

**MINUTES OF THE
2,199th REGULAR MEETING OF THE
BOARD OF DIRECTORS OF THE
MIDDLE RIO GRANDE CONSERVANCY DISTRICT**

MAY 8, 2023 - 3:00 PM

Directors having been duly notified; Madam Chair Russo Baca called the regular meeting to order at 3:05 pm. The following Directors and Staff were present:

DIRECTORS

Stephanie Russo Baca, Madam Chair	Present
Karen Dunning, Vice Chair	Present
Barbara Baca, Director	Present
John Kelly, Director	Present
Joaquin Baca, Director	Present
Glen Duggins, Director	Present
Michael T. Sandoval, Director	Present

STAFF

Jason Casuga	Chief Engineer/CEO
Lorna Wiggins	General Counsel
Dr. Charles DuMars	Chief Water Counsel
Pamela Fanelli	Secretary-Treasurer/CFO
Eric Zamora	Chief Operating Officer
Anne Marken	Water Operations Division Mgr.
Matt Martinez	Water Distribution Division Mgr.

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

Ernie Marquez, AES	Laura Crosby Meadows	Nolan Meadows
Kathryn Romero	Gus & Deb VandeVelde	Paul M. Torres
Don Simpson	Robert Torres	Gilfred Sanchez
Mark Garcia	Doug Bennett	Anthony Lucero
Nick Lucero	Joe Bob Griffin	Melissa Jaramillo
Damon Fleming	David Schultz	Joshua A. Sanchez
Leroy Baca	Hannah Riseley-White	Mike Mechenbier
Rafael Herrera	Michael Schreck	Martin Haynes
Nelson Romero	Judy & Leo Romero	Mike Silva
Anthony Wagner	Horacio Romero	Carol Benavidez
Chris Torres	Ollie Reed, Jr.	James Sanchez
Rudy Perea	Jimmy Wagner	Robert Sanchez
Troy Richardson	Jessica Richardson	Grace Richardson
James Aragon	John Fleck, UNM	Gerald Padilla
Carolyn Donnelly, BOR	Mike Hamman, OSE	Casey Cordova
Michelle Estrada Lopez, BOR	Josh Hind, MRGCD	Gabrielle Coughlin, MRGCD
Julian Avalos, MRGCD	Tyler Otero, MRGCD	Doug Strech, MRGCD
Ashley Veihl, MRGCD	Rhett Sanders-Spencer, MRGCD	Yasmeen Najmi, MRGCD
Alicia Lopez, MRGCD	Raquel Dawson, MRGCD	Angel Madera Enriquez, MRGCD
Angelina Jimenez, MRGCD	Brittany Bade, MRGCD	Casey Ish, MRGCD
Christine Nardi, MRGCD	Derek Jarner, MRGCD	Julia Maccini
David Gensler	Vipul Shah	Santiago Maestas
Harold Mann	Guy McElvain	Erica DeSmet
Tony Tafoya	Emilio Sanchez	Rusty Swint
John Thompson, MRGCD	Julia M. Dendinger	April Ash
Mark Sanchez	Elaine Hebard	Jennifer Faler, BOR
Jacobo Sanchez	Bruce Gonzalez, MRGCD	Andrew Melendez, MRGCD

AGENDA ITEM NO. 1 – PLEDGE OF ALLEGIANCE

Grace Richardson led the Pledge of Allegiance at today's meeting.

Madam Chair Russo Baca declared a quorum, and this hybrid meeting was publicly noticed with all present including Director Barbara Baca online.

AGENDA ITEM NO. 2 – APPROVAL OF THE AGENDA

Jason Casuga requested to add an item under Item No. 5, being the new 5.a. as the report from the Office of the State Engineer regarding the Rio Grande Compact; and a new item under Item No. 10, being the new 10.d. as the levee coordination update.

Ms. Lorna Wiggins suggested that the Chair take roll call votes as Director Barbara Baca attended telephonically.

Director Kelly made the **MOTION TO APPROVE THE MEETING AGENDA with the above changes**. Seconded by Vice Chair Dunning. Roll call vote was administered, and the **MOTION CARRIED**.

Director Barbara Baca	Yes	Director Sandoval	Yes
Director Kelly	Yes	Chair Russo Baca	Yes
Vice Chair Dunning	Yes	Director Duggins	Yes
Director Joaquin Baca	Absent		

AGENDA ITEM NO. 3 - CONSENT AGENDA

- a. **Consideration/Approval of Payment Ratification – May 8, 2023**
- b. **Consideration/Approval of April 2023 Invoice for Wiggins, Williams & Wiggins**
- c. **Consideration/Approval of April 2023 Invoice for Law and Resource Planning Assoc.**
- d. **Consideration/Approval of the Minutes for the Regular Meeting Board Meeting – April 10, 2023**
- e. **Memo on MRGCD Approved Licenses for April 2023 (For Informational Purposes Only)**

There was no discussion or changes made.

Director Kelly made the **MOTION TO APPROVE THE CONSENT AGENDA**. Seconded by Director Sandoval. Roll call vote was administered, and the **MOTION CARRIED**.

Director Barbara Baca	Yes	Director Sandoval	Yes
Director Kelly	Yes	Chair Russo Baca	Yes
Vice Chair Dunning	Yes	Director Duggins	Yes
Director Joaquin Baca	Absent		

AGENDA ITEM NO. 4 – CONSIDERATION/APPROVAL OF 2023 MRGCD ELECTION FORMAL DOCUMENTS – Eli Lovato, Election Director and Election Committee and REPORT OF THE ELECTION COMMITTEE MEETING, April 25, 2023 (Director Sandoval and Vice Chair Dunning)

- a. **MRGCD Election Calendar**
- b. **MRGCD Election Rule 20**
- c. **Resolution of the Notice of Election & Proclamation**

The election director, Mr. Eli Lovato, had a death in the family, so Ernie Marquez addressed the board. He stated that he and the election team met to review and revised the election calendar based on the law that was passed during the legislative session. With the help of MRGCD's

general counsel, Ms. Wiggins, both Rule 20 and the notice of election and the proclamation was revised to reflect the new dates.

Jason Casuga reminded the board that the legislation that was passed as part of the sixty-day session was legislation to delay the implementation of the Local Elections Act. He stated that the local Elections Act was still law, and as part of the Local Elections Act, there were large portions of statutes that were deleted as part of that so what the bill to delay implementation did is it allowed the Middle Rio Grande Conservancy District, to publish its sets of rules for the election. He mentioned the process of reviewing Rule 20, and striking out all the individual state statute locations because many of them were overwritten by the local elections act and those become rules of the MRGCD for this year. They're not statute anymore since they don't exist anymore.

He continued to say if the rule was compared now versus what it was before, the changes are really to make it easy to see what is still in law, and then what is clearly rules that MRGCD have used in the past and will continue to use for this election. He reported different changes like the fact that the election will not be held in June. The legislation to delay the Local Elections Act published a date as our election, and that is Tuesday, October third.

Director Kelly updated the public to the different deadlines for the upcoming election and the requirements for the candidate forms and repeated the election date.

Vice Chair Dunning, one of the members of the election team, which includes those board members that are not a part of the election, said she would have liked to make more changes to Rule 20, but unfortunately it could not happen and felt the election in 2025 will be a new ballgame.

Chair Russo Baca made the **MOTION TO APPROVE THE ELECTION COMMITTEE MEETING REPORT.** Seconded by Director Kelly. Roll call vote was administered, and the **MOTION CARRIED.**

Director Barbara Baca	Yes	Director Sandoval	Yes
Director Kelly	Yes	Chair Russo Baca	Yes
Vice Chair Dunning	Yes	Director Duggins	Yes
Director Joaquin Baca	Absent		

Director Kelly made the **MOTION TO APPROVE THE ELECTION CALENDAR AS PRESENTED; TO APPROVE THE ELECTION RULE 20 AS MODIFIED TO BE IN COMPLIANCE WITH CURRENT LEGISLATION AND TO APPROVE THE RESOLUTION BD-05-08-23-54 PROCLAMATION OF ELECTION.** Seconded by Chair Russo Baca. Roll call vote was administered, and the **MOTION CARRIED.**

Director Barbara Baca	Yes	Director Sandoval	Yes
Director Kelly	Yes	Chair Russo Baca	Yes
Vice Chair Dunning	Yes	Director Duggins	Yes
Director Joaquin Baca	Absent		

AGENDA ITEM NO. 5 – UPDATE ON THE 2023 IRRIGATION SEASON

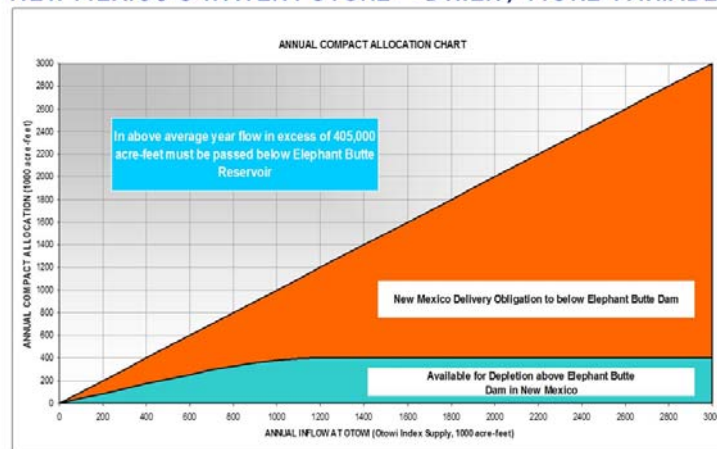
a. Report from the New Mexico State Engineer – Mike A. Hamman, PE

Mr. Hamman came to discuss the issues of the Rio Grande Compact, associated matters with managing the compact, and also to discuss the Texas v. New Mexico proposed consent decree to the extent that he could.

He gave an overview of the compact saying it was put in place back in the late 1800s, and going into the early 1900s, farmers moved into the San Luis Valley and appropriated a bunch of water. It started creating many shortages in the middle rio grande and down in the lower rio grande below Elephant Butte when Elephant Butte was already under construction. As a result of Bureau of Reclamation project that that needed the reservoir to meet the needs of 2 large irrigation districts and also to meet the Treaty of 1904 to the Republic of Mexico. For 60,000 acres of land in Mexico, with those shortages that were showing up many things were happening. There were problems in the Middle Rio Grande associated with sedimentation, and then, of course, major floods, a number of issues, and that was one of the reasons why the Middle Rio Grande Conservancy District was formed under the Conservancy Act in 1923 in order to address those specific issues, but it was tied also to work being done in the Rio Grande compact to address the shortages that water supply, the rapid development of irrigated lands in Colorado were causing on senior users down below so essentially the compact was put in place to protect senior water users all the way down to Mexico.

He reported on the joint investigation of many technical teams and the history of the first river gauge at Embudo as well as others to help measure flow requirements to deliver water to New Mexico

NEW MEXICO'S WATER FUTURE = *DRIER / MORE VARIABLE*



He explained on the chart, the turquoise bar on the bottom is what New Mexico was entitled to deplete under the compact, and that it flattens out right around 1.1 million acre feet. The orange line departs rapidly from the turquoise bar for the amount of water that needs to flow downstream, and fundamentally, that means at some point on that curve every acre foot that when that line goes flat every acre foot that flows by the Otowi gauge must also show up at Elephant Butte. He continued to say what shows up at Elephant Butte has two things: what's flowing in the river that actually gets through San Marcial and over to what they now call the Narrows Gauge. The Narrows River Gauge, which shows because the lake is so low there's a spot between the upper lake and the lower lake they call the Narrows. That's where you could see what the flows are going into the reservoir right now, and once that line goes flat, 100% must be delivered, and of that any water that arrives by monsoons or rains or return flows in the middle rio grande is also counted towards that. He said everything that you can get through the river, everything that you get through rains and return flows also pull together at the lower end,

to be measured at the Narrow's gauge, and technically, what's also being measured is the evaporation at Elephant Butte that New Mexico must absorb is part of the overall compact requirement. He stated what occurred in the early 2019 period was a year just like this and that's how New Mexico started to get into debit status.

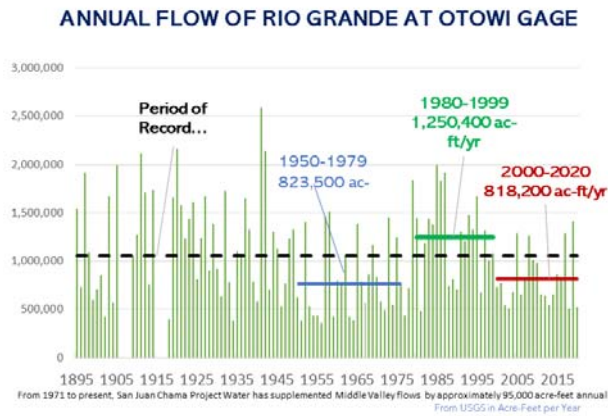
He reported that there are three articles of particular significance of the compact, being articles VI, VII, and VIII which define exactly what New Mexico owes to Texas, and how debits and credits are derived. He said New Mexico has had debits and credits. He stated it's all based on the amount of water that arrives at Elephant Butte, and the amount that's required to deliver off of that Otowi index. If we're in debit status, nothing can be stored above the Otowi gauge in post compact reservoirs, unless the amount of water that is intended to be stored is held in debit to the compact. In other words, with El Vado being a post compact reservoir it could theoretically store a certain amount of credit, and it can store a certain amount of debit. When debit is stored under the compact it's locked in storage until such time as the State of Texas calls for that water. There's multiple levels of criteria that go with that and a decision can be made to store that water in New Mexico if additional storage can be stored on top for the benefit of the water users. This year could have been a year where that could have happened. El Vado is currently under construction, so storage is not allowed until such time as construction is completed. He said if it had been available for storage we could have stored the 93,000 acre-feet that is currently in debit. We could have stored an additional when the dam is completed another 90,000 acre-feet .

He went on to say under those three articles New Mexico is allowed to go into debit, and also they approve credits that can be traded for use in Elephant Butte-Caballo. He explained when you're in Article VII, which is when the state can actually use water under the restrictions; article VII is the restriction of 400,000 acre feet, total storage, in Elephant Butte that prohibits storage in New Mexico, unless you have credits. He stated we've used those credits in the late 2000's, and going into the 2015 period actually, and were able to utilize credits for multiple years.

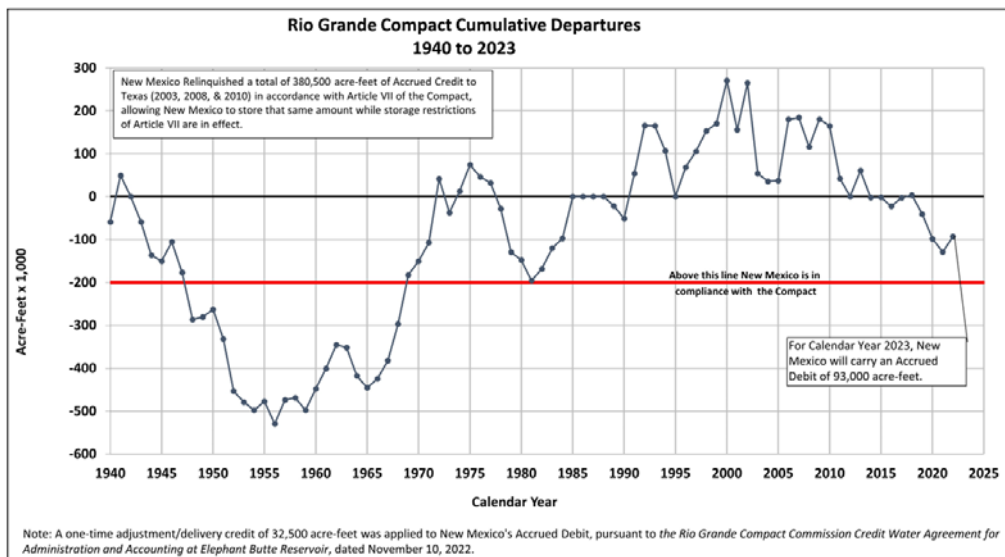
He reported today's debit started in 2019 with a year very much like this year, where we have a high flow coming down the river, and that graph shows that if you get more than a million acre feet at Otowi the delivery requirement goes exponentially higher. And in 2019 we had a total flow of about 1.3 million acre feet at Otowi, and we had to deliver a little over 800,000 acre feet to Elephant Butte and that year we came up short because of monsoons did not develop, and that was the very first year we got into debit, and it was a very high year like this. These high years cause more trouble in that respect for the middle valley, even though there's much water in the system, you would think you know, there's no problem but it actually creates more of a demand to get water down to Elephant Butte. He felt that's something that we've got to really look at in high years like this.

He spoke about the low years where we didn't get any monsoon rains in 2019 or 2020, 2021. Last year we did and actually met our compact demand, and we gained a little bit against it. The other thing that happened is we got credit through our negotiations with Texas. We got credit of an additional 36,000 acre feet. Our credit was over delivered to Texas, and they paid us back. He reported we now only have 93,000 acre feet of debit. But we want to get it down to something well below 50,000. So when El Vado is ready to store water, which is super critical to our summer, releases our needs for farming and for environmental purposes, we need El Vado for the late summer. Without it we're going to continue to be in this problem of continual debit and not being able to store, which he felt will perpetuate the problem. He said that this is an important concept that he believes the MRGCD is well aware of and is doing their best to try to help minimize our debit from year to year.

He discussed the annual flows of the rio grande at the Otowi Gage.



He reported on the rio grande compact which is called the cumulative departures from 1940 to 2023. He explained the redline depicts a 200,000 acre feet of under delivery total which is a violation under the compact.

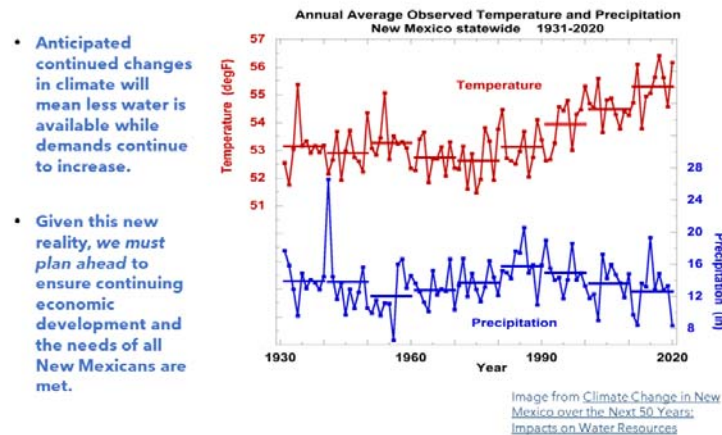


The chart shows in the 1950s though 1979, it was right around the 800,000 average during that low period for water use, we went into significant debit, then we came out of it with very high flow years. Those were the golden years for water availability. During the drought we dropped down. We were in violation of the compact for years, and during that time the United States built the Low Flow Conveyance Channel that allowed for more rapid deliveries of water down to Elephant Butte and several things happen during that period. They were channelizing the river, they put in jetty jack systems that started even before that and created a 600 foot wide channel. He said they managed the river in a different way than they did before, and a bit different than it is now. That helped get New Mexico out of debit over time.

Note: Director Joaquin Baca arrived at the meeting at this point.

He said we still have residual credit that we hope we can use at some point in the future. We are now out of Article VII, both Elephant Butte and Caballo reservoirs are up over 400,000 acre feet and are expected to be over that for the entire irrigation season. If we can store a little and work with it that way relative to our debit situation, then we have that tool available to the State. He said they expect, however, that this year we'll have a large delivery requirement. Probably in the neighborhood of 700,000 acre feet, depending on what the total flow of Otowi is and whether we make that delivery or not hinges on how much monsoon events that we have, and the efficiency of delivery that we're doing right now, we're getting about 65% delivery down to Elephant Butte at the moment with the operations that the District is currently doing. He believed if we could maintain a 65% throughout the rest of the runoff, that would be fabulous, and that would go a long ways towards us meeting our compact deliveries.

NEW MEXICO'S WATER FUTURE = *DRIER / MORE VARIABLE*



He said they expect long-term temperatures to go up due to global climate issues and we expect certain amount of precipitation to continue to vary just like it has historically, what type of precipitation is it going to be as the climate warms? Well, we are already having issues with shorter snowpack periods. We see that already, since the late 1980s snowpack periods are shorter. Spring runoff is shorter. We're already starting to see impacts due to about a 2 to 3 degree temperature increase that we've seen so far. We've had scientists analyze this from Mexico, and we expect, as temperatures rise it's going to take more water to grow the same crop. Higher temperatures require additional water for crop production. It's also going to evaporate more off the atmosphere and the riparian corridor of the Rio Grande will use more water. He felt that we've got to get creative, to understand where we're going as a community and as a state and one of the jobs that he's been given is to help prepare New Mexico for this change in water supply conditions over the long term possibly a decade or two out where it's going to be a real challenge for us on a recurrent basis.


b. Report on the Water Supply Conditions – Anne Marken, Water Ops Division Manager

Ms. Marken reported that they are seeing elevated flows into the middle valley. La Puente gage on the Chama is reporting 3200 cfs. Otowi gage, above Cochiti reservoir, is 5200 cfs and climbing. Even the Jemez River, below Jemez Canyon Dam, is reporting 280 cfs, which is

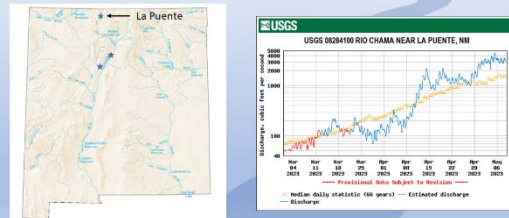
normally down to 60 cfs this time of year. All the water we are seeing in the Rio Grande, and its tributaries, is due to the exceptional snowpack conditions in the Basin. The Cumbres Trestle SNOTEL gage peaked at 41.2 inches in early April. Today, the Cumbres Trestle has 28.4” of water, not snow depth but water, waiting to move. That puts the Cumbres Trestle at about 161% of median conditions for this time of year. The Rio Chama and Rio Grande Basins overall have above median conditions as well, the Rio Grande Headwaters conditions are at 111% of median, the Upper Rio Grande is 226% of median, and the Upper San Juan Basin, where MRGCD’s San Juan Chama water comes from is 214% of median. With the amount of Snow Water Equivalent in the mountains, I expect runoff to last into at least early July.

Water Supply Update

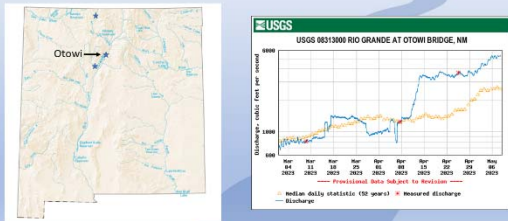
Anne Marken
Middle Rio Grande Conservancy District Board of Directors Meeting
May 8th, 2023



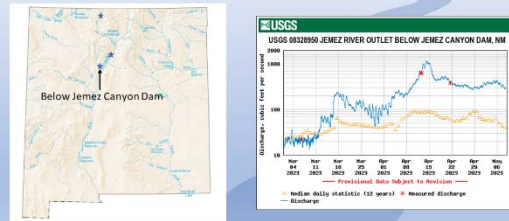
USGS Rio Chama Near La Puente



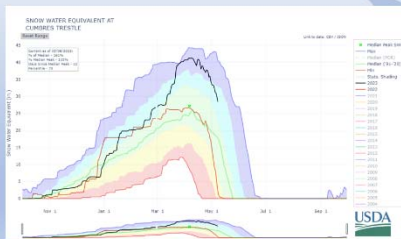
USGS Rio Grande At Otowi



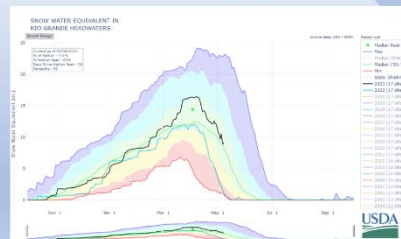
USGS Jemez River Outlet Below Jemez Canyon Dam



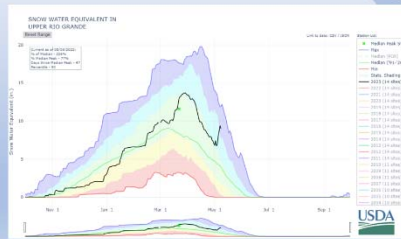
NRCS Cumbres Trestle SNOTEL Station



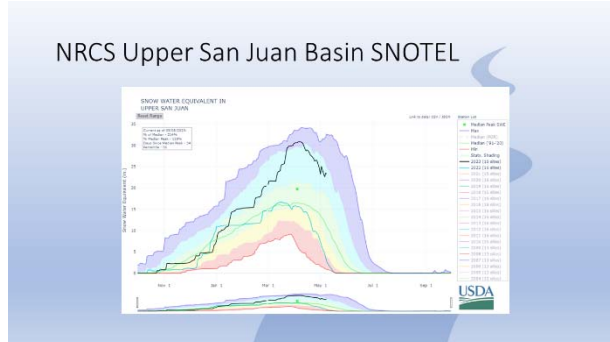
NRCS Upper Rio Grande Headwaters SNOTEL



NRCS Upper Rio Grande SNOTEL



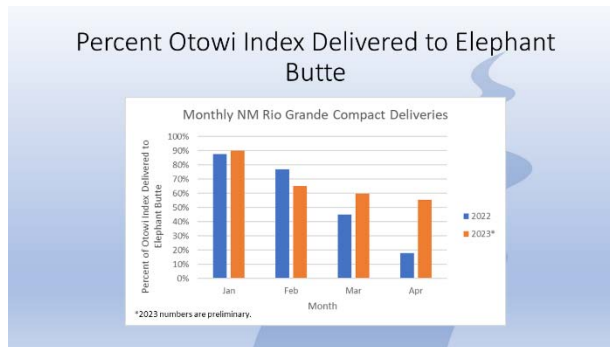
The NRCS released its May 1st forecast, which has been revised down from the April 1st forecast, due to some dust on snow observations in the mountains and a dryer-than-anticipated April. However, the March-July forecasts are still projecting above median flows. El Vado inflow is forecast for 295K acre-feet or 159% of median conditions and Otowi is forecast to be 690K acre-feet of native inflow which is 122% of median.



Even with these flows, the MRGCD is still not able to store water. In short, that is due to federal construction at El Vado dam and New Mexico's water debt to the state of Texas under the Rio Grande Compact. However, 14K acre-feet of native water has been stored in Abiquiu for Prior and Paramount lands of the Six Middle Rio Grande Pueblos, and the US Army Corps of Engineers is storing native water in Abiquiu because of channel capacity concerns downstream of the dam.

However, wet years can present an unfortunate juxtaposition. At this point in runoff season, she expects New Mexico to struggle to meet Rio Grande Compact delivery obligations at the end of the year. This is normal for wet years. When the river overbanks from the main channel, and spills into the floodplains, the middle valley experiences higher losses associated with that overbanking. With that in mind, the MRGCD has pivoted its strategy and is now diverting as much water as needed to meet irrigation demand, while the river continues overbanking. This strategy is a shift from the 80% demand curve the MRGCD committed to earlier this year. The MRGCD originally implemented that strategy to maximize deliveries to Elephant Butte and minimize New Mexico's Rio Grande Compact debt.

She believed those efforts were meaningful. By the end of April 2022, New Mexico had already begun to fall behind on its deliveries to Elephant Butte. However, by the end of April this year, New Mexico had over-delivered about 15,000 acre-feet to Elephant Butte. Which, as these numbers show, puts us into a better position than we were in this time last year.



Taking a look at current diversions, MRGCD diversions are about 700 cfs, which is typical for this time of year. MRGCD's riverside drains are full, which adds to the supply available for delivery to farmers. The river is backing into wasteways in the Belen Division, which limits the MRGCD's ability to shed excess water from its canals. The high drain flows are evident in areas

staff. He learned that members of his team were operating on a fixed 21-day rotation. For the record, he said we do not teach our staff to operate on a fixed rotation. The factors that determine irrigation intervals are supply, demand, and efficiency. He said his staff is taught to operate equitably, efficiently and with flexibility to expand and contract with the water supply.

He said one of the things they've reiterated to operators and supervisors, as Ms. Marken announced earlier, scheduling is demand based until further notice. Diversions have been adjusted to meet the demand. Higher main canal flows enable quick adjustments to laterals and acequias to move water where it is needed. On/off canals will be operated more frequently. Traditional 3–5-day advanced notice scheduling has been implemented. Irrigators who have grown accustomed to being called by the Irrigation Systems Operator (ISO) when water is available should take the initiative to contact the ISO to request water. He said that irrigators who have issues scheduling may call him or email him.

He went on to summarize the operations in each division. He stated he understands the frustration of seeing a full river in April but not seeing all the canals full. During rotational scheduling, we tell the Irrigation System Supervisors how much they must work with. Now, during demand scheduling, supervisors get to tell us how much they need. It is still important we are responsible with water use. Check structures must be operated, monitored, and adjusted very carefully with more water running through the irrigation canals and drains. I am confident that May and June will be much better, stressed farmers will get relief, and thirsty lands will get a good drink of water. I'd like to conclude by addressing a comment at the Farmer's rally this morning. Farmers are demanding transparency in water deliveries. Next board meeting there will be a demonstration of the logbook application to show the actions that have been taken to establish transparency in water delivery records.

Jason Casuga added regarding transparency that this will be the last year for the trial and testing of the application. He reported it will be deployed District wide which will provide a water delivery on a real-time basis. This application will show the number of irrigations by property. He thought if a property gets a delivery it will turn green and then, when you're 14 days out, your property will turn green, and then, when you're 18 to 20 days out, your property will turn a different color and so we will start to be able to see but everybody in the valley will be able to see everybody's water use.

Director Joaquin Baca added a note at this time, he had to leave the meeting early due to family obligations but said he was in support of the mill levy increase.

AGENDA ITEM NO. 6 - ITEMS FROM THE FLOOR (COMMENTS ARE LIMITED TO SIX (6) MINUTES)

Mark Garcia

Mr. Garcia, a farmer from Valencia County, thanked the board for the opportunity. He stated he was here with association of farmers from Sandoval, Bernalillo, Isleta, Valencia and Socorro. He said he appreciated the data today. He continued to tell a story regarding a fellow farmer so disheartened and frustrated that he may quit farming due to many factors including the District's lack of communication regarding water delivery, the full river and the many questions for the farmer.

Anthony Lucero

Mr. Lucero is a farmer from the Isleta Pueblo who discussed the different problems regarding their ditches, maintenance and other matters such as gophers. He requested that they need more help and suggested that the board come out to the ditch banks and see the issues themselves.

Leroy Baca

Mr. Baca, a farmer from Tome, said they are passionate about what they do. He stated they don't understand when we see a lot of water out there, but yet none of these waters went through the ditches. He felt there's many issues as farmers spend money on very expensive tractors, seed everything but what he really wanted to do is tell the board the things that have been identified as issues, while the major issue is the little amount of water that is flowing to the ditches. He said the other issues were the maintenance of the ditches; he felt management is not what it should be and defending the native Americans when they are not subject to the rio grande compact.

Erica DeSmet

Ms. DeSmet, a Bosque Farms resident, assured the board that the earlier event was one of many tractor convoys and peaceful protests. She stated if we, as farmers, continue to lack representation from all. She said they need water to continue to survive and hand down our legacies of farming to our children and their children's children. She felt it's about complete lack of management of water resources and lack of representation for New Mexico farmers. She stated she was unsure that the CEO if, when he was hired, was handed a list of duties and on that list was to represent New Mexico farmers. She asked the board to look around the room to view who he represents as she felt he's forgotten that. She said she was asked to be a speaker at this meeting and did some research on the issues that meant the most to her. She said the MRGCD has had an increase in labor with a decrease of representation and services to farmers. However, there has not been an increase in acreage service area or an increase in the number of ditches in the middle rio valley which she asked where everyone was. She stated she will return in 30 days with her list.

Troy Richardson

Mr. Richardson manages 650 acres in Belen. He stated he's a business owner, whose business is directly connected to the agricultural industry, and a Valencia County commissioner as farmers. Our livelihoods rely on our water without water, our agricultural communities ceases to exist without agriculture, our economy fails our food supply dries up our health declines our ecosystem collapses, and our very existence is threatened. The farmer is the heart and soul of our society in New Mexico, agriculture employs over 250,000 people. This includes farm labor and businesses that rely heavily on the agricultural industry. Unfortunately for many years this has not been a reality. Irrigation season begins on March first, and ends on October 30, but over the last several years irrigation season has been delayed by up to several weeks. He continued on regarding El Vado, the start-up plan, and the maintenance of the ditches. The MRGCD also works in cooperation with other state, local, and Federal agencies, to protect the environment, wildlife and endangered species, even according to their own mission statement, delivering irrigation water is at the top of the list this should be the priority of the board and the department. He stated that they demand that MRGCD abide by their mission.

Jessica Richardson

Ms. Richardson works for her family's agricultural business in Socorro, Valencia and Bernalillo counties. She gave the board the following handout

Farmers For Future Farmers

Since 2015, the farmers in the Rio Grande Valley have struggled with the mismanagement and disorganization of the MRGCD. For years, grievances and concerns have fallen on deaf ears. The farmers are the stewards of the ecosystem of the valley, and we no longer trust the MRGCD to manage our invaluable resources to maintain and conserve our farmland for future generations. Farmers from Socorro, Valencia, Sandoval, and Bernalillo counties, as well as Isleta Reservation, have united to hold the MRGCD accountable for their actions and demand rectification on the following issues:

- We demand a seat at the table. The MRGCD is charged with making decisions which directly impact our livelihood. Those decisions are made without the knowledge or representation of the farmers. Decisions on water diversions, irrigation schedules, maintenance and repairs are all made by a group of individuals, the majority of which have no knowledge or education on farming practices. We demand to be included in these discussions so that informed decisions that will benefit the agricultural community and directly impact the farmers can be made.
- We demand transparency. Issues and developments with the Rio Grande Compact 2014 Lawsuit settlement negotiations should be communicated with our association. We demand to be informed throughout the process of all products of these negotiations. The outcome directly affects our livelihood and the livelihood of future generations.
- We demand accountability. The bloated administration within the MRGCD is absurd and preposterous. According to the conservancy's own records, in the fiscal year 2021, \$14.1 million of a total \$22.9 million of expenditures was employee salaries and benefits. This equates to 61.7% of the total budget of the MRGCD. We are now being asked to pay more in taxes for infrastructure projects which you claim to not have enough money to complete. We demand a decrease in overall payroll within the MRGCD for staff within the bloated administration.
- We demand action. The maintenance on our infrastructure is completely non-existent. Dredging on our ditches has not occurred since 2015. Leaking checks and broken turnouts that have been reported several times over the years are ignored and forgotten. Trash, weeds, and debris removed from culverts and checks are left on ditch banks creating fire hazards and habitat for pests, sometimes for years. These issues have all been brought to the attention of conservancy staff numerous times by many and continue to be ignored.
- We demand organization. Water schedules are one of the most imperative aspects of farming, and should be made public. Every ISO's log book should be available to view online. Accountability and reliability are paramount. Crop programs rely solely on the irrigation scheduling, and we demand that these schedules be made carefully and concisely with consideration for crop rotations and crop sensitivity. During water shortages, scheduling should be done with communication and cooperation with the farmers. During years of abundance, farmers should have reasonable access to our precious water.

Farmers For Future Farmers is dedicated to preserving our agricultural lifestyle and protecting the greenbelt of the Middle Rio Grande Valley. We are no longer going to allow the conservancy and this board to dictate the future of our farming community.

No Farmers...No Food...No Future

Rudy Perea

Mr. Perea, a Corrales resident, questioned the mill levy increase and spoke on the Corrales siphon. He felt that the attorney general should do an audit of the MRGCD.

Tony Tafoya

Mr. Tafoya is also from Corrales and stated that his father was a ditch rider for 20 years and said they ran the entire system single-handedly for the last 8 or 10 years. He pointed out that there's been 2 ditch riders and less farm. He spoke about the lack of water delivery, the pumps and he believed they could be funning water through two ditches.

Mike Mechenbier

Mr. Mechenbier stated his family has been farming for over 55 years. He stated he knows what water shortage is and has tried to change his practices the last couple of years. He said he has

8 ditch riders and 5 our new. He discussed the various issues with communication, water delivery and infrastructure failures.

Emilio Sanchez

Mr. Sanchez said that they farm a few 1,000 acres down south to Feeder No. 3 and across New Mexico. We're aware of the drought. He mentioned farmers like anyone else has to keep a schedule. There are some good ditch riders who do schedule but if they don't have the water, then they cannot maintain a schedule. He mentioned the high cost for fertilizer, diesel and the lack of labor in the state. Due to no water, he suggested diverting water from other means such as the New Belen or the Tebow because no one can survive on 60 cfs. He said it's very hard to see no water in the ditches being delivered.

Anthony Wagner

Mr. Wagner represents Wagner Farms in Corrales which is still having issues. He reported that they apple trees that are 50 year old trees. They've lost some trees last year because of the drought. He stated it's hard to see the water in the river and felt waiting 3 weeks for water is too long. He felt they had to go to the media to share their misfortune.

Santiago Maestas

Mr. Maestas is with the South Valley Regional Association Acequias. He spoke on behalf of Armijo Acequia. Eddie Baca, Commissioner, was unable to attend today's video. He updated the board on their efforts to restore irrigation to the Rogers lateral. He stated they're pending a preliminary hearing on the fifteenth on the charges that were leveled against Adriana v. Bar for interfering with the acequia. His understanding is, after last month's meeting, the District sent a letter requesting that she allow the District to enter her property in order to repair it again. He hoped that know whether she responded positively or not and what action will be a District take if she hasn't, in order to try to get the water into this season on that ditch.

Glen Duggins

Mr. Duggins thanked everyone for attending. He felt that it's a good thing to participate and continue is the best thing that the education that I received being board member help him to understand better. He said they know that the District has some infrastructure problems and that the District hears you, we're working on it. He felt there's much good in this conservancy within the employees within the staff and gave an example of a ditch break, and he's seen a line of trucks running 24 hours a day. These men and women building those ditches where there's nothing to build it from and they get it done in. He said he's not trying to diminish the problems that we face that his ditch runs over, too. There's work to be done, but there's good people here, and he wanted to make sure that the people know that, and not ever forget when the canal breaks, the machines are running.

Chair Russo Baca called for a short recess at 5:45 pm. During the break, Madam Chair had to leave due to family obligations, therefore Vice Chair Dunning managed the remainder of the meeting.

Director Duggins made the **MOTION TO CONTINUE THE MEETING**. Seconded by Director Kelly. Roll call vote was administered, and the **MOTION CARRIED**.

Director Barbara Baca	Yes	Director Sandoval	Yes
Director Kelly	Yes	Chair Russo Baca	Absent
Vice Chair Dunning	Yes	Director Duggins	Yes
Director Joaquin Baca	Absent		

AGENDA ITEM NO. 7 – PROPOSED MILL LEVY INCREASE

a. Presentation of the FY24 Budget – Pamela Fanelli, CMA, CGFM

Ms. Fanelli was here to present the FY24 budget for the board’s review and approval, as presented in the Op-ads that the District placed. She reported that infrastructure failures, and near failures in this near century old gravity-driven irrigation system have impacted our ability to keep our system functioning, to meet irrigation demands and ecosystem needs along the Rio Grande. She continued by saying the current operation budget barely covers the cost of routine operation in maintenance. Failing infrastructure has become our most significant challenge in these water short times. She presented in the five-year forecast presentation, the District has budgeted for deficit budgets the last 2 years, fiscal years in fiscal year 2022, and in fiscal year 2023. These budgets were mainly due to related failure of infrastructure or purchases of capital equipment.

FY2022	FY2023
Budgeted deficit - \$(2,089,376)	Budgeted deficit - \$(2,189,477)

The District has presented a deficit budget to the Board two years in a row for fiscal years 2022 and 2023. The deficits were mostly due to budgeted expenditures related to failure of infrastructure or purchases of capital equipment.

The District has assessed the capital needs throughout the MRGCD, including efficiency improvements, water conservation measures, siphon rehab, real-time flow measuring canal structure, rehab and bosque and river restoration projects to meet our endangered species commitments. She said they've identified 175 million in priority projects that need to be planned, designed, permitted, and built. The slide above is a list of the projects that are on the priority list that we presented this in the 5 year forecast. This presentation will be posted on the District website.

Capital Investment Planning

The District has assessed capital needs throughout the MRGCD, including irrigation efficiency improvements, water conservation measures, siphon rehab, real-time flow measuring, canal structure rehab, and Bosque and river restoration projects to meet our endangered species commitments, and has identified \$175,000,000 in priority projects that need to be planned, designed, permitted and built.

Cost of Capital Investment Projects On the Priority List

Priority	Project Name	Year Built	Year(s) Rehabbed	Estimated Project Cost
1	Corrala Siphon	Design Drawings 1933	Back View 2018, West Extension 2020	8,500,000
2	Bosque Main Canal Channel Lining			65,500,000
3	El Vado Rolling Basin	1933, 1934	Outlet Works 1970's, Power Project 1985	3,500,000
4	Bosque Siphon Exploratory Condition Assessment	Rehabbed 1933, Siphon 1959		500,000
5	Feeder 2 Pump Station			6,500,000
6	Bosque Highline Replacement Project			15,000,000
7	Bosque watershed study project			720,000
8	Corrala Dam Rehabilitation Bridge			250,000
9	Levee Road Intersections			1,000,000
10	Bosque Drain 208-447 Culvert	1995	Extension 1978	1,000,000
11	ASUV/San Lorenzo Arroyo Culvert Concrete			5,000,000
12	1914 Bridge			10,000,000
13	Bosque Dam Gate Automation			1,000,000
14	Bosque Bridge Design	1934		830,000
15	Water Measurement Structures (W Structures)			5,400,000
16	San Antonio Dam Gate Automation			1,500,000
17	Turnout Upgrade			24,000,000
18	Records Building			1,200,000
19	El Vado Dam Rehabilitation (10% Non-Fed Cost)	1933, 1934	Outlet Works 1970's, Power Project 1985	22,500,000
Total Capital Investment Projects - Priority List				\$ 175,000,000

She said in March the District presented the five-year forecast, and we highlighted our lack of funding to repair and replace aging infrastructure and equipment.

In April, the Board approved a motion to allow the budget team to build the FY2024 budget with the assumption of a 1 Mill increase dedicating it strictly to capital investment, debt service and District match on grants.



El Vado Dam

She reported in April the board approved a motion to allow the budget team to build the fiscal year 2024 budget with the assumption of a one-mill increase, dedicating it strictly to capital investment, debt service and District match on grants.

Mill rate impact analysis For FY2024-FY2027

- For each 1 mill increase, ad valorem will increase by \$4,300,000 million per year.
- If the District had to pay for the Capital Investment and Operational projects planned;
The District would need to increase the mill rate by 3 mills beginning in FY2024.
- If we get \$26,000,000 in grants;
We only need a 1.46 mill increase
- If we get an additional \$7,700,000 in loans, plus the \$26,000,000 in grants;
We only need a 1 mill increase

She said For FY2024-2027, for each one mill increase, Ad Valorem would increase by \$4.3 million per year, and if the District tried to pay for the capital investment in operational projects planned on the list, we would need to raise the mill rate by 3 mills beginning in fiscal year 2024. However, if we get \$26 million in grants, she said they only need to raise the mill rate by \$1.4 million, and if we get an additional, almost \$8 million in loans plus the \$26 million in grants, then we only need a one mill increase.

What If We Just Apply For Grants and Loans?



If the District just applies for grants and loans, the projected deficits are approximately \$4 million per year. We need the additional mill to pay for District match on grants, debt service, and capital infrastructure projects.

FY2024 Budget

For the Fiscal Year 2024 budget, the District increased the mill rate by 1.0 mill dedicating it to a Capital Fund to strictly pay for capital investment, debt service, and District match on grants.

This year the budget is separated into two funds, the General Fund and the Capital Fund.

Capital investment: money that is invested in infrastructure and equipment for use in furthering the mission of the MRGCD. Sources can be taxes, loans and grants.

Debt service: principal and interest and associated fees result from loan proceeds that are required to be paid back to the lender. The capital fund will pay debt service related to proceeds on capital purchases.

District match on grants: funds will be used from the capital fund for required match on grants.

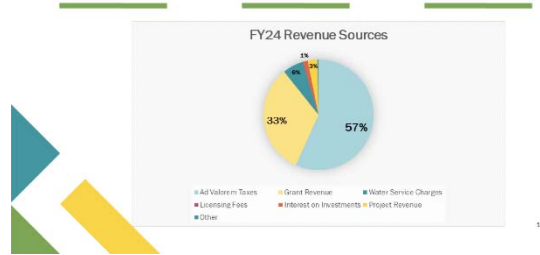
For the fiscal year 2024 budget, the District did raise the mill rate into our budget, and we dedicated it strictly to a capital fund to pay for capital investment, debt service, and District match on grants. She said this year the budget is presented into two funds: the general fund and the capital fund. She then explained the definitions for capital investment, debt service, and District match on grants.

FY 2024 Budget Summary

GENERAL FUND			CAPITAL FUND	
	FY24	FY23		FY24
Revenues	\$38,538,509	\$34,311,531	Revenues	\$4,187,483
Cash Reserves	0	2,189,477	Loan Proceeds	2,970,155
Expenses	(38,538,509)	(36,501,008)	Expenses	(7,123,583)
Surplus	\$0	\$0	Surplus	\$34,000

Raquel Dawson, the District's budget analyst, reported that the general fund shows a balanced budget with revenues and expenses budgeted at \$38.5 million, whereas in fiscal year 2023, the District used cash reserves of \$2.2 million. In the capital fund, she reported that the District has a budget of \$4.2 million in revenues, \$3 million in loan proceeds with expenditures of \$7.1 million, resulting in a surplus of \$34,000.

Revenues – General Fund FY2024



She then presented the District’s fiscal year 2024 revenue sources. Ad valorem taxes account for 57% of total budgeted revenue. Grant revenues represent 33% of total budget revenue. In prior years, specifically fiscal years 2019 through 2022, grants were only 6% of budgeted revenue.

Revenues – General Fund FY2024

Description	FY2023 Budget	FY2024 Budget Request	Incr (Decr) FY24 over FY23	% Change
Ad Valorem Taxes	21,335,000	21,664,134	329,134	1.54%
Ad Valorem Interest	245,000	220,000	(25,000)	-10.20%
Water Service Charges	2,317,500	2,317,500	0	0.00%
Water Bank Fees	25,000	30,000	5,000	20.00%
Licensing Fees	88,000	83,000	(5,000)	-5.68%
Interest on Investments	55,000	500,000	445,000	809.09%
Project Contract Revenue - Federal	757,988	757,988	0	0.00%
Project Contract Revenue - Local	218,752	222,797	4,045	1.21%
Operating and Capital Grants	8,156,691	12,509,490	4,352,799	53.36%
Soils Lab Revenue	190,000	6,000	(184,000)	-100.00%
Other	97,600	92,600	(5,000)	-5.12%
Transfer Revenue	700,000	-	(700,000)	-100.00%
Equipment disposition proceeds	25,000	35,000	10,000	40.00%
Total revenues	34,311,531	38,538,509	4,226,978	12.32%

She explained a breakdown of the District’s budgeted revenue with the main sources coming from Ad valorem taxes, grants and water service charges.

Revenues – Capital Fund FY2024

The 1 mill increase is strictly dedicated to capital investment, debt service, and District match on grants and is estimated to total \$4,187,483 in fiscal year 2024.

In addition, the District has included Loan proceeds for an equipment loan for \$2,175,000 and the loan proceeds from the required loans related to the Water Trust Board grant/loan programs for \$795,155 totaling \$2,970,155.

Description	FY2023 Budget	FY2024 Budget Request	Incr (Decr) FY24 over FY23	% Change
Ad Valorem Taxes - Bendonville County	-	450,133	450,133	100.00%
Ad Valorem Taxes - Bernards County	-	2,786,760	2,786,760	100.00%
Ad Valorem Taxes - Warren County	-	834,000	834,000	100.00%
Ad Valorem Taxes - Sussex County	-	138,564	138,564	100.00%
Loan Proceeds	-	2,175,000	2,175,000	100.00%
Grant Loan Proceeds	-	795,155	795,155	100.00%
Total revenues	-	7,137,638	7,137,638	100.00%

She continued to say the one mill increase is strictly dedicated to capital investments, debt service, and District match on grants, and is estimated to total \$4.1 million in fiscal year 2024. In addition, the District has included loan proceeds for an equipment loan for \$2.1 million, and the loan proceeds from the required loans related to the Water Trust Board Grant loan programs for \$795,000, totaling \$2.9 million.

Expenditures- General Fund FY2024

Description	FY2023 Budget	FY2024 Budget Request	Year (Dev) FY24 over FY23	% Change
Salaries	10,690,173	10,758,889	68,716	0.64%
Employee Benefits	4,269,205	4,482,815	213,609	2.67%
Employee & Board Health Care	233,182	232,200	(982)	-0.42%
General & Administrative Expenses	314,206	347,193	32,987	10.50%
Professional Services	285,000	232,500	(52,500)	-18.42%
Insurance & Legal Services	1,431,195	1,409,719	(21,476)	-1.51%
Technology & Communication	888,016	964,414	76,398	8.61%
Ad Valorem Collection Fee	473,000	451,454	(21,546)	-4.57%
Interest	152,540	348,040	195,500	128.85%
Facility Maintenance	32,380	88,500	56,120	173.35%
Construction, Contract, Rehab	1,064,430	1,334,818	270,388	25.40%
Vehicle & Equipment O&M	1,878,682	2,027,378	148,696	7.92%
Boats/Life Expense	190,704	13,200	(177,504)	-93.08%
Construction Program	5,000	115,000	110,000	22.00%
Safety Program	-	20,815	20,815	100.00%
Federal Debt Service	1,264,028	1,693,286	(429,258)	-33.96%
Governmental Agreements & Projects	309,799	333,275	23,476	7.60%
Projects	2,165,893	50,000	(2,115,893)	-97.23%
Endangered Species Act Projects	882,000	129,000	(753,000)	-85.38%
Grants Other Expenditures	8,126,691	12,509,490	4,382,799	53.94%
Grants Match for Grant Expenditures	334,423	-	(334,423)	-100.00%
Debt Service - Principal Retirement	392,142	-	(392,142)	-100.00%
Debt Service - Interest	34,400	-	(34,400)	-100.00%
Capital Expenditures	1,429,100	1,021,105	(407,995)	-28.55%
Total Expenditures	36,501,098	38,538,009	2,036,911	5.58%
Excess (deficiency) of revenues less Expenditures	(2,186,477)	-	-	-
Fund Balance/Capital Reserves	2,186,477	-	-	-
Surplus/Deficit	-	-	-	-

Ms. Dawson presented the breakdown of the District’s budgeted expenditures for fiscal year 2024. The primary expenses are in salaries and benefits. Benefits include pension and healthcare expenses. Field operations represent 82% of total salary's expenditures and in fiscal year '24 and the average salary budget per employee is averaging \$50,000 a year with a minimum starting salary of just over \$31,000. Other primary expenditures are insurance and legal services maintenance, construction and rehab, vehicle and equipment, operating and division maintenance and other grant expenditures.

Expenditures- Capital Fund FY2024

Description	FY2023 Budget	FY2024 Budget Request	Year (Dev) FY24 over FY23	% Change
Ad Valorem Collection Fee	-	86,423	86,423	100.00%
Projects	-	1,390,000	1,390,000	100.00%
Grants Match for Grant Expenditures	-	1,277,452	1,277,452	100.00%
Grant Expenditures related to loan	-	795,150	795,150	100.00%
Debt Service - Principal Retirement	-	597,835	597,835	100.00%
Debt Service - Interest	-	61,808	61,808	100.00%
Capital Expenditures	-	2,964,945	2,964,945	100.00%
Total Expenditures	-	7,173,563	7,173,563	100.00%
Excess (deficiency) of revenues less Expenditures	-	34,000	34,000	100.00%
Fund Balance/Capital Reserves	-	-	-	-
Surplus/Deficit	-	34,000	34,000	100.00%

She explained that in the capital fund, the primary expenditures are projects coming in at \$1.3. District match on grants coming in at \$1.2 million, grant expenditures related to loans and capital expenditures \$2.9 million, total expenditures in the capital fund will total \$7.1 million with a projected surplus of \$34,000.

Project Planning – FY2024

With a combination of grants, loans, and the mill increase, the District was able to put \$17,217,193 into the budget towards the \$175,000,000 priority project list.

In addition, the District included \$1,021,105 of capital expenditures in the General Fund as committed to by the Board beginning fiscal year 2022.

Ms. Fanelli stated with the combination of loans in the mill increase, the District was able to put \$17,200,000 into this year's budget towards the \$175 million dollar project list. In addition, the District included a million dollars of capital expenditures in the general fund as committed to by the Board, beginning in fiscal year 2022.

Capital Expenditures budgeted using Grants, Loans, Mill Increase – FY2024

Type of Funding	Source of Funding	Project Description	Amount	Subtotal Grants
Grants	NFWF	Water Conservation/ Habitat	536,432	
	NFWF	Environmental Projects	150,000	
	NWED	Water Measurement Devices	500,000	
	NM CAPITAL OUTLAY	Pavista Pedestrian Crossing	383,121	
	NM CAPITAL OUTLAY	Headwater of Arroyo	60,000	
	WTFB	Socongo Conveyance	5,838,566	
	NM CAPITAL OUTLAY	Traffic Control Devices	20,000	
	NM DCA	Lowflow Open Space	300,000	
	OSE	Low Flow Conveyance DAM	2,300,000	
	WTFB	Corrales Siphon	446,596	
	NM CAPITAL OUTLAY	Water Measurement Devices	250,000	
				10,839,678

She stated the capital expenditure is budgeted using grants, loans and mill increase is highlighted here. These are the grants that are related directly to capital. We have the NFWF grants, capital outlay, water trust board grants and the OSE grant related to the Low Flow Conveyance Channel. Those all total almost \$11 million in grants.

Capital Expenditures budgeted using Grants, Loans, Mill Increase

Type of Funding	Source of Funding	Project Description	Amount	Subtotal Capital Fund
Grant Match	WTFB DISTRICT MATCH	Socongo Conveyance	1,158,961	
	WTFB DISTRICT MATCH	Corrales Siphon Replacement	42,433	
	NFWF MATCH	NFWF Project	25,000	1,227,424
Grants/Loan	WTFB LOAN REQUIREMENT	Socongo Conveyance	670,087	
	WTFB LOAN REQUIREMENT	Corrales Siphon Replacement	150,000	795,150
Capital Fund Projects	CAPITAL FUND PROJECTS	Isleta Bridge Design	104,500	
	CAPITAL FUND PROJECTS	High 247 Drain Crossing Repair	200,000	
	CAPITAL FUND PROJECTS	Drain Intersections, Some & Los Lentas	200,000	
	CAPITAL FUND PROJECTS	Fender 3 Design (BRR design)	100,000	
	CAPITAL FUND PROJECTS	Arroyo Siphon Conditional Assessment	200,000	
	CAPITAL FUND PROJECTS	Corrales Siphon Pumping	530,000	1,390,000
	CAPITAL FUND PROJECTS	Turbines	47,000	
Capital Equipment	CAPITAL FUND EQUIPMENT	Turbines	47,000	
	CAPITAL FUND EQUIPMENT	Mower	200,000	
Capital Loan	CAPITAL FUND EQUIPMENT LOAN	Water Truck - 2@ 180,000	370,000	
	CAPITAL FUND EQUIPMENT LOAN	Dump Truck - 2@135,000	270,000	
	CAPITAL FUND EQUIPMENT LOAN	Mower	200,000	
	CAPITAL FUND EQUIPMENT LOAN	Front End Loader - 2@ 230,000 & 235,000	460,000	
	CAPITAL FUND EQUIPMENT LOAN	Backhoe - 2 @ 210,000 & 190,000	340,000	
	CAPITAL FUND EQUIPMENT LOAN	Dzer 700 Series	280,000	
	CAPITAL FUND EQUIPMENT LOAN	Trucks 3@ 45,000 & 75,000 & 85,000	205,000	2,964,645
				Grand Total \$ 17,227,198 9,377,519

In addition to that, she reported the District has the grant match requirements of \$1.2 million and grant loan requirements of almost \$800,000. The capital fund projects are listed. Some of the projects that we identified on the priority list are in the FY2024 budget and total almost \$1.4 million. We have budgeted purchases of equipment to replace equipment that are currently classified in the red, meaning they are well beyond their useful life, of almost \$3 million. In total, what's coming out of the capital fund for grant expenditures outside of debt service is \$6.4 million.

Impact to Owners

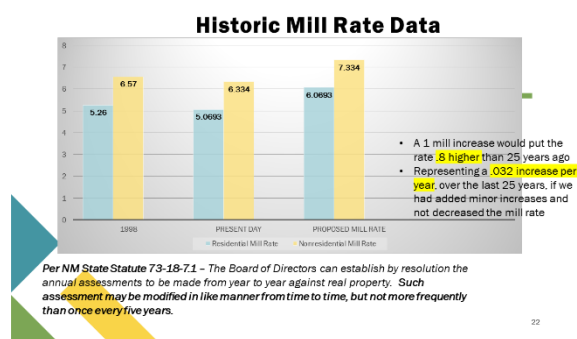
Taxable value of a Property	Net Taxable	Ad Valorem Increase
100,000	33,333	\$ 33
200,000	66,667	\$ 67
300,000	100,000	\$ 100

Irrigators will see an increase in the ad valorem tax. The Water Service Charge was not increased. If the owner receives an ag exemption, the impact will be minimal.

The percentage increase will depend on the owners' exemptions

The impact to owners would be from an ad valorem perspective, if the value of your property is 200,000 then the owner would receive an increase of \$67 per year. She pointed out to correct there was a misunderstanding of one of the farmers that it's not \$66 an acre, but it is \$66 per year. Irrigators would see an increase in the ad valorem tax. However, the water service charge was not increased in this fiscal year 2024 budget, and if the owner receives an ag exemption,

then the impact will be minimal. The percentage increase would be hard to determine, based on the owner's exemptions so we didn't actually give any percentage increase to the owners.



She went over the historical mill rate data that was presented in the five-year forecast. In 1998, the mill rate for residential was 5.26, and nonresidential was 6.57. Increasing the mill rate in the fiscal year 2024 budget would make it 0.8 higher than the mill rate was 25 years ago. In 1999, the mill rate was decreased. If we divided the difference between the current rate and the rate in 1999, we would have seen a 0.032 increase per year over the last 25 years. If we hadn't decreased the mill rate 25 years ago, we wouldn't be asking for a 0.8 mill increase today. She reminded everybody in the five-year forecast the District, per state statute, can only increase the mill rate every 5 years.

Jason Casuga added that we have to deliver the water safely and timely. We have a system that's approaching 100 years old. There are O&M items like mowing and dredging, and those kinds of things that we need to be doing. He stated the District recognized that we need to be an O&M entity, not a construction entity. He stated there's much infrastructure out there that is breaking. There's equipment that we spend quite a bit of money on, just trying to keep up, because we've had it for in some instances 10 plus years or 14 years going; those kinds of pieces of equipment are hard to find parts for in many instances. He stands by his statement that he believed outside of drought conditions failing infrastructure is probably the most significant challenge.

He doesn't know when or where infrastructure is going to fail. We have been a reactive organization. He cannot speak to what happened 20 years ago but there was no established infrastructure program based on an assessment of all the capital infrastructure. We've been trying to do that through our infrastructure assessment program and the goal of this mill levy increase is to move us away from being reactive to the next thing that breaks, and we can start implementing projects hopefully that will rehabilitate some of these critical pieces of infrastructure. The District has two other siphons on this river that are approaching 100 years old, and we have old structures up and down this valley in the same situation He stated that the MRGCD is not a great construction agency we're an agency that is best spent dredging ditches, mowing ditches, rinse, and repeat; spraying where they'll let us spray, but we need to bring private industry into rehabilitating this system or it's just going to keep breaking. The last piece, he said about infrastructure is, he thought the District had ten pieces of major infrastructure that failed this year's irrigation season.

He said he's tried to push big water in some instances directions, but when we push big water things break. Six of them in Valencia County, of those six, three of those are public roads that aren't necessarily supposed to be our responsibility to maintain, but when it breaks in a canal ditch we're still asked to help, and in many instances we could have fast tracked that if we could have contracted it out and the entity would have paid us back by agreement. He felt their hands are tied from a capital infrastructure standpoint. The District has 1,200 miles of facilities. Consider how many public roads that cross us, and all those pipes are probably about that old, and then consider the number of checks that we have in many of those checks are about that old. Consider the number of turnouts that we have that are probably in the neighborhood of 6,000 or so many are approaching that old. He said he can't speak to why there wasn't a capital infrastructure program before and why the mill levy was cut at that point in time. He and Ms. Fanelli believe it irresponsible to not develop a capital infrastructure program now and find a way to fund it, and then be held accountable to how we spend that money. That's why it was our recommendation to the finance committee that we bind that money for infrastructure, and he stands by that decision.

The Staff and the Finance Committee Recommend:

The FY2024 Budget be approved by the Board of Directors.

Every effort has been made to identify all known revenues and expenses in this budget but there will be unanticipated issues and associated expenses that arise during the fiscal year that may require reallocations of available funding. Management believes this budget represents the needs of the District.

23

b. Report from the Finance Committee Meeting, April 28, 2023 – Directors Kelly, Dunning and Barbara Baca

Director Kelly reported that the finance committee included himself, Director Dunning and Director Barbara Baca and have met many times to review the project schedule, the budget and this issue. He stated that the finance committee is in full support of creating a capital investment fund with a one mill increase which is in the best interest of the District.

Director Barbara Baca agreed with Director Kelly. She then thanked Director Duggins for his heartfelt support of the MRGCD staff because from the field operations all the way to what Pam (Fanelli) has done on this budget and Jason (Casuga), the District is trying to be more proactive and less reactive. She said she's in full support also.

Vice Chair Dunning thought the budget was the most detailed budget she's ever seen. She stated this increase will go to a fund that is kept separate from the operating stuff. She stated this is a fund for capital improvements in infrastructure.

c. Public Comment Specific to this Agenda Item (limited to six (6) minutes)

Julia Maccini

Ms. Maccini attended virtually and addressed the proposed increase to the mill levy rate, which she requested that the board not approve the increase. She said she understood the budget has been designed with that in mind, but she thought it's important to highlight a few things. Firstly, Director Kelly mentioned concerns about assessment of land not increasing. She stated Bernalillo County 2023 assessments were sent out and said they are going up across the board for commercial and residential property. Secondly, she asked how we got here at such an infrastructure crisis and needing to increase a mill levy rate in such a drastic way.

She also felt there's been a lack of foresight for thought and planning for infrastructure needs, requirements and improvements. The data that was distributed last week by the PIO showed a proposed mill rate of 0.8 higher than 25 years ago, but what's not shown is the 15% increase in the last 8 years, and the 27% increase over the last 10 years. She reminded what the vice chair previously stated that while we have different silos of budgeting to consider a capital fund, operations, staff and salaries, she felt sometimes one should think outside the box and move those silos around in order to cover things when you buy a house you know how much time you're going to get out of that roof, and you plan for it. She felt the District has not adequately planned for the failing infrastructure. She asked that the District first tighten its belt before asking its constituents to hand over more money through mill increases. She closed encouraging the board to not increase the mill levy for the year.

Guy McElvain

Mr. McElvain is an irrigator from Socorro County who said he's in favor of the mill levy increase. After listening to the state engineer and the MRGCD staff, he said he understood the dilapidated infrastructure and what it means to the MRGCD. He said if you don't have the infrastructure, you don't have an irrigation district. He went on to discuss the consequences of losing the farmlands to development and protecting what we have. He felt that there's a need to maintain and improve our infrastructure and improve the efficiency of delivery further discussing the Low Flow Conveyance Channel. He applauded the CEO, the directors, and whoever's behind the idea to bind this levy increase for capital projects as he thought it a great idea and well worth it.

Rusty Swint

Mr. Swint said he and his family have used MRGCD services in the valley for 25 years in Valencia County. He said he understood the water situation and how it impacts everyone. He thanked the ISOs are working hard to keep up with all the water users and the drama that comes with it. He added he's also employed by the District approximately 20 years. He's currently the equipment, repair and transportation manager which deals with the repair of the equipment and transportation needs across all departments. He said they have dealt with emergencies over the years due to catastrophic failures and just natural causes. He reported a total of 333 assets, which is vehicles and equipment out of that a total of 159 of those assets need to be replaced by age, mileage, land or repair cost. He said he's responsible for inspecting of the equipment following the process of ordering vehicles, parts and equipment District wide which may include researching of the newest and safest products available. He said he's firsthand a witness of the aged sites that need to be updated and repaired. He stated some of our buildings were built in the fifties which need to be replaced.

He said the grounds of Albuquerque is overpacked and flowing into ER&T whenever we're trying to repair equipment.

Troy Richardson

Mr. Richardson appreciated that we need to spend some money on infrastructure and was glad that the CEO recommended that the District make this fund specific for infrastructure and not place it in the general fund. He said looking at the budget presentation, he felt that the District wasn't looking anywhere else but the tax payers pocket. He recommended that they use some other budget money and asked the board to vote no to the increase.

d. Consideration/Approval of the Budget Adoption Fiscal Year 07-01-2023 to 06-30-2024 Resolution BA-05-08-23-88 – Pamela Fanelli, CMA, CGFM

Director Kelly commented that residential properties are being increased 3% per year, which is allowed by state law and the assessors have been doing that without looking at a single property. That's getting eaten up by inflation and even more so the last 2 years with the 8% rate. Since I've been on the board since Ms. Fanelli has been CFO, he stated they've dived into the budget. We have spent money on employees, increased starting salaries for recruitment, increased existing salaries for retention of employees, and we are still at a vacancy rate of 10%. He reported it was *around* 20% about 3 years ago in the middle of Covid. He said that he too is getting taxed on this. The board held the water service charge the same for the last few years. He said there are multiple demands on the District which doesn't have the money to barely cover operations. He felt if we are going to put a dent in infrastructure, we need the increase. He stated we have fiduciary responsibilities to the District, to our rate payers, to everybody here, and if we let the system fall apart because we are not ready to take strong actions to turn into a rehab program. He also said this board has never dropped the mill levy in the 11 years he's been with the District.

Vice Chair Dunning said she too has received her assessment in the mail and the value of her home has gone up and even though she's not a farmer or an irrigator she supports this because of the future of the District and of the farmers within the District.

Director Kelly made the **MOTION TO APPROVE THE BUDGET TO INCLUDE THE ONE MILL LEVY SPECIFICALLY FOR CAPITAL IMPROVEMENT AS BEEN DISCUSSED.** Seconded by Director Duggins. Roll call vote was administered, and the **MOTION CARRIED.**

Director Barbara Baca	Yes	Director Sandoval	Yes
Director Kelly	Yes	Chair Russo Baca	Absent
Vice Chair Dunning	Yes	Director Duggins	Yes
Director Joaquin Baca	Absent		

e. Consideration/Approval of the Creation of a Capital Investment, Debt Service and Grant Fund Resolution BA-05-08-23-89 – Pamela Fanelli, CMA, CGFM

Ms. Fanelli reported that the District is required to pass a resolution to create new funds and with that they're creating a fund for the capital investment for the debt service and for the grants projects which the resolution enables the District to create those funds in their system.

Director Kelly made the **MOTION TO APPROVE THE CREATION OF THE CAPITAL INVESTMENT, DEBT SERVICE AND GRANT FUNDS**. Seconded by Director Duggins. Roll call vote was administered, and the **MOTION CARRIED**.

Director Barbara Baca	Yes	Director Sandoval	Yes
Director Kelly	Yes	Chair Russo Baca	Absent
Vice Chair Dunning	Yes	Director Duggins	Yes
Director Joaquin Baca	Absent		

AGENDA ITEM NO. 8 - REPORT(S) FROM THE HUMAN RESOURCES DEPARTMENT - Christine Nardi, MBA

a. Introduction of MRGCD New Hires

Ms. Nardi introduced the new Belen Division manager, Tyler Otero, and said that today was his first day. Mr. Otero introduced himself to the board. She continued to welcome to the District Jake Tenorio as a new irrigation systems operator, Amber Pharr as the new division clerk for the Albuquerque Division. She was happy to announce two promotions within the Socorro Division to Andrew Armijo and Dominic Zamora, both now heavy equipment operators. She ended saying the District’s vacancy rate is at 10%.



Memorandum

To: MRGCD Chair Russo Baca and Board of Directors
 Through: Jason M. Casuga, Chief Engineer/CEO
 From: Human Resources
 Date: May 8, 2023
 Re: Introduction of New Hires and Job/Title Changes

General Office

JAKE	TENORIO	IRRIGATION SYSTEMS OPERATOR	04/17/2023
------	---------	-----------------------------	------------

Albuquerque Division

AMBER	PHARR	DIVISION CLERK	05/01/2023
-------	-------	----------------	------------

Socorro Division

ANDREW	ARMUJO	HEAVY EQUIPMENT OPERATOR	04/17/2023 PROMOTION
DOMINIC	ZAMORA	HEAVY EQUIPMENT OPERATOR	04/17/2023 PROMOTION

Belen Division

TYLER	OTERO	DIVISION MANAGER III	05/08/2023
-------	-------	----------------------	------------

b. Employee Recognitions

Ms. Nardi had the opportunity to recognize three employees through their recent professional achievements. She announced that Yasmeen Najmi, MRGCD Planner, was asked to contribute a collection of essays published by UNM Press in a book titled, “Water for the People, the Acequia Heritage of New Mexico in a Global Context”. She continued to say her essay highlights interests and issues unique to the District as well as our many shared challenges and shared heritage with the acequias around the world. This collection of essays, together with our Chichapa’s documentary film, illuminate the threats to a secular culture in traditions as well as the creative and passionate efforts worldwide to preserve acequias and the social cultural

environmental and economic systems, they support. Ms. Najmi considers it a true honor to be asked to contribute to this collection of essays. Ms. Nardi congratulated her on this distinction.

Ashley Veihl, MRGCD Right of Way Specialist, was recognized also for graduating from UNM with her master's degree in water resources with an emphasis on policy management. She said to obtain her masters she presented and defended her professional project thesis earlier this year. The focus of her master's thesis is a topic all too familiar to the District as her professional project was titled, Securing Environmental Flows for the Rio Grande Silvery Minnow.

Angel Madera joined the District in October 2022 as an engineering intern. He was then promoted to Engineer I when he graduated in December with his bachelor's degree in civil engineering. She stated he was not one to sit on his laurels, in April 2023, sat for and passed the fundamentals of engineering, the FE exam. Ms. Nardi explained the FE exam is the first of two exams engineers must pass in order to become licensed professional engineers in the United States.

Director Kelly felt the FE exam is much tougher than the PE exam. Jason Casuga concurred.

AGENDA ITEM NO. 9 - REPORT(S) FROM THE DEPARTMENT OF THE INTERIOR

a. Bureau of Reclamation – Jennifer Faler, Area Manager

Jennifer Faler was online and shared the Reclamation mission, which is to manage, develop, and protect water and related resources in an environmentally and economically sound manner, in the interest of the American public. She said that because of all the tough issues and just want folks to know it's across the West. She said Reclamation is fighting for the future of farming, fighting for the future of the environment. There's not enough water for cities, environment or the farms to go around. She added it is tough, for here on the rio grande because of the lack of storage. She said she can't think of another situation where you have a district the size of MRGCD which on a good day has only a 180,000 acre feet of storage. She felt what the farmers are experiencing is not unique, but certainly challenging and it's understanding and just to echo Director Duggins kudos to the farmers for coming out, because it's no drama to say the future of farming is at stake right now.

She said the rio grande compact even a casual reading of that you can't help but notice the rio grande project being mentioned in there and referred to in many of the articles. The project was there before the compact existed. The Rio Grande Project, and this is Reclamations project that delivers water to farmers in both New Mexico and Texas. She's surprised to hear in an irrigation district that they don't understand why the United States thinks they need to have a rule when litigation is going on between States and we have a project where we have to deliver water, yet to deliver water to farmers in two States. She thought there to have a true understanding of why the United States is in the case is to really understand that we're fighting for farmers and the future of farmers. She stated that people who don't understand that is convenient to take opportunities to bash United States from unlimited perspective on the case.

She reported her office in Albuquerque has several teams that are working hard to improve the efficiencies of water delivery in the entire rio grande. They're working up in southern Colorado throughout the rio grande throughout the middle rio grande to improve the efficiencies of infrastructure like what's been talked about. She said the BOR has numerous teams in place working collaboratively with the state, with the District, with landowners, with environmental groups with much cost share available right now. They're motivated to step up and not fight for status quo which is not going to work for the future of farming and the environment and all the

water. She said BOR is fighting for all that. We have money to make the big improvements over the next few years while we have this money available.

b. Bureau of Indian Affairs – Roland Becenti, Acting Designated Engineer

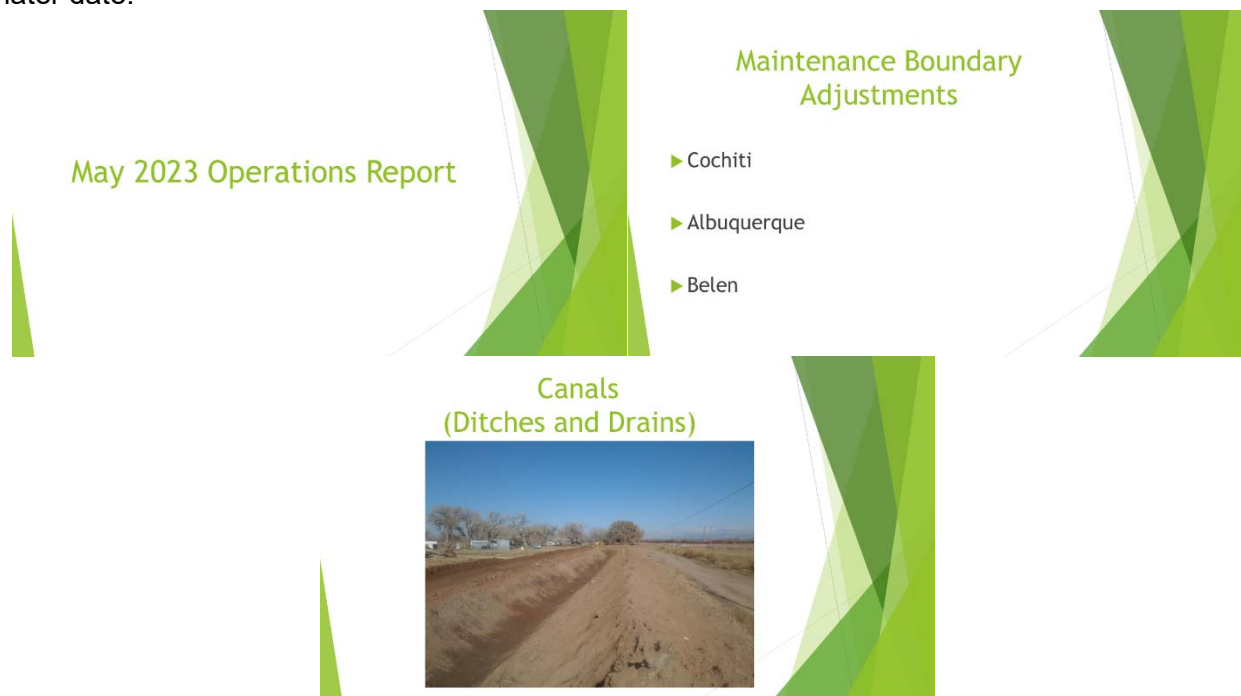
No one was in attendance at this time.

Vice Chair Dunning noted for the minutes that we now have only three board members present as Director Sandoval had to leave, but once a quorum is established, the quorum stands.

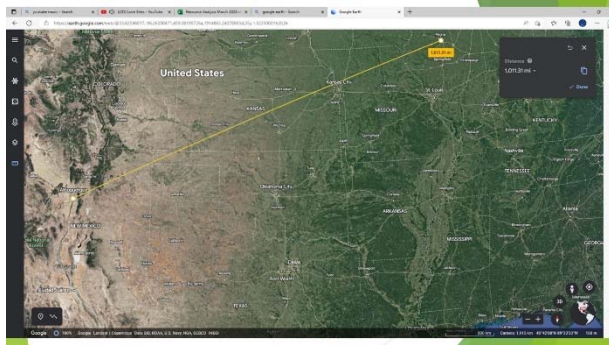
AGENDA ITEM NO. 10 – REPORT FROM THE CHIEF OPERATING OFFICER - Eric Zamora, PE

a. Report on the Maintenance Division Boundary

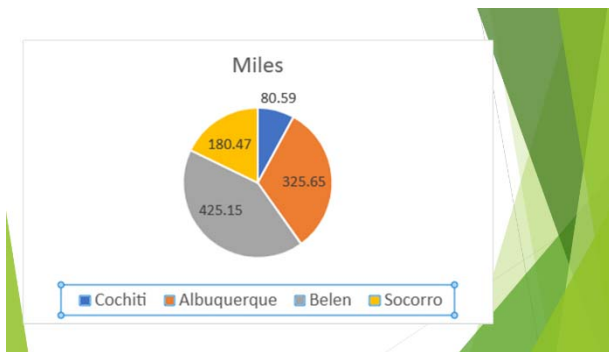
Mr. Zamora introduced a study done at the District which he began with the three northern divisions: Cochiti, Albuquerque and Belen. He stated Socorro will be updated to the board at a later date.



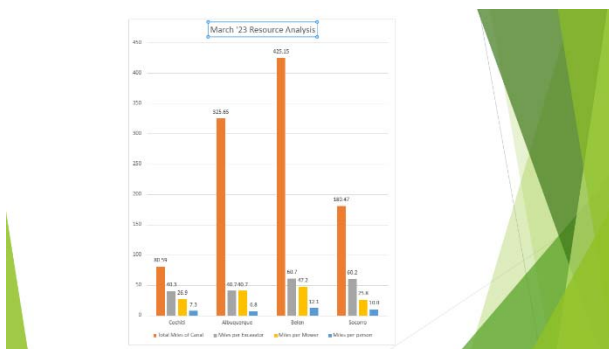
He reported the District maintains over a thousand miles of ditches, drains and canals, and if you were to draw a straight line as a crow flies that's one ditch from Albuquerque to Peoria, Illinois. That's just intended to give a visual of the scope of the work that we try to do on a daily basis.



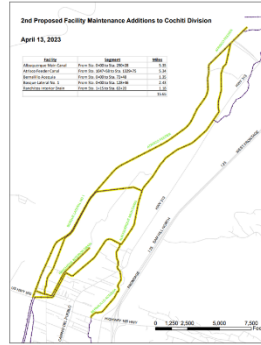
Breaking up that doubt over a thousand miles, we roughly have 425 miles in the Belen Division, by far the largest division; 325 miles in Albuquerque, 80 miles in Cochiti, and 180 miles in the Socorro Division.



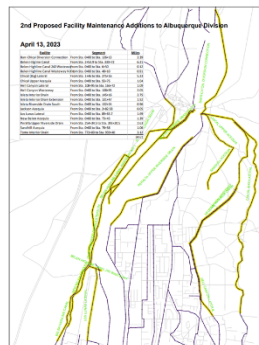
In March he started looking at District resources in each of those divisions, and primarily looked at three categories: excavators for the dredging, mowers for edge management and for personnel. He pointed out in the gray column for excavators, the mowers are the yellow column and blue column is personnel broken out in resources per mile of ditch. In that first set there for Cochiti, you'll see the yellow column 26.9 each mower that's assigned is responsible for maintaining about 27 miles of ditch on an annual basis. The number for Albuquerque is about 40 miles, in Belen is almost twice as much at 47 miles and then again in Socorro it is about similar to Cochiti, at about 26 miles. The personnel category is about 7 employees per mile of ditch in Cochiti, about 7 in Albuquerque, 12 in Belen, and 10 in Socorro. He said with the excavators 40 miles, you can see there's a little bit of parity there but still about 50% more mileage in Belen versus the other divisions, as well as, in Socorro.



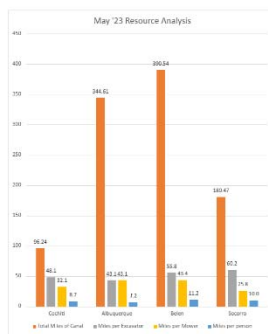
He reported that they had two approaches to addressing those issues. One is to throw a bunch of money at personnel and equipment which we've heard is going to be a difficult ask. The other way to address the issue is to balance our resources.



He reported that the Cochiti Division has been in discussion with the Pueblos individually and with the pueblo coalition over the last 3 months presenting this information. The plan is to expand the Cochiti Division to Highway 550 in Bernalillo, picking up all of Santa Ana Pueblo. An addition of about 15 miles of maintenance in Cochiti.



Looking down south in Isleta pueblo, same scenario of increasing mileage in the Albuquerque Division, to bring some more parity to the Belen Division. He said we're essentially transferring most of the maintenance with the exception of the Peralta Canal and the Otero Canal to the Albuquerque Division. He reported an overall increase of 34 to 35 miles, roughly minus the 15 that Cochiti's picking up in Northern Albuquerque division, a net adjustment of about 20 additional miles in the Albuquerque division.



- Valencia County; April 11, 2023 meeting
- Valencia County; May 5, 2023 meeting; Levee Response,
- Alicia Lopez; Monitoring APP
- Lands and Licensing; IRWA

He reported on the adjustments, a little more parity between our mowers at about 40 miles between the Albuquerque and Belen divisions, and we think this is going to greatly increase our efforts in vegetation management. With the adjustment in mileage is, how do we maintain the level of service in Cochiti and Albuquerque by adding more miles. Cochiti will be getting another mower, adding an additional mower to their fleet to a system that effort. In Albuquerque, we've been spraying herbicide in the last few years. He explained the intent is to pick up additional herbicide application along our main canals and on our drains, and so that'll ease the effort in Albuquerque division.

b. Report on the Meeting with Valencia County, April 11, 2023

Mr. Zamora gave an update requested by Valencia County Sheriff to discuss encampments, and one of the very specific examples that was given was the sheriff will go out and act on an issue perhaps as a warrant there's a campfire or something. They'll respond, make an arrest, the person will go to jail, and an hour later will be out of jail back at the encampment. One of the coordination efforts that we've already made agreement to was that if the District's notified and there is an issue like that, we've already partnered with Valencia county public works, we will send out a response team to clean up the encampment. We will receive basically free passes to the landfill to deposit any debris that we can collect. He said that was an issue that he thought would help with the flooding of the riverbed and pushing water levy to levy. Many campers have left the bosque as it's been quiet.

There was some coordination efforts trying to get an aerial survey with APD. There was some sheriff's deputies that had contacts at APD that made the arrangement, but without the approval of the chief of police. The District has reached out to the Chief of police to formally request aerial support. But again, the issue is kind of waned in light of the flooding or the higher water levels in the river.

Regarding Valencia County levy response, he's had a couple of meetings with the Valencia County Emergency management to address the higher flows in the river. Friday was their first meeting of an organizing Committee including representatives from each of the municipalities, although Los Lunas was not present, Valencia County emergency management, various volunteer fire departments, Rio Communities, City of Belen, Bosque Farms police and Peralta was there. He stated this is just an organizing committee which will direct all emergency responses and be managed by the Valencia County Emergency Manager, Sarah Gillen. He stated he'll be reaching out to Bernalillo County emergency manager to begin discussions with them as well.

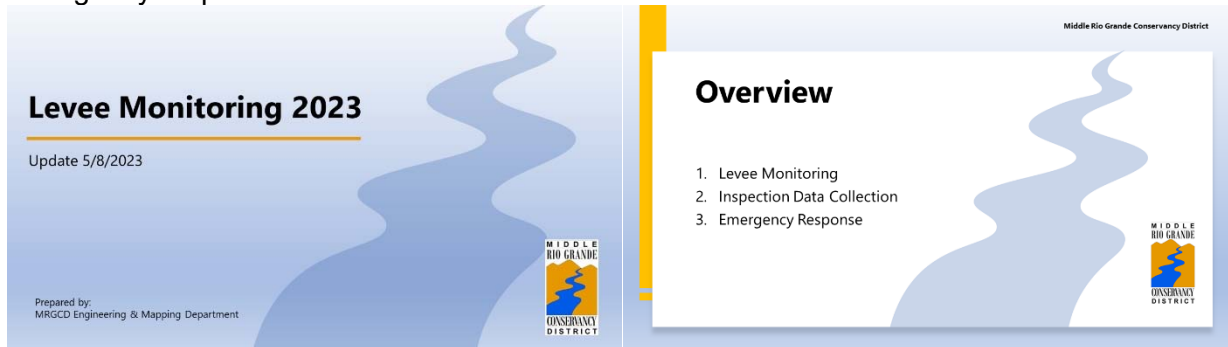
c. Report on the IRWA Training – Rhett Sanders-Spencer, Ashley Veihl and Michael Padilla, Right of Way Specialists

Mr. Zamora reported that the District addresses issues regarding properties that are under the control of the MRGCD with training for the right of way specialists in our license and land sales department. He stated he would like to see this department become more of a right of way management group; therefore they attended the International Right of Way Association (IRWA) training.

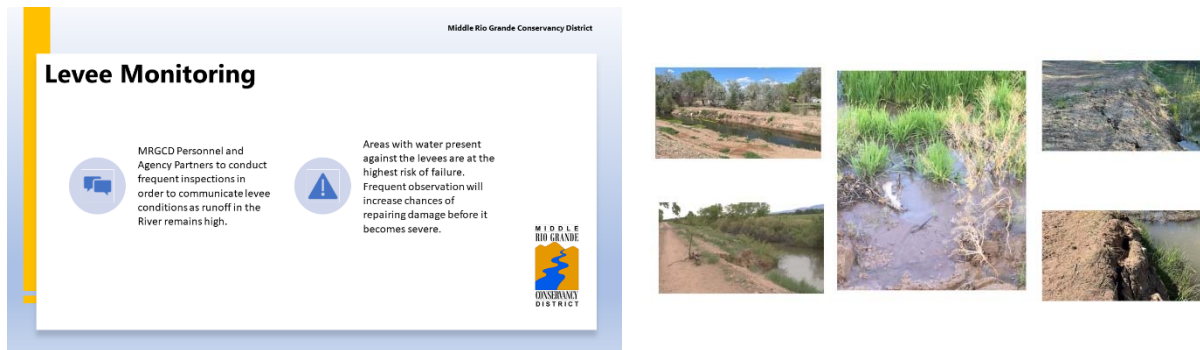
Mr. Sanders-Spencer gave a brief update on the training which was the basics of right of way management. He reported their big takeaway was the IRWA was a great resource for improving the quality of the work within their department. Licensing was a corollary duty of the engineering staff within the last decade or more but now has grown into its own department. He thought one big takeaway that he got is that asset management is a huge part of the right of way profession. He said that the department right now does a couple of aspects of those or that's the framing at least in licensing and land sales. Those are two parts of asset management, but to be more proactive, instead of reactive. He thinks reframing it as a right of way department will help us grow beyond licensing and land sales and be more proactive regarding surplus lands.

d. Update on Levy Monitoring and Data Collection

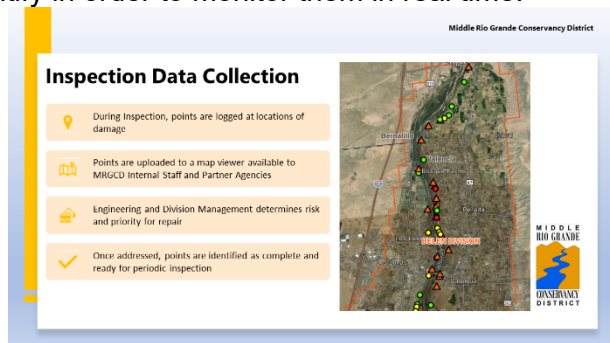
Ms. Lopez presented a report to the Board on levy monitoring, inspection data collection and emergency response.



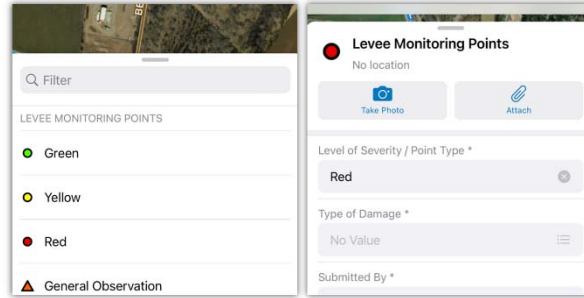
She explained that they monitor the levies for two things, basically to coordinate internally and to inform the COR and the BOR of our progress. She felt that this is important now because the highest risk areas are in places where water stayed at the levy embankment for the longest, and water has been on the levy slopes. In some areas since the river hit about 3,000 cfs a few weeks back.



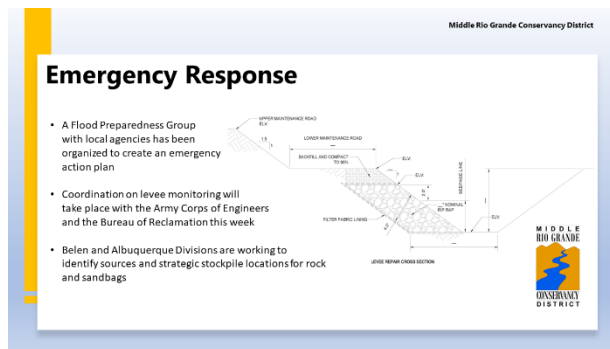
She stated the signs that a levy may be in danger are shown here and range from pretty low range seepage to bank failure. The middle video is of a sand boil and all of these places are places they want to identify in order to monitor them in real time.



She explained they're using field maps as a platform and data collection includes driving or walking large sections of the levees, logging the points into an app, created internally through the GIS analyst. Engineering and construction staff can see the points and mobilize to these locations. Risk can then be displayed and prioritized and mitigated through their display on that GIS map.



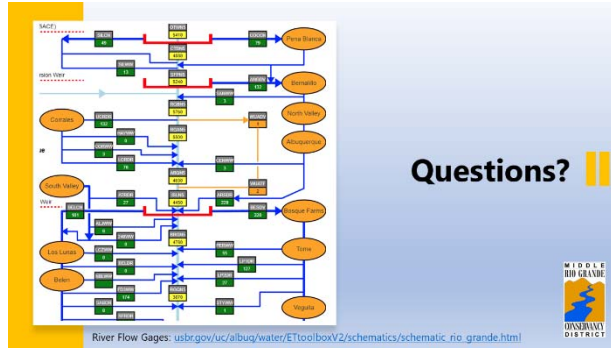
She continued to explain the interface that the collector sees, as for the photos, they're identifying places, red, yellow, green categories. It collects everything that the engineering department needs to know to get on the site and coordinate repair. This is in the hands of engineering and construction staff, as well as many of the ISO supervisors.



She said as the COO mentioned, there's been conversations for flood response which he's had some meetings for emergency flood preparedness group with the local agencies. Currently our Albuquerque and Belen divisions are working on stockpiling both rocks and like rip rap, and sandbag locations. She explained the cross section on the right are engineering standard detail for levee repair.



She explained the general approach is to reshape the embankment, and underlay that with filter fabric, and rock and line that with rip rap. She said this allows water seepage without the bank failure associated with it. They're also keeping an eye on the river level at strategically placed gauges to know when they get close to that upper limit of current capacity.



Ms. Lopez reported that as river gauges increase, will equally be increasing our frequency of levy inspections.

Director Kelly asked if there was a 2d model with current topography that could monitor as flow rates come up. Ms. Lopez responded that the District does not, but they are identifying places where we're seeing water at the till of levee, and on the tail end of everything, we'll have a database.

AGENDA ITEM NO. 11 – REPORT(S) FROM THE CHIEF ENGINEER/CEO – Jason M. Casuga, PE

a. Consideration/Approval for the Corrales Interior Drain Joint Powers Agreement – Jason M. Casuga, CE/CEO and Yasmeen Najmi, Planner

Director Kelly reported that he read the agreement, and found it very well done and made the following motion.

Director Kelly made the **MOTION TO APPROVE THE CORRALES INTERIOR DRAIN JOINT POWERS AGREEMENT**. Seconded by Director Barbara Baca. Roll call vote was administered, and the **MOTION CARRIED**.

Director Barbara Baca	Yes	Director Sandoval	Absent
Director Kelly	Yes	Chair Russo Baca	Absent
Vice Chair Dunning	Yes	Director Duggins	Absent
Director Joaquin Baca	Absent		

b. Consideration/Approval for the MOA Between Bureau of Reclamation Technical Service Center, Fisheries and Wildlife Resources Group and the MRGCD for ESA Bird Monitor – Anne Marken, Water Ops Division Manager and Jason M. Casuga, CE/CEO

Jason Casuga reported that the agreement was brought back before the board because it was at the previous board meeting, but it was not described properly. He said it was described originally as part of the River Mile 60, which was not true. This document is tied to the funding that MRGCD does with the Denver Technical Service Center for collecting environmental data associated with avian species. He brought it back before the board this month, to go on the record with correcting that error, and that the Board understands what is before them. He apologized for that error.

Director Kelly made the **MOTION TO APPROVE THE MOA BETWEEN THE BUREAU OF RECLAMATION TECHNICAL SERVICES CENTER FISHERIES AND WILDLIFE RESOURCES GROUP AND THE MRGCD FOR ESA BIRD MONITORING.** Seconded by Vice Chair Dunning. Roll call vote was administered, and the **MOTION CARRIED.**

Director Barbara Baca	Yes	Director Sandoval	Absent
Director Kelly	Yes	Chair Russo Baca	Absent
Vice Chair Dunning	Yes	Director Duggins	Absent
Director Joaquin Baca	Absent		

c. El Vado Dam Construction Schedule Update– Jason M. Casuga, CE/CEO

Jason Casuga reported that there's a delay which he said the members of the Board received an email from him earlier. Reclamation informed the District that they did not believe that they would be able to complete the schedule as proposed, that there would be a delay of the faceplate work of the El Vado dam. Rehabilitation would not be complete until later in 2025, which means that partial storage won't be back until irrigation season of 2026. They won't begin on the spillway till the faceplate's done. He believed MRGCD should expect full storage in 2028. He hoped that there would be other alternatives for storage with partial storage in El Vado, and the ability to negotiate storage in Abiquiu, because he said the District will have access there with an update to the water control manual. He also said if successful and there are bigger years that the District will be able to still make storage decisions before 2028.

d. Report on the Middle Rio Grande Pueblos Coalition Meeting, April 13 & May 4, 2023 – Jason M. Casuga, CE/CEO

Jason Casuga state it was another good meeting at the Coalition. He said he and Mr. Zamora attended meetings at both Santa Domingo and the Pueblo of Isleta where they talked about operational issues at Santa Domingo. He didn't think he could commit to all of their requests, but we were able to gain a better understanding and facilitate a good working relationship with the new leadership and the staff. We also reported out to the coalition the conclusion of what Mr. Zamore presented today, which is the adjustment of these maintenance boundaries because this has an effect on every pueblo. He thought this raises the level of service that the Pueblo of Isleta is going to receive across all of their facilities and highlighted when Mr. Zamora completed this analysis the review of the Belen Division.

Lastly, he reported on the Local Elections Act (LEA) as he and Mr. Thompson contacted the Secretary of State, and we're actively in the process of trying to plan our first meeting post legislative session to start working on the LEA. He said he asked the tribe how they wanted to be represented, and if they would get that information to him that individuals would be included in the coordination meeting. He believed that a date was made which he promised to email to the board. He inquired if the whole legislative committee wanted to participate or the election committee.

e. Report on the Rio Grande Compact Commission Meeting, April 21, 2023 – Jason M. Casuga, CE/CEO, Casey Ish, Conservation Program Supervisor and Chair Russo Baca

Casey Ish gave a general report as Mr. Casuga didn't attend. Mr. Ish said at the start of this calendar year the state of New Mexico sits in a compact debit of approximately 93,000 acre feet that reduction is in large part due to the one-time paper adjustment, credit adjustment on behalf of Texas. He felt the mood of the meeting was really quite cordial as it seemed like the state representatives were all in a mood of collaboration. He wanted to keep at front and center of everybody is the need to get Abiquiu in a position where we can utilize it which was brought up in the compact commission. He said there are still some outstanding word objectives and changes to the water control manual on behalf of Abiquiu that haven't taken place yet. He thought there was some frustration presented by some of the state reps during the meeting about that.

f. Report on the Presentation to Isleta, April 27, 2023 – Eric Zamora, COO and Jason M. Casuga, CE/CEO

Jason Casuga said he covered this earlier in his report regarding the coalition meeting (see item 11.d.) which he and the COO, Eric Zamora, presented the change in operational boundaries to the pueblos.

g. Report on the NWRA Federal Water Issues Conference, Washington DC, April 17-20, 2023 – Jason M. Casuga, CE/CEO, Chair Russo Baca, Vice Chair Dunning and Director Duggins

Jason Casuga would like to table the topic until June for the board in its entirety. Vice Chair concurred.

h. Discussion on Informational Meetings – Jason M. Casuga, CE/CEO

Jason Casuga said these would normally be scheduled by month going forward into August. He thought it may be better to coordinate individually with each board member and their counties outside of Bernalillo as there weren't any representatives still present at today's meeting.

i. Upcoming Events

- 1. Farming in The Flyway Series, Soil Health Strategies for Salt-Affected Middle Rio Grande Soils Workshops, 164 NM-116, Bosque, NM | May 12, 2023**

Mr. Zamora updated the board that this workshop was moved to May 31, 2023.

- 2. Joint Rio Grande Tour - MRGCD/Elephant Butte Irrigation District (EBID) | June 27-29, 2023**

Jason Casuga said MRGCD and Elephant Butte will be hosting this tour having invitations extended to New Mexico's full federal delegation.

- 3. Rio Grande Water Users Association Meeting | October 3-5, 2023**

Jason Casuga announced the efforts to bring together an association of Rio Grande water users patterned after CRUA, the Colorado River Water Users Association. He thought it's something that will bring people together to have conversations and may be useful in the way that we come together and advocate for money. He reported this hasn't been done before and supports the effort.

AGENDA ITEM NO. 12 - REPORT(S) FROM THE MRGCD ATTORNEY(S) - Chief Water Counsel or General Counsel

Ms. Wiggins stated neither she nor Dr. DuMars had anything during the reports or for executive session.

AGENDA ITEM NO. 13 - REPORT(S) FROM THE BOARD

- a. **Report on the Lower San Acacia Reach Improvement Project, April 12, 2023 – Chair Russo Baca**

See attached written report.

- b. **Report on the Earth Day Fiesta, April 22, 2023 – Chair Russo Baca**

See attached written report.

- c. **Report on the Low Flow Conveyance Channel Info-Sharing & Listening Session, April 25, 2023 – Chair Russo Baca**

See attached written report.

- d. **Report on the Summer Conservation Camp Planning Meeting with local farmers, Whitfield, and MRGCD, April 12 & 26, 2023 – Chair Russo Baca**

See attached written report.

- e. **Report on the IRSA at Rio Abajo Conservation Area, April 28, 2023 – Chair Russo Baca**

See attached written report.

- f. **Report on the Conservancy Act Centennial Meeting, May 2, 2023 – Vice Chair Dunning, Directors Joaquin Baca and Kelly**

Vice Chair Dunning reported that she and Directors Joaquin Baca and Kelly were in attendance. No new updates were given other than a possible date in September and that 2023 will be the kick off to 2025.

Jason Casuga added that their goal of the committee with staff will be able to bring more concrete information on 2023 and then 2025 at the June meeting.

Director Kelly added that the celebration will be for the 100th anniversary of the initial board of directors meeting.

Director Barbara Baca made the **MOTION TO APPROVE THE REPORTS FROM THE BOARD**. Seconded by Director Kelly. Roll call vote was administered, and the **MOTION CARRIED**.

Director Barbara Baca	Yes	Director Sandoval	Absent
Director Kelly	Yes	Chair Russo Baca	Absent
Vice Chair Dunning	Yes	Director Duggins	Absent
Director Joaquin Baca	Absent		

AGENDA ITEM NO. 17 - EXECUTIVE SESSION

- a. NMSA 1978 Open Meetings Act, Section 10-15-1(H)2
 - 1. Limited Personnel Matters

- b. NMSA 1978 Open Meetings Act, Section 10-15-1(H)7
 - 1. Threatened or Pending Litigation

Ms. Wiggins, MRGCD’s general counsel stated they did not need a closed session.

With no further comments, questions, or concerns, Vice Chair Dunning adjourned the meeting at 7:42 pm.

Approved to be the correct Minutes of the Board of Directors of May 8, 2023

ATTESTED:

 Pamela Fanelli, CMA, CGFM
 Secretary/Treasurer

 Stephanie Russo Baca, Madam Chair
 MRGCD Board of Directors

Stephanie Russo Baca Board Reports Regular Board Meeting May 8, 2023.

April 12, 2023. Lower San Acacia Reach Improvement Project, Virtual.

Presentation by the Bureau of Reclamation on the Lower San Acacia Reach improvements Project. The Key issues are water loss via transpiration, evaporation, seepage, and stranded water. The Project first has to go through NOI then public scoping then draft EIS before public notification of final EIS and construction would then possibly begin Winter 2025.



— BUREAU OF —
RECLAMATION

Lower San Acacia Reach Improvements Project

April 12, 2023

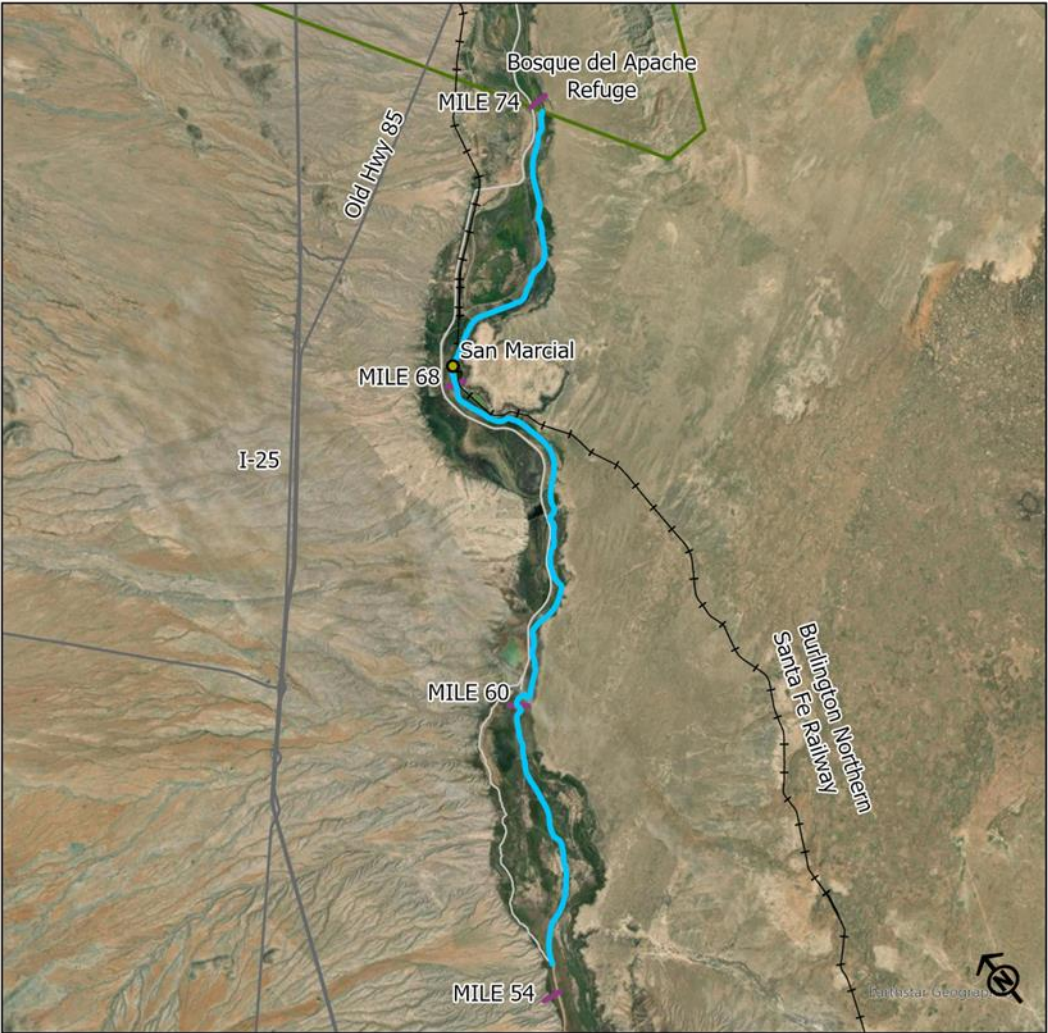
Lower San Acacia Reach Improvements Project

Goals

- Improve water delivery to Elephant Butte Reservoir
- Create aquatic and riparian habitats as required under the Endangered Species Act and the 2016 Biological Opinion
- Increase the benefits of maintenance actions by working with geomorphic trends



Location



Lower San Acacia Reach Improvements Project LSARI, River Mile 74 - 54.5

- Low Flow Conveyance Channel
 - BDA Boundary
 - River Mile
 - Major Roads
 - Railroad
 - San Marcial Gage
 - LSARI River Extent of the Middle Rio Grande
- 2 Miles

Produced by the Bureau of Reclamation,
Upper Colorado Region, Albuquerque Area Office
Ashlee Rudolph 03/10/2023 Data: Reclamation, NAIP (2018)



Project Drivers

- Sediment imbalance
 - Sediment supply vs. transport capacity
- Channel perching
 - High sediment loads, fixed channel location, lateral confinement
 - Channel banks above the adjacent floodplain, channel bed occasionally above the floodplain, main channel and active floodplain are both above the valley floor



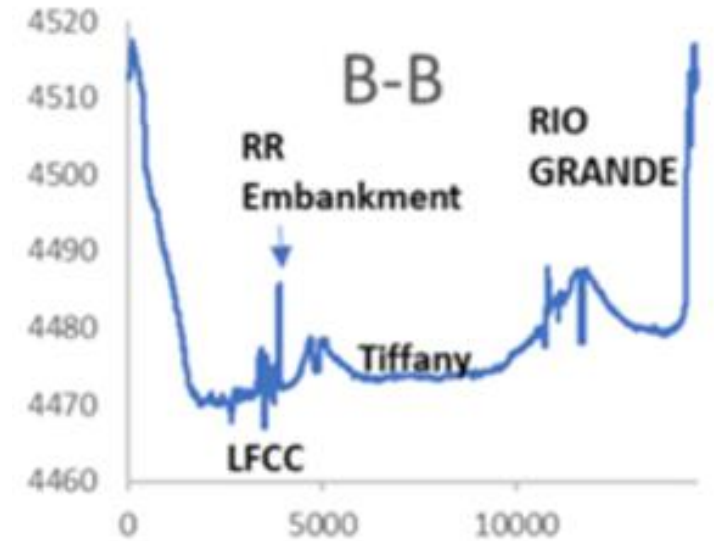
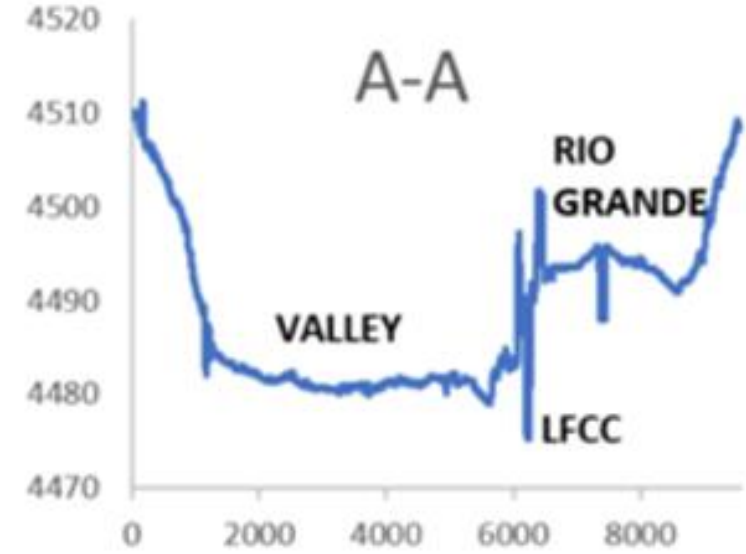
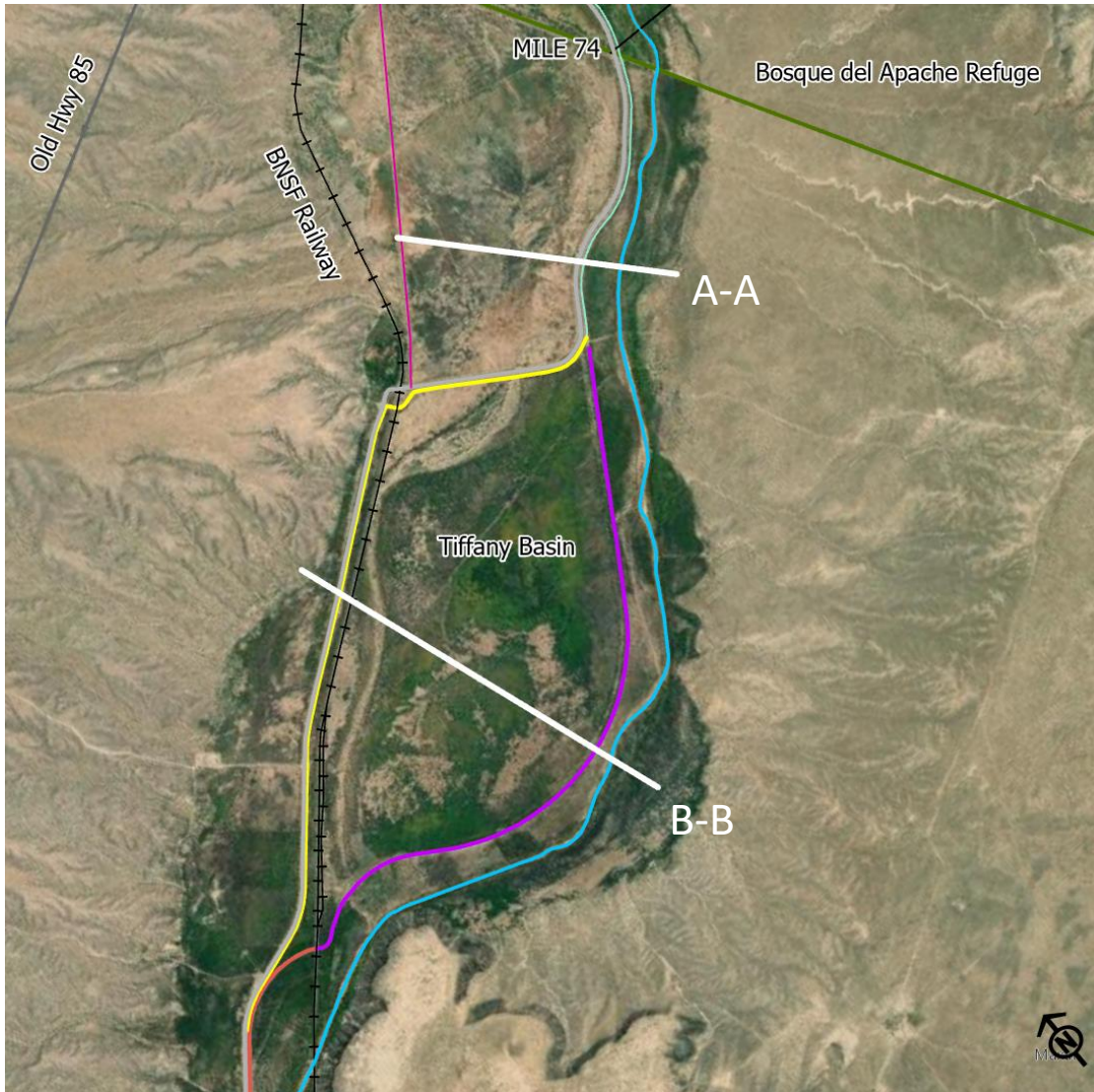
Long-standing Management Challenges



Aerial photo from 1952 showing the river altering course due to a sediment plug forming within the San Acacia Reach above the Tiffany Basin.



Current Conditions



Current Conditions

The Low Flow Conveyance Channel (LFCC) functions as a drain for the floodplain. Maintaining the LFCC does not improve the function of the river or associated habitat.

During low flows in the summer months, the river dries, negatively impacting fish populations and riparian vegetation.

The spoil levee confines the channel and sediment deposition to the east side of the valley.

The river is perched because the channel is above the adjacent floodplain.

Following high-flow events, surface water ponding in the floodplain causes fish stranding and decreases downstream water delivery.

The river is disconnected from the water table resulting in high rates of seepage loss.

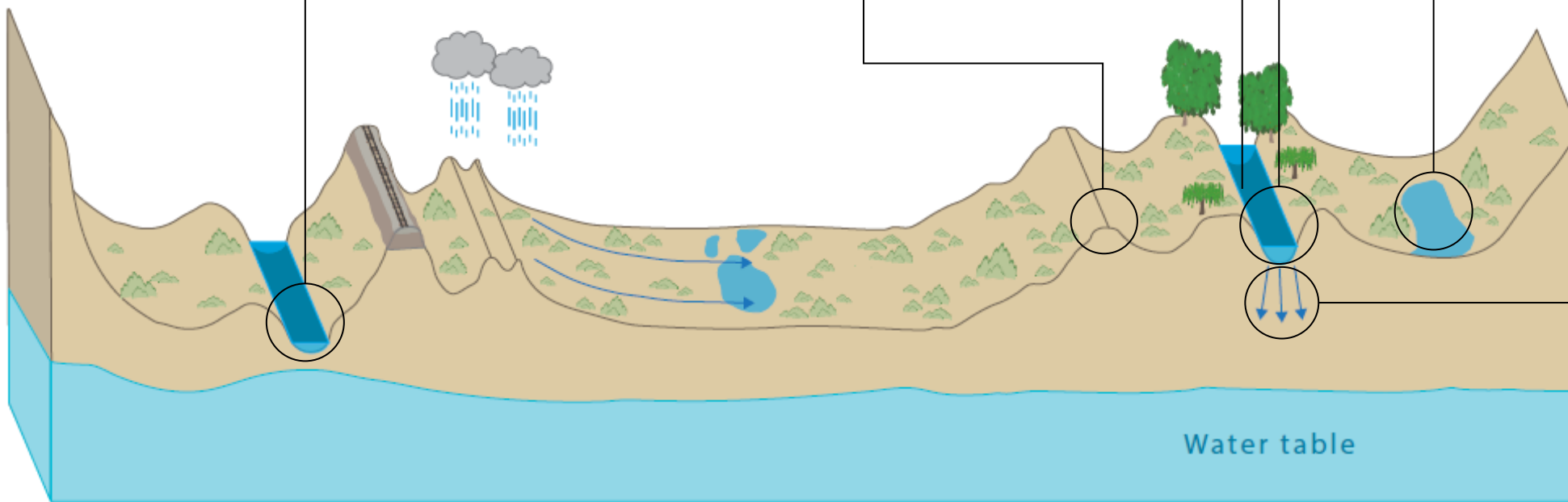


Figure is not to scale and is for illustrative purposes only.



Key Issue – Water Loss

- Transpiration – water vapor released from plant leaves, often invasive plant communities
- Evaporation – water vapor lost from open water and moist soil
- Seepage – surface water infiltrating into the ground
- Stranded Water – surface water becomes disconnected or ponded following high-flow events (leads to more evapotranspiration and seepage)



Key Issue – Stressors on Endangered Species Habitats

- River drying due to water diversions and conveyance system losses
- Infrequent and shorter duration floodplain inundation
 - Lack of egg retention and larvae development during spring runoff (insufficient low-velocity area)
 - Insufficient development of native vegetation of varying age classes near water
- Decreased complexity in channel/floodplain morphology
 - More uniform and static conditions



Key Issue – O&M with Limited Benefit

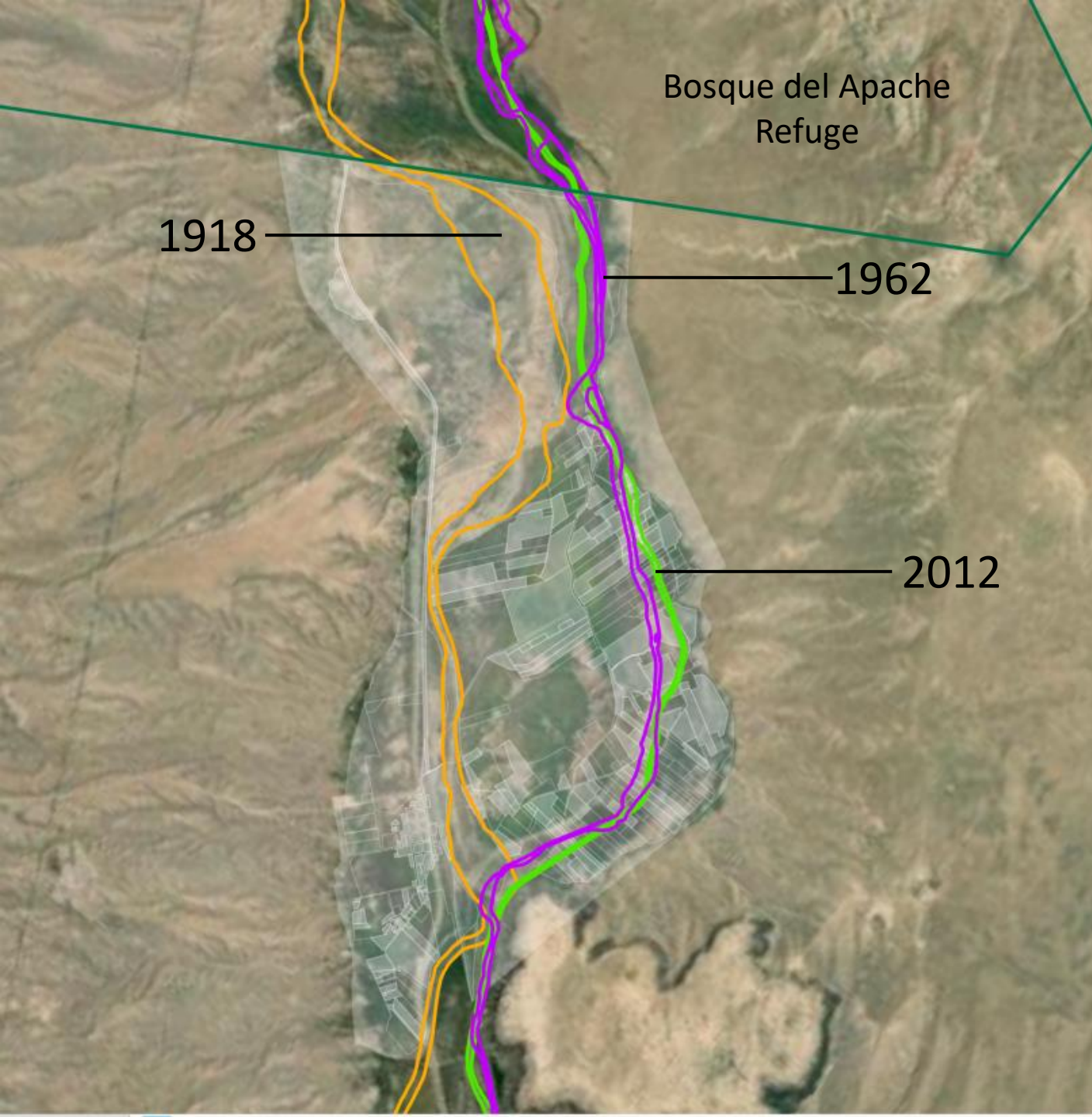
- Maintaining channel conditions/dimensions that compete with geomorphic trends results in continual maintenance and emergency actions.





What do these lines tell us?

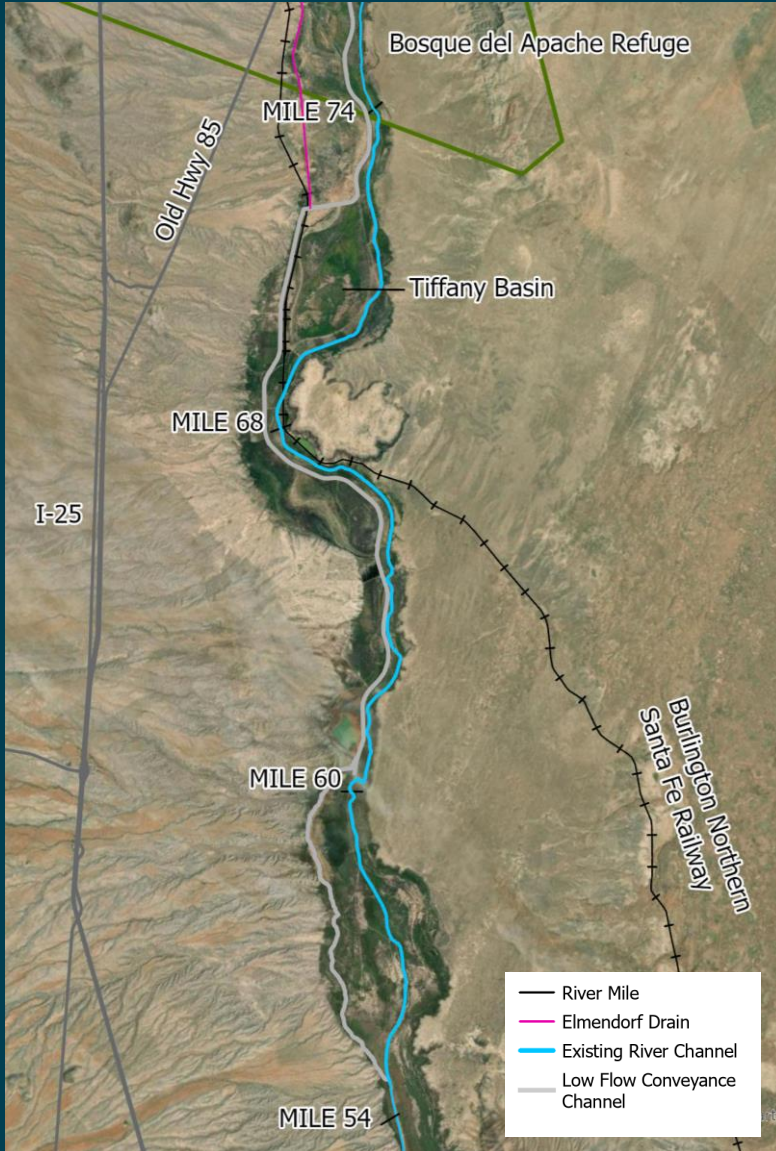




- The Rio Grande is a dynamic system
- The active channel has shifted throughout the valley during the past century
- To remain a functioning river it will need to shift again

Alternatives

Alternative A - No Action



Alternative B



Alternative C



Project Timeline

- Late April/early May 2023 – Notice of Intent (NOI) published
- 30 days following the NOI publication, Public Scoping will be conducted
- Summer 2024 – Draft Environmental Impact Statement will be available for public comment for 45 days
- Spring/Summer 2025 – Public Notification of Final Environmental Impact Statement and signing of Record of Decision
- Winter 2025 – Construction anticipated to begin



Opportunities for Public Participation

- **Public Scoping – May 2023**
 - Public Meetings will be held in three locations: Albuquerque, T or C, and Socorro
 - Notification about the public meetings will be sent via email, mail, and published in the paper
 - Online comment submittal will be available through the project's website
- **Draft EIS Public Comment – Summer 2024**
 - Open-house meetings will be hosted during the comment period
 - Notification about the public meetings will be sent via email, mail, and published in the paper
 - Online comment submittal will be available through the project's website



Ashlee Rudolph, Project Manager
arudolph@usbr.gov

Ken Richard, Program Management Group Supervisor
krichard@usbr.gov



— BUREAU OF —
RECLAMATION

Stephanie Russo Baca Board Reports Regular Board Meeting May 8, 2023.

April 16-20, 2023, NWRA Federal Water Issues Conference, Washington, DC.

This was a packed conference. Important discussions included food safety, Army Corps of Engineers project funding, Farm Bill as well as independent Congressional and Federal Agency visits. MRGCD staff and board members met with USDA/NRCS, Senator Martin Heinrich's office, and Ben Ray Luján office, For the 1st district Representative Melanie Stansbury, 2nd district Representative Gabe Vasquez office and 3rd district Representative Teresa Leger Fernandez. Additionally, we met with the U.S. Department of the Interior Assistant Secretary Tanya Trujillo. Many of these meetings were attended with a delegation from the Elephant Butte Irrigation District.



2023 Federal Water Issues Conference

Washington, D.C.

Embassy Suites Convention Center
900 10th Street NW Washington, DC, 20001

Agenda

Monday, April 17, 2023

All Day

Independent Congressional and Federal Agency Visits

Take this time to meet your congressional delegation and agency officials to discuss the issues of importance to you and NWRA.

4:00 pm
Embassy Suites

NWRA Conference Registration Opens

6:00 – 7:00 pm
Embassy Suites
Capital Ballroom B

Welcome Reception

Tuesday, April 18, 2023

6:30 am – 9:00 am
Breakfast Area

Breakfast

Complementary for hotel guests of the Embassy Suites

7:30 am – 12:00 pm
Embassy Suites

Registration & Coffee

8:00 am – 8:30 am
Embassy Suites
Capital Ballroom A

Keynote Speaker – Brian Scott

**Deputy Assistant National Cyber Director for Cyber Policy and Programs
Office of the National Cyber Director
Executive Office of the President**

Come hear about the recently announced White House National Cybersecurity Strategy.

8:30 am – 9:30 am
Embassy Suites
Capital Ballroom A

Farm Bill Panel

House and Senate Agriculture Committee Staff

Join us for a conversation with key congressional staff on the development of the next farm bill.

9:30 am – 10:00 am
Embassy Suites

Networking Break

Agenda

10:00 am – 10:30 am
Embassy Suites
Capital Ballroom A

Army Corps

Robyn Colosimo, Deputy Assistant Secretary of the Army (Project Planning and Review)

Come hear the latest on current initiatives within the Corps, such as the Principles, Requirements and Guidelines rulemaking and their potential impacts on stakeholders.

10:30-11:00 am
Embassy Suites
Capital Ballroom A

Food Safety's Impact on Water

Dr. Jennifer McEntire – International Fresh Produce Association

Join us for a conversation on how the fresh produce industry is addressing current FDA food safety regulations and how those actions might impact raw water suppliers.

11:30 am – 12:00 pm
Embassy Suites
Capital Ballroom A

NWRA Federal Affairs Roundtable

Join us as we discuss the top priorities for water users and prepare to advocate on Capitol Hill.

1:00 pm – 5:00 pm

Independent Congressional and Federal Agency Visits

Take this time to meet your congressional delegation and agency officials to discuss the issues of importance to you and NWRA.

5:30 pm – 7:00 pm
NWRA office
4 E Street SE
Washington, DC 20003

All American Cookout

Join your NWRA friends for a relaxing evening of networking and great food (hotdogs and apple pie) before heading to the Nationals game.

7:05 pm
Nationals Stadium
1500 S Capitol St SE,
Washington, DC 20003.
(a quick walk from
the NWRA offices.)

Washington Nationals Baseball

Join your NWRA colleagues for a trip to the ballpark and see the Washington Nationals play the Baltimore Orioles. Please note, a separate ticket purchase is required. A block of tickets has been reserved for NWRA.



2023 Federal Water Issues Conference

Washington, D.C.

Embassy Suites Convention Center
900 10th Street NW Washington, DC, 20001

Agenda

Wednesday, April 19, 2023

6:30 am – 8:00 am Breakfast Area	Breakfast Complementary for hotel guests of the Embassy Suites
7:30 am-10:00 am	Registration & Coffee
8:00 am – 8:30 am Embassy Suites Capital Ballroom A	Keynote Speaker - Congressman Chuck Fleischmann <i>Join us for a conversation with the Chairman of the House Appropriations Subcommittee on Energy & Water Development and hear about the subcommittee agenda for 2023.</i>
8:30 am – 9:30 am Embassy Suites Capital Ballroom A	Financing Our Nation’s Water Infrastructure Needs Jorianne Jernberg – EPA Aaron M. Snyder, PMP – Army Corps <i>Come listen to representatives from the U.S. EPA and Army Corps discuss initiatives designed to assist with the financing of water infrastructure projects.</i>
9:30 am – 10:00 am Embassy Suites	Networking Break
10:00 am – 10:30 am Embassy Suites Capital Ballroom A	Department of Interior Update Gary Gold, Deputy Assistant Secretary for Water & Science <i>Come hear about the current Western water priorities and initiatives being carried out by the Department of Interior.</i>
10:45 am – 11:45 am Embassy Suites Capital Ballroom B	NWRA Board of Directors Meeting
11:00 am – 5:00 pm	Independent Congressional and Federal Agency Visits <i>Take this time to meet your congressional delegation and agency officials to discuss the issues of importance to you and NWRA.</i>

Conservation Advisory Committee

Meeting Agenda

April 20th, 2023

9:30-11:30 AM.

THIS WILL BE A HYBRID MEETING. Committee Members who want to join the meeting in person may do so at the MRGCD's main office (1931 2nd St. Albuquerque, NM). Online Meeting URL: Meeting link will be provided in the group email. It will be a GoTO Meeting invite which will have both a computer option and or call in option.

<https://meet.goto.com/james789>

Topics for Discussion

Current Hydrology Update

Storey Wasteway OCS Update

New Belen OCS – Gate Installation Update

Conservation Program Expansion Update

Open Topic

April 21, 2023, Rio Grande Compact Commission Meeting, Virtual.

Rio Grande annual meeting addressed dam repairs, wildlands restoration, and water management. It was also noted that there is more money and water available this year, but future cooperation needed due to climate uncertainty. New Mexico State Engineer Mike Hamman emphasized settling water rights disputes at all levels. Rapid warming and variable precipitation lead to water fluctuations and drought. Rio Grande Compact Commission credit and debit accounting system to manage water sharing. Pueblos seek greater decision-making power and presentation opportunities at future meetings. Increased investment in water projects from federal agencies and states. Concerns over sediment buildup in dams, requiring improved management strategies. Dam repair project at El Vado delayed, posing challenges for water storage in 2024

Agenda
Rio Grande Compact Commission
Colorado New Mexico Texas

84th Annual Meeting (108th Meeting)
Friday, April 21, 2023, 9:00 AM (MDT)
NM State Capitol, 490 Old Santa Fe Trail, Santa Fe, NM
Room 307

1. Call to Order by the Chairman
2. Approval of the Meeting Format
3. Approval of the Agenda
4. Announcements
5. Report of the Engineer Advisers
6. Report of the Legal Advisers
7. Report of the Commissioners
 - a. State of Colorado
 - b. State of New Mexico
 - c. State of Texas
8. Report of Federal Agencies
 - a. Bureau of Reclamation
 - b. Army Corps of Engineers
 - c. Bureau of Indian Affairs
 - d. Fish and Wildlife Service

- e. U.S. Geological Survey
 - f. International Boundary and Water Commission
9. Presentation of Costs of Operation for FY 2022 (July 1, 2021 to June 30, 2022)
 10. Presentation of the Budget for FY 2024 (July 1, 2023 to June 30, 2024)
 11. Cooperative Agreement with the U. S. Geological Survey (accounting services)
 12. Approval of the Minutes of the 83rd Annual Meeting (106th Meeting)
 13. Approval of the Minutes of the November 10, 2022 Special Meeting (107th Meeting)
 14. Approval of the Letters to the Governors
 15. Other Business
 - a. Engineer Advisers' Recommendations
 - b. Presentation of Compact Accounting
 - c. Resolution for Mike Sullivan
 16. Public Comment
 17. Adjournment

**REPORT OF THE ENGINEER ADVISERS
TO THE RIO GRANDE COMPACT COMMISSION
FOR CALENDAR YEAR 2022**

April 18, 2023

The Engineer Advisers to the Rio Grande Compact Commission met in person and by video conference on January 19, 2023 and from March 13 to March 17, 2023 to:

- Receive reports;
- Reconcile the 2011 to 2021 Rio Grande Compact (Compact) water accounting pursuant to the November 10, 2022 Rio Grande Compact Commission Credit Water Agreement for Administration and Accounting at Elephant Butte Reservoir (Agreement);
- Prepare the 2022 Compact water accounting;
- Discuss continuing and new issues in preparation for the 2023 annual meeting of the Rio Grande Compact Commission (Commission); and
- Prepare the Engineer Advisers' report.

The Engineer Advisers received the participation of the Colorado Division of Water Resources (CDWR), the U.S. Geological Survey (USGS), the U.S. Bureau of Reclamation (Reclamation), the U.S. Army Corps of Engineers (Corps), the U.S. Bureau of Indian Affairs (BIA), the International Boundary and Water Commission (IBWC), and the U.S. Fish and Wildlife Service (Service) at the meetings. The agencies each presented information about their specific water-related activities in the basin during calendar year 2022.

2011-2021 COMPACT ACCOUNTING RECONCILIATION

Since 2011, there has been a lack of consensus among the Engineer Advisers on finalizing the annual Compact delivery accounting. The lack of consensus is well documented in the annual reports of the Engineer Advisers from 2011 through 2021. At the direction of the Rio Grande Compact Commission, in June of 2022, the Engineer Advisers initiated discussions to reach a consensus on finalizing Compact accounting for 2011 forward. In Fall 2022, the Engineer Advisers developed the Agreement that resolved the dispute over how the evaporative

losses on Credit Water are calculated and tabulated in the accounting for water deliveries. The Agreement also addresses future mandatory relinquishments, accounting of evaporation of Credit Water using the “Constant Credit Water Method,” and a one-time adjustment to delivery credits for New Mexico and Colorado to compensate for the 2011 releases of Credit Water.

On November 10, 2022, at a special meeting of the Rio Grande Compact Commission, a resolution was passed which adopted the Agreement. Based on this Agreement, the Engineer Advisers reconciled the annual Compact delivery accounting from 2011 to 2021. The methodology described below was utilized to reconcile the accounting, using the 2010-approved accounting as a starting point. Calculation of evaporation on Credit Water used the following methodology:

- Rio Grande storage and Rio Grande evaporation in Elephant Butte Reservoir data were exported from the final Upper Rio Grande Water Operations Model (URGWOM) files for the years 2011-2021;
- Beginning of Year (BOY) Credit Water in storage for Colorado and New Mexico was held constant throughout each year;
- Evaporation on Colorado and New Mexico’s Credit Water was calculated on a daily timestep for each year, in proportion to the total amount of native water physically stored daily in Elephant Butte Reservoir. In previous years, evaporation on Credit Water was calculated on a monthly timestep, but since daily pan evaporation and reservoir storage data are readily available, a more accurate daily timestep method was utilized for the accounting reconciliation.; and
- The daily Credit Water evaporation was totaled for Colorado and New Mexico annually for each year, and the BOY Credit Water storage for each state was reduced by the respective evaporation volumes for 2011 through 2021.

As part of their discussions on reconciliation of the accounting, the Engineer Advisers also agreed to compute evaporation on retained Debit Water in storage on a daily basis and to apply it annually. This method can be used to calculate evaporation on retained Debit Water in any reservoir where it may be in storage:

- The data for Rio Grande storage and evaporation in El Vado Reservoir were exported from the final URGWOM files for the years when New Mexico retained Debit Water (2017, 2018 and 2020);
- Evaporation on New Mexico’s retained debit was calculated on a daily timestep in proportion to the total native water stored daily in El Vado; and
- For the years where Debit Water was retained, the daily evaporation on Debit Water was totaled annually and applied as a credit to the Accrued Debit.

The reconciled and Engineer Adviser-approved accounting sheets will be presented to the Commissioners for approval at the 2023 Commission annual meeting, in accordance with the Agreement. The reconciled accounting sheets will be included in a separate document in the Rio Grande Compact Commission Annual Report.

The Engineer Advisers agreed that this will be the method for Credit and Debit water accounting going forward. Based on the reconciled accounting period which ended on December 31, 2021, New Mexico’s Accrued Debit was 128,900 acre-feet, and Colorado’s Accrued Debit was 4,000 acre-feet.

2022 COMPACT ACCOUNTING

The Engineer Advisers reviewed the streamflow and reservoir storage records and other pertinent data for the Upper Rio Grande Basin during calendar year 2022 and reached a consensus on the Compact accounting. As determined by the Engineer Advisers, scheduled and actual deliveries, release of Usable Water for the year 2022, and balances as of January 1, 2023, are as follows:

a) Deliveries by Colorado at the State Line:

Balance as of January 1, 2022	-4,000 acre-feet
Scheduled delivery from Conejos River	86,200 acre-feet
Scheduled delivery from Rio Grande	109,800 acre-feet
Actual delivery at Lobatos plus 10,000 acre-feet	199,900 acre-feet
One-time adjustment/delivery credit	300 acre-feet
Accrued credit January 1, 2023	200 acre-feet

b) Deliveries by New Mexico at Elephant Butte Dam:	
Balance as of January 1, 2023	-128,900 acre-feet
Scheduled delivery	336,600 acre-feet
Actual delivery	340,000 acre-feet
One-time adjustment/delivery credit	32,5000 acre-feet
Accrued debit January 1, 2023	93,000 acre-feet
c) Project Storage and Releases:	
Accrued departure (credit) as of January 1, 2023	2,765,800 acre-feet
Actual release of Usable Water	269,900 acre-feet
Normal release for year	790,000 acre-feet
Under Release in excess of 150,000 acre-feet	370,100 acre-feet
Accrued departure (credit) as of January 1, 2023	2,915,800 acre-feet

No Debit Water was stored in 2022.

The Engineer Advisers jointly prepare the Compact accounting based on information provided and presented by state and federal agencies, which is the best available information at the time of report preparation. The Engineer Advisers' Report is considered final upon signature by the three Engineer Advisers.

RIO GRANDE BASIN CONDITIONS

Snowpack and snow-water equivalent (SWE) amounts were near to below average throughout the winter of 2021-2022. The SWE for most headwater areas in both Colorado and New Mexico peaked at slightly below their average peak values. At the end of the winter season the SWE dropped drastically, resulting in a snow-free date for most locations occurring approximately one month earlier than usual. Below-average precipitation in the spring months as well as windy conditions and very low soil moisture were factors preventing much of the SWE from reaching the rivers and streams. As a result, snowmelt runoff levels and yearly streamflow amounts in 2022 were well below the long-term average for most areas across the basin in Colorado and in New Mexico. Multiple summer monsoonal precipitation events were instrumental in increasing most basin streamflows to around the historical average.

Due to the low runoff flows, Platoro Reservoir only reached a high of approximately 44 percent of capacity during late May of 2022. Usable Water in Rio Grande Project (Project)

Storage was below the Article VII trigger of 400,000 acre-feet the entire year, which imposed Article VII storage restrictions on storage in post-Compact reservoirs.

CONTINUING COMPACT ISSUES

This section of the report summarizes new information about issues directly related to the Compact and which were previously addressed by the Engineer Advisers. It reflects information obtained by the Engineer Advisers prior to the writing of the Engineer Advisers' report, and it may contain information obtained from the reports of the federal agencies at the 2023 Engineer Advisers meetings or otherwise reported.

Relinquishment Update

The total amount of Accrued Credit relinquished by Colorado since 2013 is 3,000 acre-feet. Colorado did not store any relinquishment credit water in 2022. Between 2013 and 2021, Colorado stored a total of 2,885 acre-feet of relinquishment credit water in Platoro Reservoir, which leaves a balance of 115 acre-feet in Colorado's relinquishment account.

The total amount of Accrued Credit relinquished by New Mexico since 2003 is 380,500 acre-feet. No relinquishment credit water was stored in New Mexico reservoirs during the 2022 calendar year. Relinquishment-credit water storage to date totals 288,728 acre-feet, leaving a balance of 91,772 acre-feet available to be stored in future years when Article VII storage restrictions are in effect.

Article VII storage restrictions are anticipated to be lifted for several months beginning in the spring of 2023.

Gaging Station Review

At the preliminary Engineer Adviser meeting in January 2023, the Colorado Division of Water Resources (CDWR) reported on activities at Colorado's Compact gages. The Colorado USGS reviewed CDWR gaging station records for the seven Colorado Compact gages and approved all of those records for 2022. The CDWR made an average of 28 measurements at each of these seven Compact gaging stations. The records for most of these stations were rated as "good" except for the periods of estimation, which were rated as "poor."

For the Rio Grande near Otowi streamflow gage (#08313000), the USGS reported that in calendar year 2022 they continued to use the stage discharge rating (#42) which was implemented on February 8, 2021. The USGS reported they made a total of 14 measurements at the Otowi gage in 2022, with nine rated “good,” one rated “fair,” and one rated “poor.” For 2022, the USGS continued to utilize redundant primary sensors (non-contact radar and wire weight) as well as redundant secondary reference gages (bubbler and staff gage) for gage-height readings. There were no equipment changes at the Otowi gage for 2022.

The USGS reported that during the 2022 calendar year, 33 measurements were collected at the Rio Grande below Elephant Butte streamflow gage (#08361000). Of the 33 measurements, 13 were rated “good,” five were rated “fair,” and two were rated “poor.” Aquatic vegetation growth on the streambed at the USGS gaging station section continues to cause a low bias in gaged flow during certain months. This issue has occurred for an undetermined period but began to be addressed in 2016 by utilizing an alternate section which is not impacted by vegetation growth during certain months. After June 1, 2022, all measurements were made at the alternate section below Elephant Butte Dam due to vegetation impacts at the primary section cableway. The gage records for 2016 through 2022 reflect improved precision, and the NMISC will continue to coordinate with the USGS to provide more accurate gage records in the future.

Reclamation reported that they analyzed the data for the Rio Grande Below Caballo gage. A total of 42 measurements were made at the below Caballo gage between June 1st and August 20th, of which 24 measurements were reported as “Compact measurements.” The Acoustic Doppler Velocity Meter (ADVM) is no longer being utilized at the site because their analysis has indicated that stage-discharge data are more representative of flow due to the site conditions. The ADVM will be deployed to the alternate section below Elephant Butte.

The USGS also reported that they reviewed and approved the 2022 streamflow gage below Caballo (#08362500) flow records developed by Reclamation, and that all necessary documentation was provided. The USGS reported that the record accuracy looked good, in large part due to the high number of measurements made at the gage.

The NMISC continued its survey of water-level elevations in Elephant Butte and Caballo reservoirs. NMISC’s surveyor performed surveys alongside Reclamation staff in June 2022 and

January 2023. Results from both NMISC's surveys indicated that Reclamation's reservoir stage elevations were within the agreed upon threshold criteria of 0.05-foot difference between the surveyed elevation and the stage-discharge recorder (SDR). Reclamation performed routine stage elevation surveys throughout 2022 and adjusted the SDR as needed if the threshold criteria was exceeded.

In 2022, Reclamation continued to measure Elephant Butte elevation via the SDR and a bubbler. The bubbler, which is maintained in conjunction with the USGS, shows more scatter but in general more accurately reflects observed elevation when the reservoir is low. NMISC and Reclamation will continue to perform side-by-side surveys at select times during 2023 to ensure the accuracy of the reservoir elevation data.

Gaging Station Costs

The Engineer Advisers and Compact Commissioners have expressed concern in the past multiple years over the large difference in costs between what Reclamation charges to operate the gage below Caballo Reservoir as compared to what CDWR and USGS charge for other Compact gages. The three Compact states split the costs of their operations in support of the Compact equally, including operation and maintenance of the Compact gaging stations. Therefore, this high cost from Reclamation affects all three states.

The cost charged by Reclamation for the operation of the below Caballo Gage for this coming year is no exception to the recent very large charges that Reclamation submits to the Engineer Advisers. For this upcoming year, Reclamation provided a cost estimate for the operation of this gaging station of \$36,581. Of that total, the cost to be borne by the Compact states was \$29,265. This is an increase of \$14,024, or a 92% increase over last year's costs. Additionally, documentation or justification to support this very large increase was not provided with the initial submission of costs but was only provided after specific requests from the Engineer Advisers. Currently, Reclamation's charges to the Compact states are approaching three times the amount of the average cost charged per gage by CDWR and USGS. The Engineer Advisers remain very concerned with Reclamation's high cost for the operation of this gage and with the large fluctuations in the charged costs year to year.

FEDERAL AND STATE AGENCY REPORTED INFORMATION

This section of the report is for informational purposes only and summarizes new information about issues which are not directly related to Compact administration. It reflects information obtained by the Engineer Advisers prior to the writing of the Engineer Advisers' report, and it may contain information obtained from the reports of the federal and/or state agencies at the 2023 Engineer Advisers' meetings or otherwise reported. This section contains information provided by various entities without analysis or approval by the Engineer Advisers.

Middle Rio Grande Endangered Species Collaborative Program

The Middle Rio Grande Endangered Species Collaborative Program (Collaborative Program) was authorized by the Omnibus Appropriations Act of 2009 (P.L. 111- 8). The Collaborative Program continues to seek innovative and collaborative ways to support Endangered Species Act (ESA) compliance for listed species while protecting water uses in the Middle Rio Grande. Reclamation reported that their federal appropriations in federal fiscal year (FY) 2022 were \$2.78 million for Collaborative Program activities, which stayed consistent from the \$2.78 million in federal FY 2021 but decreased from \$3.84 million in federal FY 2020. Projects funded through Reclamation that remain in the Collaborative Program are several long-term monitoring programs such as the Rio Grande silvery minnow (RGSM) population and genetics monitoring, and Middle Rio Grande bird surveys.

WildEarth Guardian's Litigation over the 2016 Biological Opinion

On November 30, 2022, WildEarth Guardians filed a lawsuit in U.S. District Court against the U.S. Fish and Wildlife Service and Reclamation regarding the 2016 Middle Rio Grande Biological Opinion (2016 BO). The lawsuit claims the 2016 BO is invalid under the ESA and arbitrary under the Administrative Procedure Act. The MRGCD intervened without protest and on February 6, 2023, a 90-day stay was granted for settlement negotiations.

Upper Rio Grande Water Operations Model

The URGWOM is a computational model developed through an interagency effort led by the Corps, Reclamation, and the New Mexico Interstate Stream Commission (NMISC). The effort includes regular meetings to discuss modeling outputs for daily water operations and accounting procedures. During 2022, URGWOM activities included:

- Updating the basin-wide annual operating plan (AOP) in collaboration with Reclamation and the NMISC;
- Updating the database to include data through 2021 for the MRG and the Lower Rio Grande (LRG);
- Developing, calibrating, and implementing deep aquifer objects into the model;
- Updating the five-year plan;
- Updating all URGWOM documentation volumes to the public website;
- Studying the Abiquiu deviation to store Prior and Paramount (P&P) water due to rehabilitation of El Vado Dam; and
- Continuing to develop the real-time operation model by linking URGWOM to the Corps Water Management System (CWMS) and using National Weather Service (NWS) forecasts for real-time operations.

Key objectives for 2023 include:

- Preparing basin-wide AOPs for 2023;
- Continuing to develop CWMS compatibility with partners at the Center for Advanced Decision Support for Water and Environmental Systems to eventually move URGWOM into the CWMS platform; and
- Updating the Real-Time Forecast Model using NWS forecast data (10-day forecast).

Compliance by Federal and State Agencies with State Water Law

The NMISC continues to track habitat restoration projects implemented by various federal and state agencies, and to account and report on related depletions in the Middle Rio Grande. It coordinates with the New Mexico Office of the State Engineer (NMOSE) to determine if a permit is needed and to ensure any new depletions are offset by the projects' sponsors. The NMISC reported that it continues to coordinate with the Corps on several habitat

restoration projects to ensure that those depletions are offset. The NMISC also coordinates with Reclamation in using the State's Strategic Water Reserve for ESA-related water management, including offsetting depletions associated with habitat restoration and river augmentation activities. Below-average snowmelt runoff in 2022 resulted in approximately 2 acre-feet of depletions for habitat restoration projects in the Middle Rio Grande that were offset by New Mexico's Strategic Water Reserve.

Elephant Butte Delta Channel Project

With a below-average snowmelt runoff and an above-average monsoon season the Elephant Butte Delta Channel (Delta Channel) successfully conveyed all flows during 2022. The extended duration of the monsoon season, combined with the lower magnitude of precipitation, generated smaller peak flows that resulted in less degradation of the Delta Channel throughout the year.

During October and November of 2022, the NMISC construction contractor conducted regular maintenance on the Delta Channel in the middle and upper project sections. Since 2003, New Mexico has spent nearly \$20 million to construct and maintain the Delta Channel and continues to partner with Reclamation, which provides engineering support, environmental compliance, access-road work, and primary maintenance for the project.

Mass Balance Review

The NMISC conducted a mass balance analysis for the Rio Grande between the Elephant Butte and Caballo gages for calendar year 2022. The mass balance analysis indicated that the reach gained water in nine out of twelve months with a total calculated annual gain of 43,242 acre-feet. The large gain during the year is largely attributed to intervening flows from significant monsoon rains, with August and September inflows exceeding 20,000 acre-feet and 15,000 acre-feet, respectively. Losses occurred in May, June, and July, with May seeing losses of over 5,000 acre-feet as irrigation water started being released.

Colorado Groundwater Regulations

In late 2015, the State Engineer of Colorado completed the development of rules and regulations concerning the use of groundwater in the Upper Rio Grande Basin in Colorado. These rules were approved by the Colorado Division 3 (Rio Grande Basin) Water Court in 2019 and went into full effect on March 15, 2021. As an integral part of these rules, the State Engineer of Colorado has also completed the development of Phase 6 of the Rio Grande Decision Support System Model. Development of Phase 7 began and is currently moving forward along with peer review. This model captures the interaction between surface and groundwater and shows the effect that wells have on senior surface water rights. The owners of non-exempt wells are required to mitigate the injurious depletions that their wells cause to senior surface-water rights and regulate the use of the confined and unconfined aquifers to maintain a sustainable water supply in each aquifer system. There are currently seven groundwater user subdistricts and multiple individual augmentation plans that have been developed as a way for the well owners to comply with the rules. Difficulty meeting sustainability in Subdistrict One has led to the contemplation of a new Plan of Water Management for that subdistrict and the filing of three significant independent Plans of Augmentation in Colorado Water Court.

Aamodt Settlement and Pojoaque Basin Regional Water System

The Aamodt Water Rights Settlement Agreement (Settlement Agreement) was developed through multi-party negotiations, which began in 2000 between the Pueblos of Nambé, Pojoaque, Tesuque and San Ildefonso, the State of New Mexico, the United States of America, Santa Fe, Santa Fe County, and representatives of non-Pueblo water users, to settle the Pueblos' water right claims in the Pojoaque Basin. The Settlement Agreement provides for the funding and construction of the Pojoaque Basin Regional Water System to supply treated water to Pueblo and non-Pueblo parties. As expressly stated in the Settlement Agreement, "Nothing in this agreement shall be construed to limit the authority of the State Engineer to...ensure compliance with the Rio Grande Compact," (Section 6.6.1.6). The Engineer Advisers will continue to evaluate the project as it moves forward, including evaluating potential impacts to the Otowi Index Supply.

The final Pojoaque Basin Regional Water System Environmental Impact Statement was published in the Federal Register in January 2018, and the Record of Decision was signed on September 11, 2019. Construction began on the intake area of the Regional Water System in June 2020. Additional funding and a time extension were authorized in late 2020, and the first portion of Phase I work was completed in January 2022. The next portion of Phase 1 construction was expected to begin in March 2022.

In 2022, about 3 acre-feet were withdrawn from the completed wells for construction purposes, such as dust abatement and compaction.

Reclamation's Lower San Acacia Reach Improvements Project

For FY 2022, Reclamation reported on progress on the Identification of San Acacia Reach Options (ISARO), which advanced to the next stage called the Evaluation of San Acacia Reach Options (ESARO) and is now referred to as the Lower San Acacia Reach Improvements Project (LSARI). This project focuses on the lower section of the San Acacia Reach from Highway 380 bridge just above the Bosque del Apache National Wildlife Refuge (BDANWR), downstream to the Narrows of Elephant Butte Reservoir. As previously reported, this area has historically been problematic for deliveries of water and sediment downstream into the reservoir, and high losses continue to occur in this section of the river. Reclamation has engaged with the NMISC, MRGCD, Service, and local landowners on its conceptual engineering options. A Value Planning Study required by Reclamation for large-scale projects was completed in 2021. In 2022, two alternatives were identified, a feasibility-level study and EIS were started, and a technical team was established that includes nonfederal partners, with an estimated completion date in 2024.

Conversion from a two-channel system consisting of the river channel and Low Flow Conveyance Channel (LFCC) to a single channel is the highest-ranking option in a Feasibility Study, but other options will continue to be evaluated. In addition, the re-operation of the LFCC from the San Acacia Diversion Dam to its terminus will be part of the evaluation as requested by the MRGCD.

Closed Basin Project

The total production of the Closed Basin Project in calendar year 2022 was 11,673 acre-feet. This total includes water that was exchanged for Colorado Parks and Wildlife water to be delivered to the Blanca Wildlife Habitat Area, the Alamosa National Wildlife Refuge and to the San Luis Lakes State Wildlife Area. The amount creditable for Compact purposes from direct delivery and exchange was 8,276 acre-feet. The remainder of the water produced was delivered to various federal lands along the project to be used as mitigation for the project footprint. All the water delivered to the Rio Grande in 2022 was of sufficient quality to qualify for credit under the Compact.

Reclamation continues to address problems of biofouling in the production wells of the Closed Basin Project. During 2022, Reclamation rehabilitated 19 wells and installed four new pumps. Wells will continue to be rehabilitated as budgetary constraints allow to help maintain project production. The Closed Basin Operating Committee continues to monitor groundwater levels and groundwater production and to adjust project operations pursuant to the enabling legislation.

Reclamation's Middle Rio Grande Supplemental Water Program

Reclamation's supplemental water program is intended to provide additional water, primarily obtained through the voluntary leasing of San Juan Chama Project (SJCP) water, for endangered species' needs and compliance with the 2016 BO. The program originally included water acquisition, reservoir storage, and release of water to support river flows. From 2001 to 2020, it also included operation of a pumping network in the San Acacia Reach to pump water from the LFCC to the river.

In 2022, a total of 6,337 acre-feet of supplemental water was released for endangered species purposes. Reclamation reported that the release of supplemental water began on May 24 and continued through June 17. Releases resumed on July 8 through July 27 and again on September 5 through September 21.

Reclamation ended 2022 with a total of 5,016 acre-feet of supplemental water in storage: 1,656 acre-feet of water in Abiquiu Reservoir and 3,360 acre-feet of water in Heron Reservoir,

all leased from 2022 SJCP contractor allocations. Reclamation is negotiating leases of up to 12,000 acre-feet from SJCP contractor allocations for 2023.

In addition to the water released by Reclamation, three other sources of water were reportedly used to support ESA needs:

- 139.61 acre-feet of pre-1907 native rights were permitted for offset via New Mexico's Strategic Water Reserve, released as needed between April 27 and May 5;
- 137 acre-feet of SJCP water leased by Audubon New Mexico, released between June 15 and September 11; and
- 2,551 acre-feet of native water were acquired via the MRGCD's Environmental Water Leasing Program (EWLP), which is a fallowing program funded by Reclamation.

Reclamation reported that 2,554 acres were enrolled in the EWLP and that the program receives a credit, in acre-feet, for all enrolled acres, prorated to account for water availability. According to Reclamation, above average monsoon activity resulted in above average summer and fall inflows, which generated a credit of 7,015 acre-feet for the season. Beginning in June, 2,551 acre-feet of this water were released for ESA needs and Reclamation reported that the remaining 4,464 acre-feet of EWLP credits were not released and did not carry over.

The Neil Cupp pumping site, originally developed by Reclamation for temporary pumping operations from the LFCC to the river, was converted to a permanent pumping site in 2020. It is now owned and operated by MRGCD and is capable of pumping to both the river and to irrigation facilities. In 2022, MRGCD pumped a total of 230 acre-feet to the river between June 2 and June 7 to maintain river connectivity.

Six Middle Rio Grande Pueblos Prior and Paramount Operations

In 2022, due to the limitations of storage in El Vado Reservoir during the repair to El Vado Dam, a request was made by the Corps to the Commission to allow Rio Grande water to be stored in Abiquiu Reservoir for use by the Pueblos in their P&P operations. The three compacting states agreed to allow up to 20,000 acre-feet of storage in Abiquiu Reservoir for P&P operations. Storage began on January 1, 2022, and the entire amount was stored while

Article VII Compact restrictions were in place. Due to significant monsoon rains and sufficient spring runoff, none of the water stored for P&P operations in 2022 was released for irrigation purposes. The P&P water stored in Abiquiu Reservoir had 1,356 acre-feet of evaporative losses, and the remaining 18,644 acre-feet was released downstream to Elephant Butter Reservoir November 15 through December 12, 2022.

Based on the March 2023, most-probable snowmelt runoff forecast, the BIA reported a preliminary storage target of approximately 18,496 acre-feet for their P&P operations in 2023. Additional forecasts may change this storage estimate, and the May 1 forecast is used as the final storage target. If the computed P&P storage based on the May 1 forecast is less than the 20,000 acre-feet permitted for P&P use in 2023, then the computed storage amount would be used. It is anticipated that all P&P storage in 2023 will be made during Article VII restrictions.

The BIA was able to make funding available to the Pueblos to perform work upgrading their irrigation systems. The BIA also provides funds to the MRGCD to perform maintenance work on the systems which serve Pueblo lands.

2022 Rio Chama Water Supply Conditions

Snowpack conditions in the Rio Chama Basin were well-below average during the winter of 2021-2022. The March through July native inflow to El Vado Reservoir was 114,422 acre-feet, or approximately 51 percent of average.

Beginning in early summer, flows on the Rio Chama were insufficient to meet the direct-flow irrigation needs of the Rio Chama Acequia Association (RCAA). RCAA represents 16 acequias on the Rio Chama between Abiquiu Reservoir and the confluence with the Rio Grande that have direct surface flow diversion rights. With insufficient native flows to meet their needs and the absence of sufficient leased SJCP water, the NMOSE curtailed RCAA diversions to the available natural flow of the river from summer through fall of 2022.

Rio Grande Project Operations

The 2022 Rio Grande Project (Project) water accounting amounts were approved by the respective district boards and Reclamation prior to the 2023 Engineer Advisers' Meeting. All accounting information reported by Reclamation is based on URGWOM.

On January 1, 2022, there was 183,512 acre-feet of Usable Water in Project Storage (Elephant Butte and Caballo reservoirs combined) and 275,963 acre-feet on December 31, 2022. Usable Water reached a high of 296,984 acre-feet on May 27 and a low of 89,546 acre-feet on August 18, 2022.

Reclamation's initial allocation for calendar year 2022 for El Paso County Water Improvement District No. 1 (EP No. 1) and Elephant Butte Irrigation District (EBID), was calculated in May after the 2021 water accounting had been finalized.

Mexico was provided an initial allocation of zero acre-feet in December 2021. Based on the provisions of the 1906 Convention for extraordinary drought, the allocations to Mexico were updated monthly, with a final in-season allocation in July 2022 of 14,827 acre-feet, which is about 24 percent of a full allocation.

The final in-season Project allocation of 340,257 acre-feet was given on July 7, 2022, including Mexico's allocation of 14,827 acre-feet. The final calculated charges were: 111,483 acre-feet to EP No. 1; 82,339 acre-feet to EBID; and 14,843 acre-feet to Mexico. A total of 208,665 acre-feet of water deliveries were charged to the Project water users.

Mexico is allocated Project Water for delivery during the year based on the anticipated release of Usable Water. This allocation cannot be reduced once it has been made. The actual release for the 2022 irrigation season was less than the anticipated release forecasted in May. Deliveries to Mexico during the year are made based on the most recent Project allocation. At the end of the year, Mexico's final allocation is determined using the actual annual release from Caballo Dam. If the amount of water delivered to Mexico is larger than Mexico's final allocation, the difference is charged to the two districts based on the proportion of the end-of-year 2022 allocation balances. Therefore, EP No. 1 and EBID were charged with -562 acre-feet and -739 acre-feet, respectively, as adjustments for the difference between Mexico's allocation and measured diversions.

Reclamation reported that the final 2022 allocation balances and beginning balances for 2023 were 71,860 acre-feet and 58,447 acre-feet for EP No. 1 and EBID, respectively.

Reclamation reported final 2022 releases from Caballo Reservoir for Project accounting during the irrigation season of 268,290 acre-feet for all three Project water users: EP No. 1,

EBID, and Mexico. Releases from Caballo Reservoir began on June 1 and ended on August 20, 2022. EBID and EP No. 1 began the irrigation season with coordinated orders and diversions. Mexico delayed their initial order by one week, and their diversions began on June 7. EBID ended their surface water diversions on June 28, Mexico ended on August 9, and EP No. 1 ended diversions on August 31.

During 2022, Reclamation's report indicates drainage flows into Hudspeth County Conservation and Reclamation District No. 1 (HCCRD) during March through September were 16,009 acre-feet. The calendar year total flow data for HCCRD was 25,827 acre-feet. Additionally, 926 acre-feet was delivered from Caballo Reservoir through the Bonita Lateral during calendar year 2022.

The USGS reported that the total annual flow volume at the gage below Elephant Butte dam was 281,815 acre-feet. There was a total of 268,974 acre-feet measured at the Caballo gage which is the amount used in Compact accounting for the calendar year.

For 2023 Project operations, Reclamation determined that the initial 2023 allocation to Mexico is 7,374 acre-feet based on the December 1, 2022, data. Reclamation will continue to evaluate the amount of Usable Water monthly to determine the actual Project allocations, which will occur in April or May.

Based on the March 2023 snowmelt runoff forecast for the Rio Grande and current hydrologic conditions, Reclamation anticipates a shortened irrigation season beginning around June 2, 2023.

U. S. Geological Survey

The Engineer Advisers received reports from the USGS on their Rio Grande Basin studies. The USGS, in cooperation with Reclamation, has developed a model of the transboundary aquifers and interconnected surface waters of the Palomas and Mesilla basins in New Mexico and Texas and the Conejos-Médanos Basin of northern Mexico, known as Rio Grande Transboundary Integrated Hydrologic Model (RGTIHM). A Scientific Investigations Report was published in 2022. USGS is currently extending the simulation period of the historical calibration and incorporating a process to allow dynamic simulation of Rio Grande

Project operations. USGS also reported on a project to study streamflow response to potential changes in climate in the Upper Rio Grande basin.

The USGS listed, but did not give details on, many other New Mexico Water Science Center projects and activities in the Rio Grande Basin, such as the Transboundary Aquifer Assessment Program, the Mesilla Basin Monitoring Program, URGWOM support and other groundwater and surface water monitoring programs.

U.S. Army Corps of Engineers Civil Works Projects

The Corps reported on the status of Civil Works projects under the Water Resources Development Act (WRDA) of 2020, which provided reauthorization for the Rio Grande Environmental Management Program in Colorado, New Mexico, and Texas. Authorization for this program was extended through federal FY 2029. Current projects undergoing either a feasibility study, higher-level planning, or construction include: Abiquiu Reservoir legislation, Bernalillo to Belen Levee Project, and Sandia to Isleta ecosystem restoration.

Legislation related to Abiquiu Reservoir in WRDA 2020 changed the storage limit of SJCP and native Rio Grande water in Abiquiu Reservoir from a total volume of 200,000 acre-feet to an elevation of 6,230 feet MSL (229,199 acre-feet) and to allow concurrent storage of Rio Grande and SJCP water in Abiquiu Reservoir. This would not have an effect on flood control operations at Abiquiu. The Water Control Manual must be updated, and environmental compliance completed, with a target date of the end of 2023. Additionally, future storage easements must be acquired.

The Bernalillo to Belen Levee Project, Espanola Valley Ecosystem Restoration, and Sandia to Isleta Ecosystem Restoration projects are authorized for construction under WRDA 2020. Most received funding to begin work on design and compliance contingent on executing agreements with project sponsors in FY 2023. The Espanola Valley Ecosystem Restoration design agreements were signed in November 2022 and the design is ongoing.

The Tribal Partnership Program is currently underway for San Felipe, Santa Ana, Zia, and Santo Domingo pueblos. These projects include watershed assessments, drought resilience

planning and feasibility studies for irrigation infrastructure. Efforts were initiated in FY 2020 and were completed in FY 2022.

Rio Grande Silvery Minnow

The Service reported on the 2022 monitoring results for the endangered Rio Grande silvery minnow (RGSM) using the October Catch per Unit Effort (CPUE) data used to report long-term trends in relative abundance.

The Service has adopted the use of 30 sites for evaluating RGSM take instead of the standard 20 sites. The 2022 October fish monitoring estimated an RGSM density of 0.17 fish/100 square meter (m²) for 30 sites. High spring runoff years in 2017 and 2019 had October RGSM densities of 23.2 and 3.4 fish/m². However, due to rapid decreases in discharge and extensive drying in 2022, there were no successful spawning events or egg collection, which impacted hatchery production and augmentation. The Service reported that only 129,497 (out of the 269,000 needed) RGSM were augmented to the Middle Rio Grande in 2022, in comparison to 208,772 in 2021, and 310,634 in 2020. Fish were provided by the City of Albuquerque's BioPark, the Service's Southwestern Native Aquatic Resources and Recovery Center located in Dexter, New Mexico, and the NMISC's Los Lunas Silvery Minnow Refugium. The Service expressed concern about the potential CPUE in 2023 because of the lower-than-normal number of augmented fish in 2022. The Service stated that through 2021, the 2016 BO has not been violated nor has Reclamation exceeded its take for RGSM. The Service is waiting for the 2022 final report from Reclamation for a decision on the 2022 CPUE. Only a portion of the RGSM that were stocked in 2020, 2021, and 2022 were tagged because of Covid-19 restrictions, so distinguishing wild and hatchery fish will not be possible until tagging of all the fish is resumed.

The Service, with assistance from the 2016 BO partners, conducted rescue activities in the 49.4 miles of unique drying within the San Acacia, Isleta, and Albuquerque reaches. There were 2,114 RGSM rescued from these reaches in 2022. Drying and fish rescue in the Albuquerque reach extended north to Montano Road.

El Vado Dam Repairs

Reclamation previously reported that substantial degradation of the steel lining system and service spillway has occurred at El Vado Dam. Corrective action studies determined that construction and repair work need to be conducted at the dam. The El Vado Safety of Dams Project is occurring in two phases: 1) installation of a synthetic liner system across the entire face plate of the existing dam to reduce embankment seepage, and 2) repair and refurbishment of the spillway.

Reclamation reported that contractor mobilization occurred in March 2022. During the 2022 construction season, the contractor completed repairs to the steel face plate and below-grade grouting efforts. Reclamation and the contractor also worked through several contract modifications related to material quantities and changes in site conditions. While the project is still on budget, it was reported that the contract changes are likely to add 6-12 months to the first phase of the project schedule.

Reclamation reported that the second phase of the project, the El Vado spillway repair and refurbishment, is going through final design changes and contract solicitation will be posted in late 2023 with construction activities scheduled to begin in spring of 2024.

During both phases of construction, there will be restrictions on storage of water in El Vado Reservoir. In 2022, NMISC and Reclamation each submitted a request to the Corps to deviate from the Water Control Plan at Abiquiu Reservoir to temporarily store native water at Abiquiu Reservoir during El Vado Dam and spillway construction activities under the same rules that would apply to native water storage at El Vado Reservoir. The Corps conducted the necessary regulatory compliance and ultimately stored only P&P water. (The Engineer Advisers note that Colorado and New Mexico approved storing all native water, while Texas approved storing only P&P water). The Corps reported that the deviation from normal operations at Abiquiu Dam is valid through the 2024 calendar year. If the El Vado Dam repairs are not complete within that timeframe, additional requests from the parties will be required, but no additional regulatory compliance would be necessary.

Middle Rio Grande Project Channel Maintenance

Reclamation's report indicates it is pursuing work at 17 active priority sites along the Middle Rio Grande Project reach where bank erosion or reduced channel capacity could cause levee failure.

Reclamation reported that the BDANWR Pilot Realignment Project, which was completed in March 2021, had adaptive maintenance performed starting in October 2022. The adaptive maintenance focused on implementing additional mechanical adjustment of the bed slope, which was necessary because recent spring snow-melt runoff flows were insufficient to scour the project area as originally intended. (The New Mexico Engineer Adviser notes that the current channel continues to be undefined through a significant portion of the project, resulting in extensive open water evaporation that is likely contributing to Compact delivery issues.) Reclamation reported that the BDA upper realignment is currently in the design phase with NEPA compliance to begin in 2023 and construction expected to begin in 2024.

Reclamation reported on the River Mile 60 Project, which will temporarily connect the LFCC to the Rio Grande with controlled outfalls in the Lower San Acacia Reach. This project fulfills one of the 2016 BO Conservation Measures and has an intended goal of improving water delivery to Elephant Butte Reservoir while avoiding negative impacts to southwestern willow flycatcher (flycatcher) habitat nearby. Experimental operations and adaptive management plans have been developed and Reclamation is currently working on drafting a memorandum of understanding for the MRGCD to operate the project gates.

Vegetation Management at Elephant Butte and Caballo Reservoirs

Reclamation reported that it performed vegetation maintenance at Caballo Reservoir during 2022, using federal funding. Reclamation noted that maintenance at Caballo Reservoir included mowing and mulching of approximately 400 acres of phreatophytic vegetation.

(The Engineer Advisers remain concerned about the lack of vegetation management activities by Reclamation at Elephant Butte Reservoir. The State of New Mexico would support vegetation management efforts at Elephant Butte Reservoir through the existing Technical

Services Agreement and encourages Reclamation to work with staff to implement vegetation management projects at Elephant Butte in 2023.)

Southwestern Willow Flycatcher and Yellow-billed Cuckoo

Reclamation and the Service conduct surveys and nest monitoring for the flycatcher and the western yellow-billed cuckoo (cuckoo) during the summer along the Rio Grande from Belen, New Mexico, to El Paso, Texas. Survey efforts were impacted by travel and hiring restrictions during the COVID-19 pandemic that resulted in inconsistent survey efforts in 2020 and 2021. Decreases in reported territories do not represent the actual species condition within the Middle Rio Grande during those years.

For 2022, 504 flycatcher territories were documented in the Middle Rio Grande and 108 territories in the Lower Rio Grande. As usual, most of the flycatcher territories are in the San Marcial and Elephant Butte Reservoir areas; however, increased activity also occurred within the Isleta Reach. While the current number of flycatcher territories in the Middle Rio Grande is well above the recovery goal of 100 territories, habitats in other regions have not hit their recovery targets yet, and downlisting or delisting has not been considered for this species. In 2022, the Upper Rio Grande and San Luis Valley management units had limited survey efforts with 10 flycatchers found by the Bureau of Land Management. The next round of surveys in the San Luis Valley will occur in 2023.

Reclamation has historically conducted surveys for the cuckoo from Belen to El Paso. In 2022, 157 cuckoo territories were observed in the surveyed area. In late 2021, the Service began a Species Status Assessment (SSA), that is still in progress, to inform the future recovery plan. In 2022, the Upper Rio Grande and San Luis Valley management units had limited survey efforts with only one detection. The next round of surveys in the San Luis Valley is scheduled for 2023.

The tamarisk leaf beetle continues to be found in most of the Rio Grande area, and defoliation of salt cedar in occupied territories may result in impacts to nesting success. Although numbers of tamarisk beetles in the Middle Rio Grande have been declining in the past few years, this may be cyclical, and it is uncertain if there is a long-term trend.

Additional Listing Information Provided by the U.S. Fish and Wildlife Service

In 2016, the Service found that listing the Rio Grande chub and the Rio Grande sucker may be warranted. A Conservation Agreement was signed in September 2018 between the Service and the states of New Mexico, Colorado and Texas, the Jicarilla Apache Nation, the Pueblo of Santa Ana, several counties in Colorado, the U.S. Forest Service, BLM, and the National Park Service to reduce the threats to these fishes. The Service will complete an SSA in 2023 and conduct a 12-month review in 2024.

The Service conducts photographic monitoring of the New Mexico meadow jumping mouse (jumping mouse) at BDANWR. In 2022, there were 36 unique photo detections, which is considerably higher than the 23 unique detections in the previous year.

International Boundary and Water Commission Activities

The IBWC provided a report of its activities along the Rio Grande in New Mexico and Texas during 2022 and their projected activities for 2023. The items discussed included their levee rehabilitation work and Federal Emergency Management Agency (FEMA) status, the status of their new hydraulic modeling, the River Management Plan and habitat restoration, flood control issues and activities, sediment removal activities, water accounting operations, IBWC gaging station information and status, as well as information on the border fence projects.

The Sunland Park East Levee sections contracts were awarded, and construction began, in 2022 with completion estimated in 2025. Floodplain maps will be developed for the levee areas which show the reduced flood zones due to the levees.

In 2019, the IBWC began development of a new hydraulic model for three separate reaches between Percha Dam and American Dam. The hydraulic models will be used to analyze sediment accumulation, channel capacities, levee deficiencies, and the amount of sediment required to be removed to maintain channel capacities. IBWC reported that they achieved the 60% design in April 2022, but that additional model calibration is necessary. Contract modifications are underway to complete the project.

IBWC presented updates to the status of the Canalization River Management Plan (RMP). The RMP covers floodplain management, endangered species management, and channel

maintenance. It incorporates the 2009 Record of Decision (ROD) commitments, the 2017 Biological Opinion, and statutory compliance. The last version of the RMP was November 2018, and the update is pending the analysis in the ongoing hydraulic modeling study. The target date for the revised update is now 2024.

Currently, the IBWC has implemented 22 of 30 habitat restoration sites, totaling over 500 acres. Under the River Habitat Restoration Program, the IBWC is treating 246 acres of salt cedar near Hatch, New Mexico. The IBWC completed an Environmental Assessment for aquatic habitat restoration in November 2021 and has identified five potential aquatic habitat restoration sites.

Brief updates were also provided for the IBWC's ongoing channel maintenance projects. The American Canal Lower Reach redesign was completed in 2022, and the contract is out for solicitation with a projected completion date of 2026.

The IBWC estimated that 400,000 cubic yards of silt are deposited into the Rio Grande Canalization Project reach annually. This results in sediment plugs, island formations, raised riverbeds, increased flooding risks, and inhibited irrigation return flows. The Canalization reach is defined as 105 river miles from Percha Dam in New Mexico to El Paso. During 2021, the IBWC utilized both inhouse work crews and outside contractors to remove over 400,000 cubic yards. In 2022, IBWC work crews were able to remove about 275,000 cubic yards, and for 2023, the IBWC anticipates its work crews will remove about 250,000 cubic yards of sediment. IBWC reported that it has spent considerable portions of its budget in 2022 to purchase new equipment to replace aging equipment and to increase its in-house capacity to conduct sediment removal in the Rincon, Canutillo, and El Paso County regions of the Rio Grande.

The IBWC reported that the 2022 allocation to Mexico for the Convention of 1906 was 14,827 acre-feet, which was 24.7 percent of a full allocation. The final delivery charged to Mexico was 14,843 acre-feet. A preliminary February allocation for 2023 to Mexico was reported to be 14,891 acre-feet, which is slightly more than the 2022 final allocation, but this could change before the final allocation is made.

The IBWC provided an update on the border wall projects in the Compact reach. Work was suspended on Customs and Border Protection (CBP) border wall projects in 2021. Border

wall construction activities resumed in 2022 to remediate the negative impacts from previous CBP and Texas border wall construction.

ENGINEER ADVISER RECOMMENDATIONS

On January 1, 2020, Reclamation implemented new area-capacity tables for Elephant Butte Reservoir based on their 2017 sediment survey. These tables account for the sediment buildup within the reservoir and the related loss of storage. They also are used to determine the current total storage volume of the reservoir. The Rio Grande Compact Rules and Regulations describe the now-outdated total storage volume in the reservoir. The Engineer Advisers again recommend that the Commissioners direct the Legal Advisers, in conjunction with the Engineer Advisers, to incorporate the new tables developed by Reclamation for Elephant Butte Reservoir into the Compact Rules and Regulations for potential approval at the 2024 Commission annual meeting.

The Engineer Advisers recommend that the Commissioners again direct the Legal Advisers, in conjunction with the Engineer Advisers, to investigate the need to create an official Rio Grande Compact document repository and report the results of their investigation at the 2024 Commission annual meeting.

The Engineer Advisers recommend that the Commissioners direct the Engineer Advisers and the Legal Advisers to investigate the costs submitted by Reclamation for the yearly operation and maintenance of the Rio Grande Below Caballo Reservoir gaging station, and whether a different method can or should be used to determine the costs for this gage which are allocated equally between the states.

BUDGET

The Engineer Advisers reviewed the cost of operation for the fiscal year ending June 30, 2022 and the budget for the fiscal year ending June 30, 2024.

The Engineer Advisers found that the expenses for gaging stations and administration of the Compact for the year ending June 30, 2022 were \$223,929. The U.S. federal government bore \$71,840 of this total, with the balance of \$152,089 to be borne equally by the three states.

The Engineer Advisers found that the proposed budget for the fiscal year ending June 30, 2024 indicates that a total of \$245,825 will be spent for gaging and administration, with a proposed contribution by the U.S. federal government of \$74,782.



Craig W. Cotten, P.E.

Engineer Adviser for Colorado



Page Pegram

Engineer Adviser for New Mexico



Suzy Valentine, P.E.

Engineer Adviser for Texas

Stephanie Russo Baca Board Reports Regular Board Meeting May 8, 2023.

April 22, 2023, Earth Day Fiesta, 2424 NM-47, Belen, NM 87002.

I went to represent MRGCD and there were many great presentations and booth with local vendors of food and crafts as well as partners like NRCS and Friends of Whitfield.



Stephanie Russo Baca Board Reports Regular Board Meeting May 8, 2023.

April 25, 2023, Low-Flow Conveyance Channel Info-Sharing & Listening Session, Virtual

This was a presentation and discussion of the MRGCD-ISC proposal for experimental reactivation of the low-flow conveyance channel in the San Acacia Reach of the Rio Grande.

I've attached MRGCD's slides, and here is a link to the recording of this two-hour event:

<https://us02web.zoom.us/rec/share/DNBF8CsguJI89ZMKUBNgH8nRw-8ieNRJYqc5WNradYf36RaJe3-Hm4M56zwX5LJn.cYCoRHRii3VuQpgF?startTime=1682435207000>

Passcode: @V2zT&Mj

Listening Session regarding the Experimental Monsoon LFCC Proposal



4.25.2023

Agenda

- Introductions of MRGCD and ISC Staff
- Briefly Review Highlights of Draft Proposal
- Questions & Discussion

Motivation for this Proposal

- MRGCD and ISC do not believe that this type of operation will “solve” water management in the MRG.
 - We have no desire to “resurrect” historical operations.
 - Diversions would not take place until the San Acacia Reach becomes disconnected
- This is one tool at our disposal, which may support the long-term, reliable access to other tools (Upstream Storage).
- This proposal is a creative solution that attempts to find a middle ground between supporting riparian and aquatic function in the short term while complying with the Compact and securing long term access to storage.
- Upstream Storage allows for operational flexibility (Think Environmental/Conservation Storage)
 - Beneficial for Ag, ESA, and Compact objectives.

LFCC Proposal Highlights

- Contemplates diversions of monsoon driven flow into LFCC at SADD once the river is disconnected between Elephant Butte and SADD.
- Initial Diversion Cap of 500 cfs
- Potentially increase **seasonal** deliveries of water to Elephant Butte to aid in Compact Compliance.
- Potentially limit stranding of RGSM below SADD as a result of monsoon events
- Monitoring in both the main channel and LFCC for RGSM

Questions?



Photo of MRGCD's Los Chavez Outfall. Photo courtesy of Quantina Martine, Audubon Southwest

Stephanie Russo Baca Board Reports Regular Board Meeting May 8, 2023.

April 26, 2023, Summer Conservation Camp Planning Meeting with local farmers, Whitfield, and MRGCD, Virtual

Whitfield is looking to host a summer conservation camp and is asking for the support of local farmers as well as MRGCD. This would be a half day camp from 8:00-Noon each day for ages 8-12 (3rd-6th graders) with a capacity of up to 15 students. For the camp, the organizers are asking for donations for items such as *Drawstring bag, notebook, pencil, water bottle (or other swag donated by partners: NRCS, MRGCD, VSWCD).

Organizers are asking the MRGCD board for a donation of around \$500.00 to help with the week-long camp.

Stephanie Russo Baca Board Reports Regular Board Meeting May 8, 2023.

April 28, 2023, IRSA at Rio Abajo Conservation Area, 2128 NM-304, Rio Communities, NM 87002.

The Rio Abajo Conservation Area is 240 acres adjacent to the Rio Grande south of Belen donated to the District in 2006 and held in joint conservatorship with the NM Department of Game & Fish.

This area includes both bosque and uplands terrain that VSWCD intends to preserve as a wildlife sanctuary with public access. RACA restoration activities will include removal of nonnative species, such as salt cedar and Russian olive, and planting of native grasses, trees, and shrubs in riparian and uplands areas for preservation of natural habitat and biodiversity. The Isleta Reach Stewardship Association held a cleanup day and removed over 15 bags of trash.



Stephanie Russo Baca Board Reports Regular Board Meeting May 8, 2023.

April 12, 2023. Lower San Acacia Reach Improvement Project, Virtual.

Presentation by the Bureau of Reclamation on the Lower San Acacia Reach improvements Project. The Key issues are water loss via transpiration, evaporation, seepage, and stranded water. The Project first has to go through NOI then public scoping then draft EIS before public notification of final EIS and construction would then possibly begin Winter 2025.



— BUREAU OF —
RECLAMATION

Lower San Acacia Reach Improvements Project

April 12, 2023

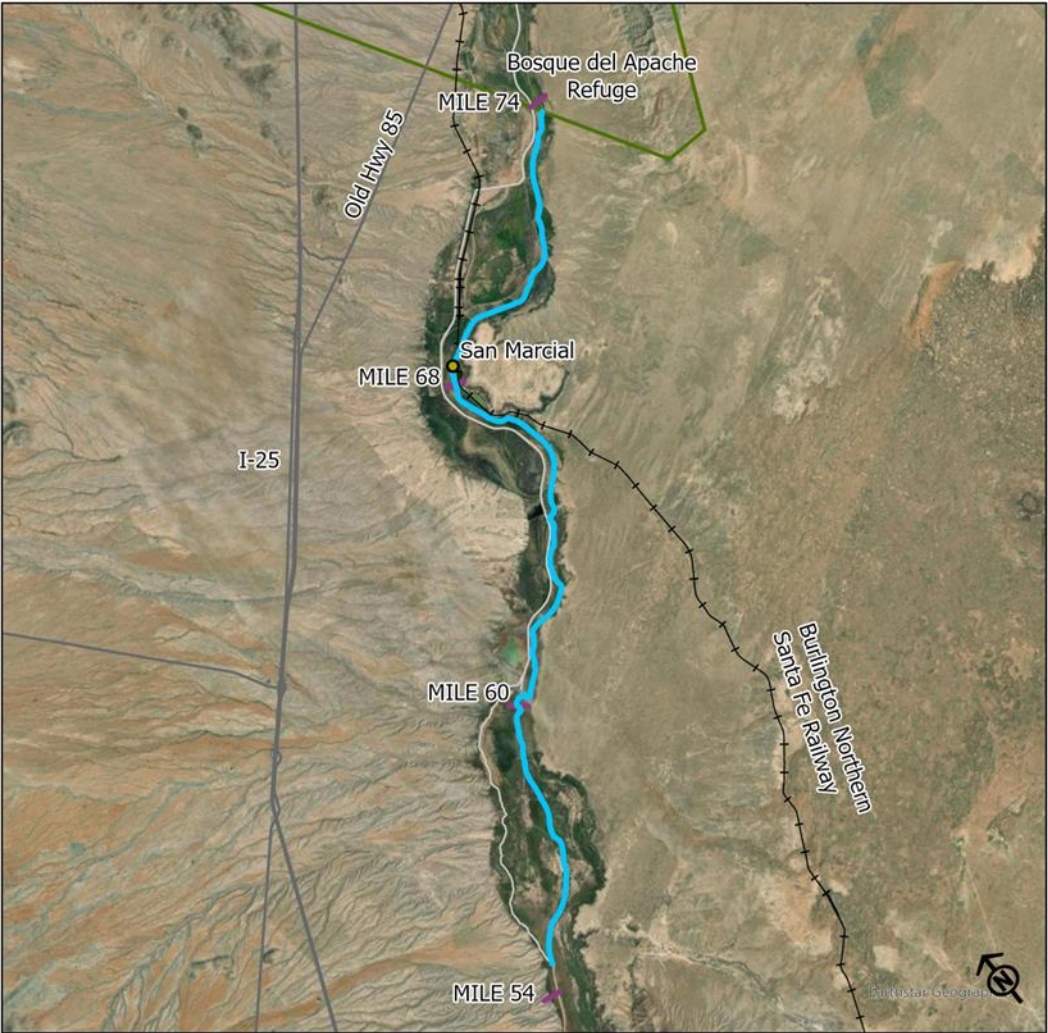
Lower San Acacia Reach Improvements Project

Goals

- Improve water delivery to Elephant Butte Reservoir
- Create aquatic and riparian habitats as required under the Endangered Species Act and the 2016 Biological Opinion
- Increase the benefits of maintenance actions by working with geomorphic trends



Location



Lower San Acacia Reach Improvements Project LSARI, River Mile 74 - 54.5

- Low Flow Conveyance Channel
- BDA Boundary
- River Mile
- Major Roads
- Railroad
- San Marcial Gage
- LSARI River Extent of the Middle Rio Grande



Produced by the Bureau of Reclamation,
Upper Colorado Region, Albuquerque Area Office
Ashlee Rudolph 03/10/2023 Data: Reclamation, NAIP (2018)



Project Drivers

- Sediment imbalance
 - Sediment supply vs. transport capacity
- Channel perching
 - High sediment loads, fixed channel location, lateral confinement
 - Channel banks above the adjacent floodplain, channel bed occasionally above the floodplain, main channel and active floodplain are both above the valley floor



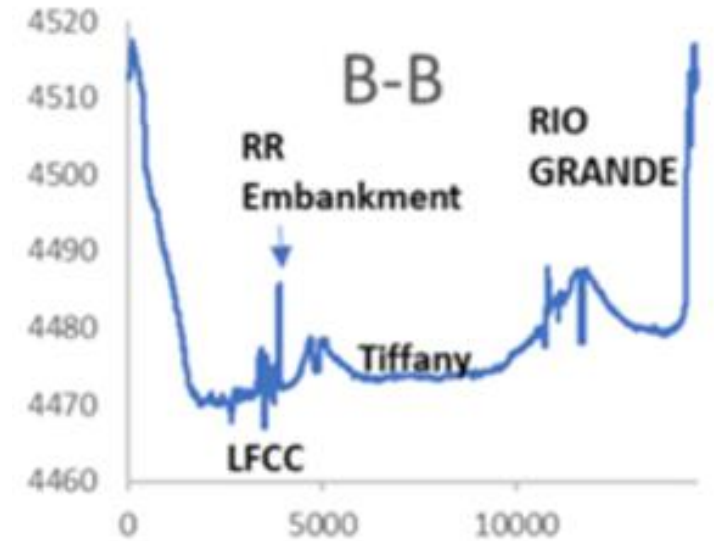
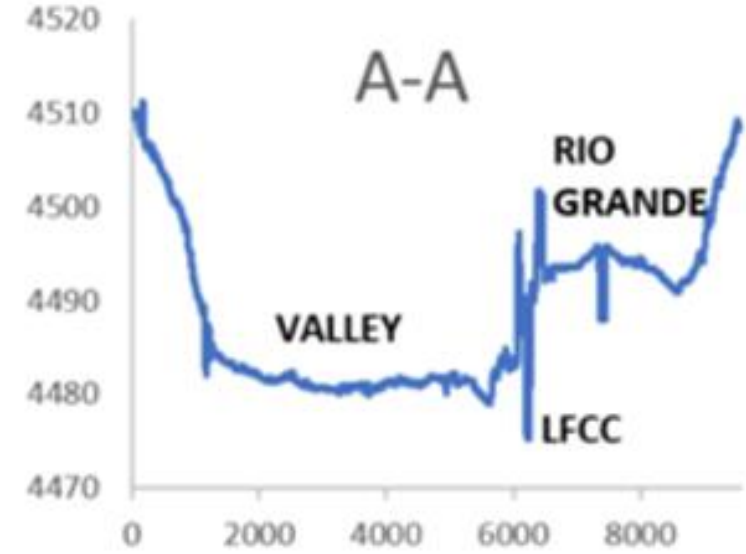
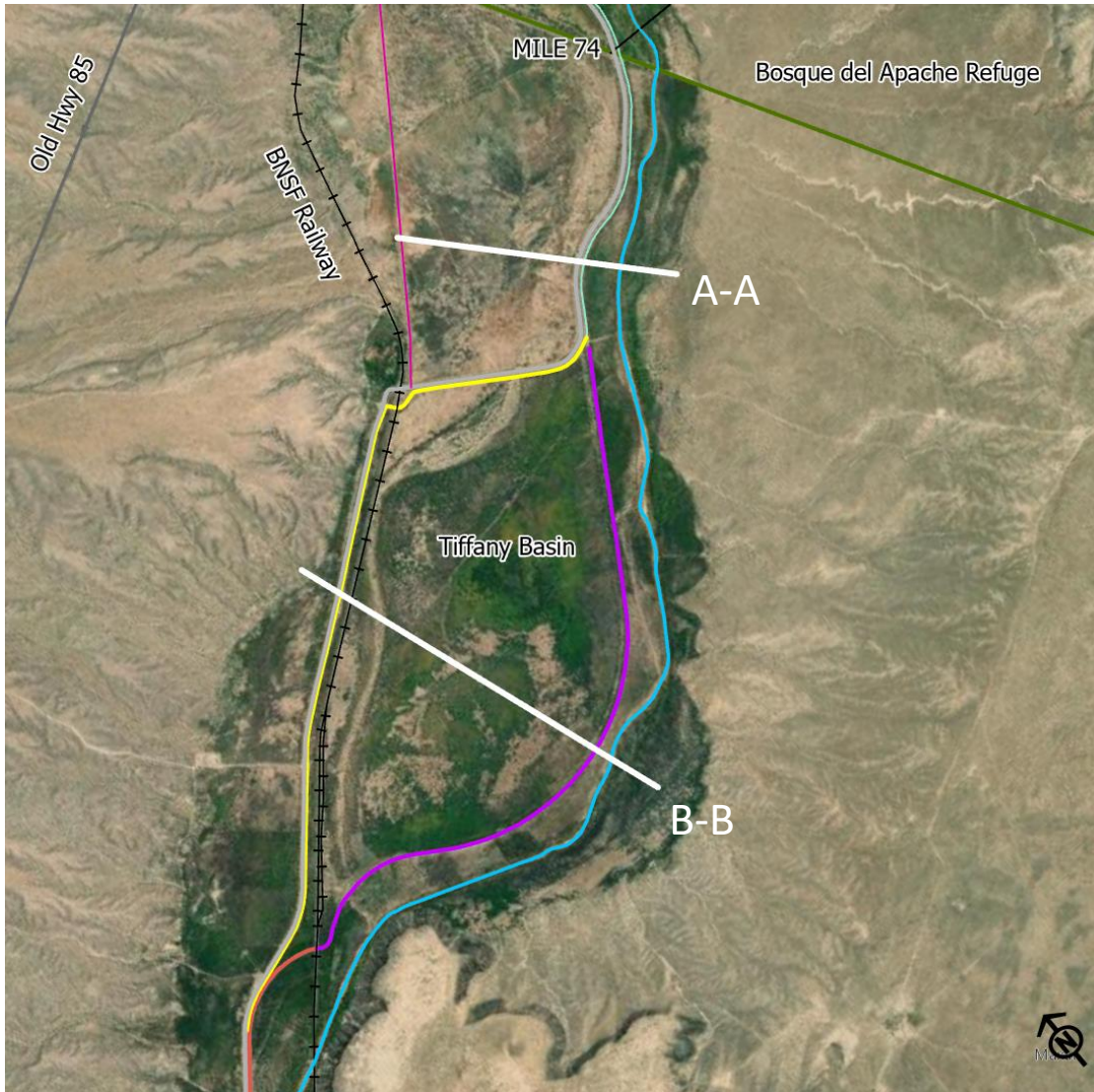
Long-standing Management Challenges



Aerial photo from 1952 showing the river altering course due to a sediment plug forming within the San Acacia Reach above the Tiffany Basin.



Current Conditions



Current Conditions

The Low Flow Conveyance Channel (LFCC) functions as a drain for the floodplain. Maintaining the LFCC does not improve the function of the river or associated habitat.

During low flows in the summer months, the river dries, negatively impacting fish populations and riparian vegetation.

The spoil levee confines the channel and sediment deposition to the east side of the valley.

The river is perched because the channel is above the adjacent floodplain.

Following high-flow events, surface water ponding in the floodplain causes fish stranding and decreases downstream water delivery.

The river is disconnected from the water table resulting in high rates of seepage loss.

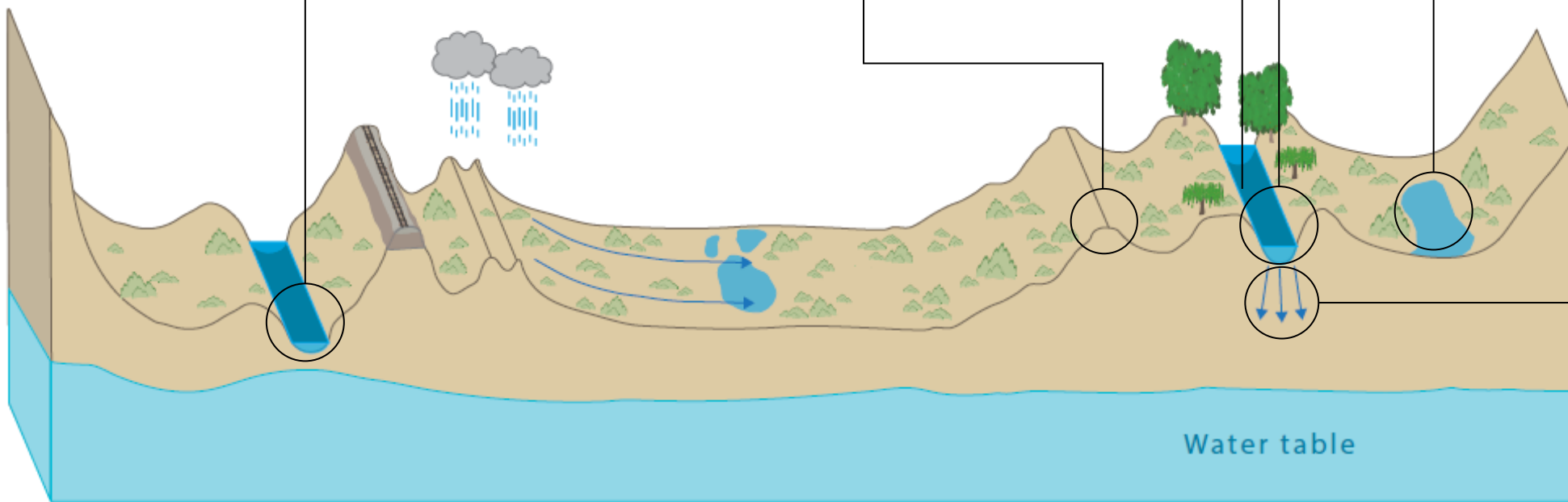


Figure is not to scale and is for illustrative purposes only.



Key Issue – Water Loss

- Transpiration – water vapor released from plant leaves, often invasive plant communities
- Evaporation – water vapor lost from open water and moist soil
- Seepage – surface water infiltrating into the ground
- Stranded Water – surface water becomes disconnected or ponded following high-flow events (leads to more evapotranspiration and seepage)



Key Issue – Stressors on Endangered Species Habitats

- River drying due to water diversions and conveyance system losses
- Infrequent and shorter duration floodplain inundation
 - Lack of egg retention and larvae development during spring runoff (insufficient low-velocity area)
 - Insufficient development of native vegetation of varying age classes near water
- Decreased complexity in channel/floodplain morphology
 - More uniform and static conditions



Key Issue – O&M with Limited Benefit

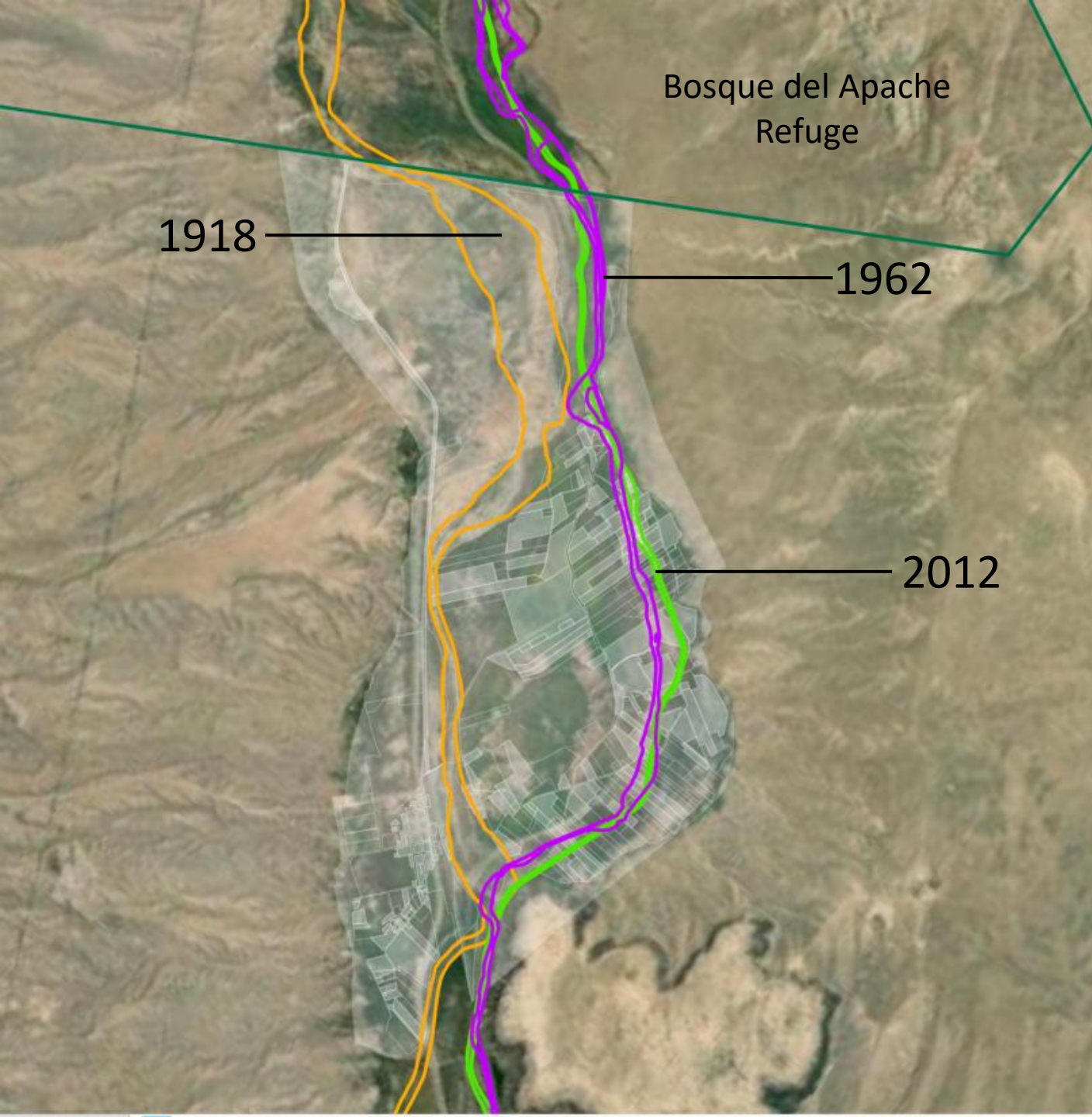
- Maintaining channel conditions/dimensions that compete with geomorphic trends results in continual maintenance and emergency actions.





What do these lines tell us?

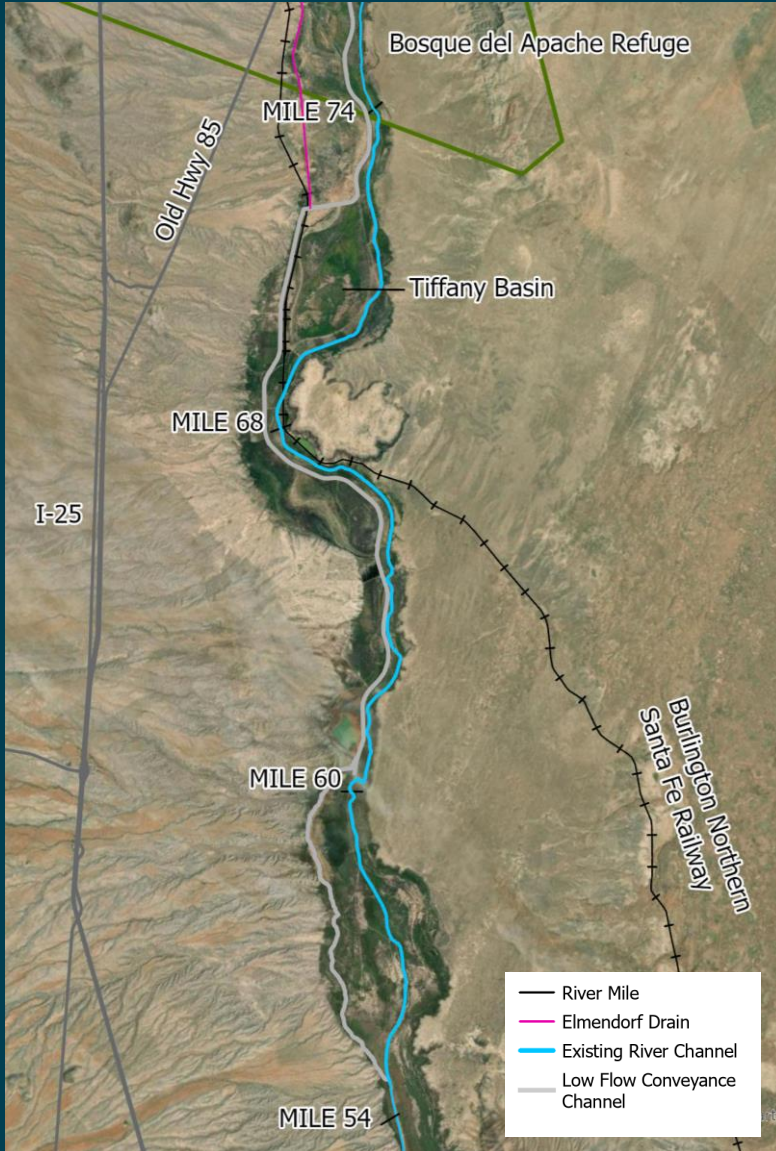




- The Rio Grande is a dynamic system
- The active channel has shifted throughout the valley during the past century
- To remain a functioning river it will need to shift again

Alternatives

Alternative A - No Action



Alternative B



Alternative C



Project Timeline

- Late April/early May 2023 – Notice of Intent (NOI) published
- 30 days following the NOI publication, Public Scoping will be conducted
- Summer 2024 – Draft Environmental Impact Statement will be available for public comment for 45 days
- Spring/Summer 2025 – Public Notification of Final Environmental Impact Statement and signing of Record of Decision
- Winter 2025 – Construction anticipated to begin



Opportunities for Public Participation

- **Public Scoping – May 2023**
 - Public Meetings will be held in three locations: Albuquerque, T or C, and Socorro
 - Notification about the public meetings will be sent via email, mail, and published in the paper
 - Online comment submittal will be available through the project's website
- **Draft EIS Public Comment – Summer 2024**
 - Open-house meetings will be hosted during the comment period
 - Notification about the public meetings will be sent via email, mail, and published in the paper
 - Online comment submittal will be available through the project's website



Ashlee Rudolph, Project Manager
arudolph@usbr.gov

Ken Richard, Program Management Group Supervisor
krichard@usbr.gov



— BUREAU OF —
RECLAMATION

Stephanie Russo Baca Board Reports Regular Board Meeting May 8, 2023.

April 16-20, 2023, NWRA Federal Water Issues Conference, Washington, DC.

This was a packed conference. Important discussions included food safety, Army Corps of Engineers project funding, Farm Bill as well as independent Congressional and Federal Agency visits. MRGCD staff and board members met with USDA/NRCS, Senator Martin Heinrich's office, and Ben Ray Luján office, For the 1st district Representative Melanie Stansbury, 2nd district Representative Gabe Vasquez office and 3rd district Representative Teresa Leger Fernandez. Additionally, we met with the U.S. Department of the Interior Assistant Secretary Tanya Trujillo. Many of these meetings were attended with a delegation from the Elephant Butte Irrigation District.



2023 Federal Water Issues Conference

Washington, D.C.

Embassy Suites Convention Center
900 10th Street NW Washington, DC, 20001

Agenda

Monday, April 17, 2023

All Day

Independent Congressional and Federal Agency Visits

Take this time to meet your congressional delegation and agency officials to discuss the issues of importance to you and NWRA.

4:00 pm
Embassy Suites

NWRA Conference Registration Opens

6:00 – 7:00 pm
Embassy Suites
Capital Ballroom B

Welcome Reception

Tuesday, April 18, 2023

6:30 am – 9:00 am
Breakfast Area

Breakfast

Complementary for hotel guests of the Embassy Suites

7:30 am – 12:00 pm
Embassy Suites

Registration & Coffee

8:00 am – 8:30 am
Embassy Suites
Capital Ballroom A

Keynote Speaker – Brian Scott

Deputy Assistant National Cyber Director for Cyber Policy and Programs
Office of the National Cyber Director
Executive Office of the President

Come hear about the recently announced White House National Cybersecurity Strategy.

8:30 am – 9:30 am
Embassy Suites
Capital Ballroom A

Farm Bill Panel

House and Senate Agriculture Committee Staff

Join us for a conversation with key congressional staff on the development of the next farm bill.

9:30 am – 10:00 am
Embassy Suites

Networking Break

Agenda

10:00 am – 10:30 am
Embassy Suites
Capital Ballroom A

Army Corps

Robyn Colosimo, Deputy Assistant Secretary of the Army (Project Planning and Review)

Come hear the latest on current initiatives within the Corps, such as the Principles, Requirements and Guidelines rulemaking and their potential impacts on stakeholders.

10:30-11:00 am
Embassy Suites
Capital Ballroom A

Food Safety's Impact on Water

Dr. Jennifer McEntire – International Fresh Produce Association

Join us for a conversation on how the fresh produce industry is addressing current FDA food safety regulations and how those actions might impact raw water suppliers.

11:30 am – 12:00 pm
Embassy Suites
Capital Ballroom A

NWRA Federal Affairs Roundtable

Join us as we discuss the top priorities for water users and prepare to advocate on Capitol Hill.

1:00 pm – 5:00 pm

Independent Congressional and Federal Agency Visits

Take this time to meet your congressional delegation and agency officials to discuss the issues of importance to you and NWRA.

5:30 pm – 7:00 pm
NWRA office
4 E Street SE
Washington, DC 20003

All American Cookout

Join your NWRA friends for a relaxing evening of networking and great food (hotdogs and apple pie) before heading to the Nationals game.

7:05 pm
Nationals Stadium
1500 S Capitol St SE,
Washington, DC 20003.
(a quick walk from
the NWRA offices.)

Washington Nationals Baseball

Join your NWRA colleagues for a trip to the ballpark and see the Washington Nationals play the Baltimore Orioles. Please note, a separate ticket purchase is required. A block of tickets has been reserved for NWRA.



2023 Federal Water Issues Conference

Washington, D.C.

Embassy Suites Convention Center
900 10th Street NW Washington, DC, 20001

Agenda

Wednesday, April 19, 2023

6:30 am – 8:00 am Breakfast Area	Breakfast Complementary for hotel guests of the Embassy Suites
7:30 am-10:00 am	Registration & Coffee
8:00 am – 8:30 am Embassy Suites Capital Ballroom A	Keynote Speaker - Congressman Chuck Fleischmann <i>Join us for a conversation with the Chairman of the House Appropriations Subcommittee on Energy & Water Development and hear about the subcommittee agenda for 2023.</i>
8:30 am – 9:30 am Embassy Suites Capital Ballroom A	Financing Our Nation’s Water Infrastructure Needs Jorianne Jernberg – EPA Aaron M. Snyder, PMP – Army Corps <i>Come listen to representatives from the U.S. EPA and Army Corps discuss initiatives designed to assist with the financing of water infrastructure projects.</i>
9:30 am – 10:00 am Embassy Suites	Networking Break
10:00 am – 10:30 am Embassy Suites Capital Ballroom A	Department of Interior Update Gary Gold, Deputy Assistant Secretary for Water & Science <i>Come hear about the current Western water priorities and initiatives being carried out by the Department of Interior.</i>
10:45 am – 11:45 am Embassy Suites Capital Ballroom B	NWRA Board of Directors Meeting
11:00 am – 5:00 pm	Independent Congressional and Federal Agency Visits <i>Take this time to meet your congressional delegation and agency officials to discuss the issues of importance to you and NWRA.</i>

Conservation Advisory Committee

Meeting Agenda

April 20th, 2023

9:30-11:30 AM.

THIS WILL BE A HYBRID MEETING. Committee Members who want to join the meeting in person may do so at the MRGCD's main office (1931 2nd St. Albuquerque, NM). Online Meeting URL: Meeting link will be provided in the group email. It will be a GoTO Meeting invite which will have both a computer option and or call in option.

<https://meet.goto.com/james789>

Topics for Discussion

Current Hydrology Update

Storey Wasteway OCS Update

New Belen OCS – Gate Installation Update

Conservation Program Expansion Update

Open Topic

April 21, 2023, Rio Grande Compact Commission Meeting, Virtual.

Rio Grande annual meeting addressed dam repairs, wildlands restoration, and water management. It was also noted that there is more money and water available this year, but future cooperation needed due to climate uncertainty. New Mexico State Engineer Mike Hamman emphasized settling water rights disputes at all levels. Rapid warming and variable precipitation lead to water fluctuations and drought. Rio Grande Compact Commission credit and debit accounting system to manage water sharing. Pueblos seek greater decision-making power and presentation opportunities at future meetings. Increased investment in water projects from federal agencies and states. Concerns over sediment buildup in dams, requiring improved management strategies. Dam repair project at El Vado delayed, posing challenges for water storage in 2024

Agenda
Rio Grande Compact Commission
Colorado New Mexico Texas

84th Annual Meeting (108th Meeting)
Friday, April 21, 2023, 9:00 AM (MDT)
NM State Capitol, 490 Old Santa Fe Trail, Santa Fe, NM
Room 307

1. Call to Order by the Chairman
2. Approval of the Meeting Format
3. Approval of the Agenda
4. Announcements
5. Report of the Engineer Advisers
6. Report of the Legal Advisers
7. Report of the Commissioners
 - a. State of Colorado
 - b. State of New Mexico
 - c. State of Texas
8. Report of Federal Agencies
 - a. Bureau of Reclamation
 - b. Army Corps of Engineers
 - c. Bureau of Indian Affairs
 - d. Fish and Wildlife Service

- e. U.S. Geological Survey
 - f. International Boundary and Water Commission
9. Presentation of Costs of Operation for FY 2022 (July 1, 2021 to June 30, 2022)
 10. Presentation of the Budget for FY 2024 (July 1, 2023 to June 30, 2024)
 11. Cooperative Agreement with the U. S. Geological Survey (accounting services)
 12. Approval of the Minutes of the 83rd Annual Meeting (106th Meeting)
 13. Approval of the Minutes of the November 10, 2022 Special Meeting (107th Meeting)
 14. Approval of the Letters to the Governors
 15. Other Business
 - a. Engineer Advisers' Recommendations
 - b. Presentation of Compact Accounting
 - c. Resolution for Mike Sullivan
 16. Public Comment
 17. Adjournment

**REPORT OF THE ENGINEER ADVISERS
TO THE RIO GRANDE COMPACT COMMISSION
FOR CALENDAR YEAR 2022**

April 18, 2023

The Engineer Advisers to the Rio Grande Compact Commission met in person and by video conference on January 19, 2023 and from March 13 to March 17, 2023 to:

- Receive reports;
- Reconcile the 2011 to 2021 Rio Grande Compact (Compact) water accounting pursuant to the November 10, 2022 Rio Grande Compact Commission Credit Water Agreement for Administration and Accounting at Elephant Butte Reservoir (Agreement);
- Prepare the 2022 Compact water accounting;
- Discuss continuing and new issues in preparation for the 2023 annual meeting of the Rio Grande Compact Commission (Commission); and
- Prepare the Engineer Advisers' report.

The Engineer Advisers received the participation of the Colorado Division of Water Resources (CDWR), the U.S. Geological Survey (USGS), the U.S. Bureau of Reclamation (Reclamation), the U.S. Army Corps of Engineers (Corps), the U.S. Bureau of Indian Affairs (BIA), the International Boundary and Water Commission (IBWC), and the U.S. Fish and Wildlife Service (Service) at the meetings. The agencies each presented information about their specific water-related activities in the basin during calendar year 2022.

2011-2021 COMPACT ACCOUNTING RECONCILIATION

Since 2011, there has been a lack of consensus among the Engineer Advisers on finalizing the annual Compact delivery accounting. The lack of consensus is well documented in the annual reports of the Engineer Advisers from 2011 through 2021. At the direction of the Rio Grande Compact Commission, in June of 2022, the Engineer Advisers initiated discussions to reach a consensus on finalizing Compact accounting for 2011 forward. In Fall 2022, the Engineer Advisers developed the Agreement that resolved the dispute over how the evaporative

losses on Credit Water are calculated and tabulated in the accounting for water deliveries. The Agreement also addresses future mandatory relinquishments, accounting of evaporation of Credit Water using the “Constant Credit Water Method,” and a one-time adjustment to delivery credits for New Mexico and Colorado to compensate for the 2011 releases of Credit Water.

On November 10, 2022, at a special meeting of the Rio Grande Compact Commission, a resolution was passed which adopted the Agreement. Based on this Agreement, the Engineer Advisers reconciled the annual Compact delivery accounting from 2011 to 2021. The methodology described below was utilized to reconcile the accounting, using the 2010-approved accounting as a starting point. Calculation of evaporation on Credit Water used the following methodology:

- Rio Grande storage and Rio Grande evaporation in Elephant Butte Reservoir data were exported from the final Upper Rio Grande Water Operations Model (URGWOM) files for the years 2011-2021;
- Beginning of Year (BOY) Credit Water in storage for Colorado and New Mexico was held constant throughout each year;
- Evaporation on Colorado and New Mexico’s Credit Water was calculated on a daily timestep for each year, in proportion to the total amount of native water physically stored daily in Elephant Butte Reservoir. In previous years, evaporation on Credit Water was calculated on a monthly timestep, but since daily pan evaporation and reservoir storage data are readily available, a more accurate daily timestep method was utilized for the accounting reconciliation.; and
- The daily Credit Water evaporation was totaled for Colorado and New Mexico annually for each year, and the BOY Credit Water storage for each state was reduced by the respective evaporation volumes for 2011 through 2021.

As part of their discussions on reconciliation of the accounting, the Engineer Advisers also agreed to compute evaporation on retained Debit Water in storage on a daily basis and to apply it annually. This method can be used to calculate evaporation on retained Debit Water in any reservoir where it may be in storage:

- The data for Rio Grande storage and evaporation in El Vado Reservoir were exported from the final URGWOM files for the years when New Mexico retained Debit Water (2017, 2018 and 2020);
- Evaporation on New Mexico’s retained debit was calculated on a daily timestep in proportion to the total native water stored daily in El Vado; and
- For the years where Debit Water was retained, the daily evaporation on Debit Water was totaled annually and applied as a credit to the Accrued Debit.

The reconciled and Engineer Adviser-approved accounting sheets will be presented to the Commissioners for approval at the 2023 Commission annual meeting, in accordance with the Agreement. The reconciled accounting sheets will be included in a separate document in the Rio Grande Compact Commission Annual Report.

The Engineer Advisers agreed that this will be the method for Credit and Debit water accounting going forward. Based on the reconciled accounting period which ended on December 31, 2021, New Mexico’s Accrued Debit was 128,900 acre-feet, and Colorado’s Accrued Debit was 4,000 acre-feet.

2022 COMPACT ACCOUNTING

The Engineer Advisers reviewed the streamflow and reservoir storage records and other pertinent data for the Upper Rio Grande Basin during calendar year 2022 and reached a consensus on the Compact accounting. As determined by the Engineer Advisers, scheduled and actual deliveries, release of Usable Water for the year 2022, and balances as of January 1, 2023, are as follows:

a) Deliveries by Colorado at the State Line:

Balance as of January 1, 2022	-4,000 acre-feet
Scheduled delivery from Conejos River	86,200 acre-feet
Scheduled delivery from Rio Grande	109,800 acre-feet
Actual delivery at Lobatos plus 10,000 acre-feet	199,900 acre-feet
One-time adjustment/delivery credit	300 acre-feet
Accrued credit January 1, 2023	200 acre-feet

b) Deliveries by New Mexico at Elephant Butte Dam:	
Balance as of January 1, 2023	-128,900 acre-feet
Scheduled delivery	336,600 acre-feet
Actual delivery	340,000 acre-feet
One-time adjustment/delivery credit	32,5000 acre-feet
Accrued debit January 1, 2023	93,000 acre-feet
c) Project Storage and Releases:	
Accrued departure (credit) as of January 1, 2023	2,765,800 acre-feet
Actual release of Usable Water	269,900 acre-feet
Normal release for year	790,000 acre-feet
Under Release in excess of 150,000 acre-feet	370,100 acre-feet
Accrued departure (credit) as of January 1, 2023	2,915,800 acre-feet

No Debit Water was stored in 2022.

The Engineer Advisers jointly prepare the Compact accounting based on information provided and presented by state and federal agencies, which is the best available information at the time of report preparation. The Engineer Advisers' Report is considered final upon signature by the three Engineer Advisers.

RIO GRANDE BASIN CONDITIONS

Snowpack and snow-water equivalent (SWE) amounts were near to below average throughout the winter of 2021-2022. The SWE for most headwater areas in both Colorado and New Mexico peaked at slightly below their average peak values. At the end of the winter season the SWE dropped drastically, resulting in a snow-free date for most locations occurring approximately one month earlier than usual. Below-average precipitation in the spring months as well as windy conditions and very low soil moisture were factors preventing much of the SWE from reaching the rivers and streams. As a result, snowmelt runoff levels and yearly streamflow amounts in 2022 were well below the long-term average for most areas across the basin in Colorado and in New Mexico. Multiple summer monsoonal precipitation events were instrumental in increasing most basin streamflows to around the historical average.

Due to the low runoff flows, Platoro Reservoir only reached a high of approximately 44 percent of capacity during late May of 2022. Usable Water in Rio Grande Project (Project)

Storage was below the Article VII trigger of 400,000 acre-feet the entire year, which imposed Article VII storage restrictions on storage in post-Compact reservoirs.

CONTINUING COMPACT ISSUES

This section of the report summarizes new information about issues directly related to the Compact and which were previously addressed by the Engineer Advisers. It reflects information obtained by the Engineer Advisers prior to the writing of the Engineer Advisers' report, and it may contain information obtained from the reports of the federal agencies at the 2023 Engineer Advisers meetings or otherwise reported.

Relinquishment Update

The total amount of Accrued Credit relinquished by Colorado since 2013 is 3,000 acre-feet. Colorado did not store any relinquishment credit water in 2022. Between 2013 and 2021, Colorado stored a total of 2,885 acre-feet of relinquishment credit water in Platoro Reservoir, which leaves a balance of 115 acre-feet in Colorado's relinquishment account.

The total amount of Accrued Credit relinquished by New Mexico since 2003 is 380,500 acre-feet. No relinquishment credit water was stored in New Mexico reservoirs during the 2022 calendar year. Relinquishment-credit water storage to date totals 288,728 acre-feet, leaving a balance of 91,772 acre-feet available to be stored in future years when Article VII storage restrictions are in effect.

Article VII storage restrictions are anticipated to be lifted for several months beginning in the spring of 2023.

Gaging Station Review

At the preliminary Engineer Adviser meeting in January 2023, the Colorado Division of Water Resources (CDWR) reported on activities at Colorado's Compact gages. The Colorado USGS reviewed CDWR gaging station records for the seven Colorado Compact gages and approved all of those records for 2022. The CDWR made an average of 28 measurements at each of these seven Compact gaging stations. The records for most of these stations were rated as "good" except for the periods of estimation, which were rated as "poor."

For the Rio Grande near Otowi streamflow gage (#08313000), the USGS reported that in calendar year 2022 they continued to use the stage discharge rating (#42) which was implemented on February 8, 2021. The USGS reported they made a total of 14 measurements at the Otowi gage in 2022, with nine rated “good,” one rated “fair,” and one rated “poor.” For 2022, the USGS continued to utilize redundant primary sensors (non-contact radar and wire weight) as well as redundant secondary reference gages (bubbler and staff gage) for gage-height readings. There were no equipment changes at the Otowi gage for 2022.

The USGS reported that during the 2022 calendar year, 33 measurements were collected at the Rio Grande below Elephant Butte streamflow gage (#08361000). Of the 33 measurements, 13 were rated “good,” five were rated “fair,” and two were rated “poor.” Aquatic vegetation growth on the streambed at the USGS gaging station section continues to cause a low bias in gaged flow during certain months. This issue has occurred for an undetermined period but began to be addressed in 2016 by utilizing an alternate section which is not impacted by vegetation growth during certain months. After June 1, 2022, all measurements were made at the alternate section below Elephant Butte Dam due to vegetation impacts at the primary section cableway. The gage records for 2016 through 2022 reflect improved precision, and the NMISC will continue to coordinate with the USGS to provide more accurate gage records in the future.

Reclamation reported that they analyzed the data for the Rio Grande Below Caballo gage. A total of 42 measurements were made at the below Caballo gage between June 1st and August 20th, of which 24 measurements were reported as “Compact measurements.” The Acoustic Doppler Velocity Meter (ADVM) is no longer being utilized at the site because their analysis has indicated that stage-discharge data are more representative of flow due to the site conditions. The ADVM will be deployed to the alternate section below Elephant Butte.

The USGS also reported that they reviewed and approved the 2022 streamflow gage below Caballo (#08362500) flow records developed by Reclamation, and that all necessary documentation was provided. The USGS reported that the record accuracy looked good, in large part due to the high number of measurements made at the gage.

The NMISC continued its survey of water-level elevations in Elephant Butte and Caballo reservoirs. NMISC’s surveyor performed surveys alongside Reclamation staff in June 2022 and

January 2023. Results from both NMISC's surveys indicated that Reclamation's reservoir stage elevations were within the agreed upon threshold criteria of 0.05-foot difference between the surveyed elevation and the stage-discharge recorder (SDR). Reclamation performed routine stage elevation surveys throughout 2022 and adjusted the SDR as needed if the threshold criteria was exceeded.

In 2022, Reclamation continued to measure Elephant Butte elevation via the SDR and a bubbler. The bubbler, which is maintained in conjunction with the USGS, shows more scatter but in general more accurately reflects observed elevation when the reservoir is low. NMISC and Reclamation will continue to perform side-by-side surveys at select times during 2023 to ensure the accuracy of the reservoir elevation data.

Gaging Station Costs

The Engineer Advisers and Compact Commissioners have expressed concern in the past multiple years over the large difference in costs between what Reclamation charges to operate the gage below Caballo Reservoir as compared to what CDWR and USGS charge for other Compact gages. The three Compact states split the costs of their operations in support of the Compact equally, including operation and maintenance of the Compact gaging stations. Therefore, this high cost from Reclamation affects all three states.

The cost charged by Reclamation for the operation of the below Caballo Gage for this coming year is no exception to the recent very large charges that Reclamation submits to the Engineer Advisers. For this upcoming year, Reclamation provided a cost estimate for the operation of this gaging station of \$36,581. Of that total, the cost to be borne by the Compact states was \$29,265. This is an increase of \$14,024, or a 92% increase over last year's costs. Additionally, documentation or justification to support this very large increase was not provided with the initial submission of costs but was only provided after specific requests from the Engineer Advisers. Currently, Reclamation's charges to the Compact states are approaching three times the amount of the average cost charged per gage by CDWR and USGS. The Engineer Advisers remain very concerned with Reclamation's high cost for the operation of this gage and with the large fluctuations in the charged costs year to year.

FEDERAL AND STATE AGENCY REPORTED INFORMATION

This section of the report is for informational purposes only and summarizes new information about issues which are not directly related to Compact administration. It reflects information obtained by the Engineer Advisers prior to the writing of the Engineer Advisers' report, and it may contain information obtained from the reports of the federal and/or state agencies at the 2023 Engineer Advisers' meetings or otherwise reported. This section contains information provided by various entities without analysis or approval by the Engineer Advisers.

Middle Rio Grande Endangered Species Collaborative Program

The Middle Rio Grande Endangered Species Collaborative Program (Collaborative Program) was authorized by the Omnibus Appropriations Act of 2009 (P.L. 111- 8). The Collaborative Program continues to seek innovative and collaborative ways to support Endangered Species Act (ESA) compliance for listed species while protecting water uses in the Middle Rio Grande. Reclamation reported that their federal appropriations in federal fiscal year (FY) 2022 were \$2.78 million for Collaborative Program activities, which stayed consistent from the \$2.78 million in federal FY 2021 but decreased from \$3.84 million in federal FY 2020. Projects funded through Reclamation that remain in the Collaborative Program are several long-term monitoring programs such as the Rio Grande silvery minnow (RGSM) population and genetics monitoring, and Middle Rio Grande bird surveys.

WildEarth Guardian's Litigation over the 2016 Biological Opinion

On November 30, 2022, WildEarth Guardians filed a lawsuit in U.S. District Court against the U.S. Fish and Wildlife Service and Reclamation regarding the 2016 Middle Rio Grande Biological Opinion (2016 BO). The lawsuit claims the 2016 BO is invalid under the ESA and arbitrary under the Administrative Procedure Act. The MRGCD intervened without protest and on February 6, 2023, a 90-day stay was granted for settlement negotiations.

Upper Rio Grande Water Operations Model

The URGWOM is a computational model developed through an interagency effort led by the Corps, Reclamation, and the New Mexico Interstate Stream Commission (NMISC). The effort includes regular meetings to discuss modeling outputs for daily water operations and accounting procedures. During 2022, URGWOM activities included:

- Updating the basin-wide annual operating plan (AOP) in collaboration with Reclamation and the NMISC;
- Updating the database to include data through 2021 for the MRG and the Lower Rio Grande (LRG);
- Developing, calibrating, and implementing deep aquifer objects into the model;
- Updating the five-year plan;
- Updating all URGWOM documentation volumes to the public website;
- Studying the Abiquiu deviation to store Prior and Paramount (P&P) water due to rehabilitation of El Vado Dam; and
- Continuing to develop the real-time operation model by linking URGWOM to the Corps Water Management System (CWMS) and using National Weather Service (NWS) forecasts for real-time operations.

Key objectives for 2023 include:

- Preparing basin-wide AOPs for 2023;
- Continuing to develop CWMS compatibility with partners at the Center for Advanced Decision Support for Water and Environmental Systems to eventually move URGWOM into the CWMS platform; and
- Updating the Real-Time Forecast Model using NWS forecast data (10-day forecast).

Compliance by Federal and State Agencies with State Water Law

The NMISC continues to track habitat restoration projects implemented by various federal and state agencies, and to account and report on related depletions in the Middle Rio Grande. It coordinates with the New Mexico Office of the State Engineer (NMOSE) to determine if a permit is needed and to ensure any new depletions are offset by the projects' sponsors. The NMISC reported that it continues to coordinate with the Corps on several habitat

restoration projects to ensure that those depletions are offset. The NMISC also coordinates with Reclamation in using the State's Strategic Water Reserve for ESA-related water management, including offsetting depletions associated with habitat restoration and river augmentation activities. Below-average snowmelt runoff in 2022 resulted in approximately 2 acre-feet of depletions for habitat restoration projects in the Middle Rio Grande that were offset by New Mexico's Strategic Water Reserve.

Elephant Butte Delta Channel Project

With a below-average snowmelt runoff and an above-average monsoon season the Elephant Butte Delta Channel (Delta Channel) successfully conveyed all flows during 2022. The extended duration of the monsoon season, combined with the lower magnitude of precipitation, generated smaller peak flows that resulted in less degradation of the Delta Channel throughout the year.

During October and November of 2022, the NMISC construction contractor conducted regular maintenance on the Delta Channel in the middle and upper project sections. Since 2003, New Mexico has spent nearly \$20 million to construct and maintain the Delta Channel and continues to partner with Reclamation, which provides engineering support, environmental compliance, access-road work, and primary maintenance for the project.

Mass Balance Review

The NMISC conducted a mass balance analysis for the Rio Grande between the Elephant Butte and Caballo gages for calendar year 2022. The mass balance analysis indicated that the reach gained water in nine out of twelve months with a total calculated annual gain of 43,242 acre-feet. The large gain during the year is largely attributed to intervening flows from significant monsoon rains, with August and September inflows exceeding 20,000 acre-feet and 15,000 acre-feet, respectively. Losses occurred in May, June, and July, with May seeing losses of over 5,000 acre-feet as irrigation water started being released.

Colorado Groundwater Regulations

In late 2015, the State Engineer of Colorado completed the development of rules and regulations concerning the use of groundwater in the Upper Rio Grande Basin in Colorado. These rules were approved by the Colorado Division 3 (Rio Grande Basin) Water Court in 2019 and went into full effect on March 15, 2021. As an integral part of these rules, the State Engineer of Colorado has also completed the development of Phase 6 of the Rio Grande Decision Support System Model. Development of Phase 7 began and is currently moving forward along with peer review. This model captures the interaction between surface and groundwater and shows the effect that wells have on senior surface water rights. The owners of non-exempt wells are required to mitigate the injurious depletions that their wells cause to senior surface-water rights and regulate the use of the confined and unconfined aquifers to maintain a sustainable water supply in each aquifer system. There are currently seven groundwater user subdistricts and multiple individual augmentation plans that have been developed as a way for the well owners to comply with the rules. Difficulty meeting sustainability in Subdistrict One has led to the contemplation of a new Plan of Water Management for that subdistrict and the filing of three significant independent Plans of Augmentation in Colorado Water Court.

Aamodt Settlement and Pojoaque Basin Regional Water System

The Aamodt Water Rights Settlement Agreement (Settlement Agreement) was developed through multi-party negotiations, which began in 2000 between the Pueblos of Nambé, Pojoaque, Tesuque and San Ildefonso, the State of New Mexico, the United States of America, Santa Fe, Santa Fe County, and representatives of non-Pueblo water users, to settle the Pueblos' water right claims in the Pojoaque Basin. The Settlement Agreement provides for the funding and construction of the Pojoaque Basin Regional Water System to supply treated water to Pueblo and non-Pueblo parties. As expressly stated in the Settlement Agreement, "Nothing in this agreement shall be construed to limit the authority of the State Engineer to...ensure compliance with the Rio Grande Compact," (Section 6.6.1.6). The Engineer Advisers will continue to evaluate the project as it moves forward, including evaluating potential impacts to the Otowi Index Supply.

The final Pojoaque Basin Regional Water System Environmental Impact Statement was published in the Federal Register in January 2018, and the Record of Decision was signed on September 11, 2019. Construction began on the intake area of the Regional Water System in June 2020. Additional funding and a time extension were authorized in late 2020, and the first portion of Phase I work was completed in January 2022. The next portion of Phase 1 construction was expected to begin in March 2022.

In 2022, about 3 acre-feet were withdrawn from the completed wells for construction purposes, such as dust abatement and compaction.

Reclamation's Lower San Acacia Reach Improvements Project

For FY 2022, Reclamation reported on progress on the Identification of San Acacia Reach Options (ISARO), which advanced to the next stage called the Evaluation of San Acacia Reach Options (ESARO) and is now referred to as the Lower San Acacia Reach Improvements Project (LSARI). This project focuses on the lower section of the San Acacia Reach from Highway 380 bridge just above the Bosque del Apache National Wildlife Refuge (BDANWR), downstream to the Narrows of Elephant Butte Reservoir. As previously reported, this area has historically been problematic for deliveries of water and sediment downstream into the reservoir, and high losses continue to occur in this section of the river. Reclamation has engaged with the NMISC, MRGCD, Service, and local landowners on its conceptual engineering options. A Value Planning Study required by Reclamation for large-scale projects was completed in 2021. In 2022, two alternatives were identified, a feasibility-level study and EIS were started, and a technical team was established that includes nonfederal partners, with an estimated completion date in 2024.

Conversion from a two-channel system consisting of the river channel and Low Flow Conveyance Channel (LFCC) to a single channel is the highest-ranking option in a Feasibility Study, but other options will continue to be evaluated. In addition, the re-operation of the LFCC from the San Acacia Diversion Dam to its terminus will be part of the evaluation as requested by the MRGCD.

Closed Basin Project

The total production of the Closed Basin Project in calendar year 2022 was 11,673 acre-feet. This total includes water that was exchanged for Colorado Parks and Wildlife water to be delivered to the Blanca Wildlife Habitat Area, the Alamosa National Wildlife Refuge and to the San Luis Lakes State Wildlife Area. The amount creditable for Compact purposes from direct delivery and exchange was 8,276 acre-feet. The remainder of the water produced was delivered to various federal lands along the project to be used as mitigation for the project footprint. All the water delivered to the Rio Grande in 2022 was of sufficient quality to qualify for credit under the Compact.

Reclamation continues to address problems of biofouling in the production wells of the Closed Basin Project. During 2022, Reclamation rehabilitated 19 wells and installed four new pumps. Wells will continue to be rehabilitated as budgetary constraints allow to help maintain project production. The Closed Basin Operating Committee continues to monitor groundwater levels and groundwater production and to adjust project operations pursuant to the enabling legislation.

Reclamation's Middle Rio Grande Supplemental Water Program

Reclamation's supplemental water program is intended to provide additional water, primarily obtained through the voluntary leasing of San Juan Chama Project (SJCP) water, for endangered species' needs and compliance with the 2016 BO. The program originally included water acquisition, reservoir storage, and release of water to support river flows. From 2001 to 2020, it also included operation of a pumping network in the San Acacia Reach to pump water from the LFCC to the river.

In 2022, a total of 6,337 acre-feet of supplemental water was released for endangered species purposes. Reclamation reported that the release of supplemental water began on May 24 and continued through June 17. Releases resumed on July 8 through July 27 and again on September 5 through September 21.

Reclamation ended 2022 with a total of 5,016 acre-feet of supplemental water in storage: 1,656 acre-feet of water in Abiquiu Reservoir and 3,360 acre-feet of water in Heron Reservoir,

all leased from 2022 SJCP contractor allocations. Reclamation is negotiating leases of up to 12,000 acre-feet from SJCP contractor allocations for 2023.

In addition to the water released by Reclamation, three other sources of water were reportedly used to support ESA needs:

- 139.61 acre-feet of pre-1907 native rights were permitted for offset via New Mexico's Strategic Water Reserve, released as needed between April 27 and May 5;
- 137 acre-feet of SJCP water leased by Audubon New Mexico, released between June 15 and September 11; and
- 2,551 acre-feet of native water were acquired via the MRGCD's Environmental Water Leasing Program (EWLP), which is a fallowing program funded by Reclamation.

Reclamation reported that 2,554 acres were enrolled in the EWLP and that the program receives a credit, in acre-feet, for all enrolled acres, prorated to account for water availability. According to Reclamation, above average monsoon activity resulted in above average summer and fall inflows, which generated a credit of 7,015 acre-feet for the season. Beginning in June, 2,551 acre-feet of this water were released for ESA needs and Reclamation reported that the remaining 4,464 acre-feet of EWLP credits were not released and did not carry over.

The Neil Cupp pumping site, originally developed by Reclamation for temporary pumping operations from the LFCC to the river, was converted to a permanent pumping site in 2020. It is now owned and operated by MRGCD and is capable of pumping to both the river and to irrigation facilities. In 2022, MRGCD pumped a total of 230 acre-feet to the river between June 2 and June 7 to maintain river connectivity.

Six Middle Rio Grande Pueblos Prior and Paramount Operations

In 2022, due to the limitations of storage in El Vado Reservoir during the repair to El Vado Dam, a request was made by the Corps to the Commission to allow Rio Grande water to be stored in Abiquiu Reservoir for use by the Pueblos in their P&P operations. The three compacting states agreed to allow up to 20,000 acre-feet of storage in Abiquiu Reservoir for P&P operations. Storage began on January 1, 2022, and the entire amount was stored while

Article VII Compact restrictions were in place. Due to significant monsoon rains and sufficient spring runoff, none of the water stored for P&P operations in 2022 was released for irrigation purposes. The P&P water stored in Abiquiu Reservoir had 1,356 acre-feet of evaporative losses, and the remaining 18,644 acre-feet was released downstream to Elephant Butter Reservoir November 15 through December 12, 2022.

Based on the March 2023, most-probable snowmelt runoff forecast, the BIA reported a preliminary storage target of approximately 18,496 acre-feet for their P&P operations in 2023. Additional forecasts may change this storage estimate, and the May 1 forecast is used as the final storage target. If the computed P&P storage based on the May 1 forecast is less than the 20,000 acre-feet permitted for P&P use in 2023, then the computed storage amount would be used. It is anticipated that all P&P storage in 2023 will be made during Article VII restrictions.

The BIA was able to make funding available to the Pueblos to perform work upgrading their irrigation systems. The BIA also provides funds to the MRGCD to perform maintenance work on the systems which serve Pueblo lands.

2022 Rio Chama Water Supply Conditions

Snowpack conditions in the Rio Chama Basin were well-below average during the winter of 2021-2022. The March through July native inflow to El Vado Reservoir was 114,422 acre-feet, or approximately 51 percent of average.

Beginning in early summer, flows on the Rio Chama were insufficient to meet the direct-flow irrigation needs of the Rio Chama Acequia Association (RCAA). RCAA represents 16 acequias on the Rio Chama between Abiquiu Reservoir and the confluence with the Rio Grande that have direct surface flow diversion rights. With insufficient native flows to meet their needs and the absence of sufficient leased SJCP water, the NMOSE curtailed RCAA diversions to the available natural flow of the river from summer through fall of 2022.

Rio Grande Project Operations

The 2022 Rio Grande Project (Project) water accounting amounts were approved by the respective district boards and Reclamation prior to the 2023 Engineer Advisers' Meeting. All accounting information reported by Reclamation is based on URGWOM.

On January 1, 2022, there was 183,512 acre-feet of Usable Water in Project Storage (Elephant Butte and Caballo reservoirs combined) and 275,963 acre-feet on December 31, 2022. Usable Water reached a high of 296,984 acre-feet on May 27 and a low of 89,546 acre-feet on August 18, 2022.

Reclamation's initial allocation for calendar year 2022 for El Paso County Water Improvement District No. 1 (EP No. 1) and Elephant Butte Irrigation District (EBID), was calculated in May after the 2021 water accounting had been finalized.

Mexico was provided an initial allocation of zero acre-feet in December 2021. Based on the provisions of the 1906 Convention for extraordinary drought, the allocations to Mexico were updated monthly, with a final in-season allocation in July 2022 of 14,827 acre-feet, which is about 24 percent of a full allocation.

The final in-season Project allocation of 340,257 acre-feet was given on July 7, 2022, including Mexico's allocation of 14,827 acre-feet. The final calculated charges were: 111,483 acre-feet to EP No. 1; 82,339 acre-feet to EBID; and 14,843 acre-feet to Mexico. A total of 208,665 acre-feet of water deliveries were charged to the Project water users.

Mexico is allocated Project Water for delivery during the year based on the anticipated release of Usable Water. This allocation cannot be reduced once it has been made. The actual release for the 2022 irrigation season was less than the anticipated release forecasted in May. Deliveries to Mexico during the year are made based on the most recent Project allocation. At the end of the year, Mexico's final allocation is determined using the actual annual release from Caballo Dam. If the amount of water delivered to Mexico is larger than Mexico's final allocation, the difference is charged to the two districts based on the proportion of the end-of-year 2022 allocation balances. Therefore, EP No. 1 and EBID were charged with -562 acre-feet and -739 acre-feet, respectively, as adjustments for the difference between Mexico's allocation and measured diversions.

Reclamation reported that the final 2022 allocation balances and beginning balances for 2023 were 71,860 acre-feet and 58,447 acre-feet for EP No. 1 and EBID, respectively.

Reclamation reported final 2022 releases from Caballo Reservoir for Project accounting during the irrigation season of 268,290 acre-feet for all three Project water users: EP No. 1,

EBID, and Mexico. Releases from Caballo Reservoir began on June 1 and ended on August 20, 2022. EBID and EP No. 1 began the irrigation season with coordinated orders and diversions. Mexico delayed their initial order by one week, and their diversions began on June 7. EBID ended their surface water diversions on June 28, Mexico ended on August 9, and EP No. 1 ended diversions on August 31.

During 2022, Reclamation's report indicates drainage flows into Hudspeth County Conservation and Reclamation District No. 1 (HCCRD) during March through September were 16,009 acre-feet. The calendar year total flow data for HCCRD was 25,827 acre-feet. Additionally, 926 acre-feet was delivered from Caballo Reservoir through the Bonita Lateral during calendar year 2022.

The USGS reported that the total annual flow volume at the gage below Elephant Butte dam was 281,815 acre-feet. There was a total of 268,974 acre-feet measured at the Caballo gage which is the amount used in Compact accounting for the calendar year.

For 2023 Project operations, Reclamation determined that the initial 2023 allocation to Mexico is 7,374 acre-feet based on the December 1, 2022, data. Reclamation will continue to evaluate the amount of Usable Water monthly to determine the actual Project allocations, which will occur in April or May.

Based on the March 2023 snowmelt runoff forecast for the Rio Grande and current hydrologic conditions, Reclamation anticipates a shortened irrigation season beginning around June 2, 2023.

U. S. Geological Survey

The Engineer Advisers received reports from the USGS on their Rio Grande Basin studies. The USGS, in cooperation with Reclamation, has developed a model of the transboundary aquifers and interconnected surface waters of the Palomas and Mesilla basins in New Mexico and Texas and the Conejos-Médanos Basin of northern Mexico, known as Rio Grande Transboundary Integrated Hydrologic Model (RGTIHM). A Scientific Investigations Report was published in 2022. USGS is currently extending the simulation period of the historical calibration and incorporating a process to allow dynamic simulation of Rio Grande

Project operations. USGS also reported on a project to study streamflow response to potential changes in climate in the Upper Rio Grande basin.

The USGS listed, but did not give details on, many other New Mexico Water Science Center projects and activities in the Rio Grande Basin, such as the Transboundary Aquifer Assessment Program, the Mesilla Basin Monitoring Program, URGWOM support and other groundwater and surface water monitoring programs.

U.S. Army Corps of Engineers Civil Works Projects

The Corps reported on the status of Civil Works projects under the Water Resources Development Act (WRDA) of 2020, which provided reauthorization for the Rio Grande Environmental Management Program in Colorado, New Mexico, and Texas. Authorization for this program was extended through federal FY 2029. Current projects undergoing either a feasibility study, higher-level planning, or construction include: Abiquiu Reservoir legislation, Bernalillo to Belen Levee Project, and Sandia to Isleta ecosystem restoration.

Legislation related to Abiquiu Reservoir in WRDA 2020 changed the storage limit of SJCP and native Rio Grande water in Abiquiu Reservoir from a total volume of 200,000 acre-feet to an elevation of 6,230 feet MSL (229,199 acre-feet) and to allow concurrent storage of Rio Grande and SJCP water in Abiquiu Reservoir. This would not have an effect on flood control operations at Abiquiu. The Water Control Manual must be updated, and environmental compliance completed, with a target date of the end of 2023. Additionally, future storage easements must be acquired.

The Bernalillo to Belen Levee Project, Espanola Valley Ecosystem Restoration, and Sandia to Isleta Ecosystem Restoration projects are authorized for construction under WRDA 2020. Most received funding to begin work on design and compliance contingent on executing agreements with project sponsors in FY 2023. The Espanola Valley Ecosystem Restoration design agreements were signed in November 2022 and the design is ongoing.

The Tribal Partnership Program is currently underway for San Felipe, Santa Ana, Zia, and Santo Domingo pueblos. These projects include watershed assessments, drought resilience

planning and feasibility studies for irrigation infrastructure. Efforts were initiated in FY 2020 and were completed in FY 2022.

Rio Grande Silvery Minnow

The Service reported on the 2022 monitoring results for the endangered Rio Grande silvery minnow (RGSM) using the October Catch per Unit Effort (CPUE) data used to report long-term trends in relative abundance.

The Service has adopted the use of 30 sites for evaluating RGSM take instead of the standard 20 sites. The 2022 October fish monitoring estimated an RGSM density of 0.17 fish/100 square meter (m²) for 30 sites. High spring runoff years in 2017 and 2019 had October RGSM densities of 23.2 and 3.4 fish/m². However, due to rapid decreases in discharge and extensive drying in 2022, there were no successful spawning events or egg collection, which impacted hatchery production and augmentation. The Service reported that only 129,497 (out of the 269,000 needed) RGSM were augmented to the Middle Rio Grande in 2022, in comparison to 208,772 in 2021, and 310,634 in 2020. Fish were provided by the City of Albuquerque's BioPark, the Service's Southwestern Native Aquatic Resources and Recovery Center located in Dexter, New Mexico, and the NMISC's Los Lunas Silvery Minnow Refugium. The Service expressed concern about the potential CPUE in 2023 because of the lower-than-normal number of augmented fish in 2022. The Service stated that through 2021, the 2016 BO has not been violated nor has Reclamation exceeded its take for RGSM. The Service is waiting for the 2022 final report from Reclamation for a decision on the 2022 CPUE. Only a portion of the RGSM that were stocked in 2020, 2021, and 2022 were tagged because of Covid-19 restrictions, so distinguishing wild and hatchery fish will not be possible until tagging of all the fish is resumed.

The Service, with assistance from the 2016 BO partners, conducted rescue activities in the 49.4 miles of unique drying within the San Acacia, Isleta, and Albuquerque reaches. There were 2,114 RGSM rescued from these reaches in 2022. Drying and fish rescue in the Albuquerque reach extended north to Montano Road.

El Vado Dam Repairs

Reclamation previously reported that substantial degradation of the steel lining system and service spillway has occurred at El Vado Dam. Corrective action studies determined that construction and repair work need to be conducted at the dam. The El Vado Safety of Dams Project is occurring in two phases: 1) installation of a synthetic liner system across the entire face plate of the existing dam to reduce embankment seepage, and 2) repair and refurbishment of the spillway.

Reclamation reported that contractor mobilization occurred in March 2022. During the 2022 construction season, the contractor completed repairs to the steel face plate and below-grade grouting efforts. Reclamation and the contractor also worked through several contract modifications related to material quantities and changes in site conditions. While the project is still on budget, it was reported that the contract changes are likely to add 6-12 months to the first phase of the project schedule.

Reclamation reported that the second phase of the project, the El Vado spillway repair and refurbishment, is going through final design changes and contract solicitation will be posted in late 2023 with construction activities scheduled to begin in spring of 2024.

During both phases of construction, there will be restrictions on storage of water in El Vado Reservoir. In 2022, NMISC and Reclamation each submitted a request to the Corps to deviate from the Water Control Plan at Abiquiu Reservoir to temporarily store native water at Abiquiu Reservoir during El Vado Dam and spillway construction activities under the same rules that would apply to native water storage at El Vado Reservoir. The Corps conducted the necessary regulatory compliance and ultimately stored only P&P water. (The Engineer Advisers note that Colorado and New Mexico approved storing all native water, while Texas approved storing only P&P water). The Corps reported that the deviation from normal operations at Abiquiu Dam is valid through the 2024 calendar year. If the El Vado Dam repairs are not complete within that timeframe, additional requests from the parties will be required, but no additional regulatory compliance would be necessary.

Middle Rio Grande Project Channel Maintenance

Reclamation's report indicates it is pursuing work at 17 active priority sites along the Middle Rio Grande Project reach where bank erosion or reduced channel capacity could cause levee failure.

Reclamation reported that the BDANWR Pilot Realignment Project, which was completed in March 2021, had adaptive maintenance performed starting in October 2022. The adaptive maintenance focused on implementing additional mechanical adjustment of the bed slope, which was necessary because recent spring snow-melt runoff flows were insufficient to scour the project area as originally intended. (The New Mexico Engineer Adviser notes that the current channel continues to be undefined through a significant portion of the project, resulting in extensive open water evaporation that is likely contributing to Compact delivery issues.) Reclamation reported that the BDA upper realignment is currently in the design phase with NEPA compliance to begin in 2023 and construction expected to begin in 2024.

Reclamation reported on the River Mile 60 Project, which will temporarily connect the LFCC to the Rio Grande with controlled outfalls in the Lower San Acacia Reach. This project fulfills one of the 2016 BO Conservation Measures and has an intended goal of improving water delivery to Elephant Butte Reservoir while avoiding negative impacts to southwestern willow flycatcher (flycatcher) habitat nearby. Experimental operations and adaptive management plans have been developed and Reclamation is currently working on drafting a memorandum of understanding for the MRGCD to operate the project gates.

Vegetation Management at Elephant Butte and Caballo Reservoirs

Reclamation reported that it performed vegetation maintenance at Caballo Reservoir during 2022, using federal funding. Reclamation noted that maintenance at Caballo Reservoir included mowing and mulching of approximately 400 acres of phreatophytic vegetation.

(The Engineer Advisers remain concerned about the lack of vegetation management activities by Reclamation at Elephant Butte Reservoir. The State of New Mexico would support vegetation management efforts at Elephant Butte Reservoir through the existing Technical

Services Agreement and encourages Reclamation to work with staff to implement vegetation management projects at Elephant Butte in 2023.)

Southwestern Willow Flycatcher and Yellow-billed Cuckoo

Reclamation and the Service conduct surveys and nest monitoring for the flycatcher and the western yellow-billed cuckoo (cuckoo) during the summer along the Rio Grande from Belen, New Mexico, to El Paso, Texas. Survey efforts were impacted by travel and hiring restrictions during the COVID-19 pandemic that resulted in inconsistent survey efforts in 2020 and 2021. Decreases in reported territories do not represent the actual species condition within the Middle Rio Grande during those years.

For 2022, 504 flycatcher territories were documented in the Middle Rio Grande and 108 territories in the Lower Rio Grande. As usual, most of the flycatcher territories are in the San Marcial and Elephant Butte Reservoir areas; however, increased activity also occurred within the Isleta Reach. While the current number of flycatcher territories in the Middle Rio Grande is well above the recovery goal of 100 territories, habitats in other regions have not hit their recovery targets yet, and downlisting or delisting has not been considered for this species. In 2022, the Upper Rio Grande and San Luis Valley management units had limited survey efforts with 10 flycatchers found by the Bureau of Land Management. The next round of surveys in the San Luis Valley will occur in 2023.

Reclamation has historically conducted surveys for the cuckoo from Belen to El Paso. In 2022, 157 cuckoo territories were observed in the surveyed area. In late 2021, the Service began a Species Status Assessment (SSA), that is still in progress, to inform the future recovery plan. In 2022, the Upper Rio Grande and San Luis Valley management units had limited survey efforts with only one detection. The next round of surveys in the San Luis Valley is scheduled for 2023.

The tamarisk leaf beetle continues to be found in most of the Rio Grande area, and defoliation of salt cedar in occupied territories may result in impacts to nesting success. Although numbers of tamarisk beetles in the Middle Rio Grande have been declining in the past few years, this may be cyclical, and it is uncertain if there is a long-term trend.

Additional Listing Information Provided by the U.S. Fish and Wildlife Service

In 2016, the Service found that listing the Rio Grande chub and the Rio Grande sucker may be warranted. A Conservation Agreement was signed in September 2018 between the Service and the states of New Mexico, Colorado and Texas, the Jicarilla Apache Nation, the Pueblo of Santa Ana, several counties in Colorado, the U.S. Forest Service, BLM, and the National Park Service to reduce the threats to these fishes. The Service will complete an SSA in 2023 and conduct a 12-month review in 2024.

The Service conducts photographic monitoring of the New Mexico meadow jumping mouse (jumping mouse) at BDANWR. In 2022, there were 36 unique photo detections, which is considerably higher than the 23 unique detections in the previous year.

International Boundary and Water Commission Activities

The IBWC provided a report of its activities along the Rio Grande in New Mexico and Texas during 2022 and their projected activities for 2023. The items discussed included their levee rehabilitation work and Federal Emergency Management Agency (FEMA) status, the status of their new hydraulic modeling, the River Management Plan and habitat restoration, flood control issues and activities, sediment removal activities, water accounting operations, IBWC gaging station information and status, as well as information on the border fence projects.

The Sunland Park East Levee sections contracts were awarded, and construction began, in 2022 with completion estimated in 2025. Floodplain maps will be developed for the levee areas which show the reduced flood zones due to the levees.

In 2019, the IBWC began development of a new hydraulic model for three separate reaches between Percha Dam and American Dam. The hydraulic models will be used to analyze sediment accumulation, channel capacities, levee deficiencies, and the amount of sediment required to be removed to maintain channel capacities. IBWC reported that they achieved the 60% design in April 2022, but that additional model calibration is necessary. Contract modifications are underway to complete the project.

IBWC presented updates to the status of the Canalization River Management Plan (RMP). The RMP covers floodplain management, endangered species management, and channel

maintenance. It incorporates the 2009 Record of Decision (ROD) commitments, the 2017 Biological Opinion, and statutory compliance. The last version of the RMP was November 2018, and the update is pending the analysis in the ongoing hydraulic modeling study. The target date for the revised update is now 2024.

Currently, the IBWC has implemented 22 of 30 habitat restoration sites, totaling over 500 acres. Under the River Habitat Restoration Program, the IBWC is treating 246 acres of salt cedar near Hatch, New Mexico. The IBWC completed an Environmental Assessment for aquatic habitat restoration in November 2021 and has identified five potential aquatic habitat restoration sites.

Brief updates were also provided for the IBWC's ongoing channel maintenance projects. The American Canal Lower Reach redesign was completed in 2022, and the contract is out for solicitation with a projected completion date of 2026.

The IBWC estimated that 400,000 cubic yards of silt are deposited into the Rio Grande Canalization Project reach annually. This results in sediment plugs, island formations, raised riverbeds, increased flooding risks, and inhibited irrigation return flows. The Canalization reach is defined as 105 river miles from Percha Dam in New Mexico to El Paso. During 2021, the IBWC utilized both inhouse work crews and outside contractors to remove over 400,000 cubic yards. In 2022, IBWC work crews were able to remove about 275,000 cubic yards, and for 2023, the IBWC anticipates its work crews will remove about 250,000 cubic yards of sediment. IBWC reported that it has spent considerable portions of its budget in 2022 to purchase new equipment to replace aging equipment and to increase its in-house capacity to conduct sediment removal in the Rincon, Canutillo, and El Paso County regions of the Rio Grande.

The IBWC reported that the 2022 allocation to Mexico for the Convention of 1906 was 14,827 acre-feet, which was 24.7 percent of a full allocation. The final delivery charged to Mexico was 14,843 acre-feet. A preliminary February allocation for 2023 to Mexico was reported to be 14,891 acre-feet, which is slightly more than the 2022 final allocation, but this could change before the final allocation is made.

The IBWC provided an update on the border wall projects in the Compact reach. Work was suspended on Customs and Border Protection (CBP) border wall projects in 2021. Border

wall construction activities resumed in 2022 to remediate the negative impacts from previous CBP and Texas border wall construction.

ENGINEER ADVISER RECOMMENDATIONS

On January 1, 2020, Reclamation implemented new area-capacity tables for Elephant Butte Reservoir based on their 2017 sediment survey. These tables account for the sediment buildup within the reservoir and the related loss of storage. They also are used to determine the current total storage volume of the reservoir. The Rio Grande Compact Rules and Regulations describe the now-outdated total storage volume in the reservoir. The Engineer Advisers again recommend that the Commissioners direct the Legal Advisers, in conjunction with the Engineer Advisers, to incorporate the new tables developed by Reclamation for Elephant Butte Reservoir into the Compact Rules and Regulations for potential approval at the 2024 Commission annual meeting.

The Engineer Advisers recommend that the Commissioners again direct the Legal Advisers, in conjunction with the Engineer Advisers, to investigate the need to create an official Rio Grande Compact document repository and report the results of their investigation at the 2024 Commission annual meeting.

The Engineer Advisers recommend that the Commissioners direct the Engineer Advisers and the Legal Advisers to investigate the costs submitted by Reclamation for the yearly operation and maintenance of the Rio Grande Below Caballo Reservoir gaging station, and whether a different method can or should be used to determine the costs for this gage which are allocated equally between the states.

BUDGET

The Engineer Advisers reviewed the cost of operation for the fiscal year ending June 30, 2022 and the budget for the fiscal year ending June 30, 2024.

The Engineer Advisers found that the expenses for gaging stations and administration of the Compact for the year ending June 30, 2022 were \$223,929. The U.S. federal government bore \$71,840 of this total, with the balance of \$152,089 to be borne equally by the three states.

The Engineer Advisers found that the proposed budget for the fiscal year ending June 30, 2024 indicates that a total of \$245,825 will be spent for gaging and administration, with a proposed contribution by the U.S. federal government of \$74,782.



Craig W. Cotten, P.E.

Engineer Adviser for Colorado



Page Pegram

Engineer Adviser for New Mexico



Suzy Valentine, P.E.

Engineer Adviser for Texas

Stephanie Russo Baca Board Reports Regular Board Meeting May 8, 2023.

April 22, 2023, Earth Day Fiesta, 2424 NM-47, Belen, NM 87002.

I went to represent MRGCD and there were many great presentations and booth with local vendors of food and crafts as well as partners like NRCS and Friends of Whitfield.

VALENCIA
SOIL & WATER CONSERVATION DISTRICT

EARTH DAY FIESTA
Day 2
11:00 - 4:00

ACTIVITIES FOR KIDS

PRESENTATIONS

- 11:30 TROPHIC CASCADES**
- 1:00 TEACHER TOOLKIT**
- 2:00 LIVE BIRDS-OF-PREY**

PARAÍSO
Roasting
COMMUNITY TO CUP

TO

Stephanie Russo Baca Board Reports Regular Board Meeting May 8, 2023.

April 25, 2023, Low-Flow Conveyance Channel Info-Sharing & Listening Session, Virtual

This was a presentation and discussion of the MRGCD-ISC proposal for experimental reactivation of the low-flow conveyance channel in the San Acacia Reach of the Rio Grande.

I've attached MRGCD's slides, and here is a link to the recording of this two-hour event:

<https://us02web.zoom.us/rec/share/DNBF8CsguJI89ZMKUBNgH8nRw-8ieNRJYqc5WNradYf36RaJe3-Hm4M56zwX5LJn.cYCoRHrii3VuQpgF?startTime=1682435207000>

Passcode: @V2zT&Mj

Listening Session regarding the Experimental Monsoon LFCC Proposal



4.25.2023



Agenda

- Introductions of MRGCD and ISC Staff
- Briefly Review Highlights of Draft Proposal
- Questions & Discussion

Motivation for this Proposal

- MRGCD and ISC do not believe that this type of operation will “solve” water management in the MRG.
 - We have no desire to “resurrect” historical operations.
 - Diversions would not take place until the San Acacia Reach becomes disconnected
- This is one tool at our disposal, which may support the long-term, reliable access to other tools (Upstream Storage).
- This proposal is a creative solution that attempts to find a middle ground between supporting riparian and aquatic function in the short term while complying with the Compact and securing long term access to storage.
- Upstream Storage allows for operational flexibility (Think Environmental/Conservation Storage)
 - Beneficial for Ag, ESA, and Compact objectives.

LFCC Proposal Highlights

- Contemplates diversions of monsoon driven flow into LFCC at SADD once the river is disconnected between Elephant Butte and SADD.
- Initial Diversion Cap of 500 cfs
- Potentially increase **seasonal** deliveries of water to Elephant Butte to aid in Compact Compliance.
- Potentially limit stranding of RGSM below SADD as a result of monsoon events
- Monitoring in both the main channel and LFCC for RGSM

Questions?



Photo of MRGCD's Los Chavez Outfall. Photo courtesy of Quantina Martine, Audubon Southwest

April 26, 2023, Summer Conservation Camp Planning Meeting with local farmers, Whitfield, and MRGCD, Virtual

Whitfield is looking to host a summer conservation camp and is asking for the support of local farmers as well as MRGCD. This would be a half day camp from 8:00-Noon each day for ages 8-12 (3rd-6th graders) with a capacity of up to 15 students. For the camp, the organizers are asking for donations for items such as *Drawstring bag, notebook, pencil, water bottle (or other swag donated by partners: NRCS, MRGCD, VSWCD).

Organizers are asking the MRGCD board for a donation of around \$500.00 to help with the week-long camp.

Stephanie Russo Baca Board Reports Regular Board Meeting May 8, 2023.

April 28, 2023, IRSA at Rio Abajo Conservation Area, 2128 NM-304, Rio Communities, NM 87002.

The Rio Abajo Conservation Area is 240 acres adjacent to the Rio Grande south of Belen donated to the District in 2006 and held in joint conservatorship with the NM Department of Game & Fish.

This area includes both bosque and uplands terrain that VSWCD intends to preserve as a wildlife sanctuary with public access. RACA restoration activities will include removal of nonnative species, such as salt cedar and Russian olive, and planting of native grasses, trees, and shrubs in riparian and uplands areas for preservation of natural habitat and biodiversity. The Isleta Reach Stewardship Association held a cleanup day and removed over 15 bags of trash.

