



**Albuquerque Metropolitan  
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**1. Call to Order and Roll Call**

Chair Thomson called the Regular Board Meeting to order at 10:00 a.m. Thursday, September 22, 2016. Roll was noted as follows:

Directors present:	Chair Bruce M. Thomson Director Cynthia D. Borrego Director Deborah L. Stover Director Tim Eichenberg
Directors excused:	Director Ronald D. Brown
Attorney present:	Attorney Randy Autio, Robles, Rael & Anaya
Others present:	Jerry M. Lovato, P.E., Executive Engineer Staff Other attendees on file at AMAFCA

A quorum was present.

**2. Approval of Agenda**

Director Eichenberg asked that Item 10. Stormwater Quality Education and Outreach Coordinator – Authorization to Advertise Request for Proposals be removed from the Consent Agenda and Item 21. Calabacillas West Branch Arroyo Drainage and Water Quality Management Plan – Alternatives Decision Point be moved to behind Item 18 Calabacillas Arroyo Facility Plan – Project Update – Briefing by Tetra. The Board agreed to move Item 19. South I-25 Corridor Study – Project Briefing by Mark Fahey, New Mexico Department of Transportation (NMDOT) to the arrival of NMDOT since they had requested to make their presentation prior to the Board recess. Chair Thomson stated that Item 24b. Executive Engineer’s Evaluation should be removed due to the fact that he had been absent for a week and a half and did not have a chance to meet and discuss.

Director Eichenberg made a motion to approve the agenda, as amended. Director Stover seconded the motion, which passed unanimously (4-0).



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**3. Meetings Scheduled**

- a. October 27, 2016, 10:00 a.m. – Regular Meeting**
- b. November 17, 2016, 10:00 a.m. – Regular Meeting**
- c. December 15, 2016, 10:00 a.m. – Regular Meeting and Holiday Luncheon**

There were no changes to the meeting dates listed.

**4. Items from the Floor/Public Comments**

No one signed up for Public Comment. Mr. Lovato introduced Mr. Paul Smith, Executive Director of the Albuquerque International Balloon Fiesta (AIBF). Mr. Smith thanked the Board and AMAFCA for all the help with the Balloon Fiesta grounds area over the years. He stated there are over 550 hot air balloons registered for this year's event. Many hot air balloons may land on AMAFCA properties and the Balloon Fiesta Park is located on a portion of an AMAFCA facility. Director Eichenberg thanked Mr. Smith. Responding to a statement from Director Eichenberg on needed enhancements at the Park and how AMAFCA would be willing to help out, Mr. Smith stated that there are many little things that had been done on the park grounds that might not be recognizable to the public. He further stated that money is always an issue with the New Mexico State Legislature and City of Albuquerque (CoA) and help from AMAFCA would be appreciated. Director Borrego thanked Mr. Smith for working with the Pueblo of Sandia and stated that there were a number of friends who had asked about signing petitions against the Pueblo. Mr. Smith stressed that the relationship with AIBF and the Pueblo of Sandia is not bad. There are issues with balloonists cutting fences or wasted resources when the Pueblo tries to help a balloonist who has come in low, but managed to get back in flight without Pueblo police staff assistance. He stressed that the Pueblo of Sandia has been supportive of the Balloon Fiesta as long as he had been involved with flying; going back 35 years. There was a discussion regarding Mr. Ron Curry, EPA Region 6 Administrator, being a hot air balloon pilot. Mr. Smith and Mr. Curry are very well acquainted.

**5. Approval of Minutes**

- a. August 25, 2016**

Director Borrego made a motion to approve the minutes of August 25, 2016. Director Stover seconded the motion, which passed (3-0). Director Eichenberg abstained, as he was not present at the meeting. Responding to a comment from Director Borrego regarding Storm Water education being a big part of the education process, Mr. Lovato stated that the AMAFCA will be requesting a Request for Proposals for the new contract and the Stormwater Quality Education and Outreach



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Coordinator would be making a presentation to the Board at a future meeting regarding their education efforts.

**6. Financial Matters**

**a. FY 17 Budget to Actual**

Mr. Herman Chavez, AMAFCA Finance and Administration Manager, presented the FY 17 Budget to Actual. Mr. Chavez referred the Board to the analysis and graphs submitted with the Board mailout. He stated that AMAFCA is trending to both the 5-year average and projected budget. This is the time of year that AMAFCA will not see too many collections, only delinquent property taxes. The December timeframe should show significant property tax payments. Expenditure budget to actual was covered showing a trend below budget. Administrative Expenditures generally starts above budget due to insurance payments and association fees. Capital Outlay does not annualize. Responding to a question from Chair Thomson, Mr. Chavez stated that it is too early in the year to predict savings to the Storm Water Quality expenditures. Last year, at this time, dual monitoring was taking place: MS4 monitoring and old permit. There is more monitoring happening at numerous sites along the Rio Grande River. Mr. Lovato stated that compliance costs would be lower than last year for expenditures associated with the MS4 permit. There are required tests that are needed. Monitoring of the watershed is required to note the types of pollutants that are found and the amount of rainfall / precipitation that is received. Lower costs are anticipated; however, those two items would have an impact on the cost(s). Responding to questions from Director Borrego, Mr. Chavez explained that salaries are trending lower than projected because the project manager position had not been filled. He further stated that the CoA has gotten better on their billings. On average, there are two invoices received every three weeks.

**b. AMAFCA Cash & Investments**

Mr. Herman Chavez, AMAFCA Finance and Administration Manager, referred the Board to the graph from the mailout. He pointed out that the gray color indicated restricted funds and green area shows funding which is not restricted. There were no questions.

**c. Approval of August 2016 Expenditures**

Mr. Herman Chavez, AMAFCA Finance and Administration Manager, presented the August 2016 Expenditure report. He noted that the Bond payment was due August 1, 2016 and there is an AMAFCA Bond on the ballot for the upcoming General Election. Responding to a question from Chair Thomson on the General Fund in the amount of \$42K for yard maintenance, Mr. Lovato stated the project with Star Paving is complete and punch list items are being taken care



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of. Phase II will start once the punch list items are complete. Responding to a question from Chair Thomson, Mr. Lovato stated that the Optical Reader line item is for 12 level loggers and 2 optical readers. Responding to a question from Director Borrego, Mr. Lovato stated that the Children's Cancer line item was charged by mistake and AMAFCA had been reimbursed immediately.

Director Borrego made a motion to approve the August 2016 Expenditure Report. Director Eichenberg seconded the motion, which passed (4-0).

**d. Financial Position Recap August 16, 2016 through September 15, 2016 &  
Forecast September 16, 2016 through October 15, 2016**

Mr. Herman Chavez, AMAFCA Finance and Administration Manager, presented the Financial Position Recap and Forecast. There were no questions.

Director Borrego made a motion that the Board approve the Financial Forecast. Director Stover seconded the motion, which passed (4-0).

**e. Fiscal Agent Funds – Proof of Cash and Savings**

Mr. Herman Chavez, AMAFCA Finance and Administration Manager, presented the Fiscal Agent Funds. There were no questions.

**7. Legal**

**a. Status Report**

Attorney Randy Autio stated that the primary issue for the past month was preparing for mediation on the Tract B2 phase, obtaining additional information from the claimants, and additional moneys owed. This item is a subject of a closed session near the end of the meeting.

**8. Executive Engineer's Report**

Mr. Jerry Lovato, AMAFCA Executive Engineer, highlighted significant activities of the past month:

- **City of Albuquerque (CoA) - Bear Arroyo:** Staff and CoA staff worked to identify the best location for a pilot project to address a regional flood control water quality project on the Bear Arroyo. AMAFCA will meet with CoA staff to discuss in detail a condition survey of the facility. The Board will be briefed at a later date.



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- **Easements** - *Ventana Dam, Mariposa Diversion, Bear Arroyo, and Ventana Ranch:* AMAFCA staff has been putting out carsonite markers that identify AMAFCA maintenance responsibilities. In doing so, landowners and neighborhood associations have found out that AMAFCA is not responsible for trash and debris on their property. As a result, neighborhood associations are re-evaluating their maintenance contracts. In the future, there is a possibility that there might be more land donated to AMAFCA from entities who cannot keep up with the required maintenance.
- **AMAFCA - Vegetation Control:** Due to the rain received the crew has been very busy and doing a great job of making sure to get weeds that are more than 4 inches in height or more than 4 inches wide to stay in compliance with CoA's weed ordinance.

**Public Outreach**

*EXPO New Mexico Parade:* AMAFCA participated in the 2016 EXPO New Mexico Parade. Director Stover joined AMAFCA staff. There were many cheers and smiles from the crowd. AMAFCA crew created a partial tumbleweed snowman display.

- *Middle Rio Grande Council of Governments (MRCOG):* The MRCOG honored AMAFCA with two awards: Southwest Valley Flood Damage Reduction Project Phase II and a partnership project for the Watershed Permit. Directors Eichenberg, Borrego, and Stover attended the event. Mr. Bradley Bingham and Mr. Patrick Chavez accepted the awards on behalf of AMAFCA, as they were the staff members that managed the successful projects.
- *Southwest Valley Flood Damage Reduction Project Phase II:* A ribbon cutting took place on September 20, 2016 at Pond 187. The ribbon cutting was well attended. There were very kind words from Bernalillo County (BernCo), the US Army Corps of Engineers (USACE), Albuquerque Public Schools (APS), and the Middle Rio Grande Conservancy District. During the ribbon cutting, it was suggested that the name of Pond 187 be changed to Raven Pond to honor Rio Grande High School. Chair Thomson extended an invite to the new USACE Colonel to come to an upcoming Board meeting, especially the December Board meeting.

**b. Notification of On-Call Services Task Orders**

Mr. Lovato referred to his memo for task orders that had been issued the prior month. The majority of the work dealt with the Constructability Reviews on the West I-40 Phase IV Channel Project. It is anticipated that On-Calls for this project will be awarded in the next few months. Responding to a question from Director Eichenberg, Mr. Lovato stated that the Constructability Review sums were based on a lump sum rate negotiated by Mr. Nolan Bennett, AMAFCA Field



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Engineer, for approximately 15-20 hours' worth of work. Responding to questions from Chair Thomson, Mr. Lovato stated that a feasibility study would need to be done that will have different options for the KAFB Drainage. This is necessary as part of the public requirements for the National Environmental Policy Act (NEPA) process. Once the feasibility study has been completed, which identifies the options, an on-call with Tetra Tech will be negotiated for the KAFB NEPA. The schedule is anticipated to be six weeks after the feasibility study has been done. This will be separate from the on-call that will be done for the other biological assessments within the District.

***Consent Agenda:***

Chair Thomson stated that agenda Items 9, 11, and 12 were on the Consent Agenda. Item 10 had been moved to the Regular Agenda. Director Eichenberg made a motion that the Board:

- Authorize the Executive Engineer to advertise for Construction Bids for the Tijeras Arroyo Sediment Retention Structure Phase I;
- Authorize out of state travel and expenses for up to staff members to attend the Extreme Precipitation Tool Workshop #2 in Denver, Colorado, not to exceed \$2,000.00; and
- Accept the recommendation of the Selection Advisory Committee and authorize the Executive Engineer to commence negotiations with Larkin Group NM for design and construction management services for the Agency and Area-Wide Flood Control Maintenance Contract 2016-2017.

Director Borrego seconded the motion, which passed (4-0).

On Item 02, Approval of the Agenda, Item 10 on the Consent Agenda was moved to the Regular Agenda.

**10. Stormwater Quality Education and Outreach Coordinator – Authorization to Advertise Request for Proposals**

Mr. Patrick Chavez, Storm Water Quality Engineer, stated the current AMAFCA contract with CWA (formerly Cooney Watson) dated December 14, 2012, expires December 14, 2016. AMAFCA needs to go to RFP for a new contract. It is anticipated that the recommendation by the Selection Advisory Committee will be at the November Board Meeting and the contract will be signed in December. Responding to questions from Director Eichenberg, Mr. Chavez stated that the contract rate is based upon the contributions of the 12 entities. The 2012 contribution was approximately \$50K from all the entities that were on the Storm Team; \$30K to \$35K was for the Storm Water Quality Coordinator. Some of the amount is passed through for the Bosque Ecosystem Monitoring Program (BEMP) work that is done in the watershed and the River



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Exchange. CoA had increased their contribution 50% to \$100K and more agencies have signed up. He further stated some entities pay more some pay less, based on their size. AMAFCA's contribution to the Storm Water Quality Team is \$10K. Responding to a question from Director Eichenberg, Mr. Lovato stated that the award would be based on quality. Responding to a question from Chair Thomson, Mr. Chavez stated that the BEMP is part of the \$50K. Mr. Lovato stated that the Storm Water Quality Education Outreach Coordinator is trying to fulfill the requirements of all the entities. The BEMP costs are used for monitoring and the outreach that is done to schoolchildren. AMAFCA is the fiscal agent for the Storm Team. The Storm Team approves the invoices that are submitted for payment. Mr. Chavez stated the contract is with the Storm Water Quality Team and the BEMP is a small portion of the funding. Mr. Lovato stated that reason the PR agency is doing water monitoring is that the Storm Water Quality Team had updated the scope of work to be more in line with the MS4 Permit. The Scope of Work from six years ago was outdated. Mr. Chavez stated that the Outreach and Education component is still there, but the public participation has been expanded in the scope. Responding to a question from Director Stover, Mr. Chavez explained what the BEMP is and does. Chair Thomson stated that he has been encouraging BEMP to submit a proposal to continue E. coli monitoring. Mr. Lovato stated that if a contract were done, it would be appropriate to have it go through the Storm Water Quality Team because the information would be used for the entire region and AMAFCA should not be taking on the entire cost(s). Mr. Lovato stated that originally AMAFCA requested the BEMP work. A two-year program was done; then the Storm Team elected on the third year not to do the monitoring. Mr. Chavez stated that some storm team members fund the River Exchange as well, so there may be a way to get funding for E. coli monitoring.

Director Eichenberg made a motion that the Board authorize advertisement of the Request for Proposals for the Stormwater Quality Education and Outreach Coordinator. Director Borrego seconded the motion, which passed (4-0).

**13. Not used**

This agenda item was not used or discussed.

**14. AMAFCA Telemetry Phase I – Consideration for Award of Construction Contract to Qualified Low Bidder**

Mr. Kevin Troutman, AMAFCA GIS Manager, stated the Telemetry Phase I Project includes construction of depth monitoring and rainfall measuring equipment at all five gated AMAFCA dams and the construction of depth monitoring, rainfall measuring, and picture / video equipment at the Hahn Arroyo and the North Diversion Channel near the AMAFCA office. Good equipment and accurate data is important. In July 2016, there was a large storm event with an estimated 5,000 cubic feet per second (cfs). The USGS gauge did not capture this event so data



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is not available. This same gauge (near Alameda), which had data going back to 1968, had not been reliable, and missed a number of flow events. There was a failure in the level loggers as well. The level loggers are not real time and the data is not available for approximately a month after the event. The project also includes an additive alternate to install depth monitoring and rainfall measuring equipment adjacent to the USGS gauge on the North Diversion Channel near Balloon Fiesta Park so that there will not be another loss in data. Two bids were submitted for the AMAFCA Telemetry Project Phase I. AECOM recommends, and staff concurs, to award the construction contract to Vital Consulting Group, LLC, in the amount of \$354,200.00, plus New Mexico Gross Receipts Tax. Staff also recommends the acceptance of the additive alternate for \$40,950.00 so that there is not a loss in data. Responding to a question from Director Borrego, Mr. Troutman stated the Telemetry dam locations are McCoy, Don Felipe, and Raymac (in the South Valley near the slope of the mesa), Amole (closer to Dennis Chavez), and the Piedras Marcadas (near Coors and Eagle Ranch). Responding to a question from Director Eichenberg, Mr. Troutman stated that Vital (Vital) Consulting has a number of seasoned construction veterans who came together from various companies to build a company that would do a better job. Mr. Troutman introduced Mr. Carl Martinez with Vital. Mr. Martinez concurred with Mr. Troutman's statement and recapped the many years of cumulative experience of the core staff at Vital. Mr. Martinez stated that he has always loved to work with AMAFCA and it is one of the good government agencies. He stressed that Vital has always completed contracts ahead of schedule. Mr. Troutman mentioned that Vital did the concrete work on the Outfall. Director Eichenberg's concern was that two contracts were being recommended for award to Vital, for two different projects. Although he was voting no on the project itself, he has confidence the money will be well spent. Responding to a question from Chair Thomson, Mr. Troutman stated the core project was originally for seven sites. The numbers were reworked and the bid was awarded based on the core project. The added alternate is an option that AMAFCA may at the time of award, accept or reject. Mr. Troutman reminded the Board the additional site is adjacent to the balloon fiesta. Mr. Lovato stated that if USGS could not continue monitoring at that location it would be a shame to lose all the historic data. Chair Thomson stated that he saw the two storms in July listed on the USGS site. Mr. Troutman pointed out the USGS site shows the information listed as estimated. AMAFCA's concern is that without the constant funding stream, should the site be vandalized, that station would not be brought back into service. Responding to a question from Chair Thomson, Mr. Troutman stated that any data collected from the seven / eight sites would be on the AMAFCA website. It will complement the USGS data. Chair Thomson stated that the years of 1988 to 1998 are missing from the USGS site. Responding to a question from Director Borrego, Mr. Troutman stated that when the data is displayed it would be very easy to bring the information (AMAFCA and USGS) together. Ownership of the USGS data is theirs and AMAFCA should not be taking on the responsibility for their data. A link to the USGS data can be added to the AMAFCA website. Responding to a question from Chair Thomson, Mr. Troutman stated that the design would enable AMAFCA to flush the pipes and do other maintenance for the seven / eight sites. This was taken into consideration when AECOM





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did their design. There will be a learning curve as AMAFCA moves into the technological realm of flood control, but he stressed he has confidence in the AMAFCA staff and crew to get this project done.

Director Borrego made a motion that the Board accept Vital Consulting Group as the lowest responsible bidder and authorize the Chair to execute the contract for the construction of the AMAFCA Telemetry Phase I Project, with the acceptance of the additive alternate, in the amount of \$395,150.00, plus New Mexico Gross Receipts Tax. Director Stover seconded the motion, which passed (3-1). Director Eichenberg voted no.

**15. Southwest Valley Flood Reduction Project Phase IIa – Isleta Drain Diversion Structure – Consideration of Award of Construction Contract to Qualified Low Bidder**

Mr. Bradley Bingham, AMAFCA Drainage Engineer, apologized for the late mailout memo. He stated that the project is the fourth and final piece of the Southwest Valley Flood Reduction Project Phase IIa. There were five bids submitted. The Engineers estimate had a typo and should read \$1,249,000.00 versus \$1,519,821.00. Chair Thomson acknowledged that Mr. John Andrews with Larkin Group was present at the meeting. He stated Mr. Andrews helped design Pond 187 and that he appreciated the quality of work that went into making the project a success.

Director Eichenberg made a motion that the Board accept Vital Consulting Group, LLC, as the lowest responsible bidder and authorize the Chair to execute the contract for the construction of the Isleta Drain Diversion Structure in the amount of \$849,412.00, plus New Mexico Gross Receipts Tax. Director Stover seconded the motion, which passed (4-0).

**16. Approval of Resolution 2016-13, Grant of Funds to Support the CO-NM Regional Extreme Precipitation Study**

Mr. Jerry Lovato, AMAFCA Executive Engineer, stated the grant in the amount of \$50K to support the Colorado-New Mexico Regional Extreme Precipitation Study (CO-NM REPS) was discussed at the August Board Meeting. Mr. Brad Bingham and Mr. Kevin Troutman attended the Extreme Precipitation Study in Denver, Colorado. The workshop was found to be valuable and there was positive feedback. It was noted that AMAFCA should be involved with the study, which could help to reduce cost(s) in the future for dam construction and re-construction. As one of the largest owners of jurisdictional dams in the State of New Mexico, AMAFCA has a significant interest in the outcome of this study. Mr. Lovato referred to parts of the Resolution which included: AMAFCA funds will be applied to the update of PMP estimation methods for Bernalillo County in New Mexico; A project goal will be to develop a tool that can be used for spillway design; A copy of invoices paid under the memorandum of agreement with the



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Colorado Dam Safety Branch would need to be submitted for which reimbursement is requested. Responding to questions from Director Eichenberg, Mr. Lovato stated that the Office of the State Engineer's (OSE) requested a grant and not a funding agreement. Mr. Lovato stated the Resolution would be reworded to not pay OSE expenses; to limit invoices to the reimbursables supporting the development of an updated Probable Maximum Precipitation Tool. Attorney Autio stated that the modification suggested will clarify what will be reimbursed. Responding to a question from Director Eichenberg, Mr. Lovato stated that the Dam Coalition was aware of the grant and supported AMAFCA's grant. Responding to a comment from Director Borrego, Mr. Lovato stated that those small communities that she is concerned with, which have dams are represented within the Dam Coalition. Director Borrego stated she had spoken with some individuals in Northern New Mexico and they have voiced concern and were under the assumption they are not represented.

Director Borrego made a motion that the Board approve and adopt Resolution 2016-13, Grant of Funds to Support the CO-NM Regional Extreme Precipitation Study, as amended. Director Stover seconded the motion. The motion passed (4-0), on a roll-call vote.

**17. City of Albuquerque Projects**

**a. San Mateo to Moon Mini DMP – Enhanced Inundation Mapping –  
Consideration of Joint Funding Agreement with the City of Albuquerque**

Mr. Patrick Chavez, Storm Water Quality Engineer, stated that during the August 2016 Board meeting staff was given guidance to draft a cost share agreement with CoA for Enhanced Inundation Mapping for the San Mateo to Moon Mini DMP study area. Mr. Chavez stated that the Inundation Mapping is the second add-on to the funding agreement. Responding to a question from Director Eichenberg, Mr. Chavez stated that the project is not for construction it is a tool to prioritize and finalize the Drainage Management Plan. Mr. Lovato stated that Section 3.2 of the Funding Agreement was done to cover all the bases. Mr. Lovato further stated that the word "project" would be struck from the Joint Funding Agreement. Responding to a question from Chair Thomson, Mr. Lovato stated that CoA and AMAFCA are not intending to do a Letter of Map Revision (LOMR). Responding to a question from Director Eichenberg, Attorney Autio stated that the Funding Agreement is boilerplate and after discussions with Mr. Lovato, AMAFCA and Legal Counsel attempted to do a standardized contract. Mr. Lovato stated that due to the recent Marble Arno Pond agreement and trying to get it through CoA Legal, AMAFCA is trying to come up with a standard agreement that will make CoA more willing to approve.



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Director Stover made a motion that the Board approve the Joint Funding Agreement with the City of Albuquerque for the San Mateo to Moon Mini DMP – Enhanced Inundation Mapping, as amended. Director Eichenberg seconded the motion, which passed (4-0).

**b. Alcalde / Barelás Pump Station and Riverside Drain Stormwater Quality Enhancement Project - Consideration for Approval of Funding Agreement with the City of Albuquerque**

Mr. Patrick Chavez, Storm Water Quality Engineer, stated the Alcalde / Barelás Pump station is located downtown. The draft funding agreement was reviewed by the Board at the August 2016 Meeting. Along with flood protection, there is a water quality enhancement for the pump stations to the river. Responding to a question from Chair Thomson, Mr. Chavez stated the agreement is for \$300K. Responding to questions from Director Eichenberg, Mr. Lovato stated this was a perfect opportunity to combine two projects. CoA has both pump stations, which are within a quarter of a mile of each other. The reason a hard number was put in was so that staff would need to come back to the Board if there were any budget issues.

Director Eichenberg made a motion that the Board approve the Funding Agreement with the City of Albuquerque to fund the design and construction of the regional flood control and water quality improvements at the Alcalde / Barelás pump stations and Riverside Drain Stormwater Quality Enhancement Project, substantially as attached. Director Borrego seconded the motion, which passed (4-0).

**18. Calabacillas Arroyo Facility Plan – Project Update – Briefing by Tetra Tech**

Mr. Kevin Troutman, AMAFCA GIS Manager, stated that this item is for the first Phase of the plan, which was to evaluate the conditions of the Calabacillas Arroyo. Mr. Troutman introduced Mr. Kyle Shour with Tetra Tech. Mr. Shour thanked the Board and stated the plan extends from Swinburne Dam down to the Rio Grande. He presented a History of AMAFCA's involvement on Calabacillas Arroyo Planning and Construction.

The presentation covered the following:

- 1973: Black Dam was constructed was constructed by the FCS now the NRCS for \$900K+
- 1975: Western Albuquerque Metropolitan Drainage Management Plan was done; Remain in natural configuration; did not consider effect of development per Resolution 1972-2
- 1983: Study by Simons, Lee & Assoc. established the prudent line



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- 1986: Facility Plan for Arroyos; Major Open Space Arroyo, Link, and Pedestrian trail corridor; Naturalistic condition; Maintain native vegetation; Use aesthetic stabilization materials
- 1987: Calabacillas Arroyo Drainage Management Plan; Considered impacts of development per AMAFCA Resolution 1980-15; Q100, 2036 developed 16,100 cfs > Coors Crossing Capacity, 13,300 cubic feet per second (cfs)
- 1987: Calabacillas Arroyo Drainage Management Plan; Construction of Swinburne Dam; Grade Control Structures (GCS) 2,000 feet apart
- 1988: Swinburne Dam Analysis
- 1989: Hydrologic, Hydraulic, and Sediment Transport Analyses; Locations of first 7 GCSs; 900+ feet apart; Cumulative Cost = \$4,270,603; Swinburne Dam constructed = \$3,342,285
- 1990: Calabacillas Arroyo Grade Control Structures Design Analysis Report; Cumulative Cost = \$6,299,913, GCS #s 1 – 7 done in 1991; 1 bank protection project done in 1995
- 1996: Hydraulic Capacity and Stability Analysis for Levees Between Coors Road and the Rio Grande
- 1998: Evaluation of Existing Erosion-Risk Limits between Coors Road and Swinburne Dam; 11 Additional GCSs; Recommended GCS completed April 2015;
- 1999-2001: Cumulative Cost = \$10,028,138; 4 Intermediate GCSs; 4 Bank Protection Projects;
- 2003 Cumulative Cost = \$15,449,138; Replacement Cost per Means Indices = \$30M; 6 Intermediate GCSs; 7 Bank Protection Projects; Replacement Cost per Means Indices = \$30M

**Prudent Line Development Methods:**

- 1983: Simons, Lee & Assoc.: 25 years of erosion or single 100-year event
- 1994: AMAFCA Sediment and Erosion Design Guide: 30 years of erosion, plus single 100-year - subject to inconsistencies
- 2008: Southern Sandoval County Arroyo Flood Control Authority (SSCAFCA) Sediment and Erosion Design Guide: Maximum possible lateral arroyo geometry and 100-year flood extents; Approach has become more conservative, Modern standards make constraining arroyo in 1983 limits more challenging

**Project Goals:**

- Evaluate: Existing structures, geomorphic conditions through study area, existing and developed hydrology, and existing and developed hydraulics.
  - Recommend improvements for existing and proposed developed conditions (including Swinburne Dam Sediment Retention Structure)



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**Project Approach:**

- Phase I will consist of Data collection and supplemental surveys, Creation of composite plan and profile, Field reconnaissance, and Rapid assessment
- Phase II will consist of Hydraulic analysis and Facility plan preparation

**Data Collection:**

- Assemble as-builts, assessed changes since 2010 LiDAR, Thalweg survey, and new aerial mapping.
- Composite Plan & Profile; Flat Slope Assessment, Equilibrium Slope Assessment

**Recommendations:**

- Immediate Action = Flanking of Swinburne Dam rip rap apron
- Intermediate Action = Potential flanking of GCS 1A

**Other Recommendations:** Monitor and maintain at eight sites, Additional analysis for existing conditions at 11 of 22 sub-reaches, Additional analysis for future conditions in all sub-reaches

Potential BMPS and wildlife habitable; Vegetation at storm drains; Edge of arroyo channel; Floodplain; Ungrounted Riprap; Bank swallow habitat

Mr. Shour introduced Dr. Mike Harvey. Dr. Harvey thanked the Board. He stated he first started working on the Calabacillas Arroyo in approximately 1992 while developing the AMAFCA Erosion Design Guide.

A brief recap of his presentation is as follows: The Calabacillas Arroyo defines the problem with development: development, increase water, cut off sediment in the arroyo. The approach that was taken with the setbacks was a very innovative way to approach the problem at that time. It recognized that this was an open space and a wildlife corridor. You have to provide lateral and vertical control. Things have worked pretty well. The channel is within the prudent line and there is real evidence things are stabilized. Phase II evaluates the consequences of the situation; cut off the sediment supply at Swinburne. 80% of the wash load will pass through. Hungry water will be put in Swinburne Dam if a dam is put within a dam. There will be stability problems if nothing is done to compensate for it. There will be vertical and lateral incision. Calabacillas is an important source of sediment for the Rio Grande. He asked that these comments be considered as Phase II is evaluated.

Mr. Troutman advised that thanks to the fieldwork by Tetra Tech and Mr. Kurt Wagener's inspection reports the AMAFCA crew is out placing some rocks at Swinburne Dam. Responding to a question from Chair Thomson, Mr. Lovato stated that the due to the turbidity of the sediment



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coming out of the Calabacillas AMAFCA is out of compliance with the MS4 permit. The Environmental Protection Agency (EPA) is penalizing AMAFCA; however, US Fish and Wildlife Service want the sediment to the River. AMAFCA wants to have both EPA and USFWS in one room to address the issue. The Calabacillas Arroyo is now a flood control facility that has a naturalistic arroyo look and the facility today has over 27 structures that are manmade to mimic a natural arroyo. Chair Thomson stated that sediment criteria is not appropriate for the watershed. Mr. Lovato stated AMAFCA is trying to go in that direction. Responding to a question from Director Borrego, Mr. Lovato stated that AMAFCA has not talked to other agencies to present the problem to EPA on sediment loads; just E. coli. Mr. Troutman explained the uniqueness of both AMAFCA and the arid State of New Mexico. EPA does not understand the different environments (Louisiana versus New Mexico). Responding to a question from Director Borrego, Mr. Lovato stated AMAFCA has had discussions with EPA since 2008, continues to have the discussions, and that is why AMAFCA has the Regional MS4 Permit. AMAFCA is considering placing sediment upstream to get it into the Rio Grande; however, the Calabacillas is different. Chair Thomson stated that maybe sediment monitoring should be part of the monitoring program. Director Borrego asked that AMAFCA follow-up with Chair Thomson's request. Chair Thomson and Mr. Lovato stated that would be something the Storm Team would look into and he will report to the Board. Mr. Troutman stated the study itself would be brought back to the Board at a later date.

**19. South I-25 Corridor Study – Project Briefing – Briefing by Mark Fahey, New Mexico Department of Transportation**

Ms. Lynn Mazur, AMAFCA Development Review Engineer, stated that AMAFCA is interested in the Corridor Study, especially closest to the South Diversion Channel (SDC). Ms. Mazur introduced Mr. Mark Fahey, Project Development Engineer for NMDOT. Mr. Fahey stated the Study is not a construction project, but a planning tool to identify different projects. Mr. Fahey introduced Mr. Jim Heimann with Parsons Brinkerhoff to provide the Project Briefing.

Mr. Heimann presented the following:

**Study Limits:**

- South Section: NM 47/ Broadway to Sunport
- North Section: Sunport to I-40
- Three Improvement "Build" Alternatives
  - All alternatives have four mainline lanes in each direction and auxiliary lanes as needed
  - All alternatives close northbound MLK off-ramp
- Focus on South Diversion Channel



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**Study Purpose:**

- Identify the preferred strategy to improve the South I-25 freeway system
- Develop a prioritized implementation plan for long-term needs
- Accommodate future growth and support economic development
- Accommodate bike and pedestrian facilities

**South Section:**

- NM 47/Broadway to Sunport
- Elements of the Build Alternative include:
  - Three mainline lanes in each direction to Rio Bravo; Four mainline lanes north of Rio Bravo
  - Rio Bravo is currently under design
  - New interchange at Bobby Foster
  - New interchange at Mesa del Sol
  - New grade separation for Mesa del Sol (Avenue A)

**Sunport to Cesar Chavez:**

- South Diversion Channel
  - CoA Multi-Use Trail Crossing
  - Sidewalks needed on Gibson Boulevard
  - Service Road on top of berm
  - FEMA Levy Designation

The Avenue A Grade Separation, Mesa del Sol Interchange, Bobby Foster Interchange (No Expected Impacts on Tijeras Arroyo Sediment Retention Facility), and the Rio Bravo Interchange were discussed.

**Current Status:**

- Estimated Costs without Right-of-Way costs
  - South Section: \$160M
  - North Section: \$200M to \$250M
- Finalize the South I-25 Highway Improvement Plan Report
  - October 15, 2016

Responding to a question from Director Eichenberg, Mr. Heimann stated that correcting the “S” curve would cost approximately \$130M. Responding to a question from Director Eichenberg, Mr. Lovato stated that the land in a specific area was APS and the University of New Mexico. Responding to a question from Chair Thomson, Mr. Lovato stated that floodwater that backs up under I-25 and Tijeras is not being addressed by the study. Mr. Heimann stated that NMDOT was / is aware of the flooding problem. Mr. Lovato thanked Mr. Fahey and the NMDOT for



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coming to AMAFCA staff and the Board. He anticipates coming to the Board in 18 months to 2 years. There are talks about using a box culvert on the SDC and a multiuse trail; however, no one has come to AMAFCA to discuss this.

**20. AMAFCA Field Highlights**

**a. Field Report**

Mr. Kurt Wagener, AMAFCA Field Engineer, gave a report of various projects and events over the past month.

The slides opened with a picture a horned lizard (from an unknown location) followed by a slide of Mr. Nolan Bennett, AMAFCA Field Engineer, doing an AMAFCA Channel Inspection, slides of AMAFCA crew working on vegetation control at San Antonio and the NDC by Balloon Fiesta, as well as Erosion Repair work at Raymac Dam. The presentation continued with a picture of CoA work on the South Pino Dump Station and trail maintenance, a slide of the sand pile that AMAFCA is giving to BernCo for sand bags for those impacted from the BernCo Dog Head Fire, slides of the Embayment Regrading at the Rio Grande, Boca Negra Detention Dam, Calabacillas to Rio Grande – drone pictures and a slide of the Piedras Marcadas Water Quality Structure, a picture of the Pre-con for the Independence Square and Mountain View Elementary School pipe penetrations. Responding to a question from Chair Thomson, Mr. Wagener stated that AMAFCA let APS move forward on the Mountain View Elementary School pipe penetration while awaiting the 408 permit. Mr. Lovato reminded the Board of the process and the delays that AMAFCA is facing due to the 408 permit. The presentation continued with sediment sales near the Balloon Fiesta, the Osuna and Singer Widening Projects, the Agency and Area-Wide NMDOT Repair task final, AMAFCA NDC repair task prep meeting and various slides of the Floor Overlay, the Isleta Diversion Mandatory Pre-Bid meeting, SWVFDR II Ribbon Cutting planning meeting, and various pictures of the ribbon cutting itself that included former executive engineers Mr. Larry Blair and Mr. John Kelly, current Executive Engineer Mr. Jerry Lovato (master of ceremonies), Directors Bruce Thomson and Deborah Stover, Lieutenant Colonel James Booth with the USACE, BernCo Commissioner Art De La Cruz, Mr. Mike Hamman, Chief Engineer/CEO, Middle Rio Grande Conservancy District, and Rio Grande High School Principal, Ms. Amanda De Bell. MRCOG Public Partnership Awards for the Watershed Based MS4 Permit and the SW Valley Flood Drainage Reduction Project Phase II. Director Stover stated the name should be Raven Pond since everyone, including the newspaper, is referring to it as Raven Pond. Mr. Wagener stated a sign would be done and put at that location. The presentation continued with a picture of Mr. Kevin Troutman and Mr. Jeff Willis at the Web-based Emergency Operations Center Training for Emergency Managers, and closed with a picture of a hawk taken at Westgate Dam and a picture of an owl taken by Mr. Willis in the backyard of his home.





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Mr. Lovato stated that Mr. Wagener presented his final Field Highlights report. Mr. Nolan Bennett will be doing the presentation in the future. Mr. Lovato thanked Mr. Wagener for what he has done (including pictures and borders) to enhance the Field Highlights presentation.

**b. Construction Report**

Mr. Kurt Wagener, AMAFCA Field Engineer, referred to the Construction Report. There were no questions.

**21. Calabacillas West Branch Arroyo Drainage and Water Quality Management Plan – Alternatives Decision Point**

Mr. Bradley Bingham, AMAFCA Drainage Engineer, stated this project started in 2012. The DMP goes upstream from Swinburne Dam versus Mr. Troutman's Calabacillas Arroyo Facility Plan going downstream from Swinburne. In the past, both the existing conditions report, as well as the determination to remove Paseo del Volcan from consideration had been presented to the Board.

The Calabacillas Arroyo West Branch watershed encompasses approximately 11 square miles, including approximately 2 square miles, diverted into the West Branch, via the Las Ventanas Dam. The contributing area of the lower reach of the arroyo, from Swinburne Dam to Rainbow Blvd. is developed with residential subdivisions. The upper reach, from Rainbow to the Rio Puerco escarpment, is still largely undeveloped with two large master-planned communities, Paradise West and Quail Ranch.

- Model #1) Developed rates, based on current zoning with no detention at all. Flow rates determined exceed design capacities of the downstream facilities.
- Model #2) Developed rates with a pond at the eastern boundary of Quail Ranch development, sized to release historic discharges. This pond would detain 260-acre feet on approximately 20 acres. Flow rates determined also exceed design capacities of the downstream facilities.
- Model #3) Developed rates with the same pond at Quail Ranch and an additional pond at the Paradise West development near del Oeste Drive. This pond is sized to release approximately 1,770 cfs, which would minimize necessary improvements to the downstream grade control structures. It would detain approximately 120-acre feet on approximately 9 acres. These two ponds would be considered the regional solution to the management of the basin.
- Model #4) The ponds range in size from 1-acre feet to 28-acre feet.



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Responding to questions from Director Eichenberg, Mr. Bingham recapped the cfs for the ponds for Models #2 to #4. Mr. Bingham stated that combining Model #2 and #3 might work. Responding to a question from Director Eichenberg, Mr. Lovato stated that Calabacillas is a recharge zone.

Mr. Lovato stated that the ponds would need to be maintained by government agencies. Mr. Bingham stressed that the jurisdictional boundaries would affect CoA, BernCo, and the City of Rio Rancho.

Responding to a comment from Director Borrego regarding making a decision on an item that was received late and her not being familiar with the area, Mr. Lovato stated a decision did not need to be made at the meeting. Responding to a question from Director Borrego, Mr. Bingham stated that he had viewed the Comprehensive Plan and the flow rates are reflected in the current zoning. He further stated that AMAFCA has been invited to the table on the various plans and he is up to speed with what is happening. Responding to a request on costs from Director Borrego, Mr. Bingham stated a cost for a pond is approximately \$100-300K x 50. The bigger facilities will win out. Director Borrego asked for a field trip with staff. Director Eichenberg stated he could just walk it himself. Mr. Bingham reminded the Board that in order to get onto Quail Ranch permission would need to be obtained. Mr. Lovato stated he would make arrangements.

**22. Storm Water Quality**

**a. E. coli Monitoring – Addressing Public Notification**

Mr. Patrick Chavez, Storm Water Quality Engineer, referred the Board to the mailout and map, which is similar to what had been presented before. He stated the red dots on the map are bad and green dots are good. The mechanics of the monitoring program are working. The Total Maximum Daily Load (TMDL) established in the river (1,000 exposures of E. coli - 4 people get sick – this is a Pueblo Water Quality Standard). The current monitoring will be part of next year's annual report to EPA.

Addressing Public Notification: Can post on the website; have the Storm Water Education Coordinator make a presentation to the Board.

Recent E. coli samples taken at the Angostura and Isleta Diversion structures before and after a wet weather event have been multiplied by USGS flow values for the Rio Grande to compare to EPA established Waste Load Allocations (WLA). Samples taken over the urban contributing area watershed have been displayed using GIS software. E. coli concentrations are reported in colony forming units per 100 mL (cfu/100mL).



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Both Wet and Dry sampling events show exceedances. The wet weather sampling event showed a waste loading of approximately 13.5 times greater than the WLA and the dry weather event showed a waste loading of approximately 3 times greater than the WLA given the Compliance Monitoring Cooperative (CMC) WLA and collected river samples.

Responding to a question from Director Stover, Mr. Chavez stated that a public advisory could be done. A UV treatment does not seem to work.

Responding to a question from Director Borrego, Mr. Chavez stated that the proposal for the Storm Water Quality Education Coordinator would state the need for total permit compliance with all minimum control measures. Director Borrego stressed that public awareness is needed and that everything needs to be reported to EPA. Mr. Lovato stated that it is reported; however, the report Mr. Chavez referred to had current information that is not due until next year. Mr. Chavez stated that E. coli is being seen in non-storm events. Chair Thomson stressed that most of the E. coli is a naturally occurring event. There was a brief discussion regarding dog waste, the BEMP report, etc. Mr. Lovato stated that the UNM Intern, Mr. James Fluke, would be doing his Thesis on E. coli and naturally occurring E. coli. Responding to a question from Director Stover, Mr. Chavez stated that EPA is aware of the E. coli issue to the extent that they are setting the TMDL. He further stated that there is possible funding for Mr. Fluke's Thesis and the Storm Team will be applying for those funds. Responding to a question from Director Eichenberg, Mr. Lovato and Chair Thomson stated that Cochiti / Santa Fe River would not flow directly to the Rio Grande River.

**23. Real Estate**

**a. Vista del Norte Homeowners Association Land Dedication – Consideration of Land Dedication to AMAFCA**

Mr. Jeffrey Willis, AMAFCA Real Estate Manager, stated that at the last Board meeting, a proposal was introduced from Vista del Norte Homeowners Association to dedicate four parcels of land to AMAFCA for public purposes. The four parcels are owned by the Vista del Norte Homeowners Association with AMAFCA having an excavation easement over the parcels. The parcels comprise the western levee section of the NDC adjacent to the Vista del Norte Subdivision.

All of the parcels included in the dedication had been reviewed by staff and can be utilized by AMAFCA for maintenance and access to current facilities. The four parcels are part of a levee section of the NDC and are subject to US Army Corps of Engineers inspection and maintenance review. Staff inspected the four parcels comprising the levee section and found minor erosions and a small amount of woody vegetation on the slopes. Staff concluded this is typical of normal



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AMAFCA maintenance issues. No other liability issues were observed during the inspection. There is a CoA licensed trail spur leading from the NDC trail. CoA will maintain the trail.

Staff plans to submit a final version of the Dedication Deed at the next AMAFCA Board meeting.

Responding to questions from Director Eichenberg, Mr. Willis stated that the parcels are approximately nine acres and the assessed value is \$1.00. Responding to questions from Director Eichenberg, Mr. Lovato stated that with the land being on the NDC, AMAFCA would be responsible if there was a problem.

**24. Executive Session (closed)**

- a. NMSA 1978 Open Meetings Act, §10-15-1(H)(6)**
  - i. Pond 187 - Discussion of Threatened or Pending Litigation**

Chair Thomson advised that 24a was a Closed Session agenda item. Director 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,”* eight edition, 2015, to discuss Threatened or Pending Litigation. Director Borrego seconded the motion, which passed unanimously (4-0), on a roll call vote.

Chair Thomson closed the meeting at 1:26 p.m. Mr. Lovato asked that Mr. Jeffrey Willis remain for the closed session. Chair Thomson asked for a motion to re-open the meeting at 1:42 p.m. Director Eichenberg made a motion that the meeting be re-opened. Director Borrego seconded the motion, which passed unanimously (4-0), on a roll call vote. Chair Thomson stated legal issues were discussed and no action was taken during the Closed Session.

- b. NMSA 1978 Open Meetings Act, §10-15-1(H)(2)**
  - i. Executive Engineer Evaluation - Limited Personnel Matters**

This item was removed from the agenda earlier in the meeting.

**25. Unfinished Business**

None.

**26. New Business**

None.



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**27. Adjourn**

There being no further business to come before the Board, Chair Thomson adjourned the meeting at 1:42 p.m.

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Deborah L. Stover, Assistant Secretary-Treasurer, 10/27/16