



**Albuquerque Metropolitan
Arroyo Flood Control Authority
Work Study Session Minutes
May 10, 2007**

Page 1

1. Call to Order and Roll Call

Chairman Hernandez called the Work Study Session to order at 9:06 a.m. Thursday, May 10, 2007. Roll was noted as follows:

Directors present: Chairman Danny Hernandez
Director Janet Saiers
Director Tim Eichenberg
Director Ronald D. Brown
Director Daniel Lyon

Others present: John Kelly, Executive Engineer
Staff
Other attendees on file at AMAFCA

A quorum was present.

2. Approval of Agenda

There were no changes to the agenda. Director Saiers made a motion to approve the agenda. Director Eichenberg seconded the motion. The motion passed unanimously (5-0).

3. Meetings Scheduled

- a. May 17, 2007, 9:00 a.m. – Special Meeting on On-Calls and SIB Financing
- b. May 31, 2007, 10:00 a.m. – Regular Meeting
- c. June 7, 2007, 9:00 a.m. – Work Study on Project Schedule – Valley Projects
- d. June 28, 2007, 10:00 a.m. – Regular Meeting

After discussion, the May 17, 2007 meeting was changed to May 16, 2007, at 2:00 p.m. at AMAFCA. The June 7 meeting was changed to June 6, 2007, at 1:30 p.m. at the MRCOG offices. Due to construction of the AMAFCA office tenant improvements, the May 31, 2007, and June 28, 2007 meetings will also be held at the MRCOG offices. The revised meeting schedule is as follows:

- a. **May 16, 2007, 2:00 p.m. – Special Meeting on On-Calls and SIB Financing**
- b. **May 31, 2007, 10:00 a.m. – Regular Meeting – to be held at MRCOG**
- c. **June 6, 2007, 1:30 p.m. – Work Study on Project Schedule – Valley Projects – to be held at MRCOG**
- d. **June 28, 2007, 10:00 a.m. – Regular Meeting – to be held at MRCOG**



**Albuquerque Metropolitan
Arroyo Flood Control Authority
Work Study Session Minutes
May 10, 2007**

Page 2

4. Drainage Facility Planning Review – Review of Projects on West Mesa

Mr. Kelly stated that AMAFCA had begun the second major update of the Drainage Facility Planning Review, which is an assessment of all major master planned drainage projects within AMAFCA's jurisdiction. A Technical Advisory Committee, consisting of Roger Paul, Bernalillo County Public Works Department; Brad Bingham, City of Albuquerque City Hydrologist; Kathy Verhage and John Curtin, City of Albuquerque Storm Drainage; and AMAFCA staff, met to discuss and prioritize projects on the west side for the Board's review. He introduced Roger Paul, who was present.

Mr. Kelly stated that the Board was reviewing the district-wide projects in a series of three work study sessions. He stated the Board reviewed projects in the East Mesa area in the first work study session, and would cover the West Mesa at this meeting. The final work study session will cover the Valley, and Planning Projects.

Using a large map of the area, Mr. Kelly presented each proposed project. The Board commented on the proposed projects, classification, and priorities. The projects presented, by watershed, were:

Calabacillas Arroyo Watershed

- West Branch Calabacillas Storm Water Management Facility (detention dam and water quality feature in Quail Ranch) – low priority, development driven, future project, subject of an AMAFCA turnkey agreement.
- South Ventana Ranch Storm Drain, Phase I and II – low priority, development driven, future project, private lead.
- Calabacillas Arroyo Stabilization (south of County boundary) – high priority upgrade, funded, private developer lead.
- Calabacillas Grade Control #2 – high priority, funded, private lead, AMAFCA to maintain.
- Swinburne Dam Water Quality #1, #2, and #3 – high priority, current need, AMAFCA lead. Water quality facilities at the inlets to the dam, and smaller projects at each storm drain into the dam. These would trap trash before it enters the dam.
- Lyon Boulevard Storm Drain Water Quality – intermediate priority, current problem, AMAFCA lead.
- Paradise Storm Drain, Phase II – intermediate priority, current need, Bernalillo County lead.
- Paradise Storm Drain, Phase III – intermediate priority, current need, City of Albuquerque lead. Extension of the Paradise Storm Drain to the middle school.



**Albuquerque Metropolitan
Arroyo Flood Control Authority
Work Study Session Minutes
May 10, 2007**

Page 3

Mr. Paul stated that the County would be adding additional drainage in the Lyon Boulevard/Paradise area, in conjunction with roadway widening, sidewalks, and other improvements.

- Chamisa Storm Drain – low priority, development driven, private lead, City of Albuquerque maintain.
- 314 Basin/Park Pond (adjacent to Paradise Boulevard) – upgrade, intermediate priority, County lead. Needs outfall.
- Calabacillas Arroyo Improvements, including grade control structure, Swinburne Dam to Black Diversion – upgrade, low priority, current need, AMAFCA lead.

Mr. Kelly stated the Mussetter Engineering, Inc., study indicated the need for these improvements, in addition to the other Calabacillas Arroyo improvements listed below.

- Calabacillas Arroyo Improvements (Black Diversion to Eagle Ranch) – high priority, unfunded committed project, AMAFCA/private (Costco).
- Calabacillas Arroyo Improvements (Eagle Ranch to Coors) – high priority, funded upgrade, in construction (AMAFCA lead).
- Calabacillas Water Quality (at Rio Grande) – may be located at Corrales Main Canal – low priority, current need, AMAFCA lead.
- Black Dam Water Quality – low priority, funded, private lead, AMAFCA to maintain. Currently in review by the Office of the State Engineer.

In response to a question from Director Saiers, Mr. Kelly stated the Calabacillas Arroyo is unique in that it is dedicated as a major open space arroyo. Where possible, AMAFCA has kept a sand bottom and natural banks, with grade control structures and limited bank protection. AMAFCA's easement mostly matches the City Right of Way, which was based on a 1983 erosion study, that looked at 25 years of erosion or a 100-year event. The arroyo is reaching the boundaries of that erosion now, which is why AMAFCA is currently adding bank protection along the Coors to Eagle Ranch stretch.

He added that staff would also like to do a study of the various public and private construction projects along the Calabacillas Arroyo, to be certain that the various improvements being made at different times all work together as intended. The study may re-prioritize some of the planned improvements.

Responding to a comment from Director Brown, Mr. Kelly stated that, because of the naturalistic nature of the Calabacillas Arroyo, the proposed water quality facility may be placed at the Calabacillas Outlet just north of the Calabacillas Levee. AMAFCA is trying to



**Albuquerque Metropolitan
Arroyo Flood Control Authority
Work Study Session Minutes
May 10, 2007**

Page 4

improve water quality at each point of discharge to the Rio Grande. Water quality efforts may be planned for the inlets to the Calabacillas Arroyo, as well.

Piedras Marcadas Watershed

- Basin 302/304 Interception Channel (channel or pipe) – low priority, development driven, City of Albuquerque lead.
- Basin 302 Pond (detention pond) – low priority, development driven, City of Albuquerque lead.
- Piedras Marcadas Tributary Storm Drain – intermediate priority, development driven, City of Albuquerque lead, partially constructed.
- Coors/Paseo del Norte Storm Drain (along Coors north of Paseo del Norte) – intermediate priority, current need, NMDOT lead.
- Paseo/Coors Detention Pond – intermediate priority, current need, NMDOT lead, AMAFCA to maintain.

In response to a question from Director Brown, Lynn Mazur, AMAFCA Development Review Engineer, stated the planned capacity of the Paseo/Coors Detention Pond is approximately 20 acre-feet of storage on approximately 3 acres. Mr. Kelly added that the current capacity will need to be increased with the addition of the water from the Coors/Paseo del Norte Storm Drain.

- Coors/Paseo del Norte Water Quality Feature – low priority, current need, NMDOT lead, AMAFCA to maintain.

San Antonio Watershed

Mr. Kelly stated that the San Antonio Arroyo is one of the two natural arroyos on the west side that drain into the Rio Grande at their historic locations, the other being the Calabacillas Arroyo.

- Quail Ranch Dam (Boca Negra Arroyo in Quail Ranch) – low priority, development driven, private lead.
- North Geologic Window Dam (west (upstream) of North Geologic Window) – low priority, development driven, AMAFCA/City of Albuquerque lead. Low flow events will bypass the dam, mimicking historic flows into the North Geologic Window. Developed flows will be captured by the dam.
- Faciel Road Storm Drain (Volcano Cliffs) – low priority, development driven, private lead.



**Albuquerque Metropolitan
Arroyo Flood Control Authority
Work Study Session Minutes
May 10, 2007**

Page 5

- Squaw Road Storm Drain (Volcano Cliffs) – low priority, development driven, private lead.
- Scenic Road Storm Drain (Volcano Cliffs) – low priority, development driven, private lead.
- Boca Negra Channel (Volcano Cliffs) – low priority, development driven, private lead.
- Boca Negra Detention Dam (Unser & Atrisco) – high priority, funded, AMAFCA to construct.
- Boca Negra Outfall (Outfall from dam) – high priority, funded, AMAFCA to construct in conjunction with the Boca Negra Dam.
- The Trails Ponds (east of Universe) – intermediate priority, development driven, temporary ponds to be relocated. Private lead.
- Universe Storm Drain (along Universe Boulevard) – intermediate priority, development driven, City of Albuquerque lead.

He added that a project had been left off the spreadsheet: the Unser Storm Drain, which is a low priority, development driven, City-lead project. This may end up as an S.A.D.

- Double Eagle II Airport Pond (north of airport) – low priority, current need, City of Albuquerque/Aviation lead. This project will meter 100-year event flow to the Boca Negra Dam downstream. Size of project to be determined, based on development at the airport and on the south end of Quail Ranch.
- SBP2 to NBP1 Diversion Storm Drain (north of airport – storm drain or channel) – low priority, development driven, City of Albuquerque/Aviation lead.
- South Boca Negra Pond SBP1 (north of airport) – low priority, development driven, City of Albuquerque/Aviation lead.
- South Boca Negra Pond SBP2 (north end of airport) – low priority, development driven, City of Albuquerque/Aviation lead.
- Double Eagle Basin Upgrade (Double Eagle Airport) – low priority, development driven, City of Albuquerque/Aviation lead.
- Double Eagle Mirehaven Pond MHP2 (Double Eagle Airport) – low priority, development driven, City of Albuquerque/Aviation lead.
- Mirehaven Arroyo (northwest of Ladera and 98th Street to Petroglyphs) – intermediate priority, development driven, private lead, probably AMAFCA maintenance under anticipated turnkey agreement.
- Ladera Dam 12 Upgrade (additional excavation to hold water from above 98th Street. This would include an OSE submittal, inundation mapping, etc.) – intermediate priority, development driven, private lead.
- Ladera Dam 9 Upgrade (capacity increase) – intermediate priority, development driven, private lead.



**Albuquerque Metropolitan
Arroyo Flood Control Authority
Work Study Session Minutes
May 10, 2007**

Page 6

- Ouray Crossing Upgrade (between Ladera Dam 14 and Ladera Dam 15) – low priority, current need, City of Albuquerque lead. This is a dip crossing with culverts under the road to convey flow from Ladera Dam 14 to Dam 15, which will either need another battery of pipes or a box culvert when the City upgrades this crossing.
- Ladera Dam 5 Upgrade – low priority, development driven, private lead.
- Ladera Dam 3 Upgrade – low priority, development driven, private lead.
- Ladera Dam 1 Upgrade – low priority, development driven, private lead.
- Ladera Dam 0 Upgrade – low priority, development driven, private lead.

Responding to a question from Director Saiers, Mr. Kelly stated that these upgrades involve increasing the storage volume of the dams. OSE regulations may make this process more complicated. As the increased capacity will be needed to handle runoff from property owned by SunCal, SunCal has been informed that they will be responsible for the costs of analyses and inundation mapping required by the OSE. As an alternative, new dam(s) may be constructed upstream, rather than modifying the dams in the Ladera System.

- Basin EA.11 Diversion (northwest of Ladera Dam 0) – low priority, development driven, private lead.
- Basin EA.11 Dam (northwest end of Basin EA.11 Diversion) – low priority, development driven, private lead.

West Bluff Outfall Watershed

- Paseo del Volcan Surge Pond (Paseo del Volcan and I-40) – low priority, development driven, NMDOT lead.
- Paseo del Volcan Diversion (Paseo del Volcan to West Amole Dam) – low priority, development driven, NMDOT lead.
- West Amole Dam (north of I-40, Paseo del Volcan to Double Eagle II) – intermediate priority, development driven, AMAFCA lead.
- Shamrock Channel (West of Double Eagle II) – high priority, funded, private lead.
- West I-40 Diversion Storm Drain (Shamrock Channel to Double Eagle II) – high priority, unfunded committed project, AMAFCA/private.
- Double Eagle II Channel (East of Double Eagle II, North of I-40) – low priority, development driven, private lead.
- West I-40 Diversion Storm Drain (Double Eagle II to East Amole Pond) – high priority, unfunded committed project, NMDOT lead.
- East Amole Surge Pond (Double Eagle II to 98th) – high priority, unfunded committed project, AMAFCA lead.



**Albuquerque Metropolitan
Arroyo Flood Control Authority
Work Study Session Minutes
May 10, 2007**

Page 7

- West I-40 Diversion Storm Drain (East Amole Pond to 98th) – high priority, unfunded committed project, NMDOT lead.
- 98th Street Diversion Basin (98th Street and I-40) – high priority, unfunded committed project, AMAFCA lead.

Mr. Kelly stated that these projects are part of or connect to the West I-40 Diversion Channel Extension Project, for which the agreements with SunCal and NMDOT are in final negotiations.

- Ladera Dam 5 Diversion (south of Ladera Dam 5) – intermediate priority, development driven, AMAFCA lead.

This project would intercept water bound for Ladera Dam 5, and send it to the West I-40 Diversion Channel instead, as there is more capacity in the West I-40 Diversion Channel. This relieves all downstream Ladera dams. If the diversion is not done, Ladera Dams 6, 7, 8, 9, 10, and 11 would need to be upgraded.

- West I-40 Diversion Channel (98th to Unser) – intermediate priority, unfunded committed project, undetermined lead.
- Unser Boulevard Detention Basin (Unser and I-40) – intermediate priority, unfunded committed project, AMAFA lead.
- Parkway Channel Upgrade (north of Unser and I-40) – intermediate priority, current need, AMAFCA lead.

The Parkway Channel is a maintenance problem for AMAFCA, as permanent improvements were never put in, anticipating it would be replaced with a pipe. It is an earth-lined channel. \$500,000 is fenced in the Contingency Fund for this project.

Amole Hubbell Watershed

- North/South Coors Pond Upgrade (Coors Road and Bridge Boulevard) – intermediate priority, current need, private lead.
- Snow Vista Pond Upgrade (west of 98th, south of Central) – intermediate priority, development driven, City of Albuquerque lead.
- Benavides Storm Drain (Westgate Subdivision) – low priority, current need, City of Albuquerque lead. This would relieve flows in the neighborhood.
- Del Rey Storm Drain Alternative (Westgate Subdivision) – intermediate priority, current need, City of Albuquerque lead (preferred, possibly cheaper alternative to the Benavides Storm Drain).



**Albuquerque Metropolitan
Arroyo Flood Control Authority
Work Study Session Minutes
May 10, 2007**

Page 8

- Snow Vista Channel (Amole Arroyo to Benavides, freeboard upgrade/riprap improvements) – low priority, current need, AMAFCA lead.
- Powerline Channel (north of Central, freeboard upgrade) – low priority, current need, private lead. Not necessary if West I-40 Diversion constructed. Otherwise, called out in the DMP as a series of ponds and connecting channels.
- Powerline Channel & Sediment Basins (Amole Arroyo to Central) – high priority, development driven, private lead. Increases capacity to Drainage Management Plan recommendations.
- Amole West Branch Channel (north and west of Westgate Dam) – low priority, development driven, private lead. Could involve grade control structures, possibly coupled with a prudent line treatment.

Roger Paul commented on this project, stated that the County had been in meetings with SunCal regarding the alignment of the 118th Street corridor, Gun Club to I-40. This road will be funded by developers in the future, but they are setting the alignment now. The AMAFCA channel can be coordinated with the roadway planning.

- Amole Arroyo (Powerline to Westgate Dam) – low priority, development driven, private lead.
- South Powerline Channel Detention (Powerline south of Amole Arroyo) – high priority, development driven, City of Albuquerque lead. Some ponds already constructed.
- Guac Detention Basin (West of Amole Dam) – intermediate priority, current need, AMAFCA lead.
- Basin B-6 Diversion (Borrega Dam to Rio Bravo) – high priority, development driven, private lead.

Mr. Kelly pointed out the location of the planned Secate Blanco Diversion Channel, stating that other projects around this parcel have diverted flow away from it, lessening the need for this parcel. It may become surplus to AMAFCA's needs if the channel is turned into a storm drain. Staff has been in discussion with the owner, Tom Salazar, about a possible exchange of AMAFCA's drainage easement at Secate Blanco for land he owns east of Unser, which could be used to expand the drainage basin, allowing for greater multiple use opportunities.

- South Branch Borrega Channel (upstream of the confluence with Borrega Channel) – low priority, development driven, private lead.
- Gun Club Storm Drain (Borrega Dam to Gun Club Road) – low priority, development driven, private lead. This would keep water out of the intersection of Gun Club and Coors.



**Albuquerque Metropolitan
Arroyo Flood Control Authority
Work Study Session Minutes
May 10, 2007**

Page 9

- South Rio Bravo Arroyo Upgrade (enters Hubbell Lake north of Borrega) – intermediate priority, development driven, private lead.
- Borrega Dam Upgrade (AMAFCA detention dam) – intermediate priority, intermediate/long term project, private lead.

Southwest Mesa Watershed

- Don Felipe Dam Upgrade (AMAFCA detention dam) – intermediate priority, intermediate/long term project, AMAFCA lead.
- Don Felipe Dam Watershed DMP – high priority, re-study needed, AMAFCA lead – in progress.

Mr. Kelly added that the Pajarito Arroyo will have a prudent line treatment, per the Pajarito Arroyo Corridor Plan. This is also the County's preferred treatment for arroyos in the southwest mesa. The hydrology of this arroyo will be studied to determine the location of the prudent line.

- Johniece Storm Drain (north of McCoy Dam) – high priority, partially funded committed project, AMAFCA lead.
- South Johniece Storm Drain (south of McCoy Dam) – high priority, unfunded committed project, AMAFCA lead.
- McCoy Diversion Channel A (northwest of McCoy Dam) – high priority, partially funded committed project, AMAFCA lead.
- McCoy Diversion Channel B (south of McCoy Dam) – high priority, partially funded committed project, AMAFCA lead.

In response to a question from Director Saiers about funding, Mr. Kelly stated that AMAFCA is studying the Johniece and South Johniece Storm Drains, and McCoy Diversion Channels A and B, and will move into design soon. The design portion of these projects is funded, and construction funding is identified but unallocated because there are no signed agreements yet.

- Raymac Dam Upgrade (west of Coors and Raymac) – intermediate priority, intermediate/long term project, AMAFCA lead.
- Raymac Dam Watershed DMP – high priority, re-study needed, AMAFCA lead – in progress.

Mr. Kelly noted that below the Los Indios Pond/Diversion, illegal dumping is occurring in the old Ragland Arroyo.

- McCoy Dam Watershed DMP – high priority, re-study needed, AMAFCA lead.



**Albuquerque Metropolitan
Arroyo Flood Control Authority
Work Study Session Minutes
May 10, 2007**

Page 10

The Board did not make any changes to the priority or classification of any of the proposed projects.

Responding to a question from Director Eichenberg about the cost of all the west mesa projects discussed, Mr. Kelly stated that the projects south of I-40, alone, would cost well over \$80 million. He added that he would obtain an updated cost estimate total for the Board.

5. Unfinished Business

None.

6. New Business

Mr. Paul stated that the Ribbon Cutting ceremony for the Isleta Phase II Project would be 2:00 p.m. on Friday, June 8, 2007, at 2420 Isleta. He stated Board invitations would be provided.

7. Items from the Floor/Public Comment

None.

8. Adjourn

With no further business to discuss, Chairman Hernandez adjourned the meeting at 10:30 a.m.

Ronald D. Brown, Asst. Sec.-Treas. 5/31/07

Recorded by Pam Woodruff, Secretary to the Executive Engineer