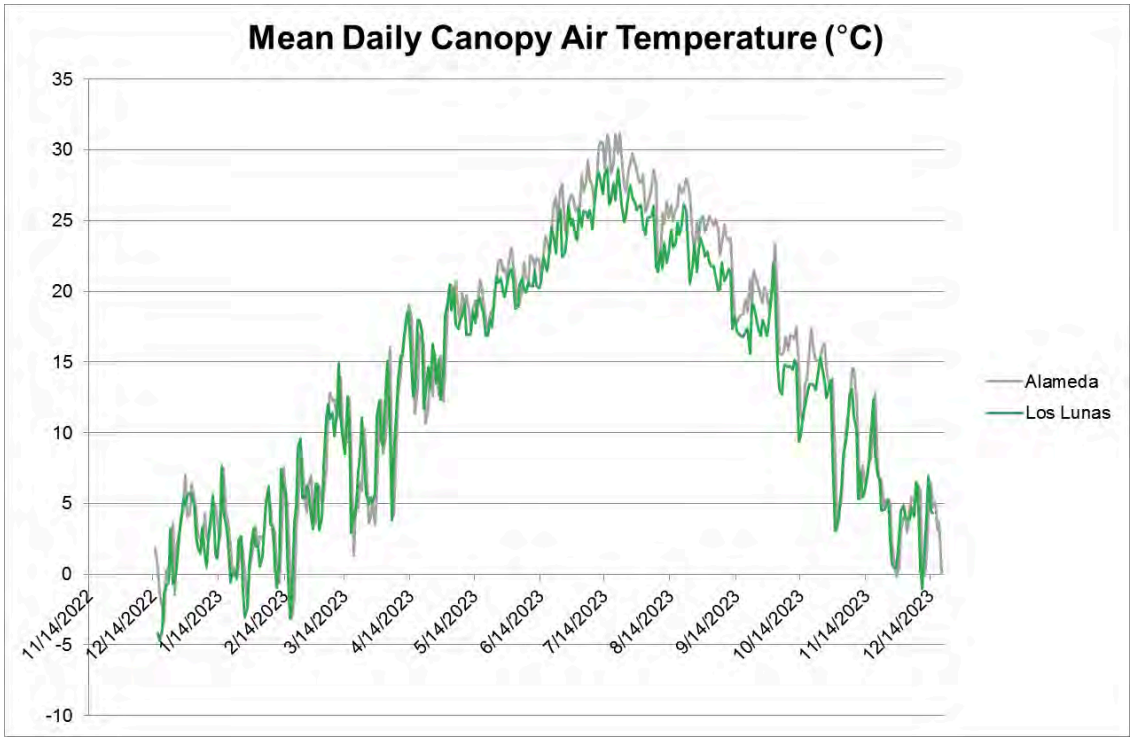


Figure 4.5 Mean air temperatures at Alameda (high canopy cover, urban area) and Los Lunas (high canopy cover, rural area).

Air temperatures show that the warmest sites fluctuate between the southernmost sites (Lemitar and Bosque del Apache), sites with low canopy cover (Santa Ana, Rt 66), and urban sites near bridges (Alameda, Rt 66).

Canopy loss is expected to expose affected areas to increased solar radiation, resulting in local elevated temperatures. This is expected to occur in regions where the dominant canopy trees (cottonwoods) die and are not replaced either through natural recruitment or plantings. As a result, microclimates within these areas will undergo noticeable shifts.

By comparing data from the subsurface temperature loggers beneath the existing canopy and in exposed areas within the same site, we not only gain insight into the insulating capacity of canopy trees within this ecosystem but will also be able to anticipate temperature shifts occurring in areas experiencing canopy loss without replacement.

The importance of canopy is demonstrated through a comparison of two Albuquerque sites, Alameda and RGNC (Figure 4.4). While RGNC is buffered by more farm fields and Candelaria Preserve, the cottonwood cover at Alameda is three times higher than at RGNC. Alameda is 1km (0.65 miles) south of the Alameda Bridge and 0.65 km (0.35 miles) north of Paseo del Norte Bridge. RGNC is 0.25 km (1 mile) south of the Montano Bridge and 0.25km (1 mile) north of I-40. Both sites are easily accessible and in the heart of the City. RGNC, with its declining canopy and sparse understory cover, is on average 0.11 °C warmer than Alameda with a maximum of 1.62 °C warmer. When considering the impact of urban areas on temperatures of the bosque, two sites with similar canopy cover were compared: Alameda and Los Lunas (almost 30 miles to the south) (Figure 4.5). Alameda is on average 1 °C warmer than Los Lunas with a maximum difference of 3.88 °C warmer.

5 Precipitation

Precipitation is measured at all of our sites, except for Bosque Farms (due to repeated vandalism). At each site, two Tru-Chek precipitation gauges are installed on a post; one under the forest canopy, and one out in the open. Each rain gauge is monitored and emptied by BEMP staff and community scientists once per month. A small amount of oil is added to the empty gauge to prevent evaporation and to ensure capture of the full month's precipitation.

More details on our methods for collecting precipitation data can be found here: https://github.com/BEMPscience/bemp_data/tree/master/precipitation

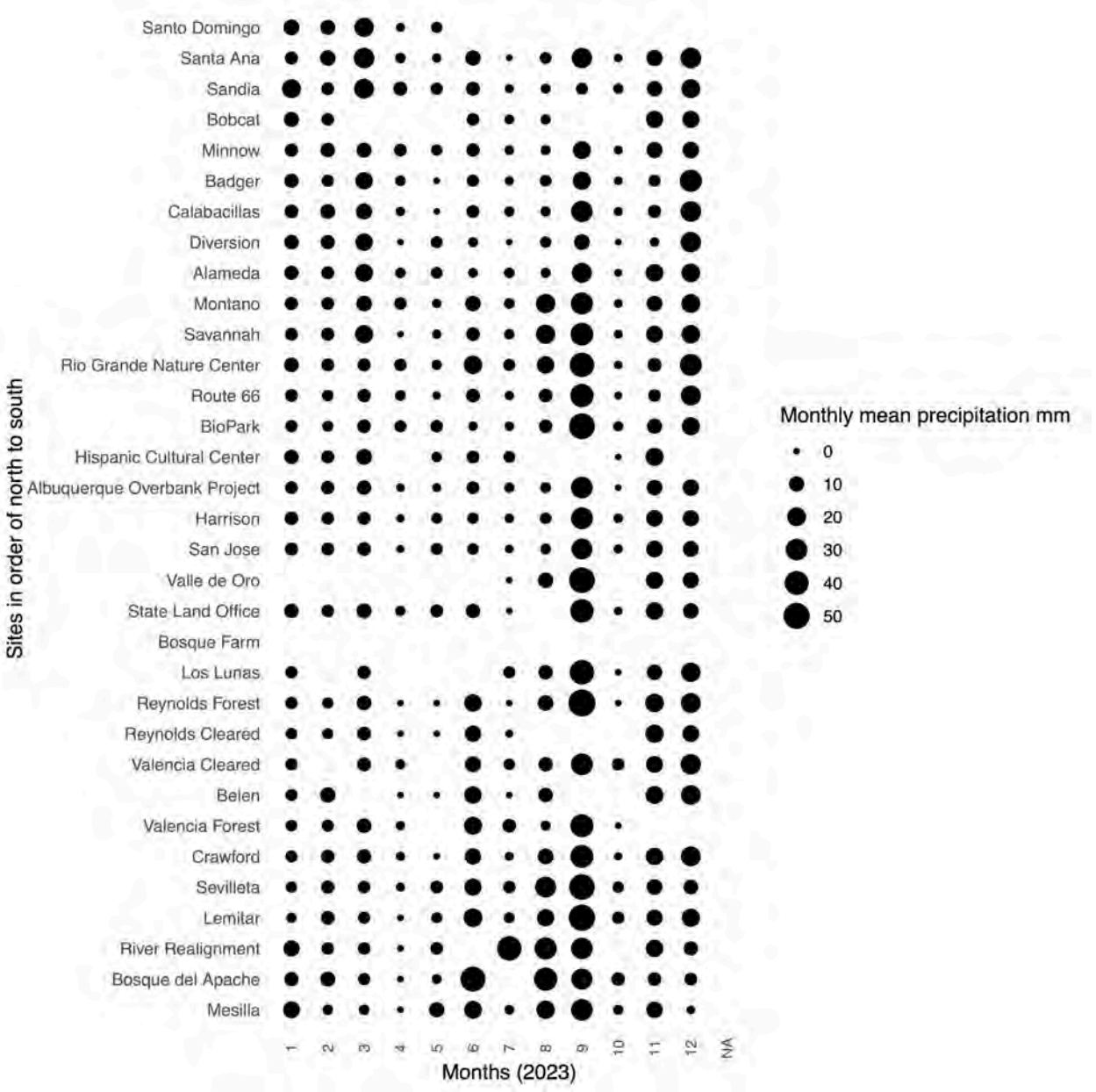


Figure 5.1 Mean monthly precipitation (mm) at each site for 2023.

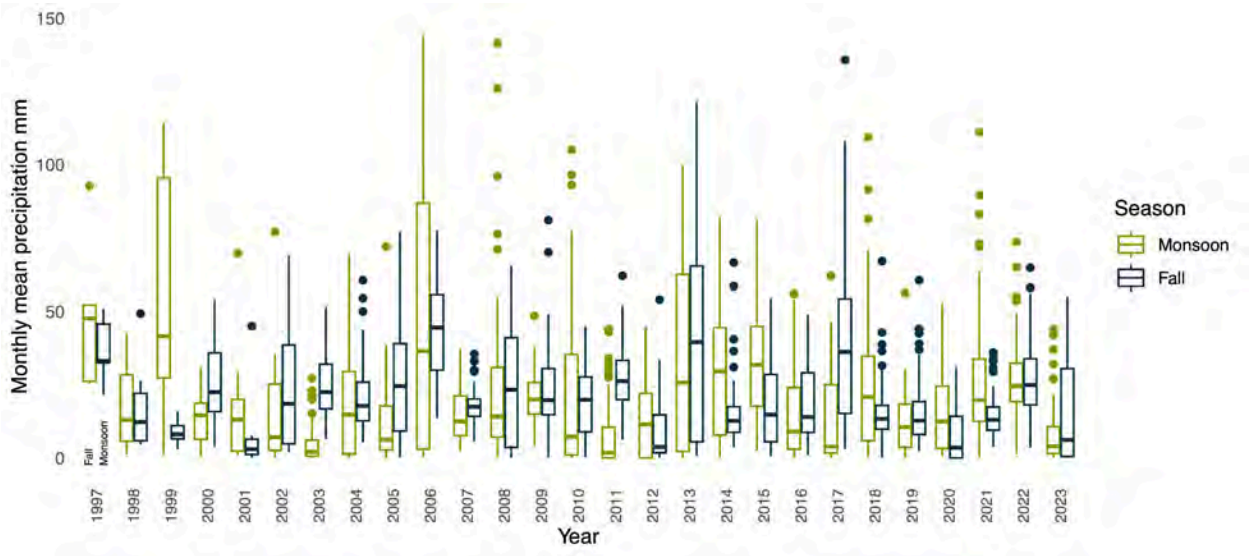


Figure 5.2 Boxplot of precipitation divided into the monsoon season (June - August) and fall storms (September-October). The number of sites has increased over time, starting with 3 sites in 1997 and reaching a maximum of 34 sites by 2018 and then dropping to 32 by 2023.

Long term precipitation trends

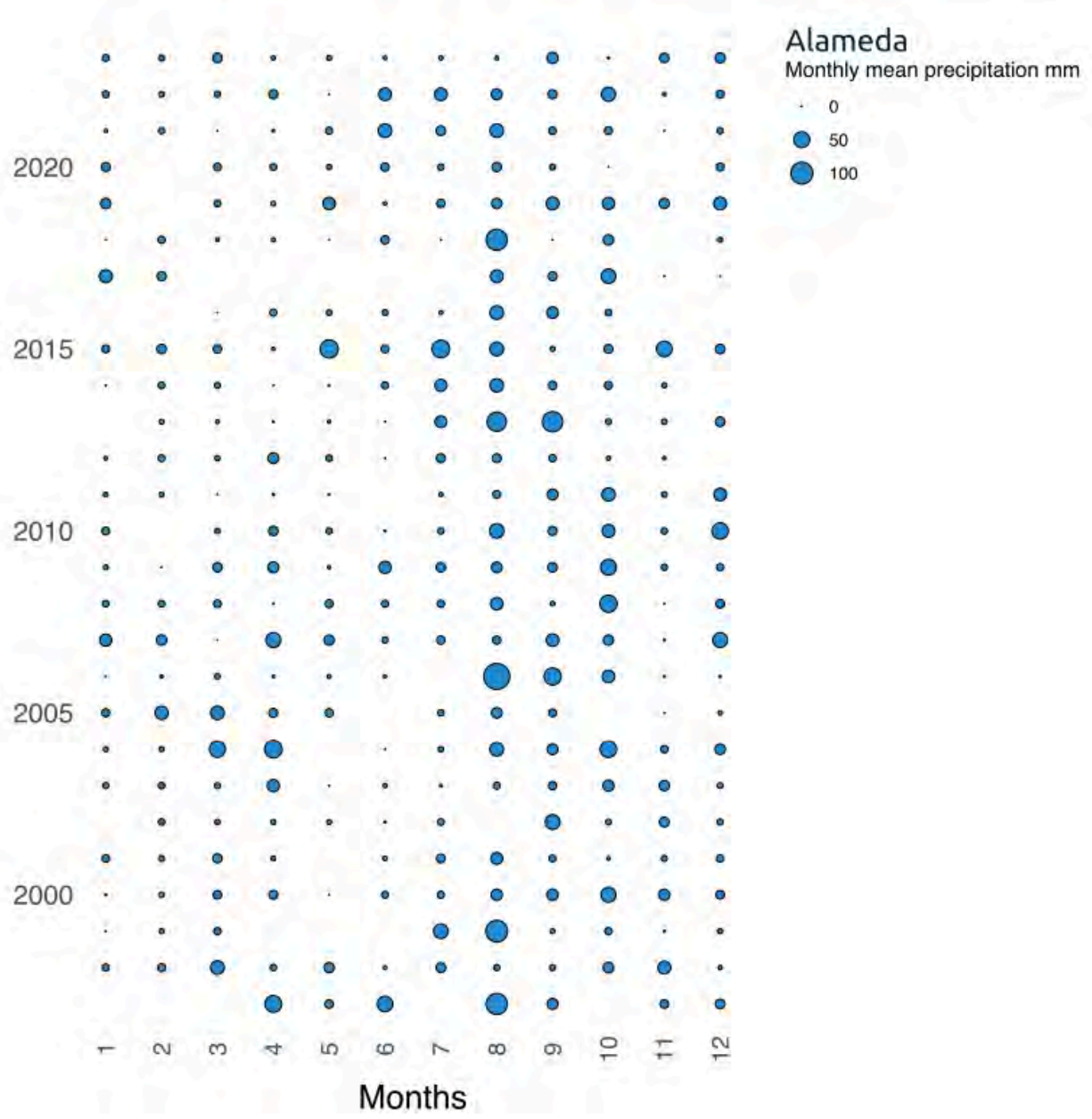


Figure 5.3 Mean monthly precipitation at Alameda from 1997 through 2023.

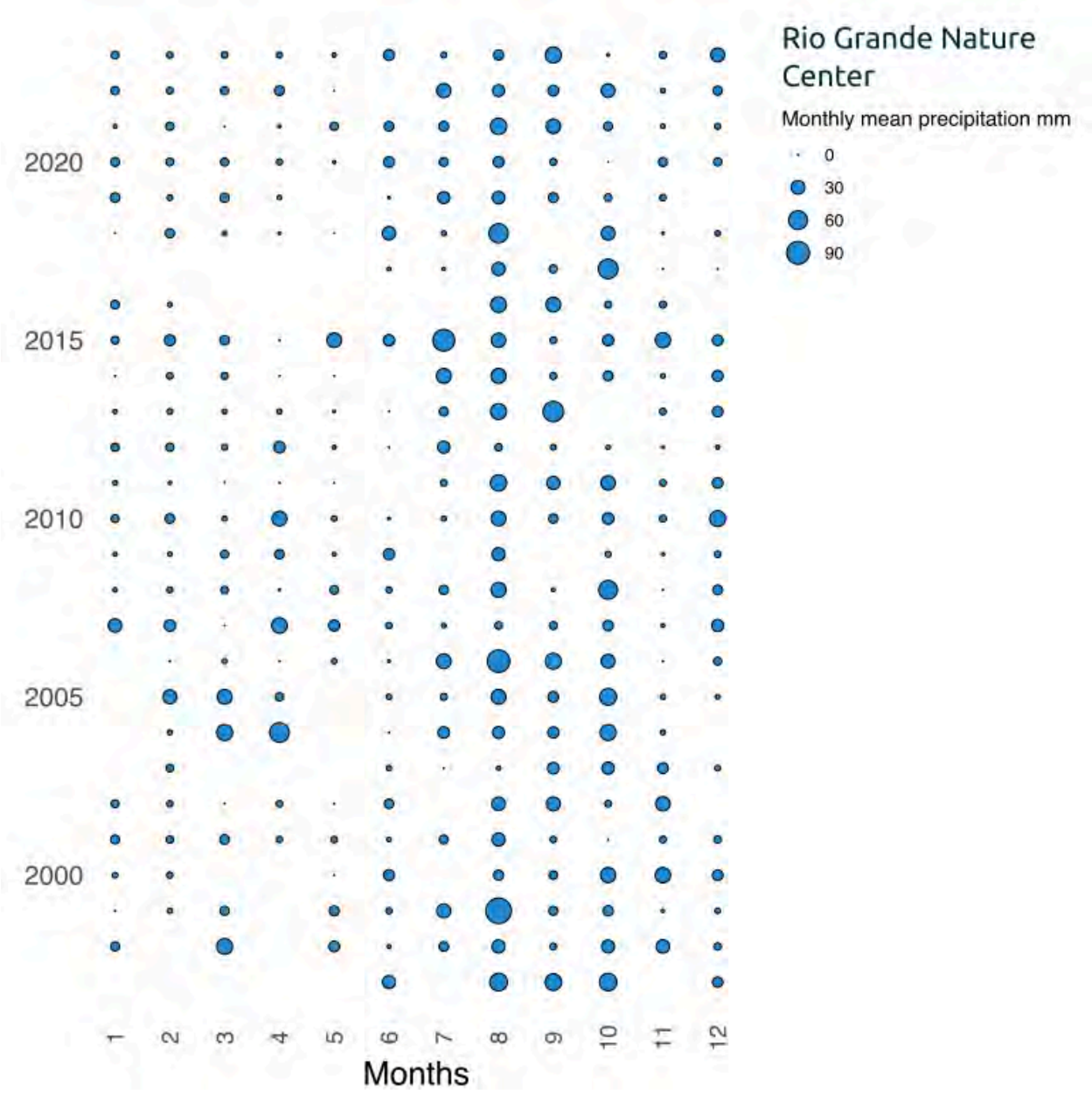


Figure 5.4 Mean monthly precipitation at RGNC from 1997 through 2023.

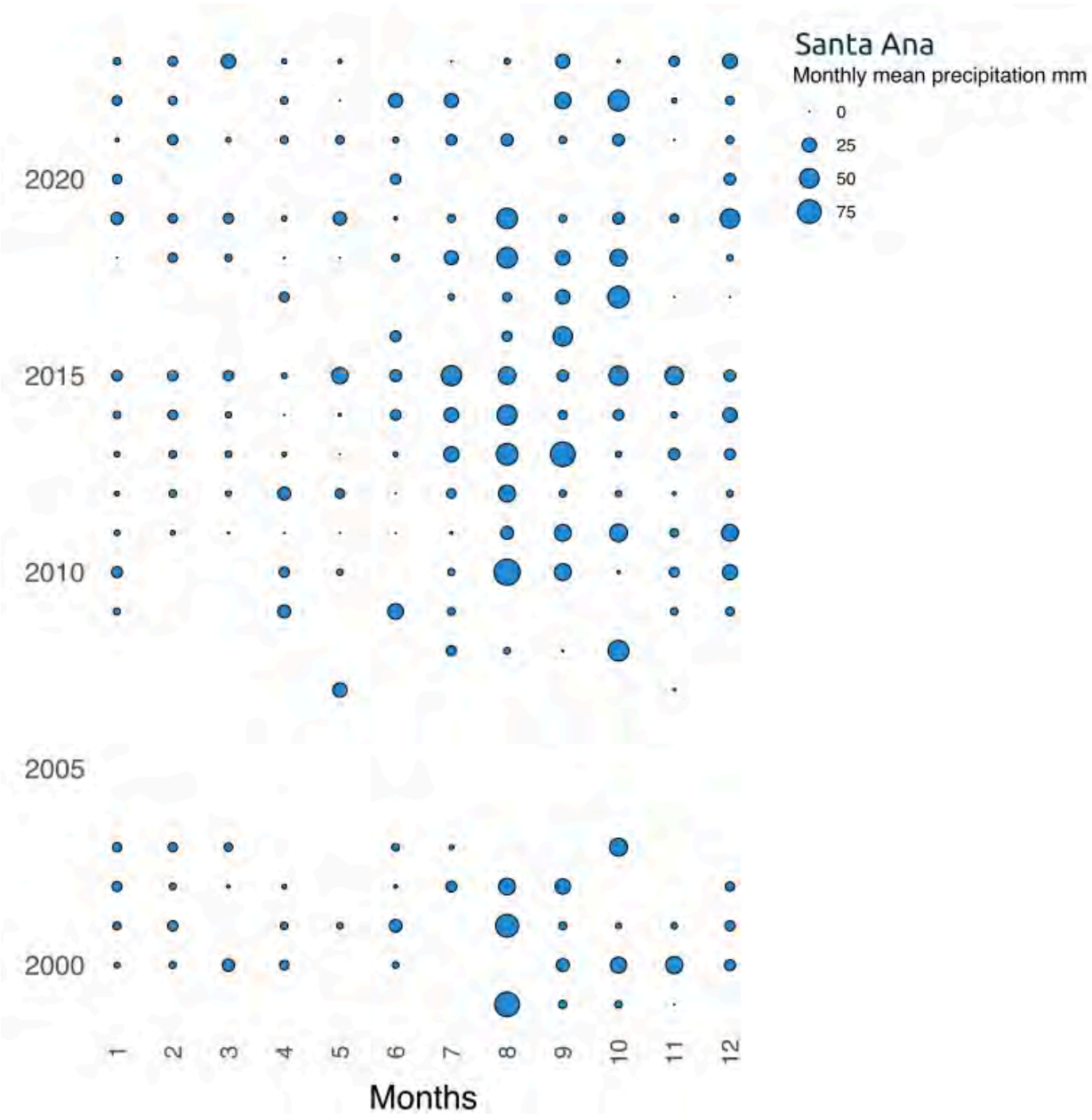


Figure 5.5 Mean monthly precipitation at Santa Ana from 1999 through 2023.

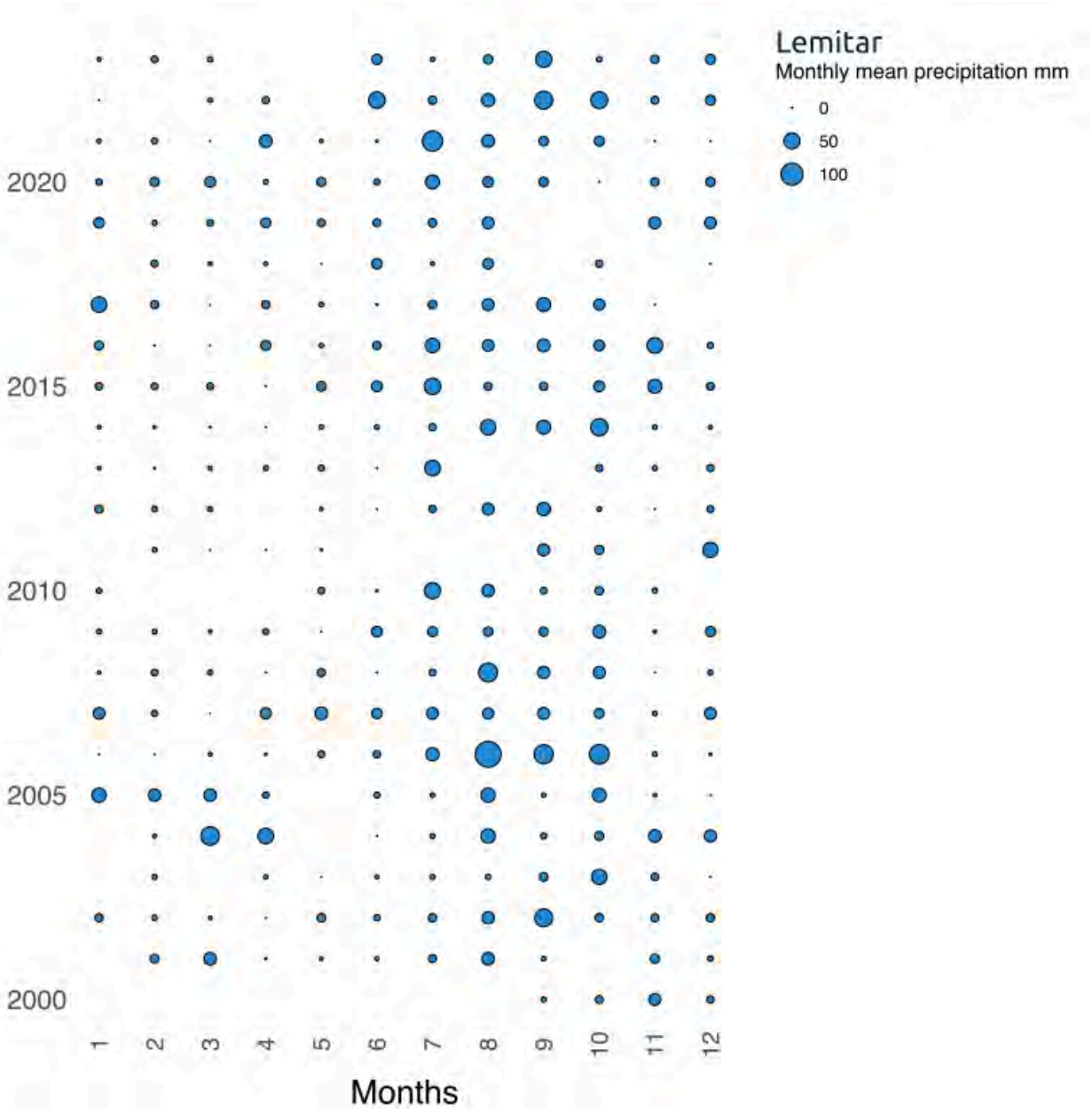


Figure 5.6 Mean monthly precipitation at Lemitar from 2000 through 2023.

While 2023 was a dry year, it is illustrative of the predicted shift towards greater precipitation events in the fall, after the historic monsoon season (mid-June to mid-September). Peak rainfall at most sites occurred in September. We compared monsoon season rains (typically defined as mid-June through September, but we used data from June-August) to fall rains (we used September and October rainfall). Even with the unevenness of having 3 months in the "monsoon" season and only two months in the "fall" season, we can see evidence of this potential shift of higher mean precipitation in fall, although it is not a strong shift in our data

at this point. The reduction of snowpack runoff, earlier snowmelt, and later fall storms will likely have an impact on the germination and growth of many different native riparian plants.

6 Depth to groundwater

Depth to groundwater is monitored at all BEMP sites except the Pueblos of Santa Ana and Santo Domingo. Pueblo of Sandia groundwater data are proprietary and must be requested through the Pueblo's Department of Natural Resources. Each month, BEMP staff along with UNM interns, K-12 students, and teachers monitor the five groundwater wells at BEMP sites. The nearby ditch/drain is also monitored and USGS river flow data are downloaded based on the monitoring day from the closest gauge to the north of each site.

Full monitoring methods can be found at:
https://github.com/BEMPscience/bemp_data/tree/master/depth_to_groundwater_data

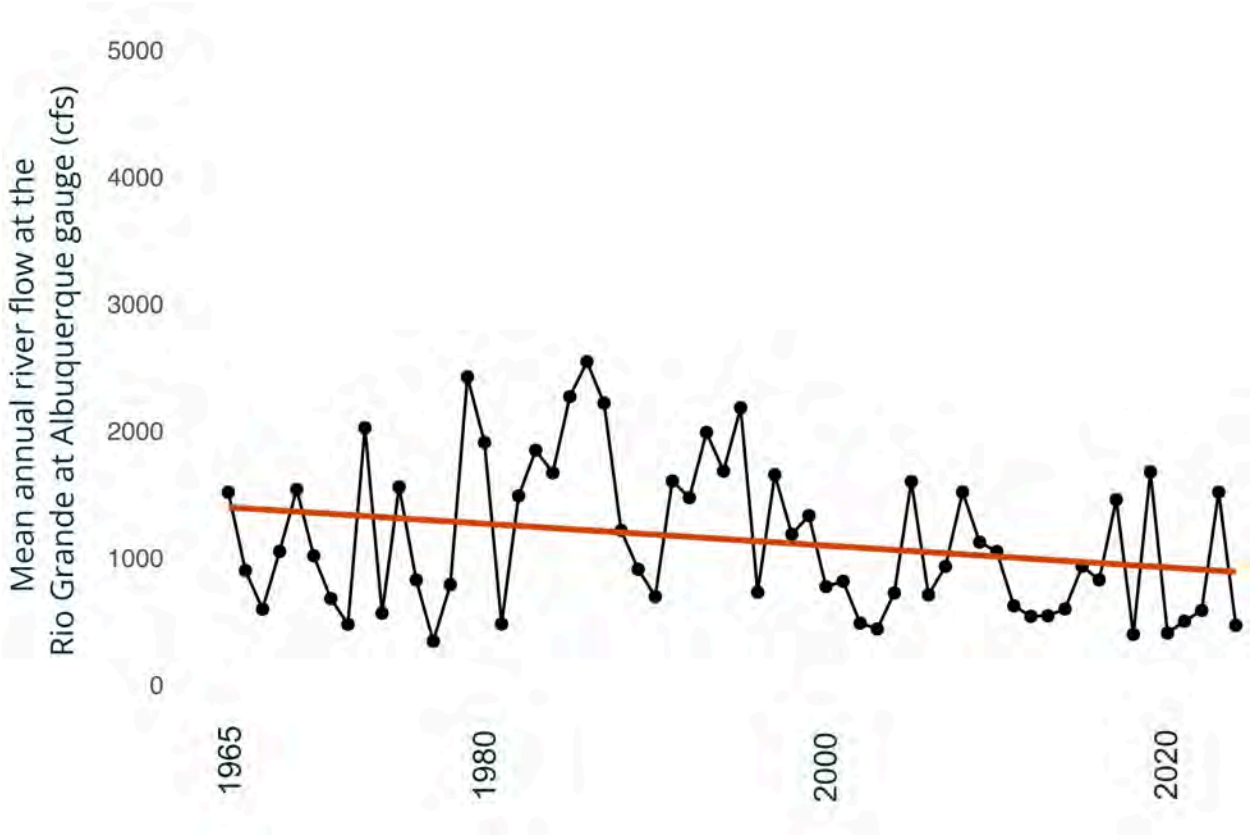


Figure 6.1 Mean annual river flow at the Albuquerque gauge over time. It is important to note that the Albuquerque gauge is located below Cochiti Dam which has regulated flows to the Rio Grande south of the dam since 1975. Prior to Cochiti Dam's construction, it was not unusual to see flows in the Rio Grande through Albuquerque peaking at or above 10 kcfs.

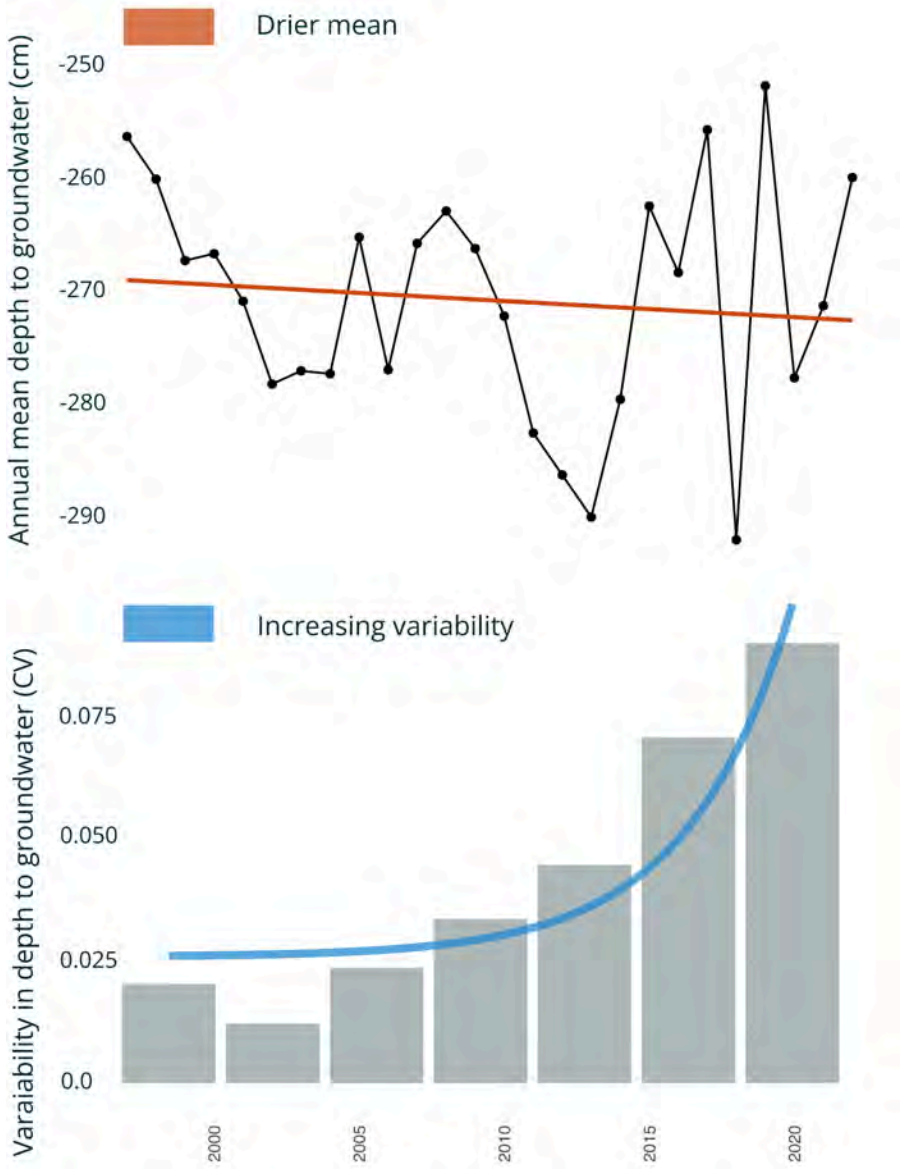


Figure 6.2 Figures showing the annual mean depth to groundwater and variability in depth to groundwater for the Alameda site.

The rapid changes in the mean and variance brought on by human-caused climate change may drive ecosystems into transition (riparian to semi-arid or arid). Climate change can cause more variability in snowpack between years, on top of overall declines in snowpack, leading to variability in river flow levels. Not all sites are impacted equally by this variability. For example, in response to high river flow, aggradation in some areas of the river can increase the likelihood of overbank flooding. Flooding can also lead to the Rio Grande flowing in sub-channels, increasing the proximity of some areas of the bosque to the river and thus decreasing depth to

groundwater more drastically. Soil profiles can also change the permeability of the soil, causing varying responses to changes in river flow.

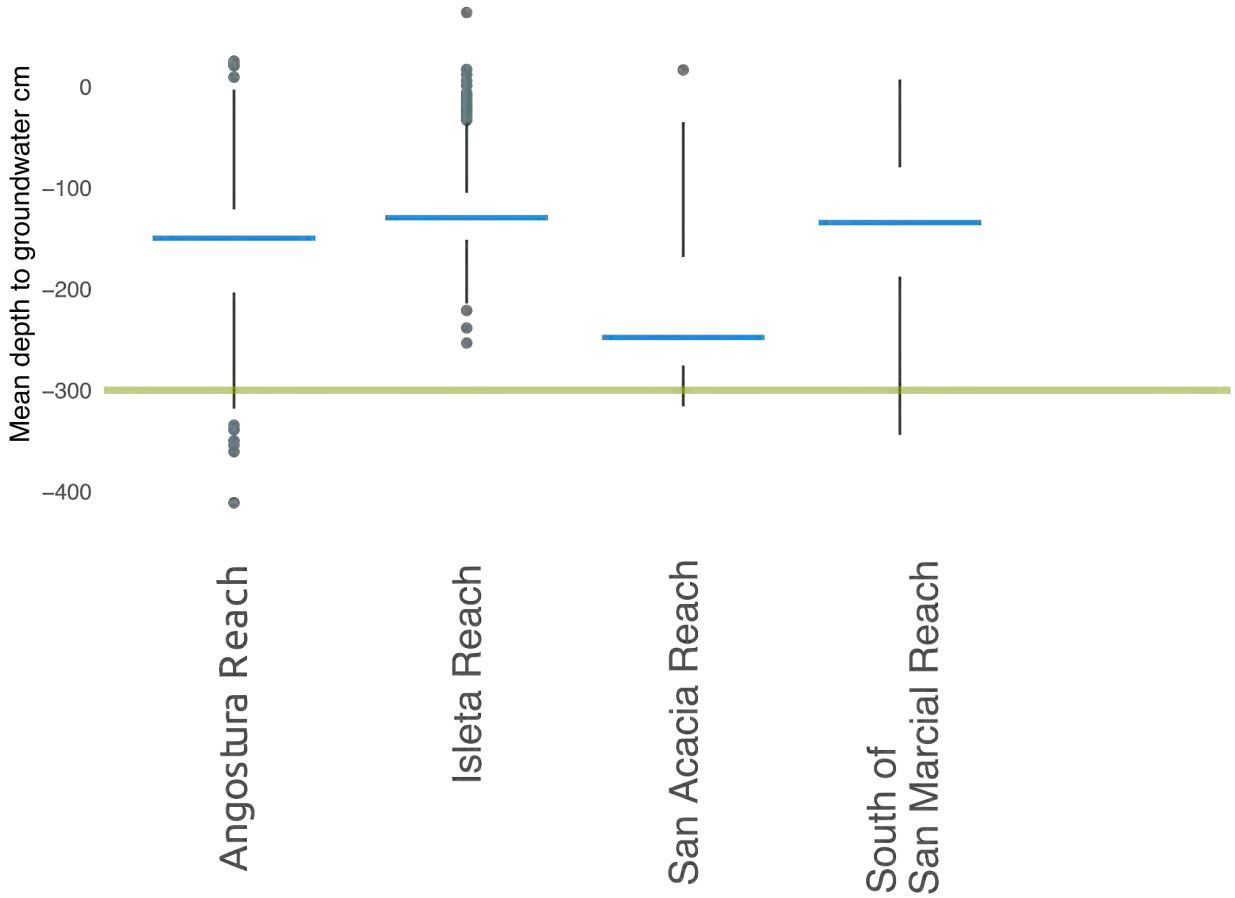


Figure 6.3 Mean depth to groundwater (cm) of BEMP sites with ten or more years of data organized by reaches of the Middle Rio Grande. Reaches are arranged north to south from left to right.

Angostura reach includes all sites within Albuquerque plus Sandia Pueblo; scouring due to proximity to Cochiti Dam as well as topography causes the riverbed in this reach to be the most degraded. The riverbed starts aggrading in lower Albuquerque and is more aggraded in the southern reaches. San Acacia is the most aggraded and experiences regular overbank flooding but also experiences longer periods of river drying. This, in addition to the placement of one

BEMP site (Lemitar) outside the levee, leads to the San Acacia Reach having the lowest mean monthly mean depth to groundwater. There is also greater variability in mean monthly mean depth to groundwater in the southern reaches than the Angostura Reach. This could be due to supplemental flows in the Angostura Reach preventing regular river drying, as groundwater levels are tightly correlated with river flow; although, 2022 and 2023 saw unusual summer drying in this reach.

Figure 6.5 Spark line plot of the mean monthly depth to groundwater across all BEMP sites. Time from 1997 to 2023 runs across the x-axis and the y-axis is depth to groundwater in cm. Sites are arranged from north to south by center point latitude.

Angostura Reach

The Angostura Reach comprises 19 sites. From north to south they are Santa Ana Pueblo, Sandia Pueblo, Bobcat, Badger, Minnow, Diversion, Calabacillas, Alameda, Montano, Savannah, Rio Grande Nature Center, Route 66, BioPark, Hispanic Cultural Center, Albuquerque Overbank Project, Harrison, San Jose, Valle de Oro NWR, and State Land Office. Groundwater data are not collected at Santa Ana. Groundwater data from Sandia Pueblo must be requested through the Pueblo's Natural Resources Department.

Isleta Reach

The Isleta reach comprises eight sites: Bosque Farms, Los Lunas, Reynolds Forest, Reynolds Cleared, Valencia Cleared, Belen, Valencia Forest, and Crawford. Similar groundwater fluctuations are exhibited by all sites throughout the Isleta reach, with peaks reflecting spikes in groundwater corresponding to recent flood events (2023, 2019, 2017) behaving more or less the same at all these sites. Los Lunas, which sees much higher peaks during recent flood events, is the sole exception. This is due to the site's positioning between the main river channel and a trough or flowing channel that fills during high flow events.

San Acacia and South of San Marcial Reaches

There are four BEMP sites that lie in the San Acacia Reach. These are Sevilleta, Lemitar, Bosque Del Apache, and River Realignment. The mean for this reach is the lowest of all the reaches, although this is skewed by the Lemitar site that is outside the levee system. As a result, Lemitar is less influenced by the river flow and there is a lower overall depth to groundwater and lower variability. As we go further south we get to an aggraded area of the Rio Grande that has many drying events as well as extreme flooding. This is shown by the variability in groundwater depth at the Bosque del Apache site in Figure 6.5.

Changes in mean and variance of depth groundwater in the shallow riparian aquifer.

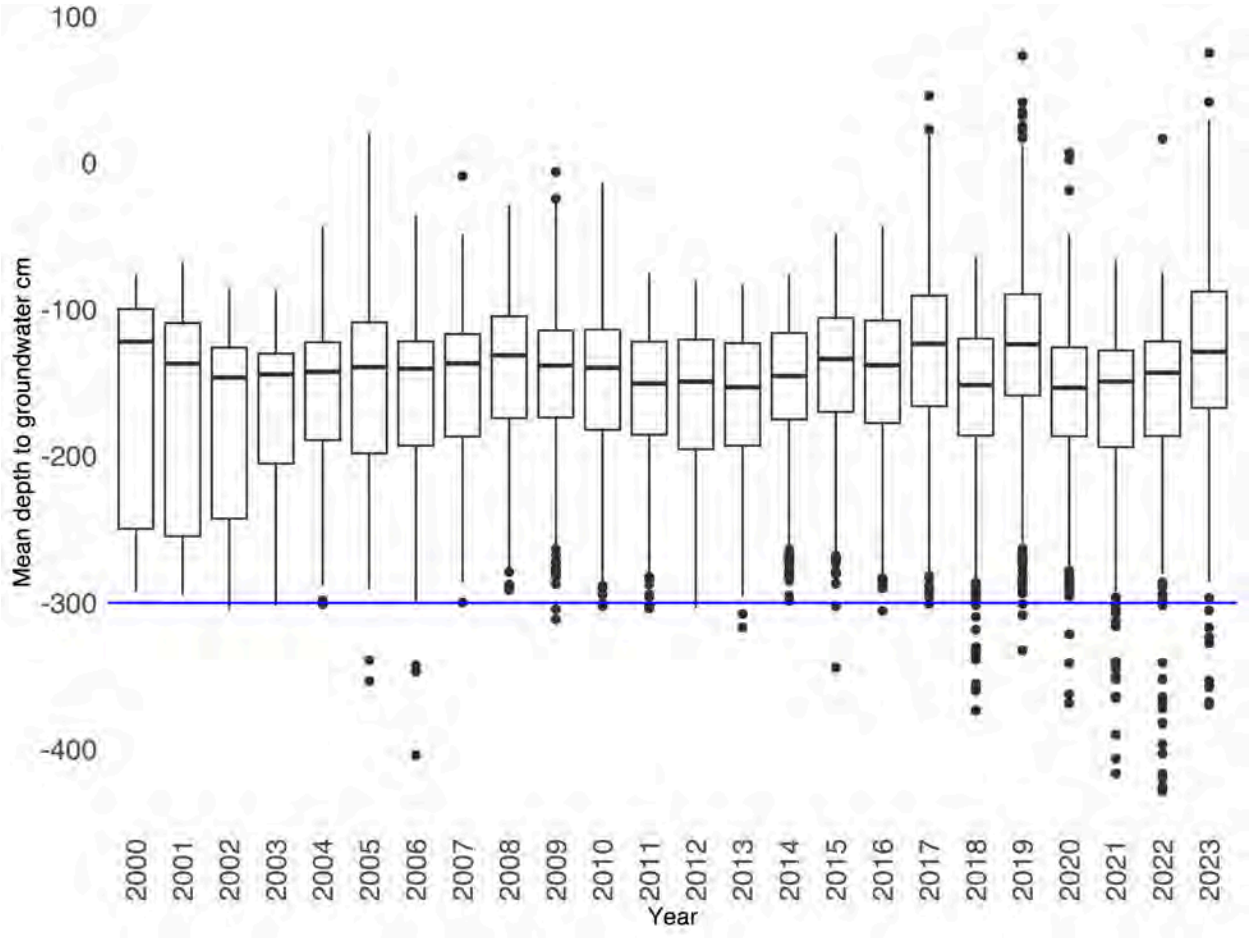


Figure 6.6 Boxplot of the mean monthly depth to groundwater across all BEMP sites from 2000 to 2023. The solid blue line is at 300 cm to show the threshold for established cottonwood trees. The black dots show the increasing number of outliers, especially toward drying events or declining groundwater. The flood events corresponding to high river flows in recent years (2017, 2019, and 2023) also have months with extremely low groundwater levels.

7 Litterfall and Vegetation Cover

Litterfall is any plant material that falls to the ground. BEMP litterfall data are categorized into leaves, reproductive parts, and wood from dominant tree species. It is collected monthly and then dried for 48 hours before being sorted and weighed. Litterfall is used to gauge plant productivity (leaves), reproductive effort (buds, flowers, seeds), and stress or senescence (wood).

Full monitoring methods can be found at:
https://github.com/BEMPscience/bemp_data/tree/master/leaf_litterfall

Vegetation cover surveys are conducted in August-September each year by a team of botanists and BEMP staff. Line intercept methods are used to monitor plant species along ten 30 meter transects at each of 27 sites. Herbarium work (identification of species) has been completed for 2023 data, which were entered, checked, and are being QA/QCed. Preliminary data through 2023 are included in this report.

Full monitoring methods can be found at:

https://github.com/BEMPscience/bemp_data/tree/master/additional_data_sets/vegetation_surveys/methods

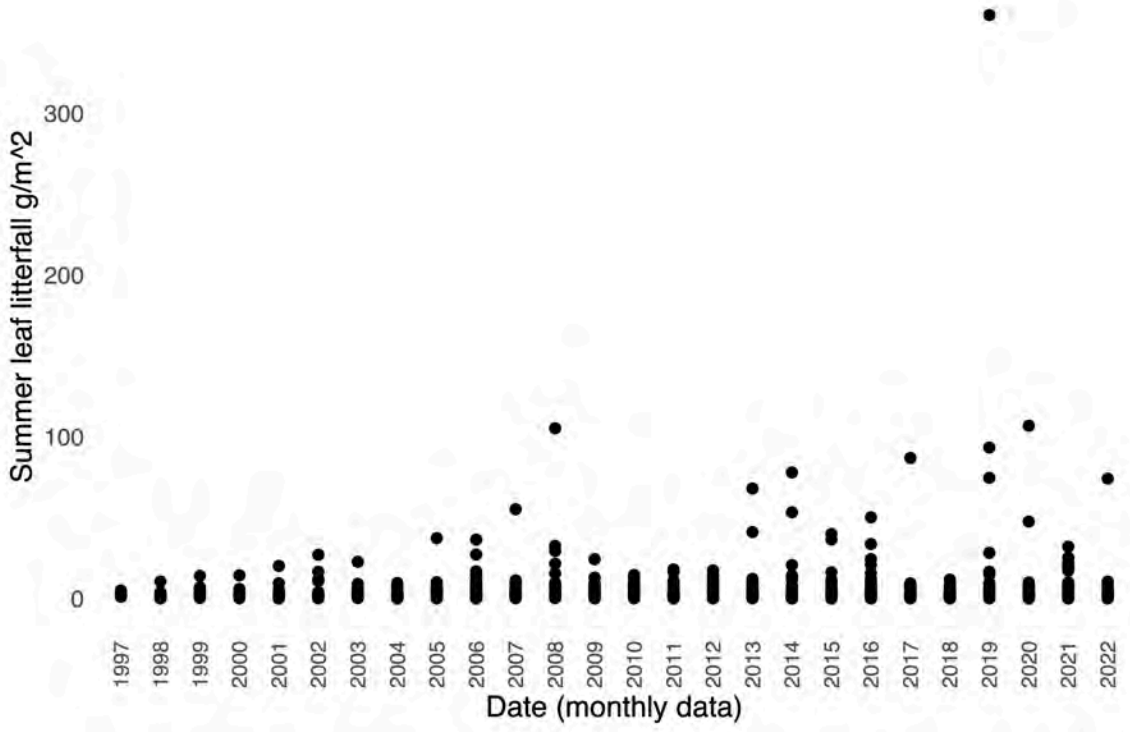


Figure 7.1 Change in leaf fall (g/m^2) during summer months, or "green fall", represents early leaf drop due to stress (e.g., heat, drought, defoliator outbreak, physical force from storms).

Most leaf fall biomass at BEMP sites is composed of cottonwood leaves. The shift toward increasing summer leaf drop most likely represents increasing stress on cottonwoods, although saltcedar early leaf drop due to defoliation from the tamarisk leaf beetle is a contributor to these numbers. Increasing outliers for higher leaf drop during flood years could also be due to the impact of long inundation periods (and potential anoxia) following years without.

Monthly litterfall of select plants.

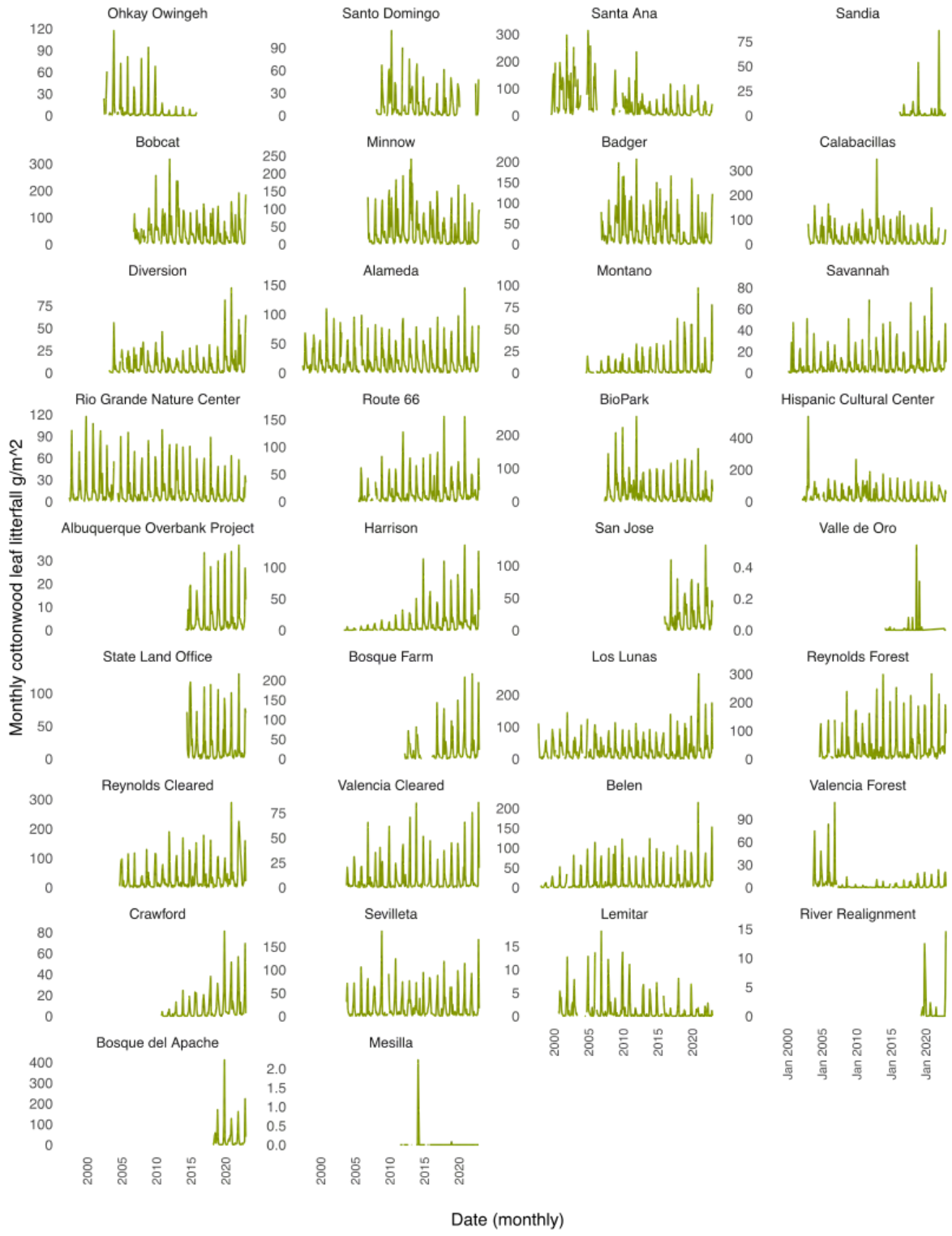


Figure 7.2 Monthly cottonwood leaf fall (g/m^2) shown across years for each site (listed north to south).

Annual litterfall trends

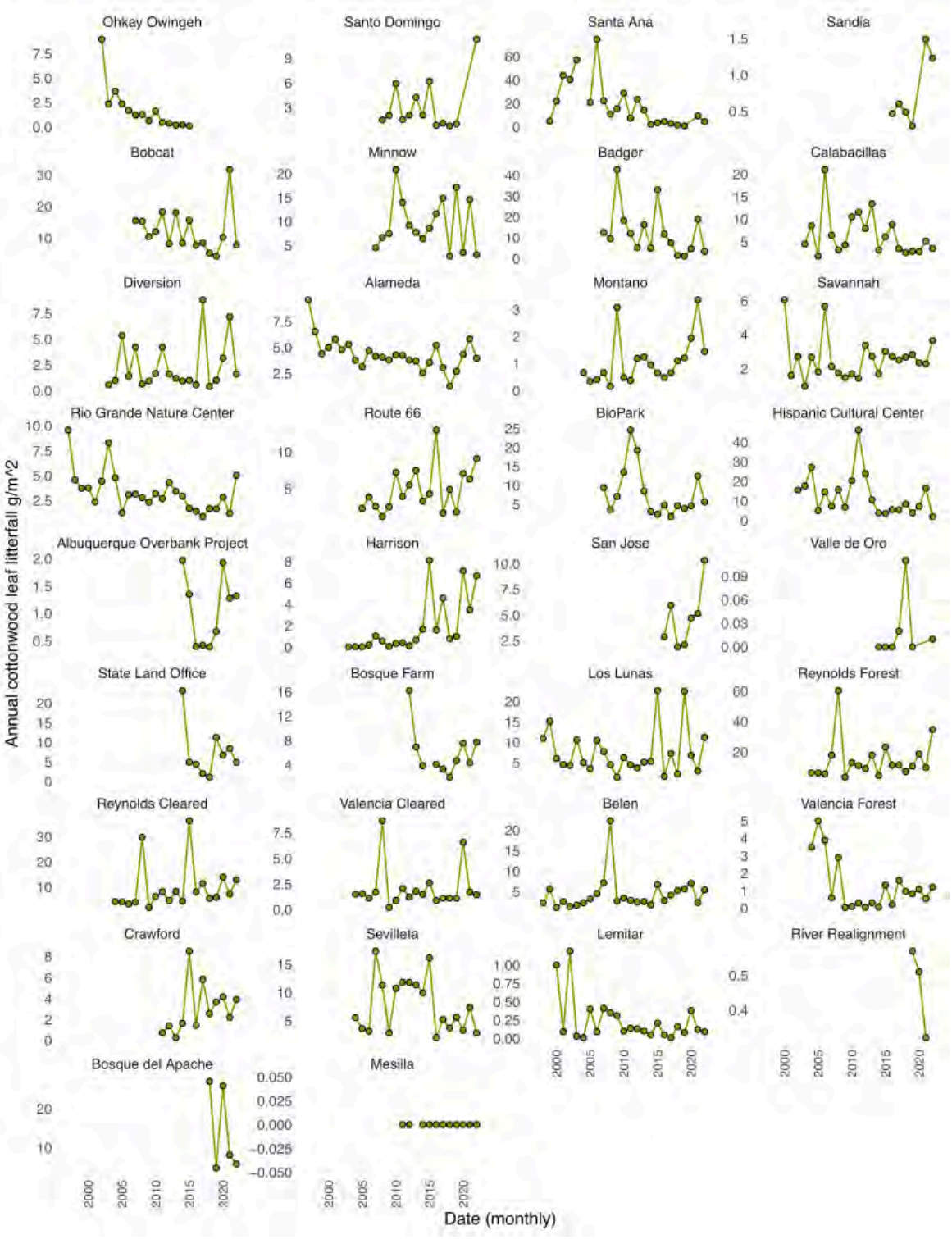


Figure 7.3 Annual sum of cottonwood leaf fall (g/m^2) across years for each site (listed north to south).

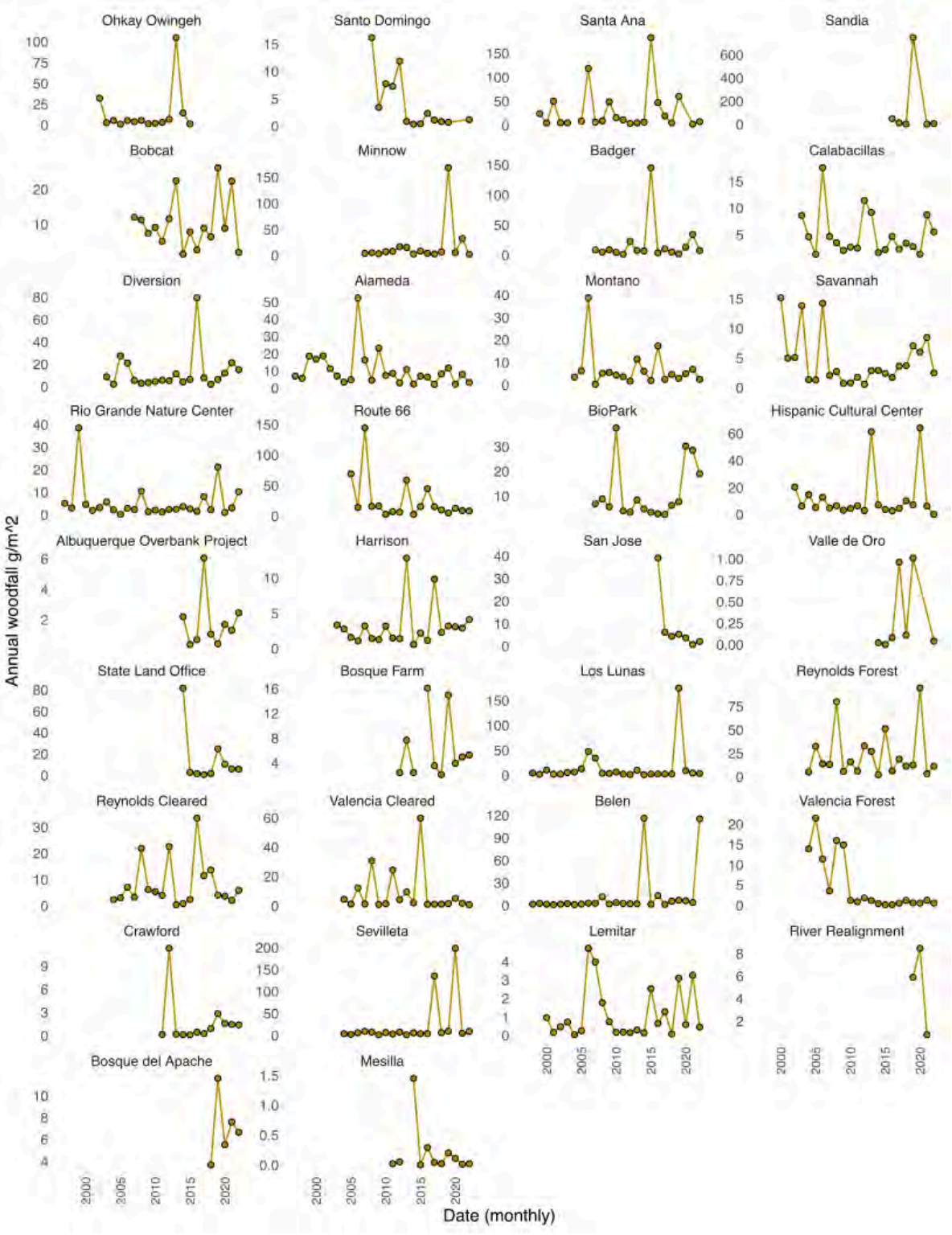


Figure 7.4 Annual sum of wood fall (g/m^2) across years for each site (listed north to south).

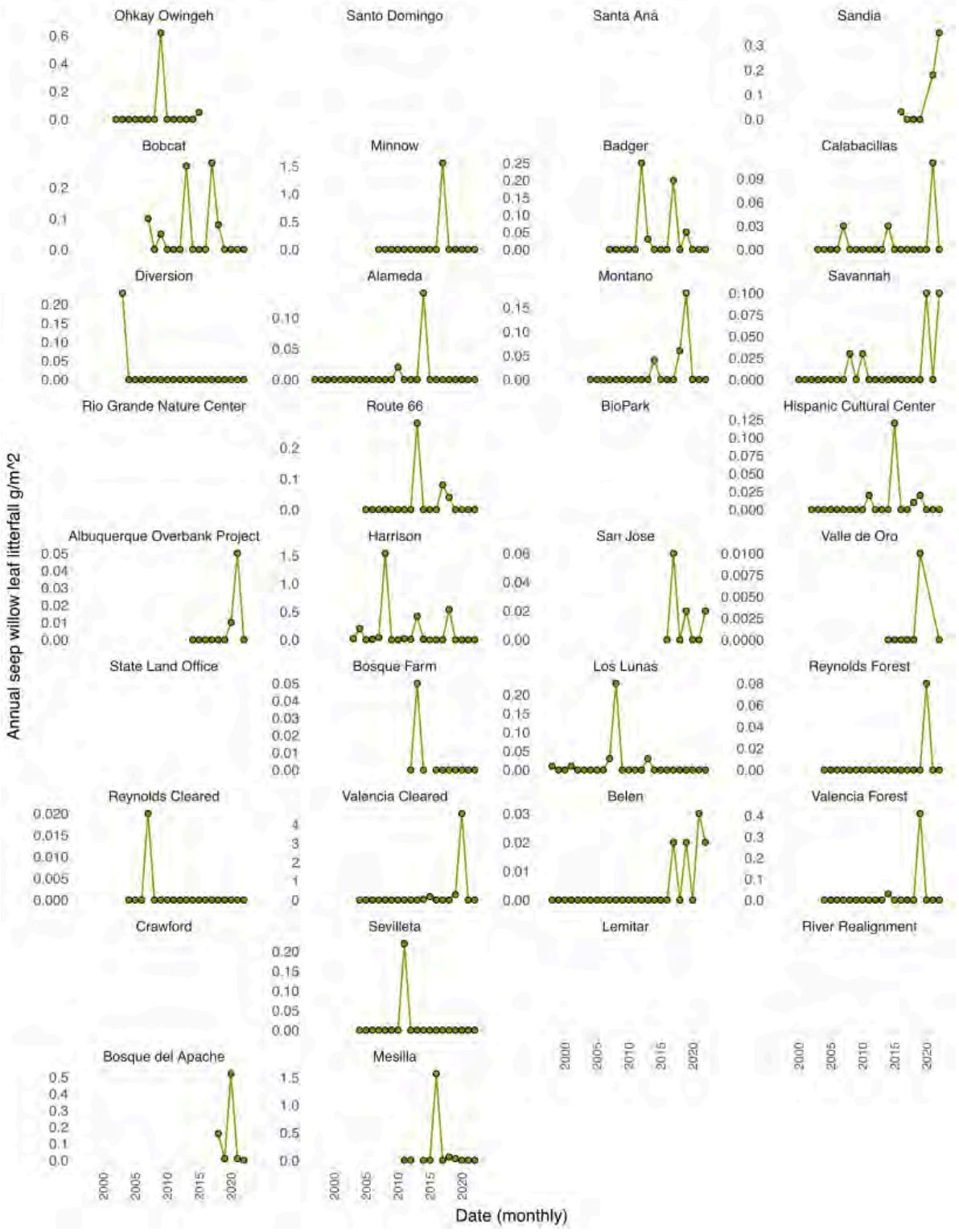


Figure 7.5 Annual sum of seepwillow (*Baccharis*) leaf fall (g/m^2) across years for each site (listed north to south). Y-axis is on a free-scale to better show data at individual sites.

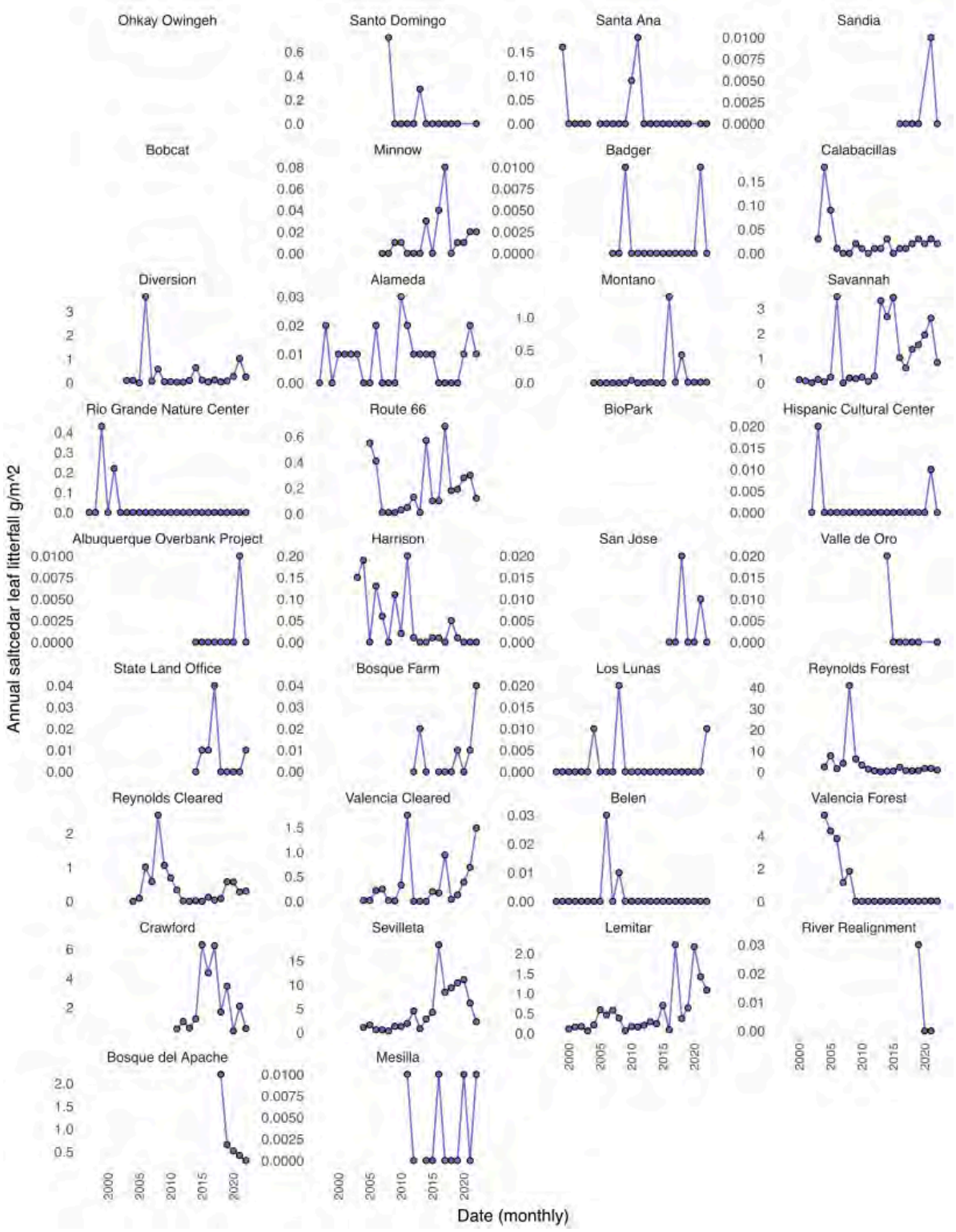


Figure 7.6 Annual sum of saltcedar leaf fall (g/m^2) across years for each site (listed north to south). Y-axis is on a free-scale to better show data at individual sites.

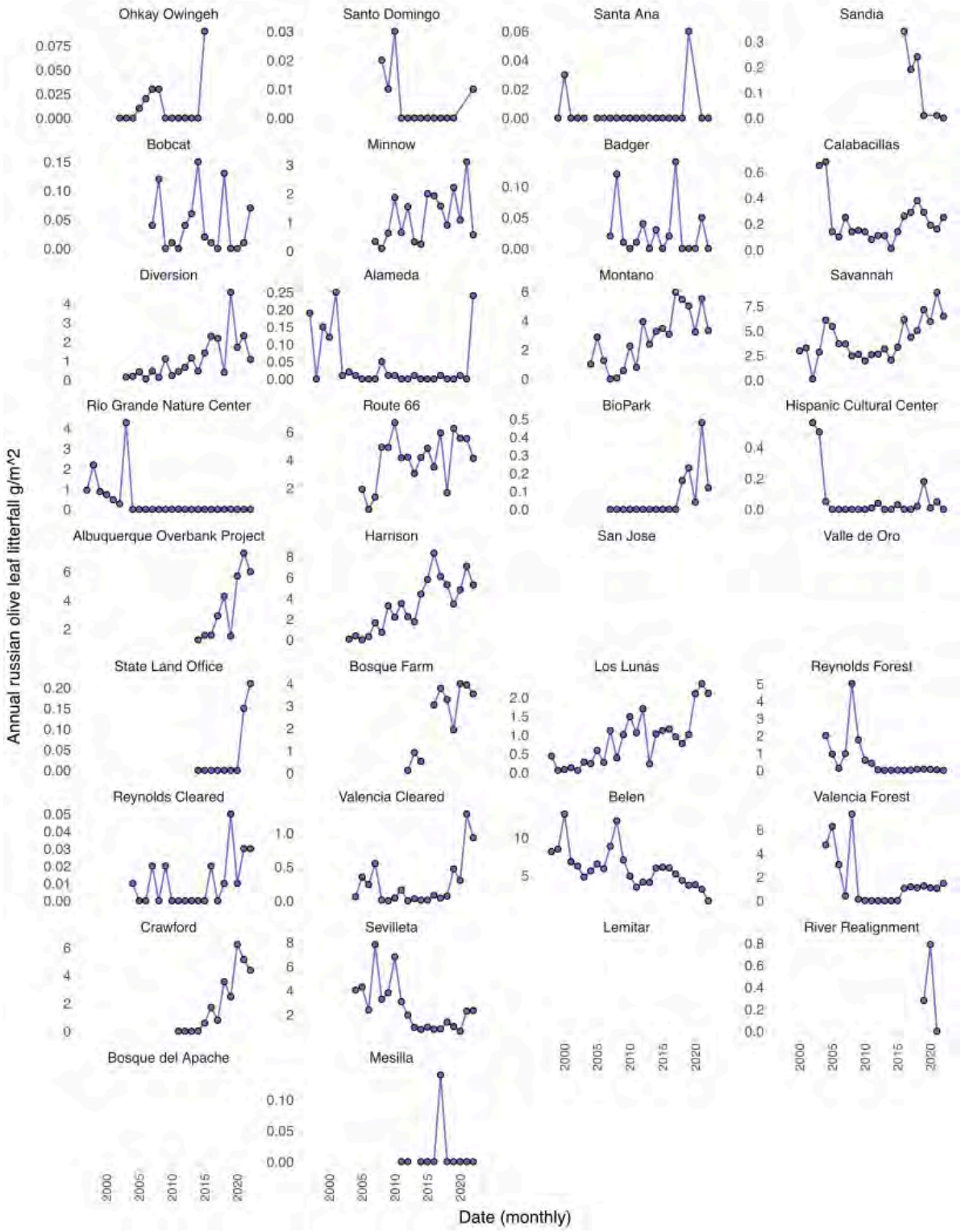


Figure 7.7 Annual sum of Russian olive leaf fall (g/m^2) across years for each site (listed north to south). Y-axis is on a free-scale to better show data at individual sites.

Annual vegetation cover

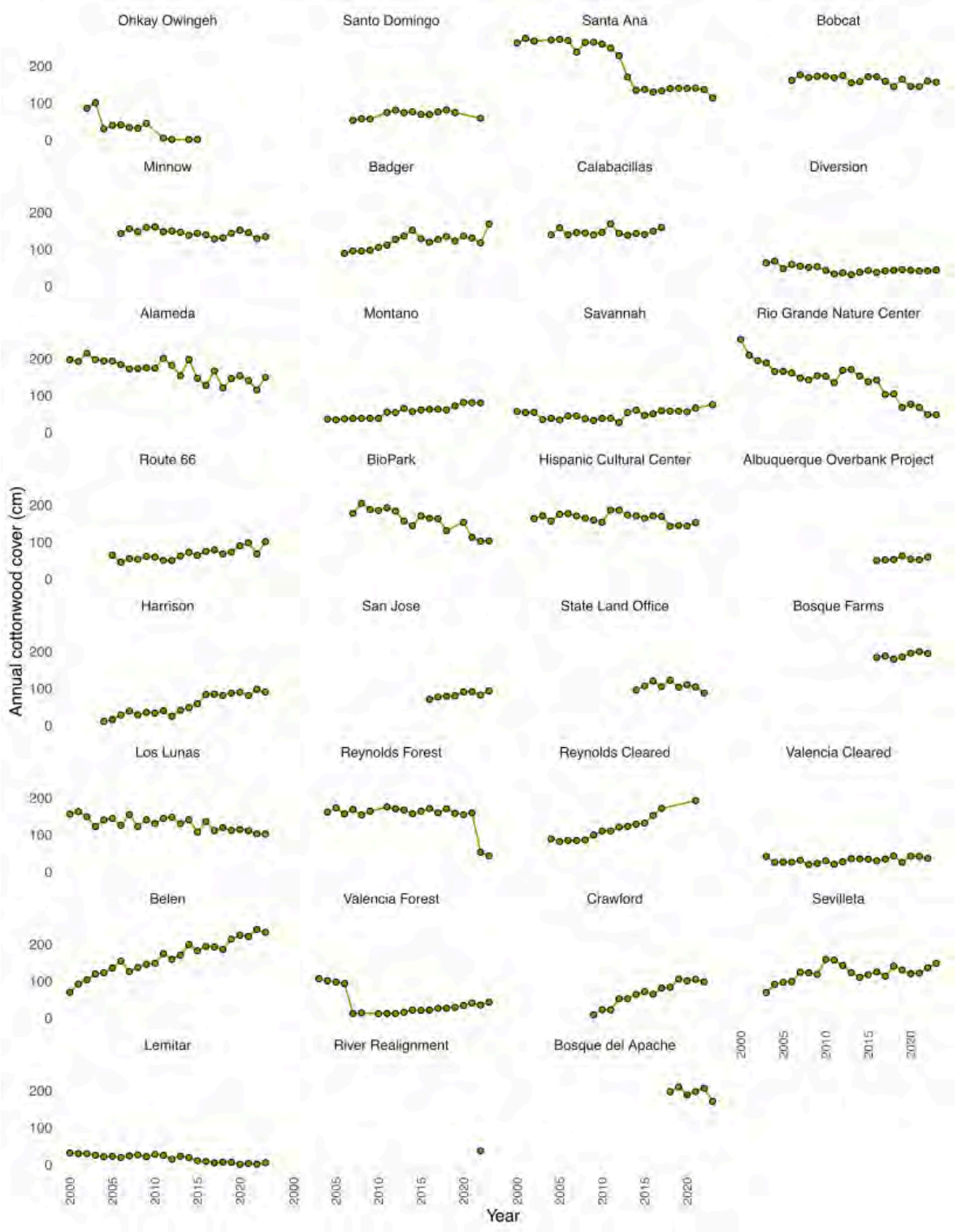


Figure 7.8 Annual cottonwood tree cover across BEMP sites. Sites are ordered from north to south. Typically sites north of I25/I40 have declining cover due to lower groundwater levels.

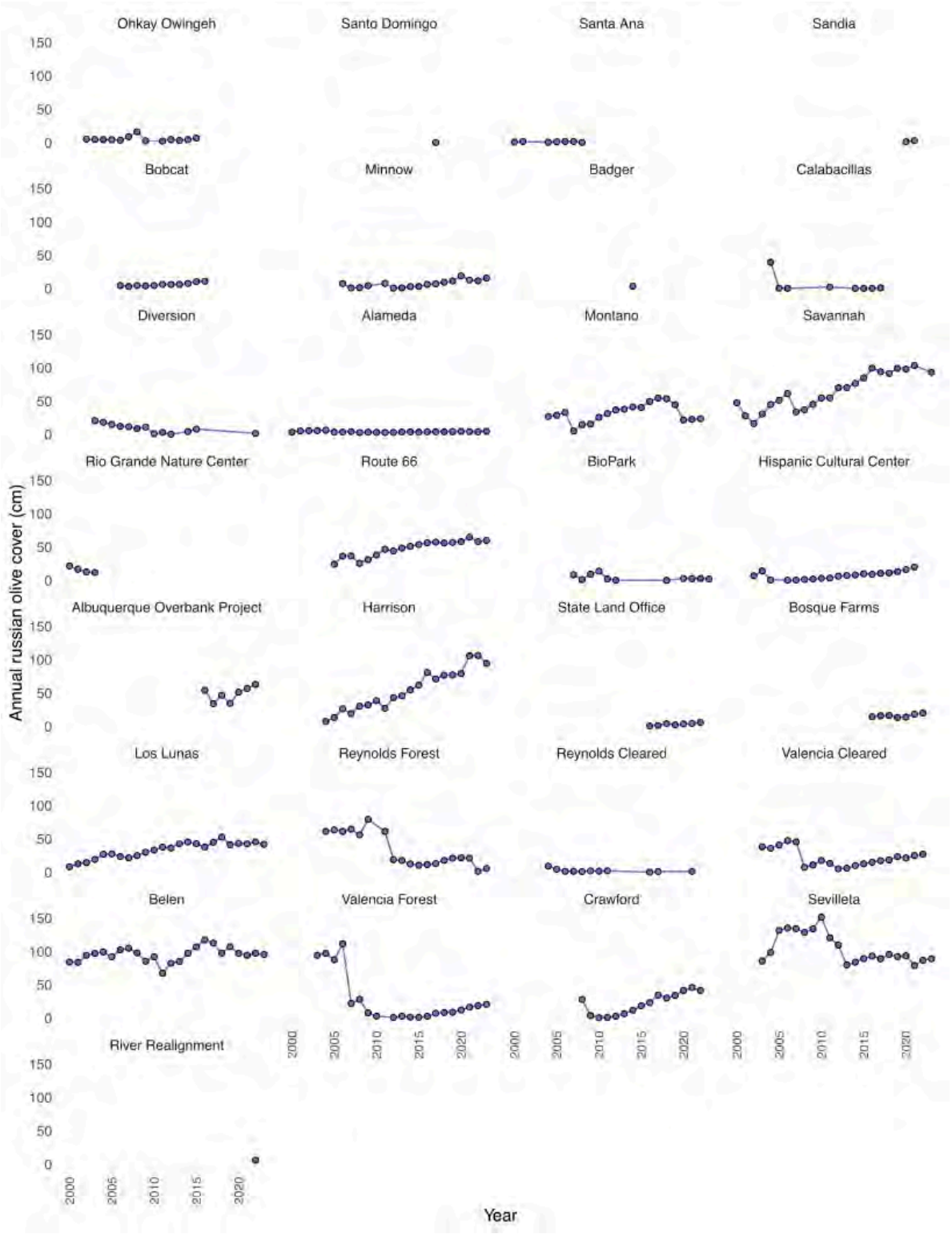


Figure 7.9 Annual Russian olive tree cover across BEMP sites. Sites are ordered from north to south. Russian olive cover continues to increase over time; however, the impact of exotic removal efforts show up as sharp decreases in cover.

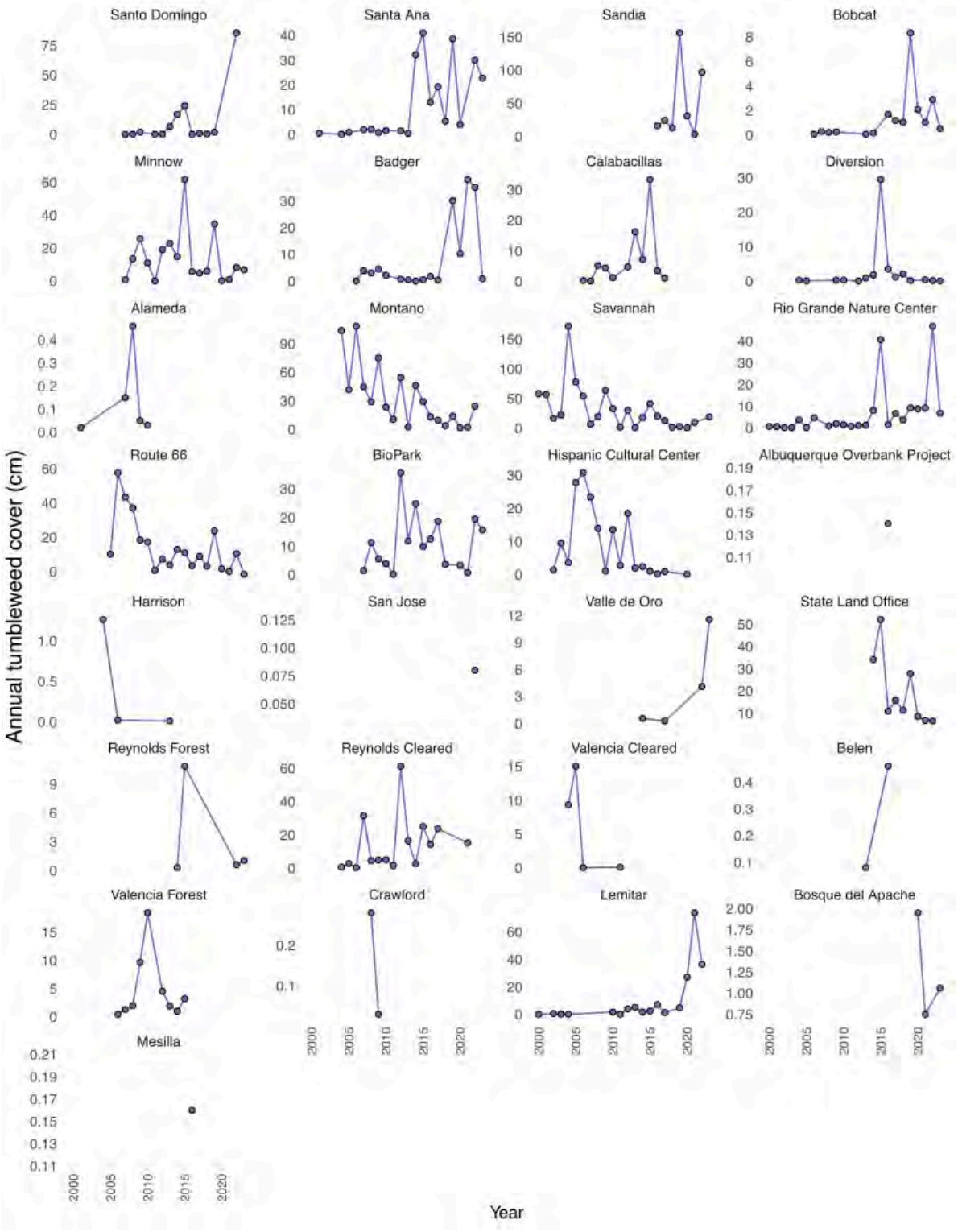


Figure 7.10 Annual tumbleweed cover across all BEMP sites. Tumbleweed cover varies quite a bit due to the interactions of exotic removal efforts, fire, and flooding.

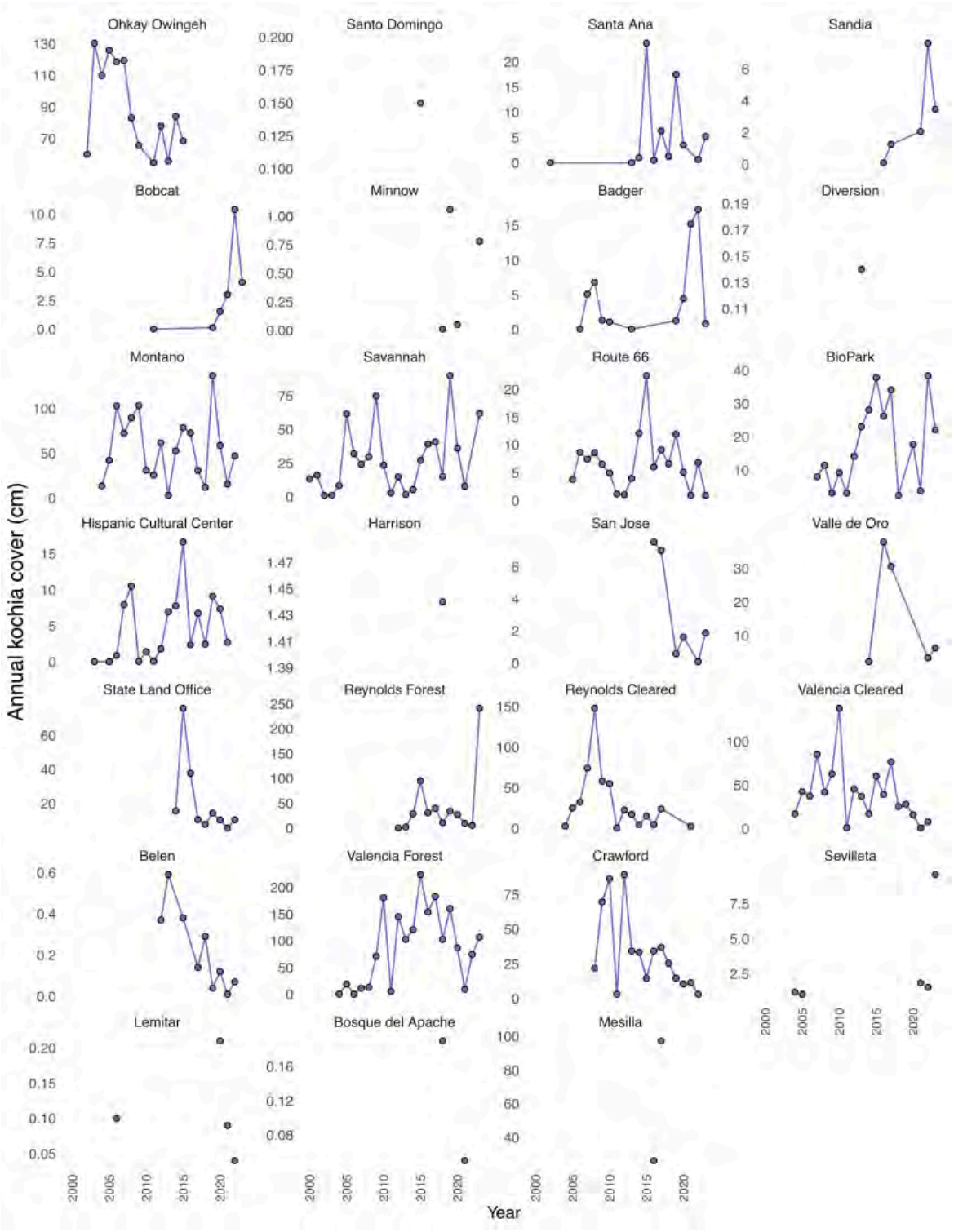


Figure 7.11 Annual kochia cover across all BEMP sites. Kochia cover is highly variable (similar to tumbleweed) due to the interactions of exotic removal efforts, fire, and flooding. In many places kochia is still persistent despite efforts to remove it but its cover relative to other plants is reduced.

Sites with higher groundwater are great for both bank-lowering and pole-planting projects or represent areas where bank-lowering or swales have been incorporated. These sites more often support younger trees and show increasing cottonwood cover. Sites with greater depths to groundwater or perched sites have little to no cottonwood recruitment and cover is decreasing over time. The sharp drop in cottonwood cover at Santa Ana starting in 2009 was part of a larger, expanding die-off of the bosque in that area. With the decrease in cottonwood cover (now 57% reduced from what it was in 2000) opening the canopy, squirrel grass, tumbleweed, and kochia started to increase in cover starting in 2011. The sharp decline in cottonwood cover at Valencia Forest in 2007 and at Reynolds Forest in 2022 were both due to fires in the Belen area. At both sites, this led to an increase in kochia and tumbleweed. Some sites have a slow, steady decline (Bobcat, Minnow, Los Lunas, Lemitar); others have a decline with small yet sharp drops due to localized fires (Ohkay Owingeh, BioPark, HCC). Alameda and Rio Grande Nature Center (RGNC) have more noticeable downward trends that are due to the dying cottonwood branches and trees at these sites. The cottonwood cover has declined by 25% at Alameda and by 80% at RGNC since the surveys done in 2000. As a non-flood site, the encroaching vegetation at RGNC is a mix of upland vegetation and invasive exotics, mostly tumbleweed. Tumbleweed has increased by over 800% at RGNC in the last 10 years. These downward trends in cottonwoods are also seen in the litterfall data, though leaf fall is more sporadic, as tree productivity responds more quickly to environmental changes. The spikes in wood fall also underline the cottonwood senescence at sites but are less indicative than cover as branches must actually fall into one of ten 40-cm diameter tubs at each site. Changes in fuel load will also be indicative of cottonwood health.

Seepwillow (*Baccharis* spp., also known as false willow or mule fat) is an important native understory shrub that has declined in this ecosystem. Seepwillow leaf fall is low compared to other species and the occasional peaks in leaf fall are still relatively small, representing leaves falling into tubs that are not always captured each year. Sites with steady seepwillow productivity levels include San Jose, a USACE-requested site with created swales that still successfully flood during higher river flows. San Jose has low saltcedar productivity, no Russian olive, and slowly increasing cottonwoods and coyote willows. Kochia and tumbleweed were only high immediately following swale construction and have remained low since then.

Exotic species such as saltcedar and Russian olive show a sporadic increase in productivity at many sites over time, with drops in productivity following targeted exotic removal projects. Russian olive cover is increasing at different rates across most sites, with drops due to management practices. Saltcedar is more sporadic than Russian olive, due to both mechanical removal and the changing outbreak cycle of the tamarisk leaf beetle. Some sites show gradual declines, like Russian olive at Belen and Sevilleta, where old growth stands are slowly dying back, or saltcedar at Crawford, which is being outcompeted by cottonwood after new establishment and repeated flooding.

Post burn assessment

Exotic recovery is particularly apparent at sites where treatment has not occurred (e.g., sites around the San Juan Chama Diversion Project Dam were cleared in 2004). Both Russian olive and saltcedar are slowly increasing. Sites with high TLB abundance show saltcedar recovery in years following TLB outbreaks. Post-burn areas that experienced flooding show native understory recovery (Los Lunas, which had no tumbleweed or kochia) while post-burn areas that did not experience flooding have high cover of exotic tumbleweed and kochia (Sandia, Reynolds Forest, Valencia Forest) (Figures 7.10 & 7.11). Both kochia and tumbleweed went from extremely low cover to abundant following the 2007 fire at Valencia Forest (Figures 7.10 & 7.11); while tumbleweed cover has been cyclic since then, kochia cover has remained relatively high (Figure 7.11). Yerba mansa has been declining in Los Lunas, but was recovering from the February 2023 fire by the time August vegetation surveys were completed. Reynolds Forest has a lower yerba mansa cover, but by August 2023, it had completely recovered from the April 2022 fire (Figure 7.12).

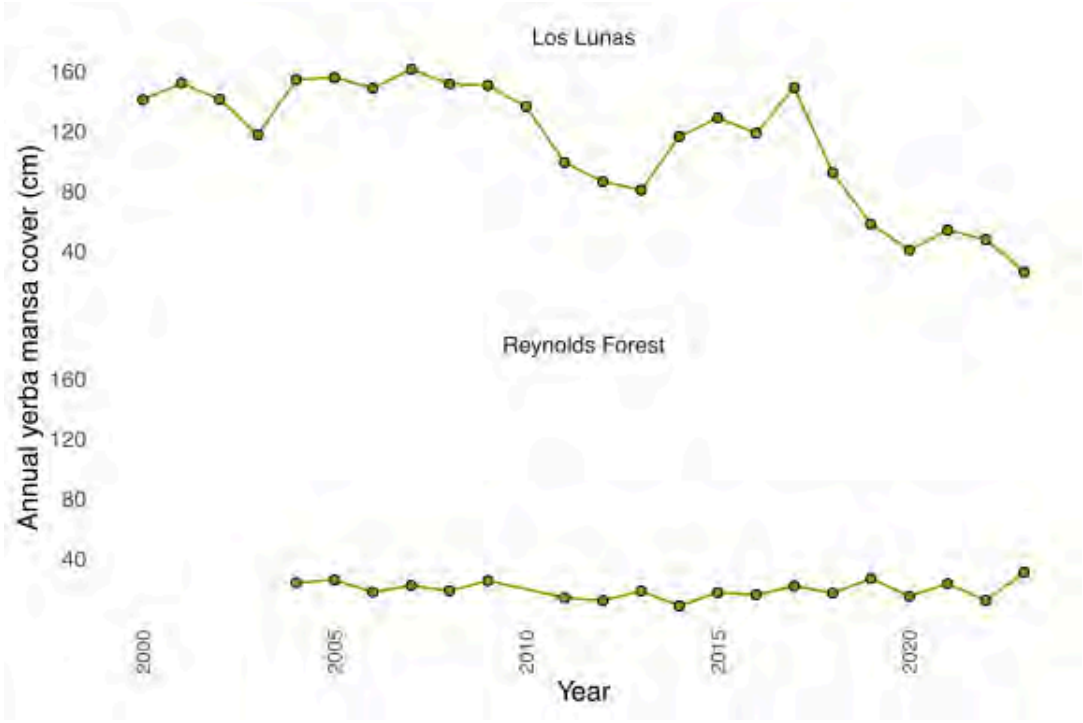


Figure 7.12 Annual yerba mansa cover at Los Lunas (partially burned in February 2023) and Reynolds Forest (severely burned in April 2022). Recovery happened quickly at both sites.

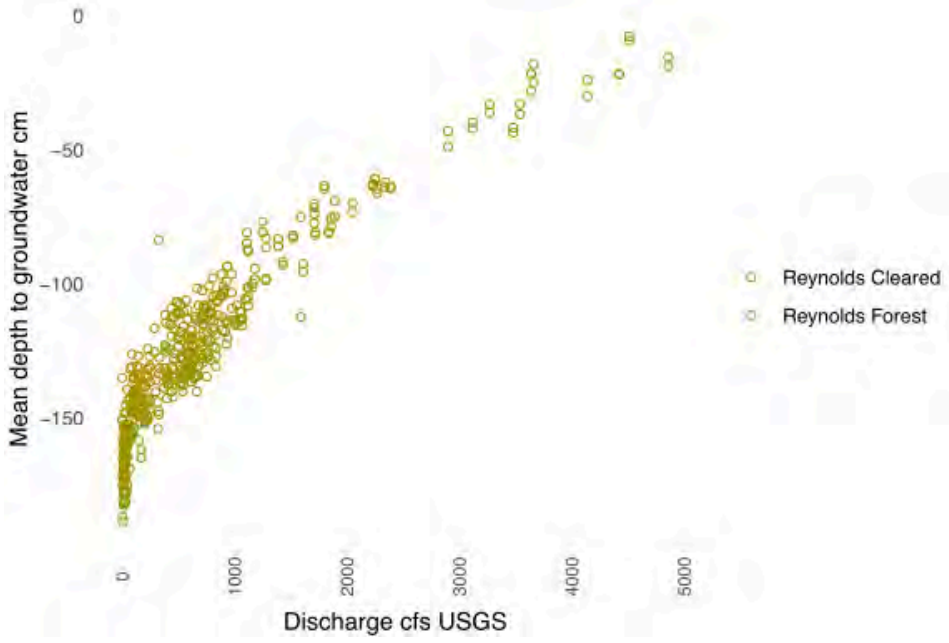


Figure 7.13 Mean depth to groundwater (cm) vs river flow (cfs) across years at Reynolds Cleared and Reynolds Forest. Groundwater levels are tightly correlated with river flow. Impacts of the Big Hole fire on groundwater can be assessed at the Reynolds Forest site.

Reynolds Forest BEMP site, May 17, 2022 (~1 month after the Big Hole fire); burned cavity from tree stump

Reynolds Forest BEMP site, May 17, 2022 (~1 month after the Big Hole fire)

Reynolds Forest BEMP site, May 17, 2022 (~1 month after the Big Hole fire); yerba mansa regrowth

Reynolds Forest BEMP site, June 22, 2022 (~2 months post fire); cottonwood resprouts in foreground, some golden currant resprouts, and thick kochia recruitment

Los Lunas BEMP site near center well, March 7, 2023, 1 week post-fire

UNM interns entering Los Lunas BEMP site, April 18, 2023, ~ 2 months post fire, floods starting

Los Lunas site, August 18, 2023, ~6 months post fire, 2 months post flood; yerba mansa regrowth

8 Surface-Active Arthropods

Surface active arthropods are monitored 3 times per year, in early May, late June, and early September through the use of pitfall traps. This report includes data through 2021. 2022 and 2023 arthropod samples are being processed, entered and checked. Full monitoring methods can be found at:
https://github.com/BEMPscience/bemp_data/tree/master/surface_active_arthropods

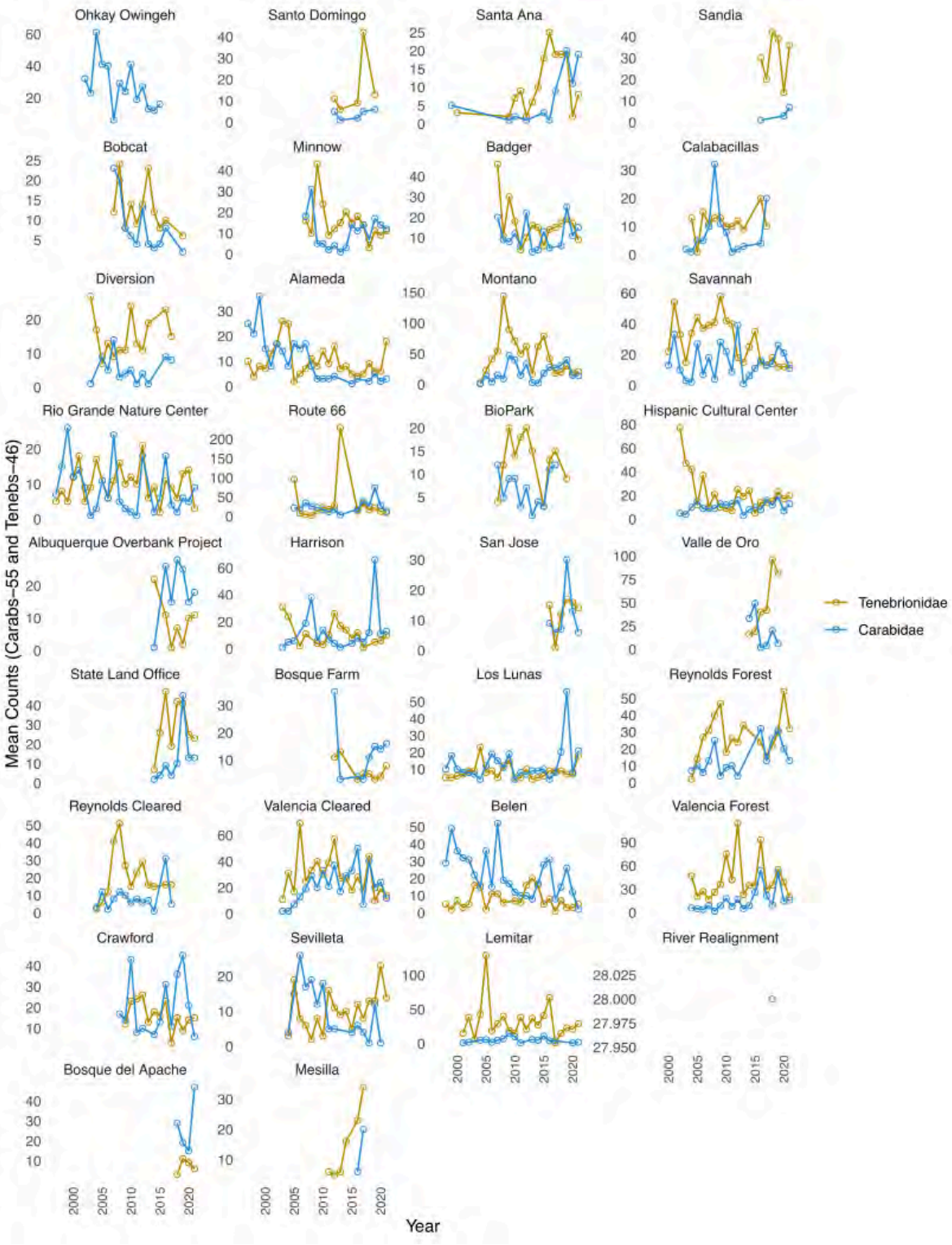


Figure 8.1 Annual mean darkling beetle (Tenebrionidae) and ground beetle (Carabidae) abundance across all sites.

Trends of surface active arthropods over time.

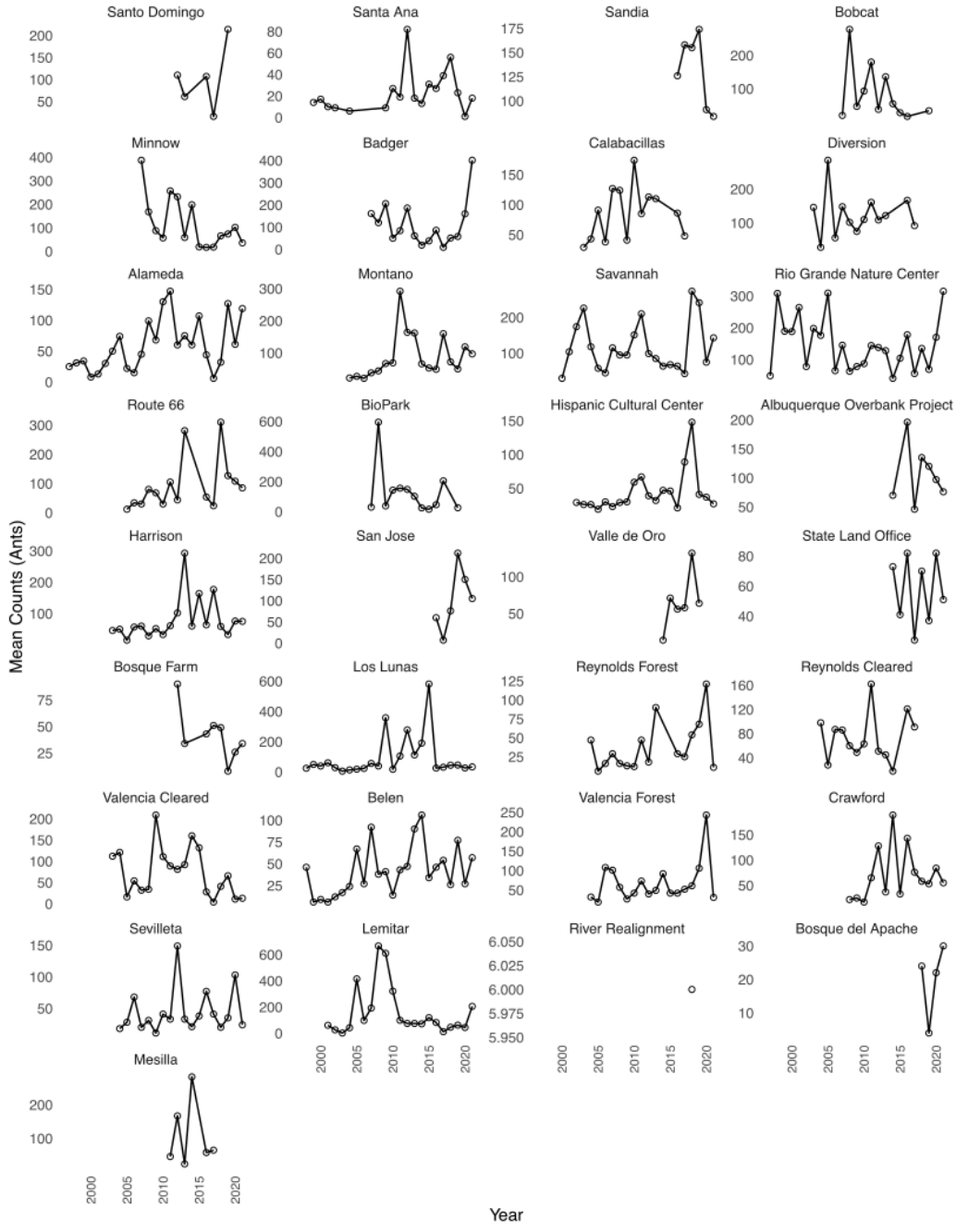


Figure 8.2 Annual mean ant (Formicidae) abundance across sites.

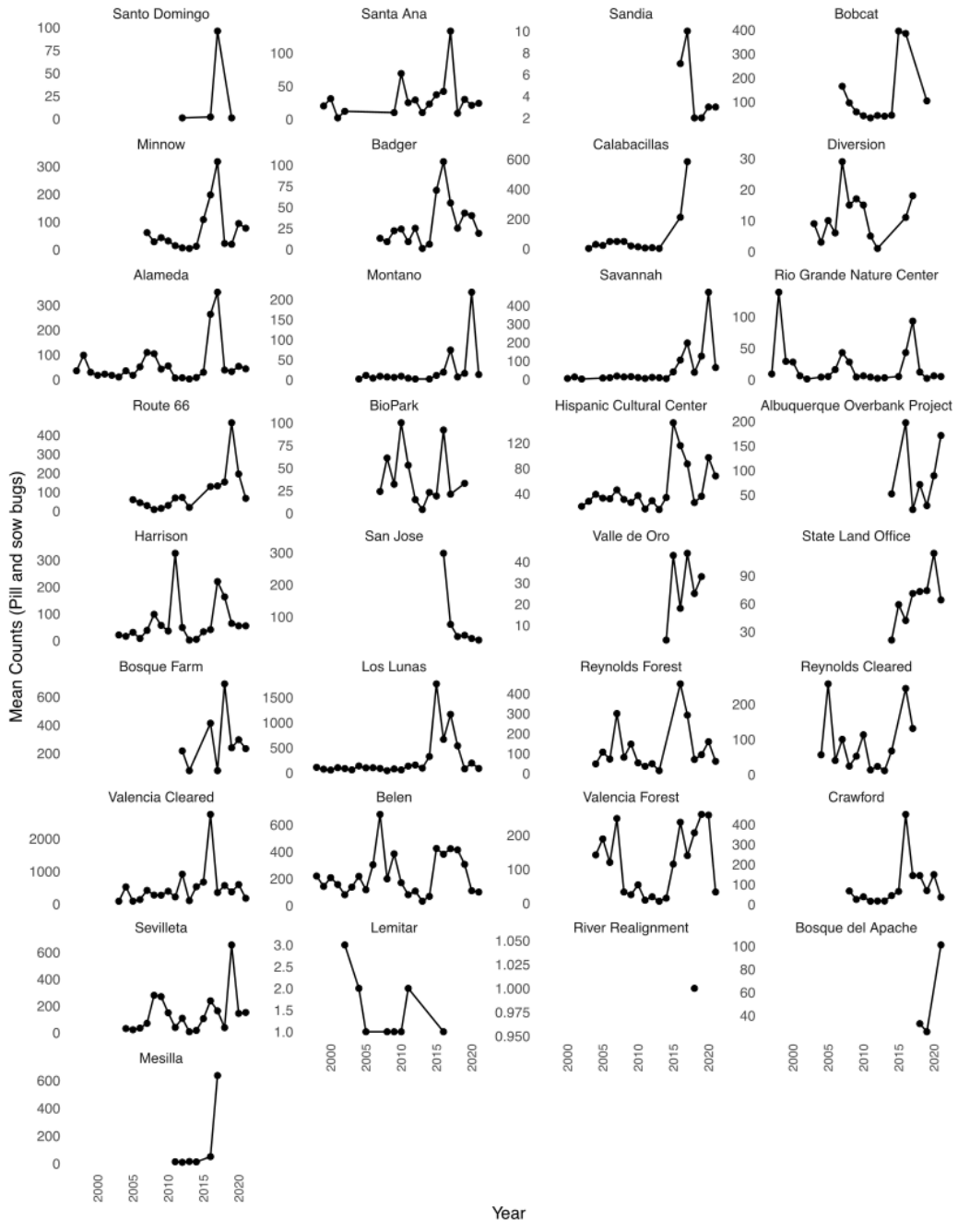


Figure 8.3 Annual mean Isopoda abundance across sites.

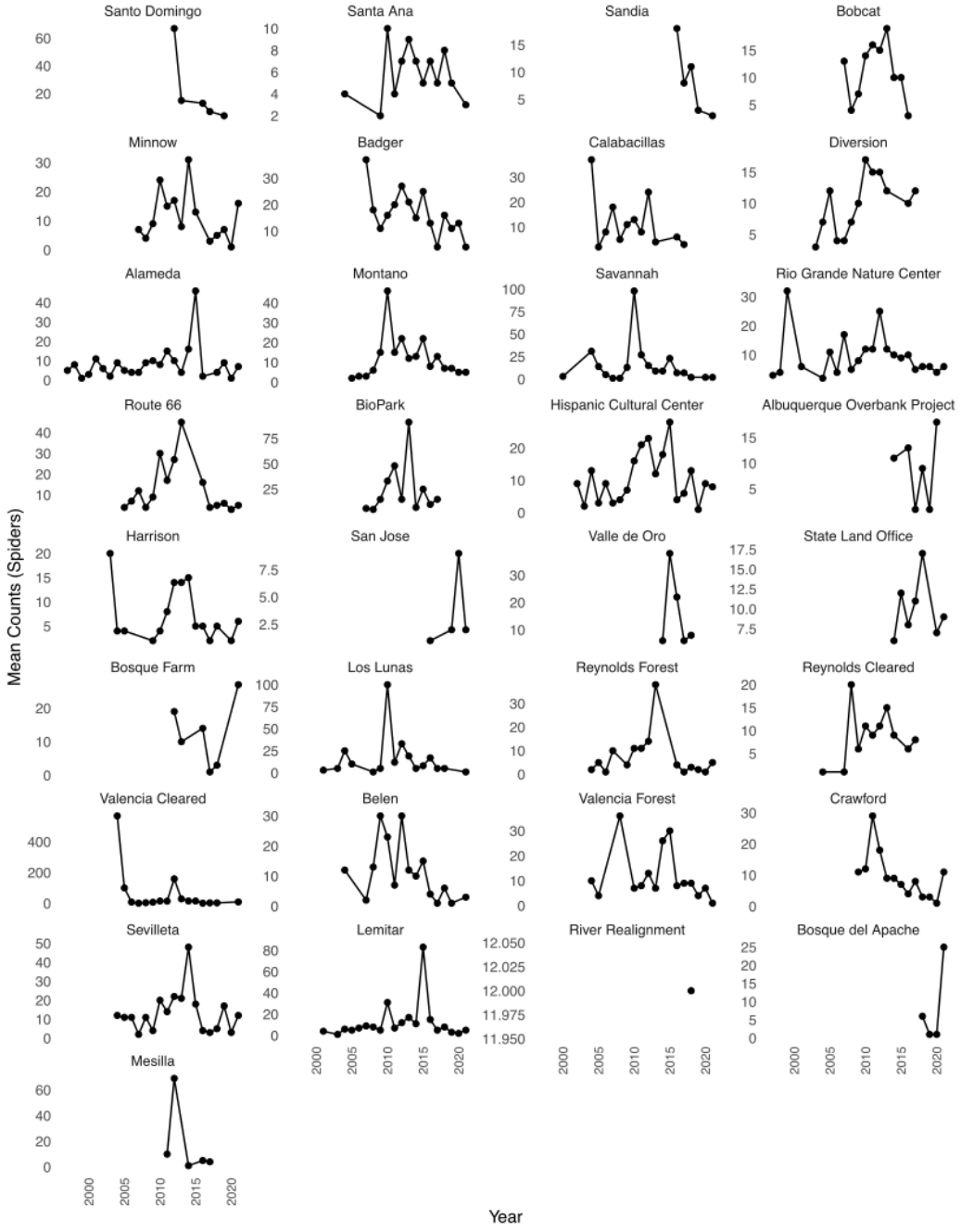


Figure 8.4 Annual mean spider (Araneae) abundance across sites.

In 2021 approximately 26,000 arthropods consisting of over 170 unique arthropod identifications were reported from BEMP sites. Belen (site# 4) had the lowest arthropod richness with 36 unique arthropod identifications, and State Land Office (site #30) had the highest richness with 56 unique arthropod identifications. Of the total arthropods identified, over 18,000 individuals were identified as Isopoda making these animals the dominant species collected in pitfall traps for 2021. Isopods are terrestrial crustaceans with two species found in the Middle Rio Grande, *Armadillidium vulgare* (pill bugs) and *Porcellio laevis* (sow bugs). These species are exotic decomposers introduced globally, and in our ecosystem, they fill niches previously dominated by crickets and other decomposers. Despite their exotic origin, these animals serve a valuable ecosystem function by aiding in the decomposition of leaf litter and fallen woody debris. Their sensitivity to moisture also makes them useful bioindicators. Pill bugs are known to be more tolerant of drier conditions while sow bugs tend to prefer relatively more mesic micro habitats. In 2021 approximately 15,000 pill bugs and 3,000 sow bugs were identified at BEMP sites. Unsurprisingly two of the most arid sites monitored, Sandia (site #32) and Lemitar (site #7) had fewer than ten pill bugs identified in 2021 (Figure 8.3).

Other indicator species include the darkling beetles (Tenebrionidae) and ground beetles (Carabidae). Tenebrionids can tolerate a variety of habitats but many are well adapted for arid environments where they are generalist omnivores feeding on fresh and decaying plant matter as well as decaying animals and occasionally fungi. Carabids form one of the most diverse families of beetles in North America, and although their diets can vary, a majority are predaceous and many are well adapted for mesic environments. At several sites where flooding has been known to occur, including Harrison (site # 13), Los Lunas (site # 3), Belen (site# 4), and Crawford (site# 25), increases in carabids following the flood events in 2017 and 2019 were documented. More arid sites, including Lemitar (site #7) and Sandia (site #32), tend to be dominated by the more xeric tenebrionids (Figure 8.1).

Ants (Formicidae) are a hyperdiverse family of insects. Species from the Middle Rio Grande form subterranean, eusocial colonies where they play important roles in ecosystems by helping to aerate soil, helping to disperse seeds, creating seed banks within their colonies, and eating a variety of living and dead organisms while being an important food source to other predators. Due to the subterranean habits of these arthropods, certain species, such as acrobat ants, (*Crematogaster* spp.) are better adapted to survival in areas prone to flooding than other species

commonly encountered in more arid environments such as harvester ants (*Pogonomyrmex* spp.). *Crematogaster* spp. were identified from 19 of the 24 sampled sites in 2021 and *Pogonomyrmex* spp. were identified from 11 of the 24 sampled sites in 2021. Tracking the occurrences of these and other ants throughout the Middle Rio Grande is important for monitoring shifts in the bosque ecosystem.

The spider, *Marinarozelotes barbatus* (Koch, 1866), has been collected at several BEMP sites located within Albuquerque since 2016. This spider is native to the Mediterranean region and was previously only documented in California within the United States before its discovery in New Mexico. Specimens have been found in pit traps at the Albuquerque Overbank Project , Harrison, San Jose, and State Land Office sites. Additionally, evidence of this spider has been documented at the BioPark BEMP site during a targeted collection effort in 2020. In 2021, this species was once again observed in traps from Albuquerque Overbank Project , Harrison, and San Jose sites. BEMP sites will continue to be monitored for evidence of this exotic species to track potential range expansions.

9 Tamarisk Leaf Beetle

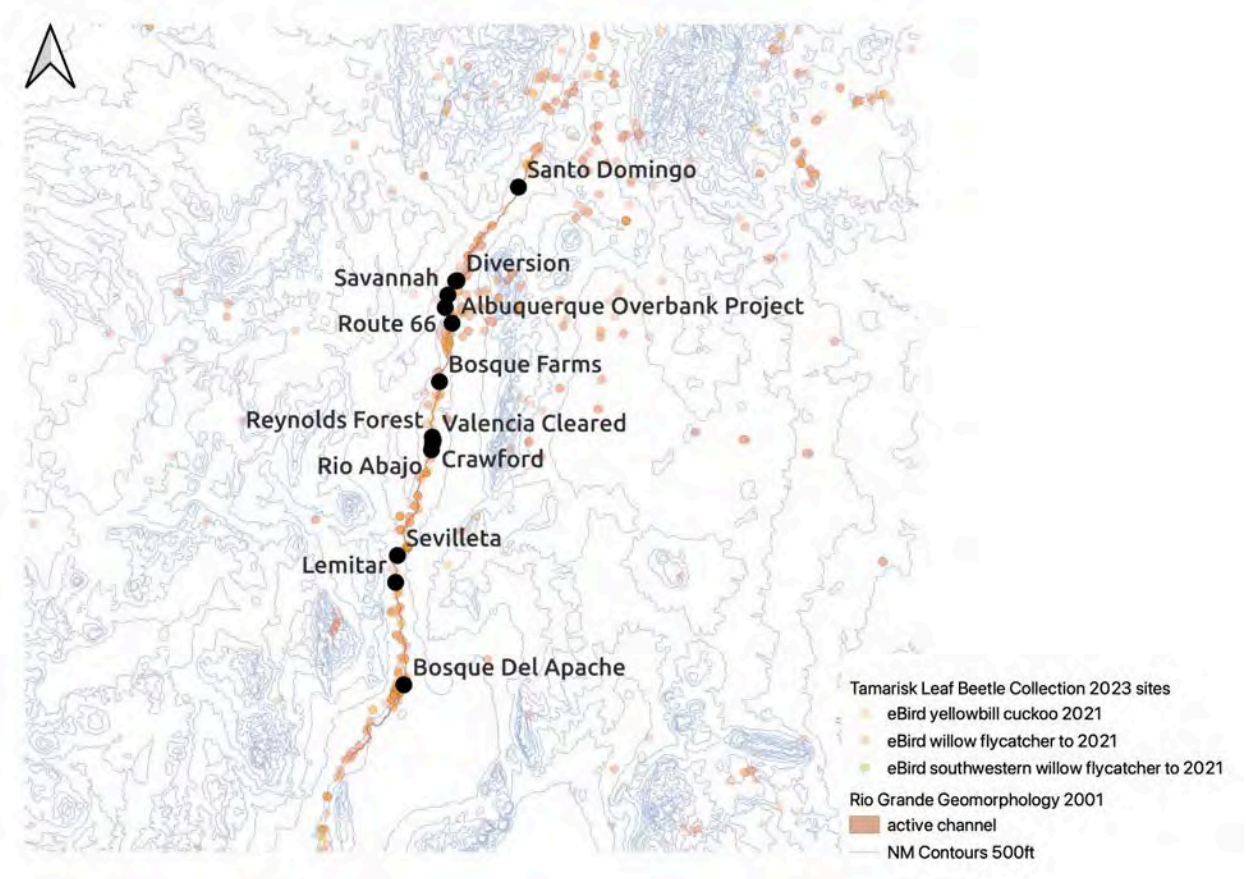


Figure 9.1 Current tamarisk leaf beetle monitoring sites for 2023 in bold. 500 foot contour intervals are in pale blue. Black circles are TLB collection sites. Tan-brown circles are ebird data from 2021 that are species of interest.

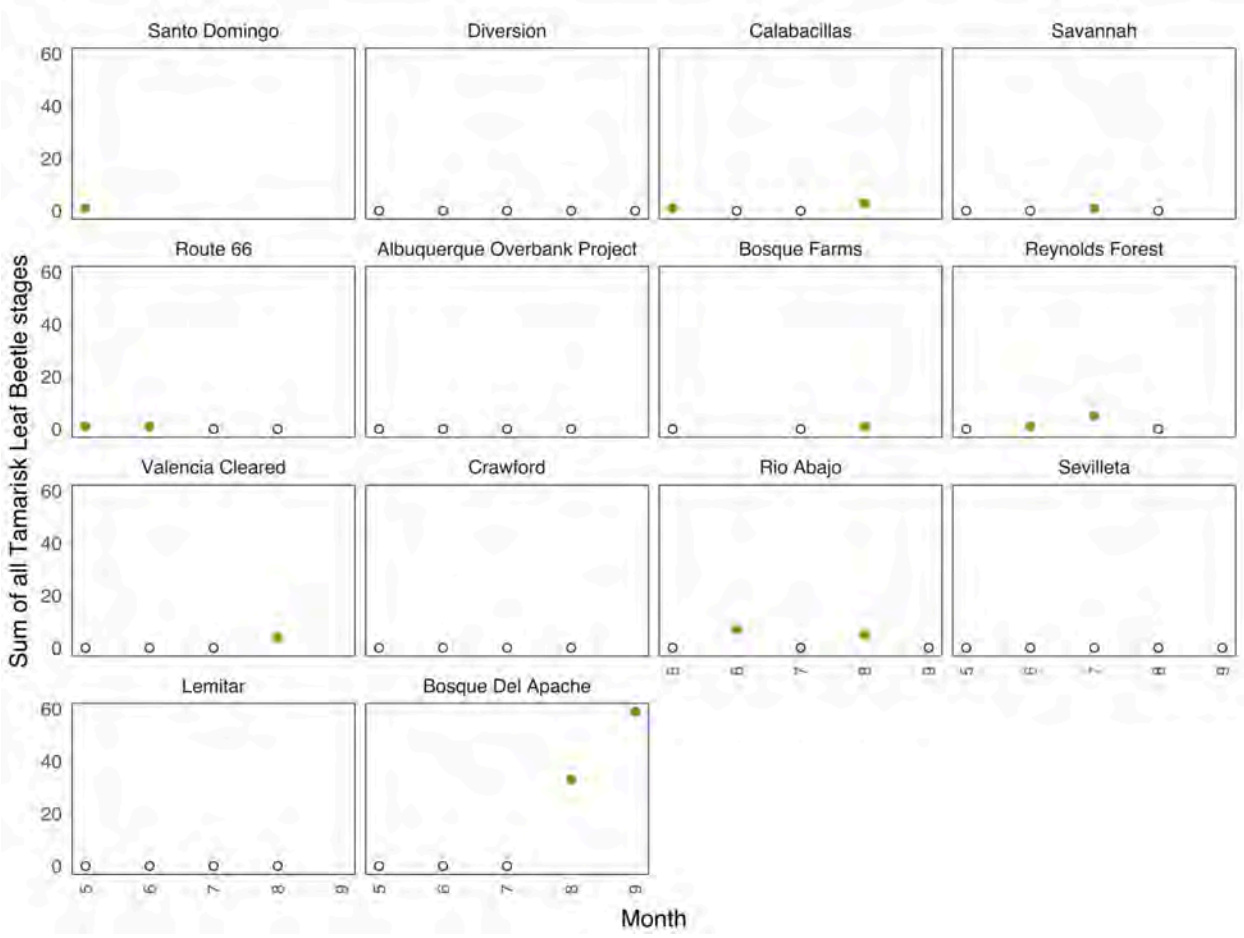


Figure 9.2 Total tamarisk leaf beetle for all life stages found at sites from May through August or September (four sites) 2023. All life stages include egg masses, early and late larvae, and adults. Hollow dots represent zeros; blanks indicate no collection. Sites are arranged from north to south.

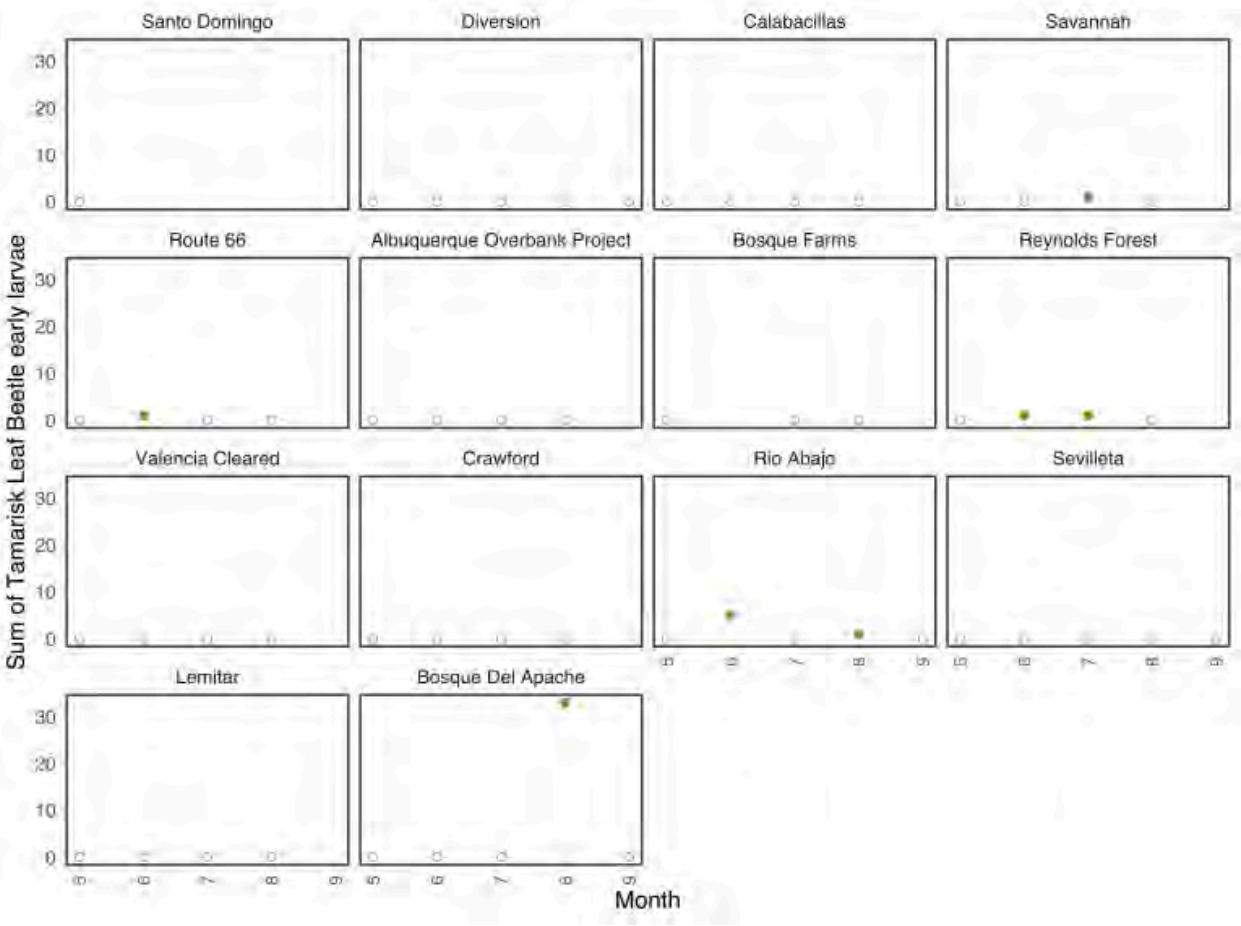


Figure 9.3 Total tamarisk leaf beetle early stage larvae found at sites from May through August or September (four sites) 2023. Hollow dots represent zeros; blanks indicate no collection. Sites are arranged from north to south.

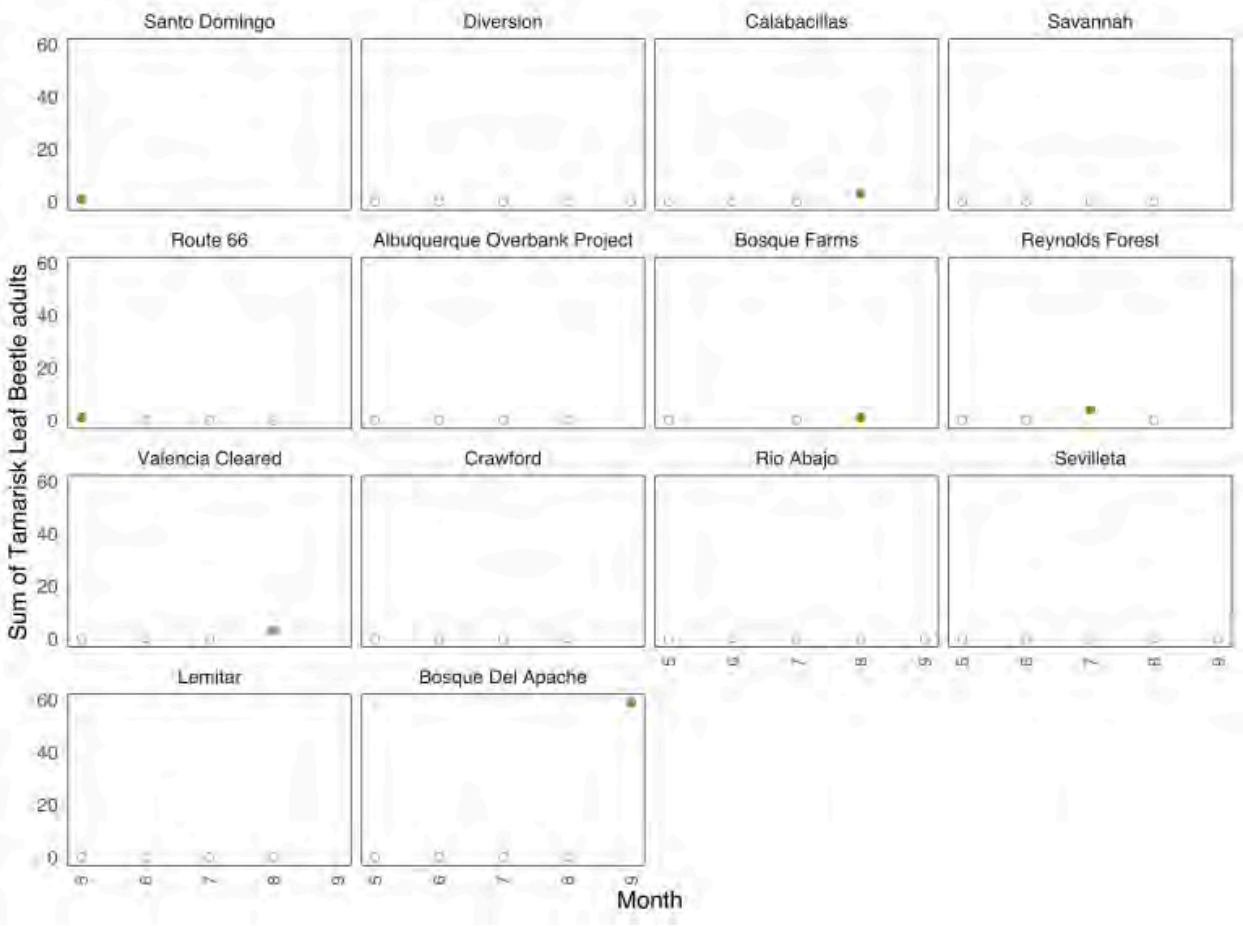


Figure 9.4 Total tamarisk leaf beetle adults found at all sites from May through August or September (four sites) 2023. Hollow dots represent zeros; blanks indicate no collection. Sites are arranged from north to south.

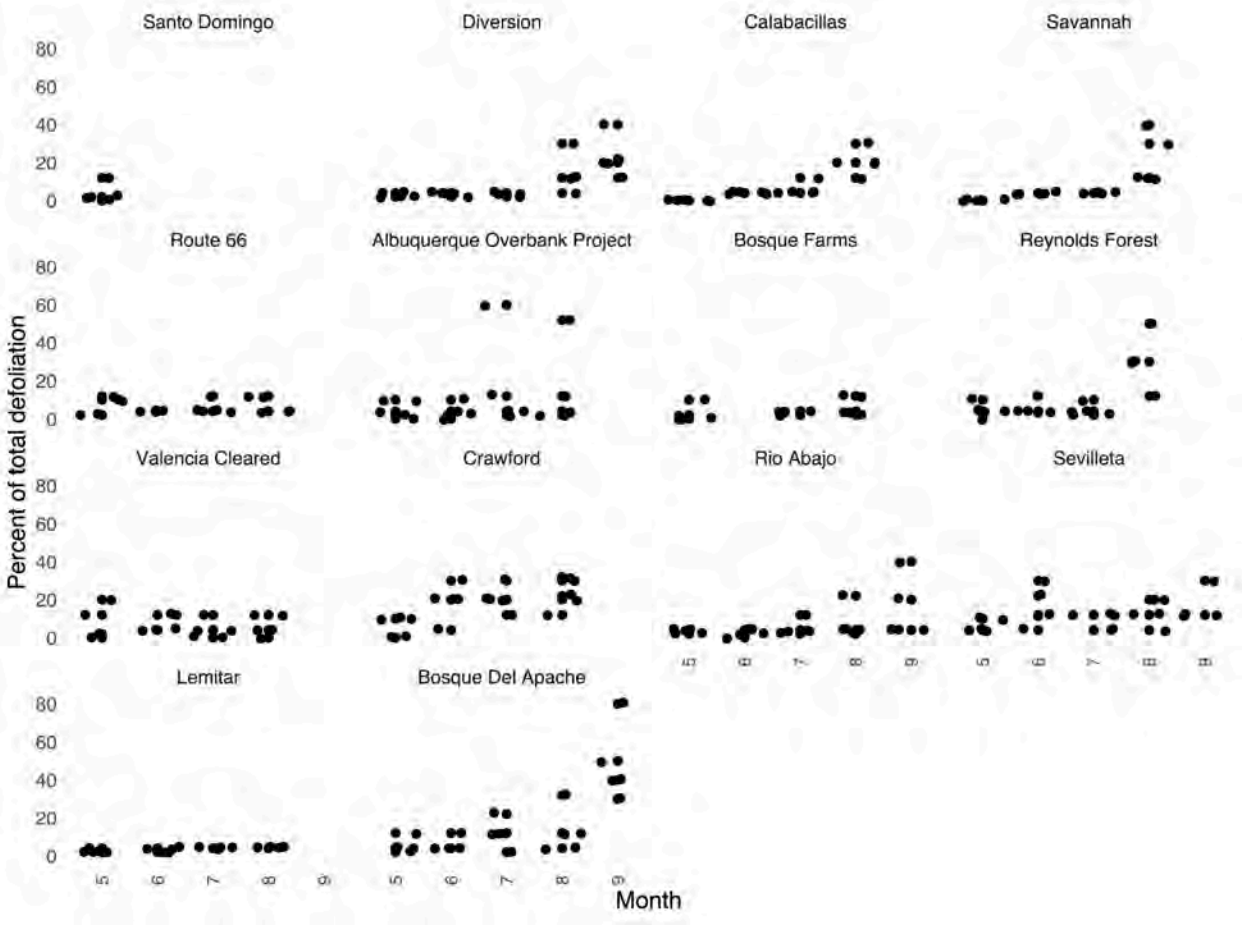


Figure 9.5 Percent total defoliation shown by tree across the sample sites for 2023. Total defoliation includes defoliation by both TLB and other defoliators.

Tamarisk leaf beetle (TLB) abundance was extremely low or absent at most sites in 2023. While many sites flooded, even sites that remained dry had low TLB abundance. Defoliation at many sites was dominated by the tamarisk leaf hopper, which was abundant this year. Bosque del Apache was the only site that had a large TLB presence, especially in September.

10 Water Quality

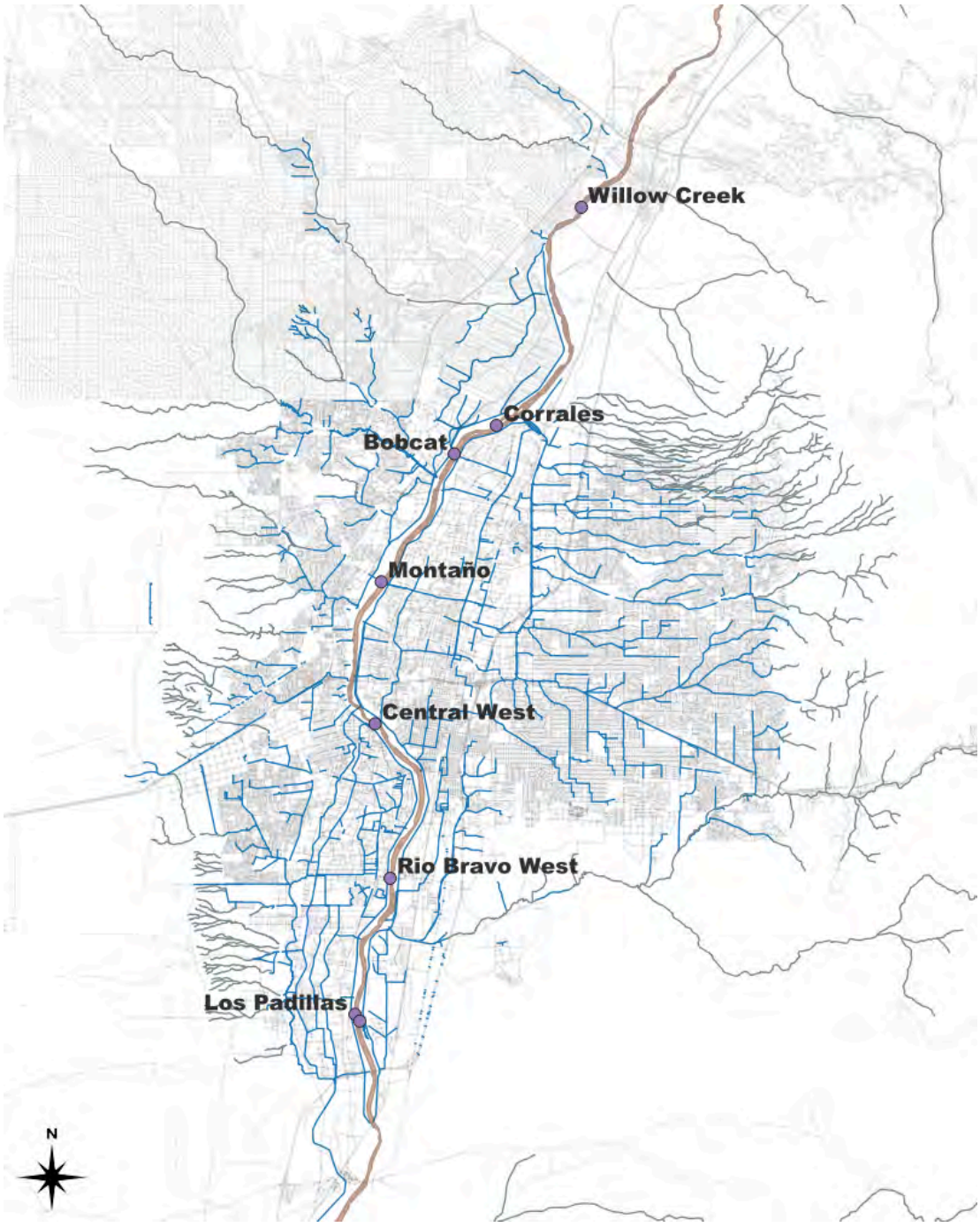


Figure 10.1. Storm water sampling locations for 2023. Additional GIS layers include arroyos, drains and ditches, city streets, and river center.

	Willow Creek	Corrales	Bobcat	Montano	Central West	Rio Bravo West	Los Padillas
February	3.1	7.4	6.3	6.3	4.1	27.2	31.8
March	7.5	2	7.5	7.5	6.3	8.4	9.7
April	<10	10	41	52	20	20	20
May	41	52	52	41	86	31	110
June	25.9	13.5	30.9	28.8	34.5	28.1	42.8
July	56.5	88.4	50.4	48	54.6	62.2	143.9
August	1607	2046	860	2909	2359	8164	261.3
September	85	118	121	63	216	63	313
October	39.9	160.7	119.8	261.3	971	369	9208
November	79.8	120.1	118.7	240	190.4	325.5	517.2
December	7.4	24.1	50.4	70.6	93.3	93.3	261.3

Table 10.1. *Escherichia coli* (MPN/100mL) samples with desired limit exceedances (88 MPN/100mL) highlighted in yellow and EPA limit exceedances (410 MPN/100mL) highlighted in orange. Sampling sites arranged from north to south.

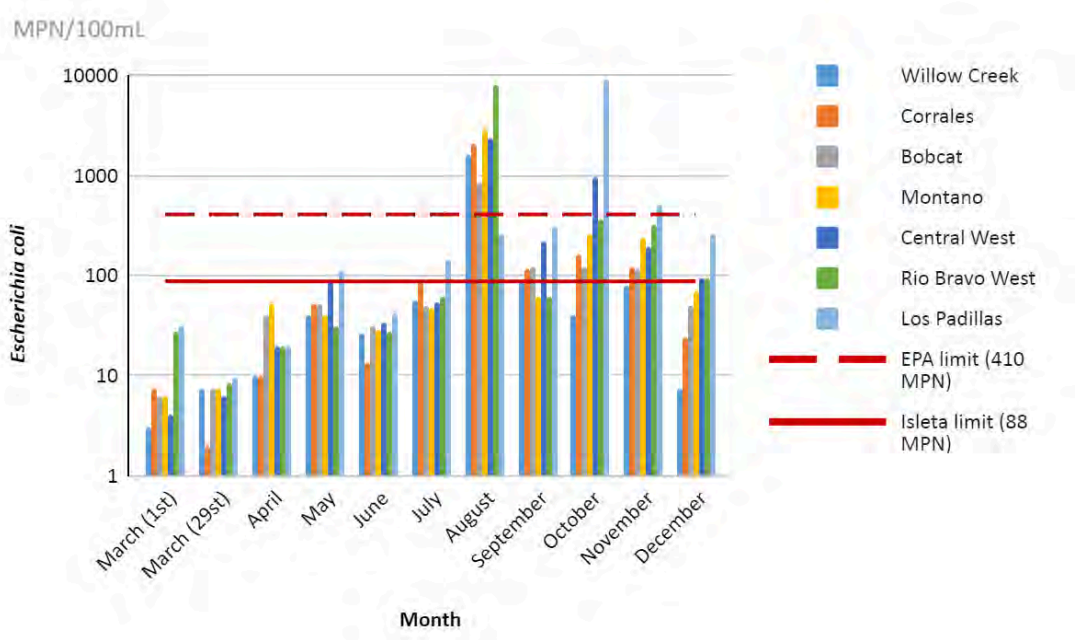


Figure 10.2 *Escherichia coli* (MPN/100mL) Log 10 scale at sampling sites across months.

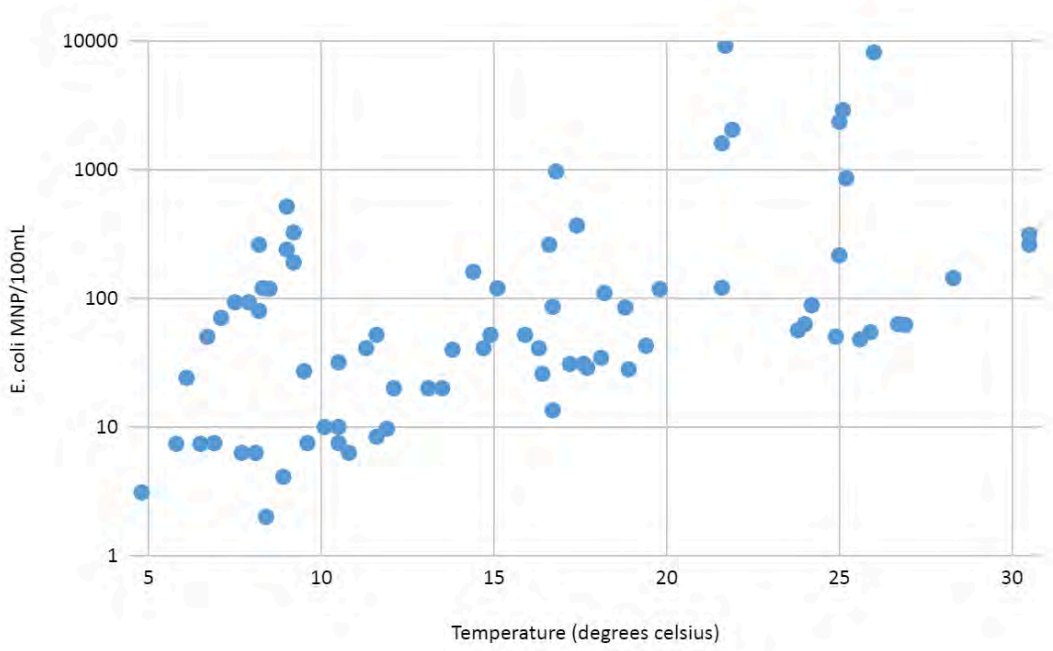


Figure 10.3 Log scale *Echeriachia coli* (MPN/100mL) vs. water temperature (degrees celsius).

Figure 10.4. Photo series of Rio Grande at Willow Creek sampling location facing upstream from March 1, 2023 – December 15, 2023, demonstrating variability in channel size and turbidity throughout the year.

BEMP is funded by the Mid Rio Grande Stormwater Quality Team to sample field parameters (specific conductance, dissolved oxygen, turbidity, and pH) and *Escherichia coli* levels in the Rio Grande. This sampling occurred monthly between March and December 2023 at seven locations seen in Figure 10.1. *Escherichia coli* levels exceeded the desired limits of 88 MPN/100mL and the EPA limits for a primary contact river of 410 MPN/100mL numerous

times during the sampling season (Table 10.1, Figure 10.2). Levels of *E. coli* are seen to increase as water flows through Albuquerque, with the highest concentration typically occurring at the southernmost sampling locations, and are positively correlated with increased water temperatures (Table 10.1, Figures 10.2 – 10.3). Monthly changes in river channel and turbidity can be seen in Figure 10.4. Sampling methodologies, details on sample sites, and results are further detailed in the 2023 Annual Stormwater Quality Technical Report, available on request.

11 Bayesian Structural Equation Models (riparian plant cover)

BEMP is constructing a Bayesian (data driven and generative model) structural equation model (SEM) using Stan (probabilistic modeling language) linking depth to groundwater, precipitation, leaf litterfall response (a proxy for productivity), vegetation cover, fire, flood, temperature, and exotic removals. Below are a couple of simple examples of SEMs, looking at one ecosystem driver (fire). Preliminary results of the SEM (Figures 11.1, 11.2, 11.3) show that native wetland plants, wet meadow grasses, and drop seed grasses all have higher cover at sites that have not burned. Sites that have burned show a variable response to fire (positive, negative, and minimal) depending on other factors (such as depth to groundwater, flooding, or management decisions, like reseeding).

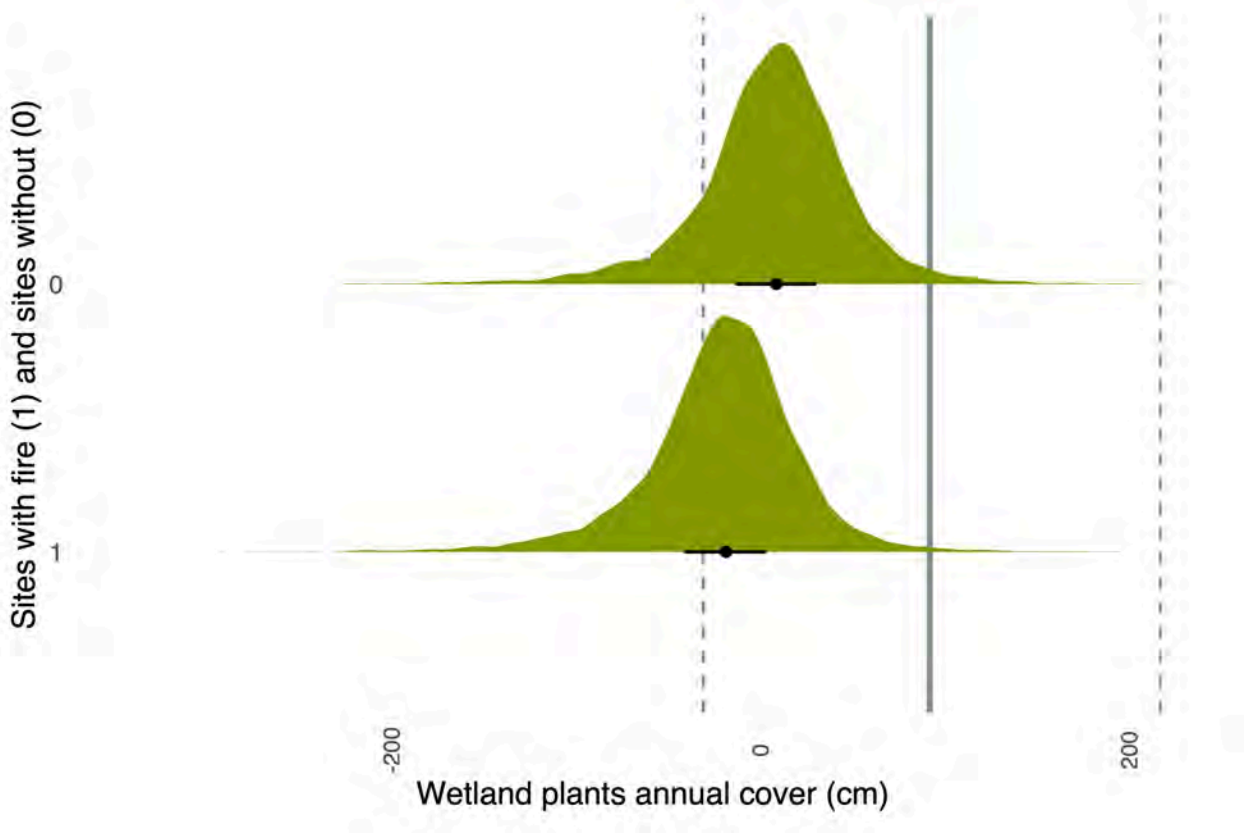


Figure 11.1 Wetland plant cover response to fire from the SEM. Posterior probability distribution (in green) with the 50% uncertainty intervals as black lines and point estimate as a black dot.

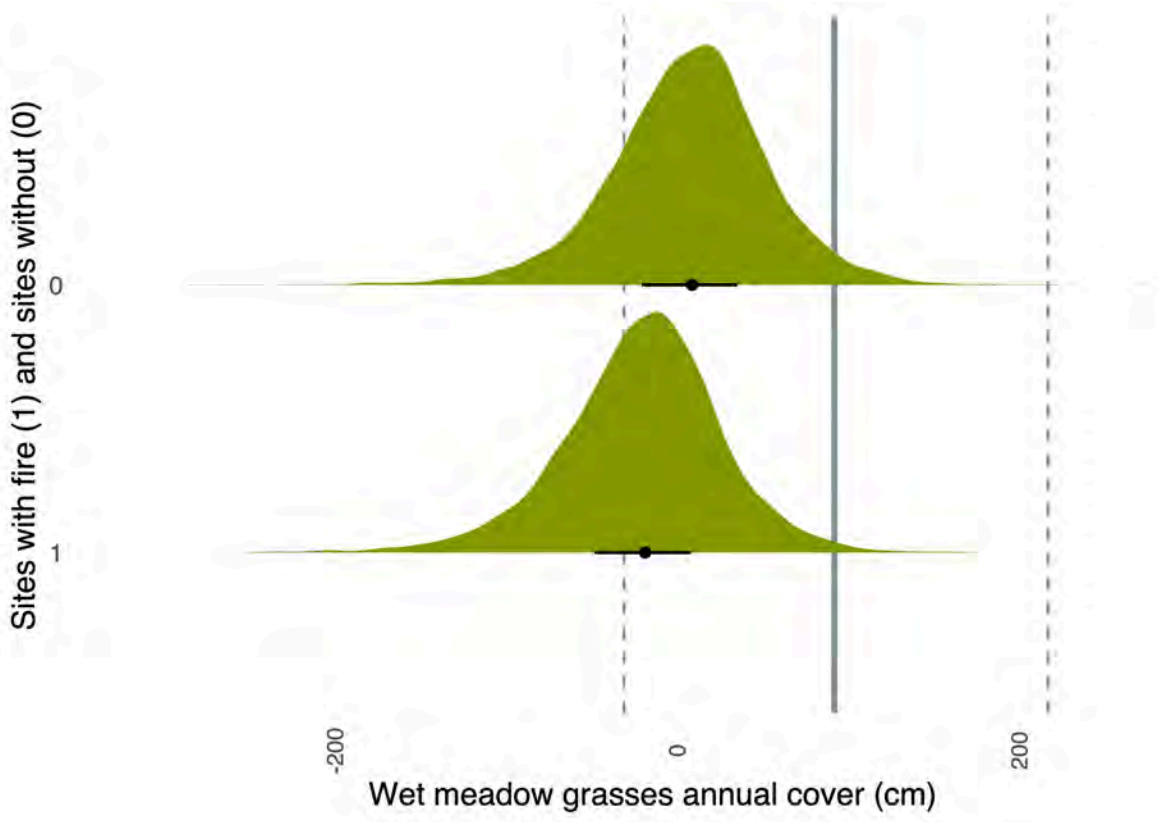


Figure 11.2 Wet meadow grasses cover response to fire from the SEM. Posterior probability distribution (in green) with the 50% uncertainty intervals as black lines and point estimate as a black dot.

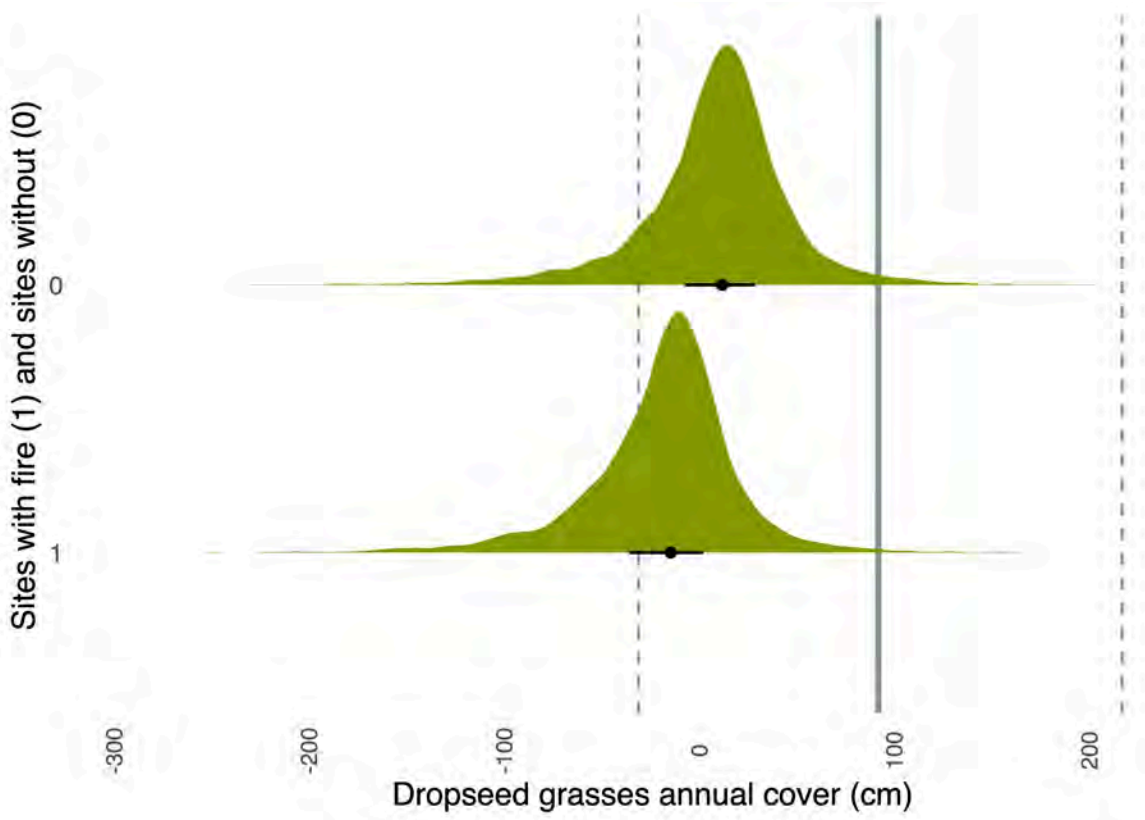


Figure 11.3 Dropseed grass (*Sporobolus* spp.) cover response to fire from the SEM. Posterior probability distribution (in green) with the 50% uncertainty intervals as black lines and point estimate as a black dot.

Kochia and tumbleweed have a different response to fire (Figure 11.4). Their combined cover increases at sites that have burned unless management action is taken to reduce their cover. This is particularly true at sites that have burned and do not flood within the same year.

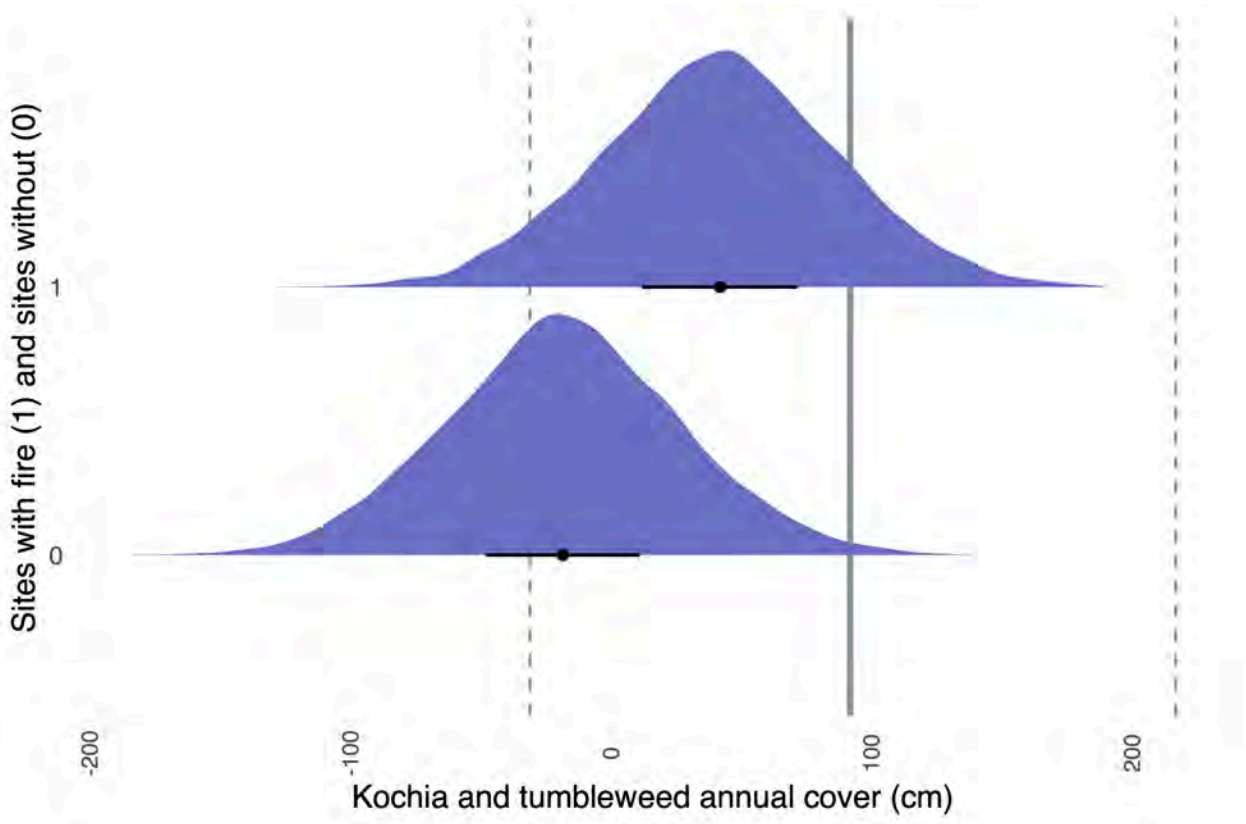


Figure 11.4 Kochia and tumbleweed cover response to fire from the SEM. Posterior probability distribution (in purple) with the 50% uncertainty intervals as black lines and point estimate as a black dot.

12 Implications for management

Data on depth to groundwater, precipitation, temperature, vegetation cover, litterfall, and indicator arthropod species are all critical for both determining what type of management strategies to use in different riparian areas and for monitoring the success of those strategies. Sites with higher groundwater levels are more likely to support successful cottonwood-willow restoration (e.g., San Jose), while sites with deeper groundwater levels require more earth-moving to establish deeper swales and wetlands in order to be successful (e.g., SLO). Establishing native vegetation following fires will depend greatly on the ability to get water on the site. Knowing what vegetation was on the site prior to the fire will aid in restoration efforts, as many native plants (e.g., golden currant, sedges, yerba mansa) are able to recover quickly after a fire, especially with stronger connections to groundwater. Without flooding, areas that were bare or disturbed generally support invasive exotics like tumbleweed and kochia following fires. These invasives can then persist for years.

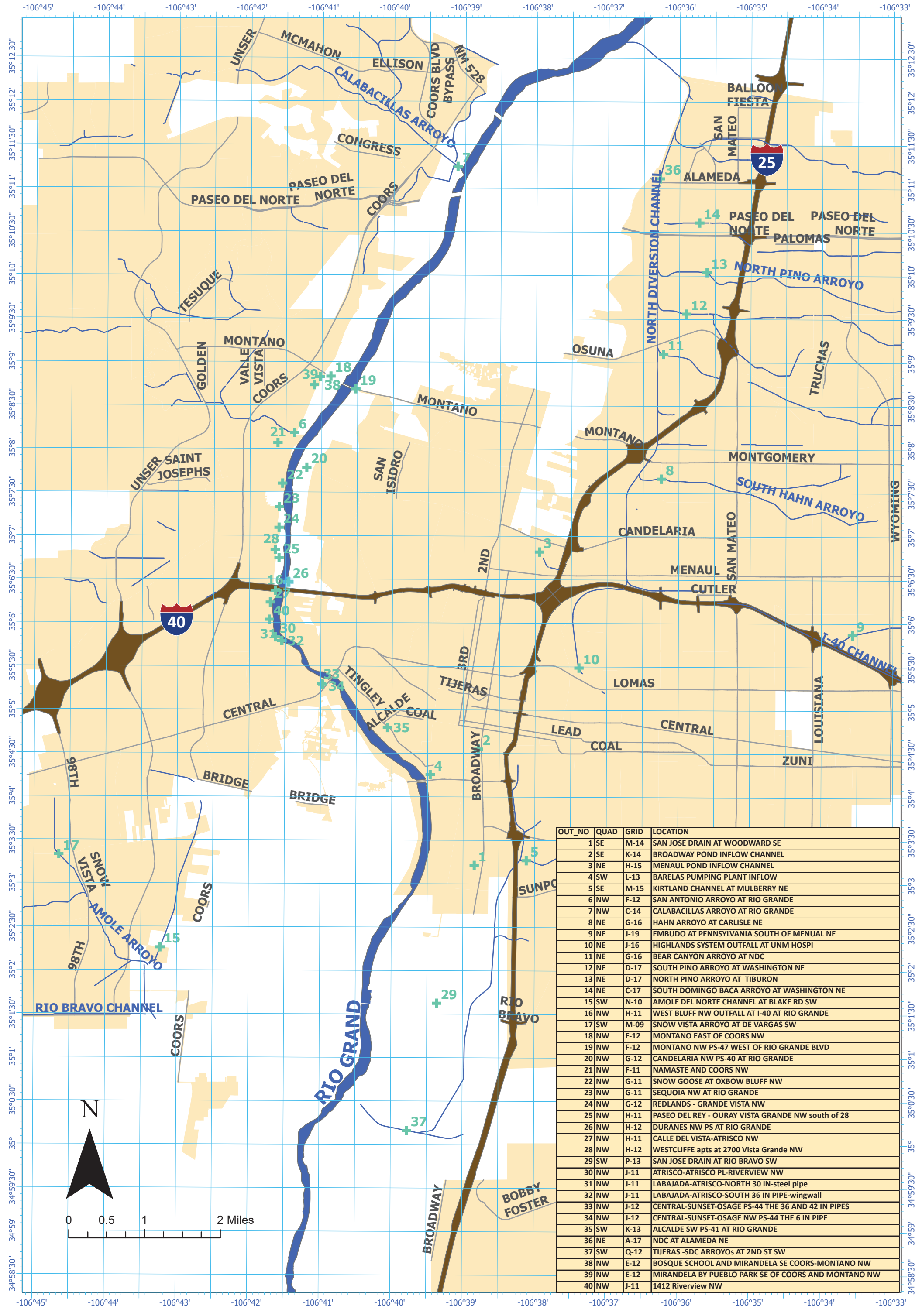
Temperature data indicate that urban sites and sites with reduced canopy have warmer temperatures, directly impacting both vegetation and animals in those areas. The cooling benefits of a canopy are clearly seen at cottonwood and willow-dominated sites.

The shift to warmer temperatures, reduced spring river flows, and more variable precipitation events that occur later in the year will directly impact which species are able to thrive. Developing Bayesian SEMs to help inform management decisions, projects, and mitigation efforts will be key to maintaining ecosystem function with reduced water availability.

Summary of AMAFCA's MS4
Dry Weather Discharge Screening Program
FY 2024 (July 1, 2023 - June 30, 2024)

NPDES Permit No. NMR04A000
Part III.A.2 - Dry Weather Discharge Screening of MS4

Dry Weather Screening of Outfalls 2024 Report



OUT_NO	QUAD	GRID	LOCATION
1	SE	M-14	SAN JOSE DRAIN AT WOODWARD SE
2	SE	K-14	BROADWAY POND INFLOW CHANNEL
3	NE	H-15	MENAUL POND INFLOW CHANNEL
4	SW	L-13	BARELAS PUMPING PLANT INFLOW
5	SE	M-15	KIRTLAND CHANNEL AT MULBERRY NE
6	NW	F-12	SAN ANTONIO ARROYO AT RIO GRANDE
7	NW	C-14	CALABACILLAS ARROYO AT RIO GRANDE
8	NE	G-16	HAHN ARROYO AT CARLISLE NE
9	NE	J-19	EMBUDO AT PENNSYLVANIA SOUTH OF MENUAL NE
10	NE	J-16	HIGHLANDS SYSTEM OUTFALL AT UNM HOSPI
11	NE	G-16	BEAR CANYON ARROYO AT NDC
12	NE	D-17	SOUTH PINO ARROYO AT WASHINGTON NE
13	NE	D-17	NORTH PINO ARROYO AT TIBURON
14	NE	C-17	SOUTH DOMINGO BACA ARROYO AT WASHINGTON NE
15	SW	N-10	AMOLE DEL NORTE CHANNEL AT BLAKE RD SW
16	NW	H-11	WEST BLUFF NW OUTFALL AT I-40 AT RIO GRANDE
17	SW	M-09	SNOW VISTA ARROYO AT DE VARGAS SW
18	NW	E-12	MONTANO EAST OF COORS NW
19	NW	F-12	MONTANO NW PS-47 WEST OF RIO GRANDE BLVD
20	NW	G-12	CANDELARIA NW PS-40 AT RIO GRANDE
21	NW	F-11	NAMASTE AND COORS NW
22	NW	G-11	SNOW GOOSE AT OXBOW BLUFF NW
23	NW	G-11	SEQUOIA NW AT RIO GRANDE
24	NW	G-12	REDLANDS - GRANDE VISTA NW
25	NW	H-11	PASEO DEL REY - OURAY VISTA GRANDE NW south of 28
26	NW	H-12	DURANES NW PS AT RIO GRANDE
27	NW	H-11	CALLE DEL VISTA-ATRISCO NW
28	NW	H-12	WESTCLIFFE apts at 2700 Vista Grande NW
29	SW	P-13	SAN JOSE DRAIN AT RIO BRAVO SW
30	NW	J-11	ATRISCO-ATRISCO PL-RIVERVIEW NW
31	NW	J-11	LABAJADA-ATRISCO-NORTH 30 IN-steel pipe
32	NW	J-11	LABAJADA-ATRISCO-SOUTH 36 IN PIPE-wingwall
33	NW	J-12	CENTRAL-SUNSET-OSAGE PS-44 THE 36 AND 42 IN PIPES
34	NW	J-12	CENTRAL-SUNSET-OSAGE NW PS-44 THE 6 IN PIPE
35	SW	K-13	ALCALDE SW PS-41 AT RIO GRANDE
36	NE	A-17	NDC AT ALAMEDA NE
37	SW	Q-12	TIJERAS -SDC ARROYOs AT 2ND ST SW
38	NW	E-12	BOSQUE SCHOOL AND MIRANDELA SE COORS-MONTANO NW
39	NW	E-12	MIRANDELA BY PUEBLO PARK SE OF COORS AND MONTANO NW
40	NW	J-11	1412 Riverview NW

Outfall Locations

DRY WEATHER OUTFALLS SCREENING 2023
TABLE OF CONTENTS

LOCATION	**SAN JOSE DRAIN AT BETHEL SE**

OUTFALL_NO	1	QUAD	SE	GRID	M-14	SAMPLED	☐
DATE_INSP	3/5/2024	TIME	9:00	Inspected by	JA/DL*		
WEATHER	SUNNY	flow	NO	FLOW_GPM	0		
APPEARANCE	na	GROSS POLLUTANT	na				
Source of Flow	na						

link X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening-2023-2024\East\1-M

AIR_TEMP_F	42	Lab	
WATER_TEMP_F		Lab_Report	
pH		E_coli_Coliform_mpn/100ml	
CONDUCTIVITY_Umos/cm		Ammonia_mg/l	
BOD_mg/l		Nitrite_NO2_mg/l	
COD_mg/l		Nitrate_NO3_mg/l	
TSS_mg/l		TKN_Tot_Kjeld_N_mg/l	
TDS_mg/l		Phosphorus_total_mg/l_P	
N-Hexane Extractabie-(Oil_Grease)_mg/l		Hardness_mg/l_CaCO3	
Floride_mg/l		Chlorine_mg/l	

1

*JA = Javier Ayala, stormwater inspector
DL = DJ Laskowski, stormwater inspector

LOCATION	**BROADWAY POND INFLOW CHANNEL**						
OUTFALL_NO	2	QUAD	SE	GRID	K-14	SAMPLED	☑
DATE_INSP	3/4/2024	TIME	10:00	Inspected by	KO/ML*		
WEATHER	SUNNY	flow	Y	FLOW_GPM	0.1		
APPEARANCE	clear	GROSS POLLUTANT	none				
Source of Flow	Irrigation, well wash, fire hydants discharge						
link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening--new-2023-2024\2-K						

AIR_TEMP_F		Lab	Eurofins
WATER_TEMP_F		Lab_Report	885-1602-1
pH	8.1	E_coli_Coliform_mpn/100ml	16.1
CONDUCTIVITY_Umos/cm	580	Ammonia_mg/l	ND
BOD_mg/l	<2	Nitrite_NO2_mg/l	ND
COD_mg/l	ND	Nitrate_NO3_mg/l	0.28
TSS_mg/l	ND	TKN_Tot_Kjeld_N_mg/l	0.77
TDS_mg/l	380	Phosphorus_total_mg/l_P	0.42
N-Hexane Extractabie-(Oil_Grease)_mg/l	ND	Hardness_mg/l_CaCO3	190
Floride_mg/l	0.56	Chlorine_mg/l	ND

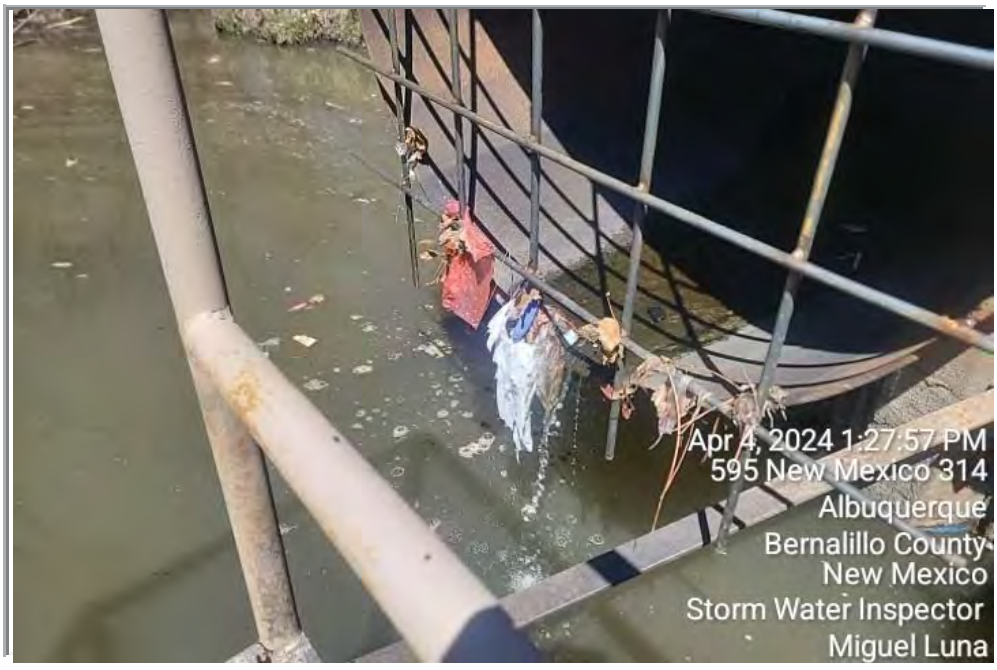
*KO = Kyle O'Malley, engineering assistant
ML = Miguel Luna, stormwater inspector

LOCATION	**MENAUL POND INFLOW CHANNEL**						
OUTFALL_NO	3	QUAD	NE	GRID	H-15	SAMPLED	☐
DATE_INSP	3/5/2024	TIME	10:00	Inspected by	JA/DL		
WEATHER	SUNNY	flow	NO	FLOW_GPM	0		
APPEARANCE	na	GROSS POLLUTANT	na				
Source of Flow	na						
link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening-2023-2024\East\3-H						

AIR_TEMP_F	55	Lab	
WATER_TEMP_F		Lab_Report	
pH		E_coli_Coliform_mpn/100ml	
CONDUCTIVITY_Umos/cm		Ammonia_mg/l	
BOD_mg/l		Nitrite_NO2_mg/l	
COD_mg/l		Nitrate_NO3_mg/l	
TSS_mg/l		TKN_Tot_Kjeld_N_mg/l	
TDS_mg/l		Phosphorus_total_mg/l_P	
N-Hexane Extractabie-(Oil_Grease)_mg/l		Hardness_mg/l_CaCO3	
Floride_mg/l		Chlorine_mg/l	

LOCATION	**BARELAS PUMPING PLANT INFLOW**						
OUTFALL_NO	4	QUAD	SW	GRID	L-13	SAMPLED	☑
DATE_INSP	4/4/2024	TIME	1:30	Inspected by	KO/ML		
WEATHER	SUNNY	flow	Y	FLOW_GPM	0.1		
APPEARANCE	clear	GROSS POLLUTANT	none				
Source of Flow	groundwater infilteration to the storm lines						
link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening--new-2023-2024\4-L						

AIR_TEMP_F	68	Lab	Eurofins
WATER_TEMP_F		Lab_Report	885-2402-1
pH	8	E_coli_Coliform_mpn/100ml	>2419.6
CONDUCTIVITY_Umos/cm	690	Ammonia_mg/l	nd
BOD_mg/l	2.1	Nitrite_NO2_mg/l	nd
COD_mg/l	nd	Nitrate_NO3_mg/l	0.14
TSS_mg/l	nd	TKN_Tot_Kjeld_N_mg/l	0.6
TDS_mg/l	450	Phosphorus_total_mg/l_P	0.19
N-Hexane Extractabie-(Oil_Grease)_mg/l	nd	Hardness_mg/l_CaCO3	240
Floride_mg/l	0.61	Chlorine_mg/l	0.07



LOCATION	**KIRTLAND CHANNEL AT MULBERRY NE**						
OUTFALL_NO	5	QUAD	SE	GRID	M-15	SAMPLED	☐
DATE_INSP	3/22/2024	TIME	11:00	Inspected by	JA/DL		
WEATHER	SUNNY	flow	N	FLOW_GPM	0		
APPEARANCE	na	GROSS POLLUTANT	na				
Source of Flow	na						
link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening-2023-2024\East\5-M						

AIR_TEMP_F	56	Lab	
WATER_TEMP_F		Lab_Report	
pH		E_coli_Coliform_mpn/100ml	
CONDUCTIVITY_Umos/cm		Ammonia_mg/l	
BOD_mg/l		Nitrite_NO2_mg/l	
COD_mg/l		Nitrate_NO3_mg/l	
TSS_mg/l		TKN_Tot_Kjeld_N_mg/l	
TDS_mg/l		Phosphorus_total_mg/l_P	
N-Hexane Extractabie-(Oil_Grease)_mg/l		Hardness_mg/l_CaCO3	
Floride_mg/l		Chlorine_mg/l	

LOCATION	**SAN ANTONIO ARROYO AT RIO GRANDE**						
OUTFALL_NO	6	QUAD	NW	GRID	F-12	SAMPLED	☐
DATE_INSP	3/22/2024	TIME	10:00am	Inspected by	JA/DL		
WEATHER	SUNNY	flow	NO	FLOW_GPM	0		
APPEARANCE	na	GROSS POLLUTANT	na				
Source of Flow	na						
link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening--new-2023-2024\6-F						

AIR_TEMP_F	60	Lab	
WATER_TEMP_F		Lab_Report	
pH		E_coli_Coliform_mpn/100ml	
CONDUCTIVITY_Umos/cm		Ammonia_mg/l	
BOD_mg/l		Nitrite_NO2_mg/l	
COD_mg/l		Nitrate_NO3_mg/l	
TSS_mg/l		TKN_Tot_Kjeld_N_mg/l	
TDS_mg/l		Phosphorus_total_mg/l_P	
N-Hexane Extractabie-(Oil_Grease)_mg/l		Hardness_mg/l_CaCO3	
Floride_mg/l		Chlorine_mg/l	

LOCATION	**CALABACILLAS ARROYO AT RIO GRANDE**

OUTFALL_NO	7	QUAD	NW	GRID	C-14	SAMPLED	☐
DATE_INSP	4/5/2024	TIME	3:00pm	Inspected by	KO/ML		
WEATHER	CLOUDY	flow	N	FLOW_GPM	0		
APPEARANCE	na	GROSS POLLUTANT	na				
Source of Flow	na						
link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening--new-2023-2024\7-C						

AIR_TEMP_F	65	Lab	
WATER_TEMP_F		Lab_Report	
pH		E_coli_Coliform_mpn/100ml	
CONDUCTIVITY_Umos/cm		Ammonia_mg/l	
BOD_mg/l		Nitrite_NO2_mg/l	
COD_mg/l		Nitrate_NO3_mg/l	
TSS_mg/l		TKN_Tot_Kjeld_N_mg/l	
TDS_mg/l		Phosphorus_total_mg/l_P	
N-Hexane Extractabie-(Oil_Grease)_mg/l		Hardness_mg/l_CaCO3	
Floride_mg/l		Chlorine_mg/l	

LOCATION	HAHN ARROYO AT CARLISLE NE						
OUTFALL_NO	8	QUAD	NE	GRID	G-16	SAMPLED	X
DATE_INSP	3/27/2024	TIME	10:00am	Inspected by	JA/DL		
WEATHER	CLOUDY	flow	Yes	FLOW_GPM	0		
APPEARANCE	na	GROSS POLLUTANT	na				
Source of Flow	na						
link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening-2023-2024\East\8-G						

AIR_TEMP_F	42	Lab	Eurofins
WATER_TEMP_F		Lab_Report	885-1871-1
pH	7.9	E_coli_Coliform_mpn/100ml	5.2
CONDUCTIVITY_Umos/cm	550	Ammonia_mg/l	ND
BOD_mg/l	5.1	Nitrite_NO2_mg/l	ND
COD_mg/l	ND	Nitrate_NO3_mg/l	0.18
TSS_mg/l	ND	TKN_Tot_Kjeld_N_mg/l	2.1
TDS_mg/l	310	Phosphorus_total_mg/l_P	0.49
N-Hexane Extractabie-(Oil_Grease)_mg/l	ND	Hardness_mg/l_CaCO3	180
Floride_mg/l	0.57	Chlorine_mg/l	ND

LOCATION	**EMBUDO AT PENNSYLVANIA SOUTH OF MENUAL NE**						
OUTFALL_NO	9	QUAD	NE	GRID	J-19	SAMPLED	X
DATE_INSP	3/26/2024	TIME	10:30am	Inspected by	JA/DL		
WEATHER	SUNNY	flow	NO	FLOW_GPM	0		
APPEARANCE	na	GROSS POLLUTANT	na				
Source of Flow	na						
link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening-2023-2024\East\9-J1						

AIR_TEMP_F	50	Lab	Eurofins
WATER_TEMP_F		Lab_Report	885-1789-1
pH	8.1	E_coli_Coliform_mpn/100ml	ND
CONDUCTIVITY_Umos/cm	490	Ammonia_mg/l	ND
BOD_mg/l	ND	Nitrite_NO2_mg/l	ND
COD_mg/l	ND	Nitrate_NO3_mg/l	0.14
TSS_mg/l	ND	TKN_Tot_Kjeld_N_mg/l	ND
TDS_mg/l	300	Phosphorus_total_mg/l_P	0.31
N-Hexane Extractabie-(Oil_Grease)_mg/l	ND	Hardness_mg/l_CaCO3	160
Floride_mg/l	0.5	Chlorine_mg/l	ND

LOCATION	**NDC AT TUCKER**						
OUTFALL_NO	10	QUAD	NE	GRID	J-16	SAMPLED	☐
DATE_INSP	4/3/2024	TIME	10:30am	Inspected by	NR*		
WEATHER	SUNNY	flow	No	FLOW_GPM	0		
APPEARANCE		GROSS POLLUTANT					
Source of Flow							

link X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening-2023-2024\East\10-J

AIR_TEMP_F	48	Lab	HALL ENVIRONMENTAL
WATER_TEMP_F	37	Lab_Report	2212536
pH	8.29	E_coli_Coliform_mpn/100ml	1046.2
CONDUCTIVITY_Umos/cm	300	Ammonia_mg/l	<5
BOD_mg/l	<12.	Nitrite_NO2_mg/l	<0.5
COD_mg/l	176	Nitrate_NO3_mg/l	<0.5
TSS_mg/l	16	TKN_Tot_Kjeld_N_mg/l	<5
TDS_mg/l	240	Phosphorus_total_mg/l_P	0.09
N-Hexane Extractabie-(Oil_Grease)_mg/l	<9.5	Hardness_mg/l_CaCO3	120
Floride_mg/l	<0.5	Chlorine_mg/l	<0.05

*NR = Nathan Randall, stormwater inspector

LOCATION	**BEAR CANYON ARROYO AT NDC**						
OUTFALL_NO	11	QUAD	NE	GRID	G-16	SAMPLED	☐
DATE_INSP	3/5/2024	TIME	2:12	Inspected by	JA/DL		
WEATHER	CLOUDY	flow	NO	FLOW_GPM	0		
APPEARANCE	na	GROSS POLLUTANT	na				
Source of Flow	na						
link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening-2023-2024\East\11-						

AIR_TEMP_F	49	Lab	
WATER_TEMP_F		Lab_Report	
pH		E_coli_Coliform_mpn/100ml	
CONDUCTIVITY_Umos/cm		Ammonia_mg/l	
BOD_mg/l		Nitrite_NO2_mg/l	
COD_mg/l		Nitrate_NO3_mg/l	
TSS_mg/l		TKN_Tot_Kjeld_N_mg/l	
TDS_mg/l		Phosphorus_total_mg/l_P	
N-Hexane Extractabie-(Oil_Grease)_mg/l		Hardness_mg/l_CaCO3	
Floride_mg/l		Chlorine_mg/l	

LOCATION	**SOUTH PINO ARROYO AT WASHINGTON NE**						
OUTFALL_NO	12	QUAD	NE	GRID	D-17	SAMPLED	☐
DATE_INSP	3/5/2024	TIME	10:00am	Inspected by	JA/DL		
WEATHER	CLOUDY	flow	NO	FLOW_GPM	0		
APPEARANCE	na	GROSS POLLUTANT	na				
Source of Flow	na						
link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening-2023-2024\East\12-						

AIR_TEMP_F	49	Lab	
WATER_TEMP_F		Lab_Report	
pH		E_coli_Coliform_mpn/100ml	
CONDUCTIVITY_Umos/cm		Ammonia_mg/l	
BOD_mg/l		Nitrite_NO2_mg/l	
COD_mg/l		Nitrate_NO3_mg/l	
TSS_mg/l		TKN_Tot_Kjeld_N_mg/l	
TDS_mg/l		Phosphorus_total_mg/l_P	
N-Hexane Extractabie-(Oil_Grease)_mg/l		Hardness_mg/l_CaCO3	
Floride_mg/l		Chlorine_mg/l	

LOCATION	**NORTH PINO ARROYO AT TIBURON NE**						
OUTFALL_NO	13	QUAD	NE	GRID	D-17	SAMPLED	☐
DATE_INSP	3/5/2024	TIME	11:00am	Inspected by	JA/DL		
WEATHER	CLOUDY	flow	NO	FLOW_GPM	0		
APPEARANCE	na	GROSS POLLUTANT	na				
Source of Flow	na						
link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening-2023-2024\East\13-						

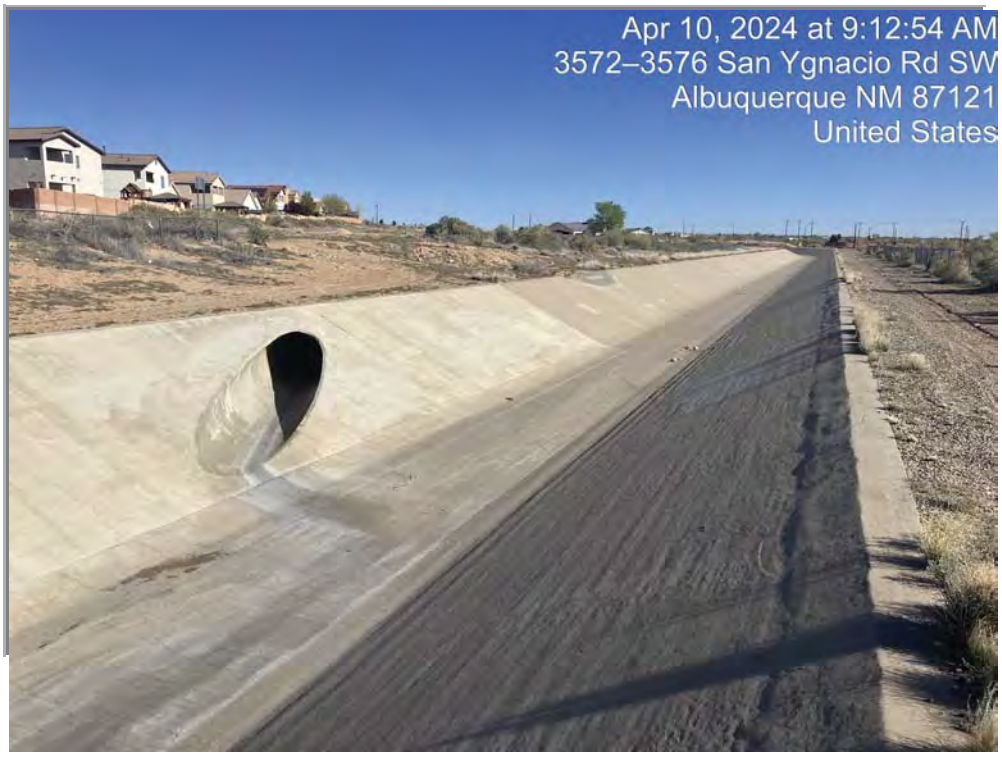
AIR_TEMP_F	49	Lab	
WATER_TEMP_F		Lab_Report	
pH		E_coli_Coliform_mpn/100ml	
CONDUCTIVITY_Umos/cm		Ammonia_mg/l	
BOD_mg/l		Nitrite_NO2_mg/l	
COD_mg/l		Nitrate_NO3_mg/l	
TSS_mg/l		TKN_Tot_Kjeld_N_mg/l	
TDS_mg/l		Phosphorus_total_mg/l_P	
N-Hexane Extractabie-(Oil_Grease)_mg/l		Hardness_mg/l_CaCO3	
Floride_mg/l		Chlorine_mg/l	

LOCATION	**SOUTH DOMINGO BACA ARROYO AT WASHINGTON NE**						
OUTFALL_NO	14	QUAD	NE	GRID	C-17	SAMPLED	X
DATE_INSP	3/5/2024	TIME	12:30pm	Inspected by	SK		
WEATHER	CLOUDY	flow	NO	FLOW_GPM	0		
APPEARANCE	na	GROSS POLLUTANT	na				
Source of Flow	na						
link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening-2023-2024\East\14-						

AIR_TEMP_F	49	Lab	
WATER_TEMP_F		Lab_Report	885-2062-1
pH	8.2	E_coli_Coliform_mpn/100ml	16.1
CONDUCTIVITY_Umos/cm	670	Ammonia_mg/l	ND
BOD_mg/l	5.2	Nitrite_NO2_mg/l	ND
COD_mg/l	ND	Nitrate_NO3_mg/l	ND
TSS_mg/l	ND	TKN_Tot_Kjeld_N_mg/l	ND
TDS_mg/l	430	Phosphorus_total_mg/l_P	0.54
N-Hexane Extractabie-(Oil_Grease)_mg/l	ND	Hardness_mg/l_CaCO3	230
Floride_mg/l	0.82	Chlorine_mg/l	ND

LOCATION	**AMOLE DEL NORTE CHANNEL AT BLAKE SW**						
OUTFALL_NO	15	QUAD	SW	GRID	N-10	SAMPLED	☐
DATE_INSP	4/10/2024	TIME	9:00am	Inspected by	KO		
WEATHER	SUNNY	flow	NO	FLOW_GPM	0		
APPEARANCE	na	GROSS POLLUTANT	na				
Source of Flow	na						
link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening--new-2023-2024\15-						

AIR_TEMP_F	47	Lab	
WATER_TEMP_F		Lab_Report	
pH		E_coli_Coliform_mpn/100ml	
CONDUCTIVITY_Umos/cm		Ammonia_mg/l	
BOD_mg/l		Nitrite_NO2_mg/l	
COD_mg/l		Nitrate_NO3_mg/l	
TSS_mg/l		TKN_Tot_Kjeld_N_mg/l	
TDS_mg/l		Phosphorus_total_mg/l_P	
N-Hexane Extractabie-(Oil_Grease)_mg/l		Hardness_mg/l_CaCO3	
Floride_mg/l		Chlorine_mg/l	



LOCATION	**WEST BLUFF NW OUTFALL AT RIO GRANDE AT I-40**						
OUTFALL_NO	16	QUAD	NW	GRID	H-11	SAMPLED	☐
DATE_INSP	3/25/2024	TIME	10:30am	Inspected by	JA/DL		
WEATHER	CLOUDY	flow	NO	FLOW_GPM	0		
APPEARANCE	na	GROSS POLLUTANT	na				
Source of Flow	na						
link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening--new-2023-2024\16						

AIR_TEMP_F	44	Lab	
WATER_TEMP_F		Lab_Report	
pH		E_coli_Coliform_mpn/100ml	
CONDUCTIVITY_Umos/cm		Ammonia_mg/l	
BOD_mg/l		Nitrite_NO2_mg/l	
COD_mg/l		Nitrate_NO3_mg/l	
TSS_mg/l		TKN_Tot_Kjeld_N_mg/l	
TDS_mg/l		Phosphorus_total_mg/l_P	
N-Hexane Extractabie-(Oil_Grease)_mg/l		Hardness_mg/l_CaCO3	
Floride_mg/l		Chlorine_mg/l	

LOCATION	**SNOW VISTA ARROYO AT DE VARGAS SW**						
OUTFALL_NO	17	QUAD	SW	GRID	M-09	SAMPLED	☐
DATE_INSP	3/5/2024	TIME	10:30am	Inspected by	JA/DL		
WEATHER	SUNNY	flow	NO	FLOW_GPM	0		
APPEARANCE	na	GROSS POLLUTANT	na				
Source of Flow	na						
link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening--new-2023-2024\17-						

AIR_TEMP_F	47	Lab	
WATER_TEMP_F		Lab_Report	
pH		E_coli_Coliform_mpn/100ml	
CONDUCTIVITY_Umos/cm		Ammonia_mg/l	
BOD_mg/l		Nitrite_NO2_mg/l	
COD_mg/l		Nitrate_NO3_mg/l	
TSS_mg/l		TKN_Tot_Kjeld_N_mg/l	
TDS_mg/l		Phosphorus_total_mg/l_P	
N-Hexane Extractabie-(Oil_Grease)_mg/l		Hardness_mg/l_CaCO3	
Floride_mg/l		Chlorine_mg/l	

LOCATION	**MONTANO EAST OF COORS NW**						
OUTFALL_NO	18	QUAD	NW	GRID	E-12	SAMPLED	☐
DATE_INSP	3/1 /2024	TIME	11:00am	Inspected by	JA/DL		
WEATHER	CLOUDY	flow	NO	FLOW_GPM	0		
APPEARANCE	na	GROSS POLLUTANT	na				
Source of Flow	na						
link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening--new-2023-2024\18-						

AIR_TEMP_F	36	Lab	
WATER_TEMP_F		Lab_Report	
pH		E_coli_Coliform_mpn/100ml	
CONDUCTIVITY_Umos/cm		Ammonia_mg/l	
BOD_mg/l		Nitrite_NO2_mg/l	
COD_mg/l		Nitrate_NO3_mg/l	
TSS_mg/l		TKN_Tot_Kjeld_N_mg/l	
TDS_mg/l		Phosphorus_total_mg/l_P	
N-Hexane Extractabie-(Oil_Grease)_mg/l		Hardness_mg/l_CaCO3	
Floride_mg/l		Chlorine_mg/l	

LOCATION	**MONTANO NW PS-47 WEST OF RIO GRANDE BLVD**						
OUTFALL_NO	19	QUAD	NW	GRID	F-12	SAMPLED	☐
DATE_INSP	3/5/2024	TIME	9:20am	Inspected by	NR		
WEATHER	SUNNY	flow	NO	FLOW_GPM	0		
APPEARANCE	na	GROSS POLLUTANT	na				
Source of Flow	na						
link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening-2023-2024\East\19-						

AIR_TEMP_F	44	Lab	
WATER_TEMP_F		Lab_Report	
pH		E_coli_Coliform_mpn/100ml	
CONDUCTIVITY_Umos/cm		Ammonia_mg/l	
BOD_mg/l		Nitrite_NO2_mg/l	
COD_mg/l		Nitrate_NO3_mg/l	
TSS_mg/l		TKN_Tot_Kjeld_N_mg/l	
TDS_mg/l		Phosphorus_total_mg/l_P	
N-Hexane Extractabie-(Oil_Grease)_mg/l		Hardness_mg/l_CaCO3	
Floride_mg/l		Chlorine_mg/l	

LOCATION	**CANDELARIA NW PS-40 AT RIO GRANDE**						
OUTFALL_NO	20	QUAD	NW	GRID	G-12	SAMPLED	☐
DATE_INSP	3/5/2024	TIME	8:00am	Inspected by	NR		
WEATHER	SUNNY	flow	NO	FLOW_GPM			
APPEARANCE		GROSS POLLUTANT					
Source of Flow							

link X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening-2023-2024\East\20-

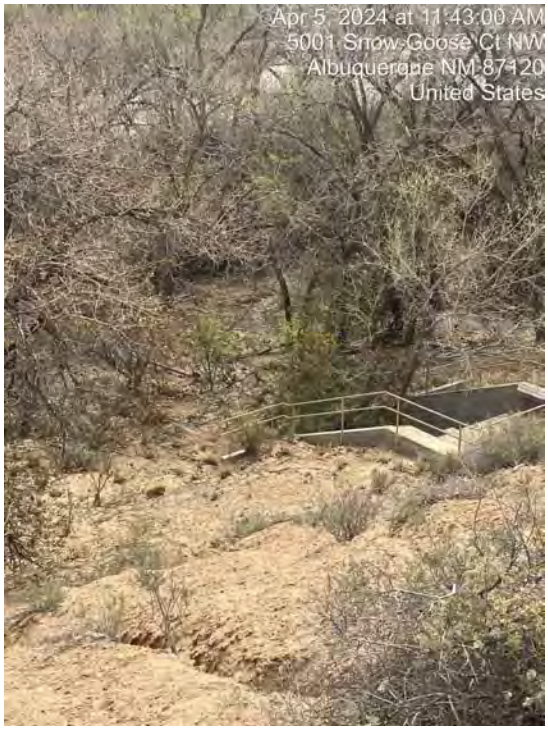
AIR_TEMP_F		Lab	
WATER_TEMP_F		Lab_Report	
pH		E_coli_Coliform_mpn/100ml	
CONDUCTIVITY_Umos/cm		Ammonia_mg/l	
BOD_mg/l		Nitrite_NO2_mg/l	
COD_mg/l		Nitrate_NO3_mg/l	
TSS_mg/l		TKN_Tot_Kjeld_N_mg/l	
TDS_mg/l		Phosphorus_total_mg/l_P	
N-Hexane Extractabie-(Oil_Grease)_mg/l		Hardness_mg/l_CaCO3	
Floride_mg/l		Chlorine_mg/l	

LOCATION	NAMASTE AND COORS NW						
OUTFALL_NO	21	QUAD	NW	GRID	F-11	SAMPLED	☐
DATE_INSP	3/5/2024	TIME	10:00	Inspected by	JA/DL		
WEATHER	CLOUDY	flow	NO	FLOW_GPM	0		
APPEARANCE	na	GROSS POLLUTANT	na				
Source of Flow	na						
link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening--new-2023-2024\21-						

AIR_TEMP_F	34	Lab	
WATER_TEMP_F		Lab_Report	
pH		E_coli_Coliform_mpn/100ml	
CONDUCTIVITY_Umos/cm		Ammonia_mg/l	
BOD_mg/l		Nitrite_NO2_mg/l	
COD_mg/l		Nitrate_NO3_mg/l	
TSS_mg/l		TKN_Tot_Kjeld_N_mg/l	
TDS_mg/l		Phosphorus_total_mg/l_P	
N-Hexane Extractabie-(Oil_Grease)_mg/l		Hardness_mg/l_CaCO3	
Floride_mg/l		Chlorine_mg/l	

LOCATION	**SNOW GOOSE AT OXBOW BLUFF NW**						
OUTFALL_NO	22	QUAD	NW	GRID	G-11	SAMPLED	☐
DATE_INSP	4/5/2024	TIME	11:30am	Inspected by	KO		
WEATHER	SUNNY	flow	NO	FLOW_GPM	0		
APPEARANCE	na	GROSS POLLUTANT	na				
Source of Flow	na						
link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening--new-2023-2024\22-						

AIR_TEMP_F	45	Lab	
WATER_TEMP_F		Lab_Report	
pH		E_coli_Coliform_mpn/100ml	
CONDUCTIVITY_Umos/cm		Ammonia_mg/l	
BOD_mg/l		Nitrite_NO2_mg/l	
COD_mg/l		Nitrate_NO3_mg/l	
TSS_mg/l		TKN_Tot_Kjeld_N_mg/l	
TDS_mg/l		Phosphorus_total_mg/l_P	
N-Hexane Extractabie-(Oil_Grease)_mg/l		Hardness_mg/l_CaCO3	
Floride_mg/l		Chlorine_mg/l	



LOCATION	**SEQUOIA NW AT RIO GRANDE**						
OUTFALL_NO	**23**	QUAD	NW	GRID	G-11	SAMPLED	☐
DATE_INSP	3/28/2024	TIME	2:30pm	Inspected by	KO/ML		
WEATHER	SUNNY	flow	NO	FLOW_GPM	0		
APPEARANCE	na	GROSS POLLUTANT	na				
Source of Flow	na						
link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening--new-2023-2024\23-						

AIR_TEMP_F	45	Lab	
WATER_TEMP_F		Lab_Report	
pH		E_coli_Coliform_mpn/100ml	
CONDUCTIVITY_Umos/cm		Ammonia_mg/l	
BOD_mg/l		Nitrite_NO2_mg/l	
COD_mg/l		Nitrate_NO3_mg/l	
TSS_mg/l		TKN_Tot_Kjeld_N_mg/l	
TDS_mg/l		Phosphorus_total_mg/l_P	
N-Hexane Extractabie-(Oil_Grease)_mg/l		Hardness_mg/l_CaCO3	
Floride_mg/l		Chlorine_mg/l	

LOCATION	**REDLANDS - GRANDE VISTA NW**						
OUTFALL_NO	24	QUAD	NW	GRID	G-12	SAMPLED	☐
DATE_INSP	3/20/2024	TIME	3:05	Inspected by	JA/DL		
WEATHER	SUNNY	flow	NO	FLOW_GPM	0		
APPEARANCE	na	GROSS POLLUTANT	na				
Source of Flow	na						
link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening--new-2023-2024\24-						

AIR_TEMP_F	45	Lab	
WATER_TEMP_F		Lab_Report	
pH		E_coli_Coliform_mpn/100ml	
CONDUCTIVITY_Umos/cm		Ammonia_mg/l	
BOD_mg/l		Nitrite_NO2_mg/l	
COD_mg/l		Nitrate_NO3_mg/l	
TSS_mg/l		TKN_Tot_Kjeld_N_mg/l	
TDS_mg/l		Phosphorus_total_mg/l_P	
N-Hexane Extractabie-(Oil_Grease)_mg/l		Hardness_mg/l_CaCO3	
Floride_mg/l		Chlorine_mg/l	

LOCATION	**PASEO DEL REY - OURAY - VISTA GRANDE NW**						
OUTFALL_NO	25	QUAD	NW	GRID	H-11	SAMPLED	☐
DATE_INSP	3/28/2024	TIME	10:55	Inspected by	KO/ML		
WEATHER	SUNNY	flow	NO	FLOW_GPM	0		
APPEARANCE	na	GROSS POLLUTANT	na				
Source of Flow	na						
link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening--new-2023-2024\25-						

AIR_TEMP_F	39	Lab	
WATER_TEMP_F		Lab_Report	
pH		E_coli_Coliform_mpn/100ml	
CONDUCTIVITY_Umos/cm		Ammonia_mg/l	
BOD_mg/l		Nitrite_NO2_mg/l	
COD_mg/l		Nitrate_NO3_mg/l	
TSS_mg/l		TKN_Tot_Kjeld_N_mg/l	
TDS_mg/l		Phosphorus_total_mg/l_P	
N-Hexane Extractabie-(Oil_Grease)_mg/l		Hardness_mg/l_CaCO3	
Floride_mg/l		Chlorine_mg/l	

LOCATION	**DURANES NW PS AT RIO GRANDE**						
OUTFALL_NO	26	QUAD	NW	GRID	H-12	SAMPLED	☐
DATE_INSP	3/5/2024	TIME	10:30am	Inspected by	NR		
WEATHER	CLOUDY	flow	YES	FLOW_GPM	3		
APPEARANCE		GROSS POLLUTANT					
Source of Flow							
link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening-2023-2024\East\26-						

AIR_TEMP_F		Lab	
WATER_TEMP_F		Lab_Report	
pH		E_coli_Coliform_mpn/100ml	
CONDUCTIVITY_Umos/cm		Ammonia_mg/l	
BOD_mg/l		Nitrite_NO2_mg/l	
COD_mg/l		Nitrate_NO3_mg/l	
TSS_mg/l		TKN_Tot_Kjeld_N_mg/l	
TDS_mg/l		Phosphorus_total_mg/l_P	
N-Hexane Extractabie-(Oil_Grease)_mg/l		Hardness_mg/l_CaCO3	
Floride_mg/l		Chlorine_mg/l	

LOCATION	**CALLE DEL VISTA-ATRISCO NW**						
OUTFALL_NO	27	QUAD	NW	GRID	H-11	SAMPLED	☐
DATE_INSP	3/25/2024	TIME	3:30pm	Inspected by	JA/DL		
WEATHER	CLOUDY	flow	NO	FLOW_GPM	0		
APPEARANCE		GROSS POLLUTANT					
Source of Flow							

link X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening--new-2023-2024\27-

AIR_TEMP_F	44	Lab	
WATER_TEMP_F		Lab_Report	
pH		E_coli_Coliform_mpn/100ml	
CONDUCTIVITY_Umos/cm		Ammonia_mg/l	
BOD_mg/l		Nitrite_NO2_mg/l	
COD_mg/l		Nitrate_NO3_mg/l	
TSS_mg/l		TKN_Tot_Kjeld_N_mg/l	
TDS_mg/l		Phosphorus_total_mg/l_P	
N-Hexane Extractabie-(Oil_Grease)_mg/l		Hardness_mg/l_CaCO3	
Floride_mg/l		Chlorine_mg/l	

LOCATION	**WESTCLIFFE APTS AT 2700 VISTA GRANDE NW**						
OUTFALL_NO	28	QUAD	NW	GRID	H-12	SAMPLED	☐
DATE_INSP	3/21/2024	TIME	10:45	Inspected by	AP*		
WEATHER	SUNNY	flow	NO	FLOW_GPM	0		
APPEARANCE	na	GROSS POLLUTANT	na				
Source of Flow	na						
link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening--new-2023-2024\28-						

AIR_TEMP_F	39	Lab	
WATER_TEMP_F		Lab_Report	
pH		E_coli_Coliform_mpn/100ml	
CONDUCTIVITY_Umos/cm		Ammonia_mg/l	
BOD_mg/l		Nitrite_NO2_mg/l	
COD_mg/l		Nitrate_NO3_mg/l	
TSS_mg/l		TKN_Tot_Kjeld_N_mg/l	
TDS_mg/l		Phosphorus_total_mg/l_P	
N-Hexane Extractabie-(Oil_Grease)_mg/l		Hardness_mg/l_CaCO3	
Floride_mg/l		Chlorine_mg/l	

*AP = Albert Palma, engineering assistant

LOCATION	**SAN JOSE DRAIN AT RIO BRAVO SW**						
OUTFALL_NO	29	QUAD	SW	GRID	P-13	SAMPLED	☐
DATE_INSP	3/4/2024	TIME	10:45	Inspected by	AP		
WEATHER	SUNNY	flow	NO	FLOW_GPM	0		
APPEARANCE	na	GROSS POLLUTANT	na				
Source of Flow	na						
link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening-2023-2024\East\29-						

AIR_TEMP_F	42	Lab	
WATER_TEMP_F		Lab_Report	
pH		E_coli_Coliform_mpn/100ml	
CONDUCTIVITY_Umos/cm		Ammonia_mg/l	
BOD_mg/l		Nitrite_NO2_mg/l	
COD_mg/l		Nitrate_NO3_mg/l	
TSS_mg/l		TKN_Tot_Kjeld_N_mg/l	
TDS_mg/l		Phosphorus_total_mg/l_P	
N-Hexane Extractabie-(Oil_Grease)_mg/l		Hardness_mg/l_CaCO3	
Floride_mg/l		Chlorine_mg/l	

LOCATION	ATRISCO-ATRISCO PL-RIVERVIEW NW						
OUTFALL_NO	30	QUAD	NW	GRID	J-11	SAMPLED	☐
DATE_INSP	3/21/2024	TIME	3:25	Inspected by	JA/DL		
WEATHER	SUNNY	flow	NO	FLOW_GPM	0		
APPEARANCE		GROSS POLLUTANT	na				
Source of Flow							
link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening--new-2023-2024\30-						

AIR_TEMP_F	48	Lab	
WATER_TEMP_F		Lab_Report	
pH		E_coli_Coliform_mpn/100ml	
CONDUCTIVITY_Umos/cm		Ammonia_mg/l	
BOD_mg/l		Nitrite_NO2_mg/l	
COD_mg/l		Nitrate_NO3_mg/l	
TSS_mg/l		TKN_Tot_Kjeld_N_mg/l	
TDS_mg/l		Phosphorus_total_mg/l_P	
N-Hexane Extractabie-(Oil_Grease)_mg/l		Hardness_mg/l_CaCO3	
Floride_mg/l		Chlorine_mg/l	

LOCATION	**LA BAJADA-ATRISCO-NORTH 30 IN PIPE**						
OUTFALL_NO	31	QUAD	NW	GRID	J-11	SAMPLED	☐
DATE_INSP	3/21/2024	TIME	3:20	Inspected by	JA/DL		
WEATHER	SUNNY	flow	NO	FLOW_GPM	0		
APPEARANCE	na	GROSS POLLUTANT	na				
Source of Flow	na						
link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening--new-2023-2024\31-						

AIR_TEMP_F	48	Lab	
WATER_TEMP_F		Lab_Report	
pH		E_coli_Coliform_mpn/100ml	
CONDUCTIVITY_Umos/cm		Ammonia_mg/l	
BOD_mg/l		Nitrite_NO2_mg/l	
COD_mg/l		Nitrate_NO3_mg/l	
TSS_mg/l		TKN_Tot_Kjeld_N_mg/l	
TDS_mg/l		Phosphorus_total_mg/l_P	
N-Hexane Extractabie-(Oil_Grease)_mg/l		Hardness_mg/l_CaCO3	
Floride_mg/l		Chlorine_mg/l	

LOCATION	**LA BAJADA-ATRISCO-SOUTH 36 IN PIPE-WINGWALL**

OUTFALL_NO	32	QUAD	NW	GRID	J-11	SAMPLED	☐
DATE_INSP	3/21/2024	TIME	3:20	Inspected by	JA/DL		
WEATHER	SUNNY	flow	NO	FLOW_GPM	0		
APPEARANCE	na	GROSS POLLUTANT	na				
Source of Flow	na						

link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening--new-2023-2024\32

AIR_TEMP_F	48	Lab	
WATER_TEMP_F		Lab_Report	
pH		E_coli_Coliform_mpn/100ml	
CONDUCTIVITY_Umos/cm		Ammonia_mg/l	
BOD_mg/l		Nitrite_NO2_mg/l	
COD_mg/l		Nitrate_NO3_mg/l	
TSS_mg/l		TKN_Tot_Kjeld_N_mg/l	
TDS_mg/l		Phosphorus_total_mg/l_P	
N-Hexane Extractabie-(Oil_Grease)_mg/l		Hardness_mg/l_CaCO3	
Floride_mg/l		Chlorine_mg/l	

LOCATION	**CENTRAL-SUNSET-OSAGE PS-44 THE 36 AND 42 IN PIPES**						
OUTFALL_NO	**33**	QUAD	NW	GRID	J-12	SAMPLED	☑
DATE_INSP	3/21/2024	TIME	10:30am	Inspected by	JA/DL		
WEATHER	SUNNY	flow	YES	FLOW_GPM	0.5		
APPEARANCE	clear	GROSS POLLUTANT	none				
Source of Flow	groundwater at the Atrisco park						
link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening-2023-2024\West\33-						

AIR_TEMP_F	48	Lab	Eurofins
WATER_TEMP_F		Lab_Report	885-1678-1
pH	7.7	E_coli_Coliform_mpn/100ml	90.1
CONDUCTIVITY_Umos/cm	360	Ammonia_mg/l	0.7
BOD_mg/l	2	Nitrite_NO2_mg/l	ND
COD_mg/l	80	Nitrate_NO3_mg/l	0.66
TSS_mg/l	ND	TKN_Tot_Kjeld_N_mg/l	0.96
TDS_mg/l	210	Phosphorus_total_mg/l_P	0.35
N-Hexane Extractabie-(Oil_Grease)_mg/l	ND	Hardness_mg/l_CaCO3	92
Floride_mg/l	ND	Chlorine_mg/l	ND

LOCATION	**CENTRAL-SUNSET-OSAGE NW PS-44 THE 6 IN PIPE**						
OUTFALL_NO	34	QUAD	NW	GRID	J-12	SAMPLED	☐
DATE_INSP	3/21/2024	TIME	3:05	Inspected by	JA/DL		
WEATHER	SUNNY	flow	NO	FLOW_GPM	0		
APPEARANCE	na	GROSS POLLUTANT	na				
Source of Flow	na						
link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening--new-2023-2024\34-						

AIR_TEMP_F	48	Lab	
WATER_TEMP_F		Lab_Report	
pH		E_coli_Coliform_mpn/100ml	
CONDUCTIVITY_Umos/cm		Ammonia_mg/l	
BOD_mg/l		Nitrite_NO2_mg/l	
COD_mg/l		Nitrate_NO3_mg/l	
TSS_mg/l		TKN_Tot_Kjeld_N_mg/l	
TDS_mg/l		Phosphorus_total_mg/l_P	
N-Hexane Extractabie-(Oil_Grease)_mg/l		Hardness_mg/l_CaCO3	
Floride_mg/l		Chlorine_mg/l	

LOCATION	**ALCALDE SW PS-41 AT RIO GRANDE**						
OUTFALL_NO	35	QUAD	SW	GRID	K-13	SAMPLED	☐
DATE_INSP	3/21/2024	TIME	1:30pm	Inspected by	AP		
WEATHER	SUNNY	flow	NO	FLOW_GPM	0		
APPEARANCE	na	GROSS POLLUTANT	na				
Source of Flow	na						
link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening-2023-2024\East\35-						

AIR_TEMP_F	46	Lab	
WATER_TEMP_F		Lab_Report	
pH		E_coli_Coliform_mpn/100ml	
CONDUCTIVITY_Umos/cm		Ammonia_mg/l	
BOD_mg/l		Nitrite_NO2_mg/l	
COD_mg/l		Nitrate_NO3_mg/l	
TSS_mg/l		TKN_Tot_Kjeld_N_mg/l	
TDS_mg/l		Phosphorus_total_mg/l_P	
N-Hexane Extractabie-(Oil_Grease)_mg/l		Hardness_mg/l_CaCO3	
Floride_mg/l		Chlorine_mg/l	

LOCATION	**NDC AT ALAMEDA NE**						
OUTFALL_NO	36	QUAD	NE	GRID	C-17	SAMPLED	☑
DATE_INSP	3/22/2024	TIME	10:30	Inspected by	JA/DL		
WEATHER	SUNNY	flow	YES	FLOW_GPM	1		
APPEARANCE	clear	GROSS POLLUTANT	leaves, papers, plastics				
Source of Flow	Irrigation water and well wash water						
link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening--new-2023-2024\36-						

AIR_TEMP_F	54	Lab	Eurofins		
WATER_TEMP_F		Lab_Report	885-1678-1		
pH	8.5	E_coli_Coliform_mpn/100ml	ND		
CONDUCTIVITY_Umos/cm	650	Ammonia_mg/l	ND		
BOD_mg/l	5.2	Nitrite_NO2_mg/l	ND		
COD_mg/l	ND	Nitrate_NO3_mg/l	ND		
TSS_mg/l	4	TKN_Tot_Kjeld_N_mg/l	0.75		
TDS_mg/l	440	Phosphorus_total_mg/l_P	0.26		
N-Hexane Extractabie-(Oil_Grease)_mg/l	ND	Hardness_mg/l_CaCO3	190		
Floride_mg/l	0.95	Chlorine_mg/l	ND		

LOCATION	**TIJERAS ARROYO AT 2ND ST SW**						
OUTFALL_NO	**37**	QUAD	SW	GRID	Q-12	SAMPLED	☐
DATE_INSP	3/5/2024	TIME	10:30am	Inspected by	JA/DL		
WEATHER	SUNNY	flow	NO	FLOW_GPM	0		
APPEARANCE	na	GROSS POLLUTANT	na				
Source of Flow	na						
link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening-2023-2024\East\37-						

AIR_TEMP_F	42	Lab	
WATER_TEMP_F		Lab_Report	
pH		E_coli_Coliform_mpn/100ml	
CONDUCTIVITY_Umos/cm		Ammonia_mg/l	
BOD_mg/l		Nitrite_NO2_mg/l	
COD_mg/l		Nitrate_NO3_mg/l	
TSS_mg/l		TKN_Tot_Kjeld_N_mg/l	
TDS_mg/l		Phosphorus_total_mg/l_P	
N-Hexane Extractabie-(Oil_Grease)_mg/l		Hardness_mg/l_CaCO3	
Floride_mg/l		Chlorine_mg/l	

LOCATION	**MIRANDELA BY PUEBLO PARK SE OF COORS AND MONTANO NW**

OUTFALL_NO	38	QUAD	NW	GRID	E-12	SAMPLED	☐
DATE_INSP	3/1/2024	TIME	10:30am	Inspected by	JA/DL		
WEATHER	SUNNY	flow	NO	FLOW_GPM	0		
APPEARANCE	na	GROSS POLLUTANT	na				
Source of Flow	na						

link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening--new-2023-2024\38-

AIR_TEMP_F	36	Lab	
WATER_TEMP_F		Lab_Report	
pH		E_coli_Coliform_mpn/100ml	
CONDUCTIVITY_Umos/cm		Ammonia_mg/l	
BOD_mg/l		Nitrite_NO2_mg/l	
COD_mg/l		Nitrate_NO3_mg/l	
TSS_mg/l		TKN_Tot_Kjeld_N_mg/l	
TDS_mg/l		Phosphorus_total_mg/l_P	
N-Hexane Extractabie-(Oil_Grease)_mg/l		Hardness_mg/l_CaCO3	
Floride_mg/l		Chlorine_mg/l	

LOCATION	**BOSQUE SCHOOL AND MIRANDELA SE OF COORS AND MONTANO NW**

OUTFALL_NO	39	QUAD	NW	GRID	E-12	SAMPLED	☐
DATE_INSP	3/1/2024	TIME	10:00am	Inspected by	JA/DL		
WEATHER	SUNNY	flow	NO	FLOW_GPM	0		
APPEARANCE	na	GROSS POLLUTANT	na				
Source of Flow	na						
link	X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening--new-2023-2024\39-						

AIR_TEMP_F	36	Lab	
WATER_TEMP_F		Lab_Report	
pH		E_coli_Coliform_mpn/100ml	
CONDUCTIVITY_Umos/cm		Ammonia_mg/l	
BOD_mg/l		Nitrite_NO2_mg/l	
COD_mg/l		Nitrate_NO3_mg/l	
TSS_mg/l		TKN_Tot_Kjeld_N_mg/l	
TDS_mg/l		Phosphorus_total_mg/l_P	
N-Hexane Extractabie-(Oil_Grease)_mg/l		Hardness_mg/l_CaCO3	
Floride_mg/l		Chlorine_mg/l	

LOCATION	**1406-1412 RIVERVIEW NW**						
OUTFALL_NO	**40**	QUAD	NW	GRID	J-11	SAMPLED	☐
DATE_INSP	3/1/2024	TIME	1:30pm	Inspected by	KO/ML		
WEATHER	PARTLY SUNNY	flow	NO	FLOW_GPM	0		
APPEARANCE	na	GROSS POLLUTANT	na				
Source of Flow	na						

link X:\MD\SHARE\MD-Storm\7_NPDES\311_SWQ_Complaints\2024\2 - DW Screening-2023-2024\West\40-

AIR_TEMP_F	44	Lab	
WATER_TEMP_F		Lab_Report	
pH		E_coli_Coliform_mpn/100ml	
CONDUCTIVITY_Umos/cm		Ammonia_mg/l	
BOD_mg/l		Nitrite_NO2_mg/l	
COD_mg/l		Nitrate_NO3_mg/l	
TSS_mg/l		TKN_Tot_Kjeld_N_mg/l	
TDS_mg/l		Phosphorus_total_mg/l_P	
N-Hexane Extractabie-(Oil_Grease)_mg/l		Hardness_mg/l_CaCO3	
Floride_mg/l		Chlorine_mg/l