



Normal ops to resume at Wolford dam



The rock-fill, clay-core Ritschard Dam that forms Wolford Mountain Reservoir in Grand County.

The Colorado River District has found that there is no compelling safety reason to proceed with remediation of Ritschard Dam at Wolford Mountain Reservoir in Grand County, now or in the foreseeable future.

This conclusion comes after exhaustive study of the settlement and a failure-risk assessment of the rock-fill, clay-core dam put into service in 1995. The River District's consulting engineers and a separate Consultant Review Board it commissioned, together with the State of Colorado Dam Safety Branch, have concluded that the dam remains safe.

The River District will fill the reservoir this spring, reversing a two-year self-imposed restriction limiting the reservoir to within 10 feet of full as a cautionary measure.

These developments come after six years and more than \$1.5 million worth of study and the installation of sophisticated instrumentation to analyze the dam's settlement. This study and monitoring was instigated by observations of settlement, a normal expectation in such a dam, beyond what designers had contemplated.

Throughout this time, the Dam Safety Branch of the Colorado Division of Water Resources has been thoroughly kept up to date on all investigations. The River District will continue its intensive monitoring of the dam and continued

collaboration with state dam safety officials and other interested parties. The River District has been transparent and public with its study of the dam and had told the public that repairs could range from minimal to in excess of \$30 million, but the overriding intent was that the settlement would be dealt with in a safe, prudent and responsible manner.

A breakthrough in understanding the risks associated with the on-going settlement came earlier this year when the River District conducted a formal Risk Analysis Workshop.

The conclusion was that the risk of a settlement-related dam failure was far lower than the estimated one-in-one-million risk of dam failure from a catastrophic flood that would overtop the dam. A one-in-one-million risk of failure represents extreme caution and a normally accepted assessment of risk common to all modern dams. The risk of a settlement-related dam failure was estimated at one-in-one-hundred-million, far lower than the flood risk.

Going forward, the River District will continue to work with the Dam Safety Branch, our engineering firm AECOM and the Consultant Review Board. Plans are to install more instrumentation and to establish a long-term monitoring plan, while preparing for the possibility that remediation may be necessary at a future point in time.



Denver Water execs meet with River District Board

The Colorado River Cooperative Agreement (CRCA) is the tie that binds.

So said Denver Water CEO/Manager Jim Lochhead in a visit to the Colorado River District Board of Directors meeting on April 19 to introduce Denver Water's new planning director, Mike King.

"The Colorado River Cooperative Agreement solidified our relationships through the course of negotiations and because of those relationships, we were able to be successful," Lochhead said. "The CRCA is really a permanent relationship between Denver Water and the West Slope, a relationship we need to continue to nourish."

[The CRCA is a 50-plus page agreement](#) negotiated between Denver Water and 17 West Slope signatories that cleared West Slope opposition to Denver Water's Moffat Tunnel Project expansion of water use and enlargement of Gross Reservoir in Boulder County. Denver is still working on permitting and aspires to start reservoir enlargement in



Denver Water Director of Planning Mike King and CEO/Manager Jim Lochhead.

2019 or 2020, Lochhead said.

Regardless, some benefits of the agreement have already been undertaken even though the awarding of permits is supposed to be a trigger.

The agreement is comprehensive, creating some water supply for headwaters counties on the West Slope

and a host of other benefits, including environmental remediation and financial support for other West Slope projects.

Until recently, King was the long-time executive director of the Colorado Department of Natural Resources in the cabinet of Gov. John Hickenlooper. He is a native of Mon-

trose on the West Slope. King replaced Dave Little at Denver Water, who had retired.

That position at Denver Water makes King, like his predecessor, the water provider's point person in negotiations with the West Slope on mutual use of the Colorado River.

'Use it or lose it' water rights paper addresses common misunderstandings

The Colorado Water Institute of Colorado State University has released an 11-page special report that addresses misunderstandings surrounding the "use or lose it" term associated with Colorado's water rights doctrine.

Colorado River District General Counsel Peter Fleming participated on a 20-person panel that generated the report, based on facilitation by the Water Institute's Reagan Waskom and MaryLou Smith. It is entitled "How Diversion

and Beneficial Use of Water Affect the Value and Measure of a Water Right; Is Use it or Lose it an Absolute?" This issue is seen as a barrier to water conservation and efficiency efforts related to irrigated agriculture and its water rights.

The report concludes that the real value to a water right is historical consumptive use, thus there is no real legal incentive to divert more irrigation water than is needed to satisfy what a crop will consume, plus the carriage water necessary to get the consumptive water to its use.

The full discussion can be found at <http://cwi.colostate.edu/publications/SR/25.pdf>.



Plan advances to protect Grand Lake water clarity

A new water clarity standard for Grand Lake that was proposed by a collaboration of stakeholders, including the Colorado River District, was adopted preliminarily by the Colorado Water Quality Control Commission just prior to the River District Board of Directors meeting on April 19.

This development opens the door to an adaptive management program and cooperative efforts to improve water clarity in Grand Lake, a natural lake prized for its clear waters, that also serves as a forebay for the Colorado-Big Thompson Project (C-BT), a transmountain diversion that moves Colorado River water to eastern Colorado through the Adams Tunnel under the Continental Divide.

The C-BT is a Bureau of Reclamation project built for the benefit of Northern Water and its shareholders in northern Colorado. Water clarity has been diminished in recent years by the co-mingling of water pumped into it from Granby Reservoir and Shadow Mountain Reservoir.

A memorandum of understanding ties Grand County, the Bureau of Reclamation, Northern Water, the Northwest Colorado Council of Governments and the Colorado River District to actions of analyzing, and where agreed upon by Reclamation, implementing operational changes to the C-BT Project to improve Grand Lake clarity over the next five years.

The five-year window will allow Reclamation to engage



A view of Grand Lake in Grand County where water clarity has been an issue addressed by a collaborative process. (Source Wikimedia)

in an analysis of long-term operational, nonstructural and structural alternatives that could be implemented to improve water clarity without adversely impacting other C-BT purposes.

The stakeholders have been meeting intensely over the last year and proposed that the numeric standard for water clarity be deferred until January 2022 and that it be reduced to an average of 3.8 meters and a minimum of 2.5 meters. This is what the CWQCC accepted for the five-year period.

Lower Gunnison Project identifies first irrigation work

The irrigation modernization initiative the Colorado River District is leading in the Lower Gunnison Basin – “the Lower Gunnison Project” -- is moving along with the first project shaping up to be improvements to the Fire Mountain Canal in the North Fork Valley starting tentatively later this year.

Last year, the River District secured an \$8 million grant from the federal Natural Resources Conservation Service to leverage existing funding from the Bureau of Reclamation, the Upper Colorado Salinity Control Program and the State of Colorado to create up to \$50 million in support to modernize agricultural operations in the basin.

The River District is the funding coordinator and is helping to break new ground with the bureaucratic challenges of combining money from two federal agencies (Reclamation and NRCS) and state and local sources, Deputy Chief Engineer Dave Kanzer told the Board of Directors at its April

quarterly meeting.

Agricultural sustainability in western Colorado is a key issue for the River District and irrigation modernization – improving water use efficiency – is an important strategy to advance that goal.

“This is a high priority for the River District,” said General Manager Eric Kuhn.

Board Vice President Tom Alvey is President of the North Fork Water Conservancy District that operates the Fire Mountain Canal, an important conduit for the delivery of irrigation water from Paonia Reservoir to agriculturalists downvalley. “Water users see the River District working hard for their projects,” Alvey said.

Target areas for Lower Gunnison Project work include the North Fork Valley, the Uncompahgre Valley, Crawford Country and Bostwick Park.



W. Slope Roundtable Colorado River risk study starts

The Colorado River District is managing and partly funding a study of the potential risk to current users of Colorado River system water if water levels fall low enough at Lake Powell to jeopardize hydropower generation and foretell an operational crisis on the river system.

Partners and co-funders of the study are the four West Slope Basin Roundtables and the Southwestern Water Conservation District, at a total cost of \$52,000. Each district is contributing \$10,000 and each Roundtable \$8,000.

The purpose of the study is to establish a common platform of knowledge as well as technical data on how the Colorado River system would be impacted by a continuation of the hydrology seen in the past several decades, in order that the four Roundtables can inform their own discussions about future West Slope development of the Colorado River. Because Front Range water providers also use Colorado River water, the study has attracted wide attention from Front Range Roundtables.

To accommodate the interest and to promote education about the river system, a Technical Advisory Committee (TAC) of more than 60 people from seven Roundtables and other interested parties will be apprised of the study's work and progress.

River District General Manager Eric Kuhn reported to the Board of Directors that a series of webinars will be conducted to keep the TAC informed. Webinars are tentatively set for the weeks of May 9, June 13 and July 11.

The study is piggybacking on "contingency planning" already undertaken on behalf of the State of Colorado,



Glen Canyon Dam forms Lake Powell, the Upper Division States' savings account by which it meets Colorado River Compact obligations. Low water levels pose a risk to current users of the Colorado River, the subject of a study by West Slope Roundtables. (Bureau of Reclamation photo)

the River District and the other three Upper Division States in the Colorado River Compact to avert an operational crisis caused by low reservoir levels.

Kuhn said it is important to manage expectations for what could be the first phase of the Roundtable study. "The bottomline is that this is educational and to promote understanding of the risks, to set the stage for more productive discussions down the road," Kuhn said.

Deputy General Manager Dan Birch said that the study is aimed at a "clear difference" among West Slope Roundtables in their Basin Implementation Plans on how to view future water development. After an initial round of technical meetings on the study, the West Slope should have discussions on how to reconcile the differences, he said.

Board Vice President Tom Alvey

cautioned that West Slope concerns "could get rolled under the bus" by the outpouring of Front Range interest and urged that the West Slope still have its own "core discussion."

Jim Lochhead, Manager of Denver Water, attended the Board meeting (See related story, page 2). He said the risk question is "a Colorado problem, not an East Slope-West Slope issue, adding that the primary question is risk to the existing supplies we have today.

"The challenge is how to achieve security as a state," Lochhead said. "The education needs to be there on the East Slope as well as the West Slope."

He noted that challenges with low reservoir levels, the Lower Division's "structural deficit" between water supply and water, plus climate change need to be worked out "in a way so as not to dislocate economies and to protect water supplies we have in place."



Board reviews state, federal affairs

The countdown is on at the **Colorado General Assembly**. Chris Treese, External Affairs Manager for the Colorado River District, opened his Colorado April 19 legislative affairs review before the Board of Directors with a gleeful announcement that there were only 22 days (16 business days) remaining in Colorado's constitutionally limited 120 day legislative session. The General Assembly must adjourn by midnight May 11.

Treese also thanked Directors for their consistent attendance and participation at the bi-weekly telephone Board meetings that have been held during the legislative session. Thus, there was only one new bill was before Directors for action at their April, quarterly meeting.

Treese summarized the complex provisions of House Bill 1433 and recommended the River District support the bill. HB 1433 is a Severance Tax Protection bill. HB 1433 addresses the realities of wildly fluctuating annual severance tax collections from oil and gas and other mineral extraction in Colorado.

The bill would create a reserve fund for severance tax revenues, funded with "excess" severance tax revenues

when they exceed an annual cap of \$180 million, indexed to inflation. The reserve funds would be available for expenditure when annual collections fall and needs persist or increase.

HB 1433 also calls for a statewide vote to "de-Bruce" severance taxes from the state budget's annual Taxpayer Bill of Rights (TABOR) revenue and expenditure calculations, recognizing that severance tax revenues are often counter-cyclical with the economy.

Representatives Millie Hamner (D-Silverthorne) and Bob Rankin (R-Carbondale) are the bill's prime sponsors. The following is a link to the introduced bill: http://www.leg.state.co.us/CLICS/CLICS2016A/csl.nsf/fsbill-cont3/B90AEE5727FD7E7387257F5E-0078B6CA?Open&file=1433_01.pdf

The River District Board voted unanimously to support House Bill 1433.

The Board also offered its unanimous support for the following gubernatorial reappointments to the Colorado Water Conservation Board: Russell George (mainstem Colorado River basin), Jay Gallagher (Yampa-White-Green basins) and Patti Wells (Denver metro).

Federal actions

Treese reported to the Board of Directors about his recent trip to the nation's capital in Washington, D.C.

The U.S. Senate continues to be where the action is, in large part because so much has passed the House awaiting Senate action, Treese said.

The California Drought legislation continues to morph into a West-wide drought bill with progress coming in fits and starts.

The River District's priority is maintenance of the progress made and relationships forged among the seven states of the Colorado River Basin to collectively and cooperatively address the challenges facing water users. The District has been opposing proposals amending the "Law of the River" that do not enjoy basin-wide support.

Treese reported progress in engaging U.S. Senate staff members to question the Bureau of Reclamation's recent refusal to support the "Clean, Drain & Dry" inspection stations at area reservoirs, designed and operated for the past decade to prevent infestation of invasive Quagga and zebra mussels into area waters.

Treese also reported progress in the unlikely Federal Aviation Administration (FAA) funding bill to reverse the Internal Revenue Service's (IRS) ruling that conservation rebates (e.g., partial cash rebates for installation of low-flow plumbing and incentive payments for turf removal) are taxable.

The IRS recently ruled that utilities providing such incentive payments must issue 1099 forms and recipients must report incentive payments as taxable income.

This represents both an expensive paper chase for utilities and a chilling effect on customers' willingness to invest in conservation.

Save the Date

Sept. 16, 2016

Annual Water Seminar



Colorado River District

ColoradoRiverDistrict.org



Board adopts policies on ESA, recreation and water quality

New policy regarding instream flows reviewed for future board action

The Colorado River District Board of Directors at its April 2016 quarterly meeting considered and readopted three existing policies and reviewed one new policy requested by the Directors in January.

Annually, the Board reviews roughly one-third of its existing policies. Policies must be on meeting agendas for at least two quarterly meetings before final action may be taken.

The three policies approved were:

Endangered Species Act policy: Supporting the Upper Colorado River Endangered Fish Recovery Program and its dual purposes of recovering endangered fish while allowing historical water use and future water development consistent with state law is critical to the Colorado River District.

The River District has been an active partner and participant in the Recovery Program since its inception and will continue to advocate for certain elements of the program such as ensuring that the burden of the Recovery Program's implementation, operation and compliance is equitably distributed across all power and water users, including transmountain diverters.

Water Quality policy: Recognizing that there is a causative link between water quality and water quantity, the River District's primary objective with respect to water quality is to protect

the ability of constituents to use water beneficially now and in the future.

Among other elements, the policy calls for the encouragement of voluntary best management practices and programs for farming and ranching activities. The District will also generally advocate for incentives of nonpoint pollution prevention and clean-up efforts.

Recreational Water Use policy: Recreational water use and enjoyment of the state's waters are integral to western Colorado's lifestyle and economy.

The District supports recreational water uses and the water rights confirming those recreational water uses that balance recreational needs with historical and future consumptive water uses. However, a "recreational in-channel diversion" water right should not be granted if it would materially impair the ability to fully develop for beneficial use Colorado's entitlements under the Compacts of 1922 and 1948 within the District's boundaries.

Also presented was the first draft of a new policy regarding Instream Flows, as requested by the Board in January. This policy was not eligible for final action; however, the Board's review and revisions will be presented at the July meeting for potential adoption.

Instream Flows policy: Flowing rivers and streams benefit the environmental and human experiences. However, these values and benefits must be balanced with the need for consumptive water uses in the arid West.

The Colorado River District supports the Colorado Water Conservation Board's (CWCB) exclusive authority to appropriate instream flow water rights that balance protection of the natural environment with the activities of mankind.

The River District likewise supports other mechanisms that benefit the aquatic environment that are consistent with the Prior Appropriation Doctrine.

Additionally, on a case-by-case basis, the District may advocate for inundation of all or portions of instream flow rights consistent with the state's policy of maximum utilization.

To review the red-lined changes of the readopted three existing policies and the newly presented policy, please visit: http://www.coloradoriverdistrict.org/wp-content/uploads/2015/12/2016_2Q_Policies.pdf

For full-text of previously approved policies please visit: www.coloradoriverdistrict.org/policies/

To comment on any policies please submit to edinfo@crwcd.org.

How to contact us: edinfo@crwcd.org,

or call 970-945-8522 x 236 website: www.ColoradoRiverDistrict.org



Water banking research to ‘scale up’ work

Pilot projects experimenting with rotational fallowing and deficit irrigation are underway to refine the science and learn how these water-saving operations could work with West Slope agriculture, as well as across agriculture in other Upper Colorado River basin states.

Some of that work is being done under the auspices of water banking investigations in which the Colorado River District is a leading partner. Other work is taking place across the Upper Basin States and in the Lower Basin States through a System Conservation Agreement that created an \$11 million fund. Support came from Denver Water, the Southern Nevada Water Authority, the Metropolitan Water District of Southern California, the Central Arizona Project and the Bureau of Reclamation; \$2.75 million of that fund was targeted for the Upper Basin and another \$1.5 million may come available.

The impetus for the programs is the looming risk that falling reservoir levels in Lakes Powell and Mead will force water use cutbacks through demand management. The water banking effort, in particular, is aimed at averting forced cutbacks by establishing a voluntary effort to increase flows into Lake Powell.

Agriculture is the biggest water user across the basin. By planning in advance, the goal is to sustain agriculture through a potential crisis and keep it in business while it shares water in tough times through voluntary, compensated fallowing.

River District General Manager Eric Kuhn and Deputy General Manager Dan Birch, the point person on water banking planning, told the Board of Directors that the real issue now is to “scale up” efforts, which means looking at entire ditch systems rather than individual producers.

To that extent, the Grand Valley Water Users Association (GVWUA) in Mesa County has expressed an interest in participating in water banking research through a larger-scale pilot project. The River District Board of Directors approved a memorandum of agreement with GVWUA to design a pilot project for 2017. Both water banking funding and System Conservation Agreement money will aid the planning effort.

Denver Water Manager Jim Lochhead attended the Board meeting. (See related story, page 2). He said he was happy to hear of GVWUA’s interest in water banking. As a



The Palo Verde Irrigation District in California participates in a rotational fallowing program through which it is compensated for the irrigation water it then sends to the Metropolitan Water District of Southern California. (LA Times photo)

funder of the System Conservation Agreement, Lochhead said he knew Denver Water would get “political heat.”

“But it is important to initiate a process for us all to have a strategy to move forward,” he added.

The political heat involves a sensitivity that urban interests want to buy up ag water rights and convert irrigation water to municipal water supplies. He noted the agreement is meant to create system water to make its way to Lake Powell, and that it is compensated and voluntary.

Lochhead said he wanted to make sure the System Conservation Agreement was not a “Denver Water program,” and he was glad to see it taken over by the Upper Colorado River Commission and the support given the program by the River District, as well as by environmental organizations such as Trout Unlimited and The Nature Conservancy.

A future issue is to create a mechanism by which to “shepherd” system water created by ag programs so that it indeed reaches Lake Powell and is not merely used by the next downstream user.

Ag fallowing is sensitive in more ways than one in that fallowing does not necessarily work in every geographic region. High elevation pastures may not survive fallowing and deficit irrigation is not well understood yet, although research is underway.

“Are we ready to change the environment in the high country?” asked Gunnison County Director Bill Trampe. “That is the fear in our country Once it is dried up it, is done.”



Colorado River District awards grants to eight of 35 applicants

The Colorado River District Board of Directors has awarded financial assistance grants to eight projects that applied to the District's 2016 Water Supply Grant Program. In total, 35 applications were received with requests in excess of \$1.2 million.

After a review and ranking by staff and the Executive Committee of the Board of Directors, the full River District Board affirmed that eight projects receive funding, including five large grants (total project costs greater than \$60,000) and three small grants (total project costs less than or equal to \$60,000). The Grant Program budget was \$150,000.

Awards are made on a cost-sharing basis with River District funding typically providing about 25 percent of total project costs. Grant projects must meet one or more of these objectives:

1. development of a new water supply;
2. improvement of an existing water supply system;
3. measures to improve instream water quality;
4. water-use efficiency improvements;
5. sediment reduction measures; and/or,
6. implementation of watershed and riparian management actions.

This year's grant awardees:

Crosho Lake Corporation's Simon #1 Dam Outlet Replacement Project in Rio Blanco County was awarded \$20,000;

Maybell Irrigation District's Ditch Improvement Project in Moffat County was awarded \$49,000;

Orchard Ranch Ditch Company's Piping Project in Delta County was awarded \$25,000;



Kathleen Ann Sickles and Patrice Alonzo offer praise for the River District's Grant Program.

The Town of Rangely's Raw Water Irrigation System Improvements Project in Rio Blanco County was awarded \$8,379;

The Town of Cedaredge's Doughty Reservoir No 2 and Calumet Reservoir Repairs Project in Delta County was awarded \$8,300;

Crawford Clipper Ditch Company's Transportable Hydroscreen Project in Delta County was awarded \$5,200;

Silt Water Conservancy District's Harvey Gap Outlet Improvements Project in Garfield County was awarded \$9,121; and,

Young Creek Reservoir Company's Abutment Seepage Mitigation Project in Delta County was awarded \$25,000.

Several grant applicants addressed the Board of Directors. Kathleen Ann Sickles, Town Administrator for Cedaredge, thanked the Board for its grant which, in addition to the financial assistance, will also help preserve and protect the highly valuable pre-Colorado River Compact water rights that were decreed in 1907.

Patrice Alonzo, agricultural producer and ditch rider, also expressed appreciation on behalf of Crawford Clipper Ditch Company for its grant by saying, "With this hydroscreen we

are able to keep the water clean and provide pressurized systems for on-farm uses."

As stated by Colorado River District's Grant Program Manager, Dave Kanzer, "This transportable hydroscreen has never been done. It could have the ability to really transform how these phased projects get implemented. Credit goes to the Executive Committee who saw that and recommended that we push forward."

For additional information on the River District Grant Program, please visit ColoradoRiverDistrict.org, as it is anticipated that information on the 2017 Grant Program will be available after Dec. 1, 2016.



Senior Accountant Ian Philips receives his five-year Colorado River District service recognition from Chief Accountant Mary Kalmes. A tradition of the River District is to recognize service for each five-year increment with ceremonies at Board of Directors meetings. Sharing in the honor is five-year office dog Gunner Philips.



2016 State of the River Annual Public Meetings

Each spring, during snowmelt runoff, the River District organizes informational “State of the River” meetings across parts of the Western Slope of Colorado to help educate the public and water users. Meeting speakers offer up-to-date information on snowpack figures, water supply forecasts and anticipated stream flows and upcoming conditions.

Reservoir operators and climate professionals will discuss the amount of water expected to flow into the local reservoirs due to melting snow and will forecast how conditions may affect the rise and fall of reservoir levels and the amounts and timing of water to be released to the rivers over the upcoming season.

State of the River meetings are recommended for all water users and providers. In particular, irrigators, sportsmen and all reservoir and river enthusiasts are invited to participate.

<p>Summit County, May 4th 5/5:30-6:30pm Open House with light appetizers 6:30-8:00pm Program Silverthorne Pavilion, 400 Blue River Parkway, Silverthorne</p> <p>Sponsors: Blue River Watershed Group & Colorado River District</p>	<p>Rifle, Wednesday, May 25th 6:00-8:00pm Ute Events Center, 132 E 4th Street, Rifle</p> <p>Sponsors: Middle Colorado Watershed Council & Colorado River District</p>
<p>Mesa County, Thursday, May 12th 6:00-8:00pm Grand Junction City Hall, 250 N 5th Street, Grand Junction</p> <p>Sponsors: The Water Center at Colorado Mesa University & Colorado River District</p>	<p>Gunnison River, Monday, June 6th 6:00-6:15pm Light Appetisers 6:15-8:00 Program Holiday Inn Express, 1391 S. Townsend Avenue, Montrose</p> <p>Sponsors: Upper Gunnison River Water Conservancy District & Colorado River District</p>
<p>Grand County, Tuesday, May 24th 5:45-6:00pm Light appetizers 6:00-7:45pm Program Mountain Parks Electric, 321 W Agate Avenue, Granby</p> <p>Sponsors: Grand County Water Information Network & Colorado River District</p>	<p>Eagle River Valley, May 16 (tentative) Typically the particulars are: 5:15pm refreshments, 6:00-8:00pm program Colorado Mountain College, 150 Miller Road, Edwards</p> <p>Sponsors: Eagle River Water and Sanitation District, Eagle River Watershed Council & Colorado River District</p>