



COLORADO

**Colorado Water
Conservation Board**

Department of Natural Resources

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TO: Colorado Water Conservation Board Members

FROM: Carlee Brown, Interstate and Federal Manager
Alex Funk, Agricultural Water Resource Specialist
Interstate, Federal, and Water Information Section

DATE: July 18, 2018

AGENDA ITEM: 15. Colorado River Storage Project Act (CRSP) Memorandum of Agreement (MOA) Annual Update

Background

In 2011, the Upper Colorado River Division States (Colorado, Wyoming, Utah, and New Mexico), the United States Bureau of Reclamation (Reclamation), the United States Department of Energy Western Area Power Administration, and the Colorado River Energy Distributors Association (CREDA) signed a Memorandum of Agreement (MOA) that authorizes the use of the Upper Colorado River Basin Fund (Basin Fund) to further the purposes of the 1956 Colorado River Storage Project (CRSP) Act (Public Law 485) and to reduce the impact on the CRSP firm power rate by eliminating the collection of power revenues beyond that amount needed to repay the costs of the existing projects through Fiscal Year (FY) 2025. The CWCB represents Colorado in the implementation of the MOA.

The Basin Funds that are the subject of the MOA are from excess CRSP power revenues allocated to the Upper Basin States. An average of \$11.5 million is to be collected each year, up to \$161 million total over the term of the MOA. Forty-six percent of the total funds collected are to be allocated to Colorado (roughly \$73 million after setting aside funds for Basinwide projects) through 2025. MOA funds can be utilized for specific types of operations, maintenance, and replacement (OM&R) projects—not including completely new construction.

In March 2015, the CWCB approved the Upper Colorado River Basin Fund Memorandum of Agreement Criteria and Guidelines for Prioritization of Projects within Colorado. Among other things, these criteria and guidelines require Staff to report to the Board annually.

Staff Recommendation

This item is informational only. No Board action is requested.



Colorado's MOA Projects

To utilize the MOA Funds, each state is responsible for recommending and prioritizing its proposed OM&R projects following the process prescribed in the MOA. In early July of each year, the Upper Colorado River Commission collects project proposals from each Upper Division state and transmits a list of those proposals to Reclamation for approval. The MOA intends that Reclamation then implement the projects based on the priority of the project, as determined by the state in which the project is located.

CWCB staff did not propose any new projects this year for the reasons detailed further in this memo. Typically, CWCB confers with representatives of the Colorado River Water Conservation District (CRWCD) and the Southwestern Water Conservation District (SWWCD) in mid-spring to identify potential projects that would be good candidates for MOA funds. CWCB staff went through that exercise this year and determined that while potential projects exist, extenuating factors and ongoing discussions with Reclamation made it wiser to withhold proposals at this time. This is the second consecutive year that Colorado has not proposed a new MOA project.

Rescinded Projects

The State of Colorado continues to disagree with Reclamation about the agency's decision to rescind approval of certain MOA projects.

In September 2016, Reclamation sent a letter to the CWCB Director rescinding approval of several projects that had been previously approved for MOA funding. Reclamation based the rescissions on internal criteria, to which the other MOA parties did not know of or agree, that were applied after the approval was initially granted. One such criteria hinged on a determination of federal ownership of the facilities. In the rescission letter, Reclamation identified a few projects that involved requests for OM&R work on what Reclamation described as non-federally owned components within the CRSP participating projects. Reclamation determined that because the project components were not federally owned, they were not eligible for MOA funds. This shift in analysis by Reclamation does not reflect Colorado's (or the other states') understanding of ownership of the participating projects or what constitutes an eligible project.

At the direction of the Board, CWCB and the Colorado Attorney General's (COAG) staff have actively engaged with Reclamation in exploring potential workarounds to the difference of opinion on the application of approval criteria. These efforts have been made through a series of meetings that included representatives from Reclamation's solicitor's office and staff along with legal committee members from the Upper Colorado River Commission; other meetings with other MOA parties (the other Upper Division states, UCRC, and CREDA); and through individual discussions. The disagreement on these projects has not been resolved. Colorado has not conceded the point and continues to advocate for the re-approval of the rescinded projects, per the direction of the Board. However, regardless of resolution regarding the

ultimate eligibility of these projects, their status will also depend upon resolution of the accounting discrepancies discussed below.

Because the status of the rescinded projects remains unresolved, CWCB staff is reluctant to approve additional expenditures without a full understanding of the total remaining allocation of Colorado's MOA funds.

Accounting

Reclamation provides CWCB with quarterly accounting spreadsheets and narrative reports of progress on all approved MOA projects. Reclamation's accounting spreadsheets currently show that Colorado is at its full allocation of MOA funds. However, CWCB staff does not believe that to be an accurate reflection of project expenditures and funding availability.

Through recent discussions with Reclamation staff, and a thorough review of past accounting, CWCB staff has identified a number of cost overruns and outdated status reports in Reclamation's reporting documents. Reclamation is aware of these issues and has acknowledged that project tracking and reporting could be improved. CWCB has offered to provide a specific reporting template for future quarterly reports, which Reclamation was willing to accept.

Additionally, certain projects have experienced significant cost overruns, while other projects are actually complete or were incorrectly charged for costs accrued to other projects. These changes are not accurately documented in Reclamation's reporting documents.

In previous annual reports to the Board, CWCB staff has provided the most recent quarterly reporting documents from Reclamation. Staff has again attached those, but does not believe it provides an accurate reflection of the actual accounting for of the projects. Staff will supplement this reporting with a verbal update at the Board Meeting.

CWCB is currently working with CRWCD, SWWCD and Reclamation to get an accurate accounting of all the approved and completed projects. A "clean-up" of this accounting is crucial for an accurate understanding of exactly how much MOA funding remains available for Colorado to pursue additional projects and to fund currently approved projects.

Communication and Collaboration

Reclamation staff has recently made an effort to work with CWCB to identify past problems with project implementation and to forge a successful, collaborative path going forward. Reclamation acknowledges cost overruns and accounting inaccuracies, and has committed to help correct them and implement a credible accounting process going forward. CWCB and COAG staff met with Reclamation in a productive meeting on June 19, 2018 on this topic. One of the take-aways from the meeting was an agreement to develop a communications plan between CWCB and Reclamation regarding ongoing project implementation. CWCB staff also offered to provide specific feedback on quarterly reporting and accounting documents so that those can be more useful to all parties in the future.

Next Steps

CWCB staff intends to develop a detailed and accurate accounting spreadsheet based on Reclamation's most recent reports and staff's own inspection of project status. CWCB staff, through the development of a communications plan, also intends to continue discussions with Reclamation regarding ways to improve project implementation and maximize Colorado's MOA allocation. The expectation is that with these improvements, both currently approved and future proposed projects can be evaluated and implemented in a mutually agreed upon manner that incorporates a justifiable and credible accounting. If such results prove to not be possible, CWCB and COAG staff will consult the Board on appropriate next steps.

Attachment

CRSP-MOA Proposals

Updated 04-18-18

Total CRSP-MOA Expenditures through March 31, 2018 on all 4 states' proposals: \$46,851,146

Colorado Projects

2012 Proposals

Florida Ditch/Canal Linings – Florida Project (CRSP Participating) – **Complete** – WCAO has completed the specifications and designs. Proposal from 8A contractor was significantly higher than the engineer's estimate. WCAO negotiated with 8A contractor. Awarded August 9, 2013 for about \$1.7 Million. The Contractor substantially completed the project on April 30, 2014, in time for water to be delivered on May 7, 2014. Reseeding was completed in late October 2014. The projected total cost of the construction is \$1,750,265.88. Kevin Moran

Fairview Pumps – Dolores Project (CRSP Participating) – **Complete** – Replacement of pumps used to pressurize irrigation water for the Dolores Project. Equipment contract awarded September 18, 2013 for \$1.15 M. Equipment shipments are complete. Contract Completed. Final contract value is \$1,149,014.76 . The installation contract was awarded September 17, 2014 to Yellowstone Electric Company. Contract value is \$547,571.94. Commissioning was coordinated with the supply contract and completed at the same time. All equipment is installed and functioning properly. Contract Completed. Final contract value is \$547,571.94 . Vern Harrell

Lemon Dam Upstream Gates – Florida Project (CRSP Participating) – **Complete** – Replacement of gate seals at Lemon Dam, southwestern Colorado. The Value Engineering study was completed on November 21, 2014. The specifications and drawings were completed. The acquisition package for procurement was completed. Anticipated award of Contract in late July 2015, to include manufacture and installation of government designed bulkhead. Service Agreement in place with TSC for bulkhead design, and engineering is complete. AMD is not confident that they can get a contract awarded by mid-July. Currently vetting various 8(a) contractors in order to maintain schedule. 8(a) contractor ESSI identified, using MedVed, Prime Machine, and AMC as major subs. Proposal received July 27, 2015. The proposal was reviewed for technical adequacy and was found to be unacceptable. Pricing was not reviewed, but fell within budget. Discussions are forthcoming to determine if this contractor can adequately revise the technical proposal to satisfy our concerns, or if Reclamation should cancel the RFP and advertise to full and open competition. In either case the work has been re-scheduled to begin in fall of 2016. The specifications are being revised, and should be submitted back to AMD during the week of November 30, 2015. AMD is telling us that we have to stay with 8(a) program. Work still scheduled for fall 2016, with the contract awarded by July 1, 2016. Still awaiting a decision to exit the 8(a) program, but will still likely have to remain small business. AMD is still confident for an award date of July 1st. We are redesigning the bulkhead from a single 4" orifice, to a 4" orifice and a 6" orifice. This will provide redundancy for making releases, and add capability to release more water. Successfully exited the 8(a) program, and moving forward as a small business set aside. Finalized PR package submitted May 8th. Site visit to be scheduled for week of 6/15/16. Proposals due end of June. TPEC identified and scheduled for July 5th. Award of contract has slipped to 7/30/16. The contract was awarded on September 1, 2016, for roughly \$1.4M, to Gracon. Gracon has proposed an accelerated schedule, and plans to be finished with the work in January 2017, in order to avoid dealing with ice. Weather conditions have caused delays. Contractor currently working on completing repair of 4 gates and hydraulic system. Reservoir ice conditions may delay bulkhead removal. Depending on weather, anticipate completion of all contractual work obligations by March 2017. Contract was extended until April 15. Work has been completed and dam is fully operational. Tyler Artichoker

Lower Gunnison Basin Selenium Management – Uncompahgre Project – Gunnison Basin PBO. – **Complete**
The System Optimization portion was funded by the State of Colorado. Water Efficiency Improvements are being implemented. Mark Wernke

2013 Proposals

Silver Jack Reservoir Automation – Bostwick Park Project (CRSP Participating) – Automation of Silver Jack Dam outlet works. WCAO worked through the Technical Service Center (TSC) for design. WCAO did discuss with TSC the possibility of TSC also preparing specifications for an award. Site visit with Toby Steves of the TSC conducted July 8, 2015. Met with Arlen Hilton from Provo office July 16, 2015 at Meeks Cabin to see similar installation. Received proposals from both in September 2015. WCAO did a technical analysis of the proposals to determine which to move forward with. Met with Bostwick Park October 15, 2015. Based upon proposals from TSC and the USBR Provo automation group, and discussion with Bostwick Park we decided to proceed with the automation work by the Provo Office. Bostwick Park will do some of the system modification work with their funds. Reclamation will procure, install and program the automation system. Arlen Hilton and Bob Norman conducted a site visit June 21st to evaluate equipment layout. Arlen Hilton and crew started installation of the automation system the week of September 19, 2016. The project is 80% complete and on hold due to winter access. District completed electrical/mechanical work. Arlen Hilton is working with the district to address communications problems. Bob Norman

Aspen Canal Lining – Smith Fork Project (CRSP Participating) – Aspen Canal piping. A site visit was conducted on July 16, 2015 with several board members from the Crawford Water Conservancy District along with WCAO engineers for a project assessment. A conceptual plan for piping was presented to the board members from the Crawford Water Conservancy District (CWCD) on October 29, 2015. Reclamation met with CWCD on August 18, 2016 for further right-of-way discussions. CWCD still needs to contact several landowners to see if they are interested in exchanging ROW for several reaches of alignment. Survey data collection began in October 2015 and due to depth of silt deposition in the canal the surveying was completed in May of 2016. Reclamation met with CWCD on January 31, and March 8, and September 21 to further clarify design criteria and project needs. **Working on getting the Archeological surveys completed. Current schedule has design being completed by August 30, 2018. This will not allow enough time for the Acquisition Staff in Salt Lake City to solicit a contractor and allow construction to begin early fall of 2018, construction now planned for fall of 2019.** Mark Wernke

Paonia Reservoir Sedimentation Study – Paonia Project (CRSP Participating) – Sedimentation study to develop alternatives to maintain or prolong reservoir capacity. WCAO has entered into a Service Agreement with the TSC for a \$212,000 scope of work. Work includes sediment surveys, sampling, upstream and downstream evaluations, and development of various alternatives. USGS has installed automatic sediment samplers. TSC has completed river survey below Paonia Reservoir. Bathymetric survey of entire reservoir completed week of June 10, 2013. TSC crunching numbers, will develop a new Area Capacity Table. Work is in progress. Received draft Data Collection Technical Memorandum on Paonia Reservoir, Muddy Creek, and North Fork on January 14, 2014. The data collection report should be final once new data is collected from the new agreement with the TSC. The one-dimensional sedimentation transport model should commence the week of March 17, 2015. Awaiting final sedimentation report from Kent Collins of the TSC. New Project Management Plan (PMP) was signed March 12, 2015 with TSC to numerically simulate 2015 flows and dam operations, evaluate model results, and develop recommendations for short term management of reservoir sediment. TSC did supply an updated area-capacity table for dam/reservoir operations on March 11, 2015. USGS completed installation of three new gauges for sediment monitoring on April 9, 2015. These are located on Muddy Creek, Anthracite Creek, and North Fork of the Gunnison below Raven Gulch near Somerset. This was the result of a new request from the State of Colorado. Regular conference calls are occurring. New bathymetric survey conducted June 29-30, 2015. Draft report received August 3, 2015. Reviewed by WCAO and the district. Received the final report for 2015 sediment modeling. **For current updates see Dam Outlet Works Modifications and Inlet Repairs under the 2016 proposals.** Tom Fowlds

2014 Proposals

Basin Creek Gaging Station – Animas-La Plata Project (CRSP Participating) – **Complete** – Agreement with State of Colorado to O&M the instrument is in the acquisitions process. Work is complete, including final construction report. The final expenditures were \$100,596 which is \$149,404 under budget. WCAO included the maintenance (by State of Colorado) with an existing contract. Tyler Artchoker

Pleasant View/Ruin Canyon Pumping Plants – Dolores Project (CRSP Participating) – This was modified by the FY15 Priority 1 proposal for Dolores. See 2015 proposal below for update information. Vern Harrell

Silt Pumping Plant Pump Replacement – Silt Project (CRSP Participating) – Replacement of pumps used to raise water from Colorado River to irrigate supplemental project lands. Project to include other water efficiency improvements. XCEL Energy plans to upgrade power transmission line to a higher voltage sometime between 2015 and 2017. TSC has sent out 90% design and specs for the pumping plant upgrade. Representatives from Silt Water Conservancy District (SWCD) and WCAO traveled to TSC for a 90% review Mar 9-11, 2015. Completed specs and requisition were sent to Salt Lake City in September 2015. The project has been assigned to a contract specialist and the milestone schedule shows an award date of July 20, 2016. However the solicitation was not issued on March 11, 2016 as per the schedule. The contract was awarded September 16, 2016 to Aslan Construction with construction planned for the winter of 2017/2018. Reclamation had a pre-construction meeting on December 6, 2016 and a partnering meeting on February 17, 2017. Submittals were received and reviewed by Reclamation. Contractor mobilized on August 28, 2017 and began construction. The project is scheduled for completion May of 2018. **The contractor will begin testing pumps and motors the week of April 16, 2018 with water delivery expected to begin that week if all tests pass.** Matt Bryner

2015 Proposals

Pumping Plant Replacements Priority 1 – Dolores Project (CRSP Participating) – This contract will supply electrical equipment for four pumping plants, Pleasant View, Ruin Canyon, Cahone, and Dove Creek. The acquisition initiation meeting (AIM) was completed February 19, 2015. The solicitation went out in July, proposals were received July 21, 2015, TPEC review completed July 27, 2015, contract award September 17, 2015. For Pleasant View, Ruin Canyon and Dove Creek pumping plants field service commissioning is complete. The only remaining work includes commissioning Cahone Pumping Plant VFD's (2018). **Commissioning of the Cahone Pumping Plant VFD's started the week of April 9, 2018.** Robert Stump

Pleasant View/Ruin Canyon Pumping Plants ASD Install Priority 2 – Dolores Project (CRSP Participating) – **Complete** – The Pleasant View/Ruin Canyon Pumping Plant installation contract new milestone dates are: AIM completed July 20, 2015, solicitation out for bid November 24, 2015, site visit December 8, 2015, proposals due December 23, 2015. The Pleasant View/Ruin Canyon Pumping Plant Equipment Installation contract was awarded January 29, 2016 to Yellowstone Electric Co. The contract is complete. The final contract value is \$497,496. Vern Harrell

Vertical Turbine Pump Re-Builds Priority 3 – Dolores Project (CRSP Participating) – The Vertical Turbine Pump Rebuild contract was awarded January 29, 2016 to All American Technical Team, Inc. of Farmington, NM. The contract involved rebuilding two pumps for Pleasant View Pumping Plant, two for Ruin Canyon, two for Dove Creek, and three for Cahone. The contractor completed the rehabilitation and delivery of the Pleasant View and Ruin Canyon 250 hp pumps in 2016. A modification for unanticipated repairs was completed. The result of the modification is a contract increase of \$28,032.73. Pumps for Dove Creek have been rebuilt. A rebuilt pump for Pleasant View failed and was removed/inspected June-July 2017 and found defective. The spare pump was installed. All-American is rebuilding the failed pump under warranty during the winter of 2017-2018 and extending the warranty on the other re-built pumps. Cahone Pumping Plant pumps will be removed after October 2018 and rebuilt during winter of 2018/2019. **The Pleasant View failed pump was rebuilt by All-American and accepted April 12, 2018. Three Cahone pumps remain to be rebuilt winter 2018/2019.**

Robert Stump

Florida Ditch/Canal Linings – Florida Project (CRSP Participating) – Need clarification of where work to be performed to determine ownership. WCAO working on ownership. Ownership still being verified; however, federal ownership of the Florida Farmers Ditch West and the Florida Ditch has been verified. Easements will need to be obtained by Reclamation, before construction can occur. **WCAO will meet with water users in the spring of 2018 to determine scope of the project and the necessary design data that will need to be collected. A majority of the survey data has been collected in the spring of 2018. Construction would tentatively begin fall of 2019 or 2020.** Kevin Moran

Lemon Reservoir Nuisance Species Control – Florida Project (CRSP Participating) – Summer 2015 WCAO plans to meet with Forest Service, Colorado Parks & Wildlife, and Florida Water Conservancy District to discuss design, construction and operation of the inspection and decontamination facilities. This meeting was conducted on June 5, 2015. Follow-up site visit conducted July 22, 2015 with Jay Bytheway for preparation of service agreement with UC Regional Design Group. Service agreement signed July 29, 2015 for preparation of final design, specifications and cost estimate by December 31, 2015. WCAO will complete pre-design survey work, procurement package and provide contract administration and construction inspection. Preliminary design and specifications sent on February 26, 2016 for review and comment by Forest Service, Colorado Parks & Wildlife, and Florida Water Conservancy District, comment deadline March 31, 2016. Comments submitted by the Forest Service led us to consider an alternate location for the inspection and decon facilities along the east side of the boat ramp access road to avoid congestion of the USFS campground/boat ramp parking area and provide more efficient traffic flow for boat inspection, decon and launching. FWCD also submitted comments. BOR took comments into consideration and Jay Bytheway submitted a new 30% design on April 29, 2016. This design was reviewed by Kevin Moran, and discussed on May 10, 2016. As of August 2016, design 70% complete. Percolation tests will be needed. Completion of final design and specifications is expected fall 2016, construction in 2018. Provo force account may be able to perform construction. However, on October 14, 2016, the design work was put on hold because John Ey, with Florida Water Conservancy District, the Forest Service, Colorado Parks and Wildlife, and Reclamation are exploring changing the reservoir designation from motorized to non-motorized boating. If this occurs, the boat inspection facilities may not be needed. John Ey is in the process of scheduling a meeting with previously mentioned agencies so this option can be discussed further. If it is determined that the boating designation will not change, then the design will be completed in spring 2018, and John will work with local entities to provide operation and maintenance funding after construction. However, recently, the FWCD, with support from Reclamation and the City of Durango, asked the Forest Service to close the reservoir to motorized boats so as to protect against mussel infestation. The Forest Service agreed and implemented a 1–3 year temporary closure effective May 1, 2017. Signs and barriers are in place. The closure will be reviewed annually. At this time, all design work is on hold. Melissa Werkmeister

Ridges Basin Mussel Inspection and Decontamination – Animas-La Plata Project (CRSP Participating) – **Complete** – Power Office gave approval via email to accelerate this FY15 funding to immediately begin the design work. AutoCAD drawings of the City of Durango's concept for entry station were received and routed to Environmental Planning group for initial cultural resources assessment. Service Agreement with Regional Office Design Group was signed; area was surveyed week of June 2, 2014 and survey data provided to Regional Office by June 9, 2014. Revised schedule is to have a final design and specification package completed by end of October 2014. Specification completed by UC Regional Design Group and reviewed by WCAO. NEPA sufficiency review completed and consultation letters were mailed to 26 Tribes and SHPO pursuant to Programmatic Agreement. However, upon receipt of comments from Ute Mountain Ute Tribe, the area of potential effect was resurveyed and subsequent consultation with SHPO has been initiated. Anticipate construction beginning in late summer 2015 under 638 contract with Wemenuche Construction Authority (WCA). WCA currently working on proposal for performing the work. Hydrologist assessing potential runoff for 25, 50, 100, and 500-yr return periods. Results will dictate storm water treatment approach. We expect to receive a proposal from the contractor by June 1, 2015. This will be followed by a technical analysis of the proposal, and negotiation of scope and price. Proposal received July 27, 2015, and was significantly higher than budgeted amount and the IGCE. WCAO will complete technical analysis of the proposal, followed by negotiation of scope and price. Contract awarded fall 2015. Negotiations with contractor completed. Awarded task order in November 2015 and ground work to beginning week of June 13, 2016. Two additional modifications were required for utility relocations, and some additional paving, concrete, and communications work. These mods will not be utilizing MOA monies, but will overlap with some of the MOA work, which is currently underway. Expected completion of the mussel and decontamination station is November 2016. Due to winter shutdown, completion (curb and gutter work and some paving) will occur summer 2017. Earthwork and concrete work are completed. AIS decontamination equipment is staged for commissioning once the paving is completed near the end of August 2017. This work is complete except for the installation and hook up of the temporary office trailer, storage container, and wash decks, which will remain staged at the parking lot through the winter. Revegetation efforts were completed by Reclamation staff in October 2017. **All project construction was completed in March 2018, and the station is currently operational. Final close out modification, and final cost, pending.** Tyler Artichoker

2016 Proposals

Power Line Road Rehabilitation – Animas-La Plata Project (CRSP Participating) – **Complete** – Work is underway to develop scope of work, Independent Government Cost Estimate (IGCE), and contract requirement documents for modification to existing PL 93-638 contract with WCA. Trying to time work subsequent to the mussel station construction for the sake of efficiency, and potential damage from hauling in materials and equipment. Specifications to be complete by end of calendar year. Scope will include installation of aggregate base course, articulated concrete mats, a drainage settling pond, and miscellaneous drainage improvements. Specifications are 90% complete, but concurrently working on a new contract vehicle, since the envisioned contract will expire in September 2016, and thus cannot be further modified with time to complete work before the expiration. . The concept of the settling pond has been removed from the scope of this work. Still awaiting contract vehicle determination, but will likely be a new competitive contract. Currently working on design and cost estimates; anticipate design completion by fall 2017. The solicitation was developed and sent to an SBA 8(a) contractor in mid-August for proposal (AMD determined in early August 2017 that legislation authorizing 638 contracting does not apply now that ALP is transferred to O&M status, so a new 638 contract is not possible). Award is expected by the middle to end of September 2017 with work starting in October 2017, weather permitting. Work may extend to spring 2018 depending on winter conditions. Contractor proposal from Victor Corporation received August 31, 2017, but higher than the IGCE. Riprap stockpiles were removed in order to remain under budget. This should be awarded in September 2017 with work scheduled to begin the following month. Work was completed in October 2017. Tyler Artichoker

Great Cut Pumping Plant Replacements Priority 1– Dolores Project (CRSP Participating) – The contract was awarded July 20, 2016 to PAF Electrical, Inc. Excitation components were delivered and are being installed. The contract is 89% complete with the field service component remaining. The field component is expected to be completed the winter of 2017-2018. **Commissioning is scheduled to start the week of April 30, 2018.** Robert Stump

Supervisory Control and Data Acquisition SCADA for Canal Automation Priority 2– Dolores Project (CRSP Participating) – **Complete** – Final design work is complete. Specification drafting is complete. Purchase request package submitted in May. Anticipate award July 2017 with completion early 2018. Solicitation via NASA SEWP had no response. Solicitation for competitive small business set-aside yielded two proposals. An additional \$80,000 was approved. Contract is currently under negotiation, expected to award by 9/22/17 for work starting in October. The contract was awarded 11/7/2017 to Global Process Automation (Wilmington NC). As of December 13, 2017 all HMI hardware and software has been received by contractor for configuration and PLC hardware has been ordered (contract is about 35% complete). Expected completion 4/1/2018. **Substantially complete as of 3/26/2018.** Robert Stump

Pumping Plant Traveling Screen Replacement Priority 3– Dolores Project (CRSP Participating) – No activity yet. Robert Stump

Installation of Cimarron Ditch Inflow Measurement Equipment – Bostwick Park Project – (CRSP Participating) When the District is ready, WCAO will meet with them to discuss equipment details and that ownership of the equipment will remain with the Bureau of Reclamation. Ryan Christianson

System Optimization and Water Efficiency Study – Bostwick Park Project – (CRSP Participating) – **Complete** – Per Allen Distel President Bostwick Park Water conservancy District, this study was funded by grants from Reclamation (WaterSmart/field service) and CWCB. WCAO received a copy of the final study. Ryan Christianson

Aspen Canal Lining – Smith Fork Project (CRSP Participating) – Combined with 2013 proposal. Mark Wernke

Dam Outlet Works Improvements – Smith Fork Project (CRSP Participating) – No activity yet. Mark Wernke

Increase Capacity of Feeder Canal Siphon – Smith Fork Project (CRSP Participating) – WCAO has had initial discussions and a site visit with Crawford Conservancy District. **The siphon capacity will be evaluated along with the Feeder Canal in the summer of 2018 after the Feeder Canal data is collected.** Mark Wernke

Reservoir Inflow Measurement and Telemetry – Smith Fork Project (CRSP Participating) – No activity yet. Mark Wernke

Daisy/Feeder Canal Capacity Increase Study – Smith Fork Project (CRSP Participating) – WCAO has had initial discussions with Crawford Conservancy District and the District is going to collect flow records for Smith Fork. Survey data was collected in the summer of 2017 while the canal is out of operation. **The remaining portion of additional data needed was collected this spring.** Mark Wernke

Canal Monitoring and Automation – Florida Project (CRSP Participating) – Automation and communications were installed at two locations (Florida Farmers Ditch and Cedar Lateral) in the spring of 2017, and two additional locations are currently planned for the spring of 2018. **Procurement is ongoing for two SlipMeter gates and frames, which are estimated to be onsite June 2018. Installation at the Kelly and Lone Pine turnouts will commence after the 2018 irrigation season. The Provo Force Account crew will be utilized.** Tyler Artichoker

Dam Elevators Repair – Paonia Project (CRSP Participating) – Concrete repair work was done on October 19, 2015 to address condensation problem. TSC will return in summer of 2016 for a follow-up when the reservoir is at a higher elevation. TSC Funding Agreement in place for completing work. In December 2016, TSC completed additional concrete crack repairs. In May 2017, when the reservoir is full, the elevator shaft will be evaluated to see if additional grouting/repair is needed, and a site visit will be scheduled with elevator companies. Tom Fowlds

Dam Outlet Works Modifications and Inlet Repairs – Paonia Project (CRSP Participating) – Worked on a service agreement with Denver TSC for intake design. A kickoff meeting was held August 26, 2015 to establish scope of work and potential team members. Received draft Project Management Plan PMP from TSC November 16, 2015. WCAO reviewed the PMP and provided comments back to TSC. The PMP was approved on January 19, 2016. A kickoff meeting was held on January 25, 2016 highlighting the schedule and budget. The main activities that will happen this year are: 1) Sediment management evaluation for both short and long term operations. Sediment management evaluation for short term is complete and operation recommendations were given to the District. We are waiting for long term operations recommendations. 2) Outlet works intake structure evaluation for short term operation. Outlet works intake structure evaluation for short term operation has been completed. A plan is being developed to remove the existing bulkhead this fall. 3) Sediment sampling, testing, and documentation in areas where construction may result in removal or erosion of deposited sediment. PN drill crew made a site visit on March 29, 2016 to assess the feasibility of getting a barge on the reservoir. Access and cost were problematic and it was decided to use vibracore sampling. Additional sampling may be necessary depending on the results of the vibracore sampling. Sediment sampling and bathymetric survey work was completed in June 2016 and results provided to all interested parties. Bulkhead removal project was completed in October 2017. New PMP, Service Agreement and Schedule was implemented to replace emergency and regulating gates. Alternatives Study put on hold until 30% Design of gates is complete. **Hydraulic model construction nearly complete. Current schedule is to start flowing water through the model the week of May 7th. TSC holding monthly progress meetings.** Tom Fowlds.

Fire Mountain Canal Safety Improvements – Paonia Project (CRSP Participating) – No activity yet. Tom Fowlds

Replace Fire Mountain Canal Diversion Structure – Paonia Project (CRSP Participating) – No activity yet. Tom Fowlds

Planning Study on Long-Term Delivery System Improvements – Paonia Project (CRSP Participating) – No activity yet. Ryan Christianson

Davie Ditch Pipe Installation – Silt Project (CRSP Participating) – No activity yet. Tom Fowlds

Silt Pump Canal Pipe Installation – Silt Project (CRSP Participating) – **Complete** – Surveying has been completed and a preliminary alignment has been selected. Design and specs have been completed and were submitted in May 2016 for solicitation of a contractor. The acquisition group in Salt Lake City is preparing the solicitation for advertisement. A contract was awarded September 18, 2017 for construction to begin in the fall of 2017. **Work was substantially complete as of January 23, 2018 and is ready to deliver water.** This work was included with the GK Lateral Pipeline Project, see East Canal Water Efficiency Improvement Structure - Uncompahgre Project below. Mark Wernke

Inspect Silt Pump Canal Siphons and Rehabilitate – Silt Project (CRSP Participating) – No activity yet. Tom Fowlds

Dry Elk Valley Lateral Lining – Silt Project (CRSP Participating) – No activity yet. Tom Fowlds

Ridgway Reservoir Mussel Control – Dallas Creek Project (CRSP Participating) – Secured the services of UC Regional Design Group for preparation of final design, specifications and cost estimate for the inspection and decontamination station in May 2015. Received a preliminary draft site plan on June 12, 2015 and met onsite June 18, 2015 with regional design engineer and Colorado Parks and Wildlife staff to evaluate proposed site and discuss site plan development. Site surveying was completed July 20, 2015. The environmental analysis was completed July 24, 2015. The 70% drawings with cost estimate, and specs were completed October 20, 2015 and sent out for review. The WCAO Design and Construction Group will assist the project with construction contracting. Site plans have been reviewed and comments sent back to Regional Design Group. A borrow site was determined to be necessary earlier in October and a borrow site was identified and selected adjacent to the project site. The CEC was amended to include the borrow site and was re-issued. The 90% drawings or complete final draft should be ready the end of November or first week of December for final review. Our project team (Reclamation and CPW staff) met at Ridgway State Park in January 2016 to find ways to reduce the costs to stay within budget. Re-sizing and re-positioning the proposed layout/design would significantly reduce the estimated cost of the project. CPW took the first stab at this and provided WCAO with a digital overlay of the design drawing addressing the items discussed. The final design and specs were submitted in December 2016 to the acquisition group in Salt Lake City. **Reclamation had a site visit for contractors on April 12, contractor proposals are due on May 3, 2018. We anticipate that a contract will be awarded in July of 2018.** Melissa Werkmeister

East Canal Water Efficiency Improvement Structure – Uncompahgre Project – WCAO met with the Uncompahgre Valley Water Users Association (UVWUA) and Cal Poly to begin planning the East Canal water efficiency structure on January 26, 2015. Design and specs have been completed for replacing the first 2 miles of the GK Lateral with pipe and were submitted in May 2016 for solicitation of a contractor. The acquisition group in Salt Lake City is preparing the solicitation for advertisement. A contract was awarded September 18, 2017 for construction to begin in the fall of 2017. **Work was substantially complete as of March 21, 2018. There was one leak when the system was watered up and the contractor is making the necessary repairs the week of April 9, 2018.** Mark Wernke

Dolores Project Pumping Plants – Vertical Turbine Pump Rebuilds (Modification) – Dolores Project – This project was approved by the State of Colorado and the Bureau of Reclamation. Project funding will come from previously approved projects that were completed under budget. Work involves rebuilding the remaining vertical turbine pumps not included in the present vertical turbine pump contract mentioned above. The specification is in final review with purchase request submission July 2017. Anticipate to award in 2018. The purchase request package was approved and assigned in AMD for solicitation development in June 2017. Solicitation is currently under development and review for solicitation expected October 2015 for early FY18 award. Work includes rebuild of 5 pumps at Ruin Canyon (winter 2017-18), 3 pumps at Pleasant View (winter 2018-19), 2 pumps at Cahone (winter 2018-19), 3 pumps at Dove Creek (winter 2019-20), and 3 pumps at Fairview (winter 2019-20). Schedule pushed to begin winter 2018 due to no solicitation before FY blackout. AMD is currently working on the solicitation package to go out early 2018. **The solicitation was submitted to AMD for analyst review as of 4/10/2018.** Robert Stump

New Mexico Projects

2012 Proposals - None Approved

2013 Proposals

Top Water Bank – Navajo Unit (CRSP Mainstem Unit) – Proposal is pursuant to PL 111-11, Section 10401. Discussions continue with the State of New Mexico (Office of State Engineer and Interstate Stream Commission [ISC]). Final product will likely be a form contract with a set of rules and regulations for each water right permit holder that is eligible to participate. It is anticipated that the United States will execute an excess capacity contract with the State of New Mexico to use available storage in the reservoir for the Top Water Bank, which will outline the terms, conditions and obligations of the State. The State will serve as the administrator of the water bank. A pilot program is being considered that can be implemented without the need for active water rights administration by the State. The State has been provided an example of methodology used to quantify water that is eligible to be banked which is acceptable to Reclamation. We are awaiting a new set of rules and regulations that implements this methodology for a pilot program. Obligations will be mostly salary and are underway. On January 13, 2017, a conference call was held with the New Mexico Interstate Stream Commission (NMISC) to discuss the need for an excess capacity contract between the New Mexico and Reclamation. WCAO/Regional Office agreed to provide information regarding the contracting process to the NMISC. WCAO/Regional Office provided the information requested and are awaiting a response from NMISC. Ryan Christianson

Hammond Evaluation Study –Hammond Project (CRSP Participating) – **Complete** -Final report received August 4, 2014. This work is complete. Final cost of \$136,416, which is \$13,584 under budget. Cost authority was closed. Tyler Artichoker

San Juan Diversion Metering – Navajo Unit Operations (CRSP Mainstem Unit) – This project replaced aging ditch diversion metering equipment and added equipment to allow for telemetry and public dissemination of collected data at diversions along the San Juan River below Navajo Dam. The New Mexico OSE evaluated sites, and developed a list of needed equipment which was provided to Reclamation. The contract has been awarded and all equipment received. The OSE will be responsible for the installation and maintenance. The OSE would like to purchase additional items against the remaining balance, **and is planning to submit additional equipment information to Reclamation in the near future.** Marc Miller

Navajo Reservoir Mussel Control – Navajo Unit (CRSP Mainstem Unit) – WCAO had a Service Agreement with TSC for design of temporary boat inspection and decontamination facilities at the Pine River Recreation Area, Navajo Lake State Park, New Mexico. As a result New Mexico State Parks (NM Parks) completed asphalt repair, underground utility conduits, and paint striping for the temporary inspection facility under an existing grant agreement between Reclamation and NM Parks (separate funding, not CRSP MOA). New service agreement with UC Regional Design Group was signed July 29, 2015 for preparation of final design, specifications and cost estimate by January 29, 2016. WCAO will complete procurement package and provide contract administration and construction inspection. New Mexico Department of Game and Fish (NMDGF) inspection staff was onsite to conduct boat inspections for the summer of 2015. In 2016 WCAO hired a private contractor Rocky Mountain Recreation to conduct inspections and decontaminations. Preliminary design and specifications sent on February 26, 2016 for review and comment by NM Parks and NM Game & Fish, comment deadline March 31, 2016. Completion of final design and specifications is expected late spring 2017. WCAO is researching separate procurement for portable office and using Provo force account for construction. Anticipate construction in winter 2018. The need for a second boat inspection and decontamination facility was identified for the second boat ramp located at Simms Mesa, and this area has been inspected and surveyed, and SHPO concurrence received. A new service agreement with the UC Regional Design Group for designing the second facility will be executed in spring 2017. The boat inspection facility at Simms Mesa is on hold pending a new site selection at the Pine River Recreation Area. Because of additional expenses associated with a traffic study and subsequent construction of acceleration/deceleration lanes on NM State Highway 511. Reclamation and its partners are relocating the decontamination area to within the state park at the inspection facilities. Potential locations for the decontamination pond were surveyed in July by Bob Levine. **Cultural clearance of the potential pond areas was completed. The 60% design prepared by Jay Bytheway was reviewed and returned.**
Melissa Werkmeister

2014 Proposals

Navajo Reservoir Inflow Augmentation – Navajo Unit (CRSP Mainstem Unit) – Weather Modification – Reclamation is analyzing the state of the science of weather modification and evaluating its position in support of weather modification.

Installation, O&M of Snotel Snowpack Measurement Stations – Application withdrawn July 7, 2013.

Hammond Improvements – Hammond Project (CRSP Participating) – Kevin Flanigan sent priority list on September 2, 2014 identifying priorities and responsibilities. IGCE valued the cultural resource (CR) work at \$72,000. Task order awarded to HDR for \$67,046. Field surveys by the contracted archaeologists are ongoing. Inspection of the drain system is complete, and a final report with recommendations was transmitted in October 2015. Planning is underway to inspect and rehabilitate the project drainage crossings (undershots), which are all currently 100% plugged. Planning is underway for siphon inspections and cleaning. Quote received for new pump at Armenta of roughly \$300k; however, awaiting analysis by TSC engineers to determine if any changes should be made for more efficient pumping to the laterals, possibly eliminating the need for the auxiliary pumping plant entirely. Service Agreement in place, but likely need another for engineering work. TSC witnessed pump rebuild by All-American Technical Team. TSC site visit was completed with recommendations for canal modernization and rehab efforts. Received approval for some minor building energy improvements, but no action yet. New flow meter and approach vanes installed for West Highline Canal. New flow meter and approach vanes installed for East Highline Canal. Approximately 95% complete with comprehensive assessment of Main, East and West Highlines, and Gravity canals, including the diversion dam. Temporary canal lining repair was performed at location where concrete lining was previously terminated and being undermined by eddy. Received new priority list from NM on July 13, 2015. Received quotes for power service to auxiliary pumping plant on July 23, 2015. Reilly Industrial rehabilitated one undershot. Cultural resources report completed, letter sent to SHPO recommending that no HCD features should be considered eligible for the national register. Will await SHPO concurrence. Point of contact for NM ISC is no longer Flanigan, rather Kristin Green. Specifications complete and AMD processes underway for upgrading 3.5 miles of power line, and demolition/reconstruction of auxiliary pumping plant. These two items need to be complete prior to the next irrigation season, and are highest priority. TSC working on two Service Agreements; one for canal modernization (telemetry, automated gates, SCADA, etc.) and one for canal lining or piping investigations. Anticipate multi-year Agreements to be executed December 2015. Quotes received for overhead doors at shop and Armenta pumping plant, as well as for EIFS insulation systems. Specifications being prepared for Armenta pumping plant roof replacement. Overhead doors were replaced at the shop and Armenta pumping plant. Service Agreement approved for canal modernization. Specifications underway for fencing and security features at diversion dam. Specifications underway for replacing the trash rake. Service Agreement executed for piping/lining investigations. Site visit conducted for piping/lining with TSC. Canal automation design and procurement are underway, at TSC. Radio pathways checks conducted the week of May 30, 2016. Specifications have been completed for new automated trashrake. Natural gas service has been extended into July 2016, possibly avoiding temporary power for aux. pumping plant. Received SHPO concurrence for the aux. pumping plant and the power line work. Site visit with RMEC conducted May 23, 2016, for aux. pumping plant replacement design-build. Reviewing the submitted proposal. Security system at diversion dam installed week of May 16, 2016. Electrical panel replacement completed the week of May 23, 2016. Contract for power line extension and upgrade executed, work started June 6, 2016. Power line work is complete. Aux. pumping plant contract awarded to RMEC, design work and submittals are underway. Started onsite work October 17, 2016. As of January 2017, most of the work is completed. Waiting on water district contract before BOR can finish installation of electrical in the building. Auxiliary Pumping Plant is complete. Automated trash rake PR package completed and submitted last November 2016. Currently going through the acquisition process; anticipate contract award fall/winter 2017. Trash rake awarded September 18, 2017, with post-award meeting **conducted** September 26, 2017. Submittals are being generated and design work is underway. New trash rake should be installed prior to the 2018 irrigation season. **Demolition work commenced in October 2017, and installation was completed in April 2018.** Equipment for telemetry received, radio checks completed, and anticipate installation completion in **October 2018.** **Automation and telemetry scope increase by \$80,000 to increase the efficiency and expand automation and remote flow measurement at numerous sites throughout the system.** TSC is working on a FER for investigations into canal lining versus piping in two reaches, under existing Funding Agreement. FER investigations completed; TSC working on design and cost estimate completion by summer 2017. The 30% design was completed in August 2017, value engineering study conducted in late August 2017, **specification review conducted in February 2018, in Denver, and** final design and specs scheduled for **May 2018.** Tyler Artichoker

2015 Proposals

Hammond Conservancy District Proposals – Hammond Project (CRSP Participating) – This will be combined with the FY14 approved funds. See above for update. Tyler Artichoker

2016 Proposals

Hammond Conservancy District Proposals – Hammond Project (CRSP Participating) – This will be combined with the FY14 approved funds. See above for update. Tyler Artichoker

Comprehensive Evaluation of Infrastructure in the San Juan Basin of New Mexico – **Complete** –Held a kick-off meeting on December 1, 2015 to discuss the scope of this study. A PMP and Service Agreement for the study was signed March 11, 2016. Patricia Cronin and Matt Gemperline from Denver TSC conducted four site visits from May – August 2016 to the study area. Monthly progress conference calls are being conducted with project participants. Project completion date extended to August 1, 2017. New PMP signed November 9, 2016 showing new schedule and cost. Copy of PMP sent to Kristin Green NMISC. Draft report submitted for review June 15, 2017. New Mexico returned review comments August 16, 2017. Mark Spears and TSC team reviewed and incorporated comments. Draft currently being reviewed by Kristin Green. Final report scheduled to be completed September 25, 2017. Final report completed on November 27, 2017. Ted Dunn