



MEMORANDUM

JUNE 28, 2019

TO: BOARD OF DIRECTORS
CC: ANDY MUELLER, GENERAL MANAGER
FROM: DAVE "DK" KANZER, P.E. ^{DK} AND SONJA CHAVEZ ^{SC}
SUBJECT: LOWER GUNNISON PROJECT ACTIVITIES – 2019 MID-YEAR UPDATE

ACTION: No Board action requested; this is an informational memo

APPLICABLE STRATEGIC INITIATIVE(S):

- 3. C. The River District will engage in and support water supply planning efforts, local and regional, which include adapting to climate change impacts.
- 7. C. The River District will look for opportunities where its efforts are needed as a catalyst to help in-District interests plan for and meet their water needs in a manner that is consistent with the District's compact contingency planning goals and objectives.
- 7.D. The River District will actively pursue funding sources and provide financial assistance to be used for the refurbishment and modernization of the aging water supply infrastructure within the District in order to help preserve and improve existing supplies and operations.

Introduction and Background

The River District created, and directly manages a large portion of, the Lower Gunnison Project (LGP), a multi-year, cooperatively-funded initiative to increase agricultural water use efficiency in four focus areas of the Lower Gunnison Basin.

The LGP relies upon a portfolio of funding that includes \$8MM of USDA-NRCS Regional Conservation Partnership Program (RCPP) of directed funding (not a grant) to leverage other monies, including approximately \$45MM of Colorado River Storage Project Act (CRSPA) power revenues and Colorado River Salinity Control grant funding (estimated to be approximately \$20-30MM from 2015, 2017 and now 2019 Funding Opportunity Announcement (FOA) cycles) and smaller, yet significant funding support from CWCB programs (Water Plan Grants, Water Supply Reserve Funds and technical assistance) as well as from Colorado Water Quality Control Division program funding (Non-point Source 319 Program).

All together these funds help local irrigation districts and companies convert open, earthen canals to buried, pressurized pipe and to change from inefficient flood irrigation to pressurized sprinklers (where appropriate). By design, this limits water losses and cuts off deep percolation that can mobilize salt and selenium to the Lower Gunnison and Colorado Rivers. The LGP can ultimately decrease headgate demands and administrative spills as system efficiencies increase, resulting in

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conserved water in upstream reservoirs, where available, or making water available to other, previously water short junior water right holders.

LGP Activities Update – Off-farm 2019

After much delay (LGP was originally approved in 2014) and some minor technical issues, we are extremely pleased to report that four LGP project components have been constructed and are functioning, as designed. On July 17th, there will be a staff presentation that provides additional detail and illustration of the following successfully constructed projects:

The Fire Mountain Canal Improvement Project (“Segment 47”; 22,400 feet or 4.2 miles, large diameter pipe; including new Leroux Creek siphon; Total Cost Estimated at \$4.6MM). Phase 1 of this 2-year piping project is completed and is delivering irrigation water. The project is cooperatively funded by the Fire Mountain Canal and Reservoir Company (approximately \$200K), RCPP Watershed Authority (\$1.15M – managed by the River District), Reclamation Salinity Control (\$2.95M), and Colorado Water Conservation Board (\$191K). The RCPP portion, with fiscal management by the River District, involves piping a total of approximately 2 miles of the lower Fire Mountain Canal ‘extension’, approximately 80% of this RCPP-funded project component was installed from November 2018 to April 2019. The balance of the 2 mile segment along with the salinity-funded large diameter pipe and siphon is scheduled to be completed in time for the 2020 irrigation season. It was designed by the Applegate Group and constructed by Telluride Gravel.

Uncompahgre Valley WUA Phase 9 East Side Laterals Piping Project (includes piping 21.5 miles of five separate irrigation laterals; Total Cost Estimated at \$10.3M, with funds from UVWUA (\$50k); RCPP Watershed Authority (\$1.3M – managed by the River District), Reclamation Salinity Control (\$5.3M), CRSP MOA (\$3.4 MM) and State of Colorado Non-Point Source Program (\$230k); Year two of this multi-year, multi-lateral project was successful, with the RCPP-funded portion, with fiscal management by the River District, has been completed on time and on budget; it piped 3.4 miles of the GB and GBA Laterals (off of the East Canal system) near Olathe. Previously a five mile section of the GK was piped. Both were designed by USBR and installed by UVWUA.

Bostwick Park WCD West Lateral Phase 1 Piping Project (includes approximately 0.5 miles of new pipeline, with a total cost of \$499,000). This construction project has completed on time and under budget. The project is entirely funded by RCPP Watershed Authority with technical assistance funding from the Colorado Water Conservation Board (\$37.4k). It was designed by JUB Engineers and constructed by Bostwick Park Water Conservancy District.

The Needle Rock Headgate Improvement Project (includes new concrete and steel headgate structure and 875 feet of pipeline; total estimated cost with design and oversight of \$380,000). After multiple delays related to federal government shutdown, landowner concerns and inclement weather this project was completed in time to be successfully delivering a secure water supply while enabling upstream fish passage for the first time. Construction was wholly funded by the RCPP Watershed Authority with technical assistance monies provided by the CWCB; unlike the other RCPP-funded projects, all fiscal and contract management was directly provided by River

LOWER GUNNISON PROJECT ACTIVITIES BRIEFING – MID-YEAR 2019

District staff on behalf of the private mutual ditch company. Although there were a few minor change orders, the net result was only approximately 2% increase over the original cost estimate.

Crawford WCD Projects (totals \$13.6MM consisting of \$1.3MM RCPP, \$5.5MM CRSP MOA, \$5.2MM Salinity, CWQCD 319 \$400K and \$200K CWCB technical assistance) to design and construct five project components:

- 4C Regulating Reservoir (approximately \$360,000 of RCPP funds and \$15,000 CWCB TA), associated with
- The Crawford Clipper Center Lateral Pipeline (approximately \$3.2MM Reclamation Salinity funded)
- Upper Aspen Canal Pipeline (approximately \$5MM CRSP MOA);
- The Lower Aspen Canal and Aspen-West Lateral Interconnection Pipelines (estimated cost \$1.8M) fund raising for in progress (Colorado Water Plan and WSRF) with technical and advisory support from River District as there is a lack of CRSP MOA funding to complete.
- Crawford Reservoir and Smith Fork feeder canal automation (approximately \$0.5MM CRSP MOA funded; \$25,000 RCPP),
- Grand View Piping and Integration Project (approximately \$672,000 of RCPP and \$2M Reclamation Salinity funding with application pending).

Most permitting has been completed for the larger projects (two FONSI's have been issued) and engineering designs are being finalized, with the construction bid processes beginning for the Upper Aspen Canal pipeline (bids open until late July).

In all, with over \$13.6MM being brought together, the Crawford Country projects will have a large beneficial impact over the next several years with varying construction schedules. Construction activities should commence in earnest in late 2019, with completion dates as late as 2022 (Grand View Canal). Currently, it is anticipated that the Center Clipper and 4C Reservoir projects will be complete by spring 2020, Crawford Reservoir automation by September 2020, Upper Aspen Canal is slated to be completed by spring of 2021 and the Lower Aspen Canal fall of 2022

LGP Activities Update – On- and near-farm improvements 2018

A great deal of work has been accomplished with regard to RCPP EQIP on-farm activities that are being managed by River District staff. Of the 22 Conservation Activity Plans (CAPs) developed, 18 were submitted by landowners for consideration for construction implementation funding. Of those, 15 irrigation improvement projects were selected for construction implementation funding award. Following notice of award, cultural resources surveys and related NEPA compliance were completed in conjunction with local NRCS offices (Delta and Shavano) and the CWCB funded RCPP Irrigation Water Management Specialist position.

Before final engineering and construction implementation contracts can be executed with landowners for on-farm irrigation improvement projects, staff must obtain formal approval from the NRCS National Headquarters (NHQ) on contract amendment provisions to ensure consistency with the Lower Gunnison Project Alternative Funding Arrangement (AFA). Contracting difficulties with NRCS has hampered the ability to move forward efficiently and effectively. River

District staff are in communications with NRCS on the above issues in attempt to come up with workable solutions. More information is anticipated and will be shared at the board meetings.

MEMORANDUM
JUNE 30, 2019

TO: BOARD OF DIRECTORS
ANDREW MUELLER, GENERAL MANAGER
PETER FLEMING, ESQ., GENERAL COUNSEL

FROM: RAY TENNEY, P.E.
JOHN CURRIER, P.E., CHIEF ENGINEER

SUBJECT: RITSCHARD DAM, WOLFORD MOUNTAIN RESERVOIR – UPDATE ON REPAIR
ACTIVITIES

ACTION: *No Action Requested*

STRATEGIC INITIATIVE(S): *13. Asset Management*

This memorandum provides updates on the following activities related to Ritschard Dam.

1. Main gate replacement (pgs. 2-12).
2. Guard gate seal replacement (pg. 12)
3. 30 inch butterfly valve replacement (pg. 12)
4. 96-inch butterfly valve leakage remedy (pg. 13)
5. New spillway safety boom (pg. 14)
6. Risk Assessment and FLAC modeling reports finalization (pg. 14)
7. Dam Crest Road Crack Investigation (pgs. 15-17)

