

**Greater Monterey County Integrated Regional Water Management Program
Regional Water Management Group Meeting**

**June 21, 2023
Zoom Conference Call**

RWMG Entity Attendees:

Jenny Balmagia – Central Coast Wetlands Group
Brandt Bates – Resource Conservation District of Monterey County
Rosa Carrillo – San Jerardo Cooperative, Inc.
Shandy Carroll – Monterey County Housing and Community Development
Beth Febus – Big Sur Land Trust
Emily Gardner – Salinas Valley Basin Groundwater Sustainability Agency
Piret Harmon – Salinas Valley Basin Groundwater Sustainability Agency
Alex Henson – Monterey County Water Resources Agency
Sarah Lopez – Preservation Inc.
Mike McCullough – Monterey One Water
Arioch Mgreene – Central Coast Wetlands Group
Heidi Niggemeyer – City of Salinas
Kevin O'Connor – Central Coast Wetlands Group
Taylor Price – Monterey County Housing and Community Development
Paul Robins – Resource Conservation District of Monterey County
Emily Zefferman – Resource Conservation District of Monterey County

Non-RWMG Attendees:

John Hunt – UC Davis
Susan Robinson – Greater Monterey County IRWM Program Director

Meeting Minutes

1. Brief Introductions

2. Update on Potential IRWM Funding: Susan Robinson announced two bills currently being proposed, Senate Bill 867 and Assembly Bill 1567, both of which include funding for IRWM. SB 867 is a \$15.5 billion bond that includes \$300 million for IRWM, and AB 1567 is a nearly \$16 billion bond that includes \$350 million for IRWM. Both bills have passed their respective houses and are now in their opposite houses for deliberation.

3. Interlake Tunnel and Spillway Modification Project: Alex Henson, Monterey County Water Resources Agency (MCWRA), provided a progress update. This project was first proposed in the 1970s to better manage flood and conservation flows. Project urgency was revitalized in 2014 due to drought.

The Nacimiento Reservoir fills three times faster than the San Antonio Reservoir. San Antonio has unused storage. By constructing a tunnel between the two, MCWRA could reduce the frequency of flood releases in the winter from Nacimiento, and by raising the San Antonio spillway 7 feet, could increase storage capacity by approximately 41,000 acre feet (AF), allowing for increased conservation releases in the summer. The objectives of the project are as follows:

- Minimize flood control releases through the Nacimiento Dam spillway
- Increase overall surface water supply collectively stored in reservoirs
- Improve hydrologic balance of Salinas Valley Groundwater Basin

- Reduce seawater intrusion
- Continue to meet flow requirements for steelhead
- Minimize the impact on existing hydroelectric production
- Preserve recreational opportunities in the reservoirs
- Protect agricultural viability and prime agricultural land

Alex described the physical elements of the project. At its deepest, the tunnel would be 700 feet beneath ground surface.

The Draft EIR was released in February and is posted on MCWRA's website. The Draft EIR considered both the full project including the Interlake Tunnel and Spillway Modification, as well as a Tunnel-Only Alternative (not including the spillway modification, i.e., no increase in water surface elevation).

Potential environmental effects of construction were determined in the Draft EIR to be:

- potential for soil erosion
- potential to disturb/damage paleontological resources
- temporary and permanent impacts on plant/wildlife habitat
- potential to disturb/damage archaeological resources, human remains, or tribal cultural resources
- potential for accidental release of hazardous materials (as with any construction project)
- release of air contaminants and greenhouse gases (as with any construction project)

Potential environmental effects of operation were determined in the Draft EIR to be:

- periodic changes in flood hazard conditions (the project will change the hydrologic regime)
- altered erosion and siltation conditions
- periodic impacts on plant and wildlife habitat
- potential to disturb/damage archaeological resources, human remains, or tribal cultural resources
- potential to interfere with vehicle movement and emergency response along local roadways during periodic inundation at San Antonio Reservoir (some low-lying roads at the upstream end may become inundated with increased spillway height)
- reduced electrical energy production from the existing hydroelectric facility at Nacimiento Reservoir (max possible reduction is 15%)
- impacts to prime agricultural farmland due to infrequent changes in flood conditions and altered erosion and siltation

Mitigation will need to be identified to reduce the potential impacts to less-than-significant levels. Alex noted that in very wet years, there could be impacts to ag lands downstream; however, in most years, with less severe storms, it is anticipated that benefits would result for ag lands (see Draft EIR on website). Potential beneficial effects of the project were determined in the Draft EIR to be:

Agricultural Resources:

- Increase overall surface water supply
- Protect agricultural viability/prime agricultural land
- Improve hydrologic balance Salinas Valley Groundwater Basin
- Reduce seawater intrusion

Recreation:

- Enhance recreational opportunities at San Antonio Reservoir

Biological Resources: Instead of releasing as flood control releases, the water would be stored and potentially used to benefit biological resources:

- Benefit riparian habitat lower San Antonio River in dry years
- Enhance fish productivity in San Antonio Reservoir
- Adult steelhead migration in Salinas River downstream of Soledad
- Juvenile steelhead rearing habitat in Nacimiento / San Antonio Rivers
- Steelhead smolts in Nacimiento / Salinas River and Lagoon
- Resident fish populations (e.g., Monterey roach and Monterey hitch)
- Tidewater goby, especially spawning adults

Hydrology and Water Quality:

- Increase overall surface-water supply
- Minimize flood control releases from the Nacimiento Reservoir spillway
- Reduce associated downstream flood damage
- Increase groundwater supplies and recharge
- Improve the hydrologic balance of the Salinas Valley Groundwater Basin

Current status: The Draft EIR and public comment period is complete. MCWRA is reviewing public comments for incorporation into the Final EIR. Design for the tunnel is at 60%. Design for the spillway is at 30%. The Engineer's Report for the Prop 218 process is underway. When the Engineer's Report is completed the 218 process can begin. The Agency hopes to complete the EIR and the Engineer's Report in 2024.

Q&A: Mike McCullough asked how the project might benefit seawater intrusion. Alex responded that the project would increase water delivery to the Salinas River Diversion Facility in drier years, supporting ag irrigation and allowing for reduced groundwater pumping. Mike wondered, however, about the diversions along the river. Alex responded that they have taken those diversions into consideration, at least to some extent.

Piret Harmon asked whether the objectives were quantifiable. Alex responded that some are, though the Agency hasn't considered quantifying objectives yet. Alex agreed "there is value in that." John Hunt asked whether the 218 process might be integrated with other projects "closer to the people who will be voting" to make it more appealing to the voters. Alex agreed the idea was worth discussing!

Kevin O'Connor asked about the relationship between the Interlake Tunnel and Spillway Modification Project and the Salinas River Habitat Conservation Plan (HCP). Alex said that these two projects are on separate tracks. The HCP is *required*, whereas the tunnel project is still in a decision-making phase. Should the tunnel project move forward, then the HCP would cover it. Jason Demers, MCWRA, will present on the HCP at a future IRWM meeting. Mike McCullough asked if there was an engineer's estimate at this point. Not yet!

4. Prop 1 Round 1 IRWM Implementation Grant Projects: The project proponents of the Prop 1 Round 1 IRWM grant projects provided progress updates on their projects. Updates were not provided for two projects – Castroville's Emergency Deep Aquifer Supply and Storage Tank Project, and MCWRA's Re-operation of Reservoirs Decision Support Tool – as the respective project proponents were unable to attend the meeting.

Salinas Storm Water Management: Increasing Capture, Improving Treatment, Reducing Energy Use (Central Coast Wetlands Group [CCWG])/Monterey One Water [M1W]/ City of Salinas) – Arioch

Mgreene presented for CCWG's portion of the project, which is a treatment wetland pilot study. CCWG is studying the effects of treating biochar with seawater to improve phosphate removal.

The process: CCWG places ¼mm pieces of eucalyptus biochar in seawater with 1 mole sodium hydroxide, which raises the pH to 10 and allows for fixation of magnesium to the carbon in a heated setting. In lab testing, phosphates were entirely removed by the biochar. To upscale the process, CCWG uses a 100-gallon tub filled with seawater, and raises the temperature to 80°C, with the biochar floating in sieves. Results: They have not been able to replicate 100% removal of phosphate yet, likely because they have been unable keep the water heated to 80°C at a consistent level for 72 hours at a time. But they have seen a notable reduction in phosphate.

The next phase of the project will be a small-scale biochar water treatment pilot study involving a mobile filtration system at the Salinas River infiltration ponds. They will utilize a treatment wetland to demonstrate different ways to treat runoff: the treatment wetland uptakes nitrogen while the biochar uptakes phosphate.

Q&A: Heidi Niggemeyer asked where the treatment unit would be located. It will be located at the Industrial Waste Treatment Facility (IWTF), occupying about 10' x 12'.

M1W and Salinas's portions of this project have been on placeholder status due to permit issues. Alex noted that the project is currently on the Department of Water Resources' plate to move forward. Mike McCullough briefly described the projects: M1W aims to assess and rehabilitate an abandoned-in-place 33-inch pipeline. In 2015 the construction of a new 42-inch industrial wastewater pipeline was completed, replacing the original 33-inch gravity main. The 33-inch pipeline could potentially be repurposed for stormwater separate conveyance – allowing the stormwater to bypass unnecessary aeration (which is required for industrial wastewater but not for stormwater) and reducing energy consumption. The City of Salinas's portion of the project involves upgrading electrical components at the IWTF.

Monterey County Farm Nutrient Management and Water Quality Assistance Program (Resource Conservation District of Monterey County [RCDMC]) – Paul Robins, Executive Director of RCDMC, presented. The project is a decision support tool for farmers to help them better manage soil, water, and nutrients to improve local water quality and streamline production inputs. Outreach focuses on small disadvantaged, mostly Spanish-speaking producers.

USDA Natural Resources Conservation Service EQIP grant funding is the primary source of funding for RCDMC's one-on-one grower education. There are three deliverables for the IRWM-funded project:

- 1) **75** individual on-farm consultations
- 2) **>25** detailed irrigation and nutrient management assessments with recommendations, and
- 3) Assist with implementation and effectiveness tracking at **~12** farm sites.

The RCDMC conducts grower education on a relatively continuous basis. Progress to date:

- 1) **55** (of 75) individual on-farm consultations conducted
- 2) **16** (of 25) detailed assessments conducted, with recommendations, and
- 3) **6** (of 12) implementation sites with water quality improvement projects. All of the sites have underground outlets, and several have basins of one sort or another, including two sites with water control structures, one lined waterway, one sediment basin, and one sediment control basin.

One-on-one assistance is critical, especially with small producers. The RCD mostly provides irrigation water management and nutrient management, but they also provide soil assessments. They also promote cover crop planting to improve soil health, reduce runoff rates and prevent erosion.

Q&A: Heidi asked about the locations and sizes of the basins (in context of the City's sediment TMDLs). Heidi also asked whether there is water quality monitoring of the discharge from these basins. Paul will connect her with the project engineer for more information about project intended benefits and observed outcomes. Kevin O'Connor asked about the long-term effects of this work. Paul responded that unfortunately, grant funding doesn't cover long-term monitoring (beyond 3-5 years). Paul would welcome a source of funding – or a collaboration – to track long-term benefits! Regarding long-term maintenance, given the frequency of short-term farming leases in Monterey County, Heidi wondered whether maintenance could be tied to the property owners rather than to the lessees. Paul responded... it's complicated.

Salinas River Flood and Habitat Improvement Program (Salinas River Management Unit Association [RMU Association] and RCDMC) – The overall goal of this project is flood risk reduction and habitat improvement on the Salinas River. Paul Robins noted that the RMU Association was determined by DWR to be ineligible as a grantee, so the RCDMC took over as grantee. The project consists of Arundo re-treatment along with eradication of other woody invasives, and expanding the stream maintenance program on secondary channels.

RCDMC has re-treated 500 acres (of 1,250 acres) with Round 1 IRWM grant funds thus far. They will re-treat about 750 acres this year, completing the Round 1 re-treatment, and then will continue re-treatment with funding from their Round 2 IRWM grant.

Brandt Bates presented on RCDMC's Watershed Management Coordination, which manages the stream maintenance program. The program spans a 92 mile-stretch of river, from Castroville to San Ardo, broken up into seven river management units. The program is landowner-driven and completely voluntary. It was started in 2014 by MCWRA with assistance from The Nature Conservancy and RCDMC in collaboration with farmers. The secondary channels were mapped using HEC-RAS models and local knowledge.

The purpose of the program is to enhance conveyance of flood flow by mimicking the natural movements of a river system (i.e., braiding). The landowners that are part of the stream maintenance program maintain pre-designated secondary channels, and conduct vegetation removal, grading, and sediment removal. The maintenance effort results in reduction in flow velocities and reduced impacts on levees and bank erosion. Landowners are responsible for all equipment operation. Grants pay for permit fees (with a streamlined permit), biological monitoring, vegetation mapping and project monitoring. The Round 1 IRWM grant supports maintenance on 40 secondary channels, 10 of which will be new channels (2 in Chualar, 3 in King City, 5 in San Lucas and San Ardo). Brandt reports that the program as a whole is slowly gaining more traction with landowners.

Q&A: John Hunt wondered whether there have been tangible benefits demonstrated this year with all of the floods. Brandt responded yes, they think so, but that's based on visual observation and complicated by many variables. Some of the levee breaks that occurred along the river were not from flows within the river channel but from water moving outside of the levees breaking back in to the main river channel. The RCDMC would be interested in obtaining more data on how the river changed with this year's floods. They need additional LiDAR (there's a regular need for LiDAR on a 5-year interval).

5. Other News:

Susan Robinson asked the group if they would prefer to start meeting in person again. The consensus was yes. A decision was made to proceed with hybrid meetings going forward.

Rachel Saunders reported that the Big Sur Land Trust was just awarded \$2.5 million from DWR in Urban Streams Grant funds for restoration at Carr Lake. It's a \$14 million project. They've received \$3.6 million from the Natural Resources Agency in Urban Greening Grant funds.

Jenny Balmagia reported that CCWG recently received \$1 million from US Fish and Wildlife Service in National Coastal Wetlands Conservation Grant funds for the Castroville to the Coast project. The Coastal Conservancy was the lead applicant for that project, and is providing an additional \$120,000 in match for the project.

Paul reported that RCDMC is doing a lot of forest health / fire resiliency work currently. RCDMC was just awarded a grant through the CDFW Vegetation Classification and Mapping Program to lead a fine-scale vegetation mapping project for Monterey, San Benito and San Luis Obispo counties – to better enable project planning and permitting. The RCDMC is also partnering with Trout Unlimited on a fish barrier project on the Arroyo Seco River, and are in conversations regarding a project at the next fish barrier on the river.

Emily Gardner announced that DWR has approved the remaining five Groundwater Sustainability Plans.

The next RWMG meeting will be held on Wednesday, August 16, 2023, 1:30pm – 3:30pm.