

COLORADO RIVER BASIN SALINITY CONTROL ADVISORY COUNCIL
Minutes of Meeting
June 5, 2024
Durango, CO and Virtual

Advisory Council Beginning Time: Wednesday June 5, 2024, 1:30 p.m. (MDT)

Designated Federal Officer Presiding: **Clarence Fullard**
Chairman Bill Hasencamp

I. Welcome, Introductions **Hasencamp**

Chairman Bill Hasencamp called the Advisory Council meeting to order at approximately 1:30 p.m. (MDT) and welcomed those participating. It appeared that everyone at the meeting had attended the Forum's meeting that morning. An attendance roster of those who participated in the meeting is included as [Appendix A](#).

II. Opening Comments **Fullard**

Clarence Fullard gave the opening comments. He introduced the Advisory Council and shared that it was not only the 50th anniversary of the Salinity Control Act, but because the Act created the Colorado River Basin Salinity Control Advisory Council, it was also the 50th anniversary of the Council. He reminded the group that the Advisory Council allows for direct input to the Department of the Interior, the Department of Agriculture and the Environmental Protection Agency. He explained that the Advisory Council is guided by a charter that is filed every two years. Fullard shared that the current charter expires August 29th of this year. The Advisory Council was created by legislation and does not have a lot of rules. He did mention that renewal of the charter, which has a fairly lengthy signatory process, commenced earlier in the year. Fullard mentioned that the voting system has been something of discussion in the past and this could be something to think about with the renewal efforts two years from now. The charter is on the Reclamation's website.

III. Review and Approval of Draft Agenda **Hasencamp**

Hasencamp then asked for a review of and motion to adopt the proposed agenda with one change. With a reminder that agenda item VIII would be moved to the Forum meeting the next day, the agenda was adopted, as proposed, by motion and is included as [Appendix B](#).

IV. Draft Minutes of October 24, 2023, Advisory Council Meeting **Fullard**

The Council then addressed the draft minutes of the October 24, 2023, Advisory Council meeting held in Santa Fe, NM. The draft minutes had been shared with the Council prior to the meeting. No comments or changes were received nor were any made during the meeting. Hasencamp then asked for a motion to approve the minutes. A motion passed and

the minutes were approved.

V. FACA Appointments and Rules

Fullard

Clarence Fullard shared a presentation to clarify the FACA appointments and rules. He indicated that his presentation was to serve as both a refresher and an explanation for those who are newer to the Advisory Council. He indicated that Advisory Councils have been around for a long time and provide for objective and transparent input to the federal agencies. He reviewed the history and makeup of the Colorado River Basin Salinity Control Advisory Council. Fullard then reviewed options for the appointments of alternates and the required process. Fullard then reviewed the purposes and potential actions of the Council. A copy of Fullard's presentation is included in [Appendix C](#).

VI. 2023 Advisory Council Report Responses 2024-24, 31

A. U.S. Bureau of Reclamation

Fullard

Fullard indicated that Reclamation had sent its responses to the 2023 Advisory Council Report just before the Council meeting. He first addressed the Council's concerns with appropriations to the Reclamation program, indicating that Reclamation's funding requests are somewhat affected by the present accrual in the LCRBDF but that it will make efforts to find additional funding to the program. He noted the Council's appreciation of Reclamation's efforts to assist with resolving the LCRBDF accrual. He noted the changing landscape which affects Reclamation's ability to forecast income to the LCRBDF but committed that Reclamation would continue to work with the states on this matter.

Fullard addressed the Council's concerns with, at times, continuing Paradox O&M cost when the project is shut down. He explained that there are certain ongoing costs which are not tied to project production, but that Reclamation would be cognizant of these concerns. In response to the Council's request, Fullard indicated that Reclamation has and will commit to continue to seek other funding mechanisms, including building and maintenance of models which support the salinity control efforts. Fullard addressed the Council's concern with the lack of participation in the recent NOFO indicating that Reclamation shares this concern and will work to encourage participation in the program. Fullard responded to the Council's request that until a PVU brine disposal replacement alternative is fully identified, Reclamation apply focused efforts to identify brine disposal alternatives, by indicating that Reclamation will continue salinity control in the Paradox Valley as it is safe and feasible to do so and that it will work with the Forum as future operations and plan are formulated. Fullard indicated that Reclamation now has a full salinity team now in place with Alex Walker as the salinity engineer, Melynda Roberts as the salinity coordinator and him as the salinity control program manager. Lastly, he indicated that Reclamation will commit to continue to work with the Work Group on the SEIM modeling efforts, it will continue to compile the annual FAR and that it will continue to host the Science Team.

Hasencamp indicated that in the post 2026 EIS process Reclamation is asking the states to look at the worst, worst case scenario from a water supply standpoint and he requested that Reclamation also look at the worst, worst case scenario from a salinity standpoint including available LCRBDF funding and salinity levels. He indicated that he believes under worst

case scenarios, the value of the Paradox project will be much greater. Fullard noted the request from the Council.

B. Natural Resources Conservation Services Fillerup
Fillerup indicated that NRCS' response is working its way up the review chain and so at that time they were not ready to respond.

C. U.S. Geological Survey Marston
Marston indicated that the Council's report was complimentary of USGS' efforts. He then reviewed the status of several ongoing studies. He indicated that a draft of the Upper Basin long-term trends study would be out soon. He also indicated that USGS will formulate a study plan for the Middle San Juan River Basin as requested by New Mexico. In response to a question, Marston indicated that the CRIT study was just a small data collection effort which is still ongoing, but they anticipate a presentation of the data this year. Marston's report is included as [Appendix D](#).

D. Bureau of Land Management Cutillo
Cutillo indicated that a written response has been prepared and is working its way through the approval process. She indicated that BLM has been expending \$2 million and intends to continue this level of funding and that it will seek to leverage non-salinity funding to improve water quality in the Basin. She indicated that BLM looks forward to working with partners to come up with metrics to measure the effectiveness of the program efforts. She also indicated that BLM would work with the partners to make sure publications are made available. Cutillo responded to the Council's request that BLM participate in with other agencies in seeking out wildlife habitat replacement areas by indicating that BLM will stay engaged in these activities. She indicated that BLM recognizes the value of process-based restoration activities, and that BLM looks forward to continuing to participate in and support the discussion of these efforts. Lastly, Cutillo recognized the Council's request for BLM to participate in discussions relative to rights-of-way on BLM lands which may affect Reclamation's implementation of salinity control activities by indicating that BLM recognizes the importance of rights-of-way on BLM lands and that it will continue to participate in these discussions and provide input.

E. U.S. Fish & Wildlife Service Broderdorp
Broderdorp indicated that they appreciate the positive comments that the Council made towards USFWS' participation in the program. He noted that the Council requested that USFWS be more proactive in seeking wildlife mitigation opportunities. He indicated that USFWS has been looking at opportunities for the development of wildlife mitigation banks. He also noted the Council's request to provide training to the Work Group on how wildlife habitat is calculated and indicated that he will work with the other agencies in putting together that training. He also indicated that he would work with the other federal agencies in identifying other funds which could provide habitat replacement.

F. Environmental Protection Agency Ismert
In response to the Council's request, Ismert indicated that he helps EPA, in three regions, understand salinity standards on the Colorado River so that such standards,

when submitted by the states, can go through the approval process fairly quickly. He further indicated that EPA works with tribes on the development of their water quality standards which include salinity standards. Ismert also reported that EPA's non-point-source program is really their main program for assisting states with improving water quality which is guided by the states' five-year Non-Point Source Management Plans.

Chair Hasencamp expressed to all of the agencies the Council's appreciation and support for all of the good work which is occurring and for the responsive reporting.

VII. Items from the Forum

There were no items from the Forum.

VIII. Lower Colorado River Basin Development Fund Update

Jolaine Saxton

This agenda item was moved to the next day's Forum meeting.

IX. Basinwide Program 2024-14

Roberts

Roberts handed out to the group a spreadsheet which detailed expenditures under the Basinwide Program (see [Appendix E](#)). She then presented to the Council a review highlighting current efforts under the program (see [Appendix F](#)). She noted that because the Basinwide Program is a grant program, it falls under specific guidelines and rules. She reviewed projects which have been fully funded, but under which work is still occurring. She noted that they were not able to further extend the San Juan Dineh Project and so there was a cutoff of the project which led to less salt savings. She then reviewed the ten projects which are ongoing and thus currently partially funded. She noted that the San Juan Dineh had a project which they were not able to start and so it has been closed and they intend to submit under the next NOFO. Roberts then showed the funding status and forecasted that at the end of FY2024 she anticipates a carryover of about \$3 million.

X. Basin States Program (BSP)

Roberts

Roberts handed out a detailed spreadsheet on the Basin States Program ([Appendix G](#)) and then walked the Council through an update on the fund ([Appendix H](#)). She indicated that this program falls under contracting and so there is additional flexibility in their management. She identified contracts with the state ag agencies, FWS and salinity consultant. She also reviewed the four active contracts with irrigation companies awarded under the NOFO. She also discussed SIR projects which are funded under the Basin States Program. Roberts then reviewed the annual fund accounting and indicated that she is projecting an FY2024 carryover amount of about \$5 million. The projects show an increasing carryover amount moving forward which will be adjusted as future contracts are entered into. There was a question regarding the SIR at Littlefield which is being carried out by the LC region.

In response to another question, Roberts indicated that carrying over large amounts of appropriated dollars (Basinwide Program) is frowned on but there are not generally concerns with carrying over non-appropriated funds (Basin States Program). She indicated that the current carryover amounts are due to lack of current projects underway. The question was asked about the lack of new projects in the 2023 NOFO and Roberts indicated that she understands that the process is working fine but maybe much of the low-hanging fruit has been picked and that the project funding limits may need to be raised moving

forward, including both cost per ton and the current cap of \$12 million per project. Aaron Mead indicated that this is something that the Work Group will be investigating further. There was a question about whether there is a need for a better marketing plan and to be proactive in seeking new projects. Roberts indicated that it is her understanding that the cost of doing business is increasing and that probably COVID through the process for a loop. There was a general discussion about cost issues facing potential program applicants, and the potential for them to reapply for greater funding amounts. There was a question about if there are things that the Forum or Council is doing which are discouraging potential project proponents. Roberts indicated that there is nothing that she was aware of along these lines, but she did note that there are other programs such as WaterSmart and PL566 which provide irrigation entities with other avenues for funding. Each has its own advantages and restrictions.

XI. Technical Advisory Group (TAG) BSP Funding Recommendations

Mead, as TAG Chair provided the TAG recommendations relative to SIR proposal funding the Council. He indicated that his presentation would cover 2024 SIR proposals, 2024 TAG funding recommendations and then seek direction from the Advisory Council relative to some SIR funding policy questions (See [Appendix I](#) for Mead's presentation).

Mead first reviewed the Salinity Control Efficacy proposal. It involves using chemical data to parse out the effects of the salinity control program in historic salinity control areas from other factors and will seek to determine the cause of the recent uptick in salinity in some areas.

The second SIR proposal involved a broader characterization of the groundwater in the Paradox Valley. He indicated that brine production in the valley comes from freshwater passing through salt formations and so one way to potentially reduce the brine production would be to capture the freshwater before it comes in contact with the salt. The study would begin to investigate the viability of this concept but identifying present data availability and then determine where additional monitor wells may be needed. Mead emphasized that this would be the first step in this process. Additional studies would be required. Due to a question, it was agreed that the Work Group should look at the land ownership within the potential study area and determine whether it might be affected by the proposed Dolores Canyons National Monument. Mead indicated that the ultimate value of a project to reduce brine production could be to dramatically reduce the required brine disposal. In the PVU EIS brine disposal alternatives were evaluated at the rate of 180,000 tons per year. If the true brine production in the Paradox Valley is closer to 150,000 tons per year and the capture of freshwater before it encounters the salt formations could cut that amount in half, and if capture wells could effectively capture two-thirds of the reduced brine production, then the PVU would only need to dispose of 50,000 tons per year and not the 180,000 tons per year vetted in the EIS which could improve the viability of potential projects. Mead did note that studies at PVU are often funded by PVU O&M dollars, but Reclamation was not interested in funding this study at this time. Due to a question regarding distances between recharge and discharge areas and the potential magnitude of pumping to capture the discharging brine, Marston indicated that at this proposal is really just a reconnaissance effort to determine what data are available and where existing wells are located. Questions regarding capture requirements would be answered in additional studies. There was also a question about Reclamation's willingness

to fund the additional studies should they prove needed, but there was not a feeling for Reclamation's position on future studies. There was also a question regarding USGS' present groundwater model for the valley, but Marston indicated that it only extends to just beyond the upper end of the Paradox Valley and this effort would extend much further into the actual recharge area.

The third proposal was the Spanish/Castle Valley Salt Loading study. He indicated that the study grows out of some sampling done in 2010-2011 which suggests a potential salt loading to the Colorado River in these two valleys of between 37,000 to 370,000 tons per year. The study would use boat-mounted helium monitors to determine the location and magnitude of salt loading. A second phase could better characterize brine production by placing piezometers into the riverbed in identified brine production areas. The cost of the first phase is \$104,000 with the potential second phase costing \$125,000.

The fourth proposal was termed the Reservoir Salinity Parameters study. It is believed that reservoirs have a meaningful effect on salinity concentrations, but the magnitude and process is not well understood. The study would use statistical methods on a number of parameters from a number of reservoirs in the western U.S. so as to develop relationships with salinity. The total cost of the study would be \$275,000 with \$50,000 coming from IWAS and \$225,000 coming from the Basin States Program. There was a discussion on the power of including a number of reservoirs in the western U.S. to make stronger statistical relationships.

Mead then moved to the TAG's recommendations. He indicated that there was really good discussion by TAG members over several meetings on these recommendations. He first noted that over the past several years the approved SIR projects have been under the allocated amount of \$300,000 and so these funds have been accumulating such that this year there are \$854,000 in potentially available funds. He then indicated that it is the TAG's recommendation that the first three proposals be funded, which would expend a total of \$709,000. The main reason for the TAG's recommendation to fund the first three proposals is the TAG's belief that these studies would lead more directly to implementation and so, while the Reservoir Salinity Parameters proposal is also important and something that the TAG would recommend with time, if the first three proposals are recommended and we stay below the \$854,000 then there is not sufficient money to fund the fourth one. In response to a question Mead clarified that this recommendation only included the funding of the first phase of the Spanish/Castle Valley Salt Loading study.

Mead then moved the group to a discussion on several policy questions which had arisen during the TAG's discussions. Mead first explained the current policy to set aside \$300,000 per year for SIRs. He indicated that it is a belief that some time ago the Council established a policy to expend approximately 40% of the Basin States Program cost-share in NRCS TA for studies. However, in reviewing the past ten years of NRCS TA expenditures, the 40% would yield a number closer to \$450,000, so it is a little unclear where the \$300,000 value came from. Mead also alerted the group that when the salinity fix legislation passed, the 40% of the cost share in NRCS TA expenditures may yield a number closer to \$200,000. He then reviewed a list of questions the TAG had developed (see slide).

Dave Robbins observed that in recent years the TAG has not been as keen on some of the science studies being proposed and, therefore, has not recommended their funding but that in this year it looks like all of the proposals are valuable and so the funding amounts maybe ought to vary up and down depending on the science needs and the quality of the proposals. Mead responded that the TAG ranks proposals relative to each other in a given year but maybe it ought to rank proposals across years. In response to a question about the timing and ability to rank across years, Mead indicated that it depends on the pressures on the funds. In a year like this year where there is not pressure on the fund to implement salinity control projects, expenditure from the fund for SIRs could exceed the average allocation but in other years it could not. Roberts clarified that if the three recommended proposals are funded, then \$709,000 would be expended this year which means that there would be \$145,000 dollars which would carry over to next year which when added to next year's \$300,000 would allow for the expenditure of \$445,000. She further noted that in total, she is projecting that the Basin States Program will carry over from 2024 more than \$5 million.

There was a question as to how the Advisory Council could better give input and focused direction to the TAG so that study proposals are developed which best meet the program needs. Barnett noted that the Advisory Council can give direction at any time to develop study ideas, but that there is a specific agenda item at the fall Advisory Council meeting, after the Council has heard the agency reports, to make recommendations to the TAG on study ideas which can then be taken to the Science Team. Mead further added that many study ideas organically come out of the discussions at the Work Group meetings as issues are worked through. Fullard reviewed for the group the process of collecting study ideas in the fall and reviewing them at a Science Team meeting and then bringing proposals to the TAG.

Jessica Neuwerth made the observation that she believes providing science support is important and that \$300,000 does not seem like too much to expend by the program and that it actually might be too little. She noted that the value of putting a set amount in every year allows the group to spend less in some years and more in other years. Sara Price indicated that it is a fine line between not expending the money and carrying it over could affect other portions of the program. Neuwerth indicated that maybe there could be an upper limit in the amount which is carried over above which moneys revert to implementation or other needs. Hasencamp responded that he felt that, similar to Dave Robbins, that the rule of thumb maybe ought to be more a guidance of thumb with flexibility to expend more for studies in some years when good proposals are available and more for implementation in other years when salinity control projects are available. There was a general discussion supporting the concept of adjusting the expenditure recommendations based on science needs, quality of proposals and availability of funds.

The Council then returned to the funding recommendations from the TAG. Hasencamp asked if there is a reason to not fund all four proposals. Mead responded by indicating that the TAG felt like it needed to stay below the \$854,000 and so the recommendation was a bit of a compromise, but if the Council believed that the funding limits were more flexible it could also be funded. Neuwerth reminded the group that the projection was for \$5 million in total fund carry over. After a discussion on USGS' capacity to perform all of the studies in a timely fashion and a clarification on what could be learned by the reservoir study, a

motion was made and passed to recommend to Reclamation that all four studies be funded. Fullard asked for clarification for Reclamation on moving forward for annual funding recommendations. After discussion and clarifications, it was agreed that the rule of thumb would be approximately \$300,000 per year but that it would be a very loose rule of thumb to be applied with judgement each year.

XII. Items for Forum

No items were identified to take to the Forum.

XIII. Public Comment

Hasencamp

It was then turned to the public for comments. There were no comments in person or on zoom made.

XIV. Other Business/Action

Hasencamp

Because some of the members would not be attending the Forum meeting the next day when the fall Forum and Advisory Council meetings would be discussed, Hasencamp asked that the group discuss the timing and location of the next meeting. Barnett presented some ideas which recommended that the meetings be held in late October in Arizona. Vineetha Kartha indicated that Arizona would be happy to host the fall meeting and identified potential locations as Phoenix, the Grand Canyon and Tucson. Concern was expressed with the last week of October and Grand Canyon and so the group provided direction to hold the meetings the week of October 21 in Phoenix or Tucson, or maybe Yuma.

Chairman Hasencamp concluded the meeting with a tribute to, and in memory of, Kristin Robbins, an amazing woman and friend to the group who passed away in January.

Advisory Council Adjournment Time:

Wednesday June 5, 2024 4:00 p.m. (MDT)