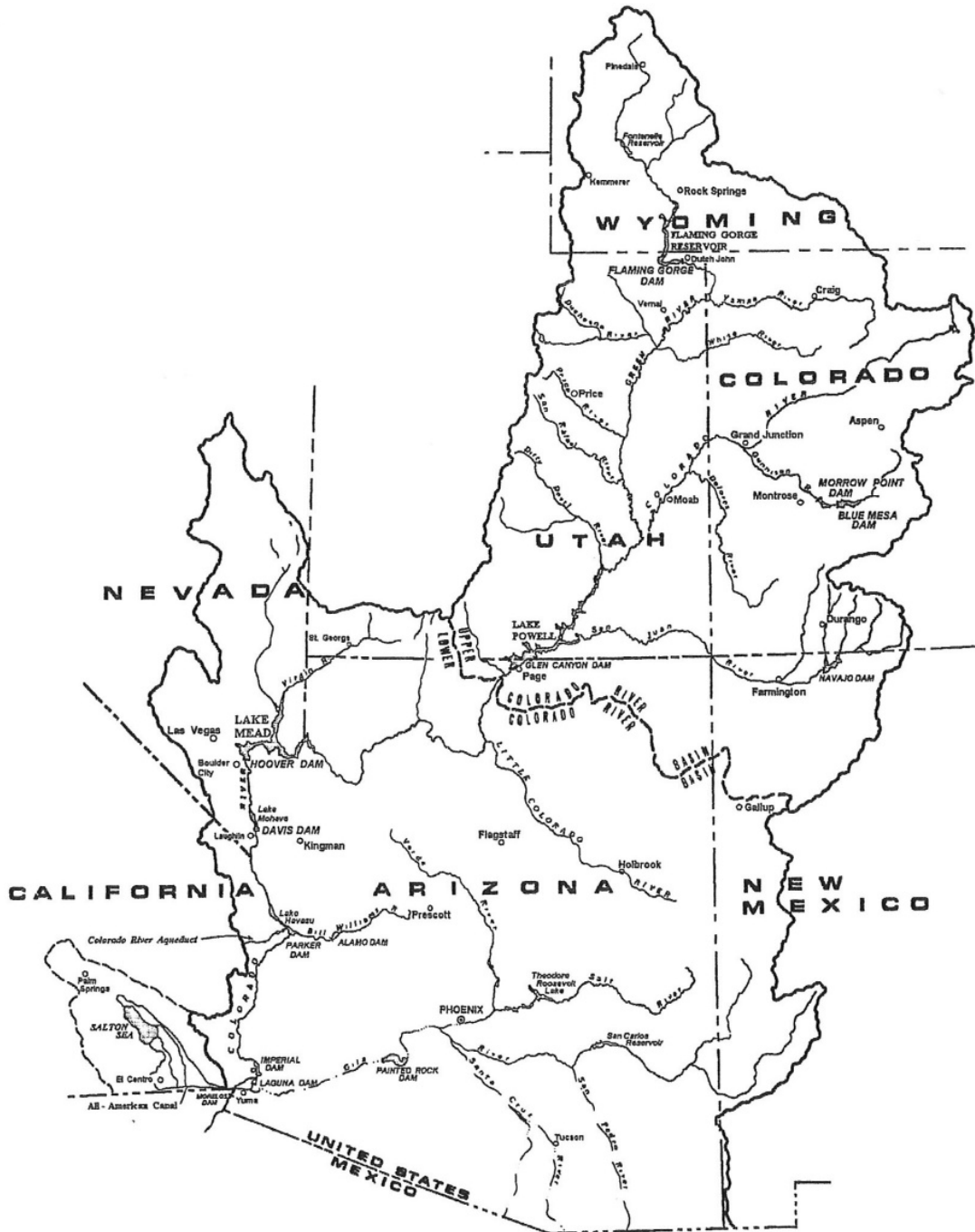


**ANNUAL REPORT  
ON THE  
COLORADO RIVER BASIN  
SALINITY CONTROL PROGRAM**

**2012**



**COLORADO RIVER BASIN  
SALINITY CONTROL ADVISORY COUNCIL**

**December 31, 2012**

For additional information, please contact:

Kib Jacobson  
Program Manager  
Colorado River Basin Salinity Control Program  
U.S. Bureau of Reclamation  
125 S. State Street, Room 7311  
Salt Lake City, UT 84138-1102  
(801) 524-3753

Don A. Barnett  
Executive Director  
Colorado River Basin Salinity Control Forum  
106 West 500 South, Suite 101  
Bountiful, UT 84010-6203  
(801) 292-4663

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**2012**

**COLORADO RIVER BASIN SALINITY CONTROL  
ADVISORY COUNCIL**

**December 31, 2012**





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## BACKGROUND

The Colorado River Basin Salinity Control Advisory Council (Council) was established pursuant to Section 204 of Public Law 93-320, the "Colorado River Basin Salinity Control Act of 1974" (Act). With the 2008 amendments to the Act that created the Basin States Program (BSP), the Advisory Council's consultation responsibilities have been redefined and clearly stated. The Secretaries of the Departments of the Interior and 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 Colorado River Basin Salinity Control Program (Program) in 2008. The Charter was renewed again in 2012. A copy of the current Advisory 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 members. The Council membership list as of December 31, 2012 is included as Attachment B. The Council has created a Technical Advisory Group (TAG) that it sometimes turns to for advice and analysis. The TAG includes one member from each state and the chairman is appointed by the Council Chairman.

Many of the Advisory Council members are 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 the Colorado River and Section 303 of the Clean Water Act.

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, 2012.

The report does not attempt to fully describe or analyze the Program. Readers unfamiliar with the Salinity Control Program should refer to *Quality of Water, Colorado River Basin, Progress Report No. 23, 2011* (USBR), and the *2011 Review, Water Quality Standards for Salinity, Colorado River System, October 2011* (2011 Review) for a full discussion of the Program. The first report is available at [www.usbr.gov/uc/progact/salinity/pdfs/PR23final.pdf](http://www.usbr.gov/uc/progact/salinity/pdfs/PR23final.pdf) or by contacting Kib Jacobson, Program Manager for the Colorado River Basin Salinity Control Program from the Bureau of Reclamation (Reclamation). The second report is available at <http://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 beginning of this report.

The Council met twice in 2012. The first meeting was held on May 17-18 in Midway, Utah. At that meeting the Advisory Council heard summaries and discussed the federal agencies' responses to the 2011 Advisory Council Report. Included in this report as Attachment C are the federal written responses to the 2011 Advisory Council Report. The Council provided the federal agencies the opportunity to report orally and to explain their responses to the 2011 Advisory Council Report.

NRCS updated the Council on 2011 EQIP allocations and expenditures and the expected 2012 allocation. The Council then heard a report from Reclamation concerning the potential need for a Funding Opportunity Announcement (FOA) by the end of the year. Reclamation explained that this FOA may be different than past FOAs in that it could include opportunities to fund some of the projects with Basin States Program moneys. The Council accepted the report and encouraged Reclamation to keep the TAG up to date on the FOA process. Reclamation then reported on potential funding for the Basinwide Program. It was reported that the Program continues to have a high priority within Reclamation and that the Upper Basin Regional Office continues to reprogram, to the extent possible, end-of-the-year dollars into the Program.

The Council heard a report from USGS on the hydrogeology of the Paradox Valley. The Council also heard a report and recommendation from the TAG on the use of cost sharing funds under the BSP. The Council reviewed and discussed the TAG's recommendations and then made recommendations to Reclamation on the use of BSP funds. Lastly, Reclamation reported that as part of the effort to close out the old Parallel Program, it is creating a catalog of all the research, investigations and studies completed with funding from that Program. This information will be made available to the Council when the catalog is completed.

The second meeting was held on November 7-8 in Phoenix, Arizona. At that meeting, the Council received annual summary reports from, and made inquiries of, the federal agencies. The Council reviewed and discussed its new Charter. The Council suggested that Reclamation look into the opportunity to adjust the timing of the approval of the Charter to better coincide with the time of the Advisory Council Meetings. The Council then heard reports from each of the federal agencies on their activities for the year. Prior to the meeting and to facilitate discussion, Council members received written summaries from the federal agencies detailing accomplishments for the year. The Council appreciates the agencies' preparation and transmittal of these summaries in advance of the

Council meetings. They allow a more complete and focused discussion on the progress and needs of the Program.

Reclamation provided an update on the funding for the Paradox Valley Unit Alternative Studies and also reported that a consulting firm had been hired to undertake the Lower Gunnison Basin and Uinta Basin Planning Studies. The Council was then given a presentation on background and history of the Basin Fund. The Basin Fund is used to provide the States' cost share for the Program.

The Council then heard a discussion of two potential uses of Basin States Program funds. The first involved using Basin States Program funding in support of Reclamation's current FOA. The proposal was that a portion of the cost share generated on EQIP expenditures could be used to fund small salinity control projects proposed under the current FOA. When awarded, these projects would then be administered by the State agricultural agencies involved with the Salinity Control Program. After discussion, the Council recommended that once such opportunities were identified and shown to be cost effective, recommendation should be given to expend Basin States Program funds in this manner. The other opportunity was to expend funds to provide habitat replacement for salinity control activities in the Grand Valley. After discussion, the Council recommended the expenditure of funds for this activity.

## COUNCIL COMMENTS AND RECOMMENDATIONS

### *General Issues*

The Council continues to be pleased with the direction the Program is headed and the way the federal agencies are working together and cooperating with the TAG and the Forum's Work Group. The Council recommends that the agencies continue to work with the TAG and the Forum's Work Group to improve and develop additional tools that will help identify future opportunities for salinity control in the Basin. The Council is particularly intrigued with, and will be following, the Rangeland Initiative Study currently being undertaken by the agencies. The Council is pleased to see that the Agricultural Research Service has been included in this effort. The Council has long believed that there is a real potential for significant cost effective salinity control by better management of rangeland. Another example of this cooperation is the effort of the Science Team, which has proven to be a great resource for the TAG and the Forum's Work Group.

The Council encourages Reclamation to continue its leadership role in Paradox Valley Unit Alternative Studies. While Reclamation has the leadership role, all agencies of the Department of the Interior should work cooperatively to solve issues concerning the Paradox Valley Unit. Continuation of the Paradox Valley Unit is critical to the overall Program, removing over 100,000 tons of salt per year. The Council is pleased that Reclamation has been able to program funds to continue these efforts and is committed to work with Reclamation to pursue opportunities to fully fund this effort until completed.

*U.S. Department of Agriculture (USDA)*

*Natural Resources Conservation Service (NRCS)*

The Advisory Council is most pleased with the 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 Forum's Work Group. The NRCS Salinity Coordinator and the three State Conservationists are to be complimented. The Council also appreciates the efforts of the NRCS Salinity Coordinator to initiate the Rangeland Initiative Study.

NRCS's salinity program is a key component to the overall Colorado River Basin Salinity Control Program. Recognizing this, the Council is pleased with the State Conservationists' approach to determine the level of funding needs for the next three years. The Council also appreciates that NRCS continues to allocate EQIP funds to its salinity control efforts in the Basin.

The Council is pleased to hear that NRCS is attempting to address the issue of future replacement of salinity measures that have reached their expected life and may not be as effective in some cases as when first installed. The Council is particularly pleased with the efforts the Utah State Conservationist has undertaken to address this issue. The Council urges that NRCS continue to work with the Forum's Work Group to address this issue. The Council was also pleased to hear that NRCS may be bringing the Henry's Fork salinity area to the Council for consideration as an approved salinity area this next year.

The Council is concerned over reports of potential travel restrictions being placed on NRCS personnel. Full participation by the appropriate NRCS personnel is critically important to continue cooperation and coordination between the NRCS and the States that has ensured the successful implementation of the program to date. The Council would point out that the Basin States Program is providing a significant administrative cost share to NRCS to help ensure this participation.

In the Management and Budget Recommendations portion of this report, the Council recommends that funding for the USDA portion of the federal program be in accordance with Table 1 of this report.

The Council requests a written response from the USDA to recommendations contained in this report by **April 19, 2013**. 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 and the Management and Budget Recommendations sections.

***Agricultural Research Service (ARS)***

The Council is pleased that ARS has been able to contribute its expertise and some funding to the Rangeland Salinity Initiative and appreciates the cooperation between ARS, BLM and USGS. The Council looks forward to a continuing involvement by ARS in the salinity control efforts.



*U.S. Department of the Interior (DOI)*

*Bureau of Reclamation (Reclamation)*

The Council congratulates Reclamation on the implementation of the Funding Opportunity Announcement process. It appears that it has addressed many of the concerns the Council has expressed in the past with Reclamation's selection and contracting process for salinity control projects. By working with the States and interested parties prior to the actual submittal of proposals, and then again with the States after the proposals are submitted, some of the uncertainties associated with the old Request for Proposal process have been removed. The Council is concerned with reports that the actual contracting of the projects remains an issue. The Council is concerned that the Basinwide Program and the Basin States Program will continue to be handicapped because of problems in the agency's contracting process, thus impacting the whole Salinity Control Program. The Council looks forward to a report at its next meeting that the contracting issues have been resolved.

The Council appreciates Reclamation's efforts to move forward on the Paradox Valley Unit Alternative Studies and the Lower Gunnison Basin and Uinta Basin Planning Studies. Cost effective salinity control in these areas is critical to meeting the overall goals of the Program. As such, the Council stands ready to work with Reclamation to develop strategies for funding future salinity control in these areas and would support requests for additional federal funding for studies. The Council appreciates Reclamation's continuing effort to find short-term funding to complete the studies. The Council stands ready to assist Reclamation in evaluating longer-term funding opportunities for the implementation of alternatives that might be identified by the studies. The Council encourages Reclamation to continue to work with the Forum's Work Group as it moves forward with these studies and analyzing future opportunities.

As the Parallel Program comes to an end, the Council would like to thank Reclamation for its flexibility in administering this program. Significant salinity control was accomplished under the Parallel Program and the Council looks forward to Reclamation's concluding report.

Based on the presentation provided to the Council on the Basin Funds, the Council encourages Reclamation to work with the Forum's Work Group to develop a better understanding within the Work Group of the complexities of administering these funds.

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 does, however, recommend that Reclamation seek increased appropriations in FY 2014 and FY 2015 in accordance with Table 1 herein. Reclamation is requested to give a detailed report on its efforts to secure additional funding at the next Council meeting.

The Council asks Reclamation to respond in writing to recommendations contained in this report by **April 19, 2013**. 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 and the Management and Budget Recommendations sections.

### ***Bureau of Land Management (BLM)***

In last year's Advisory Council Report, the Council requested that BLM promptly fill the vacant Salinity Coordinator position. A year later, this appears to have occurred. The Council is pleased that this has happened, but is concerned that the coordinator may only be assigned to salinity issues on less than a full-time basis. The Council believes BLM's program has been more focused since the creation of this position, is anxious that momentum not be lost and believes that the salinity coordination needed would seem to justify a full-time effort. If funding of the position on a full-time basis is part of the issue, the Council would like to be so advised. The Council does look forward to working with the new BLM Salinity Coordinator.

The Council appreciates BLM's efforts to coordinate with Reclamation on the Paradox Valley Unit Alternative Study and with the other agencies involved in the Rangeland Initiative Study. A portion of this latter study was funded by BLM and this is appreciated. The Council continues to recommend that sufficient funding from the Land Resources Subactivity be used for monitoring and maintenance of implemented projects. The Council appreciates the state reports the BLM provides but is concerned that there is still some confusion about which state projects are actually located in the Colorado River Basin.

The Council is pleased with the process of funds that are designated for salinity control being allocated and used for research and control. The Council urges the new Coordinator to continue with this effort.

The Council is concerned that BLM has not been able, and is not now able, to even make a good estimate of its salinity control accomplishments nor is it able to, with accuracy, report funds expended that result in salinity control. The Council requests that the new Coordinator be tasked with the challenge to implement better recording and reporting of efforts and funds spent.

The Council requests a written report responding to each of the above recommendations herein by **April 19, 2013**. 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 and the Management and Budget Recommendations sections.

### ***U.S. Geological Survey (USGS)***

The Council again wants to express our appreciation on how responsive USGS has become in its science role for the Secretary of the Interior in assisting with moving the salinity program ahead. It also recognizes USGS's efforts in the Paradox Valley and how the data collected for the area will add to the Paradox Valley Unit Alternative Study. The Council continues to urge USGS to work with Reclamation and the Forum's Work Group to ensure that the data collected is accurate, to identify any difference or discrepancies in that data and to resolve those errors.

The Council encourages USGS to continue to evaluate Pah Tempe Springs and its relationship to the Virgin River. The Council believes that these efforts are most important.

The Advisory 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 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 and review functions by **April 19, 2013**.

### ***U.S. Fish & Wildlife Service (USFWS)***

The Council recognizes and appreciates the long and helpful service of Rick Krueger and looks forward to a new relationship with Barb Osmundson. The Council encourages USFWS to focus more on its accomplishments and less on its activities and positions as it drafts its portion of the Federal Accomplishments Report. The Council also appreciates the involvement of USFWS in

evaluating the Grand Valley Habitat Replacement Project and its conclusion that this project will meet the habitat replacement goal for the Grand Valley. Given that there are sometimes conflicting mandates for an agency, the Council still notes the statutory responsibility of USFWS to assist in salinity control as it works through those mandates.

The Council requests a written response to the above recommendations by **April 19, 2013**.

***Environmental Protection Agency (EPA)***

The Council is pleased that EPA's salinity coordination is again located in Region 8 and would encourage EPA to keep it in Region 8 in the future. The Council also encourages EPA to continue to work with Reclamation in its efforts to upgrade the existing Paradox Valley Unit well. As the Council has indicated earlier, the Paradox Valley Unit is a critical component of the Program, and every effort to keep it operational is appreciated.

## 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 2011 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 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. The non-federal participants (states, landowners, irrigation districts, etc.) are ready in FY 2013 to contribute their share of the Program costs as up-front payments. The Council continues to be pleased with the funding made available to USDA as authorized by the FSRIA. The Council continues to be concerned that Reclamation funding is lagging behind USDA funding in geographic areas where coordinated implementation is essential. The potential impact of such a lag is a slowed-down, less cost-effective program. The Council urges Reclamation to vigorously pursue adequate funding so as to allow timely implementation of its portion of the Program.

The Council is encouraged by BLM efforts in the Basin and recommends that, absent receiving the full funding contained in Table 1 for BLM, BLM make available to the Program at least \$1.5 million to fund on-the-ground salinity specific control measures. While the Council recognizes the complexities of BLM's budgeting process, it and the Forum stand ready to assist BLM in achieving this funding goal.

Table 1 contains the Council's recommendations for federal funding for FY 2013 through FY 2016. These funds are for the construction activities necessary to meet the Program objectives as set forth in the Plan. The Forum will transmit these recommendations to the Congress and will actively seek the Congressional support necessary to maintain 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 Plan of Implementation objectives, as measured in tons of salt-load reduction.

As indicated in Table 1, the funding recommendations therein are for the federal portion of project implementation costs only. 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 Table 1. 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 Advisory Council makes the following funding recommendations:

### ***U.S. Department of the Interior***

#### ***Basinwide Program (Reclamation)***

Reclamation has already received a FY 2013 appropriation of approximately \$8 million for the Basinwide Program. The Council recommends 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 2013 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 Advisory Council with data which would indicate approximately 20,929 tons per year of new salinity control is needed if Reclamation is to meet its goal set out in the 2011 Review. Recognizing this fact, the Council recommends that as the budget process for FY 2014 progresses, Reclamation make every attempt to appropriate \$15,400,000 to the Basinwide Program and that as it begins budgeting for FY 2015 and FY 2016, it budgets \$17,253,000 and \$18,178,000 respectively. The Council requests that Reclamation continue to budget sufficient funds for required operation and maintenance of constructed units and for plan formulation including the Paradox Valley Unit's several studies.

#### ***Bureau of Land Management***

For a number of years, the Advisory Council has struggled with its funding recommendations for BLM and the accounting of salinity control activities performed by this agency. For many years, BLM could not recite the amount of salinity control which was accomplished through its programs. Funding activities such as salinity control come through BLM's Soil, Water and Air Program. This program is funded at about \$35 million nationwide annually. In the past, the Council has recommended that BLM spend about \$5.2 million annually from this account on projects within the Colorado River Basin which, among other benefits, will reduce the salt load to the Colorado River. Absent any new information, the Council continues to recommend this amount, but it requests that BLM better define how those recommendations can be made. In addition, in more recent years, at the request of the Council, BLM, through a manager's discretion, has set aside approximately

\$800,000 per year 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 now recommends \$1.5 million for the next four fiscal years be set aside for specific salinity control on public lands within the Basin.

### ***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 opportunities still exist. Continued funding is needed to meet the goal identified in the 2011 Review for the Department of Agriculture. The Salinity Control Program is a small part of EQIP and, in the past, the Council has developed its funding recommendations independent of input from the Department of Agriculture based on the overall EQIP appropriation. The Council has now 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 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 2016. However, to be consistent with other agencies, the Council has simply preliminarily used the 2015 amount for 2016.

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 2013 - \$15,688,800, FY 2014 - \$17,308,900 and FY 2015 - \$17,809,300, with \$17,809,300 as a preliminary amount for FY 2016.

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 and that where there is a responsibility to provide needed operation and maintenance funding, the agencies will include the required funding in their budgets.



**TABLE 1**  
**Colorado River Salinity Control – Department of the Interior**  
**Funding Recommendations (2013-2016)**  
**December 31, 2012**

	Fiscal Years			
	2013	2014	2015	2016
Bureau of Reclamation <sup>1,2</sup>	n/a	\$15,400,000	\$17,253,000	\$18,178,000
Bureau of Land Management <sup>3</sup>				
Soil, Water and Air (general)	\$5,200,000	\$5,200,000	\$5,200,000	\$5,200,000
Salinity Specific	\$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 Paradox Valley Unit. The Council needs the assistance of Reclamation to determine the level of funding needed to support the Paradox Valley Unit.
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 (2013-2016)**  
**December 31, 2012**

STATE	FY 2013 <sup>1</sup>	FY 2014 <sup>1</sup>	FY 2015 <sup>1</sup>	FY 2016 <sup>2</sup>
<b>COLORADO</b>				
FA	\$6,195,000	\$7,345,000	\$6,195,000	\$6,195,000
TA	\$1,858,500	\$2,203,500	\$1,858,500	\$1,858,500
State Total (FA & TA)	\$8,053,500	\$9,548,500	\$8,053,500	\$8,053,500
<b>UTAH</b>				
FA	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000
TA	\$1,760,000	\$1,760,000	\$1,760,000	\$1,760,000
State Total (FA & TA)	\$7,260,000	\$7,260,000	\$7,260,000	\$7,260,000
<b>WYOMING</b>				
FA	\$300,000	\$400,000	\$800,000	\$800,000
TA	\$75,300	\$100,400	\$200,800	\$200,800
State Total (FA & TA)	\$375,300	\$500,400	\$1,000,800	\$1,000,800
<b>GRAND TOTALS (FA &amp; TA)</b>	\$15,688,800	\$17,308,900	\$17,809,300	\$17,809,300

Notes:

1. Based on State Conservations' Three-Year Funding Plan (2013-2015)
2. Same as FY2015. Advisory Council recommendation for guidance when developing 2014-2016 3-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 2012 and looks forward to providing a framework for future coordination and consultation. The Council requests that written responses to this year's report be provided by **April 19, 2013**. Responses should be sent to the Advisory Council Chairman, Larry Dozier, at the following address:

Larry R. Dozier, Chairman  
Colorado River Basin Salinity Control Advisory Council  
323 West Irvine Road  
Phoenix, AZ 85086

It would be appreciated if copies of the responses are sent to 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, 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 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

# **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, Public Law 93-320, Title II, as amended by Public Laws 98-569, 104-20, 104-27, 106-459, and 110-246 (Act), and in accordance with the provisions of the Federal Advisory Committee Act (FACA), as amended, 5 U.S.C. Appendix 2.
3. **Objectives and Scope of Activities.** The Council will provide 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 .20 staff years.
8. **Designated Federal Officer.** The DFO is 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 become 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 the Department in which the member has a direct financial interest.
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. The Council Chair, with the approval of the DFO, will appoint subcommittee members. 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 26, Item 2 or 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

*Ken Salazar*

Secretary of the Interior

**OCT 10 2012**

Date Signed

**OCT 17 2012**

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



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Secretary of Agriculture

10.15.12

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Date Signed

OCT 17 2012

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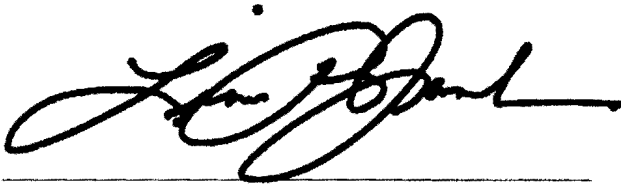
Date Filed

**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

OCT 16 2012

\_\_\_\_\_  
Date Signed

OCT 17 2012

\_\_\_\_\_  
Date Filed

## **Attachment B**

### **ADVISORY COUNCIL MEMBERSHIP**

**December 31, 2012**

#### ARIZONA

Thomas Buschatzke  
Phoenix, Arizona

Larry R. Dozier  
Phoenix, Arizona

Linda Taunt  
Phoenix, Arizona

#### NEVADA

Leo M. Drozdoff  
Carson City, Nevada

John J. Entsminger  
Las Vegas, Nevada

McClain Peterson  
Las Vegas, Nevada

#### UTAH

Gawain Snow  
Vernal, Utah

Dennis J. Strong  
Salt Lake City, Utah

John Whitehead  
Salt Lake City, Utah

#### CALIFORNIA

Bill Hasencamp  
(alternate to Pete Silva)  
Los Angeles, California

Tanya Trujillo  
(alternate to Jerry  
Zimmerman)  
Glendale, California

#### NEW MEXICO

Estevan López  
Santa Fe, New Mexico

Scott Verhines  
Santa Fe, New Mexico

#### WYOMING

Dan S. Budd  
Big Piney, Wyoming

Patrick T. Tyrrell  
Cheyenne, Wyoming

John F. Wagner  
Cheyenne, Wyoming

#### COLORADO

Jennifer L. Gimbel  
Denver, Colorado

Steven H. Gunderson  
Denver, Colorado

David W. Robbins  
Denver, Colorado



## **Attachment C**

# **Federal Responses to the 2011 Advisory Council Report**



APR 26 2012



United States Department of the Interior  
BUREAU OF LAND MANAGEMENT  
Washington, D.C. 20240  
<http://www.blm.gov>



APR 23 2012

In Reply Refer To:  
7240 (280)

Mr. Dennis J. Strong, Chairman  
Colorado River Basin Salinity Control Advisory Council  
1594 West North Temple, Suite 310  
Salt Lake City, Utah 84116

Dear Mr. Strong:

Thank you for your recent recommendations in the Advisory Council's 2011 Annual Report on the Colorado River Basin Salinity Control Program. As requested, this letter addresses the Council's recommendations to the Bureau of Land Management (BLM).

1. *"...the Council worked closely with BLM leadership to create a Salinity Coordinator position. The Council has enjoyed working with the Salinity Coordinator and believes BLM's program has been more focused since its creation. The Council is anxious that momentum not be lost and recommends that BLM move quickly to fill this recently vacated position. Because the Council believes this position is important to the overall Program, it urges that the position be attached to the headquarters office, giving the Coordinator the flexibility to move between the states. It further strongly urges that the Coordinator physically be located in Reclamation's offices in Salt Lake City, Utah where he or she can work closely with the salinity coordinators for Reclamation and NRCS. The Council also recommends that the Coordinator be given sufficient travel funds to allow the Coordinator to participate in required meetings. The Council places a high priority on this recommendation."*

We appreciate the Council recognizing the value and effectiveness of the BLM Salinity Coordinator. We currently are working to fill the vacant position, and are combining it with a vacant water-quality specialist position at the BLM National Operations Center (NOC) in Denver, Colorado. The position will be physically located in Salt Lake City, but will report administratively to the NOC. The combined position will continue to work closely with our Washington Office and should increase effectiveness by addressing water-quality issues such as salinity on a landscape scale. We are not able to assign the position directly to our headquarters office because of a policy to reduce the number of headquarters staff remotely assigned to field offices. However, we will continue to show Washington Office commitment to the Salinity Program by having the Division Chief for Environmental Quality and Protection attend Council meetings.

2. *“...the Paradox Valley Unit is an important part of the overall Program. Approximately 110,000 tons of salt annually, which would otherwise discharge to the Dolores River creating environmental and economic issues, is being disposed of through a deep injection well. There are concerns regarding the ability of the injection well to continue to operate into the future and the Secretary of the Interior, through Reclamation, is investigating economically viable and environmentally responsible salt disposal alternatives. Such investigation or ultimate solution may well temporarily or permanently involve lands which are presently administered by BLM. The Council strongly urges that BLM work closely and collaboratively with Reclamation in seeking expedited solutions to the continued operation of the Paradox Valley Unit.”*

The BLM actively participates in the Dolores River Restoration Partnership, a consortium of Federal, State, and local stakeholders that collaborate on watershed management issues such as tamarisk eradication, restoring native riparian plant species, and improving aquatic habitat for native fish populations. We are open to discussing and supporting additional actions that promote watershed function and sustainable ecosystems, where such actions are consistent with goals and objectives described in our Resource Management Plans, laws and regulations, and other applicable policies and considerations. Reclamation should contact the BLM Colorado State Office in Lakewood or Southwest Colorado District Office in Montrose to discuss alternatives for addressing concerns about their Paradox Valley Unit. We will be glad to assist with scheduling these discussions if helpful.

3. *In the General Issues and Management and Budget Recommendations sections of this report, the Council recommends that the BLM 1) expend about \$5,200,000 annually from its Soil, Water, and Air Program for activities that will improve water quality in the Colorado River Basin; 2) better define how the Council can make this funding recommendation; and 3) expend an additional \$1.5 million over the next four years to implement specific salinity control projects on public lands within the Basin. The Council also recommends that sufficient funding from the Land Resources Subactivity be used for monitoring and maintenance of implemented projects.*

Unlike the Bureau of Reclamation, the BLM does not receive a line-item appropriation to support the Colorado River Basin Salinity Control Program. The BLM has utilized discretionary funding from the Soil, Water, and Air Management (SWA) subactivity for many years to conduct salinity control activities and support the Salinity Coordinator position. The SWA subactivity was funded at about \$26 million in FY 2012, which is not sufficient to meet existing requirements. Most SWA funding is used for staff salaries and benefits, operational support, recurring monitoring and project maintenance needs, information technology and data management, and administrative overhead. Relatively modest funding (less than twenty percent) is available to support other activities such as salinity control projects. The BLM cannot increase SWA funding for salinity control projects as recommended by the Council because it lacks discretionary funding.



The BLM does provide substantial funding and support for salinity control activities in addition to the direct annual allocations through the SWA subactivity. Base program funds allocated to State Offices provide labor, logistical, and administrative support for salinity control projects. A number of other BLM programs support watershed management and science activities related to Salinity Program objectives. These programs include the Healthy Lands Initiative, Cooperative Landscape Conservation Initiative, Abandoned Mine Lands Program, Rangeland Management Program, and Riparian Management Program. It is difficult to determine which of these projects may benefit salinity control efforts and time intensive to quantify salinity reductions, especially in terrestrial upland areas where objectives are to reduce erosion. Some progress has been made in this area in recent years, and we will continue working with the Council on efforts to improve capabilities.

The BLM understands the Council's concerns about funding issues and will continue working to improve the effectiveness of future expenditures. The Council could help with these efforts by working with the BLM Salinity Coordinator to prioritize projects or identify geographic areas for us to focus efforts. The Council also could work with appropriate Department of the Interior Landscape Conservation Cooperative units to include salinity control as a consideration in their planning and conservation efforts.

We would like to thank the Council for their support and recommendations. The BLM will continue efforts to make measurable progress towards reducing salinity concentrations in waters of the Colorado River Basin.

If you have additional questions or information needs, please contact Nancy Dean, Division Chief for Environmental Quality and Protection, at (202) 912-7136.

Sincerely,

Edwin L. Roberson  
Assistant Director  
Renewable Resources and Planning

cc: WO280 RF  
WO280:Mst:RBoyd:ys:(202)912-7137:4/19/12  
Colorado\_R\_Advisory\_Council\_draft response\_041212

Kib Jacobson, Designated Federal Official  
CRBSC Advisory Council  
USBR UC 240 Rm 6107  
125 South State Street  
Salt Lake City, Utah 84138

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



# United States Department of the Interior

BUREAU OF RECLAMATION  
Upper Colorado Regional Office  
125 South State Street, Room 6107  
Salt Lake City, UT 84138-1102

IN REPLY REFER TO:

UC-240  
RES-9.00

**APR 27 2012**

Mr. Dennis Strong, Chairman  
Colorado River Basin Salinity Control Advisory Council  
Utah Division of Water Resources  
1594 West North Temple, Suite 310  
Salt Lake City, UT 84114-6201

Dear Mr. Strong:

On behalf of Secretary Ken Salazar and Commissioner Michael L. Connor, I am responding to your letter of February 22, 2012, regarding the 2011 Annual Report on the Colorado River Basin Salinity Control Program (Salinity Program), prepared by the Colorado River Basin Salinity Control Advisory Council (Council). The Council contributes greatly to the success of the Salinity Program. We truly value your partnership, participation, and recommendations in the Salinity Program. The Salinity Program continues to make measurable progress in controlling the salinity problem. The following are our responses to the specific recommendations in the report for Reclamation.

## Paradox Valley Unit (PVU)

1. General Issues: The Council is pleased with the leadership role Reclamation has taken in developing the PVU alternative studies. . . . Concurrent with these study efforts, Reclamation should continue to evaluate what options are available if the current well had a long-term emergency shutdown.

Response: Reclamation is currently assembling a board of technical experts to determine what additional information is necessary to locate a second injection well site; develop well and associated facility designs; identify rights-of-way needs, prepare cost estimates; and identify environmental concerns. This information will then be incorporated into the Alternative Study/Environmental Impact Statement (EIS) process to select a preferred option for controlling salt loading from the PVU. At present, there is no readily implementable plan to replace the existing injection well if it should experience a catastrophic failure. A replacement injection well is believed to be the most expedient course of action to restore the salinity control function in the event of a failure. A narrowly scoped EIS process limited to consideration of the no action and replacement injection well alternatives, conducted in parallel with the Alternative Study/EIS, has been discussed as a means of expediting installation of a replacement injection well although no decision has been made to implement this parallel process. The initial data needs for

this effort would be the same as the more comprehensive Alternative Study/EIS discussed above. A cost-loaded schedule for this process is attached.

2. General Issues: The Council believes that the potential use of evaporation ponds should be fully analyzed and the demonstration project strongly considered.

Response: Reclamation is exploring options to implement a pilot evaporation pond facility on Federal and/or private lands. The results of this effort would be included in the Alternative Study/EIS if Reclamation is successful in implementing this study. If Reclamation is not successful, this information will provide an informed basis for eliminating this alternative from further consideration in the Alternative Study/EIS. A cost-loaded schedule for accomplishing this objective is attached.

3. General Issues: The Council is pleased that Reclamation has been able to program funds to get these efforts underway and encourages Reclamation to continue to work with the Council and continue to fully fund this effort until completed.

Response: Reclamation has been successful in providing funds to support the fiscal year (FY) 2011 and 2012 efforts to advance the Pilot Evaporation Pond Study and Alternative Study/EIS. However, budget requests to support this work in FY 2013 have not been successful and alternative means of funding need to be pursued.

4. DOI – Reclamation: The Council recommends that Reclamation not only continue to pursue short-term funding to complete the studies, but also evaluate longer term funding opportunities for the implementation of alternatives that might be identified by the study. The Council encourages Reclamation to continue to work with the Forum's Work Group as it moves forward developing studies and analyzing future opportunities.

Response: As discussed above, Reclamation has been unsuccessful in securing appropriated funding for these efforts in FY 2013 and will continue to work with the Council and the Colorado River Basin Salinity Control Forum (Forum) to address potential funding options.

### Economic Damages Model

General Issues: Being advised that the lead economist from Reclamation's Denver Office staff, who has for years been responsible for this model, is anticipating retirement, the Council urges Reclamation and other supporting agencies to focus this year on any needed updates of this model.

Response: The lead economist, scheduled to retire this summer, has met with the Forum's Work Group and the Science Team to educate them on the workings of the salinity economic damage model. He is scheduled to make a presentation to the Forum at its 2012 spring meeting.

Through a partnership between Reclamation, Southern California Salinity Coalition, and Metropolitan Water District of Southern California (MWD), the 1999 Salinity Management Study performed by MWD and Reclamation is being updated. In collaboration with key stakeholders, the updated Salinity Management Study will seek to effectively quantify and set goals for managing the effects of salinity on water resources in Southern California. Another objective of the study is to update the current data in the MWD module, which is a major component in Reclamation's salinity economic impact model. Also, a research effort from the study will be conducted to identify and quantify other damages that are caused by high salinity levels in the MWD service area. The Study is anticipated to be completed by no later than 2014.

### Lower Gunnison and Uinta Basins Planning Studies

DOI - Reclamation: The Council is pleased that Reclamation is moving ahead with planning studies in the Lower Gunnison and Uinta Basin. The Council urges the completion of this effort at the earliest feasible date.

Response: Reclamation released a Request for Proposals solicitation on April 11, 2012, for the Lower Gunnison and Uinta Basins Planning Studies that will close on May 4, 2012. The solicitation went to those qualified entities on the General Services Administration Schedule. Proposals received will be evaluated and ranked by a Technical Proposal Evaluation Committee. The entity or entities selected will be awarded a contract or contracts to perform the studies. The entity or entities selected should be in the field by June 2012 and the studies should be completed December 2013. Reclamation has identified a facilitator in each of the basins to assist the contractor in setting up meetings and meeting the appropriate entities.

### Appropriations

1. DOI – Reclamation: The Council does, however, recommend that Reclamation seek increased appropriations in FY 2014 and FY 2015 in accordance with Table 1 herein. Reclamation is requested to give a detailed report on its efforts to secure additional funding at the next Council meeting.

See response below:

2. Management and Budget Recommendations: The Council continues to be concerned that Reclamation funding is lagging behind the United States Department of Agriculture funding in geographic areas where coordinated implementation is essential. The potential impact of such a lag is a slowed down, less cost-effective program. The Council urges Reclamation to vigorously pursue adequate funding so as to allow timely implementation of its portion of the program.

See response below:

3. Management and Budget Recommendations – Basinwide Program: The Council recommends 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 2012 appropriations into the Basinwide Program prior to the end of the FY.

See response below:

4. Management and Budget Recommendations – Basinwide Program: Recognizing this fact, the Council recommends that as the budget process for FY 2013 progresses, Reclamation make every attempt to appropriate \$14,500,000 to the Basinwide Program and that as it begins budgeting for FY 2014 and FY 2015, it budgets \$15,400,000 and \$16,300,000 respectively.

Response: 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 takes every opportunity to make known the successes and the needs of the Salinity Program at all levels of Reclamation, within the Department and Office of Management and Budget. 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 Program. Reclamation will report to the Council at its next meeting on Reclamation's efforts to secure additional funding.

5. 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 Table 1. The Council requests that in their responses, Federal agencies specifically comment on funding for these non-construction activities.

See response below:

6. Management and Budget Recommendations – Basinwide 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 several studies.

Response: In FY 2011 for operation, maintenance, monitoring, and technical assistance of the salinity units of Grand Valley, Paradox Valley, and McElmo Creek, Reclamation expended appropriations of \$1,056,357, \$3,162,123, and \$308,874, respectively. In FY 2012, \$1,495,000, \$2,664,000, and \$598,000, 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.

Reclamation provided from its Salinity Program to the United States Geological Survey for streamgaging on the Colorado River about \$444,000 in FY 2011 and about \$390,000 in FY 2012. This will assist in continuing the long-term monitoring that demonstrates the effectiveness of the implemented salinity projects.

Reclamation appreciates the support the Basin States provides to budget funding requests for the Salinity Program. Reclamation is requesting funding for the PVU as it develops future budgets. Reclamation will look for opportunities to utilize Reclamation funds, as they become available, for PVU activities. Reclamation is committed to working with the Basin States in developing studies, analyzing future opportunities for salt disposal, and finding funding for studies and salt disposal options.

We thank you again for your support and for being such an active and aggressive partner in the Salinity Program. If you have any questions, please contact Mr. Kib Jacobson at 801-524-3753 or [kjacobson@usbr.gov](mailto:kjacobson@usbr.gov).

Sincerely,



Larry Walkoviak  
Regional Director

Enclosures - 2

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

Mr. Tim Henley  
Chairman  
Work Group  
3550 North Central Avenue  
Phoenix, AZ 85012

Mr. Kib Jacobson  
Designated Federal Officer  
Bureau of Reclamation  
125 South State Street, Room 7311  
Salt Lake City, UT 84138-1147

Mr. Robert King  
Utah Division of Water Resources  
P.O. Box 146201  
Salt Lake City, UT 84114-6201



Paradox Valley Unit  
Pilot Evaporation Pond Schedule<sup>1</sup>

Task Description	2011		2012				FY 12 Cost <sup>2</sup>	2013				FY 13 Costs <sup>2</sup>	2014				FY 14** Cost <sup>2</sup>	2015				FY 15** Costs	Total Costs <sup>2</sup> per Task	Completion Date
	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th						
<b>Task 1 Brine Sample Water Quality Analysis</b> -Review Laboratory Results and discuss with EPA and CDPHE																							Completed	
<b>Task 2 Public Scoping</b> -NEPA Pilot Evaporation Pond and Alternative Studies (Public Scoping Meetings in Paradox and Dolores/Cortez)																							Completed	
<b>Task 3 Reclamation Landfill Policy Waiver</b> -Obtain Commissioner waiver per Reclamation's DS																							Oct-12	
<b>Task 4 Site(s) Selection(s)</b>																							Jul-12	
<b>Task 5 BLM Withdraw Process</b>							Unk <sup>3</sup>				Unk <sup>3</sup>				Unk <sup>3</sup>								Unk*** Sep-14	
<b>Task 6 Design and Data Collection</b> Obtain Geotech, Flood Study, T&E & Cultural Resource Surveys							\$60,000																\$60,000 Nov-12	
<b>Task 7 Prepare Draft EA</b>											\$10,000												\$10,000 Dec-12	
<b>Task 8 Negotiate and execute agreement with USFWS</b> -Agreement addresses impacts to migratory birds and process for evaluating impacts under the MBTA							\$5,000																\$5,000 Oct-12	
<b>Task 9 Draft EA Public Review and Comment</b>																							Feb-12	
<b>Task 10 Landfill Designation Certificate</b> -Montrose County (via EA process) -EPA/CDPHE Discussions -Regulatory Process and Issuance of Certificate																							Mar-13	
<b>Task 11 Prepare Final EA</b>											\$10,000												May-13	
<b>Task 12 Prepare FONSI (if appropriate)</b>																							Jul-13	
<b>Task 13 Complete Final Design and Specs</b>											\$600,000												\$600,000 May-13	
<b>Task 14 Procurement Award</b> -Liner, Monitoring Equipment, Pumps, Etc.															\$25,000								\$25,000 Dec-14	
<b>Task 15 Construction of Pilot Study Facilities<sup>3</sup></b> -BLM Site																							\$7,200,000 Sep-15	
<b>ESTIMATED WCAO FTE STAFF TIME<sup>4</sup></b>								0.75 FTE			1.0 FTE				0.25 FTE							0.75 FTE	\$447,251	
<b>TOTAL ESTIMATED COST</b>								\$232,720			\$223,625				\$80,906							\$7,200,000	\$8,357,251	

<sup>1</sup> Assumes 75% pan evap rate of 55 in/yr and pilot study is capable of evaporating approx. 15% of current brine injection stream if ponds are built with 16 surface acres 10 feet deep or 160 acre-feet capable of storing 110k tons of salt.

<sup>2</sup>Costs Displayed are for anticipated contracts, interagency agreements, and service agreements with UC and TSC staff.

<sup>3</sup>Estimated construction schedule is dependant on withdraw process completion for a BLM site.

<sup>4</sup>Estimated FTE costs for WCAO GJ and Durango staff for all activities. Assumes avg. salary for GS 12/10 x 2.5.

<sup>5</sup>Unknown at this time if there are any direct costs associated with BLM withdrawal process

Revision Date
4/20/2012



ENCLOSURE Z

April 13, 2012 Draft

Paradox Alternative Study EIS Schedule

Activity	FY 2012			FY 2013			FY 2014			FY 2015			FY 2016			FY 2017			FY 2018			ACTIVITY COSTS Cont*
	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	
1. Review Proposal with Forum																						\$0
2. Prepare ROW and Connecting Process for Geologic Studies for area applications.																						\$115,000
3. Award Contracts and conduct Geologic Studies																						\$500,000
4. Evaporation Pond Pilot Study Planning, Permitting and Construction (See EIS Pilot Study Schedule, assuming ROW Withdrawal needed for pond construction)																						See Pilot Pond Study Schedule for costs
5. Draft NOI for Alternative Study/EIS and review with Forum.																						\$0
6. Departmental Review and Publish NOI in Federal Register																						\$0
7. Public Scoping																						\$20,000
7A. Develop and Distribute Informational Packet																						\$0
7B. Public Meetings (Paradox and Cortez, maybe Grand Junction?)																						\$20,000
7C. Identify Cooperating Agencies																						\$0
8. Prepare Scoping Report																						\$0
8A. Identify Significant Issues																						\$0
8B. Identify Sources of Information																						\$0
8C. Identify Initial Study (Research) Needs																						\$0
9. Cooperating Agency Kick Off Meeting																						\$40,000
10. Identify Range of Alternatives																						\$0
10A. No Action																						\$0
10B. 1 or more new well lifts																						\$0
10C. Evaporation Ponds																						\$0
10D. Geomorphical Features																						\$100,000
10E. Other Alternatives (IRA)																						\$0
11. Define Issues and Identify Detailed Study Needs.																						\$0
12. Implement and conduct any additional needs studies.																						\$500,000
13. Prepare Draft EIS																						\$400,000
14. National Impact Analysis (NIA) combined by completion of the first Evaporation Pond Study																						\$200,000
14. Identify Preferred Alternative																						\$0
15. Prepare Draft EIS																						\$200,000
16. Publish NIA for Draft EIS																						\$200,000
17. Public Review and Comments on Draft EIS																						\$0
18. Prepare Final EIS																						\$500,000
19. Publish NIA and Distribute Final EIS to Public																						\$400,000
20. State Record of Decision																						\$0
WCAO STATE FTE ESTIMATE**																						\$315,440
TOTAL COST BY FY																						\$4,235,400

\*\*Estimated FTE cost for WCAO GI and Durango staff for all activities. Avg. salary for GS 12/01/12 \$

\*Costs displayed for Activities are for anticipated contract, interagency agreements and service agreement with MC and TSC staff.



# United States Department of the Interior



## FISH AND WILDLIFE SERVICE

Ecological Services  
Colorado Field Office  
P.O. Box 25486, DFC (65412)  
Denver, Colorado 80225-0486

IN REPLY REFER TO:  
ES/CO: Salinity Advisory Council

May 3, 2012

Dennis J. Strong, Chairman  
Colorado River Basin Salinity Control Advisory Council  
Utah Division of Water Resources  
1594 West North Temple, Suite 310  
Salt Lake City, Utah 84116

Dear Mr. Strong:

In response to your letter dated February 22, 2012, and the Salinity Advisory Council's recommendations from the Annual Report on the Colorado River Basin Salinity Control Program 2011, we offer the following comments for your consideration.

In your report you acknowledge the efforts relative to the replacement of wildlife values forgone and recent efforts to look at replacement of these values on larger more manageable tracks of land. In addition, we have initiated conversations with State and Federal land managers to evaluate opportunities to replace the wildlife habitat values forgone on their owned lands. We also have initiated some lively discussions within the Work Group and Forum members on acquisition of private lands adjoining existing lands managed for wildlife that would provide the acres and management needed to fulfill the long-term goals of the Salinity Program. We will continue to put these issues in front of the Council as a means to meet the requirements outlined in the Salinity Control Act which directs the Secretaries of Interior and Agriculture to replace incidental fish and wildlife values forgone.

In your report you discuss the ongoing efforts at Paradox to continue removing salt by evaluating the potential of building a pilot evaporation pond. You urge the Fish and Wildlife Service (Service) to work collaboratively with the Bureau of Reclamation (Bureau) and States to bring a science-based approach to the study and development of disposal alternatives. We have been working very closely with the Bureau office in Grand Junction on the evaluation of various means to deter birds and other wildlife from the ponds. The Migratory Bird Treaty Act (MBTA) has no provisions for take, so if any birds should die in the ponds it would be a violation of the MBTA and subject to civil and criminal penalties. Therefore, it is very important to evaluate all aspects of the ponds that might result in take of migratory birds.

Obviously the best way to avoid impacts to migratory birds is to not provide the mechanism for birds to access adverse conditions. When the Paradox Project was originally proposed evaporation ponds were considered as a means to reduce salt loading to the basin. This idea was scuttled and deep well injection has proven successful in reducing salinity concentrations in the Dolores River with no adverse impacts to migratory birds or other wildlife within the basin. Based on the success of the deep well injection system it would seem prudent to put the resources that will be necessary to develop a pilot evaporation study toward the construction of additional wells that can dispose of the salt in a proven and environmentally conscientious manner.

We also want to let you know that Rick Krueger, the Service's Salinity Coordinator, has announced his retirement effective June 2, 2012. Rick has worked tirelessly over the past few years to facilitate a good working relationship between the various programs, and has strived to initiate conversations among the programs to eliminate the outstanding habitat mitigation deficit. We are hopeful that Rick's efforts will be carried forward, and that we will ultimately see a day in the near future where the incidental fish and wildlife values forgone are all replaced with compensatory long-term managed wildlife habitat on the ground. Barb Osmundson, Fish and Wildlife Biologist in the Grand Junction office, will be taking over for Rick as the new Service Salinity Coordinator. She has over 25 years of experience with the Service, and we believe she has the knowledge and expertise to continue the productive partnerships that have developed between the agencies and other partners.

Thank you for the opportunity to comment on the Councils comments and recommendations and we look forward to a continued strong working relationship with the Salinity Council, Forum, and Work Group. If you have any questions, feel free to contact me at 303-236-4210 or Barb Osmundson at (970) 243-2778 extension 21.

Sincerely,



Susan C. Linner  
Colorado Field Supervisor

cc: BR, SLC, Kib Jacobson  
Salinity Forum, Don Barnett  
FWS, SLC, Larry Crist  
FWS, Grand Junction Field Office

APR 26 2012

United States Department of Agriculture



Natural Resources Conservation Service  
Post Office Box 2890  
Washington, D.C. 20013

COPY

APR 20 2012

Mr. Dennis J. Strong  
Chairman  
Colorado River Basin Salinity Control Advisory Council  
Utah Division of Water Resources  
1594 West North Temple, Suite 310  
Salt Lake City, Utah 84116

Dear Mr. Strong:

Thank you for your letter of February 22, 2012, and the 2011 Annual Report on the Colorado River Basin Salinity Control Program.

The Natural Resources Conservation Service appreciates the long standing support and commitment of the Colorado River Basin Salinity Control Advisory Council to improve salinity levels in the Colorado River and environmental improvements in the Colorado River Basin.

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,

*Homer L. White Acting*  
Dave White  
Chief

Enclosure

Mr. Dennis J. Strong  
Page 2

cc:

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

Anthony J. Kramer, Deputy Chief for Programs, NRCS, Washington, D.C.

Keisha Tatum, State Conservationist, NRCS, Phoenix, Arizona

Lincoln E. Burton, State Conservationist, NRCS, Davis, California

Phyllis Philipps, State Conservationist, NRCS, Lakewood, Colorado

Bruce Petersen, State Conservationist, NRCS, Reno, Nevada

Xavier Montoya, State Conservationist, NRCS, Albuquerque, New Mexico

David Brown, State Conservationist, NRCS, Salt Lake City, Utah

Paul Shelton, Acting State Conservationist, NRCS, Casper, Wyoming

Michael Hubbs, Director, Financial Assistance Programs Division, NRCS, Washington, D.C.

Mark Rose, Team Leader, Financial Assistance Programs Division, NRCS, Washington, D.C.

Travis James, Western Salinity Coordinator, NRCS, Salt Lake City, Utah

Kib Jacobson, Designated Federal Official, Bureau of Reclamation, Salt Lake City, Utah

Nancy Dean, Acting Salinity Coordinator, Bureau of Land Management, Salt Lake City, Utah

Dave Mason, Program Manager, Financial Assistance Programs Division, NRCS,  
Washington, D.C.

Enclosure

*The Council is pleased with the way all of the Federal agencies are working together. The Council is also pleased with the agencies' efforts, in cooperation with the Forum's Work Group, to develop an Upper Colorado river Basin specific SPARROW model.*

NRCS is working closely with the U.S. Geological Survey and Bureau of Reclamation to refine the use of the SPARROW model and to identify data needs or areas of improvement. The use of the SPARROW model has allowed NRCS to quantify salt control benefits resulting from the Environmental Quality Incentives Program (EQIP) implementation in areas that otherwise would have not have been quantified. By using SPARROW, NRCS was able to identify more than 880 tons of salt control planned with new EQIP contracts in the larger Upper Colorado River Basin.

*The Council is pleased that NRCS continues to allocate EQIP funds to its salinity control activities in the Basin. The Council continues to be supportive of NRCS' efforts to scale back its activities in the Grand Valley Salinity Control Project area and looks forward to hearing reports on how the wrap-up is progressing.*

Colorado is currently implementing a wrap-up strategy, including direct mailings, to the few remaining producers with unimproved irrigation systems. A plan is in place to accelerate wildlife habitat improvements to meet the 1,200 acre replacement goal during the final 2 year wrap-up period. In the Grand Valley Project, NRCS will continue to offer financial and



technical assistance to interested clients. As new irrigation and salinity control technology becomes available, NRCS will encourage water users to adopt such technology.

In summary, Colorado is willing to provide the Advisory Council with periodic update reports, and the fall 2012 Forum/Council meeting would be a good opportunity to review the Grand Valley wrap-up progress through the end of fiscal year (FY) 2012.

The Council is concerned that measures installed 20 years ago may not be as effective in some cases as when first installed. The Council believes that NRCS' efforts to prepare annual monitoring and evaluation reports is most helpful. The issue of replacement of installed practices, however, has not been completely addressed by NRCS or the Council. The Council urges that NRCS, the Science Team, and the Forum's Work Group collectively address this issue and provide to the Council in November a report on this effort.

Without doubt, many older irrigation application systems are no longer providing the salt reduction that they might have provided when new. Our experience indicates that the predominant factor in maintaining optimal salt control is the day-to-day management of the application system by the operator. NRCS will analyze the proportion of requests for replacement of aging systems to the total number of requests for financial assistance. In the past decade, NRCS attempted to provide financial incentives proportional to the environmental benefits. There is a diminishing return on EQIP expenditures for salt control when the

incremental improvements are minimal. A significant number of applications are exceeding a cost effectiveness of \$300 per ton. NRCS desires to know from the Council what it continues to recognize as “cost effectiveness.” NRCS plans to continue to provide financial and technical assistance to interested applicants and willing producers upon their request, and as authorized by a contemporary Farm Bill. NRCS also will work closely with the Science Team and the Forum’s Work Group to better understand how to obtain the maximum environmental benefit for the funds expended.

*In the Management and Budget Recommendations portions of this Advisory Council report, the Council recommends that funding for the USDA portion of the Federal program be in accordance with Table 1 of this report.*

The FY 2012 allocation for EQIP salinity control activities in the Colorado River Basin Salinity Control project areas is \$14,350,000. The State Conservationists will continue to monitor local need and demand within the project areas, as well as explore and consider opportunities for salt control throughout the Upper Colorado River Basin. NRCS will allocate funds to the States so that contract development can occur. NRCS accepts applications throughout the year and will continue to provide planning assistance to eager clients. We will remain in communication with the Advisory Council as the FY 2013 funding situation becomes more firm.

*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 Table 1. The Council requests that in their responses, Federal agencies specifically comment on funding for these non-construction activities.

In addition to EQIP, NRCS is utilizing its other authorities such as Conservation Technical Assistance to conduct inventories, planning and scoping, and evaluation of potential new projects. NRCS will continue to provide assistance upon request throughout the Upper Basin of the Colorado River and attempt to quantify any salinity reduction impacts.

The Council has now determined that it will make its recommendation for the allocation of EQIP funding for the salinity control effort based on the Three-Year Funding Plan developed by the State Conservationists for Colorado, Utah, and Wyoming. 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 the salinity control in the Basin: FY 2012 - \$18,416,300, FY 2013 - \$17,793,400, and FY 2014 - \$18,294,300, with \$18,294,300 as a preliminary amount for FY 2015.

NRCS acknowledges the Council's requested funding number for FY 2013 and the out years FY 2014 and FY 2015. Colorado, Utah, and Wyoming will be requested to provide their Three-Year Funding Plan (FY 2013-2015) by September 2012. Depending on the analysis of requests to replace out-dated systems and a determination of "cost-effectiveness," the three States may make adjustments to their 3 year plans.



# United States Department of the Interior

U.S. GEOLOGICAL SURVEY  
Office of the Director  
Reston, Virginia 20192

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**MAY 16 2012**

Mr. Dennis J. Strong, Chairman  
Colorado River Basin Salinity Control Advisory Council  
1594 West North Temple, Suite 310  
Salt Lake City, Utah 84116

Dear Mr. Strong:

Thank you for your letter regarding the 2011 Annual Report on the Colorado River Basin Salinity Control Program (CRBSCP). The U.S. Geological Survey (USGS) is pleased that our recent work is meeting the science information needs of the CRBSCP. The 2011 Council report specifically mentions the development and refinement of the USGS SPARROW<sup>1</sup> model for Total Dissolved Solids in the Upper Colorado River Basin. We understand that the CRBSCP's managing agencies have found this model, developed in our Utah Water Science Center, to be a valuable tool in estimating the distribution of salinity load in the Upper Colorado River Basin, and in informing program management and implementation. The SPARROW model was developed through the USGS National Water-Quality Assessment Program and has been a critical tool in moving from monitoring to prediction of the quality of the Nation's streams. We are glad to see this tool being applied effectively to the specific information needs of the CRBSCP. We will continue to work closely with the CRBSCP Work Group and Science Team to enhance model accuracy and utility relative to program needs.

Concerning our study of the occurrence and transport of salinity load from Pah Tempe Springs to the Virgin River, we are aware that our scientists are working with the Bureau of Reclamation and local water users on a scope for future work that would build on information currently being gathered. We will continue to work on this issue with the objective of providing a sound science foundation to aid Reclamation and other stakeholders in assessing the feasibility and potential impact of diverting this salinity load from the river.

<sup>1</sup> U.S. Geological Survey [Spatially Referenced Regression on Watershed Attributes](#) surface-water quality model.

USGS support to the CRBSCP includes the continued collection of basic data for regional salinity-load quantification and modeling. The USGS operates and maintains a 20-station monitoring network in the Colorado River Basin, which is relied on to estimate monthly and annual salinity concentrations and loads. As you may know, the USGS currently provides more than 40 percent of the total operating funds for the collection of streamflow discharge and water-quality data at network sites. USGS funding for the activity is applied mainly, although not exclusively, toward monitoring discharge and is provided through the USGS National Streamflow Information Program, and to a lesser degree through the USGS Cooperative Water Program. We are in a period of significant uncertainty in the level of funding in these programs beyond the Federal 2012 fiscal year. However, Colorado River Basin monitoring sites have high priority within these programs, and the USGS will continue to work within these programs to maintain funding beyond the current fiscal year. We will work closely with Reclamation and CRBSCP working groups to minimize the impact of any budget changes in these programs on the data provided from this network. Reclamation also collects water-quality data at locations along the Colorado River and its tributaries. We continue to work with them to ensure consistency in data collection methods to maximize data comparability.

Again, let me thank you for the opportunity to respond to and address the Council's comments and recommendations concerning USGS science and the CRBSCP. We will continue to report on the results of our activities and studies, and provide support to CRBSCP decision makers on the use of our data and assessment tools.

If you would like any additional information or have questions, please contact Mr. Patrick Lambert, Director of the USGS Utah Water Science Center, and the USGS Representative to the Colorado River Basin Salinity Control Forum. Mr. Lambert may be reached at (801) 908-5033, or [plambert@usgs.gov](mailto:plambert@usgs.gov).

Sincerely,



Marcia McNutt  
Director

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