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1. Call to Order and Roll Call

Vice Chairman Hernandez called the Regular Board Meeting to order at 10:03 a.m. Thursday, September 26, 2013. Roll was noted as follows:

Directors present: Vice Chairman Danny Hernandez
Director Ronald D. Brown
Director Daniel F. Lyon
Chairman Tim Eichenberg (arrived at 12:10 p.m.)

Directors excused: Director Bruce M. Thomson

Others present: Jerry M. Lovato, P.E., Executive Engineer
Attorney Marcus Rael, Jr.
Staff
Other attendees on file at AMAFCA

A quorum was present.

Vice Chairman Hernandez noted that former AMAFCA Board member Reginald Garcia had passed away shortly after the August Board meeting. Mr. Garcia was one of the original five Board appointees, and served as Chairman from 1963 through 1964. Vice Chairman Hernandez requested a moment of silence in Mr. Garcia's memory.

Directors Brown and Lyon stated that they had known Mr. Garcia, although not in his capacity of AMAFCA director.

2. Approval of Agenda

The agenda had been revised on the morning of September 24, 2013, prior to the 48 hour deadline. Agenda item 9, Personnel and Salary Committee, had been replaced with a briefing on the Water Fund for Rio Grande and Forested Watersheds. There were no further changes to the agenda.

Director Brown made a motion to approve the agenda as revised on September 24, 2013. Director Lyon seconded the motion, which passed (3-0).

3. Meetings Scheduled

- a. Thursday, October 24, 2013, 10:00 a.m. – Regular Meeting**
- b. Thursday, November 21, 2013, 10:00 a.m. – Regular Meeting**



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c. Thursday, December 19, 2013, 10:00 a.m. – Regular Meeting and Holiday Luncheon

No changes were made to the meeting schedule as presented.

4. Items from the Floor/Public Comments

None.

5. Public Outreach in Advance of Balloon Fiesta

Mr. Lovato stated that AMAFCA will participate in the City of Albuquerque's cleanup of the Balloon Fiesta Park area in advance of the International Balloon Fiesta, by cleaning the AMAFCA facilities at the North Diversion Channel, as the bike trail is a frequently used access point. The AMAFCA crew will clean the channel and remove sediment, trash, and debris.

In response to a question from Vice Chairman Hernandez regarding goat heads on the trails approaching the Balloon Fiesta Park, Director Brown stated he knew of a product that could remove goat heads from the bike trails.

Vice Chairman Hernandez recognized Paul Smith, of the International Balloon Fiesta, who was present.

Mr. Smith thanked AMAFCA and the Board for all they do to help the International Balloon Fiesta, especially for providing their facilities as authorized balloon landing areas, and for participating in the cleanup efforts. He noted that close to 2,000 bicyclists had used the bike valet service last year.

Vice Chairman Hernandez noted that 2,000 participants would make the International Balloon Fiesta the single largest biking event in the state.

Mr. Smith stated that 550 balloons were registered for this year's Balloon Fiesta, including some new special shapes balloons. In 2001, there were over 1,000 balloons registered, but with fewer landing sites available as the city develops, limiting registrations to fewer balloons made more sense. He noted that the Balloon Fiesta is changing how launches are coordinated, which should make mass ascensions faster and more efficient this year.

In response to a question from Director Lyon, Mr. Smith stated that balloonists get a map with the AMAFCA facilities marked, as predetermined sites that chase crews can gain access to.

The Board thanked Mr. Smith and the International Balloon Fiesta.



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6. Approval of Minutes

a. August 22, 2013 Regular Meeting

Director Lyon made a motion to approve the minutes of the August 22, 2013 Regular Board Meeting. Director Brown seconded the motion, which passed (3-0).

7. Financial Matters

a. Approval of August 2013 Expenditures

Ms. Jeffries presented the August 2013 Expenditure Report. There were no questions.

Director Brown made a motion to approve the August 2013 Expenditure Report. Director Lyon seconded the motion, which passed (3-0).

b. Investment Report for August 2013

Ms. Jeffries presented the Investment Report for August 2013.

There were no questions, and no Board action was required.

c. Financial Recap August 16, 2013, through September 15, 2013

Ms. Jeffries presented the Financial Recap for August 16, 2013, through September 15, 2013. Director Brown noted that expenditures had been very close to the forecasted amounts.

There were no questions, and no Board action was required.

d. Financial Forecast September 16, 2013, through October 15, 2013

Ms. Jeffries presented the Financial Forecast for the period September 16, 2013, through October 15, 2013. She noted that the recommended actions for the Capital Projects/Construction Fund include payments on several construction projects, and payments on various engineering invoices.

Director Brown made a motion that the Board approve the Financial Forecast. Director Lyon seconded the motion, which passed (3-0).



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e. New Mexico Department of Finance and Administration

Ms. Jeffries noted that the New Mexico Department of Finance and Administration (DFA) had certified the AMAFCA FY 2014 budget. She stated that no Board action was required, but State Statutes required budgets certified by DFA to be included in the minutes.

In response to questions from Directors Brown and Lyon, Ms. Jeffries confirmed that the budget, which had already been approved by the Board, was not public information until certified by DFA.

8. Legal

a. Status Report

Marcus Rael, Jr. briefed the Board on the status of various legal matters. There were no questions from the Board.

9. Water Fund for Rio Grande and Forested Watersheds – Presentation by Laura McCarthy

Mr. Lovato noted that Laura McCarthy had not arrived yet. Vice Chairman Hernandez stated that agenda item 9 would be deferred until her arrival.

10. Executive Engineer's Report

a. Notification of Past Month's Activities

The Executive Engineer's Report, which had been provided as late mailout, highlighted significant activities of the past month.

Between his memo and further information given in the meeting, Mr. Lovato covered the following:

- **Corps of Engineers (COE) – Rio Grande Basin Meeting.** The Albuquerque District of the COE hosted a meeting September 17 and 18 to introduce projects that affect the Rio Grande Basin, including flood control and habitat restoration projects. Director Lyon attended the meeting on behalf of AMAFCA.

Director Lyon stated that he found the meeting very interesting, and many federal agencies attended the meeting. They talked about forest fires, restoration, and ash and debris washing out of burned areas during rains, polluting the water. He noted that John Stomp, of the Albuquerque



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Bernalillo County Water Utility Authority, stated that the City had to stop drawing water from the Rio Grande for a time due to fire area runoff putting an excess of ash and debris in the river.

Director Lyon stated that the federal agencies talked about doing studies, analyzing the studies, and then re-studying the issues because the studies had grown old. He said that he had suggested they do some projects instead of just doing studies. Then they talked about doing \$5 million pilot programs in each region, mostly forest restoration and the like. He stated that he had mentioned the Montaña Gap Levee, as a shovel-ready project because local engineering studies had already been completed. However, the federal agencies wanted a *federal* study done first.

He also noted that a lot of discussion centered around the Treaty of Guadalupe-Hidalgo of 1848 between the sovereign nations of the United States and Mexico, and international water rights along the border. He asked the moderator about water rights between the sovereign nations of the various Pueblos within the borders of the state, and the United States. They were not concerned about the water rights of these groups.

Director Lyon stated that he had learned a lot, and can see why it takes years to get projects through the federal project approval and funding process. Mostly, however, they were concerned with wildfires and forest restoration, and they were interested in local collaboration on projects.

Mr. Lovato returned to his Executive Engineer's report.

Middle Rio Grande Bosque. The Albuquerque District, in conjunction with the Bosque Ecosystem Monitoring Program, will be hosting a tour of the Rio Grande Bosque. The tour will look at the changes made in the habitat of the Rio Grande Bosque as a part of the created wetlands at Tingley Beach and the bank lowering that was done as a part of the Albuquerque Overbank Project.

Owl Habitat Restoration. The Albuquerque District has highlighted the efforts of AMAFCA in creating burrowing owl habitat. As part of the Ecosystem Preservation and Landscaping contract, AMAFCA has installed burrowing owl homes at the North Diversion Outfall, and will be installing more homes in the Calabacillas Arroyo after the Calabacillas Arroyo 3b/3c Grade Control construction project is completed. He also noted that AMAFCA's Field Engineer, Kurt Wagener, had designed a variation of the standard artificial owl habitat. Examples of each have been installed, and staff will evaluate next year which is most popular with the owls.

- **City of Albuquerque (COA) – Proposed Changes to the City of Albuquerque Drainage Ordinance.** Both COA and AMAFCA staff have discussed proposed changes to the City's Drainage Ordinance. AMAFCA concerns were not addressed with the current draft of the ordinance, but City staff advised that AMAFCA should send its concerns



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directly to the City Council. A copy of that letter was provided to the Board. In addition, Director Brown and he had met with members of the business community to discuss the differences between AMAFCA's and the City's approaches to compliance with the NPDES discharge permit. AMAFCA is taking a regional approach to compliance by building regional facilities and incorporating water quality into past and present drainage management plans. The City's approach is to place compliance on individuals and new development. The changes to the ordinance requested by AMAFCA are in line with the regional approach. He is attempting to set up a meeting with the City's CAO to address AMAFCA's concerns.

Director Brown stated that the business community is also trying to set a follow-up meeting with the City's Public Works staff.

San Pedro Storm Drain and the Louisiana Storm Drain. The request for proposals for a review of the hydrology and hydraulics of the area has not yet been advertised. Staff intends to have this item ready for the next Board meeting.

Our Town NEA Grant. Staff from Story of Place, Littlelobe, the UNM School of Architecture and Planning, the City of Albuquerque, and AMAFCA met to discuss scoping, schedules and preliminary scoping milestones concerning the project. The first public meeting to introduce the project to stakeholders in the International District was held on September 24, 2013.

Web EOC. Mr. Lovato stated that Roger Ebner, Director of the Albuquerque APD/Office of Emergency Management, has contacted AMAFCA concerning participation in Web EOC. This is a web-based, user-friendly, and locally-configurable incident and event management system. AMAFCA and other emergency managers and first responders can enter and view incident information in Web EOC status boards regardless of location. More collaboration between emergency managers and AMAFCA will enable everyone to manage multiple incidents. The resource manager that is part of Web EOC allows for daily reports and assignments to be tracked and resources managed, which helps when reimbursement from FEMA is requested. The City would like AMAFCA to participate in the purchase of the software, which would cost about \$100,000. Mr. Lovato opined that this would be a good idea. In addition to tracking all the documents needed for FEMA reimbursement, AMAFCA would gain access to 168 cameras operated by the Albuquerque Police Department in Albuquerque, which it could use to monitor flooding and runoff. This would free up staff time during storm events and could lead to more efficient dispatching of AMAFCA personnel.

Director Brown noted that he had recently received flood warning text messages on his phone. Kevin Troutman, AMAFCA's GIS Manager, stated that this was a new service that was being



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tested by the National Weather Service. It will push out weather warnings and public safety alerts as text messages to all cell phones connected to a cell tower in the flood warning area.

- **Bernalillo County** – *Southwest Valley Flood Reduction Project Phase I.* Bernalillo County and AMAFCA monitored the Los Padillas Extension over the last few rain events. The project worked as designed. Bernalillo County has done extensive field reconnaissance to evaluate mosquito populations near the project. Spraying for adult mosquitoes is not being considered because no mosquito larvae exist in the water. Gambusia fish (mosquito larvae predators) in the Los Padillas Extension have been eating all mosquito larvae in the Extension. A non-vector mosquito species (does not carry the West Nile virus) is along the south side of the Los Padillas Extension. FourStar Briquets were placed in the canal to release spores which destroy mosquito larvae. Vector control staff will continue to visit and monitor the area. Bernalillo County Public Works has begun mowing down vegetation along the banks of drainage and irrigation canals. A primary mosquito habitat is due to an underground irrigation canal that contains standing water, south of the Isleta Diversion, on private property.

Emergency Action Plan Field Exercise. The field exercise was postponed due to the emergency response to last week's weather events. The exercise will be rescheduled. AMAFCA will be participating in a field exercise to test the AMAFCA EAP for North Domingo Baca Dam.

- **Emergency Response** – *City of Albuquerque.* AMAFCA provided over 1,000 filled sandbags to the Albuquerque Fire Department, and over 2,000 empty sandbags and sand to both the Bernalillo County Fire Department and the City of Albuquerque Fire Department. AMAFCA provided emergency response Friday night and Saturday, September 13-14, 2013.

Pueblo of Sandia. AMAFCA provided 2,000 empty sandbags to the public works department of the Pueblo of Sandia.

To' Hajiilee. AMAFCA provided 2,000 empty sandbags in response to a request for help from the To' Hajiilee Indian Reservation.

Calabacillas Arroyo. The Calabacillas Arroyo sustained storm damage resulting in the loss of large boulders used as slope protection, and the movement of large amounts of sediment. Mr. Lovato stated that he will request, in agenda item 14, that he be allowed to advertise for the purchase and delivery of large boulders to three locations along the Calabacillas Arroyo, so the AMAFCA crew can begin repairs.



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In addition, the movement of large amounts of sediment, approximately 25,000 to 40,000 cubic yards, requires that AMAFCA use front end loaders to remove deposited soil. One AMAFCA loader has mechanical problems that may cost more than \$20,000 to fix. In an effort to minimize down time, he informed the Board that he may enter into a contract that is greater than his independent contracting authority of \$20,000. Three written quotes will be requested to ensure that AMAFCA gets the best price and value. He expected to have the written quotes by Monday, September 30, 2013.

Incident Command System. AMAFCA has initiated training for all employees in the Incident Command System (ICS), in addition to training associated with FEMA's National Incident Management System. The ICS is used by all local, state, and federal emergency managers and ICS training is required by the federal government for reimbursement.

- **Public Outreach** – *New Mexico State Fair Parade.* Once again, and in honor of AMAFCA's 50th Anniversary, AMAFCA provided a float in the Expo New Mexico Parade. In honor of AMAFCA's creation in 1963, Expo gave AMAFCA position number 63 for the parade. The crowd was estimated to be over 50,000 people.

Vice Chairman Hernandez and Director Lyon commented on the number of people who said "thank you" as the float went by. Director Lyon stated that Jeff Willis, AMAFCA Real Estate Manager, and the AMAFCA crew did a fine job on the float this year. He also noted that Brad Bingham, AMAFCA Drainage Engineer, and his family rode on the float. The crowd was appreciative and applauded the float in addition to saying "Thank you" to AMAFCA.

Breaking News. Kurt Wagener, AMAFCA Field Engineer, and Jeff Willis, AMAFCA Real Estate Manager, participated in many on-camera interviews with local news organizations to describe and explain the flood control system in Albuquerque.

Mr. Lovato noted that it had been the wettest September since 1929. He had been gone for four days on a family camping trip during some of the wettest weather. A fiber optic cable was broken and the radar for the central region was offline. As he was driving towards Santa Fe, visibility was around 1,000-1,500 feet, so he knew the rain was bad. He had an opportunity to turn around and come back, but trusted staff to handle things in his absence. Mr. Lovato praised the office staff and field crew for a job well done in his absence.

b. Notification of On-Call Services Task Orders

Mr. Lovato stated that four on-call task orders had been issued since the last Board meeting, as listed in his memo. He gave further details on each. No Board action was required.



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9. Water Fund for Rio Grande and Forested Watersheds – Presentation by Laura McCarthy

Mr. Lovato introduced Laura McCarthy, Director of Conservation Programs with The Nature Conservancy, who briefed the Board on the Water Fund for Rio Grande and Forested Watersheds.

Ms. McCarthy stated that The Nature Conservancy has been working to preserve the land and water in New Mexico for more than thirty years. The Conservancy has been working on wildfire restoration for the last ten to fifteen years, with a focus on the Jemez area. This protects water sources. She gave the example of the Las Conches fire, which was very large, very hot, and had a high impact on the area. Nothing was left afterwards except for ash and rock. She showed a video of the flooding of the Dixon Orchard caused by rain runoff from the burn area, carrying heavy loads of ash and debris. A river of mud traveled through the orchard, even though it was not a particularly large storm.

She noted that post-fire runoff leads to water quality degradation, as well as property destruction.

Her second example was from recent fires in Cochiti Canyon. Post-fire rains led to an estimated seventy feet of sediment being deposited at the canyon's confluence with the Rio Grande. Cochiti Lake captured hundreds of tons of debris, leading to recreation closure and poor water quality. The City of Albuquerque stopped using San Juan-Chama water for forty days as a result, due to the ash and debris in the water. The sediment and debris load took the lake to approximately the "50 year" level of sediment, even though the lake is only forty years old, shortening the lifespan of the dam.

Ms. McCarthy stated that, in other areas such as in Latin America, a successful model has been to have water users pay into a Water Fund that is used to help those upstream (usually farmers) change their land management practices to ones which result in less sediment loss and cleaner water downstream (usually cities). Cities in the United States which have begun similar Water Funds to finance local projects include Santa Fe, which will raise \$8.5 million, and Denver, raising \$16.5 million. In addition, Flagstaff just passed a \$10 million bond to do essentially the same thing.

She noted that a wildfire in the east mountains could easily travel up over the top of the Sandia Mountains onto the west face, and would cause runoff issues for AMAFCA and the City of Albuquerque in the northeast heights and southeast heights.

Ms. McCarthy stated that currently The Nature Conservancy is treating approximately 3,000 – 5,000 acres in the Rio Grande watershed. They plan to scale this up to 30,000 acres per year for



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ten to thirty years. They have a goal of adding 50,000 to 100,000 acres per year statewide. A few studies will be done to determine which forests are at highest risk, from the water protection perspective.

Her proposals included a program of forest thinning of overgrown brush and trees, stream restoration, and flood mitigation. Forest restoration treatments can increase snowpack and reduce sublimation. They also reduce soil moisture depletion during the growing season. She stated that sublimation in burned areas reduces snowpack by 50% due to the lack of shade.

She covered the full cost of a fire such as the Los Conchas fire, and including lost tourism and other expenses, the cost of that fire is estimated at \$138 to \$232 million.

Her figures showed that in Santa Fe, a survey determined that a vast majority of residents were willing to pay a small amount monthly into a Water Fund to use to fund water quality improvements. In Santa Fe, that is 65 cents per household per month. A similar survey is being done in Albuquerque.

She showed an extensive list of private companies, national laboratories, universities, state offices, acequia associations, counties, municipalities, and agencies throughout the state which support the Water Fund concept in New Mexico's watersheds. Responding to questions from Vice Chairman Hernandez and Director Lyon, she stated that there is a range of support commitments from verbal support to various levels of monetary support, up to \$45,000. Some agencies are providing "in kind" services, and all are participating in an advisory capacity. A total of \$500,000 has been pledged for various studies to date.

Vice Chairman Hernandez noted that if the Sandia Mountains burned, sediment flows similar to those through the Dixon Orchard would be coming through AMAFCA facilities. AMAFCA would spend large amounts of money to remove sediment from its facilities. He stated that he would rather spend a smaller amount up front. Director Brown noted that the west facing slope of the Sandias would not even need to burn for AMAFCA to have a problem. A fire in Tijeras Canyon would result in a large amount of sediment flow into the Tijeras Arroyo and the South Diversion Channel.

Ms. McCarthy explained the Water Fund concept to the Board. An Advisory Board is established, and a treatment plan is developed, along with cost estimates. She explained the Water Fund structure, and how important communications is to the entire process. She stated that they hoped to launch in the Rio Grande Watershed in the summer of 2014. Their plan is to accelerate forest treatments in the watershed, with a demonstration project in the Sandia Mountains by July.



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She mentioned the cost to the state of processing wood from the thinned forest. Director Brown commented that there are private companies who would be willing to process that wood into pellets, as it gives them a product that they can turn around and sell. They are looking for a dependable supply of wood. Ms. McCarthy was open to pursuing this idea further, as it would reduce the state investment in the project.

In response to a question from Director Lyon, she stated that approximately 15% of the land area in the Rio Grande Watershed is held by Pueblos. She did not know the percent of the land owned by private landowners, but stated that it could be easily obtained from the GIS data.

Director Brown stated he would be willing to have AMAFCA endorse the Water Fund concept, preparing to be a financial contributor in the future. Vice Chairman Hernandez agreed. Director Lyon stated he would support the Water Fund, but was not sure about providing funding. He stated that AMAFCA could support the Water Fund through advisory expertise.

Ms. McCarthy stated that after the East Mountains Debris Flow study is finished sometime this fall, the Water Fund would appreciate AMAFCA's technical expertise in interpreting the results. They might later have a specific request for funding.

Consent Agenda:

Vice Chairman Hernandez stated that agenda items 11, 12, 13, and 14 were on the consent agenda.

11. On-Call Survey, Oblique Aerial Photography Services – Consideration of Selection Advisory Committee Recommendation

The memo from Jeff Willis, AMAFCA Real Estate Manager, stated that seven firms submitted proposals for the On-Call Surveying Services. Six were responsive. The Selection Advisory Committee met on September 18, and recommended selection of the top four firms: Souder, Miller & Associates, Community Sciences Corporation, Wilson & Company, and High Mesa Consulting Group, for AMAFCA's On-Call Surveying Services.

His memo stated that one firm submitted a proposal for Oblique Aerial Photography Services and it was deemed responsive. The SAC recommended selection of Eagle's Eye Photo. The memo stated that, after the Board's approval of the selections, contracts will be negotiated with each firm and presented at the October meeting for Board approval.



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12. Valle de Oro Wildlife Refuge and Drainage Facility Site Layout – Approval of Engineering Services Agreement with Wilson and Company

The memo from Karen Stearns, AMAFCA's Stormwater Quality Engineer, stated that, pursuant to the Board's acceptance of Wilson & Company for the Valle de Oro Wildlife Refuge and Drainage Facility Site Layout, an agreement had been negotiated with Wilson & Company. The engineering fee for the Site Plan is \$153,193.75. The anticipated total design and construction cost for this project is \$5 million plus NMGRT, with the AMAFCA funding contribution of \$2.1 million spread between FY 14 and FY 17. The memo requested that the Board approve the Agreement for the Valle de Oro Wildlife Refuge and Drainage Facility Site Plan Engineering Services with Wilson & Company and authorize the Chairman to execute the same on behalf of AMAFCA.

13. Ecosystem Preservation and Landscaping – First Extension of Agreement with Mountain West GolfScapes, Inc.

The memo from Kurt Wagener, AMAFCA Field Engineer, stated that the agreement with Mountain West GolfScapes, Inc., was a typical one-year contract with up to three optional one-year extensions. Mountain West GolfScapes, Inc., has agreed to extend the contract for one year with no increase in unit prices in the contract. The memo requested that the Board authorize the Executive Engineer to extend the Ecosystem Preservation and Landscaping Contract with Mountain West GolfScapes, Inc. for a one-year term to November 6, 2014, with no increase in the unit prices in the contract.

14. Calabacillas Arroyo Rock Purchase

The memo from Mr. Lovato stated that numerous rains in the Calabacillas watershed has revealed the need for immediate maintenance and repair of different reaches of the arroyo banks. Some of these locations will require the use of large diameter rock to stabilize the bank. AMAFCA is in short supply of this rock. The memo requested authorization to advertise for three separate locations, to provide easy access to the rock to stabilize the various reaches. Each bid would be for 2500 CY of large diameter basalt rock which is estimated to cost approximately \$75,000 for a total of \$225,000 plus NMGRT. The Contingency Fund has sufficient funds reserved for "Calabacillas Arroyo Caliche Bend Bank Protection" to cover this amount. This will provide enough material to begin repairs. After the purchase, funds will be transferred from the Contingency Fund to the Operating Fund to cover the cost.

There being no further items on the Consent Agenda, Director Lyon made a motion that the Board:



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- Approve the Selection Advisory Committee's recommendation of the top four surveying firms and the one aerial photography firm and authorize the Executive Engineer to negotiate a contract with each firm per the New Mexico State Procurement Code;
- Approve the Agreement for the Valle de Oro Wildlife Refuge and Drainage Facility Site Plan Engineering Services with Wilson & Company and authorize the Chairman to execute the same on behalf of AMAFCA;
- Authorize the Executive Engineer to extend the Ecosystem Preservation and Landscaping Contract with Mountain West GolfScapes, Inc. for a one-year term to November 6, 2014, with no increase in the unit prices in the contract; and
- Authorize the Executive Engineer to advertise for bids for Large Diameter Basalt Rock, and to purchase the same upon bid opening.

Director Brown seconded the motion.

In response to a question from Director Lyon, Mr. Lovato stated that the rocks from the Boca Negra Dam blasting were too small to use in the Calabacillas Arroyo repairs, at 24" and smaller. Boulders three to four feet across will be needed. The previous rocks used for bank protection had washed downstream. Two structures originally built with rock 24" and smaller had been moved. Those structures will be rebuilt with larger rock. AMAFCA wants to get the rock quickly, in less than thirty days. The fastest way to obtain large rocks is to buy the rock from private companies.

The motion passed (3-0).

In response to a comment from Director Brown about Swinburne Dam, Mr. Lovato stated that in 1988, there had been a large storm in the Calabacillas Arroyo watershed which caused a huge sediment plug in the Rio Grande. AMAFCA invested in the Swinburne Dam in order to prevent this from happening again. The dam worked, as the rain events two weeks ago were even larger than the one in 1988, and there was no Rio Grande sediment plug. The dam might need to hold even more, as there is a lot of sediment upstream of the dam due to lack of development. After the storms of 2013, AMAFCA will need to remove five to seven feet of sediment from the Swinburne Dam and from the Calabacillas Arroyo near the Rio Grande.

Director Brown stated that a study might be necessary to determine how much more sediment the Swinburne Dam might be able to hold.

Mr. Lovato also stated that the potential projects included in the draft project list for the FY 2014 Project Schedule is the Swinburne Dam Water Quality Project study. The dam pool may be modified as a part of that project, as the definition of water quality includes the detention of sediment.



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Regular Agenda:

15. AMAFCA Projects

a. Black Mesa Phase 1a Pipe Extension Project Update

Mr. Lovato briefed the Board on the progress in the Black Mesa Phase 1a Pipe Extension Project.

He stated that he had met with the Middle Rio Grande Conservancy District (MRGCD) the day before. Later in the meeting, staff will be asking permission to purchase an easement to "straight-line" the outfall pipe from Raymac Dam to Raymac Road. In the meeting with MRGCD, he stressed that AMAFCA redesigned the project to make the pipeline more hydraulically efficient, and to make the Gun Club Lateral more efficient. He also mentioned the swales AMAFCA will be installing on the west side of the Gun Club Lateral to intercept flows coming from the west mesa and put them into the AMAFCA pipe. The MRGCD is concerned that AMAFCA is using too much of their right of way to build the AMAFCA pipe.

He stated that he had also explained to them that under the constraints the MRGCD was putting on AMAFCA to keep the AMAFCA pipe under the maintenance road, as well as maintain the MRGCD ditch, he felt that it was advantageous to both parties that the pipe and ditch be straight-lined to make both more efficient. Future conversations with the MRGCD Board will follow up on this.

Mr. Lovato reported that he had also had conversations with the Bureau of Reclamation (BOR) and MRGCD regarding properties either owned by them in fee simple, and/or in prescriptive rights. The MRGCD will give AMAFCA a license for construction and maintenance, and the BOR will give AMAFCA a license for the properties they own.

b. Valle de Oro Drainage Outfall/Bosque Restoration Project Update

Lynn Mazur, AMAFCA Development Review Engineer, stated that after the August Board meeting, the U.S. Bureau of Reclamation (BOR) had informed staff that an Environmental Assessment (EA) would be required for the Valle de Oro drainage outfall project in the Bosque. The New Mexico State Land Office (SLO) replied that they had already prepared one for their Phase I Riverine Restoration Project. A meeting with AMAFCA, BOR, SLO, and the U.S. Fish and Wildlife Service (FWS) was held to discuss the issues.

Ms. Mazur stated that at the meeting, the BOR concluded that the current approved SLO EA could be amended to include the additional AMAFCA work, with the ponds referenced as "habitat restoration swales." They will provide approval by mid-November. BOR will also issue



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a separate permit for access and facilities on federal lands for the work outside of SLO property. This permit is expected by mid-October. Construction will begin in early January 2014, and will reach substantial completion by the end of March, 28, 2014, to avoid the willow flycatcher nesting season.

She stated that she anticipated asking the Board for authorization to advertise at the October Board meeting.

Ms. Mazur stated that a draft Memorandum of Understanding between AMAFCA, SLO, and the City of Albuquerque for the project had been received, and had been provided to the Board. The City of Albuquerque is included because they will provide vegetation expertise and maintenance. The SLO will also issue a separate license for the work on the SLO property. Drafts were provided to the Board for their review. Ms. Mazur stated that she would request the Board's authorization for signature on the Memorandum of Understanding, at the October Board meeting.

Vice Chairman Hernandez expressed congratulations to staff for negotiating this resolution of the issues.

In response to a question from Director Lyon, Mr. Rael indicated that he had just begun his review of the documents and will complete that review before the October Board meeting.

**c. Corps of Engineers Project – Southwest Valley Flood Reduction Project
Phase II Update**

Jeff Willis, AMAFCA Real Estate Manager, stated that a public meeting regarding the Southwest Valley Flood Reduction Project Phase II would be held at the Rio Grande High School Auditorium on Wednesday, October 2, 2013. This will cover, in particular, Phases 2a, 2b, and 2c of the project. He had provided a copy of the meeting flyer to the Board in their meeting folders.

16. North Albuquerque Acres Drainage Management Plan Audit – Briefing by Weston Solutions

Ms. Mazur stated that over the past few years, AMAFCA has been updating older Drainage Management Plans (DMP) to verify development in the area, and to verify needed facilities. She stated that the North Albuquerque Acres DMP had been completed in the 1990s and adopted in the late 1990s. Some major drainage infrastructure in the area has not been completed.

She introduced Elvidio Diniz, who was the engineer on the original DMP, and was subcontracted by Weston Solutions to perform the DMP audit.



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Mr. Diniz introduced Robert Ederer and David "Sonny" Cooper of Weston Solutions, then briefed the Board on the North Albuquerque Acres Drainage Management Plan Audit.

Using a series of large map graphics, Mr. Diniz showed the areas which have developed as expected, and those where development has been denser than anticipated in the 1990s. He showed the facilities which have been built, and those which are still needed.

He stated that the results of the audit indicate that some areas within the City corporate limits have developed at a higher density than originally planned in the DMP, however, these areas are associated with planned subdivisions for which the City required the developer to construct adequately-sized drainage infrastructure.

He noted that if AMAFCA is unable to get Avulsion 1 constructed on Sandia Pueblo land, Hamilton Dam will need to be built. AMAFCA already owns the land for the Hamilton Dam. Responding to a question from Vice Chairman Hernandez, Mr. Lovato stated that Hamilton Dam would cost roughly \$6 million to construct.

Mr. Diniz noted that in the Bernalillo County section of North Albuquerque Acres, most of the development has occurred along Paseo del Norte within the South Domingo Baca watershed. There was no increase in runoff in that watershed. Changes to land use in other areas are insufficiently large to affect runoff.

Director Brown suggested exploring the option of diverting Paseo del Norte storm drain flows on the north side of the road to the North Domingo Baca Dam, and those on the south side of the road to the South Domingo Baca Dam. This would solve some of the County's drainage problems downstream, and would allow for some water quality treatment and improve conditions on Paseo del Norte. Ms. Mazur stated that this has been discussed further downstream as a future project that would be development driven.

Mr. Diniz stated that the area further to the west could be diverted to drain to the dams, if it was necessary, and would reduce flows on Paseo del Norte. Mr. Lovato stated that the existing storm drains already outfall to the dams. The inlets could be enlarged to make them more efficient and remove more water from Paseo del Norte.

17. Upper Piedras Marcadas Existing Conditions Study – Briefing by Donnie Duneman, Wilson and Company

Karen Stearns, AMAFCA Stormwater Quality Engineer stated that AMAFCA contracted with Wilson and Company to study the Upper Piedras Marcadas Watershed. She introduced Donnie



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Duneman, P.E., of Wilson and Company, the Project Engineer performing the hydrologic and hydraulic analysis on the project.

Mr. Duneman stated that the Piedras Marcadas Dam and the drainage system downstream of the Volcano Heights area cannot handle the future developed flows. There is a need to develop additional detention capacity and water quality facilities prior to development of this area. It will also be necessary to divert some of the Piedras Marcadas water to the north to the Calabacillas watershed, and to the south to the Boca Negra Dam.

He stated that Wilson and Company is also coming up with funding reimbursement plans so that AMAFCA can build drainage and water quality facilities before development and recoup the costs upon the development of the properties in the area.

Mr. Duneman stated that Wilson and Company is considering the location of the rock outcroppings in the area in their plan, along with existing and planned projects in the area. There will be greater runoff where the rock is at or very near the surface. He reviewed the preliminary results of the study so far, answering several questions from the Board during his presentation.

Chairman Eichenberg arrived at 12:10 p.m. At Chairman Eichenberg's request, Vice Chairman Hernandez continued chairing the remainder of the meeting.

Mr. Duneman stated that staff and Wilson and Company are meeting with property owners now. Wilson and Company will develop several engineering and reimbursement alternatives. A Drainage and Water Quality Plan is due to be completed in January 2014.

Vice Chairman Hernandez called a brief recess at 12:13 p.m. The meeting resumed at 12:28 p.m.

18. Field Highlights

a. Construction Report

The memo from Mr. Wagener contained a summary of current construction projects. There were no questions.

b. Field Report

Mr. Wagener gave a report of various projects and events over the past month, answering a number of questions from the Board during his presentation.



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19. Gibson Boulevard/Kirtland Air Force Base Flood Reduction Program – Update

Mr. Lovato stated that there is a significant issue with water flowing off the federal land at the Kirtland Air Force Base (KAFB) onto lands in the AMAFCA jurisdiction. This causes a floodplain in the Gibson/San Pedro area. In 1984, the "Kirtland AFB Detention Design Analysis Report" looked for ways to throttle the flows and recommended constructing two ponds near the corner of Gibson and Louisiana to manage the runoff. The north pond was built but the south pond was deferred.

Mr. Lovato showed a short video, taken by local residents, of water streaming off the KAFB property into nearby streets and onto private property. The video demonstrated there is still a drainage issue in this area.

He stated that a feasibility study white paper was done which determined that the south pond was still needed. On August 29, 2013, he and Director Thomson met with Brent Wilson, the Base Civil Engineer, to present the findings and begin discussions on the possibility of constructing a 20 to 30 acre-foot pond that would allow for detention of flows leaving KAFB. The white paper mentioned that the pond could be designed to also provide mitigation for their MS4 permit and as a recreation field. Mr. Wilson had discussed these ideas internally with KAFB personnel and they were positively supported. A follow-up meeting will be scheduled in the near future.

20. AMAFCA Real Estate

a. Notice of Issuance of Short Term Recreational Licenses

Jeff Willis, AMAFCA Real Estate Manager, stated that the Executive Engineer had issued five short term recreational licenses in the past month, for cross country races. For each event, AMAFCA had received the APS Certificate of Liability Insurance which named AMAFCA as the certificate holder.

In response to a question from Director Lyon, Mr. Willis stated that some of the races were on facilities where the asphalt millings had been used.

b. Consideration of Approval of Private Storm Drain License for Las Estancias

Ms. Mazur stated that Las Estancias is a 77-acre development south of the Walmart at Rio Bravo Boulevard and Coors Boulevard. The natural grade of the site is to the southeast corner. The stormwater discharge to the Isleta Drain is limited to 1 cfs, therefore, numerous interconnecting detention ponds will meter the outflow from the site.



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She noted that the 18-inch discharge pipe from the downstream detention pond will discharge to the Isleta Drain Spillway to the Los Padillas Extension. AMAFCA maintains the concrete spillway diversion but does not own the fee right-of-way, nor do we have an easement. AMAFCA proposes to obtain a private storm drain license to ensure that the facility and AMAFCA's maintenance responsibilities are protected. The owner has obtained a permit for construction and stormwater discharge from the Middle Rio Grande Conservancy District.

Ms. Mazur noted that the first development in Las Estancias would be an assisted living facility on a six acre parcel in the southeast corner of the site. The primary detention pond and storm drain outfall for the site will be constructed with this facility. The outfall will pass through a water quality manhole. Staff has reviewed and approved the plan and the connection to the Isleta Drain spillway diversion. She requested Board approval of the draft license.

Director Lyon made a motion that the Board authorize the Executive Engineer to issue the *Private License Agreement for Storm Drain Connection to the Isleta Drain Spillway as Related to Las Estancias*. Director Brown seconded the motion, which passed (4-0).

c. Purchase of Easement for Black Mesa Phase 1a Outfall (closed session)

Vice Chairman Hernandez stated that discussion of the purchase of an easement for the Black Mesa Phase 1a Outfall would be in closed session.

Chairman Eichenberg made a motion that the meeting be closed, pursuant to the Open Meetings Act, §10-15-1 NMSA 1978, Subsection H, to preserve the confidentiality of the information to be discussed, and as further described in *"The Open Meeting Act, A Compliance Guide for New Mexico Public Officials and Citizens,"* seventh edition, 2010, to discuss the purchase of a real estate easement. Director Brown seconded the motion.

Vice Chairman Hernandez stated that the closed session would be for purposes of discussion only, regarding the purchase of a real estate easement. The motion passed (4-0), on a roll call vote.

Vice Chairman Hernandez closed the meeting at 12:46 p.m.

Director Brown made a motion that the meeting be re-opened. Chairman Eichenberg seconded the motion, which passed (4-0), on a roll call vote.

Vice Chairman Hernandez reopened the meeting at 12:58 p.m. He stated that the Board had taken no action during the closed meeting, but had discussed the purchase of a real estate easement.



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d. Resolution 2013-9, *Authorization to Proceed with Acquisition of Right of Way*

Director Brown made a motion that the Board adopt Resolution 2013-9, *Authorization to Proceed with Acquisition of Right of Way*, substantially as attached to the memo, subject to final legal review. Director Lyon seconded the motion, which passed (4-0) on a roll call vote.

21. Update on the Extreme Precipitation Evaluation Tool (EPAT)

Mr. Lovato gave the Board an update on the Extreme Precipitation Evaluation Tool (EPAT). He stated that at the last Board meeting there was a draft agreement with the Natural Resources Conservancy Service. Since then, the New Mexico Office of the State Engineer has been in contact with the corresponding office in Colorado, which is undergoing a similar software revision. There is a possibility of joining with Colorado, sharing the storm library and some of the software update tasks. If this is done, then the State Engineer Office would manage the update rather than AMAFCA.

He stated that the update to EPAT is proceeding, and that the State Engineer Office will manage the update. He will have draft agreements for the Board's review at the October Board meeting.

In response to a question from Director Brown about the City's Embudo Dam's Emergency Action Plan, Mr. Lovato stated that he had heard that the State Engineer Office had not come to an agreement on the hydrology for the dam. An inundation map still needed to be modeled. Director Brown stated that his concern was that if that dam failed, it was likely that citizens would think it was AMAFCA's dam.

Mr. Lovato stated that AMAFCA is becoming known as the experts in flood control in the Albuquerque area, and he agreed that this could be the misperception. Brad Bingham, AMAFCA Drainage Engineer, stated that the watershed is approximately 7 to 12 square miles flowing into the dam. Director Brown noted that the water would be high velocity, due to the steepness of the slopes.

22. AMAFCA FY 2014 Project Schedule – Review of All Projects

Mr. Bingham briefed the Board on all the proposed projects which staff and the Technical Team would like to see listed on the FY 2014 Project Schedule. Mr. Bingham had provided the information a week before the normal mailout date, and had also offered to brief the Board on any other projects in those areas that they would like to learn more about.

The memo explained the rating schedule, which takes into consideration the urgency and importance of each of the proposed projects, showed the location of each project, and explained



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the need for each of the projects. His memo stated that the FY 2014 Project Schedule will describe the projects in detail, in a format that can easily be used by Directors and others as project flyers, similar to that used for the FY 2012 Project Schedule.

Mr. Lovato stated that there were 330 projects, totaling \$740 million in estimated cost, on the list. This list will be pared down to the final project list for the Board's review at the October Board meeting.

Responding to a question from Director Brown about modifying Swinburne Dam's capacity, Mr. Bingham noted that both AMAFCA and SSCAFCA were doing studies of the area, and an analysis of the dam could be included. Director Brown stated that a couple of smaller dams upstream might be able to catch some of the sediment before it got to the Swinburne Dam.

Mr. Diniz stated that the dam throttles the peak flow of the 100 year storm. The intent was to pass the flow of lower volume storms because the sediment input was needed further downstream to maintain the prudent line.

Mr. Wagener stated that most of the sediment load stays in the dam, and the spillway is clear of sediment after storms pass.

No Board action was required. There were no objections to the projects listed. Mr. Bingham stated that the draft Project Schedule would be brought to the Board in October.

23. Unfinished Business

None.

24. New Business

None.

25. Adjourn

There being no further business to come before the Board, Vice Chairman Hernandez adjourned the meeting at 1:11 p.m.

Bruce M. Thomson, Secretary-Treasurer, 10/24/2013

Recorded by Pamela Woodruff, Executive Administrative Assistant