



MEMORANDUM

JULY 5, 2018

TO: BOARD OF DIRECTORS

CC: ANDY MUELLER, GENERAL MANAGER

FROM: DAVE “DK” KANZER, P.E. DK

SUBJECT: SALINITY / SELENIUM CONTROL AND LOWER GUNNISON PROJECT ACTIVITIES BRIEFING

***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.

Background Information

In support of state and federal initiatives, the River District has actively participated in a series of significant and overlapping programs to improve water quality in the Colorado River Basin, almost going back to the inception of the federal Clean Water Act (CWA), as amended in 1972.

This includes leading efforts to raise funding and awareness by knitting together financial and technical assistance opportunities into a comprehensive strategy to help water users comply with the changing regulatory landscape, consistent with the Board’s adopted Strategic Initiative.

Two well-known water quality issues, dissolved salinity (total dissolved solids) and selenium, have received most of the attention. Until recently, the Colorado River Basin Salinity Control Program (created shortly after the CWA in 1974) was the only funding source available to address these issues that generally occur together and impact the Colorado River system via similar processes: loading from groundwater springs and seeps (primarily from agricultural and natural sources).

In the last 20 years, efforts to address salt and selenium loading have ramped up in Colorado, culminating in the investment of millions for research, planning and implementation of projects that cut off deep percolation of water that induces contaminant mobilization.

In 2012, the Record of Decision for the Re-operations of the Aspinall Unit was signed, directing the development of the Selenium Management Program to serve as a conservation measure to help offset water management impacts in the Gunnison River Basin. This was mostly an unfunded mandate. Subsequently, River District staff has worked diligently to put together a package of technical and financial assistance for affected water users using State of Colorado and federal programs. Significant amongst these programs and projects has been the Lower Gunnison Project funded in part by the USDA-NRCS Regional Conservation Partnership Program (RCPP). This is a directed funding program of \$8MM (not a grant) for which the River District successfully competed and is now managing. The RCPP funding leverages other available funding sources, such as the Colorado River Storage Project Act (CRSPA) power revenues (approximately \$45MM) now available for system improvements under the 2012 MOA.

Briefly, all together these activities endeavor to increase agricultural water use efficiency and to reduce water loss associated with infiltration of conveyed and applied waters below the root zone of agricultural crops. This reduction of deep percolation has the explicit intent of reducing return flows that mobilize contaminants and to also minimize the headgate demands. By design, in the targeted Lower Gunnison River valleys, such reduced demands can result in conserved water in upstream reservoirs, where available. This is distinctly different from higher mountain meadow environments where return flows have less, if any, adverse impact water quality and may be managed for multiple uses and purposes.

On Wednesday morning of the quarterly Board meeting, Sonja Chavez and I will present a short briefing on these interrelated programs, activities and the associated costs, benefits and results.