RECLAMATION

Managing Water in the West

Funding Opportunity Announcement No. BOR-DO-19-F009

WaterSMART:
Water Reclamation and Reuse Research under the Title XVI Program for Fiscal Year 2019



U.S. Department of the Interior
Bureau of Reclamation
Policy and Administration
Denver, Colorado

June 2019

Mission Statements

The Department of the Interior conserves and manages the Nation's natural resources and cultural heritage for the benefit and enjoyment of the American people, provides scientific and other information about natural resources and natural hazards to address societal challenges and create opportunities for the American people, and honors the Nation's trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated island communities to help them prosper.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

Cover photo: West Basin Municipal Water District's Custom Engineered Membrane Filtration Pilot Test Project.

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Synopsis

Federal Agency Name:	Department of the Interior, Bureau of Reclamation, Policy and Administration
Funding Opportunity Title:	WaterSMART: Water Reclamation and Reuse Research under the Title XVI Water Reclamation and Reuse Program for Fiscal Year (FY) 2017
Announcement Type:	Funding Opportunity Announcement (FOA)
Funding Opportunity Number:	BOR-DO-19-F009
Catalog of Federal Domestic Assistance (CFDA) Number:	15.504
Dates: (See FOA Sec. D.4)	Application due date: September 23, 2019 4:00 p.m. Mountain Daylight Time (MDT)
Eligible Applicants: (See FOA Sec. C.1)	State, regional, or local authorities; Indian tribes or tribal organizations; or other entities such as a water district, wastewater district, or rural water district. Applicants must be located in the western United States or United States Territories as identified in the Reclamation Act of June 17, 1902, as amended or Hawaii.
Recipient Cost Share: (See FOA Sec. C.2)	75 percent or more of total study costs.
Federal Funding Amount: (See FOA Sec. B.1)	Funding Group I: Up to $150,000 per agreement Funding Group II: Up to $300,000 per agreement Funding Group III: Up to $750,000 per agreement
Estimated Number of Agreements to be Awarded: (See FOA Sec. B.1)	Approximately 5 to 12 awards, depending on the amount requested by each applicant.

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Application Checklist

The following table contains a summary of the information that you are required to submit with your application.

√	What to submit	Required content	Form or format	When to submit
	Mandatory Federal Forms: Application for Federal Assistance Budget Information Assurances	See Sec. D.2.2.1	SF-424, SF-424A, and SF-424B forms may be obtained at www.grants.gov/web/grants/forms/sf-424-family.html	*
	Title page	See Sec. D.2.2.2	Page 15	*
	Table of contents	See Sec. D.2.2.3	Page 15	*
	Technical proposal: Executive summary Project description Evaluation criteria	 See Sec. D.2.2.4 See Sec. D.2.2.4 See Sec. E.1	 Page 15 Page 15 Pages 31 to 36	* * * *
	Project Budget: Funding plan and letters of commitment Budget proposal Budget narrative	See Sec. D.2.2.5 See Sec. D.2.2.5 See Sec. D.2.2.5 See Sec. D.2.2.5	Pages 16 to 23 Page 16 Page 18 Page 19	* * * *
	Environmental and cultural resources compliance	See Sec. D.2.2.6	Page 23	*
	Letters of support	See Sec. D.2.2.7	Page 25	*
	Required permits or approvals	See Sec. D.2.2.8	Page 25	*
	Official Resolutions	See Sec. D.2.2.9	Page 25	**

* Submit materials with your application.

** Document should be submitted with your application; however, please refer to the applicable section of the FOA for extended submission date.

*** Should be completed prior to the application deadline; however, please refer to the applicable section of the FOA for extended completion date.

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Acronyms and Abbreviations

ASAP	Automated Standard Application for Payments
ARC	Application Review Committee
CFDA	Catalog of Federal Domestic Assistance
CFR	Code of Federal Regulations
CWA	Clean Water Act
Department	U.S. Department of the Interior
DUNS	Data Universal Number System
ESA	Endangered Species Act
FAPIIS	Federal Award Performance Integrity Information System
FOA	Funding Opportunity Announcement
FY	fiscal year
MDT	Mountain Daylight Time
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
OM&R	operations, maintenance, or replacement
P.L.	Public Law
Reclamation	Bureau of Reclamation
SAM	System of Award Management
Title XVI	Title XVI Water Reclamation and Reuse program
U.S.C.	United States Code
USACE	United States Army Corps of Engineers
WaterSMART	Sustain and Manage America’s Resources for Tomorrow
WIIN	Water Infrastructure Improvements for the Nation

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Section A: Funding Opportunity Description

A.1. Program Information

The U.S. Department of the Interior's (Department) WaterSMART (Sustain and Manage America's Resources for Tomorrow) Program provides a framework for Federal leadership and assistance to stretch and secure water supplies for future generations in support of the Department's priorities. Through WaterSMART, the Bureau of Reclamation (Reclamation) leverages Federal and non-Federal funding to support stakeholder efforts to stretch scarce water supplies and avoid conflicts over water. WaterSMART provides support for the Department's priorities, including creating a legacy of conservation stewardship, sustainably developing our energy and natural resources, modernizing our infrastructure through public-private partnerships, and restoring trust with local communities by improving relationships and communication with states, tribes, local governments, communities, landowners and water users.

Through the Title XVI Water Reclamation and Reuse Program (Title XVI), authorized by Public Law (P.L.) 102-575 in 1992, Reclamation provides financial and technical assistance to local water agencies for water reclamation and reuse research and the planning, design, and construction of water reclamation and reuse projects. Water recycling is an essential tool in stretching the limited water supplies in the Western United States. Title XVI projects develop and supplement urban and irrigation water supplies through water reuse, thereby improving efficiency, providing flexibility during water shortages, and diversifying the water supply. Through the Title XVI Program, Reclamation provides funding to facilitate investment in technology and enables broader scale use of recycled water which supports the goals of the October 19, 2018 Presidential Memorandum on Promoting the Reliable Supply and Delivery of Water in the West.

Water reclamation and reuse research helps states, tribes, and local communities tackle water supply challenges. For purposes of the Title XVI Program, a water reclamation and reuse project is a project that reclaims and reuses municipal, industrial, domestic, or agricultural wastewater or impaired groundwater or surface waters. Research funded under the Title XVI Program (Title XVI Research) supports the development of water reclamation and reuse projects to supplement urban and irrigation water supplies through water reuse, thereby improving efficiency, providing flexibility during water shortages, and diversifying the water supply. Water reclamation and reuse projects provide growing communities with new sources of clean water which increases water management flexibility and makes our water supply more reliable. Title XVI is an important part of the WaterSMART Program. For further information on the WaterSMART Program, see www.usbr.gov/WaterSMART.

A.2. Objective of this Funding Opportunity Announcement

The objective of this FOA is to invite research sponsors to submit proposals to cost share Title XVI Research activities that seek to address water supply challenges by establishing or expanding the use of water reclamation and reuse, improving existing water reuse facilities, and/or streamlining the implementation of state-of-the-art technology for new facilities.

For the purposes of this FOA, state of the art is defined as the latest and most advanced technologies or processes currently available in the industry for deployment and implementation. **"State-of-the-art technology" does not include innovative technologies or processes that are not commercially available and are currently under development through pilot or demonstration research efforts.**

A.3. Statutory Authority

This FOA is issued under the authority of Title XVI of Public Law 102-575, as amended (43 United States Code [U.S.C.] 390h through 390h-39).

A.4. Other Related Funding Opportunities

WaterSMART: Title XVI Congressionally Authorized Water Reclamation and Reuse Projects - Through this FOA, funding is available for planning, design, and construction of Title XVI Projects specifically authorized for funding under Title XVI of Public Law 102-575, as amended (43 U.S.C. 390h through 390h-39).

WaterSMART: Title XVI WIIN Water Reclamation and Reuse Projects - Through this FOA, funding is available for planning, design, and construction of Title XVI Projects eligible under Section 4009(c) of the Water Infrastructure Improvements for the Nation (WIIN) Act.

WaterSMART: Desalination Construction Projects Under the WIIN Act – Through this FOA, funding is available for planning, design, and construction of desalination projects eligible under Section 4009(a) of the WIIN Act.

Desalination and Water Purification Research and Development: Laboratory and Pilot Scale Projects – Through this FOA, funding is available for laboratory and pilot scale research studies to determine the viability of a novel process, new materials, or process modifications in conjunction with individuals, institutions of higher education, commercial or industrial organizations, private entities, public entities (including state and local), and Indian tribal governments.

Desalination and Water Purification Research and Development: Pitch to Pilot – Through this FOA, funding is available to develop innovative and disruptive new technologies or processes at the pilot scale with the goal to augment water supplies and address costs, energy usage, and environmental impacts of water treatment technologies.

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Section B: Award Information

B.1. Total Study Funding

Fiscal year 2019 appropriations include $58.6 million for the Title XVI Program. It is estimated that up to $3,000,000 will be available for development of new water reclamation and reuse research studies under this FOA. Applications submitted under this FOA also may be considered if other funding becomes available in FY 2019 or thereafter.

B.2. Study Funding Limitations

The Federal share (Reclamation's share plus any other sources of Federal funding) of any one proposed research study shall not exceed 25 percent of the total research study cost. Generally, the non-Federal share of research study costs must be expended at the same or greater rate as the Federal share of research study costs. Applicants are invited to submit proposals under any of the three Funding Groups provided below.

Note: For the purposes of this FOA, the terms "project" and "study" are used interchangeably and refer to the applicant's proposed Title XVI Research Study.

B.2.1. Funding Group I

Up to $150,000 in Federal funds provided through this FOA will be available for desktop research studies to develop science and decision-support tools to assist communities in decision-making related to implementing or expanding water reclamation projects.

B.2.2. Funding Group II

Up to $300,000 in Federal funds provided through this FOA will be available for research studies focused on improvements to existing facilities that could be implemented at the research study sponsor's location but that also may include broad benefits for the industry.

B.2.3. Funding Group III

Up to $750,000 in Federal funds provided through this FOA will be available for research studies that focus on state-of-the-art technology verification at a new proposed location or community that may also result in broader benefits for the industry.

B.3. Assistance Instrument

Awards will be made through grants or cooperative agreements as applicable to the selected project. If a cooperative agreement is awarded, the recipient should expect Reclamation to have substantial involvement in the project.

Substantial involvement by Reclamation may include:

- Collaboration and participation with the recipient in the management of the project and close oversight of the recipient's activities to ensure that the program objectives are being achieved.
- Oversight may include review, input, and approval at key interim stages of the project.

At the request of the recipient, Reclamation can provide technical assistance after award of the agreement. If you would like to receive Reclamation technical assistance, you must account for these costs in your project budget. To discuss available assistance and these costs, contact your local Reclamation office, listed at www.usbr.gov/main/regions.html.

Section C: Eligibility Information

C.1. Eligible Applicants

Applicants eligible to receive an award under this FOA include state, regional, or local authorities; Indian tribes or tribal organizations; or other entities such as a water district, wastewater district, or rural water district. Applicants must be located in the western United States or United States Territories as identified in the Reclamation Act of June 17, 1902, as amended or Hawaii.

Sponsors of water reclamation and reuse projects specifically authorized for funding under the Title XVI Act, including projects eligible under the WIIN Act, which have not reached their Federal funding ceiling, are also eligible to receive an award under this FOA.

Entities not eligible under this FOA include, but are not limited to:

- Federal governmental entities
- Research institutions, including universities and nonprofits
- For-profit organizations
- Individuals

Entities not eligible to apply are encouraged to partner with eligible entities to improve the deployment of state-of-the-art technologies.

C.2. Cost Sharing Requirements

Applicants must be capable of cost sharing 75 percent or more of the total project costs. The total project cost is defined as the total allowable costs incurred under a Federal award and all required cost share and voluntary committed cost share contributions, including third-party contributions.

Cost share may be made through cash, costs contributed by the applicant, or third-party in-kind contributions. Third-party in-kind contributions is the value of non-cash contributions of property or services that benefit the federally assisted project and are contributed by non-Federal third parties, without charge. Cost share funding from sources outside the applicant's organization (e.g., loans or state grants) should be secured and available to the applicant prior to award. Please see *Section D.2.2.5. – Project Budget: Funding Plan and Letters of Commitment* and *Section D.2.2.8. - Official Resolution* for more information regarding the documentation required to verify commitments to meet cost sharing requirements.

Other sources of Federal funding may not be counted towards the required cost share. The exception to this requirement is where the Federal statute authorizing a program specifically provides that Federal funds made available for such program

can be applied to matching or cost sharing requirements of other Federal programs, such as awards to tribal organizations under P.L. 93-638, as amended. If it is determined that the Federal funding cannot be applied towards the non-Federal cost share, the work associated with the funding may be removed from the proposed project.

C.2.1. Cost Share Regulations

All cost share contributions must meet the applicable administrative and cost principles criteria established in 2 Code of Federal Regulations (CFR) Part 200, available at www.ecfr.gov.

C.2.2. Third-Party In-Kind Contributions

Third-party in-kind contributions may be in the form of equipment, supplies, and other expendable property, as well as the value of services directly benefiting and specifically identifiable to the proposed project. The cost or value of third-party in-kind contributions that have been or will be relied on to satisfy a cost sharing or matching requirement for another Federal financial assistance agreement, a Federal procurement contract, or any other award of Federal funds may not be relied on to satisfy the cost share requirement for an award under this FOA. Applicants should refer to 2 CFR §200.434 Contributions and donations for regulations regarding the valuation of third-party in-kind contributions, available at www.ecfr.gov.

C.3. Eligible Studies

C.3.1 Eligible Studies

Proposals for water reclamation and reuse research studies designed to help states, tribes, and local communities establish or expand water reuse markets, improve existing water reuse facilities, and/or streamline the implementation of new facilities are eligible for funding under this FOA. Eligible research studies must focus on supporting water reclamation and reuse of non-traditional water supplies, including but not limited to municipal, industrial, domestic, or agricultural wastewater as well as impaired ground or surface waters, including stormwater, seawater, or brackish water.

Funding Groups I, II, and III, below, describe types of research studies eligible for funding under this FOA. Applications may include any one, or combination, of the types of research studies described in Funding Group I, II, or III. In general, if you are seeking funding for multiple research studies (for example, a Funding Group I research study and a Funding Group III research study) and the research studies are interrelated or closely related, they should be combined into one Funding Group application. In these cases, the specifications of the higher funding group would apply.

C.3.1.1 Funding Group I: Planning Related Research to Streamline Approval of Water Reclamation Projects or Expand Water Reclamation Markets or Use

Research studies in this funding group should support and streamline approval, implementation, and expansion of water reuse projects in a specific region. Research studies should focus on desktop research to develop science and decision-support tools to assist communities in decision-making related to implementing or expanding water reclamation projects. Research studies eligible for this funding group include, but are not limited to:

- Research studies focused on creating or identifying innovative pathways to fast-track the implementation of water reclamation projects in times of drought.
- Research to create state or regional guidance to streamline the navigating of institutional obstacles such as the multijurisdictional regulatory framework for permitting new facilities.
- Research to evaluate the institutional barriers to expand or modify an existing water recycling facility for new water use applications such as indirect or direct potable reuse.
- Research to develop or expand reclaimed or recycled water use at a specific location through implementation frameworks that outline best practices to address social acceptance, environmental mitigation, or marketing structures for water reclamation projects.
- Research to evaluate a state or regional market for recycled water, which may include valuing the economic, social, and environmental benefits of water reuse to promote facility implementation.

C.3.1.2 Funding Group II: Research for State-of-the-Art Improvements or Optimization of Existing Water Reclamation Facilities

Planning related research studies or field research studies in this funding group should focus on state-of-the-art solutions to optimize water reuse facility efficiencies, such as reducing treatment costs, improving energy efficiency, or improving water quality at existing facilities. Research studies should focus on improvements to existing facilities that could be implemented at the research study sponsor's location, but may also include broad benefits as case studies for the industry. Research studies eligible for this funding group include, but are not limited to:

- Planning-related research to identify opportunities to promote widespread adoption of efficient treatment technologies in an existing water reclamation facility to stretch supplies generated for agriculture use.
- Planning-related research on integration of existing or new state-of-the-art technology at an existing facility to improve treated water quality to expand the use of reclaimed water for new market applications, such as indirect or direct potable reuse.

- Field research to identify and enact wider adoption of existing or new state-of-the-art technologies at a specific location that improve efficiency, reduce cost, enhance drought resiliency, or counteract the impacts of climate change.
- Field research to evaluate technology implementation options to improve the energy efficiency of existing water reclamation facilities, such as integrating energy recovery devices, energy generation, and optimizing pumping rates or times to conserve energy and lower operating costs.
- Field research to evaluate implementing existing or new state-of-the-art treatment technologies or nutrient recovery techniques that are not widely deployed to improve water quality of discharge into environmental systems at an existing facility.
- Field research to evaluate implementing different software and hardware systems for monitoring, measurement, or leak detection in reclaimed or recycled water plants or distribution systems.
- State-of-the-art technology verification at an existing facility to increase treatment capacity or improve effluent quality to expand recycled water use for new applications.

C.3.1.3 Funding Group III: Field Research to Deploy State-of-the-Art Technologies and Adopt Best Practices for New Water Reuse Facilities

Research studies in this funding group should focus on deploying state-of-the-art technologies at new locations. Research studies should focus on technology verification at a new proposed location or community. Technologies eligible for deployment under this funding group must provide sufficient documentation to prove the technology has been successfully demonstrated in a pilot study for use in the proposed research application. Research studies eligible for this funding group include, but are not limited to:

- Field research to validate the technical merit of a state-of-the-art technology, identified as viable thorough a feasibility investigation or demonstrated in a pilot study, in a new location to assist in streamlining the planning, design, and permanent construction of new water reclamation facilities.
- Field research to determine the physical and economic viability or suitability of a state-of-the-art technology that will reduce total cost, energy input, or carbon emissions at a full scale facility.
- Field research to deploy technologies at a new location for a particular water user including agricultural, municipalities, and industry.
- Field research to evaluate how a state-of-the-art technology may reduce environmental impact of a water reclamation facility.

- Field research to evaluate implementation of state-of-the-art technologies for desalination intake and outfall structures.
- Field research to evaluate methods and/or technologies for treating water produced by oil and gas extraction processes.
- Other research studies that are similar to those listed above may be submitted for consideration and will be allowed to the extent they are consistent with program authorization and goals.

C.3.2 Ineligible Studies

Research studies not eligible for funding under this FOA include, but are not limited to:

- Lab-scale research, piloting, or demonstration research focused on new and novel advanced water treatment technology development, such as studies currently proposed or funded under Reclamation's Desalination and Water Purification Research Program
- Construction of permanent research facilities
- Operations, maintenance, or replacement (OM&R) activities. OM&R is described as system improvements that replace or repair existing infrastructure or function without providing increased efficiency or effectiveness of water distribution over the expected life of the improvement. Examples of ineligible OM&R projects include:
    - Replacing malfunctioning components of an existing facility with the same components
    - Improving an existing facility to operate as originally designed
    - Performing an activity on a recurring basis, even if that period is extended (e.g., 10-year interval)
    - Sealing expansion joints of concrete lining because the original sealer or the water stops have failed
    - Replacing broken meters with new meters of the same type
    - Replacing leaky pipes with new pipes of the same type

C.3.3 Length of Studies

The length of time to complete a research study is determined by the Funding Group for which the research study is proposed. The Funding Groups and respective research study timeframes are listed below:

- Funding Group I research studies should be completed within 18 months of award,

- Funding Group II research studies should be completed within 24 months of award, and
- Funding Group III research studies should be completed within 36 months of award.

Section D: Application and Submission Information

D.1. Address to Request Application Package

This document contains all information, forms, and electronic addresses required to obtain the information required for submission of an application.

If you are unable to access this information electronically, you can request paper copies of any of the documents referenced in this FOA by contacting:

By mail: Bureau of Reclamation
Acquisition and Assistance Operations Branch
Attn: Matthew Reichert
Mail Code: 84-27810
P.O. Box 25007
Denver, Colorado 80225

By email: mreichert@usbr.gov

By telephone: 303-445-3865

D.2. Content and Form of Application Submission

All applications must conform to the requirements set forth below.

D.2.1. Application Format and Length

The technical proposal and evaluation criteris section shall be limited to a maximum of **20** consecutively numbered pages. If this section exceeds **20** pages, only the first **20** pages will be evaluated. The font shall be at least 12 points in size and easily readable. Page size shall be 8½ by 11 inches with standard 1" margins, including charts, maps, and drawings. Oversized pages will not be accepted.

Applications will be prescreened for compliance to the page number limitations. Excess pages will be removed and not considered in the evaluation of the proposed project.

D.2.2. Application Content

The application must include the following elements to be considered complete:

- Mandatory Federal Forms
  - SF-424 Application for Federal Assistance
  - SF-424A Budget Information—Non-construction Programs
  - SF-424B Assurances—Non-construction Programs

  SF-424, SF-424A, and SF-424B forms may be obtained at www.grants.gov/web/grants/forms/sf-424-family.html
- Title page
- Table of contents
- Technical proposal and evaluation criteria (limited to **20** pages)
  - Executive summary
  - Technical project description
  - Evaluation criteria
- Environmental and cultural resources compliance
- Required permits or approvals
- Letters of project support (will not count toward the page limitation)
- Official resolution (will not count toward the page limitation)
- Project budget
  - Funding plan and letters of commitment
  - Budget proposal
  - Budget narrative

D.2.2.1. Mandatory Federal Forms

The application must include the following standard Federal forms.

SF-424 Application for Federal Assistance

A fully completed form SF-424 signed by a person legally authorized to commit the applicant to performance of the project must be submitted. Failure to submit a properly signed SF-424 may result in the elimination of the application from further consideration.

SF-424 Budget Information

A fully completed form SF-424A, Budget Information-Non-Construction Programs, must be submitted with the application.

SF-424 Assurances

A form SF-424B, Assurances—Non-Construction Programs, signed by a person legally authorized to commit the applicant to performance of the project must be

included. Failure to submit a properly signed SF-424B may result in the elimination of the application from further consideration.

D.2.2.2. Title Page

Provide a brief, informative, and descriptive title for the proposed work that indicates the nature of the project. Include the name and address of the applicant, and the name and address, email address, and telephone of the Project Manager.

D.2.2.3. Table of Contents

List all major sections of the proposal in the table of contents.

D.2.2.4. Technical Proposal and Evaluation Criteria

The technical proposal and evaluation criteria (**20** pages maximum) includes:

(1) Executive summary
(2) Technical project description
(3) Evaluation criteria

Executive Summary

The executive summary should include:

- The date, applicant name, city, county, and state
- A one paragraph project summary that specifies the work proposed, including how funds will be used to accomplish specific project activities and briefly identifies how the proposed project contributes to accomplishing the goals of this FOA.
- State the length of time and estimated completion date for the proposed project

Technical Project Description

The technical project description should describe the work in detail, including specific activities that will be accomplished. This description should have sufficient detail to permit a comprehensive evaluation of the proposal. The technical project description should describe research methods and/or the state-of-the-art technologies that will be investigated as part of the research study. A thorough description of past research should include information regarding why the proposed method or technology is more appropriate for the intended use than other available methods as well as other methods considered.

Evaluation Criteria

(See *Section E.1. Technical Proposal: Evaluation Criteria* for additional details, including a detailed description of each criterion and subcriterion and points associated with each.)

The evaluation criteria portion of your application should thoroughly address each criterion and subcriterion in the order presented to assist in the complete and accurate evaluation of your proposal.

It is suggested that applicants copy and paste the evaluation criteria and subcriteria in* Section E.1. Technical Proposal: Evaluation Criteria *into their applications to ensure that all necessary information is adequately addressed.

D.2.2.5. Project Budget

The project budget includes:

(1) Funding plan and letters of commitment
(2) Budget proposal
(3) Budget narrative

Project pre-award costs that have been incurred prior to the date of award may be submitted for consideration as an allowable reimbursable expense or as non-Federal cost share. **In no case will pre-award costs incurred prior to July 1, 2018 be considered for reimbursement or cost share purposes.**

If the project is selected, the awarding Reclamation Grants Officer will review the proposed pre-award costs to determine if they are consistent with program objectives and are allowable in accordance with the authorizing legislation. Proposed pre-award costs must also be compliant with all applicable administrative and cost principles criteria established in 2 CFR Part 200, available at www.ecfr.gov, and all other requirements of this FOA.

Please note that the costs for preparing and submitting an application in response to this FOA, including the development of data necessary to support the proposal, are not eligible project costs under this FOA and must not be included in the project budget. In addition, Budget Proposals must not include costs for the purchase of water or land, or to secure a permanent easement. These costs are not eligible project costs under this FOA.

Funding Plan and Letters of Commitment

Describe how the non-Federal share of project costs will be provided. Reclamation will use this information in making a determination of financial capability.

Project funding provided by a source other than the applicant shall be supported with letters of commitment from these additional sources. This is a **mandatory requirement.** Letters of commitment shall identify the following elements:

- The amount of funding commitment
- The date the funds will be available to the applicant
- Any time constraints on the availability of funds

- Any other contingencies associated with the funding commitment

Commitment letters from third-party funding sources should be submitted with your project application. If commitment letters are not available at the time of the application submission, please provide a timeline for submission of all commitment letters. Cost share funding from sources outside the applicant's organization (e.g., loans or state grants), should be secured and available to the applicant prior to award.

Reclamation will not make funds available for an award under this FOA until the recipient has secured the non-Federal cost share. Reclamation will execute a financial assistance agreement once non-Federal funding has been secured or Reclamation determines that there is sufficient evidence and likelihood that non-Federal funds will be available to the applicant subsequent to executing the agreement.

The funding plan must include all project costs, as follows:

- Any monetary contributions by the applicant towards the cost share requirement and source of funds (e.g., reserve account, tax revenue, and/or assessments)
- Any costs that will be contributed by the applicant
- Any third-party in-kind costs (i.e., goods and services provided by a third party)
- Any cash requested or received from other non-Federal entities
- Any pending funding requests (i.e. grants or loans) that have not yet been approved and an explanation of how the project will be affected if such funding is denied

In addition, please identify whether the budget proposal includes any project costs that have been or may be incurred prior to award. For each cost, describe:

- The project expenditure and amount
- The date of cost incurrence
- How the expenditure benefits the project

Please include the following chart (Table 1) to summarize all funding sources.

Table 1.—Total Project Cost Table

SOURCE	AMOUNT
Costs to be reimbursed with the requested Federal funding	$
Costs to be paid by the applicant	$
Value of third-party contributions	$
TOTAL PROJECT COST	**$**

Budget Proposal

The total project cost (Total Project Cost), is the sum of all allowable items of costs, including all required cost sharing and voluntary committed cost sharing, including third-party contributions, that are necessary to complete the project.

The budget proposal should include detailed information on the categories listed below and must clearly identify all project costs, including those that will be contributed as non-Federal cost share by the applicant (required and voluntary), third-party in-kind contributions, and those that will be covered using the funding requested from Reclamation, and any requested pre-award costs. Unit costs must be provided for all budget items, including the cost of services or other work to be provided by consultants and contractors. Applicants are strongly encouraged to review the procurement standards for Federal awards found at 2 CFR §200.317 through §200.326 before developing their budget proposal.

It is also strongly advised that applicants use the budget proposal format shown below in Table 2 or a similar format that provides this information. If selected for award, successful applicants must submit detailed supporting documentation for all budgeted costs.

Table 2.—Sample Budget Proposal Format

BUDGET ITEM DESCRIPTION	COMPUTATION		Quantity Type	TOTAL COST
	$/Unit	Quantity		
Salaries and Wages				
Employee 1				$
Employee 2				$
Employee 3				$
Fringe Benefits				
Full-Time Employees				$
Part-Time Employees				$
Travel				
Trip 1				$
Trip 2				$
Trip 3				$
Equipment				

Table 2.—Sample Budget Proposal Format

BUDGET ITEM DESCRIPTION	COMPUTATION		Quantity Type	TOTAL COST
	$/Unit	Quantity		
Item A				$
Item B				$
Item C				$
Supplies and Materials				
Item A				$
Item B				$
Third-Party Contributions				
Item A				$
Item B				$
Contractual/Construction				
Contractor A				$
Contractor B				$
Other				
Other				$
TOTAL DIRECT COSTS				**$**
Indirect Costs				
Type of rate	percentage	$base		**$**
TOTAL ESTIMATED PROJECT COSTS				**$**

Budget Narrative

Submission of a budget narrative is mandatory. An award will not be made to any applicant who fails to fully disclose this information. The budget narrative provides a discussion of, or explanation for, items included in the budget proposal. The types of information to describe in the narrative include, but are not limited to, those listed in the following subsections. Costs, including the valuation of third-party in-kind contributions, must comply with the applicable cost principles contained in 2 CFR Part §200, available at the Electronic Code of Federal Regulations (www.ecfr.gov).

Salaries and Wages

Indicate the Project Manager and other key personnel by name and title. The Project Manger must be an employee or board member of the applicant. Other personnel should be indicated by title alone. For all positions, indicate salaries and wages, estimated hours or percent of time, and rate of compensation. The labor rates must identify the direct labor rate separate from the fringe rate or fringe cost for each position. All labor estimates must be allocated to specific tasks as outlined in the applicant's technical project description. Labor rates and proposed hours shall be displayed for each task.

The budget proposal and narrative should include estimated hours for compliance with reporting requirements, including final project and evaluation. Please see *Section F.3.2. Interim Performance Reports* for information on types and frequency of reports required.

Generally, salaries of administrative and/or clerical personnel will be included as a portion of the stated indirect costs. If these salaries can be adequately documented as direct costs, they should be included in this section; however, a justification should be included in the budget narrative.

Fringe Benefits

Indentify the rates/amounts, what costs are included in this category, and the basis of the rate computations. Federally approved rate agreements are acceptable for compliance with this item.

Travel

Identify the purpose of each anticipated trip, destination, number of persons traveling, length of stay, and all travel costs including airfare (basis for rate used), per diem, lodging, and miscellaneous travel expenses. For local travel, include mileage and rate of compensation.

Equipment

Itemize costs of all equipment having a value of over $5,000 and include information as to the need for this equipment, as well as how the equipment was priced if being purchased for the agreement. *Note: if the value is less than $5,000, the item should be included under materials and supplies. If the equipment will be purchased and installed under a construction contract, the equipment should be included in the construction contract cost estimate.*

If equipment is being rented, specify the number of hours and the hourly rate. Local rental rates are only accepted for equipment actually being rented or leased.

If the applicant intends to use their own equipment for purposes of the project, and the cost to use that equipment is being included in the budget as in-kind cost share, the propsed rates should fall within the equipment usage rates outlined by the United States Army Corps of Engineers (USACE) in their Construction Equipment Ownership and Operating Expense Schedule (EP 1110-1-8) at www.publications.usace.army.mil/USACE-Publications/Engineer-Pamphlets/u43545q/313131302D312D38. Provide the rates and hours for each piece of equipment owned and budgeted.

Materials and Supplies

Itemize supplies by major category, unit price, quantity, and purpose, such as whether the items are needed for office use, research, or construction. Identify how these costs were estimated (i.e., quotes, past experience, engineering estimates, or other methodology). *Note: If the materials/supplies will be furnished and installed under a construction contract, the materials/supplies should be included in the construction contract cost estimate.*

Contractual

Identify all work that will be accomplished by subrecipients, consultants, or contractors, including a breakdown of all tasks to be completed, and a detailed budget estimate of time, rates, supplies, and materials that will be required for each task. For each proposed contract, identify the procurement method that will be used to select the consultant or contractor and the basis for selection. Please note that all contracts with an anticipated value of $10,000 or more must use a competitive procurement method. Only contracts for architectural/engineering services can be awarded using a qualifications-based procurement method. If a qualifcations-based procurement method is used, profit must be negotiated as a separate element of the contract price. See 2 CFR §200.317 through §200.326 for additional information regarding the standards for procurement transactions, including required contract content.

Third-Party In-Kind Contributions

Identify all work that will be accomplished by third-party contributors, including a breakdown of all tasks to be completed, and a detailed budget estimate of time, rates, supplies, and materials that will be required for each task. Third-party in-kind contributions, including contracts, must comply with all applicable administrative and cost principles criteria, established in 2 CFR Part 200, available at www.ecfr.gov, and all other requirements of this FOA.

Environmental and Regulatory Compliance Costs

Prior to awarding financial assistance, Reclamation must first ensure compliance with Federal environmental and cultural resources laws and other regulations (“environmental compliance”). Every project funded under this program will have environmental compliance costs associated with activities undertaken by Reclamation and the recipient.

To estimate environmental compliance costs, please contact compliance staff at your local Reclamation Office for additional details regarding the type and costs of compliance that may be required for your project. *Note, support for your compliance costs estimate will be considered during review of your application.* See *Section G. Agency Contacts* of this FOA for a list of Reclamation staff by region to contact regarding compliance costs and requirements.

Environmental compliance costs are considered project costs and must be included as a line item in the project budget and will be cost shared accordingly. The amount of the line item should be based on the actual expected environmental compliance costs for the project, including Reclamation's cost to review environmental compliance documentation. Environmental compliance costs will vary based on project type, location, and potential impacts to the environment and cultural resources.

How environmental compliance activities will be performed (e.g., by Reclamation, the applicant, or a consultant) and how the environmental compliance funds will be spent, will be determined pursuant to subsequent agreement between Reclamation and the applicant. The amount of funding required for Reclamation to conduct any environmental compliance activities, including Reclamation's cost to review environmental compliance documentation, will be withheld from the Federal award amount and placed in an environmental compliance account to cover such costs. If any portion of the funds budgeted for environmental compliance is not required for compliance activities, such funds may be reallocated to the project, if appropriate.

Costs associated with environmental and regulatory compliance must be included in the budget. Compliance costs include costs associated with any required documentation of environmental compliance, analyses, permits, or approvals. Applicable Federal environmental laws could include National Environmental Policy Act (NEPA), Endangered Species Act (ESA), National Historic Preservation Act (NHPA), Clean Water Act (CWA), and other regulations depending on the project. Such costs may include, but are not limited to:

- The cost incurred by Reclamation to determine the level of environmental compliance required for the project
- The cost incurred by Reclamation, the recipient, or a consultant to prepare any necessary environmental compliance documents or reports
- The cost incurred by Reclamation to review any environmental compliance documents prepared by a consultant
- The cost incurred by the recipient in acquiring any required approvals or permits, or in implementing any required mitigation measures

Other Expenses

Any other expenses not included in the above categories shall be listed in this category, along with a description of the item and why it is necessary. No profit or fee will be allowed.

Indirect Costs

Indirect costs are costs incurred by the applicant for a common or joint purpose that benefit more than one activity of the organization and are not readily assignable to the activities specifically benefitted without undue effort. Costs that

are normally treated as indirect costs include, but are not limited to, administrative salaries and fringe benefits associated with overall financial and organizational administration; operation and maintenance costs for facilities and equipment; and, payroll and procurement services. If indirect costs will be incurred, identify the proposed rate, cost base, and proposed amount for allowable indirect costs based on the applicable cost principles for the applicant's organization. It is not acceptable to simply incorporate indirect rates within other direct cost line items.

If the applicant has never received a Federal negotiated indirect cost rate, the budget may include a *de minimis* rate of up to 10 percent of modified total direct costs. For further information on modified total direct costs, refer to 2 CFR §200.68 available at www.ecfr.gov.

If the applicant does not have a federally approved indirect cost rate agreement and is proposing a rate greater than the *de minimis* 10 percent rate, include the computational basis for the indirect expense pool and corresponding allocation base for the rate. Information on "Preparing and Submitting Indirect Cost Proposals" is available from the Interior Business Center, Office of Indirect Cost Services at www.doi.gov/ibc/services/finance/indirect-cost- services. If the proposed project is selected for award, the recipient will be required to submit an indirect cost rate proposal with their cognizant agency within 3 months of award.

Total Costs

Indicate total amount of project costs, including the Federal and non-Federal cost share amounts.

D.2.2.6. Environmental and Cultural Resources Compliance

If the proposed project includes ground-disturbing activities, environmental and cultural resources compliance will be required. To allow Reclamation to assess the probable environmental and cultural resources impacts and costs associated with a proposed research study, proposals that include ground-disturbing activities must included responses to the following list of questions focusing on the NEPA, ESA, and NHPA requirements. Please answer the following questions to the best of your knowledge. If any question is not applicable to the project, please explain why. The application should include the answers to:

- Will the proposed project impact the surrounding environment (e.g., soil [dust], air, water [quality and quantity], or animal habitat)? Please briefly describe all earth-disturbing work and any work that will affect the air, water, or animal habitat in the project area. Please also explain the impacts of such work on the surrounding environment and any steps that could be taken to minimize the impacts.
- Are you aware of any species listed or proposed to be listed as a Federal threatened or endangered species, or designated critical habitat in the project area? If so, would they be affected by any activities associated with the proposed project?

- Are there wetlands or other surface waters inside the project boundaries that potentially fall under CWA jurisdiction as "Waters of the United States?" If so, please describe and estimate any impacts the proposed project may have.
- When was the water delivery system constructed?
- Will the proposed project result in any modification of, or effects to, individual features of an irrigation system (e.g., headgates, canals, or flumes)? If so, state when those features were constructed and describe the nature and timing of any extensive alterations or modifications to those features completed previously.
- Are any buildings, structures, or features in the irrigation district listed or eligible for listing on the National Register of Historic Places? A cultural resources specialist at your local Reclamation office or the State Historic Preservation Office can assist in answering this question.
- Are there any known archeological sites in the proposed project area?
- Will the proposed project have a disproportionately high and adverse effect on low income or minority populations?
- Will the proposed project limit access to and ceremonial use of Indian sacred sites or result in other impacts on tribal lands?
- Will the proposed project contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area?

Note, if mitigation is required to lessen environmental impacts, the applicant may, at Reclamation's discretion, be required to report on progress and completion of these commitments. Reclamation will coordinate with the applicant to establish reporting requirements and intervals accordingly.

Under no circumstances may an applicant begin any ground-disturbing activities (including grading, clearing, and other preliminary activities) on a project before environmental compliance is complete and Reclamation explicitly authorizes work to proceed. This pertains to all components of the proposed project, including those that are part of the applicant's non-Federal cost share. Reclamation will provide a successful applicant with information once environmental compliance is complete. An applicant that proceeds before environmental compliance is complete may risk forfeiting Reclamation funding under this FOA.

If you have any questions regarding NEPA, ESA, and/or NHPA requirements, please contact your local Title XVI Coordinator. See www.usbr.gov/watersmart/title/contacts.html.

D.2.2.7. Letters of Support

Please include letters from interested stakeholders supporting the proposed project. To ensure your proposal is accurately reviewed, please attach all letters of support/ partnership letters as an appendix. *(Note: this will not count against the application page limit.)* **Letters of support received after the application deadline for this FOA will not be considered in the evaluation of the application.**

D.2.2.8. Required Permits or Approvals

Applicants must state in the application whether any permits or approvals are required and explain the plan for obtaining such permits or approvals.

D.2.2.9 Official Resolution

Include an official resolution adopted by the applicant's board of directors or governing body, or, for state government entities, a signed statement from an official authorized to commit the applicant to the financial and legal obligations associated with receipt of a financial assistance award under this FOA, verifying:

- The identity of the official with legal authority to enter into an agreement
- The board of directors, governing body, or appropriate official who has reviewed and supports the application submitted
- The capability of the applicant to provide the amount of funding and/or in-kind contributions specified in the funding plan
- That the applicant will work with Reclamation to meet established deadlines for entering into a grant or cooperative agreement

An official resolution meeting the requirements set forth above is mandatory. If the applicant is unable to submit the official resolution by the application deadline because of the timing of board meetings or other justifiable reasons, the official resolution may be submitted up to 30 days after the application deadline.

D.3. Unique Entity Identifier and System for Award Management (SAM)

All applicants (unless the applicant has an exception approved by Reclamation under 2 CFR §25.110[d]) are required to:

(i) Be registered in SAM before submitting its application;

(ii) Provide a valid unique entity identifier in its application; and

(iii) Continue to maintain an active SAM registration with current information at all times during which it has an active Federal award or an application or plan under consideration by a Federal awarding agency.

Meeting the requirements set forth above is mandatory. If the applicant is unable to complete registration by the application deadline, the Data Universal Number System (DUNS) and SAM registration must be initiated within 30 days after the application deadline in order to be considered for selection and award.

Reclamation will not make a Federal award to an applicant until the applicant has complied with all applicable unique entity identifier and SAM requirements and, if an applicant has not fully complied with the requirements by the time the Reclamation is ready to make an award, Reclamation may determine that the applicant is not qualified to receive a Federal award and use that determination as a basis for making a Federal award to another applicant.

D.4. Submission Date and Time

Application submission date deadline:

September 23, 4:00 p.m. Mountain Daylight Time

Proposals received after the application deadline will not be considered unless it can be determined that the delay was caused by Federal Government mishandling.

Please note that any application submitted for funding under this FOA may be subjected to a Freedom of Information Act request (5 U.S.C. Section 552, as amended by P.L. No. 110-175), and as a result, may be made publicly available. Following awards of funding, Reclamation will post all successful applications on the Reclamation website, www.usbr.gov/watersmart/title after conducting any redactions determined necessary by Reclamation, in consultation with the recipient.

D.4.1. Application Delivery Instructions

Applications may be submitted electronically through Grants.gov (www.grants.gov) or hard copies may be submitted to either one of the following addresses. Under no circumstances will applications received through any other method (such as email or fax) be considered eligible for award.

By mail:
Bureau of Reclamation
Acquisition and Assistance Operations Branch
Attn: Matthew Reichert
P.O. Box 25007, MS-842710
Denver, CO 80225

By express delivery: Bureau of Reclamation mail services
Attn: Matthew Reichert
Denver Federal Center
Bldg. 67, Rm. 152
6th Avenue and Kipling Street
Denver, Colorado 80225

By courier services: Bureau of Reclamation
Attn: Matthew Reichert
Denver Federal Center
Bldg. 67, Rm. 581
6th Avenue and Kipling Street
Denver, Colorado 80225

D.4.2. Instructions for Submission of Project Application

Each applicant shall submit an application in accordance with the instructions contained in this section.

D.4.2.1. Applications Submitted by Mail, Express Delivery, or Courier Services

Please follow these instructions to submit your application by mail, express delivery, or courier services.

- Applicants shall submit one copy of all application documents for hardcopy submissions. Only use a binder clip for documents submitted. Do not staple or bind application documents.
- Hard copy applications may be submitted by mail, express delivery, or courier services to the addresses identified in this FOA.
- Materials arriving separately will not be included in the application package and may result in the application being rejected or not funded. This does not apply to letters of support, funding commitment letters, or official resolutions.
- Faxed and emailed copies of application documents will not be accepted.
- Do not include a cover letter or company literature/brochure with the application. All pertinent information must be included in the application package.

D.4.2.2. Applications Submitted Electronically

If the applicant chooses to submit an electronic application, it must be submitted through Grants.gov (www.grants.gov). Reclamation encourages applicants to submit their applications for funding electronically through the URL: www.grants.gov/applicants/apply-for-grants.html. Applicant resource documents and a full set of instructions for registering with Grants.gov (www.grants.gov) and

completing and submitting applications online are available at: www.grants.gov/applicants/apply-for-grants.html.

- Please note that submission of an application electronically requires prior registration through Grants.gov, which may take 7 to 21 days. Please see registration instructions at www.grants.gov/applicants/apply-for-grants.html. **In addition, please note that the Grants.gov system only accepts applications submitted by individuals that are registered in SAM as both a user and an Authorized Organizational Representative.**

- Applicants sometimes have experienced significant delays when attempting to submit applications through Grants.gov. If you plan to submit your application through Grants.gov you are encouraged to submit your application several days prior to the application deadline. If you are a properly registered Grants.gov applicant and encounter problems with the Grants.gov application submission process, you must contact the Grants.gov Help Desk to obtain a case number. This case number will provide evidence of your attempt to submit an application prior to the submission deadline.

Regardless of the delivery method used, you must ensure that your proposal arrives by the date and time deadline stated in this FOA. Applications received after this date and time due to weather or express delivery/courier performance will not be considered for award. Late applications will not be considered unless it is determined that the delay was caused by Reclamation mishandling or by a problem with the Grants.gov application system. Please note that difficulties related to an applicant's Grants.gov profile (e.g., incorrect organizational representative), the upload of documents to Grants.gov, or an applicant's SAM registration are not considered technical issues with the Grants.gov system.

D.4.2.3. Acknowledgement of Application Receipt.

If an application is submitted by mail, express delivery, or courier, Reclamation will notify you in writing that your application was received and whether it was received prior to the deadline identified in the FOA.

If an application is submitted through Grants.gov, you will receive an email acknowledging receipt of the application from Grants.gov. In addition, Reclamation will notify you in writing that your application was successfully downloaded from Grants.gov.

D.5. Intergovernmental Review

This FOA is not subject to Executive Order 12372, "Intergovernmental Review of Federal Programs."

D.6. Automated Standard Application for Payments Registration

All applicants must also be registered with and willing to process all payments through the Department of Treasury Automated Standard Application for Payments (ASAP) system. All recipients with active financial assistance agreements with Reclamation must be enrolled in ASAP under the appropriate Agency Location Code(s) and the DUNS number prior to the award of funds. If a recipient has multiple DUNS numbers, the recipient must separately enroll within ASAP for each unique DUNS number and/or agency. All of the information on the enrollment process for recipients, including the enrollment initiation form and the enrollment mailbox, can be found at www.usbr.gov/mso/aamd/asap.html.

Note that if your entity is currently enrolled in the ASAP system with an agency other than Reclamation, you must enroll specifically with Reclamation in order to process payments.

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Section E: Application Review Information

E.1. Technical Proposal: Evaluation Criteria

The evaluation criteria portion of your application should thoroughly address each of the following criteria and subcriteria in the order presented to assist in the complete and accurate evaluation of your proposal. Note: it is suggested that applicants copy and paste the below criteria and subcriteria into their applications to ensure that all necessary information is adequately addressed.

Applications will be evaluated against the evaluation criteria listed below. Please note that research studies may be prioritized to ensure balance among the eligible studies and to ensure that the projects address the goals and objectives of the FOA.

Please note, if the work described in your application is a phase of a larger project, please only discuss the benefits that will result directly from the work discussed in your application and that is reflected in the budget, not the overall project.

The evaluation criteria total 100 points as shown in Table 3.

Table 3.—Evaluation Criteria Points

Criterion	Points
Evaluation Criterion 1—Statement of Problems and Needs	15
Evaluation Criterion 2—Local Water Reclamation and Reuse Opportunities	15
Evaluation Criterion 3—Advancing Water Reclamation Knowledge	15
Evaluation Criterion 4—Environment and Water Quality	15
Evaluation Criterion 5—Legal and Institutional Requirements	10
Evaluation Criterion 6—Department of the Interior Priorities	10
Evaluation Criterion 7—Watershed Perspective	10
Evaluation Criterion 8—Broader Research Benefits	10

E.1.1. Evaluation Criterion 1 — Statement of Problems and Needs (15 Points)

Points will be awarded based on the presence of local water resource management problems and needs for which water reclamation and reuse may provide a solution.

1. Describe in detail the water resource management problems and needs in the local area and explain how water reclamation and reuse may address those problems and needs
2. Identify the water supply imbalance and describe how the research study supports the establishment or expansion of water reclamation and reuse

that will reduce, postpone, or eliminate the development of new or expanded non-recycled water supplies

E.1.2. Evaluation Criterion 2 — Local Water Reclamation and Reuse Opportunities (15 Points)

Points will be awarded based on the extent to which the proposal demonstrates that the research study will explore local opportunities for water reclamation and reuse.

1. Describe the source(s) of water that will be investigated for potential reclamation, including impaired surface or ground waters
2. Describe how the research study will support establishment or expansion of water reclamation and reuse markets in the study area
3. Describe how the research study will help broaden the use of reclaimed water for additional purposes in the study area (e.g., environmental restoration, fish and wildlife, groundwater recharge, municipal, domestic, industrial, agricultural, power generation, and recreation)

E.1.3. Evaluation Criterion 3 — Advancing Water Reclamation Knowledge (15 Points)

Points will be awarded based on the extent to which the proposal demonstrates that the research study will advance water reclamation knowledge to support water reclamation and reuse of non-traditional water supplies.

1. Describe the objectives of the proposed research study, research methodology, and how the results will advance water reclamation and reuse knowledge, applicability, effectiveness, and/or energy efficiency. References and literature citations should be provided, as applicable.
2. Describe any collaborators involved with the research and their respective roles.
3. Describe the credentials, experience, and past performance of the research team. Alternatively, describe the process and criteria that will be used to select an appropriate, experienced research team.

E.1.4. Evaluation Criterion 4 — Environment and Water Quality (15 points)

Points will be awarded based on the extent to which the proposal demonstrates that the research study will provide results that could be used to improve surface, groundwater, or effluent discharge quality; restore or enhance habitat for nonlisted species; or provide water or critical habitat for federally listed threatened or endangered species. For each of the following sub-criteria, include descriptions of any specific issues that will be investigated or information that will be developed as part of the research study.

1. Describe the potential for the research results to identify measures or implement technologies that improve the quality of surface or groundwater in the study area
2. Describe the potential for the research results to identify measures or implement technologies that improve flow conditions in a natural stream channel
3. Describe the potential for the research results to identify measures or implement technologies that provide water or habitat for non-listed, sensitive, or federally-listed threatened or endangered species
4. Describe the potential for the research results to reduce negative impacts of water reclamation and reuse on the environment

E.1.5. Evaluation Criterion 5 — Legal and Institutional Requirements (10 Points)

Points will be awarded based on the extent to which the proposal demonstrates that the research study will address legal or institutional requirements or barriers to implementing a water reclamation and reuse project, including water rights issues and any unresolved issues associated with implementation of a project.

1. For desktop research studies, describe how the research may identify methods or produce results that help to eliminate obstacles for using reclaimed water as a supply in the study area.
2. For field-based research studies, describe how the research study may identify methods or produce results that help to eliminate obstacles for using reclaimed water as a supply in the study area, and describe the readiness of the research study to proceed in terms of:
    a. What type and level of preliminary research investigations have been completed?
    b. What type and level of preliminary research plans or testing designs have been completed?
    c. What uncertainties could affect the timing of research completion associated with environmental compliance, permitting, etc. as applicable to the research study?
    d. How will research results help address regulatory or institutional requirements to implement a water reclamation and reuse project?

E.1.6. Evaluation Criterion 6 — Department of the Interior Priorities (10 points)

Points will be awarded based on the extent that the proposal demonstrates that the research study supports the Department of the Interior priorities. Please address those priorities that are applicable to your research study. You may address only the parts of a priority that are applicable. It is not necessary to address priorities,

or parts of priorities, that are not applicable to your research study. A proposal will not necessarily receive more points simply because multiple priorities are addressed. The points available under this criterion will not be divided among the priorities, and projects will not be penalized if some of the priorities are not applicable. Points will be allocated based on the degree to which the research study supports one or more of the priorities listed, and whether the connection to the priority(ies) is well supported in the proposal.

1. ***Creating a conservation stewardship legacy second only to Teddy Roosevelt***

    a. Utilize science to identify best practices to manage land and water resources and adapt to changes in the environment

    b. Examine land use planning processes and land use designations that govern public use and access

    c. Revise and streamline the environmental and regulatory review process while maintaining environmental standards

    d. Review the Department's water storage, transportation, and distribution systems to identify opportunities to resolve conflicts and expand capacity

    e. Foster relationships with conservation organizations advocating for balanced stewardship and use of public lands

    f. Identify and implement initiatives to expand access to Department lands for hunting and fishing

    g. Shift the balance towards providing greater public access to public lands over restrictions to access

2. ***Utilizing our natural resources***

    a. Ensure American energy is available to meet our security and economic needs

    b. Ensure access to mineral resources, especially the critical and rare earth minerals needed for scientific, technological, or military applications

    c. Refocus timber programs to embrace the entire "healthy forests" lifecycle

    d. Manage competition for grazing resources

3. ***Restoring trust with local communities***

    a. Be a better neighbor with those closest to our resources by improving dialogue and relationships with persons and entities bordering our lands

    b. Expand the lines of communication with governors, state natural resource offices, Fish and Wildlife offices, water authorities, county commissioners, tribes, and local communities

4. ***Striking a regulatory balance***

    a. Reduce the administrative and regulatory burden imposed on U.S. industry and the public

    b. Ensure that ESA decisions are based on strong science and thorough analysis

5. ***Modernizing our infrastructure***

    a. Support the White House Public/Private Partnership Initiative to modernize U.S. infrastructure

    b. Remove impediments to infrastructure development and facilitate private sector efforts to construct infrastructure Projects serving American needs

    c. Prioritize Department infrastructure needs to highlight:
        (1) Construction of infrastructure
        (2) Cyclical maintenance
        (3) Deferred maintenance

E.1.7. Evaluation Criterion 7 — Watershed Perspective (10 points)

Points will be awarded based on the extent to which the proposal demonstrates that the research study will promote and apply a regional or watershed perspective to water resource management.

A watershed perspective generally means an approach to planning directed at meeting the needs of geographically dispersed localities across a region or a watershed that will take advantage of economies of scale and foster opportunities for partnerships. This approach also takes into account the interconnectedness of water and land resources, encourages the active participation of all interested groups, and uses the full spectrum of technical disciplines in activities and decision making.

1. Describe the extent to which the research study is based on recommendations from an existing plan or study that recommends research needs in the study area.
2. Explain any additional benefits of, or specific need for, the proposed research study within the sponsor's watershed (e.g., supporting feasibility studies or construction projects planned in the watershed).
3. Does the research study promote collaborative partnerships to address water-related issues? Explain.
4. Does the research study include public outreach and opporltunities for the public to learn about the project? Explain.

E.1.8. Evaluation Criterion 8 — Broader Research Benefits (10 points)

Points will be awarded based on the extent to which the proposal demonstrates that the research study will result in broader benefits that advance the implementation of water reclamation and reuse projects.

1. Describe how the research study helps to implement new methodologies, improve best practices, or deploy state-of-the-art technology.
2. Describe how the research results will benefit other locations based on the technical, economic, or institutional questions that will be answered by the research study.
3. Explain how the research study includes or promotes and encourages collaboration. Identify if there is widespread support for the research study.

E.2. Review and Selection Process

The Government reserves the right to reject any and all applications that do not meet the requirements or objectives of this FOA. Awards will be made for projects most advantageous to the Government. Award selection may be made to maintain balance among the eligible projects listed in this FOA. The evaluation process will be comprised of the steps described in the following subsections.

E.2.1. Initial Screening

All application packages will be screened to ensure that:

- The applicant meets the eligibility requirements stated in this FOA.
- The applicant meets the unique entity identifier and SAM registration requirements stated in this FOA (this may be completed up to 30 days after the application deadline).

- The application meets the content requirements of the FOA package, including submission of technical and budget proposals, a funding plan, letter(s) of commitment, and related forms.
- The application contains a properly executed SF-424, Application for Federal Assistance, form SF-424A, Budget Information Non-Construction Programs and form SF-424B, Assurances Non-Construction Programs.
- The application includes an official resolution, adopted by the applicant's board of directors, governing body, or appropriate authorized official (this may be submitted up to 30 days after the application deadline).
- The application and funding plan meets or exceeds the minimum non-Federal cost share requirements identified in this FOA.

Reclamation reserves the right to remove an application from funding consideration if it does not pass all initial screening criteria listed above. An applicant that has submitted an application that is determined to be ineligible for funding will be notified along with other applicants, or sooner, if possible.

E.2.2. Application Review Committee Evaluation

Evaluation criteria will comprise the total evaluation weight as stated in the *Section E: Application Review Information*. Applications will be scored against the evaluation criteria by an Application Review Committee (ARC), made up of experts in relevant disciplines selected from across Reclamation. The ARC will also review the application to ensure that the proposed project meets the description of eligible projects and meets the objective of this FOA.

During ARC review, Reclamation may contact applicants to request clarifications to the information provided, if necessary.

E.2.3. Red-Flag Review

Following the results of the ARC review, Reclamation offices will review the top-ranking applications and will identify any reasons why a proposed project would not be feasible or otherwise advisable, including environmental or cultural resources compliance issues, permitting issues, legal issues, or financial position. Positive or negative past performance by the applicant and any partners in previous working relationships with Reclamation may be considered, including whether the applicant is making significant progress toward the completion of outstanding financial assistance agreements and whether the applicant is in compliance with all reporting requirements associated with previously funded projects.

In addition, during this review, Reclamation will address any specific concerns or questions raised by members of the ARC.

E.2.4. Managerial Review

Reclamation management will prioritize projects to ensure the total amount of all awards does not exceed available funding levels. Management will also ensure that all projects meet the scope, priorities, requirements, and objectives of this FOA. Management may also prioritize projects to ensure that multiple project types are represented.

E.2.5. Pre-Award Clearances and Approvals

The following pre-award clearances and approvals must be obtained before an award of funding is made. If the results of all pre-award reviews and clearances are satisfactory, an award of funding will be made once the agreement is finalized. If the results of pre-award reviews and clearances are unsatisfactory, consideration of funding for the project may be withdrawn.

E.2.5.1. Environmental Review

If the proposed project includes ground-disturbing activities, Reclamation will forward the proposal to the appropriate Reclamation Regional or Area Office for completion of environmental compliance. To the extent possible, environmental compliance will be completed before a financial assistance agreement is signed by the parties. However, in most cases, the award will be made contingent on completion of environmental compliance. The financial assistance agreement will describe how compliance will be carried out and how the costs will be paid. Ground-disturbing activities may not occur until until environmental compliance is complete and a notice to proceed is issued by the awarding Grants Officer.

In some circumstances, environmental compliance may be completed by another Federal agency. If this occurs or if there is an existing environmental compliance document, the environmental compliance document will need to be reviewed and adopted by Reclamation and a notice to proceed must be issued by the awarding Grants Officer before ground-disturbing activities can begin.

Note: Any construction costs incurred prior to the completion of environmental and cultural compliance are not eligible for reimbursement and cannot be used to meet the non-Federal cost share requirement.

E.2.5.2. Budget Analysis and Business Evaluation

A Reclamation Grants Officer will also conduct a detailed budget analysis and complete a business evaluation and responsibility determination. During this evaluation, the Grants Officer will consider several factors that are important, but not quantified, such as:

- Allowability, allocability, and reasonableness of proposed costs

- Financial strength and stability of the applicant
- Past performance, including satisfactory compliance with all terms and conditions of previous awards, such as environmental compliance issues, reporting requirements, proper procurement of supplies and services, and audit compliance
- Adequacy of personnel practices, procurement procedures, and accounting policies and procedures, as established by applicable Office of Management and Budget circulars

E.3. Federal Award Performance Integrity Information System

Prior to making an award with a Federal total estimated amount greater than $150,000, Reclamation is required to review and consider any information about the applicant that is in the designated integrity and performance system accessible through SAM (currently Federal Award Performance Integrity Information System [FAPIIS]) (see U.S.C. §2313). An applicant, at its option, may review information in the designated integrity and performance systems accessible through SAM and comment on any information about itself that a Federal awarding agency previously entered and is currently in the designated integrity and performance system accessible through SAM. Reclamation will consider any comments by the applicant, in addition to the other information in FAPIIS, in making a judgment about the applicant's integrity, business ethics, and record of performance under Federal awards when completing the review of risk posed by applicants as described in 2 CFR §200.205 Federal awarding agency review of risk posed by applicants.

E.4. Anticipated Announcement and Federal Award Date

Reclamation expects to contact potential award recipients and unsuccessful applicants in January 2020 or slightly later if necessary. Within 2 to 4 months after that date, financial assistance agreements will be awarded to applicants that successfully pass all pre-award reviews and clearances.

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Section F: Federal Award Administration Information

F.1. Federal Award Notices

Successful applicants will receive by electronic mail, a notice of selection signed by a Reclamation Grants Officer. This notice is not an authorization to begin performance.

F.2. Administrative and National Policy Requirements

F.2.1. Environmental and Cultural Resources Compliance

All proposed projects that include ground-disturbing activities will require compliance with NEPA before any ground-disturbing activity may begin. Compliance with all applicable state, Federal and local environmental, cultural, and paleontological resource protection laws and regulations is also required. These may include, but are not limited to, CWA, ESA, NHPA, consultation with potentially affected tribes, and consultation with the State Historic Preservation Office.

Reclamation will be the lead Federal agency for NEPA compliance and will be responsible for evaluating technical information and ensuring that natural resources, cultural, and socioeconomic concerns are appropriately addressed. As the lead agency, Reclamation is solely responsible for determining the appropriate level of NEPA compliance. Further, Reclamation is responsible to ensure that findings under NEPA, and consultations, as appropriate, will support Reclamation's decision on whether to fund a project. Environmental and cultural resources compliance costs are considered project costs. These costs will be considered in the ranking of applications.

Under no circumstances may an applicant begin any ground-disturbing activities (e.g., grading, clearing, and other preliminary activities) on a project before environmental and cultural resources compliance is complete and Reclamation explicitly authorizes work to proceed. This pertains to all components of the proposed project, including those that are part of the applicant's non-Federal cost share. Reclamation will provide a successful applicant with information once such compliance is complete. An applicant that proceeds before environmental and cultural resources compliance is complete may risk forfeiting Reclamation funding under this FOA.

F.2.2. Approvals and Permits

Recipients shall adhere to Federal, state, territorial, tribal, and local laws, regulations, and codes, as applicable, and shall obtain all required approvals and permits. Recipients shall also coordinate and obtain approvals from site owners and operators.

F.2.3. Real Property, 2 CFR §200.311

Real property, equipment, and intangible property, that are acquired or improved with a Federal award must be held in trust by the non-Federal entity as trustee for the beneficiaries of the project or program under which the property was acquired or improved (2 CFR §200.316). Title to real property acquired or improved under a Federal award will vest upon acquisition in the non-Federal entity. Except as otherwise provided by Federal statutes or by the Federal awarding agency, real property will be used for the originally authorized purpose as long as needed for that purpose, during which time the non-Federal entity must not dispose of or encumber its title or other interests. When real property is no longer needed for the originally authorized purpose, the non-Federal entity must obtain disposition instructions from the Federal awarding agency or pass-through entity. As required by 2 CFR §200.329 *Reporting on real property*, recipients will be required to submit reports on the status of real property acquired or improved under a financial assistance agreement issued under this FOA.

F.2.4. Reclamation Administrative Costs

All costs incurred by Reclamation related to the development and administration of any award under this FOA are considered part of the total costs of the project, and the recipient will be required to provide non-Federal cost share for Reclamation's administrative costs. These costs include, but are not limited to, salary, overhead, travel, and other costs directly or indirectly related to the award, as determined by Reclamation. Following the completion of each quarter of the fiscal year, Reclamation will provide the recipient with a statement of Reclamation's costs for the previous quarter. The recipient may request explanations or a review of the costs included in the statement; however, Reclamation's determination as to the validity of the costs will be final. The recipient's required non-Federal cost share for Reclamation's costs will be deducted from payments processed by Reclamation for any award issued under this FOA.

F.3. Reporting — Requirements and Distribution

If the applicant is awarded an agreement as a result of this FOA, the applicant will be required to submit the following reports during the term of the agreement.

F.3.1. Financial Reports

Form SF-425—Federal Financial Report must be submitted on at least a semiannual basis and with the final performance report.

F.3.2. Interim Performance Reports

The specific terms and conditions pertaining to the reporting requirements will be included in the financial assistance agreement.

Interim performance reports submitted on at least a semi-annual basis, that include the following information:

- A comparison of actual accomplishments to the milestones established by the financial assistance agreement for the period
- The reasons why established milestones were not met, if applicable
- The status of milestones from the previous reporting period that were not met, if applicable
- Whether the project is on schedule and within the original cost estimate
- Any additional pertinent information or issues related to the status of the project

F.3.3. Final Performance Report

Recipients will be required to submit a final performance report covering the entire period of performance. Please note that final reports are public documents and will be made available on Reclamation's website, www.usbr.gov/WaterSMART/Title. The final performance report must include, but is not limited to, the following information:

- A narrative summary of all work performed under the agreement.
- A description of the research process or methodology used to establish or expand a water reuse market, improve existing water reuse facilities, or streamline the implementation of state-of-the-art technology for new facilities.
- Presentation and interpretation of test data, results, conclusions, and lessons learned.
- Documentation of the broader benefits of the research as a case study for the industry to help streamline future water reclamation projects, optimize existing facility efficiencies, or broaden the deployment of state-of-the-art technology.

- Photographs documenting the research process area are also appreciated. Note: Reclamation may print photos with appropriate credit to the applicant.

Please note that final reports are public documents and may be made available on Reclamation's website, www.usbr.gov/watersmart/title. Reclamation may print photos with appropriate credit to the applicant.

F.4. Conflicts of Interest

F.4.1. Applicability

This section intends to ensure that non-Federal entities and their employees take appropriate steps to avoid conflicts of interest in their responsibilities under or with respect to Federal financial assistance agreements. In the procurement of supplies, equipment, construction, and services by recipients and by subrecipients, the conflict of interest provisions in 2 CFR 200.318 apply.

F.4.2. Requirements

Non-Federal entities must avoid prohibited conflicts of interest, including any significant financial interests that could cause a reasonable person to question the recipient's ability to provide impartial, technically sound, and objective performance under or with respect to a Federal financial assistance agreement.

In addition to any other prohibitions that may apply with respect to conflicts of interest, no key official of an actual or proposed recipient or subrecipient, who is substantially involved in the proposal or project, may have been a former Federal employee who, within the last 1 year, participated personally and substantially in the evaluation, award, or administration of an award with respect to that recipient or subrecipient or in development of the requirement leading to the funding announcement.

No actual or prospective recipient or subrecipient may solicit, obtain, or use non-public information regarding the evaluation, award, or administration of an award to that recipient or subrecipient or the development of a Federal financial assistance opportunity that may be of competitive interest to that recipient or subrecipient.

F.4.3. Notification

Non-Federal entities, including applicants for financial assistance awards, must disclose in writing any conflict of interest to the Department's awarding agency or pass- through entity in accordance with 2 CFR 200.112, Conflicts of Interest.

Recipients must establish internal controls that include, at a minimum, procedures to identify, disclose, and mitigate or eliminate identified conflicts of interest. The

recipient is responsible for notifying the Financial Assistance Officer in writing of any conflicts of interest that may arise during the life of the award, including those that have been reported by subrecipients.

F.4.5. Restrictions on Lobbying

Non-Federal entities are strictly prohibited from using funds under this grant or cooperative agreement for lobbying activities and must provide the required certifications and disclosures pursuant to 4 3 CFR Part 18 and 31 USC 13 52.

F.4.6. Review Procedures

The Financial Assistance Officer will examine each conflict of interest disclosure on the basis of its particular facts and the nature of the proposed grant or cooperative agreement, and will determine whether a significant potential conflict exists and, if it does, develop an appropriate means for resolving it.

F.4.7. Enforcement

Failure to resolve conflicts of interest in a manner that satisfies the Government may be cause for termination of the award. Failure to make required disclosures may result in any of the remedies described in 2 CFR 200.338, Remedies for Noncompliance, including suspension or debarment (see also 2 CFR Part 180).

F.5. Data Avilability

F.5.1. Applicability

The Department of the Interior is committed to basing its decisions on the best available science and providing the American people with enough information to thoughtfully and substantively evaluate the data, methodology, and analysis used by the Department to inform its decisions.

F.5.2. Use of Data

The regulations at 2 CFR 200.315 apply to data produced under a Federal award, including the provision that the Federal Government has the right to obtain, reproduce, publish, or otherwise use the data produced under a Federal award as well as authorize others to receive, reproduce, publish, or otherwise use such data for Federal purposes.

F.5.3. Availability of Data

The recipient shall make the data produced under this award and any subaward(s) available to the Government for public release, consistent with applicable law, to allow meaningful third-party evaluation and reproduction of the following:

- the scientific data relied upon;

- the analysis relied upon; and
- the methodology, including models, used to gather and analyze data.

F.6 Releasing Applications

Following awards of funding, Reclamation will post all successful applications on the Reclamation website after conducting any redactions determined necessary by Reclamation, in consultation with the recipient.

Section G: Agency Contacts

There will be no pre-application conference. Organizations or individuals interested in submitting applications in response to this FOA may direct questions to the Reclamation personnel identified below.

G.1. Reclamation Financial Assistance Management Contact

Questions regarding application and submission information and award administration may be submitted to the attention of Matthew Reichert, Supervisory Grants Management Specialist, as follows:

By mail: Bureau of Reclamation
Acquisition and Assistance Operations Branch
Attn: Matthew Reichert
Mail Code: 84-27810
P.O. Box 25007
Denver, Colorado 80225

By email: mreichert@usbr.gov

By phone: 303-445-3865

G.2. Reclamation Program Coordinator Contact

Questions regarding applicant and project eligibility and application review may be submitted to the attention of Amanda Erath, Program Analyst, as follows:

By mail: Bureau of Reclamation
Water Resources and Planning
Attn: Amanda Erath
Mail Code: 84-51000
P.O. Box 25007
Denver, Colorado 80225

By email: aerath@usbr.gov

By phone: 303-445-2766