

# RECLAMATION

*Managing Water in the West*

## **Funding Opportunity Announcement Salt Load Reduction Worksheet**

### **Colorado River Basinwide and Basin States Salinity Control Programs**



## **FUNDING OPPORTUNITY ANNOUNCEMENT (FOA)**

The Bureau of Reclamation, Upper Colorado Region, will be soliciting applications for reducing salinity contributions to the Colorado River through a Funding Opportunity Announcement (FOA) that will open around the first of August 2012, and close around the middle of November 2012. Such applications may propose measures to reduce salinity contributions originating from saline springs, leaking wells, irrigation sources, municipal and industrial sources, erosion of public and private land, or other sources in the upper basin of the Colorado River. **Anyone interested in submitting an application in the upcoming FOA should contact the appropriate Reclamation Technical Contact listed in Section B.**

### **SECTION A: INSTRUCTIONS FOR COMPLETING THE SALT LOAD REDUCTION WORKSHEET (WORKSHEET)**

All potential applicants must obtain salt load reduction estimates by completing a Worksheet and submitting it to Reclamation prior to submission of their application.

#### **A.1 WORKSHEET SUBMITTAL INSTRUCTIONS & SCHEDULE**

Completed Worksheets shall be submitted to the Salinity Program Manager with a copy to the appropriate Technical Contact listed in Section B. Reclamation will process requests on a first-come first-served basis and will provide a salt load reduction estimate once the FOA has been released. The salt load reduction estimates will be provided in a letter from the Salinity Program Manager.

The schedule and deadlines for Worksheet submittals will be specified in the FOA document. It is anticipated that for a single project, applicants will be allowed an initial submittal and one revised submittal for a total of two submittals of the Worksheet. Though Reclamation will not provide official salt load reduction estimates prior to release of the FOA, applicants are encouraged to submit the Worksheet prior to the release of the FOA. Early submissions allow Reclamation to begin processing the salt load reduction estimate and provide responses as soon as possible following the release of the FOA. Applicants should be aware that submittals may require 30 or more calendar days to process.

#### **A.2 PROPOSED SALINITY CONTROL**

##### **A.2.A IRRIGATION DELIVERY SYSTEM IMPROVEMENTS**

**Prior to preparing the responses for the Worksheet, applicants proposing salinity control projects through irrigation delivery system improvements should contact the appropriate Reclamation Technical Contact listed in Section B to learn if salt load reduction estimates are available for your area.** Salt load reduction estimates for agricultural areas can only be provided where Reclamation has been able to make estimates from Reclamation, Natural Resources Conservation Service (NRCS), or United States Geological Survey (USGS) salinity studies. For proposed salinity control projects through irrigation delivery system improvements,

applicants must complete and submit the Worksheet including Part D.1 of the Background & Information section describing the facilities to be improved or replaced and Appendix B detailing the facility data.

### **A.2.B OTHER TYPES OF SALINITY CONTROL**

Applications for other types of salinity control (non-irrigation related) will be accepted for evaluation in the FOA. Applicants proposing other types of salinity control must complete and submit the Worksheet including Part D.2 of the Background & Information section and Appendix C. The Worksheet is to include relevant information and data regarding the salinity source and proposed salinity control process and must quantify the salt load reduction. Reclamation will review the information regarding the salinity source and control process and may request additional information. In a response letter to the applicant, Reclamation will either confirm the applicant's estimated salt load reduction or provide a revised estimate based on Reclamation's analysis of the information.

### **A.2.C WATER IMPOUNDMENT STRUCTURES**

This section contains special provisions for applications involving new pond or reservoir construction.

It is allowable to include the construction of a new pond or reservoir in a salinity control proposal if that structure is needed for the operation of a piped irrigation water delivery system or for other essential purposes. Justification for the pond or reservoir must be provided in the application. To be acceptable the design and construction must meet standards developed by Reclamation. The standards are aimed at providing a liner sufficient to last for the life of the entire project (50 years if coupled with buried pipelines). Applicants contemplating a new pond or reservoir can obtain these standards from the appropriate Technical Contact listed in Section B. A successful applicant's funding agreement will require a complete Reclamation review of the proposed design, specifications, and construction.

Additional seepage will likely occur from the new pond or reservoir and must be accounted for in the application's overall salt load reduction estimate. This seepage must be identified and multiplied by the appropriate local salt loading rate to estimate new salt loading which will then be deducted from the application's total salt load reduction estimate. Applicants proposing new water impoundment structures as part of a salinity control project must obtain a salt load reduction estimate from Reclamation by completing and submitting the Salt Load Reduction Worksheet.

## SECTION B - RECLAMATION SALINITY PROGRAM CONTACTS

The Grants Officer responsible for overall administration of the FOA and agreement(s) is:

Ms. Lila Duffin  
Bureau of Reclamation  
Attention: UC-825  
125 South State Street, Room 6107  
Salt Lake City UT 84138-1147  
Phone: 801-524-3727  
Fax: 801-524-3857  
Email: [lduffin@usbr.gov](mailto:lduffin@usbr.gov)

### **Salinity Program Manager**

Mr. Kib Jacobson  
Bureau of Reclamation  
125 South State Street, Room 7311  
Salt Lake City UT 84138-1147  
Phone: 801-524-3753  
Fax: 801-524-5499  
Email: [kjacobson@usbr.gov](mailto:kjacobson@usbr.gov)

### **Salinity Program Coordinator**

Mr. Bradley Parry  
Bureau of Reclamation  
125 South State Street, Room 7311  
Salt Lake City UT 84138-1147  
Phone: 801-524-3723  
Fax: 801-524-5499  
Email: [bjparry@usbr.gov](mailto:bjparry@usbr.gov)

### **Technical Contacts**

#### **Western Colorado & Southwest Colorado, New Mexico, and Arizona**

Mr. John Sottolare  
Bureau of Reclamation  
2764 Compass Drive  
Grand Junction CO 81506  
Phone: 970-248-0640  
Fax: 970-248-0601  
Email: [jsottolare@usbr.gov](mailto:jsottolare@usbr.gov)

#### **Eastern Utah and Western Wyoming**

Mr. Ben Radcliffe  
Bureau of Reclamation  
302 East 1860 South  
Provo UT 84606  
Phone: 801-379-1213  
Fax: 801-379-1159  
Email: [bradcliffe@usbr.gov](mailto:bradcliffe@usbr.gov)

# **RECLAMATION**

*Managing Water in the West*

**Colorado River  
Basinwide and Basin States  
Salinity Control Programs**

**Salt Load Reduction Worksheet**

**PROJECT NAME & LOCATION**

**Applicant Name**

**Date**

<b>REQUESTOR INFORMATION</b>													
<p>This worksheet may only be submitted by the owner/operator of the facilities proposed to be improved or constructed. The owners may, at their discretion, designate an engineering/consulting company or individual as their representative by formally notifying the Salinity Program Manager and appropriate Technical Contact (see Section B of this document). Salt load reduction estimates will be provided directly to the Entity Manager with a copy to any designated representative.</p>													
<b>A.</b>	<p><b>REQUESTING ENTITY NAME:</b></p> <p>City/town, State</p> <p>Response:</p>												
<b>B.</b>	<p><b>PROJECT NAME:</b></p> <p>Response:</p>												
<b>C.</b>	<p><b>WORKSHEET PREPARED BY:</b></p> <p>Response:</p>												
<b>D.</b>	<p><b>ENTITY MANAGER CONTACT INFORMATION:</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 20%;">Name:</td><td></td></tr> <tr><td>Title:</td><td></td></tr> <tr><td>Address:</td><td></td></tr> <tr><td>Telephone:</td><td></td></tr> <tr><td>Fax:</td><td></td></tr> <tr><td>E-mail:</td><td></td></tr> </table>	Name:		Title:		Address:		Telephone:		Fax:		E-mail:	
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<b>E.</b>	<p><b>PROJECT MANAGER CONTACT INFORMATION (if applicable):</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 20%;">Name:</td><td></td></tr> <tr><td>Title:</td><td></td></tr> <tr><td>Address:</td><td></td></tr> <tr><td>Telephone:</td><td></td></tr> <tr><td>Fax:</td><td></td></tr> <tr><td>E-mail:</td><td></td></tr> </table>	Name:		Title:		Address:		Telephone:		Fax:		E-mail:	
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<b>BACKGROUND &amp; INFORMATION FOR SALT LOAD REDUCTION ESTIMATE</b>	
<p>IN ORDER TO OBTAIN SALT LOAD REDUCTION ESTIMATES FOR FOA APPLICATIONS, THIS WORKSHEET MUST BE SUBMITTED TO THE SALINITY PROGRAM MANAGER WITH A COPY TO THE APPROPRIATE RECLAMATION TECHNICAL CONTACT (LISTED IN SECTION B).</p>	
<p>Provide a brief narrative or tabular data responding to each of the following sections that apply to the proposed salinity control project. All information must be entered into the response boxes provided in the application, with the exception of data tables which may be inserted in Appendix B. Additional instructions for completing this worksheet are provided in 0. (It is important to confer with or contact the appropriate Technical Contact listed in Section B, prior to preparing the responses for this worksheet)</p>	
<b>A.</b>	<p><b>BACKGROUND &amp; DESCRIPTION OF PROJECT AREA:</b> Describe project setting and geographic location. For irrigation-related applications, include general hydrology, geology, soils, climate (average rainfall, temperature, and growing season), water storage facilities, existing irrigation facilities (total mileage of canals &amp; laterals and number of users), irrigated acreage, types of crops, etc.</p> <p>Response:</p>
<b>B.</b>	<p><b>PROJECT MAP(S):</b> Attach a detailed map(s) as Appendix A scaled appropriately to easily identify the project area, existing facilities, and major geographic features including roads, streams, reservoirs, towns, etc. If the proposed project is irrigation related, the map should show locations of canals, laterals, and irrigated lands. Those canals or laterals proposed for improvement or abandonment under this application should be identified. Existing lined or piped sections of canals or laterals should also be clearly identified.</p>
<b>C.</b>	<p><b>WATER RIGHTS AND SUPPLY:</b> Describe the water rights for both diversion and storage. Describe irrigation water supply and water shortages.</p> <p>Response:</p>
<b>D.</b>	<p><b>DESCRIPTION OF PROPOSED SALINITY CONTROL:</b> Describe proposed process or changes (in parts D.1, D.2, or D.3) anticipated by the proposed project that will lead to salt load reductions to the Colorado River system. This would include improvements to or elimination of existing facilities or operations. If the application does not contemplate changes in one of the three categories below, please indicate by entering "NA" or "Not Applicable".</p>
<b>D.1</b>	<p><b>IRRIGATION DELIVERY SYSTEM (CANALS, LATERALS, DITCHES) IMPROVEMENTS:</b> If specific facilities are to be improved or replaced, include a detailed description of the facilities and complete Appendix B.</p> <p>Response:</p>
<b>D.2</b>	<p><b>OTHER TYPES OF SALINITY CONTROL (NON-IRRIGATION RELATED):</b> For desalinization, evaporation or other salinity control measures, clearly describe the proposed project, identify the salinity sources and quantify the salt (in tons/year) that will be controlled or eliminated. Include data that defines the salt loading and control in tabular format in Appendix C.</p> <p>Response:</p>
<b>D.3</b>	<p><b>NEW WATER IMPOUNDMENT STRUCTURES:</b> If new ponds, reservoirs, settling basins, or other water impoundment structures are to be constructed for any purpose (e.g., re-regulation, evaporation, etc.) as part of this application, address the requirements listed Section A.2.C. If the size of a proposed or existing water impoundment structure increases later a new salt load calculation will be developed and funding may be reduced and/or the application ranking may change.</p> <p>Response:</p>

**APPENDIX A: PROJECT MAPS**

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**APPENDIX B: EXISTING IRRIGATION DELIVERY FACILITIES DATA SHEET**

(Use required format provided below)

Item	Units	Identify individual canal, lateral, or ditch				
		(Insert name here)				
<b><u>Length of existing canal/lateral/ditch</u></b>	feet					
<b><u>Irrigated acreage served</u></b>	acres					
<b><u>Irrigation season</u></b>						
Average daily diversion	cfs					
Average seasonal diversion	ac-ft					
Average no. of days water carried	days					
<b><u>Non-irrigation season (stockwater)</u></b>						
Average daily diversion	cfs					
Average seasonal diversion	ac-ft					
Average no. of days water carried	days					
Length of ditch carrying winter water	feet					
<b><u>Describe EXISTING lined or piped sections</u></b>						
Lined length	feet					
Liner type (concrete, earth, etc)	See Note 1					
Year installed	year					
Liner condition	See Note 2					
Piped length (see Note 3)	feet					
Remaining unlined/unpiped length	feet					
<b><u>Length to be replaced/improved</u></b>	feet					
<b><u>Proposed replacement material</u></b>	pipe or liner					

- Notes: 1. Type of liner may be concrete, earth (clay), membrane or other (please specify).  
 2. Condition of liner should be rated as poor, satisfactory, good.  
 3. Disregard dispersed pipe segments with individual lengths of less than 100 feet.

**APPENDIX C: SUPPLEMENTAL DATA TABLES AND/OR DATA FOR OTHER  
TYPES OF SALINITY CONTROL (NON IRRIGATION RELATED)**

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