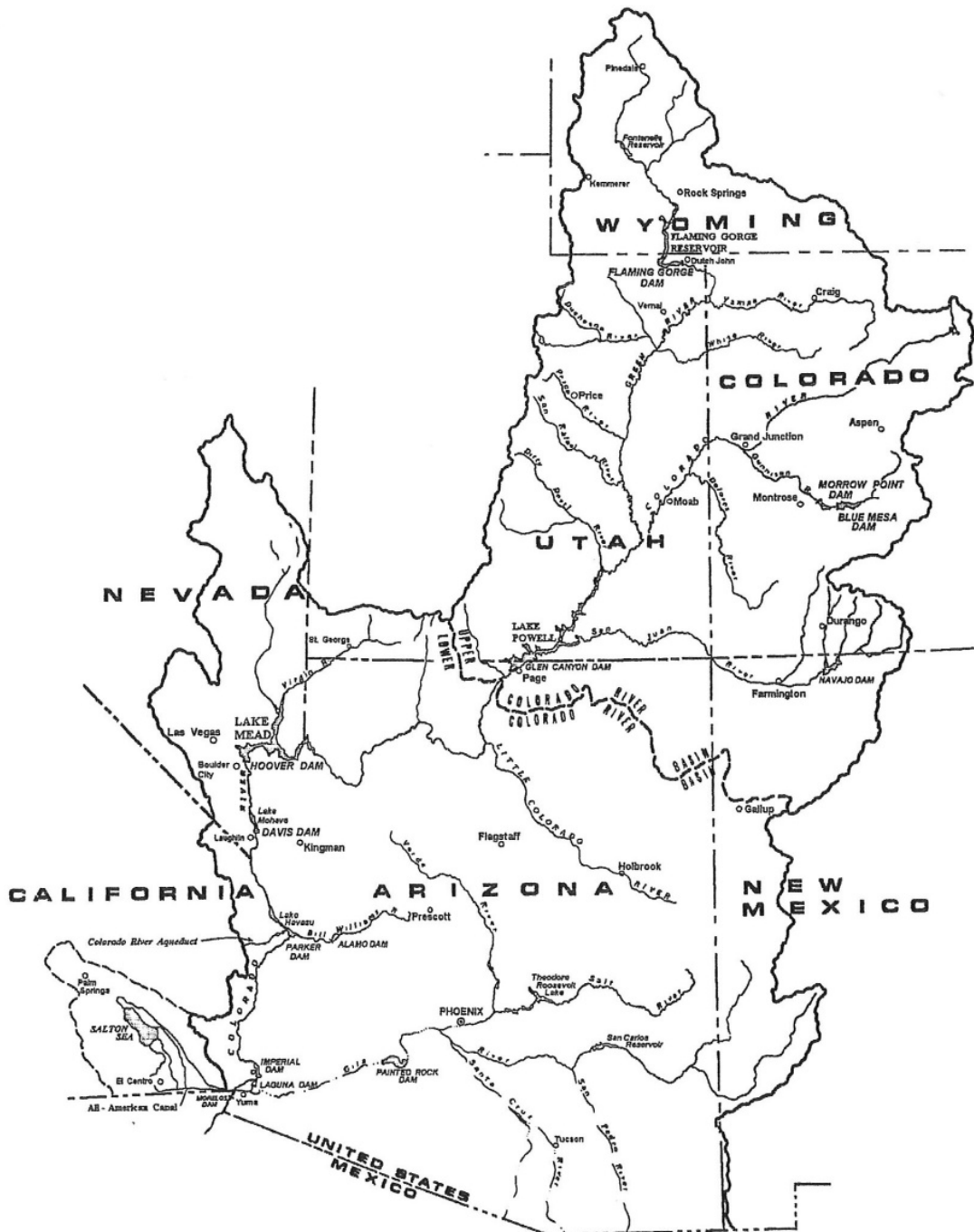


**ANNUAL REPORT
ON THE
COLORADO RIVER BASIN
SALINITY CONTROL PROGRAM**

2016



**COLORADO RIVER BASIN
SALINITY CONTROL ADVISORY COUNCIL**

December 31, 2016

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BACKGROUND

Title II of the Colorado River Basin Salinity Control Act (Act) (Public Law 93-320) created the Colorado River Basin Salinity Control Program (Program), and Section 204 of the Act created the Colorado River Basin Salinity Control Advisory Council (Council). With the 2008 amendments to the Act that created the Basin States Program (BSP), the Council's consultation responsibilities have been redefined and clearly stated. The Secretary of the Department of the Interior, the Secretary of the Department of Agriculture and the Administrator of the Environmental Protection Agency (EPA) originally approved a charter for the Council on February 6, 1976. In 2010 the Charter was revised to better reflect the Legislative changes that occurred to the Program in 2008. The Charter was renewed in 2016 and will need to be renewed again in 2018. A copy of the current Council Charter is included as Attachment A.

The Council consists of up to three members from each of the seven Colorado River Basin States. Governors of their respective states appoint the Council members. The Council membership list as of December 31, 2016, is included as Attachment B. The Council has created a Technical Advisory Group (TAG) that it uses to provide analyses and recommendations. The TAG includes one member from each state. Its chair is appointed by the Council's Chair.

All of the Council members at this time are also members of the Colorado River Basin Salinity Control Forum (Forum). The Forum is an organization created in 1973 by the seven Colorado River Basin States for the purpose of interstate cooperation and to provide the states with the information necessary to comply with the Water Quality Standards for Salinity on the Colorado River and Section 303 of the Clean Water Act. The Forum, like the Council, has an advisory and analytical group which is named the Forum's Work Group (Work Group).

This report provides annual recommendations to the federal agencies concerning the progress of the Program and the need for specific actions by involved federal agencies.

This report comments on the actions taken by the federal agencies through December 31, 2016.

The report does not attempt to fully describe or analyze the Program. Readers unfamiliar with the Program should refer to *Quality of Water, Colorado River Basin, Progress Report No. 24, 2013*, and the *2014 Review, Water Quality Standards for Salinity, Colorado River System, October 2014* (2014 Review) for a discussion of the Program. The first report is available at www.usbr.gov/uc/progact/salinity/pdfs/PR24final.pdf or by contacting Kib Jacobson, Program Manager for the Bureau of Reclamation's (Reclamation) portion of the Program. The second report is available at www.ColoradoRiverSalinity.org or by contacting Don A. Barnett, the Executive Director for the Forum. The addresses and phone numbers for Reclamation and the Forum are provided at the end of this report.

The Council met twice in 2016. The first meeting was held on June 8-9 in Keystone, Colorado. At that meeting the Council heard summaries of activities and discussed the federal agencies' responses to the 2015 Advisory Council Report. The Council provided the federal agencies the opportunity to report orally and to explain their responses to the 2015 Advisory Council Report. Included in this report as Attachment C are the federal written responses to the 2015 Advisory Council Report. The second meeting was held on October 26-27 in Moab, Utah. At this meeting the Council heard reports from the federal agencies on implementation of the Program during Fiscal Year (FY) 2016 and discussed the substance of this report. The Council appreciates the efforts of the federal agencies to summarize Program accomplishments into a timely, informative and concise Federal Accomplishments Report which was reviewed and discussed at the meetings.

COUNCIL COMMENTS AND RECOMMENDATIONS

GENERAL SUBJECTS

The Council continues to be pleased with the direction of the Program and the way the federal agencies are working together and coordinating with the Forum, the TAG and the Work Group. The importance of this joint effort is magnified as Reclamation evaluates replacement alternatives to the Paradox Valley Unit (PVU) during its current EIS effort. The Council finds that securing the continued future effectiveness of the PVU is a most critical issue. It is most important that all involved Department of the Interior agencies consider the Paradox replacement alternative effort as a Department-wide effort and that BLM, USFWS and USGS become partners with Reclamation in moving the project ahead. Each of these three agencies has an important role to play and Reclamation has worked hard at securing this coordination, assistance and support. It is apparent that the assistance and support will be most important as the EIS process proceeds.

The Council is also pleased with BLM's continuing effort to study and understand salt mobilization processes on rangelands. The Council encourages all federal agencies involved in these efforts to continue to work cooperatively to find answers to the salt loading which occurs from these federally administered lands. The Council is committed to work with Reclamation, BLM and ARS to pursue opportunities to fund these efforts. With significant seed moneys for these efforts having come from the limited Basin States Program funds, the Council is hopeful that BLM and ARS will now lead out in these efforts both monetarily and in executing the needed studies.

The Council also appreciates the efforts of the Science Team in providing the TAG and the Work Group valuable analysis of various issues facing the Program and reviewing potential study efforts. The Council recommends that this support continue.

The Council and the Forum continue to develop opportunities to ensure that adequate up-front cost sharing is available to match the federal expenditures for the Program. The

Council appreciates Reclamation's extra efforts in working through the short-term management of the Lower Colorado River Basin Development Fund. The Council encourages all the federal agencies to work with the Forum on this effort as appropriate.

As a final general item, the timing of the renewal of the Charter has been problematic in past years as it has fallen coincident with the Council's fall meeting, which made it difficult to commit to meeting and travel arrangements when the Charter hadn't yet been signed by all three sponsoring agencies. The Council appreciates Reclamation's efforts this past year to move the period for renewal forward and herein requests that the Department of Agriculture and EPA also assist in 2018 such that the Charter is renewed in July.

The below paragraphs provide specific comments and recommendations to the federal agencies involved in the implementation of the Salinity Control Program.

U.S. DEPARTMENT OF AGRICULTURE (USDA)

Natural Resources Conservation Service (NRCS)

The Council recognizes the key and essential role that NRCS has played in reducing the salt load of the Colorado River for the benefit of downstream agricultural and municipal users. NRCS has been a consistent and very productive partner in the effort. Providing these benefits is the result of a coordinated effort between the Colorado, Utah and Wyoming state NRCS offices in the Upper Basin and also the cooperation they have provided when working with other federal agencies, the TAG, the Forum and the Work Group.

The Council recognizes and appreciates the increases in EQIP FA funding for FY-2017. It recognizes the myriad of demands placed on program managers in allocating limited EQIP funds and, therefore, expresses appreciation for the priority NRCS has placed on salinity control activities. The Council will continue to work closely with the three State Conservationists and their staff in preparing a three-year funding plan for salinity control implementation. The Council has found that significant effort and good thought has gone into this plan. It is a realistic determination of what might be accomplished each of the next three years with adequate funding.

The Council also recognizes that much of NRCS's past success in implementing salinity control comes from efforts beyond simply servicing EQIP contracts. It comes from talented staff working with producers in properly operating and managing on-farm improvements. A recent USGS study of NRCS data over a number of years in the Grand Valley shows a wide range in effectiveness derived from implementation and maintenance of the same practices, confirming the importance of the continual need for training and assisting producers. The Council requests that NRCS continue to recognize this need and provide sufficient staff and funding, including sufficient CTA dollars and other non-EQIP dollars, to meet this critical need.

The Council believes that it is the dedication, coupled with effective and hard work of NRCS personnel, which has made the NRCS salinity control program such a success. The Council

appreciates the attentiveness of NRCS Washington staff in the Program's success. The Council also recognizes and appreciates the dedicated attention that the three State Conservationists have given the Program and it invites them to continue to frequently participate in Program meetings, discussions and activities and provide input, expertise and guidance as we move the overall Program forward.

Implementation of the Salinity Control Program has been adaptive over the years as we have needed to adjust to changes in funding, legislation, policies, practices and producer needs. The Council is aware that changes are under review in the relationship between the technical assistance and division of labor being provided by NRCS and the state ag agency personnel with Basin States Program (BSP) dollars. The Council asks that NRCS continue to stay engaged and provide counsel and guidance in this effort as the most effective and beneficial options for implementation of Program objectives are evaluated and then implemented.

Due to a number of factors, present Program implementation has de-emphasized the role and number of EQIP-ineligible contracts referred to Reclamation for funding consideration. That said, the Council believes that there will continue to be a limited number of such contracts which are cost effective and strategic to overall Program implementation objectives. The Council has been troubled regarding the recent hand-off process. To the extent that such worthy, yet EQIP-ineligible contracts are received, reviewed and batched by NRCS, the Council requests that they be forwarded (handed-off) to Reclamation by April 1 each year and that NRCS provide to Reclamation any evaluations or supporting information it has developed for these contracts so that it can quickly, in conjunction with the State ag agencies, determine which, if any, of the projects will be funded with BSP funds (see also discussion on this matter in the Reclamation section).

The Council very strongly believes that the efforts of NRCS's Salinity Control Program Coordinator have been critical to the Program's successes. Not only has the Coordinator been effective in coordinating and unifying NRCS implementation of the Program, but he has also been extremely helpful in providing input and expertise in the overall Program

implementation. As one of the major implementing agencies, the NRCS Salinity Coordinator has provided a vital role in the overall Program successes. The Council sees an absolute need to continue this position and requests that it always be filled with a motivated and well qualified individual and that the position continue to be housed in Reclamation's offices so that full Program coordination can continue. With the retirement of NRCS's Salinity Coordinator, the Council strongly urges NRCS to quickly act to fill this position with a very qualified individual. The Council believes that this is a most critical and urgent need.

The NRCS has many dedicated employees who have worked hard to accomplish irrigation improvements and advance the purposes of the Program. The Council recognizes and appreciates the recent filling of the engineer position in the Vernal office and it encourages NRCS to fill similar position needs in Colorado. These two positions have provided key engineering and technical support in Colorado and Utah, as well as authored the annual Monitoring and Evaluation Reports. The Monitoring and Evaluation Reports prepared each year are most helpful, and the Council applauds the involved NRCS staff for this effort. The Council urges that this work continue.

The Council recognizes the interplay between broad policy efforts and actual implementation of contracts by those in the field and the importance of organizing and coordinating the offices of area conservationists and district conservationists in such a way that the efficient implementation of the Program will continue and requests that NRCS make every effort to assure that each of these offices is adequately staffed. The Council recognizes that as efforts are completed or winding down in one salinity project area, implementation dollars will be shifted to other areas and it requests that NRCS shift staff resources to service the needs. The Council also recommends that NRCS pursue salinity control in established salinity control areas before going to other parts of the Basin to expend salinity EQIP funds. The Council requests that NRCS specifically include in its response a discussion and detailing on the adequacy of staffing in moving the program forward.

In the future, the Salinity Control Program may need to turn more and more to grazing lands (rangelands). BLM, ARS and USGS are now engaged in studies, in part funded by Basin States Program funds, to unravel the complex nature of salt loading from grazing lands. NRCS's Salinity Coordinator has been most helpful as this effort has moved ahead. NRCS has leading knowledge in some aspects of this complex puzzle. The Council requests that NRCS continue to support this effort in any way it can.

As a last item, the Council recognizes and commends NRCS for its additional efforts in the Colorado River Basin through the Regional Conservation Partnership Program. The Council supports better water management and conservation efforts, regardless of the program, and will work with NRCS as appropriate through collaboration on these other projects and efforts which will improve the water quality of the Basin.

The Council requests a written response from the USDA to recommendations contained in this report by **May 10, 2017**. This response should include comments on statements made in this section of this report and also on recommendations found in this report under the General Issues section and the Management and Budget Recommendations section.

U.S. DEPARTMENT OF THE INTERIOR (DOI)

Bureau of Reclamation (Reclamation)

The Council greatly appreciates the efforts of the Upper Colorado Region (UC) office in the continued oversight and coordination of the Program and the priority given to the Program from the top down, including the assemblage and support of a capable and dedicated salinity team. The Council also appreciates the increased involvement of the Lower Colorado Region (LC) offices, including participation of a salinity coordinator in the Work Group meetings and a high-level representative at the Forum and Advisory Council meetings.

The Council notes that the Upper Colorado Region has brought together a capable staff to effectively administer the Program. Things are really working well from an administrative standpoint within the Program. The Council notes that important to the overall efforts in the past has been an engineering position. This position has now been vacant for several years. Last year Reclamation anticipated that the position would be filled by the end of the calendar year. The federal agencies are now operating under a temporary hiring freeze, but the Council recommends that efforts be made to put things in place so that the position can be filled as soon as the freeze is lifted. The Council notes that among other areas, this position has been most essential in the FOA evaluation process which will be occurring later this year.

The Council appreciates the effort in the UC Region to address and improve the contracting issues that have previously faced the Program. The Council requests that Reclamation continue to monitor the time and effort required to move efforts forward through the contractual process and make adjustments as needed.

Recognizing the funding issues that are facing the Program and the fact that the LC manages the Lower Colorado River Basin Development Fund (LCRBDF), the Council finds that the LC's role is critical to the success of the Program. The Forum and Council are dealing with temporarily difficult decisions relative to funding and generation of cost share

dollars to the LCRBDF. The Council appreciates Reclamation's efforts to work with the Council to manage this fund over the next several years in a way that prevents the LCRBDF from going into deficit. The Council encourages Reclamation to work with the Forum and Work Group to continue to monitor the status of the funding imbalance and report to the Advisory Council at its regular meetings.

The Council has observed over the years Reclamation's efforts to be even more effective in administering the Basinwide Program each time with its, generally triennial, Funding Opportunity Announcement (FOA). Much commendation should be given to the Reclamation staff and the NRCS coordinator for work well done. With 2017 being another FOA year, the Council urges Reclamation to continue to stay the course as it builds on lessons learned in prior efforts.

As noted above, deficiency in income to the LCRBDF has reduced available cost share dollars. Among other things, this has led to a reevaluation of the efforts and dollars being expended under the Basin States Program, including moneys provided to the state ag agencies for implementation of the Program. The Council appreciates Reclamation's efforts in participating with the states in reviewing past practices and looking for potential changes as we adapt and move the Program forward in an efficient manner. The heart of past Basin States Program efforts has revolved around the pass-off of EQIP ineligible projects to the state ag agencies. For a number of reasons, over the past few years this piece of the Basin States Program has been less employed. While it is presently a lesser piece of the overall efforts, the Council believes that there are, and may continue to be, worthy and cost-effective EQIP ineligible projects which should be funded under the state ag agencies' programs. There was a full discussion on practices, concerns and future opportunities of these projects at the October Advisory Council Meeting. After discussion, the Council recommends herein that NRCS forward such EQIP ineligible projects, along with pertinent project information, to Reclamation for review and potential funding recommendations by April 1 of each year. The Council also urges that shortly after the receipt of such projects, Reclamation meet with the appropriate state ag agency to review the projects for potential funding under the state ag agency contracts. The Council is

concerned that this last step has not been occurring to the degree that it was initially envisioned.

The continued and efficient operation of the PVU is very important to the Council. In the General Issues section, the Council has expressed its support for the PVU EIS and Alternative Studies efforts and continues to emphasize the need to complete these studies in a timely manner. Last year the EIS schedule was put off one year when a joint decision was made to conduct at least two pilot scale demonstrations of potential brine crystallization technologies. The Council applauds Reclamation's efforts to seek out new technologies which might have less negative impacts. The Council urges Reclamation to quickly move ahead on these efforts so that the overall, revised EIS schedule can be kept. The Council urges that Reclamation make every effort to meet this schedule. The EIS effort continues to require meaningful funding, and the Council appreciates Reclamation's efforts to secure the required funding.

The Council appreciates Reclamation's commitment to the ongoing EIS efforts for the PVU and also encourages it to plan for and secure the needed funding for the planning, design and implementation of the selected alternative(s) after issuance of the Record of Decision in 2019. The Council also requests that Reclamation work with the states on funding options, including potential phasing for implementation of the selected alternative. The Council also recognizes Reclamation's efforts to develop a contingency plan and road map for placing PVU back into operation as quickly as possible if a shut-down were to occur prior to the implementation of a preferred replacement alternative. The Council requests that Reclamation keep the plan up to date as the EIS and Alternatives Study progresses.

With the drilling and testing of small-diameter wells this summer, Reclamation's efforts and the USGS studies, with the participation from the Washington County Water Conservancy District, have furthered the understanding of the salt loading mechanisms at Pah Tempe (La Verkin) Springs, and this final effort should allow for the design of brine-capture facilities. As these studies conclude, the Council requests that Reclamation begin to look at how a project might be built at Pah Tempe Springs. The Council notes that these

springs were authorized for study under the original Salinity Control Act. The Council believes that these future efforts are moving ahead under this original authority and that if a project becomes feasible at these springs, implementation and funding of the project would be under the original authority. In the response to last year's Advisory Council Report, Reclamation indicated that it would confirm the authority question and report back to the Council.

The Council recognizes the significant efforts of Reclamation this past year, both in terms of time and staff, to better understand and update the Salinity Economic Impacts Model (SEIM). A number of meetings were held with state agencies and water users. Additionally, the model structure and format was significantly updated. The Council appreciates these efforts and notes that they will lead to improved forecasts in the Forum's 2017 Review. This process has also recognized and better defined model deficiencies. Several years ago the Council recommended the use of \$150,000 in BSP dollars to be matched with Reclamation funds to hire a contractor to improve data, methods and the model. The Council requests a report on the status of this effort.

In the Management and Budget Recommendations portion of this report, the Council recognizes that it is very difficult, given Reclamation's budget cycle, to make funding recommendations that can influence Reclamation's budget request for the next two fiscal years. The Council recognizes and appreciates Reclamation's efforts which have led to an increase in Basinwide Program funding in FY-2016. The Council recommends that Reclamation seek increased appropriations in FY-2018, FY-2019, and FY-2020 in accordance with Table 1. It is noted that the requested amounts have been decreased due to the very cost effective projects selected in the recent FOA. Reclamation is requested to give a detailed report on its efforts to secure additional funding at the next Advisory Council meeting.

The Council also recognizes Reclamation's efforts to secure additional Basinwide Program funding each year, up to 15 percent. Reclamation's efforts have been very successful in this regard in prior years. However, in FY-2016 the full additional amount was not available.

The Council requests an understanding from Reclamation on this matter. Additionally, the Council recognizes and expresses appreciation to Reclamation for its efforts to “find” additional dollars and stretch the limited dollars to make the Program work. Program staff have been very effective at looking for and bringing in dollars to make things work, and the Council appreciates these extra efforts.

Each fall Reclamation seeks input from the involved federal agencies and prepares a Federal Accomplishments Report (FAR), which report is sent to the Advisory Council before its fall meeting. This is very helpful and the Council urges that this report continue to be provided.

The Council continues to observe the value of the role played by the Science Team. The Council urges Reclamation to continue to convene and staff the Science Team. The Council has recommended for several years the funding of efforts at Desert Lakes to confirm salinity savings from the Huntington-Cleveland Project. Working with the Science Team and the Work Group, the Council requests that Reclamation summarize the data and findings and make recommendations for future study efforts, if any.

The Council recognizes that among the many things Reclamation does to move the Program forward is the biennial preparation of Progress Reports and their submittal to Congress. The Council appreciates the value of these reports. The Council requests that these reports be coordinated with the Work Group and the Forum on the consistency of data and requests that Progress Report No. 25 be finalized soon. It also recommends that Reclamation consider posting past reports on its salinity website.

The Council asks Reclamation to respond in writing to recommendations contained in this report by **May 10, 2017**. This response should include comment on statements made in this section of this report and also on recommendations found in this report under the General Issues section and the Management and Budget Recommendations section.

Bureau of Land Management (BLM)

The Council recognizes that when Congress directed the Secretary of the Interior “to develop a comprehensive program for minimizing salt contributions to the Colorado River from lands administered by the Bureau of Land Management,” BLM was given a daunting task. Creation of a “program” hasn’t always fit within other BLM programs. The Council recognizes and expresses appreciation for the top-to-bottom leadership which BLM is now showing relative to the Congressional charge to BLM. Such leadership is seen by participation in meetings, responses to inquiries, dedication of staff time and funding, commitment to studies, understanding and reporting, and the willingness to think outside the box in regards to integrating salinity control into other BLM programs and objectives. The Council recognizes these efforts, expresses appreciation for the shift in emphasis and encourages BLM to continue on the courses it has laid out.

The Council understands that BLM is nearing completion of a salinity “strategy” document. The Council would appreciate a presentation and report on the document at its spring meeting. The presentation could include the report’s findings and recommendations, an understanding of how the recommendations will be implemented and anticipated impacts to salt loading in the Colorado River.

In 2016 BLM expended \$1.5 million of Soil, Water and Air funds on specific Colorado River salinity control activities. From the Council’s perspective this is a huge milestone and something that has been sought for a number of years. BLM is to be congratulated for this commitment and these efforts. As BLM continues to fund Program efforts at these levels, the Council requests that at the fall Council meeting, and maybe in the FAR, BLM not only report detail of efforts, as was done in the 2016 FAR, but also maybe, in coordination with the Work Group, create a summary table of expenditures and estimated salt savings by state and by control activity.

The Council appreciates BLM’s efforts to create a better understanding of salt mobilization on public lands, including a significant literature review of rangeland salinity control. This has led to a number of presently on-going studies in conjunction with ARS and USGS. The

Council is anxious to hear the results of these studies and asks that BLM work with the Science Team and the Forum's Work Group in reporting out the results of these studies as they become available. The Council has recommended in the past to Reclamation that an important portion of the limited Basin States funds designated for scientific study be spent on this rangeland salinity issue. Reclamation has moved ahead with the funding of some recommended studies that involve BLM, ARS and USGS (approximately \$1 million in the past few years). The Council is not recommending that additional studies be funded with Basin States Program funds until the results of these already funded efforts are reported. Therefore, the Council requests that BLM coordinate with ARS in letting the Work Group know where studies have been reported (i.e., journals, etc.) and report the status of the overall BLM and ARS efforts, as well as plans moving forward.

In the 2016 FAR the Council notes significantly increased efforts to quantify and report the salinity savings associated with various BLM activities. The Council applauds these efforts and requests that BLM continue to refine the process and then report such to the Science Team and Work Group for peer review and input. Figure 16 (page 52) shows a correlation between salinity and sediment loading that is "generally accepted." The Council requests that in their studies BLM independently verify and quantify this generally accepted relationship. Included in this verification would be a review of the changes in flow paths that sediment retention activities may create and, therefore, net changes in salinity values. Such understanding is important in confirming the sediment and salt retention values being reported in the FAR.

The Council notes improved coordination and involvement within BLM. This includes state/field staff, the salinity coordinator, Denver staff and Washington D.C. staff. This is much appreciated and the Council believes that this expanded involvement has, in part, been the reason for recent BLM accomplishments. Previously, the Council urged that BLM select a salinity coordinator whose assignment would be to work exclusively on Colorado River salinity issues. The Council's vision was that the three implementing agencies, with their coordinators domiciled together, would move ahead as a team through daily interfacing of their coordinators. Controlling salt mobilization on BLM administered lands

is a monumental task and the Council requests that BLM continually evaluate staffing needs, ensuring that program goals and objectives are addressed and adequately coordinated with the activities of the other federal agencies.

The Council is concerned about the future of the Paradox Valley Unit. Currently Reclamation is involved in an EIS that addresses the future of the project. There are BLM issues to be addressed, particularly with respect to the potential future use of some BLM lands for PVU alternatives (e.g., evaporation ponds). The Council urges BLM to become very involved with these issues and facilitate, as part of Interior's team, resolution of a workable brine disposal alternative.

The Council requests a written report responding to each of the Council's recommendations by **May 10, 2017**. This response should include comment on statements made in this section of the report as well as recommendations found in the General Subjects section and the Management and Budget Recommendations section.

U.S. Geological Survey (USGS)

The Council wants to express its appreciation for how responsive USGS is in its science role for the Secretary of the Interior in assisting with moving the Salinity Control Program forward. The Council asks that USGS continue work with Reclamation, NRCS, BLM and the Work Group to ensure that the data collection, interpretation and analysis efforts are accurate, effective and contribute to the overall goal of Program implementation.

The Council appreciates the continued coordination and support of the Program provided by USGS with the several individuals involved in assisting with science support. Both the continuity of participation, as well as the ability to bring in specialists when needed, has really provided important strength and understanding to the Program. Participation by USGS on the Science Team, the TAG and Work Group and at Advisory Council and Forum meetings has helped strengthen the overall Program and efforts.

Continued effective operation of the PVU is critical to the Council. USGS is presently working on four or five efforts, some using Basin States Program dollars and some using PVU O&M dollars, to better define the movement and discharge of brine within the groundwater system. USGS is nearing completion of an effort to update the total dissolved solids regression equations and estimate pre and post-project salt loads to the Dolores River. The Council is pleased with and appreciates these efforts. Similarly, the Council urges USGS to continue moving the other efforts forward so that the results can appropriately inform Reclamation and the states on the potential effectiveness of alternatives being considered during the EIS Alternatives Study.

The Council has given its support to detailed investigative efforts by USGS of the Pah Tempe Springs. The Council appreciates USGS's efforts and insight in proposing the final study to finish characterizing the fault zone which leads to brine discharge to the Virgin River. The Council will be watching and asking for periodic updates as this cooperative effort moves forward.

The Council recognizes USGS's critical role on the Science Team in identifying Program science needs and their role in scoping out potential studies and performing many such studies. These efforts are much appreciated. USGS is just completing a major effort to update the SPARROW model and the Council is anxious to hear a report and begin to use the model in future activities. USGS has performed a number of other studies for the Program which have guided thinking and implementation activities. The USGS's role and efforts are recognized by the Council and are much appreciated.

The Council wishes to thank USGS for the priority it gives to funding the basic stream gaging program on the Colorado River and encourages and supports USGS in their efforts to maintain the 20-gage network.

The Council requests that USGS respond to the Council on its continued ability to perform important data gathering, review and study functions by **May 10, 2017**.

U.S. Fish & Wildlife Service (USFWS)

The Council appreciates USFWS's role in finding, reviewing and supporting viable wildlife replacement projects and the service that USFWS provides in reviewing and tabulating replacement by areas and as requested. The Council recommends that USFWS continue these activities and proactively assist the other agencies in moving the Program forward.

As noted in prior years, the Council appreciates the tables provided by USFWS in the FAR. The Council finds them most helpful and requests that the Council continue to be informed each year in the FAR as to the effectiveness of the wildlife replacement efforts and the current status of those efforts. The Council appreciates the USFWS's efforts to review and approve off-site replacement efforts and concurs with the USFWS that such efforts are better than receiving no replacement.

In the past few years the USFWS has participated with other agencies in seeking and reviewing potentially larger, more permanent mitigation opportunities, including ones on federally administered lands. The Council recognizes USFWS's role in the recently completed and successful (and notably under budget) efforts with a project in the Grand Valley and believes that this could be a good model moving forward. The Council appreciates and applauds these efforts as a potentially improved way to provide replacement for fish and wildlife values foregone. The Council would ask that USFWS continue to not only be a participant in these activities, but that it be proactive and a leader in looking for wildlife replacement opportunities which will provide lasting wildlife enhancement and which will fit within the Program opportunities and mandates, including construction of such projects on public lands.

The Council continues to recognize that USFWS, as an Interior agency, has a vital role in assisting other agencies in implementing the Salinity Control Program and encourages the agency to be collaborative in finding solutions for moving the Program forward and working through the issues, as needed, to continue to implement the Program. This collaborative effort is most needed as Reclamation looks for the best opportunities to control the brine through their PVU project. The Council believes that USFWS should

consider itself a part of the Interior team that is charged with finding the best solution to the future of salinity control at the PVU. The Council applauds the USFWS's efforts to realistically look at the issues of incidental take under the 1918 Migratory Bird Treaty Act and requests that the USFWS provide a status report of these efforts to the Council.

The Council requests a written response to the above recommendations by **May 10, 2017**.

ENVIRONMENTAL PROTECTION AGENCY (EPA)

The Council appreciates EPA's determination that Region 8 will be the coordinating region. The Council is pleased with the representative from this region and appreciates his participation at meetings, as well as the materials and responses provided, including EPA's annual write-up in the FAR.

The Council notes that the Forum is in the middle of its triennial review process to review and update its *Water Quality Standards for Salinity, Colorado River System* and asks for EPA's participation in and support of this effort, including the submission of NPDES permit information for those permits administered by EPA in the Colorado River Basin. The Council also asks for continued support of EPA as the individual states forward their standards for approval, as has been done in the past, following the Review process. The Council appreciates the updates given each year by EPA on the status of its efforts to approve such standards, as well as the involvement in water quality control by the Tribes in the Colorado River Basin.

The Council recognizes the importance of the PVU in the overall efforts to improve the water quality of the Colorado River and continues to encourage EPA's participation in the PVU EIS efforts. It also recognizes and appreciates EPA's previous commitments to fast tracking of a UIC permit, if the current injection well were to fail before an appropriate brine disposal alternative has been identified.

The Council has found that Region 8 of the EPA has been most responsive to issues it has been asked to address. The Council would appreciate a response to the above comments by **May 10, 2017**.

INTERNATIONAL BOUNDARY AND WATER COMMISSION (IBWC)

While the Council's responsibilities are for activities occurring above Imperial Dam, the Council wishes to express its appreciation for the efforts and the activities of IBWC, particularly as it deals with sensitive salinity matters. The Council encourages IBWC to continue its coordination with the Council, the Forum and the states on issues affecting the salinity of the Colorado River as it crosses the international boundary.

The Council senses there may be a need to better inform Mexican officials and water users of the benefits to them associated with the Title II Salinity Control Program. The Council suggests that IBWC involve the Forum if there are ways that it can assist with any informational efforts directed to those using water below Imperial Dam. In the past the Forum and its staff has facilitated and conducted tours for designated officials from Mexico. It may be that IBWC would find this again to be helpful. If so, please contact the Forum in this regard.

MANAGEMENT AND BUDGET RECOMMENDATIONS

The funding level recommendations contained in this report are consistent with and support the conclusions regarding the funding required to accomplish the Plan of Implementation (Plan) adopted by the Forum as part of its 2014 Review. The Program includes a significant amount of non-federal cost sharing. The states provide, in total, 30 percent cost share for the Program from the Upper Colorado River Basin Fund and the Lower Colorado River Basin Development Fund. The states are currently the second largest contributor to the Program behind USDA. In addition to the states' cost share, the local farmers cost share in the USDA on-farm program and many who participate in Reclamation's Basinwide Program bring significant dollars to their projects. The non-federal participants (states, landowners, irrigation districts, etc.) are ready in FY-2017 to contribute their share of the Program costs as up-front payments.

Tables 1 and 2 contain the Council's recommendations for federal funding for FY-2017 through FY-2020. These funds are for the construction activities necessary to meet the Program objectives as set forth in the Plan of Implementation. The Forum also supports these recommendations and will seek adequate funding for the Program. The Council wishes to emphasize that funding delays and funding in lesser amounts will render the Program unable to meet the program objectives, as measured in tons of salt-load reduction. The funding recommendations shown in Table 1 are for the federal portion of project implementation costs only and are independent of the cost-share dollars from the Basin States Program. The Council also urges the agencies to provide adequate funding to support operation and maintenance, technical and education assistance, monitoring and evaluation of implemented projects and planning for future projects. The Council recommends funds for these activities be provided in addition to the funds recommended in Tables 1 and 2. The Council requests that in their responses, federal agencies specifically comment on funding for these non-construction activities.

Recognizing the need for the salinity control set forth in the Plan of Implementation, the Council makes the following funding recommendations:

U.S. DEPARTMENT OF THE INTERIOR

Basinwide Program (Reclamation)

Reclamation has already received a FY-2017 appropriation of approximately \$8.162 million for the Basinwide Program. The Council recommends that Reclamation not reduce this appropriation any further through budgetary manipulations and that, in fact, it attempt to increase this appropriation by reprogramming any Reclamation-wide excess FY-2017 appropriations into the Basinwide Program prior to the end of the fiscal year. The Basinwide Program has proven its ability to effectively and efficiently utilize such end-of-the-year funding. Reclamation has provided the Forum and the Council with data that indicates that approximately 11,000 tons per year of new salinity control is needed if Reclamation is to meet its goal set out in the 2014 Review.

There are several funding issues facing the Program. The Forum has created a subcommittee to address these issues, and the Council recommends that Reclamation continue to work with this subcommittee in attempting to identify options and strategies for resolving these issues. Prior to reaching that resolution, the Council has recommended temporary funding level expenditures from the LCRBDF in FY-2018, FY-2019 and FY-2020. The Council recommends that as the FY-2019 budget process progresses, Reclamation make every attempt to budget \$10,283,000 to the Basinwide Program and that as it begins budgeting for FY-2020 it budgets the same amount. These funding requests are significantly reduced from previous recommendations by the Council. The Council believes that the funding levels it had previously recommended will ultimately be required if the Program is to maintain both the short and long-term goals set out in its most recent Plan of Implementation which will meet or exceed the requirements established by the salinity standard adopted by the States and approved by EPA for the Colorado River System. The Council appreciates Reclamation's efforts to work with the Council to appropriately manage the funds over the next several years and to assist the Forum as it studies and develops options for generation of future revenues. Because large appropriations will be

required in the future, the recommended funding levels are the minimum levels that are acceptable for continued success of the Program.

The Council requests that Reclamation continue to budget sufficient funds for required operation and maintenance of constructed units and for plan formulation, including the PVU alternatives studies and EIS effort. The Council requests that Reclamation also address anticipated funding needs for implementation of the preferred alternative in its future budget formulation. The Council also recognizes that Reclamation receives an appropriation to its Colorado River Water Quality Improvement Program. While this program is outside of the Title II funding, there is meaningful overlap and benefits between the two efforts, including supporting staff and maintaining stream gaging and monitoring activities. Therefore, the Council requests that Reclamation support the funding of this line item so that it does not draw dollars away from implementation efforts under the Title II program.

Bureau of Land Management

In the past, BLM has not been able to quantify its salinity control accomplishments, and the Council has struggled with BLM funding recommendations. BLM's salinity control funding comes through its Soil, Water and Air Program. The Council requests that BLM continue to fund projects in the Colorado River Basin under this program which, among other objectives, will improve the water quality within the Basin. In addition, this past year BLM, through a manager's discretion, has set aside approximately \$1.5 million for specific salinity control activities within the Colorado River Basin. The expenditure of the funds in this manner has proven very beneficial to the Program by developing and testing methods of controlling salinity on public lands. The Council appreciates BLM's efforts to make more money available in FY-2016 and 2017 for salinity control activities. Moving forward, the Council recommends \$1.5 million for the next four fiscal years be set aside for specific salinity control on public lands within the Basin. If BLM is successful in creating a line-item Colorado River Basin salinity control program, the Council asks that this amount of funding be requested.

U.S. DEPARTMENT OF AGRICULTURE

EQIP (NRCS)

The Council appreciates levels of funding made available to the salinity control effort through EQIP. Traditionally, on-farm salinity control has been some of the most cost-effective salinity efforts available. While much of the less expensive salinity control has now been accomplished and there has been a notable increase in on-farm salinity control costs in the last couple of years, cost-effective salinity control opportunities still exist. Continued funding is needed to meet the goal identified in the 2014 Review for the Department of Agriculture. The Council notes and expresses appreciation for the allocation of EQIP funding in FY-2017 consistent with the Three-Year Funding Plan.

The Council has determined that it will make its recommendations for the allocation of EQIP funding for the salinity control effort based on the Three-Year Funding Plan developed by the NRCS State Conservationists for Colorado, Utah and Wyoming. The funding allocations made by NRCS under EQIP generally do not come out until several months after the new fiscal year has begun and, therefore, input to NRCS is more immediate and projections out four years not nearly as germane. Further, the Three-Year Funding Plan put forth by the State Conservationists does not go out to FY-2020. However, to be consistent with other agencies, the Council has preliminarily used the FY-2019 amount for FY-2020.

Based on the information provided in the Three-Year Funding Plan and in support of that plan, the Council recommends the following fiscal year allocations for salinity control in the Basin: FY-2017 - \$14,299,000, FY-2018 - \$14,467,750, FY-2019 - \$14,897,250 with \$14,897,250 as a preliminary amount for FY-2020.

Tables 1 and 2 summarize the Council's funding recommendations to the federal agencies. It should be noted that the funds identified in the tables do not include funds needed to continue to operate and maintain salinity control features, nor for the requisite planning

and investigation studies necessary for a successful and cost-effective program. The Council expects that where there is a responsibility to provide funding for these purposes, the agencies will also include the needed additional funding in their budgets.

TABLE 1
Colorado River Salinity Control – Department of the Interior
Funding Recommendations (2017-2020)
December 31, 2016

	Fiscal Years			
	2017	2018	2019	2020
Bureau of Reclamation ^{1,2} Basinwide Program	\$8,162,000	\$10,283,000	\$10,283,000	\$10,283,000
Bureau of Land Management ³ Salinity Specific Funding from the Soil, Water and Air Program	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000

Notes:

1. The Council anticipates and requests that Reclamation budget sufficient funds for required operation and maintenance of constructed units and for plan formulation in addition to these amounts.
2. Funding recommendations in Table 1 do not include funds recommended for studies and future implementation at the PVU. The Council needs the assistance of Reclamation to determine the level of funding needed to support the PVU.
3. The Council anticipates and requests that BLM budget sufficient funds for inventory and ranking, planning, maintenance, monitoring, evaluation and support.

TABLE 2
Colorado River Salinity Control – Department of Agriculture (EQIP)
Funding Recommendations (2017-2020)
December 31, 2016

STATE	FY-2017 ¹	FY-2018 ¹	FY-2019 ¹	FY-2020 ²
COLORADO				
FA	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000
UTAH				
FA	\$7,114,000	\$7,282,750	\$7,712,250	\$7,712,250
WYOMING				
FA	\$185,000	\$185,000	\$185,000	\$185,000
TOTALS	\$14,299,000	\$14,467,750	\$14,897,250	\$14,897,250

Notes:

1. Based on State Conservationists' Three-Year Funding Plan (2017-2019)
2. Same as FY-2019. Advisory Council recommendation for guidance when developing 2018-2020 Three-Year Funding Plan

CONCLUSION

The Council recognizes and appreciates its responsibility to submit comments and recommendations on salinity control activities to the federal agencies. As indicated in the General Comments section, the Council is pleased with the agencies' efforts put forth in 2016 and looks forward to providing a framework for future coordination and consultation. The Council requests that written responses to this report be provided by **May 10, 2017**. Responses should be sent to the Council's Vice Chairman, Mr. Eric Millis, at the following address:

Eric Millis, Vice Chairman
Colorado River Basin Salinity Control Advisory Council
1594 West North Temple, Suite 310
Salt Lake City, Utah 84116

It would be appreciated if copies of the responses are sent to Mr. Kib Jacobson, Reclamation's Program Manager for the Colorado River Basin Salinity Control Program (who also serves as the Designated Federal Officer to the Colorado River Basin Salinity Control Advisory Council), and to the Forum's Executive Director, Mr. Don Barnett, at the following addresses:

Kib Jacobson, Program Manager
Colorado River Basin Salinity Control Program
U.S. Bureau of Reclamation
125 S. State Street, Room 8100
Salt Lake City, UT 84138

Don A. Barnett, Executive Director
Colorado River Basin Salinity Control Forum
106 West 500 South, Suite 101
Bountiful, UT 84010

Attachment A

Advisory Council Charter

**U.S. Department of the Interior
and
U.S. Department of Agriculture
and
U.S. Environmental Protection Agency**

**Colorado River Basin Salinity Control
Advisory Council**

Charter

1. **Committee's Official Designation.** The official designation of this Federal advisory committee is the Colorado River Basin Salinity Control Advisory Council (Council).
2. **Authority.** The Council was established by Section 204(a) of the Colorado River Basin Salinity Control Act (43 USC § 1594), Public Law 93-320, Title II, as amended by Public Laws 98-569, 104-20, 104-27, 106-459, and 110-246 (Act), and is regulated by the Federal Advisory Committee Act (FACA), as amended, 5 U.S.C. Appendix 2.
3. **Objectives and Scope of Activities.** The Council provides advice and recommendations to the Secretaries of the Departments of the Interior (Interior) and Agriculture (Agriculture) and the Administrator of the Environmental Protection Agency (EPA) as stated in paragraph 4.
4. **Description of Duties.** The Council shall be advisory only and shall:
 - a. Act as liaison between both the Secretaries of the Interior and Agriculture and the Administrator of the EPA and the States in accomplishing the purposes of Title II;
 - b. Receive reports from the Secretary of the Interior on the progress of the salinity control program and review and comment on said reports;
 - c. Recommend to the Secretary of the Interior and the Administrator of the EPA appropriate studies of further projects, techniques, or methods for accomplishing the purposes of Title II; and
 - d. Provide to the Secretary of the Interior advice and consultation regarding implementation of the Basin States Program to carry out salinity control activities.
5. **Agency or Official to Whom the Committee Reports.** The Council will report to the Secretaries of the Interior and Agriculture, and the Administrator of the EPA through the Designated Federal Officer (DFO).
6. **Support.** Support for the Council will be provided by the Department of the Interior, Bureau of Reclamation.
7. **Estimated Annual Operating Cost and Staff Years.** The annual operating costs associated with supporting the Council's functions are estimated to be \$75,000, including all direct and indirect expenses and 0.20 Federal staff years support.

8. **Designated Federal Officer.** The DFO is the Colorado River Salinity Control Program Manager with the Bureau of Reclamation, and a full-time Federal employee appointed in accordance with Agency procedures. The DFO will approve or call all Council and subcommittee meetings, prepare and approve all meeting agendas, attend all Council and subcommittee meetings, adjourn any meeting when the DFO determines adjournment to be in the public interest, and chair meetings when directed to do so by the Secretary.
9. **Estimated Number and Frequency of Meetings.** The Council will meet approximately twice a year, and at such other times as designated by the DFO.
10. **Duration.** Continuing.
11. **Termination.** The Council is subject to biennial review and will be inactive 2 years from the date this Charter is filed, unless prior to that date, it is renewed in accordance with Section 14 of the FACA. The Council will not meet or take any action without a valid current charter.
12. **Membership and Designation.** Membership of the Council is specified in Title II as being comprised of no more than three representatives from each of the seven Basin States (Wyoming, Colorado, Utah, New Mexico, Arizona, Nevada, and California). The representatives will serve at the discretion of the Governors of the state that appointed them.

Members of the Council serve without compensation. However, while away from their homes or regular places of business, members engaged in Council or subcommittee business approved by the DFO may be allowed travel expenses, including per diem in lieu of subsistence, in the same manner as persons employed intermittently in Government service under Section 5703 of Title 5 of the United States Code.

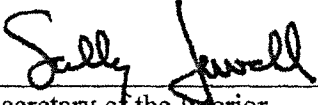
13. **Ethics Responsibilities of Members.** No Council or subcommittee member will participate in any specific party matter including a lease, license, permit, contract, claim, agreement, or related litigation with Interior, Agriculture, and EPA in which the member has a direct financial interest. Members of the Board shall be required to disclose to the DFO their direct or indirect interest in leases, licenses, permits, contracts, claims, grants, or any specific party matter that involve lands or resources administered by Interior, Agriculture, or EPA, or any litigation related to those matters.
14. **Subcommittees.** Subject to the DFO's approval, subcommittees can be formed for the purposes of compiling information or conducting research. However, subcommittees must act only under the direction of the DFO and must report their recommendations to the full Council for consideration. Subcommittees must not provide advice or work products directly to the Agency. Subcommittees will meet as necessary to accomplish their assignments, subject to the approval of the DFO.
15. **Recordkeeping.** The records of the Council, and formally and informally established subcommittees of the Council, shall be handled in accordance with General Records Schedule 6.2, and other approved Agency records disposition schedule. These records shall be available for public inspection and copying, subject to the Freedom of Information Act, 5 U.S.C. 552.

**U.S. Department of the Interior
and
U.S. Department of Agriculture
and
U.S. Environmental Protection Agency**

**Colorado River Basin Salinity Control
Advisory Council**

Charter

Counterpart Signatory Page



Secretary of the Interior

JUL 06 2016

Date Signed

SEP 07 2016

Date Filed

**U.S. Department of the Interior
and
U.S. Department of Agriculture
and
U.S. Environmental Protection Agency
Colorado River Basin Salinity Control
Advisory Council**

Charter

Counterpart Signatory Page


Secretary of Agriculture

AUG 23 2016
Date Signed

SEP 07 2016
Date Filed

**U.S. Department of the Interior
and
U.S. Department of Agriculture
and
U.S. Environmental Protection Agency**

**Colorado River Basin Salinity Control
Advisory Council**

Charter

Counterpart Signatory Page



Administrator
Environmental Protection Agency

AUG 1 2016

Date Signed

SEP 07 2016

Date Filed

Attachment B

ADVISORY COUNCIL MEMBERSHIP

December 31, 2016

ARIZONA

Clint Chandler
Phoenix, Arizona

Krista Osterberg
Phoenix, Arizona

Suzanne Ticknor
Phoenix, Arizona

NEVADA

John J. Entsminger
Las Vegas, Nevada

Jayne Harkins
Las Vegas, Nevada

Jason King
Carson City, Nevada

UTAH

Eric Millis
Salt Lake City, Utah

Gawain Snow
Vernal, Utah

Leah Ann Lamb
Salt Lake City, Utah

CALIFORNIA

Bill Hasencamp
Los Angeles, California

Tom Howard
Sacramento, California

Tanya Trujillo
Glendale, California

NEW MEXICO

Tom Blaine
Santa Fe, New Mexico

Trais Kliphuis
Santa Fe, New Mexico

WYOMING

Chad Espenscheid
Big Piney, Wyoming

Patrick T. Tyrrell
Cheyenne, Wyoming

David Waterstreet
Cheyenne, Wyoming

COLORADO

James Eklund
Denver, Colorado

Pat Pfaltzgraff
Denver, Colorado

David W. Robbins
Denver, Colorado

Attachment C

Federal Responses to the 2015 Advisory Council Report



United States Department of Agriculture

COPY

MAY 05 2016

Mr. David Robbins
Chairman
Colorado River Basin Salinity Control Advisory Council
1660 Lincoln Street, Suite 2720
Denver, Colorado 80264

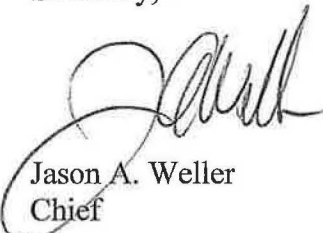
Dear Mr. Robbins:

Thank you for your letter of March 15, 2015, and the enclosed 2015 Annual Report on the Colorado River Basin Salinity Control Program. I apologize for the delay in my response.

The Natural Resources Conservation Service appreciates the support and commitment of the Colorado River Basin Salinity Control Advisory Council to reduce salinity loading in the Colorado River Basin. Your long-standing support to improve the environment and economies of Colorado-River-water users is to be commended. The enclosure addresses each of your comments and recommendations as requested.

Again, thank you for writing and for your continued leadership and support of Colorado River Basin salinity control activities.

Sincerely,



Jason A. Weller
Chief

Enclosure

cc:

Don A. Barnett
Executive Director
Colorado River Basin Salinity Control Forum
106 West 500 South, Suite 101
Bountiful, Utah 84010

RECOMMENDATION

The Council recognizes the key and essential role that NRCS has played in reducing the salt load of the Colorado River for the benefit of downstream agricultural and municipal users. Providing these benefits has resulted from a coordinated effort between the three State NRCS offices in the Upper Basin and also the cooperation they have provided when working with other Federal agencies, the TAG and the Work Group. The Council recognizes the improvements in the implementation of NRCS's program that have been realized through the efforts of NRCS individuals involved in the Program. The Council has observed that the role of informed and participating State Conservationists is most important with respect to the success of the Program and expresses its appreciation to these dedicated individuals.

NRCS COMMENT

NRCS will continue to have an appropriate presence involved in the various meetings of the partners. Our plan is that one or more of the state conservationist will attend the Forum and FAC meetings and at least one of their staff will attend the Work Group and TAG meetings. The salinity coordinator is tasked with keeping Leadership informed about critical issues so that NRCS can provide information and decision-making in an effective and timely manner.

RECOMMENDATION

The Council believes that the efforts of NRCS's Salinity Control Program Coordinator have also been critical to this success. The Council sees an absolute need to continue this position and requests that it always be filled with a motivated and well qualified individual. The NRCS has many dedicated employees who have worked hard to accomplish irrigation improvements and advance the purposes of the Program. Recently, two well-seasoned individuals who have provided key engineering and technical support in Colorado and Utah have retired. These individuals also authored the annual Monitoring and Evaluation (M&E) Reports. These vacant positions have not been filled, and the Council urges NRCS to address these important reporting functions and responsibilities.

NRCS COMMENT

NRCS has taken interim steps to ensure that the M&E Reports and process are completed and conducted in a satisfactory manner. These reports should be available for the Advisory Council's use by May of 2016. NRCS also expects to have the Utah position filled in mid-spring of 2016 and Colorado has made contractual arrangements for its M&E tasks through the summer of 2016.

RECOMMENDATION

The three State Conservationists, working together, prepare a 3-year funding plan for the salinity control implementation and submit that plan to headquarters. The Council has found that significant effort and good thought has gone into this plan. It is a realistic determination of what might be accomplished each of the next 3 years with adequate funding. Each year the Council reviews and has supported the 3-year funding plans. It was concerning to the Council to find that fewer funds were allocated than were requested in fiscal year (FY) 2015. The amount of \$13.9 million in the Environmental Quality Incentives Program (EQIP) financial assistance funding was requested and only \$12.1 million was allocated. Even more concerning is the 2016 allocation of \$10 million versus the \$14.3 million identified in the 3-year funding plan and

requested by the Council. The Council requests an explanation as to why this occurred and requests that funding allocations be consistent with the 3-year plan occur in 2017. For every dollar of EQIP funds allocated, an additional \$.43 is added to the Program as cost-share from Basin Funds. Without the Federal expenditure, these funds are not available. These Basin States Program funds are used for additional on-farm contracts and for many other purposes, including the support of NRCS staff.

NRCS COMMENT

The demands for EQIP funding continue to grow and are impacted by the dynamics of the economy, critical natural resource concerns, and responses to extreme weather conditions. In FY 2015, sequestration reduced mandatory programs such as EQIP by seven percent or more. In 2016, in addition to the allocation to General EQIP category, no less than 24 other critical concerns, including salinity must be considered in the allocation process. The continuing general drought in the Western U.S. and the exceptional and perhaps, unprecedented drought in California demands a significant response. \$15M was allocated in 2016 to drought; presumably some of these funds will find their way into water efficiency projects that have salinity benefits in the three States.

Other significant allocations include \$30M to the Mississippi River Basin Initiative to help forestall regulatory action from nutrients, pesticides, sediment and habitat loss in a 12-State region, \$25M to Air Quality to help clients avoid regulations in non-attainment areas, \$30M to StrikeForce initiatives to assist under-served groups including Tribes, \$22M to help clients install measures to preclude Threatened and Endangered (T&E) listing of sage grouse, and \$10M to address issue in the California Bay Delta, to name a few.

The allocation process attempts to take all pertinent factors into account, including and especially the contributions provided by partners. The Colorado River Basin Salinity Control Program is widely and internationally recognized as a model for success. The list of accomplishments is long and lasting and the threat of regulation of agricultural producers in the Basin from salt loading seems less than some other areas of the Nation dealing with non-attainment of air quality and water quality parameters, particularly toxic constituents.

NRCS Leadership will continue to rely on the assessments of the state conservationist to define and quantify the resource needs in their States when considering funds allocations.

RECOMMENDATION

The Council knows that Conservation Technical Assistance funding is most important when producers first contact NRCS about their involvement in the salinity program. The Council appreciates the use of these funds in the past and urges that adequate funding be made available in the future.

The Council recognizes the interplay between broad policy efforts and actual implementation of contracts by those in the field and the importance of organizing and coordinating the offices of area conservationists and district conservationists in such a way that the efficient implementation of the Program will continue and requests that NRCS make every effort to assure that each of these offices is adequately staffed. The Council also recommends that NRCS pursue salinity

control in established salinity control areas before going to other parts of the Basin to expend salinity EQIP funds.

NRCS COMMENT

NRCS will continue every effort to meet demands by matching staff to workload. NRCS also will continue to work with our local and State partners to find innovative ways to stretch human resources including the use of contribution agreements, Technical Service Providers and other partnership arrangements.

NRCS will continue to focus its salinity activities within the 12 project areas; only going to other parts of the Basin if opportunities would be lost and funds might be redirected to other programs outside the Basin.

RECOMMENDATION

The Monitoring and Evaluation Reports prepared each year are most helpful, and the Council applauds the involved NRCS staff for this effort. The Council urges that this work continue and notes that retired NRCS engineers will be much missed for their good work in this effort.

NRCS COMMENT

NRCS recognizes the talent that is lost when its senior employees retire and we use all available options and resources to meet the needs. We have taken steps in each state to assure that the M&E Reports and the process will be timely, effective, and successful in 2016 and beyond.

RECOMMENDATION

In the future, the Salinity Control Program may need to turn more and more to grazing lands (rangelands). The Bureau of Land Management (BLM), Agricultural Research Service (ARS), and U.S. Geological Survey (USGS) are now engaged in studies, in part funded by Basin States Program funds, to unravel the complex nature of salt loading from grazing lands. NRCS' salinity coordinator has been most helpful as this effort has moved ahead. NRCS has leading knowledge in some aspects of this complex puzzle. The Council requests that NRCS continue to support this effort in any way it can.

NRCS COMMENT

NRCS will continue to coordinate with BLM, ARS, and USGS to determine where NRCS programs and technical expertise can facilitate salt control on grazing land. In particular, NRCS has vast experience and knowledge in establishing and maintaining vegetation of grazing lands if, presumably, vegetation management manifests as the most effective salt control technique.



United States Department of Agriculture
Research, Education and Economics
Agricultural Research Service

April 28, 2016

Mr. David W. Robbins, Chairman
Colorado River Basin Salinity Control
Advisory Council
1660 Lincoln Street, Suite 2720
Denver, CO 80264

Dear Mr. Robbins,

Thank you for the opportunity to respond to the Advisory Council's recommendations to the USDA Agricultural Research Service in the 2015 Annual Report on the Colorado River Basin Salinity Control Program. The Agricultural Research Service is continuing to evaluate salt mobility and transport process on rangelands in the Upper Colorado River Basin (UCRB) in partnership with the BLM and USGS and throughout the Upper and Lower CRB with continued BLM support. This research is expected to continue for the next several years as we conduct additional experiments, sampling, processing, interpretation, and modelling in Utah, Colorado, and New Mexico.

The Agricultural Research Service would be honored to participate in the Salinity Science and Work Group meetings addressing this issue either in person or through teleconferences when requested. In the preliminary research conducted to date we have found that salt loadings or total dissolved solids (TDS) in runoff are highly correlated with sediment yield on rangelands. Therefore, we are evaluating if by reducing soil erosion on rangeland uplands we could potentially reduce TDS in the Colorado River. I reported in person on findings and next steps on reducing salinity from rangelands in the Upper Colorado River Basin to the Advisory Council in May, 2015. I have participated in numerous teleconferences with the Science and Working Groups over the last three years where we have discussed the ARS and BLM research findings-to-date. In collaboration with the BLM, the initial report is in preparation on these findings and will interpret the first two years of field sampling to the U.S. Department of Interior Agencies (USFWS, Reclamation, BLM, and USGS), the EPA, NRCS, and the Work Group and Salinity Forum within the next several months upon completion. In addition, we have several professional manuscripts that will be submitted for publication in peer-reviewed journals soon.

Great Basin Rangelands Research
920 Valley Road, Reno, NV 89512
Voice: 775 784-6057 EXT: 229 Fax: 775 784-1712
Email: mark.weltz@ars.usda.gov

Agricultural Research - Investing in Your Future



United States Department of Agriculture

Research, Education and Economics
Agricultural Research Service

After approval, copies will be made available to the Advisory Council and the Science and Work Groups. I will keep the Salinity Forum, the Council, and the Science and Work Groups updated as needed on all ARS salinity-related projects.

The Agricultural Research Service appreciates the Council's time and consideration taken for its acknowledgements and recommendations as presented in the 2015 Annual Report. We will continue to conduct research on methods of managing rangelands to reduce salinity within the Colorado River Basin.

If you have any questions or concerns, please contact me.

Sincerely,

A handwritten signature in blue ink that reads "Mark A. Weltz".

Dr. Mark A. Weltz

Rangeland Hydrologist, Research Leader

cc:

Dr. Andrew C Hammond
Pacific West Area, Area Director
USDA Agricultural Research Service 800 Buchanan Street
Albany, CA, 94710-1105

Dr. Marlen Eve
National Program Leader
USDA Agricultural Research Service
Room 4-2292, 5601 Sunnyside Avenue
Beltsville, MD, 20705-5140

Great Basin Rangelands Research

920 Valley Road, Reno, NV 89512
Voice: 775 784-6057 Fax: 775 784-1712
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United States Department of Agriculture
Research, Education and Economics
Agricultural Research Service

Dr. Sally Schneider
Deputy Administrator, Natural Resources and Sustainable Agriculture Systems
USDA ARS
Room 4-2288, 5601 Sunnyside Ave.
Beltsville, MD 20705-5139

Mr. Kib Jacobson, Program Manager
Colorado River Basin Salinity Control Manager
U.S. Bureau of Reclamation
125 S. State Street, Room 8100
Salt Lake City, UT 84138

Mr. Don A. Barnett, Executive Director
Colorado River Basin Control Forum
106 West 500 South, Suite 101
Bountiful, UT 84010

Great Basin Rangelands Research
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Email: mark.weltz@ars.usda.gov

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United States Department of the Interior

BUREAU OF RECLAMATION
Upper Colorado Regional Office
125 South State Street, Room 8100
Salt Lake City, UT 84138-1102

IN REPLY REFER TO:

UC-240
RES-9.00

MAY 05 2016

Mr. David W. Robbins, Chairman
Colorado River Basin
Salinity Control Advisory Council
1660 Lincoln Street, Suite 2720
Denver, CO 80264

Subject: The Bureau of Reclamation's Response to the Specific Recommendations on the
Colorado River Basin Salinity Control Program's 2015 Annual Report

Dear Chairman Robbins:

On behalf of Commissioner Estevan López, I am responding to your letter of March 15, 2016, regarding the 2015 Annual Report on the Colorado River Basin Salinity Control Program (Salinity Control Program), prepared by the Colorado River Basin Salinity Control Advisory Council (Council). The Council contributes greatly to the success of the Salinity Control Program. We truly value your partnership, participation, and recommendations in the Salinity Control Program. The Salinity Control Program continues to make measurable progress in controlling the salinity problem. Our responses to the specific recommendations in the report for Reclamation are enclosed.

We thank you for your support and for being such an active and aggressive partner in the Salinity Control Program. If you have any questions, please contact Mr. Kib Jacobson by telephone at 801-524-3753 or by e-mail at kjacobson@usbr.gov.

Sincerely,



Brent Rhees
Regional Director

Enclosure

cc: Bureau of Reclamation
Designated Federal Officer
Mr. Kib Jacobson
125 South State Street, Room 8100
Salt Lake City, UT 84138

Central Arizona Water Conservancy District
Chairman, Technical Advisory Group
Mr. Patrick Dent
P.O. Box 43020
Phoenix, AZ 85080

✓ Colorado River Basin Salinity Control Forum
Executive Director
Mr. Don Barnett
106 West 500 South, Suite 101
Bountiful, UT 84010

Reclamation's Response to the Specific Recommendations on the Colorado River Basin Salinity Control Program's 2015 Annual Report

Paradox Valley Unit (PVU)

COUNCIL COMMENTS AND RECOMMENDATIONS - General Issues: Reclamation recently provided a revised EIS schedule. The Council urges Reclamation make every effort to meet this schedule.

Response: The EIS continues to move forward on schedule to have the Record of Decision issued in early FY-18. The planning efforts and studies are funded by appropriations and by transferring funds not utilized in other programs. Reclamation's Western Colorado Area Office staff and Salinity Control Program staff, as usual, will monitor the process and provide input and guidance.

COUNCIL COMMENTS AND RECOMMENDATIONS, Department - Reclamation: The Council requests that Reclamation not only plan to advance the ongoing EIS efforts for the PVU, but that it also secure the needed funding for the planning, design and implementation of the selected alternative(s) after issuance of the Record of Decision in 2018. The Council also requests that Reclamation work with the states on funding options, including potential phasing for implementation of the selected alternative. The Council also recognizes Reclamation's efforts to develop a contingency plan and road map for placing PVU back into operation as quickly as possible if a shut-down were to occur prior to the implementation of a preferred replacement alternative. The Council requests that Reclamation keep the plan up to date as the EIS and Alternatives Study progresses.

Response: The need to program and budget funding for planning and design of the selected alternative in FY-18 is known by Reclamation budget staff and management and was included in the FY-18 budget process. A roadmap has been developed for actions necessary to implement a second injection well alternative in the event the current well fails or deep well injection becomes the preferred alternative.

The Contingency Plan and the previously mentioned roadmap to a second injection well have been developed and outlines the major steps necessary to implement a second injection well if that were to become the preferred contingency option. The actions outlined in the roadmap are largely dependent and/or dictated by the results of preceding investigations which in some instances prevents concurrent implementation. The EIS process is in the alternatives development stage with all previously identified alternatives being considered. Additional studies are required and are being implemented to determine the technical, economical and regulatory viability of each alternative.

COUNCIL COMMENTS AND RECOMMENDATIONS - General Issues: The Council has recently learned that the reduction in salt loading by the past PVU efforts is now in question.

Response: Reclamation also recognizes the importance of work with the USGS to answer any salt reduction questions at the PVU. The Reclamation staff at the PVU are currently working with the USGS to finalize studies that will produce more information.

Science Team

COUNCIL COMMENTS AND RECOMMENDATIONS - General Issues: The Council also appreciates the efforts of the Science Team in providing the TAG and the Work Group valuable analysis of various issues facing the Program and reviewing potential study efforts. The Council recommends that this support continue.

Response: Reclamation also has found the efforts of the Science Team efforts to be very valuable and will continue support the Science Team.

Pah Tempe (La Verkin) Springs

COUNCIL COMMENTS AND RECOMMENDATIONS - General Issues: Reclamation's efforts, USGS studies and the participation from the Washington County Water Conservancy District have moved the understanding of the salt loading mechanisms at Pah Tempe (La Verkin) Springs ahead to a point where it is clear additional studies may be able to identify if a salinity control project is feasible at this site. The Council urges Reclamation to move ahead with these additional studies. The Council notes that these springs were authorized for study under the original Salinity Control Act. The Council believes that these future efforts are moving ahead under this original authority and that if a project becomes feasible at these springs, implementation and funding of the project would be under the original authority.

Response: Reclamation in consultation with and with recommendations from the Council will fund appropriate studies of Pah Tempe Springs to determine if there could be a salinity control project. Reclamation will discuss with the Department of Interior Solicitors if there is authority in the Salinity Control Act to implement and fund a salinity control project at Pah Tempe Springs. Reclamation will consult with the Council on its discussions with the Solicitor.

Progress Reports

COUNCIL COMMENTS AND RECOMMENDATIONS - General Issues: The Council requests that these reports be coordinated with the Work Group and the Forum on the consistency of data and requests that Progress Report No. 25 be finalized soon. It also recommends that Reclamation consider posting past reports on its salinity website.

Response: Reclamation agrees with the Council that the Progress Reports be coordinated with the Work group and Forum so that there is a consistency of data, especially, with the Forum's Triennial Review. Progress Report 25 is in its final review within Reclamation and will be provided to the Forum's Work Group for review. Once Progress Report 25 is

published it will be posted on Reclamation's Salinity Program website. Progress Reports 21 to 24 are already posted on the website.

Charter

COUNCIL COMMENTS AND RECOMMENDATIONS - General Issues: The Council offers to assist in this effort and requests the Charter be renewed this July and also requests that it be advised if important changes are being proposed.

Response: Staff within the Department of Interior (DOI) were informed the end of January that it was the desire of the Council to get the Charter renewed in July. They were also made aware that the Council recommended in this Annual Report that the Charter be renewed in July. Salinity Coordinators in the USDA-NRCS and EPA have informed the DOI staff that contacts within their agencies are ready to move the Charter through for signature once it is received.

Economic Damages Model

COUNCIL COMMENTS AND RECOMMENDATIONS, Department - Reclamation: Reclamation has been working with the Work Group to evaluate and revise the economic damages model. The Council recommends that this continue. In October the Council recommended that Reclamation use \$150,000 of Basin States Program dollars to be matched with \$150,000 of appropriated dollars to hire a consultant to update the economic damages model. The Council requests that Reclamation make updating and improving the salinity damages calculations a priority and that this study move forward expeditiously.

Response: Reclamation agrees with the Council that the economic damages model needs to be updated and improved in a timely manner. Reclamation staff are revising and updating the model. Reclamation is also working with Work Group members from Nevada, Arizona, and California to identify, collect, and include inputs from those states in the model. Reclamation appreciates the recommendation from the Council to use \$150,000 from the Basin States Program to be matched with \$150,000 of appropriated funds to hire a consultant to update the economic damages model. This effort is being led by Reclamation's Southern California Area Office. It is expected that a consultant will be under contract by the end of the fiscal year.

Funding – Lower Colorado River Basin Development Fund (LCRBDF)

COUNCIL COMMENTS AND RECOMMENDATIONS, Department - Reclamation: The Council appreciates Reclamation's efforts to work with the Council to manage this fund over the next several years in a way that avoids the LCRBDF going into deficit. The Council encourages Reclamation to continue to work with the Forum and Work Group to study and develop options and project future revenues to the fund.

Response: Staff from Reclamation's Upper and Lower Colorado Regions will continue to work with the Forum and the Work Group to implement strategies and procedures to avoid the LCRBDF going into a deficit. Reclamation staff will continue to work with the Forum and Work Group to study and develop options to increase the revenues in the LCRBDF.

MANAGEMENT AND BUDGET RECOMMENDATIONS, Department - Reclamation:

There are several funding issues facing the Program. The Forum has created a subcommittee to address these issues, and the Council recommends that Reclamation continue to work with this subcommittee in attempting to identify options and strategies for resolving these issues. Prior to reaching that resolution, the Council has recommended temporary funding level expenditures from the LCRBDF in FY-2017, FY-2018 and FY-2019.

Response: See Response above.

Also, Reclamation appreciates the Council's recommended temporary funding level expenditures from the LCRBDF in FY-2107, FY-2018, and FY-2019. Reclamation, in consultation with the Council, will try to obtain the funding levels recommended by the Council.

Funding

COUNCIL COMMENTS AND RECOMMENDATIONS, Department - Reclamation:

The Council recommends that Reclamation seek increased appropriations in FY-2017, FY-2018, and FY-2019 in accordance with Table 1. It is noted that the requested amounts have been decreased due to the very cost effective projects selected in the recent FOA. Reclamation is requested to give a detailed report on its efforts to secure additional funding at the next Advisory Council meeting.

Response: Reclamation appreciates the support the Basin States provide to budget funding requests for the Salinity Control Program. Reclamation's UC Region takes every opportunity to make known the successes and the needs of the Salinity Control Program at all levels of Reclamation, within the Department and the Office of Management and Budget (OMB). Reclamation is making every effort to fund the Basinwide Program at the highest levels possible while balancing the needs of other high priority projects and programs within a flat-to-declining-budget environment. Reclamation welcomes the opportunity to work with the Basin States to identify and prioritize the activities to be funded by appropriations received for the Salinity Control Program. Reclamation will report to the Council on its efforts to secure additional funding.

MANAGEMENT AND BUDGET RECOMMENDATIONS: The Council also urges the agencies to provide adequate funding to support operation and maintenance, technical and education assistance, monitoring and evaluation of implemented projects and planning for future projects. The Council recommends funds for these activities be

provided in addition to the funds recommended in Tables 1 and 2. The Council requests that in their responses, federal agencies specifically comment on funding for these non-construction activities.

Response: In FY15 for operation, maintenance, monitoring, and technical assistance of the salinity units of Grand Valley, PVU, and McElmo Creek, Reclamation expended appropriations of \$1,685,205, \$2,681,205 and \$402,500, respectively. In FY16, \$2,772,000, \$3,899,000 and \$678,000 have been appropriated for operation, maintenance, monitoring, and technical assistance of the same units respectively. Reclamation feels that the units are being adequately funded to operate, maintain, monitor, and provide technical assistance.

In FY 2015 and in FY 2016, \$380,000 have been appropriated into the Colorado River Water Quality Program (CRWQP) with the same amount anticipated to be appropriated in FY 2017. In FY 2015 an additional \$300,000 was transferred to the CRWQP and it is anticipated that \$300,000 of additional funds will be transferred at the end of this fiscal year. Funds in the CRWQP are used for staff salaries, monitoring and evaluation of implemented projects, technical and education assistance, and planning for future Salinity Control Program activities. There is no cost-sharing from the Basin Funds applied to these funds.

MANAGEMENT AND BUDGET RECOMMENDATIONS, Department - Reclamation:

The Council recommends that Reclamation not reduce this appropriation any further through budgetary manipulations and that, in fact, it attempt to increase this appropriation by reprogramming any Reclamation-wide excess FY-2016 appropriations into the Basinwide Program prior to the end of the fiscal year.

Response: For many years Reclamation has been able to transfer up to 15% of its annual appropriations of additional funding into the Basinwide Program. Reclamation is prepared and anticipates to again transfer up to 15% of additional funding in FY-2016 into the Basinwide Program.

MANAGEMENT AND BUDGET RECOMMENDATIONS, Department - Reclamation:

The Council recommends that as the FY-2018 budget process progresses, Reclamation make every attempt to budget \$10,283,000 to the Basinwide Program and that as it begins budgeting for FY-2019 it budgets the same amount. These funding levels are significantly reduced from previous recommendations by the Council. The Council believes that the funding levels it had previously recommended will ultimately be required if the Program is to maintain both the short and long-term goals set out in its most recent Plan of Implementation which will meet or exceed the requirements established by the salinity standard adopted by the States and approved by EPA for the Colorado River System.

Response: See Previous Responses

Staffing

COUNCIL COMMENTS AND RECOMMENDATIONS, Department - Reclamation:
The Council notes that the Upper Colorado Region has brought together an effective staff. However, many months ago a key staff engineer accepted an assignment in Washington. That position has not been filled. The Council recommends that this position be promptly filled.

Response: Reclamation agrees with the Council that the Upper Colorado Region has brought together an effective staff. Reclamation also agrees with the Council that the position formerly held by Nick Williams needs to be filled. Reclamation is working on filling that position and hopes to have it filled before the end of the fiscal year.



United States Department of the Interior
BUREAU OF LAND MANAGEMENT

Washington, D.C. 20240

<http://www.blm.gov>



JUN 01 2016

In Reply Refer To:
7300 (WO280)

Mr. David W. Robbins
Chairman
Colorado River Basin Salinity Control
Advisory Council
1660 Lincoln Street, Suite 2720
Denver, Colorado 80264

Dear Mr. Robbins:

Thank you for your recent recommendations to the Bureau of Land Management (BLM) in the Advisory Council's 2015 Annual Report on the Colorado River Basin Salinity Control Program. As requested, this letter addresses the Council's recommendations to the BLM.

Recommendation

1. "When Congress directed the Secretary of the Interior 'to develop a comprehensive program for minimizing salt contributions to the Colorado River from lands administered by the Bureau of Land Management, BLM was given a daunting task...(more) than creation of plans or reports. Many years have passed...not yet a 'comprehensive program in place...Council is encouraged by recent progress.'"

Response

The BLM identified the need to assist in addressing the rapidly increasing salinity concentration in the Lower Colorado River and its impact on water users. The BLM organized a system of services, projects and organizational structure to establish a BLM Salinity Control Program to focus on improving the water quality of the Colorado River. Led by the Division Chief of Environmental Quality and Protection, the BLM Salinity Control Work Group coordinates salinity control efforts among BLM headquarters, state and field offices. The Work Group meets quarterly to discuss and share information, plan and prioritize workload, as well as, plan for upcoming meetings and formulate and execute the Salinity budget. The Science Team meets monthly or as needed to address emerging and current issues. The Washington, D.C. staff, the National Operations Center in Denver, and the salinity coordinator have been working steadfastly to develop a comprehensive program for reducing salinity and sediment contributions to the Colorado River Basin (Basin) from its administered public lands. The Team alternates attendance at the Salinity quarterly meetings (Advisory Council, Work Group, Salinity Forum, and Science Team) and updates its respective members of BLM's actions. The BLM is in the

process of drafting a Salinity Program strategy that will be used to guide this initiative into the future, set priorities, focus energy and resources, strengthen operations, ensure that employees and other stakeholders are working toward common goals, establish agreement around intended outcomes/results, and assess and adjust the organization's direction in response to a changing environment.

Recommendation

2. “The Council received what it believed was a historic presentation at the Council’s October 2014 meeting made by (Ms. Dean). At that meeting BLM proposed having a line-item BLM salinity control program in its FY-2017 budget. The progress that BLM has made in the many months since that meeting is encouraging... The Council requests that BLM report on its thoughts on the creation of a line-item program or other avenues for creating a ‘comprehensive program’ for salinity reduction.”

Response

The BLM has supported the Colorado River Salinity Program for many years by allocating funds from the Soil, Water and Air Management Program sub-activity for specific projects in the Basin that contribute to Salinity Control objectives. Allocation of these funds has been at the discretion of the BLM. There was no direction from the Department of the Interior (DOI), Office of Management and Budget (OMB), or Congress through the federal appropriations process. The Division of Environmental Quality and Protection has worked with DOI, OMB, and Congress to provide direction to the BLM in its appropriations for FY 2016 to expend at least \$1,500,000 on efforts to support the Colorado River Basin Salinity Control objectives. This direction will remain in future budgets unless additional direction is given in the President’s budget or subsequent congressional direction.

Funds allocated through the Soil, Water, and Air Management Program sub-activity are but one component of the BLM’s approach for meeting its commitments to maintain and improve water quality as required by the Colorado River Basin Salinity Control Act, as amended, and mission mandates promulgated under the Federal Land Policy Management Act of 1976. The BLM’s primary strategy for reducing salt and sediment transport to the Colorado River is to minimize erosion from public lands through many existing land-management programs that reduce impacts from authorized land-use activities, restore degraded ecosystems, improve soil stability and address legacy disturbance of public lands. The BLM lacked the capability in the past to quantify and report how these many programs contribute to Colorado River Basin Salinity Control objectives. The BLM is working to develop the tools and administrative capability to meet these requirements in the future.

Recommendation

3. “The Council appreciates BLM’s efforts to create a better understanding of salt mobilization on public lands, including a significant literature review of rangeland salinity control. The Council notes that when the Forum was drafting its 2014 Review, BLM could not provide an accounting of the tons of salt controlled by BLM programs. This has been a continual

challenge. The Council is pleased to hear that BLM is initiating renewed aggressive efforts to identify and implement salinity specific activities in the Colorado River Basin and to account for past and future salinity reductions. There is an important and immediate need for quantifying past net salinity improvements within the Basin. The Council recommends that BLM continue with this effort so that pertinent information may be used in the future to assist the Program.”

Response

The BLM is currently collaborating with USDA-ARS on efforts to develop regional watershed and water-quality modeling tools to develop the ability to quantify and report on the accomplishments of its many different management programs that contribute to the Colorado River Salinity Control objectives. Although the modeling tools are still under development, the BLM section in the FY 2016 Federal Accomplishments Report will most likely include estimates for maintaining roads, managing rangelands as reflected by land-health standards, emergency stabilization activities after large wildfires, and specific projects funded through the Soil, Water, and Air Management Program.

Recommendation

4. “How much salt is coming off of the vast open spaces of the Colorado River drainage, how can it be better controlled and how it can be accounted for is not only difficult, but has never been accomplished before in a major river system...This was learned from the major effort BLM and ARS compiled in a major bibliography of works...The Council urges BLM to continue aggressively working to tackle this issue. The Council is not recommending that additional studies be funded with Basin States Program funds until the results of these already funded efforts are reported.”

Response

The BLM values collaborating with the Salinity Control Forum on efforts to improve the understanding of salt transport processes in the Colorado River Basin and recent Basin States Program funds provided to the USGS to use the results of the literature compilation funded by BLM and to the USDA-ARS to conduct rainfall-runoff experiments in Utah. The BLM is committed to complete ongoing work to develop modelling tools and improve the understanding of the salinity transport process needed to meet our commitments to improve capabilities for quantifying and reporting accomplishments of land-management activities in meeting Colorado River basin Salinity Control objectives. We are partnering with USDA-ARS on these efforts and expect to make substantial progress in the near future toward developing and implementing new capabilities needed to manage the Salinity Control Program.

Recommendation

5. “The Council notes improved coordination and involvement within BLM. This includes state/field staff, the salinity coordinator, Denver staff, and Washington D.C. staff. This is much appreciated and the Council believes that this expanded involvement has, in part, been

the reason for the recent BLM accomplishments. Previously, the Council urged that BLM select a salinity coordinator whose assignment would be to work exclusively on Colorado River salinity issues. BLM has a large effort and the Council would request BLM to continually evaluate staffing needs, ensuring that program goals and objectives are addressed and adequately coordinated with the activities of the other federal agencies.”

Response

The BLM made organizational changes to the position following the departure of the previous salinity coordinator in 2011 by 1) transferring administrative responsibility for the position from the Washington Office to the National Operations Center and, 2) combining job duties with a national water quality specialist. The combined position was intended to improve the effectiveness of services and the level of expertise delivered to all BLM offices and meets commitments to support program efforts. The BLM recognized the workload challenges in meeting all expectations of the combined position when the current salinity coordinator was hired in 2013 and has reorganized duties since that time to focus work on efforts within the Basin. The salinity coordinator, Denver staff, field and state staff and the Washington, DC office work in coordination to promote a more effective salinity control results.

Recommendation

6. “In the 2015 FAR, BLM reported that \$1,125,000 was spent from their Soil, Water and Air fund to support projects specifically relating to salinity control sub-activities. The Council recognizes that this is an important increase in funding and the Council is most appreciative of this expenditure of funds. The Council also appreciates the report in the FAR as to how these funds were expended in each state. The Council notes a major improvement in the accounting of these expenditures and the results. The Council urges BLM to allocate \$1.5 million to this effort.”

Response

The BLM appreciates the Council’s recognition of our improvement in salinity expenditures and accounting per state. After the 2015 Federal Accomplishments Report (FAR) was submitted, Congress intervened and directed the BLM in the appropriation process to allocate additional funding that increased the fiscal year total to \$1,500,000. As the funding level has recently increased yearly, the BLM has identified several projects to minimize salinity from entering the Basin. The usage of funds and their respective results per state will be included in the next FAR. In acknowledgment of BLM’s continued coordination, the Washington, D.C. office, the National Operation’s Center in Denver, CO, and the salinity coordinator continue to hold monthly meetings led by the Division Chief of Environmental Quality and Protection to review Salinity Control progress, goals, timelines, and overall plans.

Recommendation

7. "The Council is concerned about the future of the Paradox Valley Unit as administered by Reclamation. Currently Reclamation is involved in an EIS that addresses the future of the project. There are BLM issues to be addressed, particularly with respect to the potential future use of some BLM lands. The Council urges BLM to become very involved with these issues and facilitate, as a part of Interior's team, resolution of a workable brine disposal alternative."

Response

The BLM Colorado State Office has been working closely with the Bureau of Reclamation since the Environmental Impact has been needed to identify alternatives, including the brine disposal alternative, for replacing the existing Paradox Valley Unit injection well facility. In alignment with existing policies and regulations, the BLM is willing to consider supporting the use of public lands for the various uses assessed in the EIS.

Thank you for your support and recommendations. The BLM will continue to be aggressive in our progress toward reducing salinity in the waters of the Colorado River Basin. If you have any questions or concerns, please contact Ms. Miyoshi Stith, Division Chief for Environmental Quality and Protection, at mstith@blm.gov or (202) 912-7136.

Sincerely,



Kristin Bail
Acting Assistant Director
Resources and Planning

cc:

Kib Jacobson, Program Manager
Colorado River Basin Salinity Control Manager
U.S. Bureau of Reclamation
125 S. State Street, Room 8100
Salt Lake City, UT 84138

Don A. Barnett, Executive Director
Colorado River Basin Control Forum
106 West 500 South, Suite 101
Bountiful, UT 84010



United States Department of the Interior

U.S. GEOLOGICAL SURVEY

Office of the Director

Reston, Virginia 20192

In Reply Refer To:
Mail Stop 101
GS16000680

MAY 23 2016

Mr. David Robbins, Chairman
Colorado River Basin Salinity Control Advisory Council
1660 Lincoln Street, Suite 2720
Denver, Colorado 80264

Dear Mr. Robbins:

Thank you for the opportunity to respond to the Colorado River Basin Salinity Control Advisory Council's (Council's) comments and recommendations presented in the 2015 Annual Report on the Colorado River Basin Salinity Control Program (CRBSCP). We appreciate the Council's recognition of the responsiveness of U.S. Geological Survey (USGS) science support to CRBSCP information needs. We are also pleased that our representation to the Council, although reassigned in 2015, continues to be of benefit to the program's direction and progress.

We appreciate the Council's input on emphasizing the importance of timely results from USGS investigations supporting assessment of potential salinity control measures at the Paradox Valley Unit (PVU) in Colorado and at Pah Tempe Springs in Utah. We will continue to work closely with the Bureau of Reclamation's (Reclamation's) PVU staff and their Alternative Study/Environmental Impact Study Team as we apply available data and recently developed modeling tools to understanding the feasibility and efficiency of potential control measures. We look forward to briefing the Council and Forum on progress in this area in their June Forum meeting in Colorado. The USGS will begin a new phase of investigation at Pah Tempe Hot Springs in October to improve our understanding of the hydrogeologic characteristics of the spring complex that are relevant to salt-load mitigation through pumping. We will be working closely at Pah Tempe with Reclamation and the Washington County Water Conservancy District to establish a data set and assessment tools to support the design of a feasible mitigation project.

We understand that the CRBSCP Work Group and Technical Advisory Group were briefed in April on progress and preliminary results of the USGS assessment of salinity trends in the Uinta Basin as requested in the Council Report. We would be happy to provide a similar briefing on observed trends in salinity load in the basin's surface water system to the Forum and the Council in their next meeting. We encourage the Council to communicate with David Susong, Director of the USGS Utah Water Science Center and current USGS representative to the Forum,

Mr. David Robbins

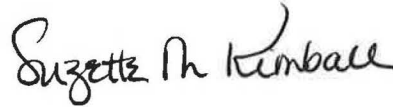
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whenever it wishes to be briefed on USGS activities in support of the CRBSCP. We will be glad to report out on progress and results, as appropriate, at any stage of the work.

The USGS will continue to be an active participant in the Salinity Control Program Science Team and recognizes the benefit of that participation in the development of collaborative and relevant research in support of SCP activities. We will also continue to work with CRBSCP participating agencies to help inform the directions of on-the-ground projects and assess effectiveness, including those projects aimed at the reduction of salt mobilization on rangelands.

Again, thank you for the opportunity to respond to and address the Council's comments and recommendations. If you would like any additional information or have questions, please contact David Susong at (801) 908-5062, or ddsusong@usgs.gov.

Sincerely,

A handwritten signature in black ink that reads "Suzette M. Kimball". The signature is written in a cursive, flowing style.

Suzette M. Kimball
Director

Copy to: Don A. Barnett, Executive Director, CRBSC Forum
Kib Jacobson, Designated Federal Officer, CRBSC Advisory Council



United States Department of the Interior



FISH AND WILDLIFE SERVICE

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IN REPLY REFER TO:
ES/CO:BR/Salinity
TAILS 06E24100-2016-CPA-0047

April 5, 2016

David Robbins, Chairman
Colorado River Basin Salinity Control Advisory Council
1660 Lincoln Street, Suite 2720
Denver, Colorado 80264

Dear Mr. Robbins:

We have reviewed the Advisory Council Annual Report on the Colorado River Basin Salinity Control Program-2015, and offer the following response to comments addressed to the U.S. Fish and Wildlife Service (Service).

In your report you acknowledge the role of the Service in finding, reviewing and supporting viable wildlife replacement projects, as well as reviewing and tabulating replacement acres by salinity control unit (SCU) areas. The Service plans to continue these activities and work proactively to assist the other agencies in moving the Program forward. We have been working closely with the Bureau of Reclamation (Bureau) and Natural Resource Conservation Service (NRCS) to come up with habitat replacement plans that all parties, including state wildlife management agencies, agree will provide long term habitat replacement.

It has been recognized that we are going to need to consider "off-site" projects to be able to fully replace wildlife values foregone in several salinity control unit project areas. This March, the Fish and Wildlife salinity coordinator reviewed and approved some off-site wildlife replacement proposals presented to us by NRCS staff in the Grand Junction and Montrose Colorado offices. Once these projects are completed, acres will be credited to the McElmo and lower Gunnison SCU's. Because it has been very challenging for NRCS to come up with replacement projects with willing landowners, the Service continues to remain flexible and allow some off-site replacement to be credited to designated SCU's. The Service would rather have something on the ground and be proportional and concurrent, than to restrict wildlife replacement opportunities for only on-site replacement.

The Council noted their appreciation for tables provided in the 2015 Federal Advisory Report (FAR) that indicate the status of wildlife replacement acres for each SCU. We will continue to provide these tables annually in future reports. Also the Council asked the Service to be proactive in looking for wildlife replacement opportunities, including construction of such

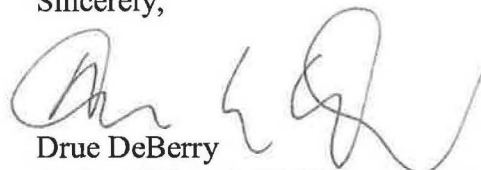
projects on public lands. The most recent wildlife replacement project included non-native vegetation control on five Colorado Parks and Wildlife areas in the Grand Valley. Also, the salinity coordinators representing the Bureau, NRCS, Service, and Bureau of Land Management (BLM) have been involved with discussions exploring the potential of implementing riparian restoration projects on BLM land that can be counted as wildlife replacement acres for some of the SCU's. We are hopeful that this will provide future opportunities for more wildlife replacement projects that will be maintained for the long-term.

The Service continues to participate as a cooperating agency in the evaluation of alternatives for salt control at the Paradox site, with the Service salinity coordinator attending most cooperating agency meetings. The Service salinity coordinator was involved with the review of environmental contractor proposals that addressed potential impacts to migratory birds from evaporation ponds, and provided feedback to the Bureau. The Service is committed to working with the Salinity Control Program to evaluate Paradox alternatives, with the goals of controlling salinity loads in the Colorado River while also minimizing impacts on the environment and to trust resources, including migratory birds.

The Service participates in the Salinity Control Program by providing technical assistance on fish and wildlife resource impact assessment, restoration, and management, through implementation of Federal statutes including the Endangered Species Act (ESA), Fish and Wildlife Coordination Act, National Environmental Policy Act, and the Migratory Bird Treaty Act. The Service provides independent review and oversight of program aspects dealing with fish and wildlife resources, including our assessment of the degree to which fish and wildlife have received due consideration in project planning and incidental fish and wildlife values foregone have been replaced. We continue to consult with the Bureau under Sec. 7 of the ESA regarding historic and new depletions associated with piping projects. Additionally, with the recent listing of the yellow-billed cuckoo (*Coccyzus americanus*), we continue to consult with NRCS and the Bureau on regarding both salinity control and wildlife replacement projects that may impact this bird and/or its critical habitat.

We will continue to work with the Federal partners to address fish and wildlife values forgone and assist with meeting their mitigation goals. Please contact Barb Osmundson on any wildlife related issues at (970) 628-7189.

Sincerely,



Drue DeBerry
Acting Colorado Field Supervisor

cc: Kib Jacobson, Designated Federal Officer, Colorado River Basin Salinity Control Advisory Council, U.S. Bureau of Reclamation, 125 S. State Street, Room 7311, Salt Lake City, UT 84138-1102

✓ Don A. Barnett, Executive Director, Colorado River Basin Salinity Control Forum, 106 West 500 South, Suite 101, Bountiful, UT 84010-6203



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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April 13, 2016

Ref: 8EPR

David Robbins, Chairman
Colorado River Basin Salinity Control Advisory Council
1660 Lincoln Street, Suite 2720
Denver, CO 80264

Dear Mr. Robbins:

Thank you for your letter to Administrator McCarthy transmitting the 2015 Annual Report on the Colorado River Basin Salinity Control Program. We appreciate the recognition of EPA's retired salinity coordinator, whose efforts were most appreciated by the Council. In response to the Advisory Council's comments presented in the report summary, we offer the following:

- Consistent with your recommendation, EPA will assist this year such that the Charter is renewed in a timely manner.
- Region 8 will continue to maintain EPA's Colorado River Salinity Control coordination efforts and participate on the 2017 Triennial Review Committee to examine its policies relative to the issuing of NPDES permits.
- We clearly understand the importance of the Paradox Valley Unit and the ongoing EIS process. As a cooperating agency in the process, our representatives of the Underground Injection Control and NEPA programs will continue to support the review efforts of the Bureau of Reclamation.
- EPA will continue to support individual states and tribes where applicable, when they submit their adopted standards for approval.

Please contact me or Peter Monahan at monahan.peter@epa.gov or by phone (303)312-6946, if you have questions or would like to discuss our comments further.

Sincerely,

Karen Hamilton, Acting Director
Ecosystems Protection Program

cc: Kib Jacobson
Program Manager, Colorado River Basin Salinity Control Forum
U.S. Bureau of Reclamation

✓ Don A. Barnett
Executive Director, Colorado River Basin Salinity Control Forum