



— BUREAU OF —
RECLAMATION

Notice of Funding Opportunity No. R24AS00016

Desalination and Water Purification Research Program: Research Projects



Mission Statements

The U.S. Department of the Interior protects and manages the Nation's natural resources and cultural heritage; provides scientific and other information about those resources; honors its trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated Island Communities.

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 – Yuma Desalting Plant in Yuma, Arizona (Bureau of Reclamation)

Synopsis

Federal Agency Name:	United States Department of the Interior, Bureau of Reclamation, Research and Development Office
Funding Opportunity Title:	Desalination and Water Purification Research Program: Research Projects
Announcement Type:	Notice of Funding Opportunity (NOFO)
Funding Opportunity Number:	R24AS00016
Catalog of Federal Domestic Assistance (CFDA) Number:	15.506
Dates: (See NOFO section D.4)	Application due date: November 15, 2023, at 4:00 p.m. Mountain Standard Time (MST)
Eligible Applicants: (See NOFO section C.1)	Applicants eligible to receive financial assistance to fund activities under this NOFO include: state governments, county governments, city or township governments, special district governments, Native American tribal governments, institutions of higher education, nonprofits, individuals, and for profit organizations. Foreign entities are not eligible to apply. Federal agencies are not eligible to apply.
Recipient Cost Share: (See NOFO section C.2)	For institutions of higher education, non-Federal cost share is not required but highly encouraged. All other applicants must provide at least a 50-percent non-Federal cost share.
Federal Funding Amount: (See NOFO section B.1)	Approximately \$2,000,000 is available for this NOFO. The final amount of Federal funding available for award under this NOFO will be determined once final fiscal year 2024 appropriations have been made. Funding Group I – Laboratory-Scale Projects. Up to \$250,000 per award for a project that can be completed within 2 years. Funding Group II – Pilot-Scale Projects. Up to \$800,000 per award for a project that can be completed within 3 years.
Estimated Number of Agreements to be Awarded: (See NOFO section B.1)	The Bureau of Reclamation anticipates awarding approximately 4 to 10 projects contingent upon available Federal appropriations. It is expected that more awards will be made for Funding Group I – Laboratory-Scale Projects than for Funding Group II – Pilot-Scale Projects.
Intergovernmental Review: (See NOFO section D.5)	This NOFO is subject to Executive Order 12372, “Intergovernmental Review of Federal Programs.” A list of States that have elected to participate in the intergovernmental review process can be found at www.whitehouse.gov/wp-content/uploads/2020/04/SPOC-4-13-20.pdf .

Application Checklist

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

✓	Mandatory Application Components:	Required content	Page
✓	Mandatory Federal Forms: <ul style="list-style-type: none"> • SF-424: Application for Federal Assistance (Office of Management and Budget [OMB]) • SF-424A: Budget Information - Non-Construction Programs (OMB) • SF-424B: Assurances - Non-Construction Programs (OMB) • OMB Form 4040-0019: Project Abstract Summary 	See section D.2.2.1	12
✓	Unique Entity Identifier (UEI) and System for Award Management (SAM) registration	See section D.3	19
✓	Technical Proposal (Used Project Narrative Attachment Form to upload in grants.gov)	See section D.2.2.2	13
✓	Project Budget (Use Budget Narrative Attachment Form to upload in grants.gov)	See section. D.2.2.3	16
✓	Recommended Application Components:	Required content	Page
✓	Environmental and cultural resources compliance	See section D.2.2.4	17
✓	Personnel Qualifications	See section D.2.2.5	17
✓	Required permits or approvals	See section D.2.2.6	17
✓	Overlap or duplication of effort statement	See section D.2.2.7	17
✓	Conflict of interest disclosure statement	See section D.2.2.8	18
✓	Uniform audit reporting statement	See section D.2.2.9	18
✓	SF-LLL: Disclosure of Lobbying Activities (if applicable) (OMB)	See section D.2.2.10	19
✓	Letters of support	See section D.2.2.11	19

Acronyms and Abbreviations

ARC	Application Review Committee
ASAP	Automated Standard Application for Payments
CE	Categorical Exclusion
CEC	Categorical Exclusion Checklist
CFR	Code of Federal Regulations
CWA	Clean Water Act
Department	U.S. Department of the Interior (also DOI)
DWPR	Desalination and Water Purification Research Program
EA	Environmental Assessment
EIN	Employer Identification Number
EIS	Environmental Impact Statement
E.O.	Executive Order
ESA	Endangered Species Act
FAIN	Federal Award Identification Number
FGDC	Federal Geospatial Data Committee
FOIA	Freedom of Information Act
FONSI	Finding of No Significant Impact
FY	Fiscal Year
GIS	Geographic Information Systems
IBC	Interior Business Center
MST	Mountain Standard Time
NAICS	North American Industry Classification System
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NOAA	National Oceanic and Atmospheric Administration
NOFO	Notice of Funding Opportunity
OMB	Office of Management and Budget
P.L.	Public Law
PSC	Product Service Code
QA/QC	Quality Assurance and Quality Control

Reclamation	Bureau of Reclamation
SAM	System for Award Management
SF	Standard Form
SPOC	Single Point of Contact
TRL	Technology Readiness Level
UEI	Unique Entity Identifier
U.S.C.	United States Code
USFWS	United States Fish and Wildlife Service
WIIN	Water Infrastructure Improvements for the Nation Act

Symbols

%	percent
§	section(s)

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Section A: Program Description

A.1 Authority

This Notice of Funding Opportunity (NOFO) is issued under the authority of the Reclamation Act of 1902, §1 and 2, and the Omnibus Public Land Management Act of 2009, Public Law (P.L.) 111-11, §9509, “Research Agreement Authority.”

A.2 Background and Program Requirements

The United States Department of the Interior (Department), Bureau of Reclamation’s (Reclamation) Desalination and Water Purification Research Program (DWPR) works with Reclamation researchers and partners to develop innovative, cost-effective, and technologically efficient ways to desalinate and treat water.

DWPR funding plays a critical role in iterating an idea from the lab to a real-world demonstration, yielding products that serve the water treatment community and attract commercialization interest. Reclamation is interested in research where the benefits are widespread but where private-sector entities are not able to make the full investment and assume all the risks. Reclamation is also interested in research that has a national significance—where the issues are of large-scale concern and the benefits accrue to a large sector of the public.

The goal of the DWPR program is to address the need to reduce the costs, energy requirements, and environmental impacts of treating impaired and unusable water. The program also aligns with Executive Order (E.O.) 14008, “Tackling the Climate Crisis at Home and Abroad,” by investing in development and application of advanced water treatment technologies that expand access to otherwise unusable water resources, thereby increasing water supply flexibility under the risks of long-term climate change and shorter-term drought.

For further information on the DWPR Program, see www.usbr.gov/research/dwpr.

A.3 Notice of Funding Opportunity Purpose and Objectives

The goal of the DWPR Program is to increase water supplies by reducing the cost, energy consumption, and environmental impacts of treating impaired and otherwise unusable waters. This DWPR Research NOFO invites applicants to address any of the following objectives:

- Develop or improve process or approaches to reduce the cost, energy consumption, feasibility, and/or environmental impacts of desalination and water treatment

- Improve existing membrane technologies, including reverse osmosis, electrodialysis, nanofiltration, membrane filtration, and pretreatment processes
- Carry out basic and applied research on next-generation desalination technologies, including improved energy recovery systems and renewable energy-powered desalination systems
- Develop cost-effective approaches for concentrate management that address feasibility, cost, and/or environmental impacts
- Develop technologies or processes for the selective removal of nutrients and other target contaminants
- Study methods for the recovery of byproducts resulting from desalination to offset the costs of treatment and to reduce environmental impacts from those byproducts
- Develop improved intake/outfall methods at coastal facilities to minimize marine environment impacts such as impingement of larger organisms, entrainment of smaller ones, and impacts to benthic communities
- Develop a better understanding of pathogen removal efficiencies and the variability of performance in various unit processes and multibarrier treatment and develop ways to optimize these processes
- Identify better indicators and surrogates to monitor process performance in desalination and reuse scenarios and develop online real-time or near real-time analytical monitoring techniques for their measurement
- Develop a better understanding of the formation of hazardous and other transformation products during water treatment for reuse and ways to minimize or remove them
- Improve the detection, characterization, monitoring, and separation of per- and polyfluoroalkyl substances and other contaminants of concern
- Develop new technologies or processes for the destruction of per- and polyfluoroalkyl substances

A.4 Program Requirements

The funds provided through this NOFO will be available for selected recipients to conduct water treatment related research. Reclamation's Brackish Groundwater National Desalination Research Facility in Alamogordo, New Mexico, and the Water Quality Improvement Center in Yuma, Arizona, may be available if a location for testing is needed.

A.5 Other Related Funding Opportunities

Reclamation provides funding for other related projects through several other programs under [WaterSMART](#) and the [Desalination and Water Purification Research Program \(DWPR\)](#):

- **DWPR Pitch to Pilot:** Through this NOFO, funding is available for recipients to design, construct, install, and test a pilot-scale process at an already known location using a real water source. See www.usbr.gov/research/dwpr/index.html.
- **Title XVI Water Reclamation and Reuse Program:** Through this NOFO, funding is available for projects to applying commercially available water reclamation and reuse technologies. See www.usbr.gov/watersmart/title/index.html.
- **WaterSMART: Desalination Construction Projects Under the Water Infrastructure Improvements for the Nation (WIIN) Act:** Through this NOFO, funding is available for planning, design, and construction of desalination projects eligible under Section 4009(a) of the WIIN Act. See www.usbr.gov/watersmart/desalination/index.html.
- **WaterSMART: Water Recycling and Desalination Planning:** Through this NOFO, funding is available for planning and pre-construction activities to facilitate project development and to provide assistance with the preparation of water recycling and desalination feasibility studies. See www.usbr.gov/watersmart/desalination/index.html.

Section B: Federal Award Information

B.1 Total Funding

Approximately \$2,000,000 is available for this NOFO, with per-project limits as described in *Section B.2. Expected Award Amount*. Reclamation will determine the final amount of Federal funding available for award under this NOFO once final fiscal year (FY) 2024 appropriations have been made. This NOFO may be canceled if appropriations are insufficient to support new awards. Applications submitted under this NOFO may also be considered if other Federal funding becomes available in or after FY 2024.

B.2 Expected Award Amount

Maximum award for Funding Group I: \$250,000

Maximum award for Funding Group II: \$800,000

Minimum award: No minimum award amount

The maximum award amount in Federal funds may be awarded to an applicant over the project period. See *Section C.3. Cost Sharing or Matching Requirements* for cost share information.

B.3 Expected Award Funding and Anticipated Dates

Anticipated Award Date: 09/30/24

Reclamation expects to contact potential award recipients and unsuccessful applicants in March 2024 (or later if necessary), subject to the timing of final fiscal year 2024 appropriations.

Anticipated Project Completion Date for Funding Group I: September 30, 2026

Anticipated Project Completion Date for Funding Group II: September 30, 2027

B.4 Number of Awards

Approximately four to ten awards, depending on the amount requested by each applicant and the amount of Federal funding available will be awarded under this NOFO.

B.5 Type of Award

Project awards will be made through cooperative agreements. Under cooperative agreements, the successful applicant should expect Reclamation to have substantial involvement in the project:

- Collaboration and participation with the successful applicant in the management of the project and close oversight of the successful applicant'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.

B.6 Technical Assistance

At your request, Reclamation can provide technical assistance after award of the project. If you receive Reclamation's assistance, you must account for these costs in your budget. To discuss available assistance and these costs, contact the program coordinator identified in *Section G. Federal Awarding Agency Contact(s)*.

Section C: Eligibility Information

C.1 Eligible Applicants

Applicants eligible to receive an award to fund include:

- State governments
- County governments
- City or township governments
- Special district governments
- Native American tribal governments (federally recognized)
- Native American tribal governments (other than federally recognized)
- Public and state-controlled institutions of higher education
- Private institutions of higher education
- Nonprofits having a 501(c)(3) status with the IRS, other than institutions of higher education
- Nonprofits without 501(c)(3) status with the IRS, other than institutions of higher education
- Individuals
- For profit organization other than small businesses
- Small businesses
- Others (excluding those identified as ineligible in Section C.2 Ineligible Applicants)

C.2 Ineligible Applicants

Applicants ineligible to receive an award include:

- Federal Governmental entities
- Foreign entities

C.3 Cost-Sharing or Matching Requirements

A non-Federal cost share of at least 50-percent is required for all applicants that are not designated as an institution of higher education. For institutions of higher education, non-Federal cost share is not required but is highly encouraged (see *Section E.1.8 Evaluation Criterion H. Non-Federal Cost Share*).

Cost sharing may be made through direct cash contributions, third-party in-kind contributions, or combinations thereof. It is highly recommended that applicants consider identifying in their application any non-Federal cost share if applicable. Note that cost share amounts will be verified for projects considered for funding. If the reported cost share cannot be verified, funding for the project may be subject to change or delay. As such, it is strongly recommended that reported cost share complies with requirements and regulations found in this section and its sub-sections.

See *Section D.2.2.3. Project Budget* for information on reporting cost share funding in your application. All cost-share contributions must meet the applicable administrative and cost principles criteria established in 2 Code of Federal Regulations (CFR) Part 200.

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. Other sources of Federal funding may not be counted towards 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.

Third-party 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 NOFO. Applicants should refer to 2 CFR §200.434 *Contributions and donations* for regulations regarding the valuation of third-party in-kind contributions.

C.4 Other

Reclamation conducts a review of the [SAM.gov Exclusions database](#) for all applicant entities and their key project personnel prior to award and ineligibility condition apply to this Federal program. If entities or key project personnel are identified in the [SAM.gov Exclusions database](#) as ineligible, prohibited/restricted or otherwise excluded from receiving Federal contracts, certain subcontracts, and certain Federal assistance and benefits, Reclamation cannot award funds to them.

C.5 Eligible Projects

Applicants can apply for two categories of projects under this NOFO:

- **Funding Group I – Laboratory-Scale Projects.** Laboratory-scale projects are typically bench-scale studies involving small flow rates. These projects are used to determine the viability of a novel process, new materials, or process modifications. Funding Group I projects can also include modeling studies, decision support tools, literature and technology reviews, etc. that address objectives identified in *Section A.3 Notice of Funding Opportunity Purpose and Objectives*. Research at this stage often involves a high degree of risk and uncertainty.
- **Funding Group II – Pilot-Scale Projects.** Pilot-scale projects test a novel process at a sufficiently large scale to determine the practicality of implementing the technology at a larger scale. These projects should involve flow rates above 1 gallon per minute and use natural water sources rather than synthetic or laboratory-made feed water. Pilot-scale studies are used to generate data over a sufficient period that can be used to estimate the operational requirements (e.g., labor, chemical addition, power requirements) of the process and show performance with respect to finished water quality goals. Pilot-scale projects are generally preceded by laboratory studies (funded previously by the DWPR Program or others) that demonstrate technology feasibility.

Laboratory-scale projects should be completed within **24** months of award, and pilot-scale projects should be completed within **36** months of award, including the required project presentation and reports. Applications for projects requiring more time will be considered for funding only under limited circumstances. Proposed projects will be reviewed by the Program Office to determine whether the application is eligible for evaluation.

C.6 Ineligible Projects

Projects not eligible for funding under this NOFO include, but are not limited to:

- Proposals for planning activities eligible under the WaterSMART: Water Recycling and Desalination Planning funding opportunity.
- Proposals for work currently funded under an existing Reclamation financial assistance agreement.
- Proposals for the construction of permanent research facilities.
- Proposals for the testing of established water treatment processes for the purposes of generating site specific information.

Section D: Application and Submission Information

D.1 Address to Request Application Package

This document contains all the information, forms, and electronic addresses required to submit an application. If you are unable to access this information electronically, you can request paper copies of any of the documents referenced in this NOFO by emailing the Financial Assistance Operations Section staff at sha-dro-fafoa@usbr.gov.

D.2 Content and Form of Application Submission

All applications must conform to the requirements described in this section.

D.2.1 Application Format and Length

The total technical proposal section (*Section D.2.2.2* below) 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, including charts, maps, and drawings. The margins should be standard 1-inch margins. Oversized pages will not be accepted.

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

D.2.2 Application Content

Applications will be screened for timeliness, completeness and compliance with the provisions of this funding opportunity. A complete application must include all the items identified as Mandatory Application Components in the Application Checklist. Any application which fails to include these items will be deemed ineligible and will not be considered for funding.

Note: Applications submitted by consultants must contain Standard Form (SF) SF-424 and SF-424B that are signed by an authorized representative of the entity applying. These forms are available at www.grants.gov/web/grants/forms/sf-424-family.html.

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✓	Mandatory Federal Forms: <ul style="list-style-type: none"> SF-424: Application for Federal Assistance (Office of Management and Budget [OMB]) SF-424A: Budget Information - Non-Construction Programs (OMB) SF-424B: Assurances - Non-Construction Programs (OMB) OMB Form 4040-0019: Project Abstract Summary 	See section D.2.2.1	12
✓	Unique Entity Identifier (UEI) and System for Award Management (SAM) registration	See section D.3	19
✓	Technical Proposal (Used Project Narrative Attachment Form to upload in grants.gov)	See section D.2.2.2	13
✓	Project Budget (Use Budget Narrative Attachment Form to upload in grants.gov)	See section D.2.2.3	16
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✓	Required permits or approvals	See section D.2.2.6	17
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✓	Conflict of interest disclosure statement	See section D.2.2.8	18
✓	Uniform audit reporting statement	See section D.2.2.9	18
✓	SF-LLL: Disclosure of Lobbying Activities (if applicable) (OMB)	See section D.2.2.10	19
✓	Letters of support	See section D.2.2.11	19

To facilitate fair and timely reviews by the Application Review Committee (ARC), it is highly recommended that application packages be structured in the order identified above.

Applications will be screened for completeness and compliance with the provisions of this notice. Incomplete or noncompliant applications not including required materials will be eliminated from competition.

D.2.2.1 Mandatory Federal Forms

The application must include the following standard Federal forms Questions regarding forms should be referred to the Financial Assistance Point of Contact under *Section G. Federal Awarding Agency Contact(s)*.

D.2.2.1.1 SF-424 Application for Federal Assistance.

A fully completed form SF-424, Application for Federal Assistance, signed by a person legally authorized to commit the applicant to performance of the project must be submitted with the application. The SF-424 must contain a valid Unique Entity Identifier (UEI). Applications that fail to include an SF-424 by the submission deadline will be considered ineligible and will not pass initial screening.

Applicants requesting more than \$100,000 in Federal funding, must certify to the statements in [43 CFR Part 18, Appendix A-Certification Regarding Lobbying](#). The Authorized Official's signature on the appropriate SF-424, Application for Federal Assistance form, represents the entity's certification of the statements in 43 CFR Part 18, Appendix A.

Failure to submit a signed SF-424 with a valid (UEI) number will result in the elimination of the application from further consideration.

SF-424A Budget Information Form

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

Failure to submit a SF-424A will result in the elimination of the application from further consideration.

SF-424B Assurances – Non-Construction Programs

A SF-424B Assurances for Non-Construction Programs signed by a person legally authorized to commit the applicant to performance of the project must be submitted with the application.

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

OMB Form 4040-0019 Project Abstract Summary

A fully completed OMB Form 4040-0019 Project Abstract Summary must be submitted with the application. The Project Abstract Summary shall include the purpose of the project, the activities to be performed, the expected deliverables or outcomes, the intended beneficiaries, and any subrecipient activities, if known. If selected for an award, information provided on this form will be used to create a summary of your project to be posted at www.usbr.gov/research/dwpr/index.html. See *Section F.5.1. Freedom of Information Act*.

Failure to submit a completed OMB Form 4040-0019 will result in the elimination of the application from further consideration.

D.2.2.2 Technical Proposal

Submission of a technical proposal is mandatory and must be received by the application deadline. Failure to submit this information will result in the elimination of the application from further consideration.

Information provided in this 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 technical proposal and evaluation criteria should include the following sections:

D.2.2.2.1 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 as well as the name, address, email, and telephone number of the Project Manager.

D.2.2.2.2 Table of Contents

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

D.2.2.2.3 Executive Summary

The executive summary should include:

- The date, applicant name, city, county, and state.
- Describe the problem to be solved, the proposed solution, and how the proposed solution is superior to currently available technologies or approaches.
- Summarize the proposed project activities and how these activities address one or more objectives of this NOFO. Describe how project success will be measured.
- State the length of time and estimated completion date for the proposed project (month/year).
- Identify the proposed project location(s) and state if any work will be conducted at a Federal facility or on Federal land.

D.2.2.2.4 Problem Statement

Describe the problem to be solved by the proposed project, including why current approaches or technologies are insufficient and how the proposed approach or technology improves on current shortcomings. Include information on what is already known, either from previous research efforts or a literature review. Describe how the proposed work aligns with one or more of the objectives provided in *Section A.3. Notice of Funding Opportunity Purpose and Objectives*.

D.2.2.2.5 Prior Work and Experience

Describe previous research and/or technology development that supports the need for the proposed project. Identify relevant experience of key project team members in the proposed field of study.

D.2.2.2.6 Technical Project Description

Describe the technical approach and proposed research activities to be conducted under the project. Include enough detail on the proposed technology or approach to permit a comprehensive evaluation of the proposal. The applicant's understanding will be established not only by the proposed approach, but also by identifying potential challenges that may be faced throughout the proposed testing, and mitigation strategies for these challenges.

Describe in detail the tasks to be conducted, including the development of the final technical report. For each task, describe planned activities and expected outcomes and milestones. Describe the staff levels, expertise, and number of staff hours required for each task. Provide the location(s) of the proposed project, water type(s) to be tested, and system flow rate.

As applicable, provide figures such a flow diagram, mass/energy balance, and/or similar ways to describe the proposed technology or approach, including process inputs and outputs.

Identify the current technology readiness level (TRL) of the proposed technology (using the TRL definitions in *Section E.1.2. Evaluation Criterion B. Readiness Level*). Identify the TRL that can be achieved if the proposed project is implemented. Assuming your project is successfully implemented, please describe potential next steps (e.g., additional research, pilot testing, commercialization, etc.).

This section is solely intended to provide an understanding of the technical aspects of the project. Please note, if the work for which you are requesting funding is a phase of a larger project, please only describe the work that is reflected in the budget and exclude description of other activities or components of the overall project. Please do not duplicate information.

D.2.2.2.7 Research Schedule

Provide a research schedule based on the technical project description and proposed tasks. The schedule should show individual tasks with significant milestones identified for the work to be accomplished. Clearly and concisely convey this schedule using a table, Gantt chart, project network diagram, or any other visual format. Time for final report preparation as described in *Section F.3. Reporting Requirements and Distribution* should be included in the work plan.

D.2.2.2.8 Facilities and Equipment Information

Describe the facilities where the work will be performed. List the equipment that is available for use on the project and that which will be required for carrying out the proposed work. List and justify any special equipment that will need to be purchased and indicate the extent to which the work cannot be accomplished without it. Information on alternative sources considered for the equipment should also be included.

D.2.2.2.9 Quality Assurance and Quality Control Plan

Identify the proposed quality assurance and quality control (QA/QC) protocols to be used throughout the project, including statistical data analysis, peer review, instrument calibration, etc. If your organization already has a QA/QC program, provide a summary of the program, and include additional information as needed to address the use of the existing program for your proposed project.

D.2.2.2.10 Environmental and Cultural Resources Impacts and Compliance

Describe any potential environmental and/or cultural resource impacts of the proposed work. Provide a plan for disposal of any wastes generated by the project. Identify any permits and licenses that are required for the project and describe how they will be obtained (if not yet obtained).

D.2.2.2.11 Responses to Evaluation Criteria

Section E.1. Evaluation Criteria provides a detailed description of each criterion and points associated with each. Describe how your proposal addresses each criterion, referring to other sections of your proposal as needed.

Copying and pasting the evaluation criteria in Section E.1. Evaluation Criteria into your applications is suggested to ensure that all necessary information is adequately addressed.

D.2.2.3 Project Budget

The 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. Please include the following chart (table 1) to summarize all funding sources. Denote in-kind contributions with an asterisk (*).

Funding Sources	Amount
Non-Federal Entities	
1.	\$
2.	\$
3.	\$
Non-Federal Subtotal	\$
Requested Reclamation Funding	\$

Submission of a budget narrative is mandatory. The budget narrative provides detailed information on the items included in the budget Object Class Categories on the SF-424A or Cost Classification categories identified on the SF-424C. The budget narrative must clearly identify ***all*** items of cost (***total estimated project cost***), ***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.

The types of information to describe in the narrative may include, but are not limited to, those identified in the Budget Narrative Guidance attached to this NOFO (Attachment A).

Applicants may elect to use the Budget Detail and Narrative spreadsheet (Attachment B to this NOFO) for their budget narrative. 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 CFR (www.ecfr.gov).

Please note: The Budget Narrative Attachment Form in Grants.gov is to be used to upload the budget proposal.

Failure to submit a budget proposal will result in the elimination of the application from further consideration.

D.2.2.4 Environmental and Cultural Resources Compliance

If the project includes monitoring, measurement, or other field work, environmental and cultural resources compliance may be required. Proposals that include on the ground activities should answer the questions from *Section H.1. Environmental and Cultural Resource Considerations* in this section.

D.2.2.5 Personnel Qualifications

Identify key personnel (including sub-awardees) that will directly work on project tasks and describe the type of work to be performed by each individual. Provide a statement of assurance that the proposed personnel will be available for work on the project, and a list of alternative personnel to be used in the event proposed personnel are not available as planned. Provide a brief resume (maximum two pages each) for all key personnel named.

D.2.2.6 Required Permits or Approvals

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.

D.2.2.7 Overlap or Duplication of Effort Statement

Applicants should provide a statement that addresses if there is any overlap between the proposed project and any other active or anticipated proposals or projects in terms of activities, costs, or commitment of key personnel. If any overlap exists, applicants must provide a description of the overlap in their application for review.

Applicants must also state if the proposal submitted for consideration under this program does or does not in any way duplicate any proposal or project that has been or will be submitted for funding consideration to any other potential funding source—whether it be Federal or non-Federal. If such a circumstance exists, applicants must detail when the other duplicative proposal(s) were submitted, to whom (agency name and financial assistance program), and when funding decisions are expected to be announced. If at any time a proposal is awarded funds that would be duplicative of the funding requested from Reclamation, applicants must notify the NOFO point of contact or the Program Coordinator immediately.

D.2.2.8 Conflict of Interest Disclosure Statement

Conflict of Interest Disclosure Per the Financial Assistance Interior Regulation (FAIR), 2 CFR §1402.112, you should state in your application if any actual or potential conflict of interest exists at the time of submission.

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 sub-recipients, the conflict of interest provisions in 2 CFR§200.318 apply.

Notification

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

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

Restrictions on Lobbying

Non-Federal entities are strictly prohibited from using funds under a grant or cooperative agreement for lobbying activities and must provide the required certifications and disclosures pursuant to 43 CFR §18 and 31 United States Code (U.S.C.) §1352.

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.

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 §200.339, Remedies for noncompliance, including suspension or debarment (see also 2 CFR §180).

D.2.2.9 Uniform Audit Reporting Statement

All U.S. states, local governments, federally recognized Indian Tribal governments, and non-profit organizations expending \$750,000 in U.S. dollars or more in Federal award funds in your organization's fiscal year must submit a Single Audit report for that year through the

[Federal Audit Clearinghouse's Internet Data Entry System](#) in accordance with 2 CFR §200 subpart F. U.S. state, local government, federally recognized Indian Tribal governments, and non-profit applicants must state if your organization was or was not required to submit a Single Audit report for the most recently closed fiscal year. If your organization was required to submit a Single Audit report for the most recently closed fiscal year, provide the Employer Identification Number (EIN) associated with that report and state if it is available through the [Federal Audit Clearinghouse](#) website.

D.2.2.10 Disclosure of Lobbying Activities (if applicable)

A fully completed and signed SF-LLL, Disclosure of Lobbying Activities is required if the applicant has made or agreed to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. Note—this form cannot be submitted by a contractor or other entity on behalf of an applicant.

D.2.2.11 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. Letters of support received after the application deadline for this NOFO will not be considered in evaluating your proposed project.

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

Each applicant (unless the applicant is an individual or Federal awarding agency that is excepted from those requirements under 2 CFR 25.110 [b] or [c], or has an exception approved by the Federal awarding agency under 2 CFR 25.110 [d]) is required to:

- Be registered in System for Award Management (SAM) before submitting an application. Instructions for registering are available at sam.gov/content/home
- Provide a valid Unique Entity Identifier (UEI) in its application
- Maintain an active SAM registration with current information at all times during which it has an active Federal award or plan under consideration by a Federal award agency.

Meeting the requirements set forth above is mandatory.

D.3.1 Register with the System for Award Management (SAM)

Each applicant must be registered in SAM before submitting an application.

Register on the [SAM.gov](https://sam.gov) website. “Help” tab on the website contains User Guides and other information to assist you with registration. The [Grants.gov Register with SAM page](#) also provides detailed instructions. You can also contact the supporting Federal Service Desk for help registering in SAM.

Once registered in SAM, entities must renew and revalidate their SAM registration at least once every 12 months from the date previously registered. Entities are strongly encouraged to revalidate their registration as often as needed to ensure their information is up to date and reflects changes that may have been to the entity’s IRS information. See the *Submission Requirements* section of this document below for more information on SAM.gov registration. **There is no cost to register with SAM.gov.** There are third-party vendors who will charge a fee in exchange for registering entities with SAM.gov; **please be aware you can register and request help for free.**

D.3.2 Obtain a Unique Entity Identifier (UEI) Number

You are required to register in SAM.gov and obtain a [Unique Entity Identifier](#) (UEI) prior to submitting a Federal award application. A UEI will be assigned to entities upon registering in SAM.gov.

D.3.3 Maintain an Active SAM Registration and UEI Number

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. The Federal awarding agency may 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 Federal awarding agency is ready to make a Federal award, the Federal awarding agency 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

Due Date for Applications: November 15, 2023, at 4:00 pm Mountain Standard Time (MST)

Applications must be submitted to [Grants.gov](https://www.grants.gov) no later than this due date and time.

Proposals received after the application deadline will not be considered unless it can be determined that the delay was caused by Reclamation mishandling or technical issues with the [Grants.gov](https://www.grants.gov) application system. Please note that difficulties related to an applicant's Grants.gov profile (e.g., incorrect organizational representative), uploading documents to Grants.gov, or an applicant's SAM registration are not considered technical issues with the Grants.gov system.

D.4.1 Application Delivery Instructions

Applications must be submitted electronically through Grants.gov (www.grants.gov) **Under no circumstances will applications received through any other method (such as email or fax) be considered eligible for award.**

D.4.2 Instructions for Submitting the Project Application

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

D.4.2.1 Applications Submission

Applications must be submitted through Grants.gov (www.grants.gov/applicants/apply-for-grants.html.) Applicant resource documents and a full set of instructions for registering with Grants.gov and completing and submitting applications online are available at: www.grants.gov/applicants/apply-for-grants.html.

Application submission requires prior registration through Grants.gov, which may take up to 21 days. See the registration instructions available 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 and active in SAM as both a user and an Authorized Organizational Representative.**

Applicants have experienced significant delays when attempting to submit applications through Grants.gov. Applicants are encouraged to submit applications 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.

Late applications will not be considered unless it is determined that a delay was caused by Reclamation mishandling or technical issues with the Grants.gov application system. Please note that difficulties related to an applicant's Grants.gov profile (e.g., incorrect organizational representative), uploading documents to Grants.gov, or an applicant's SAM registration are not considered technical issues with the Grants.gov system.

D.4.2.2 Acknowledgment of Application Receipt

Applicants will receive an e-mail acknowledging receipt of the application from Grants.gov. In addition, you will receive an email acknowledgement when your application is successfully downloaded from Grants.gov.

D.5 Intergovernmental Review

This NOFO is subject to Executive Order (E.O.) 12372, "Intergovernmental Review of Federal Programs." A list of states that have elected to participate in the intergovernmental review process are listed on the Office of Management and Budget's website, www.whitehouse.gov/wp-content/uploads/2020/04/SPOC-4-13-20.pdf.

Applicants in these states must contact their state's Single Point of Contact (SPOC) to find out about and comply with the state's process under E.O. 12372. The names and addresses of the SPOCs are also listed on the Office of Management and Budget's website, www.whitehouse.gov/wp-content/uploads/2020/04/SPOC-4-13-20.pdf.

D.6 Funding Restrictions

D.6.1 Pre-award Costs

Pre-award costs are those incurred prior to the effective date of a Federal award where such costs are necessary for efficient and timely performance of the scope of work. Such costs are allowable only to the extent that they would have been allowable if incurred after the date of the Federal award.

Eligible pre-award costs associated with the proposed project must be incurred after notification of selection for an award. If the proposed project is selected, the pre-award costs will be reviewed 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 and all other requirements of this funding opportunity.

Note: Any incurrence of costs in the performance of the project prior to the issuance of a financial assistance award is at the applicant's own risk. No legal liability on the part of Reclamation for any payment may arise until funds are made available, in writing, by a Reclamation Grants Officer.

Incurrence of pre-award costs is not authorized without prior written approval of the awarding Grants Officer. Per 2 CFR 200.458, pre-award costs are those incurred prior to the effective date of the Federal award or subaward directly pursuant to the negotiation and in anticipation of the Federal award where such costs are necessary for efficient and timely performance of the scope of work. If the proposed 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 and all other requirements of this NOFO. ***In no case will costs incurred prior to notification of selection for an award be considered for reimbursement or non-Federal cost share purposes.***

Please note that the costs for preparing and submitting an application in response to this NOFO, including the development of data necessary to support the proposal, are not eligible project costs under this NOFO and must not be included in the project budget.

D.6.2 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”). Projects funded under this program may have environmental compliance activities undertaken by Reclamation and the successful applicant.

Depending on the potential impacts of the project, Reclamation may be able to complete its compliance activities without additional cost to the successful applicant. Where environmental or cultural resources compliance requires significant participation by Reclamation, Reclamation will add a line item for costs incurred by Reclamation to the budget during development of the financial assistance agreement and cost shared accordingly (i.e., withheld from the Federal award amount). Any costs to the successful applicant associated with compliance will be identified during the process of developing a final project budget for inclusion in the financial assistance agreement. ***In no case will pre-award costs incurred prior to a recipient's notification of selection be considered for reimbursement or non-Federal cost-share purposes.***

D.6.3 Indirect Costs

You may include indirect costs that will be incurred during the development or construction of a Project, which will not otherwise be recovered, as part of your Project budget. Show the proposed rate, cost base, and proposed amount for allowable indirect costs based on the applicable cost principles for your organization. It is not acceptable to simply incorporate indirect rates within other direct cost line items.

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If you have never received a Federal negotiated indirect cost rate, your 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§200.1.

If you do not have a federally approved indirect cost rate agreement and are 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 each rate. Information on “Preparing and Submitting Indirect Cost Proposals” is available from the Department’s Interior Business Center (IBC), Office of Indirect Cost Services, at ibc.doi.gov/ICS/icrna.

If the proposed project is selected for award, the successful applicant will be required to submit an indirect cost rate proposal with their cognizant agency within 3 months of award. The Federal awarding agency that provides the largest amount of direct funding to your organization is your cognizant agency for indirect costs, unless otherwise assigned by the White House Office of Management and Budget (OMB). If the U.S. Department of the Interior (DOI) is your organization’s cognizant agency, the Interior Business Center (IBC) will negotiate your indirect cost rate.

Contact the IBC by phone 916-930-3803 or email at ICS@ibc.doi.gov. Visit their website ibc.doi.gov/ICS/icrna, for information regarding email submission forms.

Organizations must have an active Federal award before they can submit an indirect cost rate proposal to their cognizant agency. Failure to establish an approved rate during the award period renders all costs otherwise allocable as indirect costs unallowable under the award. Recipients may not shift unallowable indirect costs to another Federal award unless specifically authorized to do so by legislation.

Section E: Application Review Information

E.1 Evaluation Criteria

Applications will be evaluated against the evaluation criteria listed below. If the work described in your application is a phase of a larger project, only discuss the benefits that will result directly from the work discussed in the technical project description and that is reflected in the budget—not the larger project.

Evaluation criteria scoring summary	Institutions of higher education	All other applicants
A. Impact of the proposed work	25	25
B. Readiness level	15	15
C. Familiarity in the field of work	10	15
D. Novelty of work approach	10	15
E. Relationship to DWPR objectives	10	10
F. Team qualifications	10	10
G. Schedule and quality assurance/quality control	10	10
H. Non-Federal cost share	10	N/A
Total	100	100

Note: Projects may be prioritized to ensure balance among the NOFO's goals and objectives.

E.1.1 Evaluation Criterion A: Impact of the Proposed Work

Impact of the proposed work on the field of water treatment, including technical, environmental, and economic considerations. Impacts can be measured by the potential and broad applicability of the solution, the problem being addressed, and the likelihood for success. Examples include energy and cost reduction, impact on water supply, and/or ease of use on operation of the technology. Provide information on how project success will be measured for the proposed project.

E.1.2 Evaluation Criterion B: Readiness Level

Describe prior research on the proposed technology or approach and how this prior work supports the need for the proposed project. Information such as a process flow diagram, mass and energy balances, and data from previous testing can be used to support the readiness of the proposed project. As applicable, provide the location of the proposed testing, water type(s) to be tested, and system flow rate.

Using the definitions below, clearly identify what technology readiness level (TRL) the proposed technology is currently at, and what technology readiness level will be achieved if the proposed project is implemented. This funding opportunity is targeting technologies that are currently at TRLs 1-6, but technologies at other TRLs will also be considered if sufficient justification is provided.

TRL	Definition
1	Basic principles observed and reported
2	Technology concept and/or application formulated
3	Analytical and experimental critical function and/or characteristic proof of concept
4	Component and/or system validation in laboratory environment
5	Laboratory-scale, similar system validation in relevant environment
6	Pilot-scale system validation in relevant environment
7	Full-scale system demonstrated in relevant environment
8	Actual system completed and qualified through test and demonstration
9	Actual system operated over the full range of expected conditions

E.1.3 Evaluation Criterion C: Familiarity in the Field of Work

Demonstrate familiarity with current technology and approaches in the field of work. Clearly state the problem being solved, how the proposed approach differs from current solutions, potential challenges that will be faced throughout the proposed testing, and mitigation strategies for these challenges.

E.1.4 Evaluation Criterion D: Novelty of Work Approach

Describe the novelty of approach to the proposed work or the novelty of the idea itself. Novelty is defined as new and/or original; the approach or the technology is not being implemented at full scale in its intended use in any water facility in the United States.

E.1.5 Evaluation Criterion E. Relationship to DWPR Objectives

Describe how the proposed work aligns with one or more of the objectives shown in *Section A.3. Notice of Funding Opportunity Purpose and Objectives*. Clearly identify which objective(s) are supported by the proposed project. Points will be allocated based on the degree to which the proposed work supports one or more of the stated objectives, and not the number of objectives identified. It is not necessary to address objectives that are not applicable to your proposed work.

E.1.6 Evaluation Criterion F: Team Qualifications

Describe the qualifications, capabilities, and experience of the proposed Project Manager and other key personnel who are critical to achievement of the proposed objectives.

E.1.7 Evaluation Criterion G. Schedule and Quality Assurance / Quality Control

Describe the schedule, task phasing, and milestones for the proposed project, with the schedule directly tied to tasks. The identified work should be realistic for completion within the proposed period of performance. Describe quality assurance/quality control protocols to be used throughout the project, including statistical data analysis, peer review, instrument calibration, etc.

E.1.8 Evaluation Criterion H: Non-Federal Cost Share

This criterion is only applicable to applicants designated as an institution of higher education. Non-Federal cost share points will be awarded for voluntarily committed non-Federal cost share. A breakdown of these points by percentage of non-Federal cost share for total project costs is provided below. For example, a project providing \$150,000 in non-Federal cost share and requesting \$250,000 in Federal funding will have a cost share of 37.5% and score eight points for this criterion.

Non-Federal cost share	Points
0%	0
1 to 4%	1
5 to 10%	2
11 to 20%	4
21 to 35%	6
36 to 49%	8
50% plus	10

E.2 Review and Selection Process

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

E.2.1 Initial Screening

Financial Assistance will conduct an initial review of each application submitted in response to the NOFO to determine whether the applicant is eligible, and the application is complete and submitted on time. If the GO determines the applicant is ineligible or non-responsive, the GO will notify the applicant. All application packages will be screened to ensure that:

- The applicant meets the completeness, eligibility, and timeliness requirements stated in this NOFO.
- The applicant meets the unique entity identifier and SAM registration requirements stated in this NOFO.
- The application meets the content requirements of the NOFO package, including submission of a technical proposal, budget proposal, and budget narrative.
- The application contains properly executed mandatory forms SF-424, Application for Financial Assistance and SF-424B, Assurances Form, a completed SF-424A, Budget Information Form, and Project Abstract Summary.

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 criteria will comprise the total evaluation weight as stated in the *Section E.1. Technical Proposal: Evaluation Criteria*. 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 and other Federal agencies. The ARC will also review the application to ensure that the project meets the description of eligible projects and meets the objective of this NOFO.

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, conduct a preliminary budget review, and evaluate the applicant's ability to meet cost share as required.

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 NOFO. Management may also prioritize projects to ensure that multiple project types are represented. After completion of the Managerial Review, Reclamation will notify applicants whose proposals have been selected for award consideration. Applicants whose proposals were not selected for award will also be notified at this time.

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

Reclamation will forward the proposal to the appropriate Reclamation Regional or Area Office for completion of environmental compliance, if applicable. 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 can be completed with the release of funds contingent on completion of environmental compliance and receipt of a written Notice to Proceed from the Reclamation Grants Officer. The financial assistance agreement will describe how compliance will be carried out. Ground-disturbing activities (e.g., installation of a stream gage, biological or water quality monitoring) may not occur until environmental compliance is complete and a notice to proceed is issued by the awarding Reclamation Grants Officer.

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 Reclamation 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 OMB circulars
- 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 procedure, as established by applicable OMB circular

E.3 Federal Award Performance Integrity

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 (see *41 U.S.C. §2313*).

Applicants, at their option, may review information in the designated integrity and performance systems accessible through SAM and comment on any information about themselves that a Federal awarding agency previously entered and that is currently in the designated integrity and performance system accessible through SAM. Reclamation will consider any comments by the applicant 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 §200.206 Federal awarding agency review of risk posed by applicants*.

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 the project.

F.2 Administrative and National Policy Requirements

See the “[DOI Standard Terms and Conditions](#)” for the administrative and national policy requirements applicable to the Bureau of Reclamation and Department of the Interior awards.

F.2.1 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 UEI Number prior to the award of funds. If a recipient has multiple UEI numbers, they must separately enroll within ASAP for each unique UEI number and/or agency. All the information on the enrollment process for recipients, including the enrollment initiation form, will be sent to you by ASAP staff if selected for award.

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

F.2.2 Environmental and Cultural Resources Compliance

All projects being considered for award funding will require compliance with the National Environmental Policy Act (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, the Clean Water Act (CWA), Endangered Species Act (ESA), National Historic Preservation Act (NHPA), consultation with potentially affected Tribes, and consultation with the State Historic Preservation Office. Please see *Section H. Other Information* for an overview of compliance requirements that may be applicable to a project.

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.

Depending on the potential impacts of the project, Reclamation may be able to complete its compliance activities without additional cost to the successful applicant. Where environmental or cultural resources compliance requires significant participation by Reclamation, Reclamation will add costs anticipated to be incurred by Reclamation as a line item to the budget during development of the financial assistance agreement and cost shared accordingly. Any costs to the successful applicant associated with compliance will be identified during the process of developing a final project budget for inclusion in the financial assistance agreement.

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 monitoring, measurement, or other ground-disturbing activities before environmental and cultural resources compliance is complete and Reclamation provides written notification that all such clearances have been obtained. This pertains to all components of the proposed project, including those that are part of the applicant's non-Federal cost-share. An applicant that proceeds before environmental and cultural resources compliance is complete may risk forfeiting Reclamation funding under this NOFO.

F.2.3 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.2.4 Geospatial Data and Data Tools

All geospatial data collected for or produced through the use of the U.S. Department of the Interior financial assistance funds are required to meet all relevant standards established by the Federal Geospatial Data Committee (FGDC) as authorized by Geospatial Data Act of 2018, P.L. 115-254, Subtitle F – Geospatial Data, §751-759C, codified at 43 U.S.C. §2801–2811. The DOI requires fully compliant metadata on all geographic information systems (GIS) files developed for financial assistance projects. If a funded financial assistance project involves

acquiring or collecting geospatial data, the successful applicant is required to search [GeoPlatform.gov](https://www.geoplatform.gov) to determine that no existing Federal, State, local or private data meet the Government's needs and are available at no cost before acquiring or collecting additional geospatial data.

Any spatially explicit data or tools developed in the performance of an award made under this NOFO must be developed in industry standard formats that are compatible with GIS platforms.

F.2.5 Intangible Property (2 CFR §200.315)

Title to intangible property acquired under a Federal award vests upon acquisition in the non-Federal entity (see §200.1 *Intangible Property*). The non-Federal entity must use that property for the originally authorized purpose and must not encumber the property without approval of the Federal awarding agency. When no longer needed for the originally authorized purpose, disposition of the intangible property must occur in accordance with the provisions in §200.313(e) Equipment (of this CFR).

The non-Federal entity may copyright any work that is subject to copyright and was developed, or for which ownership was acquired, under a Federal award. However, per 2 CFR 200.315 (b), the Federal awarding agency reserves a royalty-free, nonexclusive, and irrevocable right to reproduce, publish, or otherwise use the work for Federal purposes, and to authorize others to do so.

The non-Federal entity is subject to applicable regulations governing patents and inventions, including government wide regulations issued by the Department of Commerce at 37 CFR §401, *Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Awards, Contracts and Cooperative Agreements*.

F.2.6 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 *Property trust relationship*). 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 Reclamation, 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 Reclamation. As required by 2 CFR §200.330 *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 NOFO.

F.2.7 Buy America Domestic Procurement Preference

As required by Section 70914 of the Bipartisan Infrastructure Law (also known as the Infrastructure Investment and Jobs Act), P.L. 117-58, on or after May 14, 2022, none of the funds under a Federal award that are part of Federal financial assistance program for infrastructure may be obligated for a project unless all of the iron, steel, manufactured products, and construction materials used in the project are produced in the United States, unless subject to an approved waiver. The requirements of this section must be included in all subawards, including all contracts and purchase orders for work or products under this program.

Recipients of an award of Federal financial assistance are hereby notified that none of the funds provided under this award may be used for a project for infrastructure unless:

1. all iron and steel used in the project are produced in the United States--this means all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States;
2. all manufactured products used in the project are produced in the United States—this means the manufactured product was manufactured in the United States; and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product, unless another standard for determining the minimum amount of domestic content of the manufactured product has been established under applicable law or regulation; and
3. all construction materials are manufactured in the United States—this means that all manufacturing processes for the construction material occurred in the United States.

The Buy America preference only applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project. As such, it does not apply to tools, equipment, and supplies, such as temporary scaffolding, brought to the construction site and removed at or before the completion of the infrastructure project. Nor does a Buy America preference apply to equipment and furnishings, such as movable chairs, desks, and portable computer equipment, that are used at or within the finished infrastructure project but are not an integral part of the structure or permanently affixed to the infrastructure project.

For further information on the Buy America preference, please visit www.doi.gov/grants/BuyAmerica. Additional information can also be found at the White House Made in America Office website: www.whitehouse.gov/omb/management/made-in-america/.

Waivers

When necessary, recipients may apply for, and the U.S. Department of the Interior (DOI) may grant, a waiver from these requirements, subject to review by the Made in America Office. The DOI may waive the application of the domestic content procurement preference in any case in which it is determined that one of the below circumstances applies:

1. Non-availability Waiver: the types of iron, steel, manufactured products, or construction materials are not produced in the United States in sufficient and reasonably available quantities or of a satisfactory quality;
2. Unreasonable Cost Waiver: the inclusion of iron, steel, manufactured products, or construction materials produced in the United States will increase the cost of the overall project by more than 25 percent; or
3. Public Interest Waiver: applying the domestic content procurement preference would be inconsistent with the public interest.

There may be instances where an award qualifies, in whole or in part, for an existing DOI general applicability waiver as described at: www.doi.gov/grants/BuyAmerica/GeneralApplicabilityWaivers. If the specific financial assistance agreement, infrastructure project, or non-domestic materials meets the criteria of an existing general applicability waiver within the limitations defined within the waiver, the recipient is not required to request a separate waiver for non-domestic materials.

If a general applicability waiver does not already apply, and a recipient believes that one of the above circumstances applies to an award, a request to waive the application of the domestic content procurement preference may be submitted to the financial assistance awarding officer in writing. Waiver requests shall include the below information. The waiver shall not include any Privacy Act information, sensitive data, or proprietary information within their waiver request. Waiver requests will be posted to www.doi.gov/grants/buyamerica and are subject to public comment periods of no less than 15 days. Waiver requests will also be reviewed by the Made in America Office.

1. Type of waiver requested (non-availability, unreasonable cost, or public interest).
2. Requesting entity and Unique Entity Identifier (UEI) submitting the request.
3. Department of Interior Bureau or Office who issued the award.
4. Federal financial assistance listing name and number (reference block 2 on DOI Notice of Award).
5. Financial assistance title of project (reference block 8 on DOI Notice of Award).
6. Federal Award Identification Number (FAIN).

7. Federal funding amount (reference block 11.m. on DOI Notice of Award).
8. Total cost of Infrastructure expenditures (includes Federal and non-Federal funds to the extent known).
9. Infrastructure project description(s) and location(s) (to the extent known).
10. List of iron or steel item(s), manufactured goods, and construction material(s) the recipient seeks to waive from Buy America requirements. Include the name, cost, countries of origin (if known), and relevant Product Service Code ([PSC](#)) or North American Industry Classification System ([NAICS](#)) code for each.
11. A certification that the recipient made a good faith effort to solicit bids for domestic products supported by terms included in requests for proposals, contracts, and nonproprietary communications with the prime contractor.
12. A statement of waiver justification, including a description of efforts made (e.g., market research, industry outreach) by the recipient, in an attempt to avoid the need for a waiver. Such a justification may cite, if applicable, the absence of any Buy America-compliant bids received in response to a solicitation.
13. Anticipated impact if no waiver is issued.

Approved waivers will be posted at www.doi.gov/grants/BuyAmerica/ApprovedWaivers; recipients requesting a waiver will be notified of their waiver request determination by an awarding officer.

Questions pertaining to waivers should be directed to the financial assistance awarding officer.

Definitions

“Construction materials” includes an article, material, or supply that is or consists primarily of:

- non-ferrous metals;
- plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables);
- glass (including optic glass);
- lumber; or
- drywall.

“Construction Materials” does **not** include cement and cementitious materials, aggregates such as stone, sand, or gravel, or aggregate binding agents or additives.

“Domestic content procurement preference” means all iron and steel used in the project are produced in the United States; the manufactured products used in the project are produced in the United States; or the construction materials used in the project are produced in the United States.

“Infrastructure” includes, at a minimum, the structures, facilities, and equipment for, in the United States, roads, highways, and bridges; public transportation; dams, ports, harbors, and other maritime facilities; intercity passenger and freight railroads; freight and intermodal facilities; airports; water systems, including drinking water and wastewater systems; electrical transmission facilities and systems; utilities; broadband infrastructure; and buildings and real property. Infrastructure includes facilities that generate, transport, and distribute energy.

“Project” means the construction, alteration, maintenance, or repair of infrastructure in the United States.

F.2.8 Cost Share/Match Waiver for Insular Areas

In accordance with provisions of Public Law 95-134, Title V, § 501 (1977) (codified at 48 U.S.C. 1469a), as amended by Public Law 96-205, Title V, § 601, DOI has determined that any requirement for local matching funds to be provided by insular governmental entities shall be waived, notwithstanding any other provision of law. Any matching funds otherwise required by law to be provided by government entities of an insular area are waived.

The areas defined by Public Law 95-134, Title V, § 501 (1977), as amended (48 U.S.C. § 1469a), include the Virgin Islands, Guam, American Samoa, and the islands formerly referred to as the “Trust Territory of the Pacific Islands”: the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia, the Republic of the Marshall Islands, and the Republic of Palau.

F.3 Reporting Requirements and Distribution

If the applicant is awarded an agreement as a result of this NOFO, the applicant will be required to submit the following reports during the term of the agreement. Recipients will also be required to have a system in place to comply with these reporting requirements (see 2 CFR §170.210 for additional information).

F.3.1 Financial Reports

Recipients will be required to submit a fully completed form SF-425 Federal Financial Report on an annual basis and with the final performance report. The SF-425 must be signed by a person legally authorized to obligate the successful applicant.

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 will be submitted annually, which include:

- 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 encompassing the entire period of performance. The final performance report must include, but is not limited to, the following information:

- A summary of all project activities completed over the entire period of performance.
- Whether the project objectives and goals were met.

F.3.4 Interim Technical Reports

Interim technical reports shall be submitted on a quarterly basis and will be used by Reclamation to ensure that the goals and objectives of the project are being met. Each report will describe work conducted, significant accomplishments, unanticipated delays, schedule status, and budget status for the reporting period.

F.3.5 Final Technical Report

Publication guidelines and published final reports from previous projects are available at www.usbr.gov/research/dwpr. Recipients will use the provided report template and deliver a final report in Microsoft Word format. Recipients will address review comments from Reclamation in a timely manner. Please note final technical reports are public documents and will be made available on Reclamation's website.

F.3.6 Project Presentation

All recipients are required to make a presentation on project achievements at Reclamation's office in Denver, Colorado. It should occur after the draft final report has been submitted to Reclamation for review. The presentation should inform Reclamation of the project accomplishments, the final results of each task, lessons learned, and future research needs. If the presentation cannot be delivered in person, it can be done virtually.

F.3.7 Real Property Reports

Recipients and subrecipients are required to submit status reports on the status of real property acquired under the award in which the Federal government retains an interest. The required frequency of these reports will depend on the anticipated length of the Federal interest period. The Bureau will include recipient-specific real property reporting requirements, including the required standard form or data elements, reporting frequency, and report due dates, in the Notice of Award when applicable.

F.4 Disclosures

F.4.1 Conflict of Interest Disclosures

Recipients must notify the program immediately in writing of any conflict of interest that arise during the life of their Federal award, including those reported to them by any subrecipient under the award. Recipients must notify the program in writing if any employees, including subrecipient and contractor personnel, are related to, married to, or have a close personal relationship with any Federal employee in the Federal funding program or who otherwise may have been involved in the review and selection of the award. The term employee means any individual engaged in the performance of work pursuant to the Federal award.

F.4.2 Other Mandatory Disclosures

The Non-Federal entity or applicant for a Federal award must disclose, in a timely manner, in writing to the Federal awarding agency or pass-through entity all violations of Federal criminal law involving fraud, bribery, or gratuity violations potentially affecting the Federal award. Non-Federal entities that receive a Federal award including the terms and conditions outlined in 2 CFR 200, *Appendix XII—Award Term and Condition for Recipient Integrity and Performance Matters* are required to report certain civil, criminal, or administrative proceedings to SAM. Failure to make required disclosures can result in any of the remedies described in 2 CFR §200.338 *Remedies for noncompliance*, including suspension or debarment.

F.5 Data Availability (2 CFR §1402.315)

F.5.1 Data Publication

All data, methodology, factual inputs, models, analyses, technical information, reports, conclusions, valuation products or other scientific assessments in any medium or form, including textual, numerical, graphic, cartographic, narrative, or audiovisual, resulting from a financial assistance agreement is available for use by the U.S. Department of the Interior, including being available in a manner that is sufficient for independent verification.

The Federal Government has the right to:

1. Obtain, reproduce, publish, or otherwise use the data, methodology, factual inputs, models, analyses, technical information, reports, conclusions, or other scientific assessments, produced under a Federal award; and
2. Authorize others to receive, reproduce, publish, or otherwise use such data, methodology, factual inputs, models, analyses, technical information, reports, conclusions, or other scientific assessments, for Federal purposes, including to allow for meaningful third-party evaluation.

F.5.2 Freedom of Information Act

Please note that any application submitted for funding under this NOFO may be subjected to a Freedom of Information Act (FOIA) request (5 U.S.C. §552, as amended by P.L. No. 110-175), and as a result, may be made publicly available.

In response to a FOIA request for research data relating to published research findings produced under a Federal award that were used by the Federal government in developing an agency action that has the force and effect of law, the Federal awarding agency must request, and the non-Federal entity must provide, within a reasonable time, the research data so that they can be made available to the public through the procedures established under the FOIA. If the Federal awarding agency obtains the research data solely in response to a FOIA request, the Federal

awarding agency may charge the requester a reasonable fee equaling the full incremental cost of obtaining the research data. This fee should reflect costs incurred by the Federal agency and the non-Federal entity. This fee is in addition to any fees the Federal awarding agency may assess under the FOIA (5 U.S.C. 552[a][4][A]).

Published research findings mean when:

- Research findings are published in a peer-reviewed scientific or technical journal; or
- A Federal agency publicly and officially cites the research findings in support of an agency action that has the force and effect of law. “Used by the Federal government in developing an agency action that has the force and effect of law” is defined as when an agency publicly and officially cites the research findings in support of an agency action that has the force and effect of law.

Research data means the recorded factual material commonly accepted in the scientific community as necessary to validate research findings, but not any of the following: preliminary analyses, drafts of scientific papers, plans for future research, peer reviews, or communications with colleagues. This “recorded” material excludes physical objects (e.g., laboratory samples). Research data also does not include:

- Trade secrets, commercial information, materials necessary to be held confidential by a researcher until they are published, or similar information which is protected under law; and
- Personnel and medical information and similar information the disclosure of which would constitute a clearly unwarranted invasion of personal privacy, such as information that could be used to identify a particular person in a research study.

Section G: Federal Awarding Agency Contact(s)

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

G.1 Reclamation Financial Assistance Contact

Questions regarding application and submission information and award administration may be submitted to:

Name: Christina Munoz

Email: bor-sha-fafoa@usbr.gov

Phone: 720-614-2192

Please include the NOFO number R24AS00016 in the subject. Staff availability on the day of the NOFO closing will be limited.

G.2 Reclamation Program Coordinator Contact

Questions regarding applicant and project eligibility and application review may be submitted to the attention of Mr. Andrew Tiffenbach:

By mail: Bureau of Reclamation
Research and Development Office
Attn: Mr. Andrew Tiffenbach
P.O. Box 25007, MS 86-69100
Denver, CO 80225

By e-mail: atiffenbach@usbr.gov

By phone: 303-445-2393

Section H: Other Information

The following is a brief overview of NEPA, NHPA, and ESA. This information is only relevant to proposals that include measurement, monitoring and field work. While these statutes are not the only environmental laws that may apply, they are the Federal laws that most frequently do apply. Compliance with all applicable environmental laws will be initiated by Reclamation concurrently, immediately following the initial recommendation to award a financial assistance agreement under this NOFO. The descriptions below are intended to provide you with information about the environmental compliance issues that may apply to your projects.

H.1 Environmental and Cultural Resource Considerations

To allow Reclamation to assess the probable environmental and cultural resources impacts and costs associated with each application, all applicants should consider 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], 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?

H.1.1 National Environmental Policy Act

NEPA requires Federal agencies such as Reclamation to evaluate, during the decision-making process, the potential environmental effects of a proposed action and any reasonable mitigation measures. Before Reclamation can decide to fund an award under this NOFO, Reclamation must comply with NEPA. Compliance with NEPA can be accomplished in several ways, depending upon the degree and significance of environmental impacts associated with the proposal.

Some projects may fit within a recognized **Categorical Exclusion (CE)** to NEPA (i.e., one of the established categories of activities that generally do not have significant impacts on the environment). If a project fits within a CE, no further NEPA compliance measures are necessary. Use of a CE can involve simple identification of an applicable **Department CE** or documentation of a **Reclamation CE** using a **Categorical Exclusion Checklist (CEC)**. If a CE is being considered, Reclamation will determine the applicability of the CE and whether extraordinary circumstances (i.e., reasons that the CE cannot be applied) exist. *That process can take anywhere from 1 day to about 30 days, depending upon the specific situation.*

- If the project does not fit within a CE, compliance with NEPA might require preparation of an **Environmental Assessment/Finding of No Significant Impact (EA/FONSI)**. Generally, where no CE applies but there are not believed to be any significant impacts associated with the proposed action, an EA will be required. The EA is used to determine whether any potentially significant effects exist (which would trigger the further step of an **Environmental Impact Statement (EIS)**, below). If no potentially significant effects are identified, the EA process ends with the preparation of a FONSI. The EA/FONSI process is more detailed than the CE/CEC process and can take weeks or even months to complete. Consultation with other agencies and public notification are part of the EA process.

- The most detailed form of NEPA compliance, where a proposed project has potentially significant environmental effects, is completion of an **EIS** and **Record of Decision**. An EIS requires months or years to complete, and the process includes considerable public involvement, including mandatory public reviews of draft documents. It is not anticipated that projects proposed under this program will require completion of an EIS.

During the NEPA process, potential impacts of a project are evaluated in context and in terms of intensity (e.g., Will the proposed action affect the only native prairie in the county? Will the proposed action reduce water supplied to a wetland by 1 percent? Or 95 percent?). The best source of information concerning the potentially significant issues in a project area is the local Reclamation staff that has experience in evaluating effects in context and by intensity.

Reclamation has the sole discretion to determine what level of environmental NEPA compliance is required. If another Federal agency is involved, Reclamation will coordinate to determine the appropriate level of compliance. You are encouraged to contact your regional or area Reclamation office. See www.usbr.gov/main/offices.html with questions regarding NEPA compliance issues. You may also contact the Program Coordinator for further information (see *Section G. Federal Awarding Agency Contact(s)*).

H.1.2 National Historic Preservation Act

To comply with Section 106 of the NHPA, Reclamation must consider whether a proposed project has the **potential to cause effects to historic properties**, before it can complete an award under this NOFO. Historic properties are cultural resources (historic or prehistoric districts, sites, buildings, structures, or objects) that qualify for inclusion in the National Register of Historic Places. In some cases, water delivery infrastructure that is over 50 years old can be considered a historic property that is subject to review.

If a proposal is selected for initial award, the successful applicant will work with Reclamation to complete the Section 106 process. Compliance can be accomplished in several ways, depending on how complex the issues are, including:

- If Reclamation determines that the proposed project does not have the potential to cause effects to historic properties, then Reclamation will document its findings and the Section 106 process will be concluded. This can take anywhere from a couple of days to one month.
- If Reclamation determines that the proposed project could have effects on historic properties, a multi-step process, involving consultation with the State Historic Preservation Officer and other entities, will follow. Depending on the nature of the project and impacts to cultural resources, consultation can be complex and time consuming. The process includes:

- A determination as to whether additional information is necessary.
 - Evaluation of the significance of identified cultural resources.
 - Assessment of the effect of the project on historic properties.
 - A determination as to whether the project would have an adverse effect and evaluation of alternatives or modifications to avoid, minimize, or mitigate the effects.
 - A Memorandum of Agreement is then used to record and implement any necessary measures. At a minimum, completion of the multi-step Section 106 process takes about two months.
- Among the types of historic properties that might be affected by projects proposed under this NOFO are **historic irrigation systems** and **archaeological sites**. An irrigation system or a component of an irrigation system (e.g., a canal or headgate) is more likely to qualify as historic if it is more than 50 years old, if it is the oldest (or an early) system/component in the surrounding area, and if the system/component has not been significantly altered or modernized. In general, proposed projects that involve ground disturbance, or the alteration of existing older structures, are more likely to have the potential to affect cultural resources. However, the level of cultural resources compliance required, and the associated cost, depends on a case-by-case review of the circumstances presented by each proposal.

You should contact your State Historic Preservation Office and your local Reclamation office's cultural resources specialist to determine what, if any, cultural resources surveys have been conducted in the project area. See www.usbr.gov/cultural/crmstaff.html for a list of Reclamation cultural resource specialists. If an applicant has previously received Federal financial assistance, it is possible that a cultural resources survey has already been completed.

H.2 Endangered Species Act

Pursuant to Section 7 of the Endangered Species Act (ESA), each Federal agency is required to consult with the U.S. Fish and Wildlife Services (USFWS) or the National Oceanic and Atmospheric Administration (NOAA) Fisheries Service to ensure any action it authorizes, funds, or carries out is not likely to **jeopardize the continued existence of any endangered or threatened species or destroy or adversely modify any designated critical habitat**.

Before Reclamation can approve funding for the implementation of a proposed project, it is required to comply with Section 7 of the ESA. The steps necessary for ESA compliance vary, depending on the presence of endangered or threatened species and the effects of the proposed project. A rough overview of the possible course of ESA compliance is:

- If Reclamation can determine that there are no endangered or threatened species or designated critical habitat in the project area, then the ESA review is complete and no further compliance measures are required. *This process can take anywhere from one day to one month.*
- If Reclamation determines that endangered or threatened species may be affected by the project, then a **Biological Assessment** must be prepared by Reclamation. The Biological Assessment is used to help determine whether a proposed action may affect a listed species or its designated critical habitat. The Biological Assessment may result in a determination that a proposed action **is not likely to adversely affect** any endangered or threatened species. If the USFWS/NOAA Fisheries Service concurs in writing, then no further consultation is required, and the ESA compliance is complete. *Depending on the scope and complexity of the proposed action, preparation of a Biological Assessment can range from days to weeks or even months. The USFWS/NOAA Fisheries Service generally respond to requests for concurrence within 30 days.*
- If it is determined that the project **is likely to adversely affect listed species**, further consultation (**formal consultation**) with USFWS or NOAA Fisheries Service is required to comply with the ESA. The process includes the creation of a **Biological Opinion** by the USFWS/NOAA Fisheries Service, including a determination of whether the project would **jeopardize** listed species and, if so, whether any **reasonable and prudent** alternatives to the proposed project are necessary to avoid jeopardy. Nondiscretionary **reasonable and prudent measures** and **terms and conditions** to minimize the impact of incidental take may also be included. *Under the timeframes established in the ESA regulations, the Biological Opinion is issued within 135 days from the date that formal consultation was initiated, unless an extension of time is agreed upon.*

The time, cost, and extent of the work necessary to comply with the ESA depends upon whether endangered or threatened species are present in the project area and, if so, whether the project might have effects on those species significant enough to require formal consultation.

ESA compliance is often conducted parallel to the NEPA compliance process and, as in the case of a CEC, documented simultaneously. The best source of information concerning the compliance with the ESA in a particular project area is the local Reclamation environmental staff that can be helpful in determining the presence of listed species and possible effects that would require consultation with the USFWS or NOAA Fisheries Service. Contact your regional or area Reclamation office, www.usbr.gov/main/offices.html with questions regarding ESA compliance issues.