

**MINUTES OF THE  
THREE THOUSAND TWELFTH REGULAR MEETING  
OF THE  
BOARD OF DIRECTORS OF THE  
MIDDLE RIO GRANDE CONSERVANCY DISTRICT  
AUGUST 14, 2017**

Directors having been duly notified, Vice-Chair Duggins called the regular meeting to order at 3:02 pm at the MRGCD General Office. The following Directors and Staff were present:

**DIRECTORS:**

John P. Kelly	Chair	Absent
Glen Duggins	Vice-Chair	
Joaquín Baca	Director	
Karen Dunning	Director	
Derrick J. Lente	Director	
Beverly Romero	Director	Absent
Valerie Moore	Director	

**STAFF:**

Michael A. Hamman	Chief Engineer/CEO
Lacy Daniel	Chief Water Counsel
Lorna Wiggins	General Legal Counsel
David M. Fergeson	Secretary/Treasurer
Jeanette Bustamante	Administrative Officer
David Gensler	Water Operations Manager
Ray Gomez	Engineer Supervisor
Alicia Lopez	Engineer Technician
Jason Casuga	Engineer I
Joe Brem	Albuquerque Division Manager
Rick Altenberg	GIS/Mapping Technician
Becky Burnham	Budget Analyst
Doug Strech	GIS Supervisor

The following names of individuals were interested viewers and/or participants:

Jeff Willis, AMAFCA	Penny Perkins, Corrales
John Thompson, MRGCD Lobbyist	Mary Chappelle, Corrales
David Hammack, Corrales	Debra Hammack, Corrales
Bill Perkins, Corrales	Fred Hashimoto, Corrales
Dave Krueper, Corrales	Suzanne Harper, Corrales

**AGENDA ITEM NO. 1 – PLEDGE OF ALLEGIANCE**

Vice-Chair Duggins requested that John Thompson, MRGCD Lobbyist lead the Pledge of Allegiance.

Vice-Chair Duggins welcomed the guests and declared a quorum.

**AGENDA ITEM NO. 2 – APPROVAL OF THE AGENDA**

Vice-Chair Duggins called for approval of the Agenda.

Director Dunning made the **MOTION TO APPROVE the August 14, 2017 AGENDA**. Director Baca seconded the motion. The **MOTION CARRIED** unanimously.

**AGENDA ITEM NO. 3 – APPROVAL OF MRGCD PAYMENT RATIFICATION & ATTORNEY INVOICES**

- a. Consideration / Approval of Payment Ratification – August 14, 2017

Vice-Chair Duggins called for approval of the August 14, 2017 Payment Ratification.

Director Moore made the **MOTION TO APPROVE THE PAYMENT RATIFICATION OF AUGUST 14, 2017 AS PRESENTED**. Director Baca seconded the motion. The **MOTION CARRIED** unanimously.

- b. Consideration / Approval of July 2017 Invoice for Wiggins, Williams & Wiggins

Vice-Chair Duggins called for approval of the July 2017 invoice for Wiggins, Williams & Wiggins. There were no questions from the Board on the invoice.

Director Moore made the **MOTION TO APPROVE THE JULY 2017 INVOICE FOR WIGGINS, WILLIAMS & WIGGINS**. Director Baca seconded the motion. The **MOTION CARRIED** unanimously.

- c. Consideration / Approval of July 2017 Invoice for Law and Resource Planning Associates

Vice-Chair Duggins called for approval of the July 2017 invoice for Law and Resource Planning Associates. There were no questions from the Board on the invoice.

Director Dunning made the **MOTION TO APPROVE THE JULY 2017 INVOICE FOR LAW AND RESOURCE PLANNING ASSOCIATES**. Director Moore seconded the motion. The **MOTION CARRIED** unanimously.

#### **AGENDA ITEM NO. 4 – APPROVAL OF THE MRGCD MEETING MINUTES**

- a. Consideration / Approval of Minutes for Regular Board Meeting – July 24, 2017

Vice-Chair Duggins called for approval of the minutes for the Regular Board Meeting July 24, 2017.

Director Dunning made the **MOTION TO APPROVE THE MINUTES OF THE REGULAR BOARD MEETING JULY 24, 2017 AS MODIFIED**. Director Baca seconded the motion. The **MOTION CARRIED** unanimously.

#### **AGENDA ITEM NO. 5 – ITEMS FROM THE FLOOR**

1. Fred Hashimoto, Corrales
2. Dave Krueper, Corrales
3. Bill Perkins, Corrales
4. Mary Chappelle, Corrales
5. Suzanne Harper, Corrales
6. David Hammack, Corrales

The residents of Corrales came to discuss the Corrales Riverside Drain/Romero Road Maintenance Proposal and each discussed their concerns regarding clearing of trees and vegetation thinning. They also expressed to safeguard the wildlife habitat, etc. because the habitat is not the same in all areas throughout the District. They stated to continue to consider the functionality of a healthy riparian ecosystem.

Mr. Krueper stated the urban interface is extremely important, but the biological integrity is critical.

Mr. Bill Perkins stated the environment has developed since the creation of the Clear Ditch decades ago, it evolved in a way where there are probably many species that aren't native to New Mexico, but they are part of an incredibly rich ecological environment that is fabulous for the wildlife that inhabit that area, especially along the west bank, and hope that comprehensive master plans sensitive to habitat and wildlife will be developed and shared with concerned public before continuing destructive tree and vegetation removal.

There were similar comments from the other Corrales residents.

**7e (moved up) Corrales Riverside Drain/Romero Road Maintenance Proposal – Mike Hamman, MRGCD CEO**

Mr. Hamman provided a detailed presentation of the Corrales Riverside Drain/Romero Road Maintenance Proposal; describing the SCAFCA rehabilitation of the roads, around the Harvey Jones Channel. He stated the Clear Ditch sloughing occurs, and historically the District mows and provides weed control on the east side. We are proposing to do a pilot project that would sit there for a year or two with planted vegetation to try to restore this, but also get drain functionality back, where we could narrow it up and actually maintain it from the east side. Also talking about reestablishing the bank line, narrow the Clear Ditch a little bit and reestablish that bank line at 45° angle to allow it to be more functional as a drain and reestablish the base flow levels

Positive flow and good drainage is good on two counts: 1) it provides agricultural drainage and it also continues to allow for any kind of toe drain drainage that may occur if and when we get the problems and water up against the levee. That's something the Corp of Engineers always looks at that.

SCAFCA would like to have the resurfacing of the roadway done all the way through to the Romero Road exit before the next monsoon period, which would be next year.

Mr Hamman wanted to update the Board, and also reassure the Village of Corrales and Corrales concerned citizens that this is a long-term planning effort, and it will be done collaboratively to try to maintain as much vegetation as possible but also reestablish the drain at its original grade and its original width with the proper bank on the east side and west side.

Director Baca asked is there a plan to address these vegetation matters? Mr. Hamman responded that we are in the process of developing a long-term plan for the area.

Director Dunning asked if a wetland will be created by SCAFCA. Mr. Hamman stated is will be a joint project with SCAFCA and will use the flows to create a habitat.

Director Lente advised the Board that he and Mr. Hamman back in May met with the Town Council and reaffirmed our commitment to the District being a partner with the Village and the Mayor, and that this project will be done in a collaborative manner.

Mr. Hamman said the next step is refine some possibilities, meet with the Bosque Advisory Commission and discuss the overall plan to develop a master plan so that we can get some general consensus around the long-term and short-term solutions.

**AGENDA ITEM NO. 6 – REPORT(S) FROM THE U.S. DEPARTMENT OF THE INTERIOR**

a. Reports from the US Department of Interior – Jennifer Faler (Not Present)

Following is the BoR Water Report 07-14-17

1. Heron Summary

Content = 193,779 ac-ft (8/10)  
Azotea tunnel: 100-1500 cfs  
Total SJC inflow year-to-date: 155,909 a.f.  
Currently releasing 200 cfs  
Current MRGCD storage: 20,900 ac-ft

2. El Vado Summary

- A. Total storage (all contractors and natural) in El Vado as of 8/10:  
131,760 ac-ft.
- B. Native in El Vado  
144,341 ac-ft.
- C. MRGCD's SJ-C storage in El Vado  
25 ac-ft.
- D. P & P: 14,089 ac-ft
- E. EDWA: 0 ac-ft
- F. All other SJ-C contractors: 3,305 ac-ft

Current release is 600 cfs RG Inflow is 100-150 cfs

3. Storage in Abiquiu

Content = 144,204 ac-ft (8/10)  
MRGCD's SJ-C storage= 30,277 ac-ft

Total water released for minnow to date in 2017: 6,942 ac-ft

**Snowpack Data:**

All SNOTEL sites melted out

**AGENDA ITEM NO. 7 – REPORT(S) FROM THE CHIEF ENGINEER (Michael A. Hamman, MRGCD CEO/CE)**

- a. Bid Abstracts – Jeanette Bustamante, MRGCD Administrative Officer/CPO
  - 1. Concrete/Shotcrete – District



## Memorandum

**To:** MRGCD Chairman Lente and Board of Directors  
Mike A. Hamman, CEO/CE  
David Fergeson, Secretary-Treasurer  
Jeanette Bustamante, Administrative Officer

**From:** Richard DeLoia, Purchasing Agent *RD*

**Date:** August 7, 2017

**Re:** ABSTRACT FOR CONCRETE AND SHOTCRETE

Request for Bid for Concrete and Shotcrete was advertised in compliance with the NM State Procurement Code. This award shall be for the 2018 Fiscal Year effective September 1, 2017. The MRGCD received three (3) bids as follows:

**SCHEDULE 1 – ALBUQUERQUE DIVISION**

ALBUQUERQUE DIVISION	Cu. Yds.	ALBUQUERQUE GRAVEL		COYOTE GRAVEL		A-I QUALITY REDI MIX	
		UNIT COST	TOTAL	UNIT COST	TOTAL	UNIT COST	TOTAL
CONCRETE 3,000 PSI	280	<b>\$92.00</b>	<b>\$25,760.00</b>	\$95.50	\$26,740.00	NO BID	

## SCHEDULE 1 – ALBUQUERQUE DIVISION

ALBUQUERQUE DIVISION	Cu. Yds.	ALBUQUERQUE GRAVEL		COYOTE GRAVEL		A-I QUALITY REDI MIX	
		UNIT COST	TOTAL	UNIT COST	TOTAL	UNIT COST	TOTAL
CONCRETE 4,000 PSI	60	\$94.00	\$5,640.00	\$98.50	\$5910.00		
SHOTCRETE 3,000 PSI	395	\$94.00	\$37,130.00	\$99.50	\$39,302.50		
CALCIUM / POLAR SET	280	\$0.20	\$56.00	\$0.25	\$70.00		
FIBERMESH	280	\$0.50	\$140.00	\$0.25	\$70.00		
AIR ENTRAINMENT	280	\$0.25	\$70.00	\$0.25	\$70.00		
			\$68,796.00		\$72,162.50		

## SCHEDULE II – COCHITI DIVISION

COCHITI DIVISION (DID NOT request polar set, fiber-mesh or air entrainment)	Cu. Yds.	ALBUQUERQUE GRAVEL		COYOTE GRAVEL		A-I QUALITY REDI MIX	
		UNIT COST	TOTAL	UNIT COST	TOTAL	UNIT COST	TOTAL
CONCRETE 3,000 PSI	65	\$125.00	\$8,125.00	\$122.50	\$7,962.50		
CONCRETE 4,000 PSI	20	\$130.00	\$2,600.00	\$126.50	\$2,530.00		
SHOTCRETE 3,000 PSI	175	\$130.00	\$22,750.00	\$126.50	\$22,137.50		
			\$33,475.00		\$32,630.00		NO BID

## SCHEDULE III – BELEN DIVISION

BELEN DIVISION	Cu. Yds.	ALBUQUERQUE GRAVEL		COYOTE GRAVEL		A-I QUALITY REDI MIX	
		UNIT COST	TOTAL	UNIT COST	TOTAL	UNIT COST	TOTAL
CONCRETE 3,000 PSI	250	\$115.00	\$28,750.00	\$105.50	\$26,375.00		
CONCRETE 4,000 PSI	20	\$120.00	\$2,400.00	\$109.50	\$2,190.00		
SHOTCRETE 3,000 PSI	200	\$125.00	\$25,000.00	\$108.50	\$21,700.00		
CALCIUM / POLAR SET	200	\$2.00	\$400.00	\$.25	\$50.00		
FIBERMESH	200	\$2.00	\$400.00	\$.25	\$50.00		
AIR ENTRAINMENT	500	\$2.50	\$1250.00	\$.25	\$125.00		
			\$58,200.00		\$50,490.00		NO BID

## SCHEDULE IV – SOCORRO DIVISION

SOCORRO DIVISION	Cu. Yds.	ALBUQUERQUE GRAVEL		COYOTE GRAVEL		A-I QUALITY REDI MIX	
		UNIT COST	TOTAL	UNIT COST	TOTAL	UNIT COST	TOTAL
CONCRETE 3,000 PSI	140	<b>NO BID</b>		\$140.00	\$21,000.00	\$118.00	\$16,520.00
CONCRETE 4,000 PSI	15			\$145.00	\$2,900.00	\$120.00	\$1,800.00
DARASET / POLAR SET	155			\$5.00	\$750.00	\$5.00	\$775.00
FIBER MESH	155			\$1.00	\$150.00	\$5.50	\$852.50
AIR ENTRAINMENT	155			\$.25	\$42.50	\$1.50	\$232.50
						\$24,842.50	

After thorough review, Staff is recommending multiple awards to the following lowest responsible bidders.

Schedule I - Albuquerque Division: Albuquerque Gravel	\$ 68,796.00
Schedule II & III - Cochiti & Belen: Coyote Gravel	\$ 83,120.00
Schedule IV - Socorro Division: A-1 Quality Redi Mix	<u>\$ 20,180.00</u>
	<b>\$172,096.00</b>

**FY2018 BUDGET \$160,000.00**

Vice-Chair Duggins called for approval for Concrete/Shotcrete. There was one question regarding the total bid amount for all Schedules is over budget. Mr. Ferguson advised the Board that the major increase was in Schedule II Cochiti Division which is over budget by approximately \$12,000. He expressed the contract award is based on unit cost and if Cochiti requires the full amount of material a budget transfer would be made.

Director Lente made the **MOTION TO APPROVE THE AWARD OF CONCRETE AND SHOTCRETE AS RECOMMENDED BY STAFF**. Director Dunning seconded the motion. The **MOTION CARRIED** unanimously.

- 2018 International 20 Yard Dump Truck, 2 Each via CES Contract for Albuquerque and Belen Divisions



## Memorandum

**To:** MRGCD Chairman Kelly and Board of Directors  
Mike A. Hamman, CEO/CE  
David Ferguson, Secretary-Treasurer

**From:** Jeanette Bustamante, Administrative Officer/CPO *JB*

**Date:** August 9, 2017

**Re:** REQUESTING BOARD APPROVAL FOR 2 EACH 2018 INTERNATIONAL

**20 YD. DUMP TRUCKS – ALBUQUERQUE (1) & BELEN DIVISION (1)**

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Staff is requesting Board approval for two (2) each 2018 International HX620 6x4 20 Cubic Yard Dump Trucks complete with three (3) year bumper to bumper warranty. This procurement will be through CES Contract #16-019B-C101-ALL

VENDOR	YEAR	MAKE	MODEL	UNIT COST	GRAND TOTAL
CES CONTRACT SUMMIT TRUCK GROUP	2018	International HX620 6x4	HX62F	\$177,529.20	\$355,058.40

Units will come complete with a 20 yard 18' Dump Body, power tail gate and electric tarp, etc.

Vice-Chair Duggins called for approval for 2 Each 2018 International 20 Yard Dump Trucks. There were no questions from the Board on the invoice.

Director Lente made the **MOTION TO APPROVE THE AWARD OF TWO EACH 2018 INTERNATIONAL 20 YARD DUMP TRUCKS AS RECOMMENDED**. Director Dunning seconded the motion. The **MOTION CARRIED** unanimously.

b. Water Report – David Gensler, MRGCD Water Operations Manager

As of the Wednesday after the last board meeting we have stopped releasing water from El Vado, the rain finally came. Also as of August 10<sup>th</sup> we went back into Article 7 Restriction, and cannot store any more water. The upside is that Reclamation had not made any allocation of the Rio Grande water that had gone into storage; they were waiting for Article 7 to be retriggered before they decide on the Rio Grande storage that happened this spring. Now that we are back in Article 7 we actually know to the last drop how much water we have. Special thanks to Ed Campbell of Reclamation for doing a masterful job working through this complex year where we had water going into and coming out of storage simultaneously while we were in and out of Article 7. He did a good job maximizing the benefit for the Middle Valley.

The District has about 113,000 ac. ft. of Rio Grande water in El Vado free and clear, and approx. 23,000 of this is locked up due to Article 7/Article 8 complications of the Compact, but it leaves about 90,000 ac. ft. there to use this year. Plus we have 30,000 ac. ft. at Abiquiu; 21,000 ac. ft. sitting in Heron now, our 2017 allocation that's the good news. The bad news is that we are currently 20,000 ac. ft. behind for the year on Rio Grande Compact deliveries, and that not including the 23,000 we were short the previous year, putting us 43,000 ac. ft. in the hole. We passed the million ac. ft. mark at Otowi gage for the year, which means that 100 percent of the water passing Otowi gage that is required to be delivered to Elephant Butte must be delivered, and the deficit is going to continue to climb as we move through the year. That is one of the strange paradoxes of a wet year. We are actually in a lot better shape Compact-wise when we don't have any water. We can expect to be releasing a bunch of that Rio Grande water at the end of the year.

c. Consideration/Approval of Year 2 Legal Counsel Contract Renewals – Mike Hamman, MRGCD CEO

1. Wiggins, Williams & Wiggins – General Counsel
2. Law and Resource Planning Associates – Chief Water Counsel

Vice-Chair Duggins called for approval for Year 2 Contract Renewal for Wiggins, Williams & Wiggins and Law and Resource Planning Associates

Director Dunning made the **MOTION TO APPROVE THE APPROVAL OF YEAR CONTRACT RENEWAL FOR WIGGINS, WILLIAMS & WIGGINS and LAW AND RESOURCE PLANNING ASSOCIATES**. Director Moore seconded the motion. The **MOTION CARRIED** unanimously.

d. Consideration/Approval of Resolution BD-08-14-17-38.12 Open Meetings Act Resolution Revised

There was a lot of discussion on the Open Meeting Act Resolution regarding the start time of the meeting, and formatting of the meetings pertaining to Resolution BD-08-14-17-38.12. Director Lente made a **MOTION TO TABLE RESOLUTION BD-08-14-17-38.12**. Director Moore seconded the motion. Additional discussion was had. **The MOTION CARRIED unanimously**.

e. Corrales Riverside Drain/Romero Road Maintenance Proposal – Mike Hamman, MRGCD CEO

**THIS ITEM DISCUSSION WAS MOVED UP AFTER ITEMS FROM THE FLOOR**

f. Report on the El Vado Value Planning Workshop Denver, CO July 31 through August 3, 2017 – Mike Hamman, MRGCD CEO and Jason Casuga, MRGCD Staff Engineer

Mr. Hamman presented a thorough slide presentation of El Vado Dam with detailed description of each slide.

The El Vado Dam is located 23 miles southwest of Chama, NM. Total storage capacity is 185,770 ac. ft.; Structural Height 175 ft.; Crest Length 1326 ft.; Crest Width 20 ft.; Crest Elevation (El.) 6914.5; Spillway Crest El. 6879.2; Emergency Spillway Crest El. 6906.0; and maximum Reservoir El. 6904.2 (June 4, 1948)

- Construction was completed in 1935 by the Middle Rio Grande Conservancy District. later transferred to Bureau of Reclamation (BOR).
- BOR rehabilitated the spillway, spillway gate, and outlet works in 1957  
BOR constructed the emergency spillway in 1957
- BOR performed additional foundation grouting in 1955 and 1959 to reduce seepage
- BOR replaced the original outlet works with a new outlet works in 1966
- The Los Alamos County Department of Public Utilities constructed a FERC licensed power plant in 1986 utilizing the previously abandoned original outlet works.

The Site Geology – The dam and reservoir are underlain by Cretaceous Dakota Sandstone (Kd) and Mancos Shale (Km)

1949 inspection proposed that the movement of the landslide lobe appears to have contributed to the buckling of the steel plates on the left abutment. The report suggests the landslide was still active after the original construction ended and the movements were large enough to cause the damage to the steel plates.

The Service and Emergency Spillways are currently under corrective action

Recent Incidents:

- November 1, 2011: A large crack was observed in the steel plate during a normal monthly inspection
- The crack was 0.5 to 1-inch in width and was 10 ft. long (6 feet above reservoir)
- Late December 2011: The portion of the crack above the reservoir was welded.
- April 23, 2012: Dye test performed at crack location. Dye was detected downstream within 2.5 hours.
- April 25, 2012: BOR Dive team placed a temporary membrane on the crack below the reservoir. After placement, seepage flows decreased 25% in the 2 ft. flume.
- July 2012: Reservoir dropped low enough to allow welding of the crack.
- Crack was right next to a previous welded crack.
- Probing indicated void beneath open crack about 5 inches deep.

2016 Faceplate Inspection

- A total of 21 expansion joints were traversed from the top of the dam to the reservoir level on October 18, 2017, while the reservoir was at about elevation 6827.0 ft. Of the 21 expansion joints examined, 16 expansion joints had roughly horizontal cracks across the expansion joints. Vertical cracks were less frequent. Most cracks were in or across the trough formed by the expansion joint. (Around 100 deficiencies were documented)
- There were more cracks in the expansion joints on the east side of dam beginning at about station 6+64
- Cracks ranged from barely visible to open about 1-inch. Some had been repaired previously. Cracks at the water surface were accepting water.
- A large number of steel plates/expansion joints were not examined because they were covered by water.

Reclamation Dam Safety Public Protection (DSPR) Category

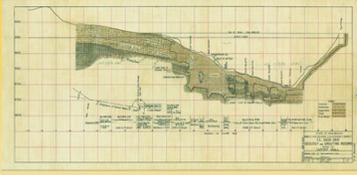
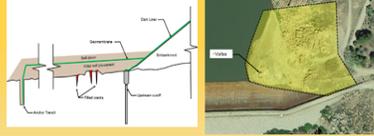
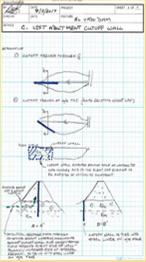
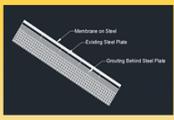
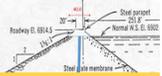
- El Vado Dam is judged to be in the DSPR II (Urgent Priority ) category
- The estimated total static risks are primarily driven by one static failure mode that may manifest during normal operations.

This presentation was to demonstrate that the BOR has done a tremendous amount of monitoring and determined that there are extensive concerns that need to be addressed with the dam safety fixes. Mr. Jason Casuga will give a brief presentation of 13 different options. Mr. Hamman stated that he considers the team in Denver to be a very good technical team who will propose the best solution from a dam safety perspective as well as an economic perspective.

Mr. Casuga advised the Board that he wouldn't be going through all 13 options with today's presentation it would take a lot more time. Mr. Casuga will be talking about Three Foundation Alternatives, and the Foundation Alternatives are specifically targeted at reducing the seepage and, therefore the risk of seepage to the left embankment. The BOR will be doing a feasibility study, and these are specifically the structural alternatives. Mr. Casuga thoroughly discussed each Alternative and how they were scored. Mr. Casuga stated there are other alternatives that were not included with this slide presentation that are non-structural. That was an alternative that the BOR asked Mr. Hamman and Mr. Casuga to flush out.

Mr. Hamman stated the purpose of this presentation was to give a pretty good picture of all the things that everybody is considering with these highly technical strategy sessions to flush out the best alternatives. Sometime this fall the BOR will be doing another risk analysis and then moving into the feasibility study after that. The estimated costs may be between 55-60 million dollars and the MRGCD would be responsible for about 15% percent of that, and at some point the BOR will be coming to the Board to review and sign a contract.

<p>MIDDLE RIO GRANDE CONSERVANCY DISTRICT</p> <p>EL Vado Value Planning Alternatives</p> 	<p>Alternative Development</p> <ul style="list-style-type: none"> <li>• Three Foundation Alternatives</li> <li>• Thirteen Complete Alternatives</li> </ul> <p>2 MRGCD</p>	<p>Foundations Alternatives</p> <p><small>The foundation alternatives are not intended to be stand alone solutions and will be paired with solutions that address the failure of the steel joints.</small></p> <ul style="list-style-type: none"> <li>• Alternative A: Foundation Grouting</li> <li>• Alternative B: Left Abutment Seepage Blanket</li> <li>• Alternative C: Left Abutment Cutoff Wall</li> </ul> <p>3 MRGCD</p>
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<p><b>Alt. A – Left Abutment Grouting</b></p> <p>This alternative consists of grouting the left abutment to reduce the risks of internal erosion along the embankment / foundation contact. Grouting would be completed from the toe of the left abutment along existing grout concrete cutoff wall.</p>  <p>4 MRGCD</p>	<p><b>Alt. B – Left Abutment Seepage Blanket</b></p> <p>This alternative includes construction of a seepage blanket on the upstream left abutment. The seepage blanket would cover the toe of the landslide mass and be constructed with soils excavated from the right abutment for the spillway construction and include a geo-membrane liner.</p>  <p>5 MRGCD</p>	<p><b>Alt. C – Left Abutment Cutoff Wall</b></p> <p>This alternative includes a cutoff wall through either the crest of the dam or along the upstream toe of the dam. The cutoff wall is proposed to reduce seepage through the left abutment landslide mass.</p> <p><b>Option C-1</b> From the dam crest treating both the embankment and foundation</p> <p><b>Option C-2</b> Along the upstream toe at the base of the existing liner.</p>  <p>6 MRGCD</p>
<p><b>Alt. 3 – Membrane on Existing Steel</b></p> <p>This alternative includes placement of a flexible membrane over the existing upstream steel faceplate. It would be mechanically fastened and would seal the existing steel faceplate cracks from seepage. To avoid further damaging deflection to the steel faceplate voids behind the plate should be filled to provide support from hydrostatic pressures.</p>   <p>7 MRGCD</p>	<p><b>Alt. 4 – New Upstream Liner</b></p> <p>This alternative includes removal of the existing steel liner and replacement with a new lining system. The new lining may consist of:</p> <ul style="list-style-type: none"> <li>• Option 4-1 New Steel Liner</li> <li>• Option 4-2 Soil Bedding Layer and Exposed Geomembrane Liner</li> <li>• Option 4-3 Geomembrane and Asphalt Faced Liner</li> <li>• Option 4-4 Geomembrane and Reinforced Concrete Faced Liner</li> <li>• Option 4-5 Geomembrane and Roller Compacted Concrete (RCC) or Soil Cement Facing</li> </ul>  <p>8 MRGCD</p>	<p><b>Alt. 6 – Seepage Cutoff Wall Along Dam CL</b></p> <p>This alternative consists of constructing a seepage cutoff wall from the crest of the dam to minimize the risks of internal erosion through the embankment and along the embankment foundation contact. The wall will fully penetrate the sandstone in the left abutment and will be embedded into the Mancos Shale. The responsible backfill will be a plastic concrete mix to allow for some movement of the wall without compromising permeability.</p>   <p>9 MRGCD</p>

g. Report on Six MRG Pueblo Coalition Meeting, August 3, 2017 – Mike Hamman, MRGCD CEO

Mr. Hamman attended the August 3, 2017 Six MRG Pueblo Coalition Meeting a gave them a water supply update, and talked about the operation and maintenance plans, and talked a little about the concept of hydropower in concert with tribal lands and facilities.

h. Report on NWRA Conference August 8-10, 2017 Santa Fe, NM – Mike Hamman, MRGCD CEO

Mr. Hamman reported that the NWRA Conference was a very good conference. The MRGCD helped sponsor this conference, and there was a lot of thanks given to the District, EBID and the other irrigation districts that participated with this NWRA conference in Santa Fe.

The subject matter was really good throughout the conference. They talked about if you can use federal water to grow marijuana legally in an irrigation district, and the answer is they didn't know. They talked about the Agua Caliente Tribe lawsuit, this is important because it may impact the District down the road, depending on how it plays out in the Supreme Court. It talks about precedents establishing sort of open ended water rights for ground water, for tribes that are making their claims.

John Fleck made a presentation on his book and his perspectives on how the west really has adjusted to water shortages and will continue to do so. There was also discussion on infrastructure and where to get funding; Emergency Preparedness with our levee problems. The Orville Dam disaster was discussed in detail.

The last day a distinguished panel of former commissioners for Reclamation and a former Director of Civil Works of the Army Corps of Engineers where they see things going in the future with Reclamation and the Corps of Engineers.

i. Approved Licenses for June 2017 (For Informational Purposes Only)



**FYI**  
**MEMORANDUM**  
**ENGINEERING DEPARTMENT**

TO: Mike Hamman, Chief Executive Officer  
 Ray Gomez, Engineer Supervisor

FROM: Alicia Lopez, Engineer Tech

DATE: August 10, 2017

RE: MRGCD Licenses

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The following license requests were approved by staff for the month of **July 2017**.

1. SP-025-2017 – License with the Albuquerque Bernalillo County Water Utility Authority to pump potable water into the Los Padillas Interior Drain for water quality compliance purposes.
2. SP-026-2017 – License with the Department of Energy to access the Upper Corrales Levee right of way for one day to park vehicles for radio testing.
3. SP-027-2017 – License with Blue River Productions to use the Griegos Interior Drain right of way to shuttle attendees of the Lavender Festival from parking areas.
4. SP-028-2017 – License with Ajac Enterprise to access the Rio Grande Bosque to conduct river monitoring for the Bureau of Reclamation's silvery minnow project.
5. SP-030-2017 – License with Icebox Productions, LLC to film the television series "Icebox" within the Los Anayas Wasteway right of way.
6. SP-031-2017 – License with New Mexico Underground to discharge groundwater into the Isleta Drain in order to install Atrisco Drive roadway improvements.

**AGENDA ITEM 8 - REPORT(S) FROM THE MRGCD ATTORNEY(S) Chief Water Counsel and General Counsel**

Ms. Wiggins, General Counsel reported on NMDOT vs. C de Baca et al. was action for condemnation of a small parcel of land that was adjacent to an area where DOT intended to expand a bridge location. The question was whether the MRGCD and the BOR had any interest in that very small area. In the meantime the action is going to be dismissed against both DOT and the MRGCD, so we are out of that case.

Ms. Wiggins reported that in the William Turner v. MRGCD et al., case the briefing deadlines have been extended into September. Ms. Wiggins advised the Board that it would probably be a good year or two before the Tenth Circuit rules.

**AGENDA ITEM 9 - REPORT(S) FROM THE MRGCD BOARD OF DIRECTORS**

- a. Report – NWRA Conference August 8-10, 2017 Santa Fe, NM, June 30, 2017 – Chairman Kelly and Director Moore

Director Moore said the NWRA Conference was very interesting, and the networking was very important and they heard about the different problems that are faced with all over the West. Another conversation regarding the Orville Dam failure was very interesting and issues of it eroding, and it was washing out because they had to get rid of the water, and the fear that the dam could bust. They also spoke about tools such as using drones for surveillance. They said that helped tremendously, and maybe this is something for the District to consider. Director

Moore's last thing she stated that was important was setting up an Emergency Public Information, and stated this is something to consider.

**AGENDA ITEM NO. 10 – EXECUTIVE SESSION**

**EXECUTIVE SESSION WAS NOT REQUIRED (General Counsel Reported under Item 8)**

- a. NMSA 1978 Open Meetings Act Section 10-15-1-(H)2
  - 1. Threatened or Pending Litigation
    - a. NMDOT vs. C de Baca, et al.
    - b. William Turner vs. MRGCD et al.

With no further comments, questions or concerns, Director Dunning made the **MOTION TO ADJOURN THE MEETING**. Director Baca seconded the motion. The **MOTION CARRIED** unanimously.

The meeting was adjourned at 5:30 pm.

Approved to be the correct Minutes of the Board of Directors of August 14, 2017.

**Attested:**

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David M. Fergeson  
Secretary/Treasurer

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Glen Duggins,  
Vice-Chair MRGCD Board of Directors