

RECLAMATION

Managing Water in the West

**Bureau of Reclamation
Colorado River
Basinwide & Basin States
Salinity Control Programs**

**FOA Project Application
FOA No. BOR-UC-17-F003**

PROJECT NAME

PROJECT LOCATION

Applicant Name

Date

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PART I -- PROJECT SUMMARY																	
All information must be entered into the response boxes provided. Where information requested is not applicable enter "NA".																	
A	APPLICANT/ENTITY NAME: City/town, State Response:																
B	PROJECT APPLICATION NAME: Response:																
C	PROJECT APPLICATION PREPARED BY: Response:																
D	FUNDING REQUEST SUMMARY: <i>[Use * to denote an in-kind contribution]</i> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width: 70%; text-align: center; padding: 2px;">FUNDING SOURCE</th> <th style="width: 30%; text-align: center; padding: 2px;">FUNDING AMOUNT</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;">Basinwide/Basin States Program:</td> <td style="padding: 2px;"></td> </tr> <tr> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> </tr> <tr> <td style="padding: 2px;">Other Federal (list each source):</td> <td style="padding: 2px;"></td> </tr> <tr> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> </tr> <tr> <td style="padding: 2px;">Other (list each source):</td> <td style="padding: 2px;"></td> </tr> <tr> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> </tr> <tr> <td style="padding: 2px;">TOTAL PROJECT FUNDING:</td> <td style="padding: 2px;"></td> </tr> </tbody> </table>	FUNDING SOURCE	FUNDING AMOUNT	Basinwide/Basin States Program:				Other Federal (list each source):				Other (list each source):				TOTAL PROJECT FUNDING:	
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Basinwide/Basin States Program:																	
Other Federal (list each source):																	
Other (list each source):																	
TOTAL PROJECT FUNDING:																	
E	ABBREVIATED PROJECT SUMMARY: If the project is irrigation related, include name and length of canals and laterals to be improved by piping or lining. Response:																
F	ESTIMATED SALT LOAD REDUCTION: (See FOA Section IV.A) <b style="color: red;">IN ORDER TO OBTAIN SALT LOAD REDUCTION ESTIMATES, THE SALT LOAD REDUCTION WORKSHEET MUST BE SUBMITTED TO THE PROGRAM MANAGER WITH A COPY TO THE APPROPRIATE RECLAMATION TECHNICAL CONTACT. <u>FINAL SUBMISSIONS MUST BE RECEIVED NO LATER THAN OCTOBER 2, 2017</u> Response:																
G	ESTIMATED COST EFFECTIVENESS VALUE: Response:																

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I	<p>ACKNOWLEDGEMENT OF FOA AMENDMENTS: Applicants shall acknowledge receipt of any amendment to this Funding Opportunity Announcement by identifying the amendment number and date.</p> <p>List Amendment No. and Date:</p>												
J	<p>Engineering firm selected for project (if already selected)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 20%;">Title:</td><td></td></tr> <tr><td>Address:</td><td></td></tr> <tr><td>Telephone:</td><td></td></tr> <tr><td>DUNS #</td><td></td></tr> <tr><td>SAM #</td><td></td></tr> <tr><td>How was this firm selected?</td><td></td></tr> </table>	Title:		Address:		Telephone:		DUNS #		SAM #		How was this firm selected?	
Title:													
Address:													
Telephone:													
DUNS #													
SAM #													
How was this firm selected?													
K	<p>Two entities submitting one Application:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 20%;">Name:</td><td></td></tr> <tr><td>Name:</td><td></td></tr> <tr><td>Lead Contact:</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:		Name:		Lead Contact:		Telephone:		Fax:		E-mail:	
Name:													
Name:													
Lead Contact:													
Telephone:													
Fax:													
E-mail:													
L	<p>ACKNOWLEDGEMENT OF Memorandum of Agreement (MOA) Two or more applicants shall enter into one project agreement, if it combines ditches, laterals etc... They MUST have an MOA signed between them and attached in the FOA from Reclamation Approval.</p>												

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PART II - PROJECT PROPOSED FOR FUNDING	
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 maps or data tables which may be inserted in the appropriate appendix.	
A.	<p>BACKGROUND & DESCRIPTION OF PROJECT AREA: 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 & laterals and number of users), irrigated acreage, types of crops, etc.</p> <p>Response:</p>
B.	<p>PROJECT MAPS: Attach, as Appendix A, detailed GIS map(s) showing existing facilities and proposed improvements as described in Parts B.1 and B.2 below. Printed maps shall be no larger than 11x17.</p>
B.1	<p>MAP(S) OF EXISTING FACILITIES: Attach a GIS detailed map(s) scaled appropriately to easily identify the project area, existing facilities, and major geographic features including roads, streams, reservoirs, towns, land ownership (Federal, state, Tribal, private, 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 clearly identified.</p>
B.2	<p>MAP(S) OF PROPOSED IMPROVEMENTS: Attach a detailed GIS map(s), along with a topographic ground and layout profile, scaled appropriately which clearly identifies improvements that would be constructed under this application. Any additional maps, such as those with an aerial photo background, can also be included to better help identify project location. If irrigation related, display proposed pipeline alignments and/or canal segments to be lined, along with locations of previously lined or piped sections. Indicate in the color blue, the portion of the delivery system facilities to be funded in whole or part by Reclamation and, in the color red, any portion to be funded by other sources. Those funding sources should be identified in Part III, B of this application.</p>
C.	<p>WATER RIGHTS AND SUPPLY: Describe the water rights for both diversion and storage. Include state diversion or reservoir structure ID, if applicable. Describe source of irrigation water supply and water shortages. Include average amount of total per year in acre feet. Provide method of water allocation such as splitter box delivery or water flow per acre.</p> <p>Response:</p>
D.	<p>DETAILED DESCRIPTION OF PROPOSED PROJECT: Describe the project in detail including the proposed salinity control process. Detailed project plans should include the following: preliminary hydraulic analysis, geologic descriptions, geo-technical investigations, initial design drawings, GIS map(s) detailing construction timeline, preliminary work on habitat mitigation plan, initial NEPA scoping and timeline. Projects should plan to begin construction within 12-18 months of agreement execution.</p> <p>Response:</p>
D.1.a	<p>EXISTING IRRIGATION DELIVERY SYSTEM (CANALS, LATERALS, DITCHES, ETC.): Describe the specific existing facilities (canals, laterals, ditches) that are to be improved or replaced. Details should include names of each canal, lateral or ditch and existing lengths and flow capacities. Additional information concerning these existing facilities should be provided in Appendix E. Projects should identify the canal system or individual canals and laterals and describe in detail (lining method, pipe material, pipe sizes, lengths, etc.) the proposed lining or piping of those facilities. If the proposed project requires acquisition of water or water rights, describe the acquisition plan and required</p>

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	contracts. Describe plans for abandoning any facilities.
	Response:
D.1.b	PROPOSED IRRIGATION DELIVERY SYSTEM IMPROVEMENTS: Identify the canal system or individual canals and laterals and describe in detail the proposed lining or piping of those facilities. Include pipe/lining types, sizes, lengths, etc. If the proposed project requires acquisition of water or water rights, describe the acquisition plan and required contracts. Describe plans for abandoning any facilities including obliterating abandoned canal/ditch prisms. If the project plan does not remove or filling in the canal, then please describe why this will be left open (leaving a ditch/canal open will raise cost effectiveness). Projects must allow for appropriate pressure and velocity to enable NRCS-EQIP On-Farm sign ups, if the topography permits. Applications that proposes detriment to future NRCS-EQIP On-Farm signups will not be considered for award.
	Response:
D.2	OTHER TYPES OF SALINITY CONTROL (NON-IRRIGATION RELATED): For desalinization, evaporation or other salinity control measures, clearly identify the salinity sources and quantify the amount of salt (in tons/year) that will be controlled or eliminated. Include data that defines the salt loading and control in tabular format in Appendix B. Also see FOA Section IV.E.3.
	Response:
D.3	NEW WATER IMPOUNDMENT STRUCTURES: If new ponds, reservoirs, settling basins, or other water impoundment structures are to be constructed or existing structures enlarged for any purpose (e.g., re-regulation, evaporation, etc.) as part of this application, address the requirements listed in FOA Section IV.E.1.b and identify the type and thickness of the liner, the average seepage rate expected over the project life, construction methods, and quality control program. 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.
	Response:
D.4	DESCRIPTION OF ON-FARM OPPORTUNITIES: If new irrigation features will provide water and pressure of such quantity, quality, and reliability to: 1) promote high efficiency sprinkler systems or 2) promote above ground and buried drip or tubing, micro spray, to meet the conditions required for precision leveled, border irrigated fields and/or surge irrigated fields, complete the Enable On-Farm Worksheet and submit required mapping in accordance with FOA Section IV.E.2. Attach the completed worksheet as Appendix C. Summarize below the number of eligible deliveries and "Claimable Acres" for each canal/lateral/ditch. Additionally, identify the percentage of acres that belong to landowners that have demonstrated their interest by signing the on-farm worksheet.
	Response:
E.	ENVIRONMENTAL CONSIDERATIONS:
E.1	NEPA COMPLIANCE: Describe existing environmental compliance documents for the project area and new environmental documents (e.g., environmental assessments) required to implement the proposed project. Identify responsible parties and estimated costs.
	Response:

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E.2	OTHER BENEFITS: Describe any additional environmental benefits of the proposed project including selenium-loading reduction.
	Response:
E.3	ENDANGERED SPECIES CONCERNS: Identify any known endangered or threatened species in the project area and assess the possibilities they may be affected by activities associated with the proposed project.
	Response:
E.4	CULTURAL RESOURCES: Identify any known archaeological sites in the area of the proposed project and assess the possibilities they may be affected by activities associated with the proposed project. Applicant must identify major geographic features including roads, streams, reservoirs, towns, land ownership (Federal, State, Tribal, private, etc).
	Response:
F.	HABITAT REPLACEMENT PLAN: If known, describe wetlands that may be affected by the proposed project and whether they have been previously inventoried. Identify existing Habitat Replacement Plans or new evaluations and analysis needed to develop a plan. Identify costs for studies and implementation of the plan. Justification must be provided if estimated costs are less than 5% of the Total Construction Cost. Construction Costs include the following: Labor, Supplies and Materials, Equipment and Construction Management & Contract Costs. See FOA Section IV.E.4 for further information. The habitat must be maintained for the life of the project which is 50 years. Future costs of habitat maintenance cannot be funded by Reclamation.
	Response:
G.	OPERATION, MAINTENANCE & FUNDING AND MANAGEMENT PLAN: Describe the proposed operation, maintenance, and management plan and habitat replacement plan that will assure the project achieves the proposed salinity control over the project life, which is 50 years. A proposed project that relies extensively on water management to achieve benefits, a detailed description of the plan and funding source must be included. Provide current yearly budget and personnel flowchart/description along with any anticipated changes for the proposed project. Applicants must also submit a funding and management plan, for future procedures, that will be implemented, to assure adequate O&M for the life of the project. (e.g. cleaning headwork screens and clearing sediment, performing electrical maintenance, replacing mechanical equipment, habitat mitigation etc.) O&M of water impoundment structures should be described as specified in FOA Section IV.E.1.b. All O&M management costs, including maintenance of habitat mitigation cannot be paid for with Salinity Grant Funding.
	Response:
H.	EXPERIENCE IN IMPLEMENTING PROJECTS: The Applicant, Project Manager and Engineering Firm must identify and disclose past salinity control projects or projects of similar nature completed or underway by your organization (entity and consultant) and must include construction dates, brief description, and status.
	Response:

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PART III – PROJECT COSTS AND FUNDING PLAN				
A.	DETAILED COST ESTIMATE: Using the table in Appendix D provide a detailed cost estimate for materials and construction. The Habitat Replacement Plan, design, NEPA, and other similar costs must be shown as direct costs. Indirect costs such as overhead are to be included in the cost estimate as well. All quantities, materials, sizes, etc. must be consistent with those provided in the detailed project description in Part II.D of this application.			
B.	FUNDING PLAN: Describe the funding plan for project implementation. The funding plan should have a timeline of proposed funding expenditures. If funding from sources other than the Basinwide or Basin States Programs is anticipated, the funding partner should be identified and a letter of commitment attached. Proposed in-kind contributions should be identified. Funding other than Salinity Control Program funding must be spent concurrently.			
	Response:			
C.	COST EFFECTIVENESS:			
C.1	PROJECT LIFE IS 50 YEARS: The life of the project construction components and wildlife habitat mitigation must be maintained and operated for 50 years.			
	TOTAL & AMORTIZED RECLAMATION COSTS:			
	Total Basinwide / Basin States Program cost:	\$	Amortized Basinwide / Basin States Program cost:	\$
	(In the table provided, enter the total and amortized Basinwide Program or BSP costs. The amortized cost can be determined by applying the amortization factor of 0.04168 to the Basinwide or BSP costs. The amortization factor is based on the FY 2017 Federal planning interest rate of 2.875 percent and a project life of 50 years.)			
C.2	ESTIMATE OF SALT LOAD REDUCTION: Include written response from Reclamation providing salt load reduction estimate in Appendix E			
	Off-farm: _____ tons/year			
	Other: _____ tons/year			
	Total: _____ tons/year			
C.3	COST EFFECTIVENESS VALUE: Divide the Amortized Basinwide/Basin States Program cost by the total annual salt load reduction estimate.			
	\$ _____ /ton/year			
C.4	CONSTRUCTION & FUNDING SCHEDULE: Include a detailed schedule (Gantt chart) displaying anticipated major work items similar to the detailed cost estimate along with the major NEPA and Habitat Replacement milestones. Also include funding requirements (including other funding and in-kind services) on a Federal FY basis (October 1 – September 30) for each year of the project. No more than \$2.0 million of Salinity Funds, is allowed to be budgeted, per year.			
	Response:			



APPENDIX A: GIS PROJECT MAPS

Map(s) of existing facilities shall be scaled appropriately to easily identify the project area, existing facilities, and major geographic features including roads, streams, reservoirs, towns, and land ownership (Federal, state, Tribal, private, etc. If the proposed project is irrigation related, the map(s) should show locations of canals, laterals, and irrigated lands. Those canals or laterals proposed for improvement or abandonment under this application should be clearly identified. A construction timeline should be included on the map(s)

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

APPENDIX C – ESTIMATE OF ENABLED ON-FARM ACREAGE

The Page 2 table for Appendix C can be downloaded from the website <http://www.usbr.gov/uc/progact/salinity> as an Excel spreadsheet. Instructions for completing Appendix C are contained in the spreadsheet file. Include the completed table with the final application as Appendix C and submit the completed Excel spreadsheet electronically.

PLEASE CLICK ON THE EXCEL ICON FOR THE ENABLE ON FARM WORKSHEET



Appendix C - Enable On-Farm Wc

APPENDIX D: DETAILED COST ESTIMATE

- 1) The cost estimates must be provided with sufficient detail to evaluate the reasonableness of your budget Application. For example, show items such as different pipe diameters, farm turnouts, road crossings, air vents, pressure reducing valves, fittings, isolations valves, diversion structures, trash cleaners, mechanical equipment, metalwork, earthwork, lining materials, concrete structures, canal obliteration, structure removal, re-vegetation, and right-of-way acquisition. The line item should show quantities and appropriate pricing either in unit prices or materials and installation. **Add lines to this table and customize for your specific project.**
- 2) All entries must match values and descriptions in the responses to Part II, Project Proposed for Funding.
- 3) Applicants must provide a detailed **Budget Narrative** which justifies the reasonableness of the cost estimates included in the budget Application. *Failure to give enough detail will result in a lower ranking.* Examples of acceptable justifications are quotes from more than one vendor in the competitive market, construction reference manual, historical documentation of actual costs on prior similar projects, open competitive requests for Applications (RFP) and/or evidence of the industry standards for your geographic area,.
- 4) The cost for the **Habitat Replacement Plan** should be at least five percent (5%) of the Total Construction Cost, unless, justification is provided in the project Application for a different value. See FOA Section IV.E.4. **Construction Costs include the following: Labor, Supplies and Materials, Equipment and Construction Management & Contract Costs.**
- 5) Costs must be included for **NEPA** compliance and compliance with cultural resource laws. The applicant is responsible for any costs of mitigation of cultural resource impacts and should include sufficient allowances. See FOA Section III.B.4.
- 6) Include cost of **Single Audit(s)** for each of your fiscal years when Federal expenditures exceeded \$750,000.00. Expenditures begin when the financial obligations were incurred.
- 7) For further guidance please refer to the *Budget Pricing Guide* document which can be downloaded from <http://www.usbr.gov/uc/progact/salinity>.

PLEASE DOUBLE CLICK THE EXCEL FILE ICON TO OPEN AND FILL IN THE COST ESTIMATE SHEET



Appendix C - Enable On-Farm Wo

APPENDIX E: SALT LOAD REDUCTION ESTIMATE(S)

Include the response letter from Reclamation providing the salt load reduction estimate.

***PLEASE DOUBLE CLICK THE WORD AND EXCEL FILES ICON TO OPEN AND FILL
IN THE SALT LOAD REDUCTION WORKSHEET***



APPENDIX E Salt
Load Reduction Wo



APPENDIX E Salt
Load Reduction Wo