



— BUREAU OF —
RECLAMATION

Notice of Funding Opportunity No. R22AS00316

Desalination and Water Purification Research Program Pitch to Pilot



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; and 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.

Synopsis

Federal Agency Name:	Department of the Interior, Bureau of Reclamation, Research and Development Office
Funding Opportunity Title:	Desalination and Water Purification Research Program Pitch to Pilot
Announcement Type:	Notice of Funding Opportunity
Funding Opportunity Number:	R22AS00316
Catalog of Federal Domestic Assistance (CFDA) Number:	15.506
Dates: (See NOFO Sec. D.4)	Application due date: Phase I Technical Proposal: July 12, 2022, at 4:00 p.m. Mountain Daylight Time Phase II: Presentation Pitch at Reclamation's office in Denver, Colorado for selected applicants: September 27 to 29, 2022 Submission to Phase I is required for Phase II consideration. If the applicant is not present for Phase II, the proposal is automatically disqualified from proceeding further and will be ineligible for an award. Reclamation will be able to provide funding for invitation travel for one representative to attend the in-person meeting in Denver, Colorado up to a maximum of \$3,000 total for lodging and travel expenses. Phase II might be conducted virtually if needed subject to travel restrictions and developments associated with the COVID-19 pandemic.
Eligible Applicants: (See NOFO Sec. C.1)	Applicants eligible to receive financial assistance to fund activities under this NOFO include: individuals/entrepreneurs, institutions of higher education, profit organizations, State and local governmental entities, non-profit organizations, federally funded Research and Development Centers, and Indian tribal governments and organizations. Foreign entities are not eligible for funding under the authorizing legislation for this program. Federal agencies are not eligible to apply.
Recipient Cost-Share: (See NOFO Sec. C.2)	No cost share is required but highly encouraged.
Federal Funding Amount: (See NOFO Sec. B.1)	Up to \$200,000 per applicant for a Phase II project that can be completed within 18 months.
Estimated Number of Agreements to be Awarded: (See NOFO Sec. B.1)	Up to 10
Intergovernmental Review: (See NOFO Sec. 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 is at https://www.whitehouse.gov/wp-content/uploads/2020/04/SPOC-4-13-20.pdf .

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Application Checklist

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

	Mandatory Federal Forms: Application for Federal Financial Assistance Budget Information Assurances Disclosure of Lobbying Activities	See Sec. D.2.2.1	SF-424, SF-424A, SF-424B (if necessary), Project Abstract Summary (OMB Form 4040-0019), and SF-LLL www.grants.gov/web/grants/forms/sf-424-family.html	*
	Title page	See Sec. D.2.2.2	Page 9	*
	Table of contents	See Sec. D.2.2.3	Page 9	*
	Technical proposal:			*
	Executive summary	See Sec. D.2.2.5	Page 10	*
	Problem statement	See Sec. D.2.2.6	Page 10	*
	Prior work, experience, and results	See Sec. D.2.2.7	Page 10	*
	Technical project description	See Sec D.2.2.8	Page 10	
	Research work plan and schedule	See Sec D.2.2.9	Page 11	
	QA/QC plan	See Sec D.2.2.210	Page 11	
	Environmental impact	See Sec D.2.2.11	Page 11	
	Summary slides	See Sec D.2.2.12	Page 11	
	Evaluation criteria	See Sec. E.1	Page 19	
	Overlap or duplication of effort statement	See Sec D.2.2.14	Page 12	
	Conflict of interest disclosure	See Sec D.2.2.15	Page 12	
	Uniform Audit Reporting	See Sec D.2.2.16	Page 13	
	Certification regarding lobbying	See Sec D.2.2.17	Page 13	*
	Unique Entity Identifier and System for Award Management	See Sec. D.3	Page 13	***

* Submit materials with your application.

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

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

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Acronyms and Abbreviations

ASAP	Automated Standard Application for Payments
ARC	Application Review Committee
BGNDRF	Brackish Groundwater National Desalination Research Facility
CFDA	Catalog of Federal Domestic Assistance
CFR	Code of Federal Regulations
CWA	Clean Water Act
D&B	Dun & Bradstreet
Department	U.S. Department of the Interior (also DOI)
DWPR	Desalination and Water Purification Research Program
DUNS	Data Universal Number System
EIN	Employer Identification Number
ESA	Endangered Species Act
FAIN	Federal Award Identification Number
FAIR	Financial Assistance Interior Regulation
FAPIS	Federal Award Performance Integrity Information System
FGDC	Federal Geospatial Data Committee
FOIA	Freedom of Information Act
FY	fiscal year
IBC	Interior Business Center
MDT	Mountain Daylight Time
NAICS	North American Industry Classification System
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NOFO	Notice of Funding Opportunity
OMB	Office of Management and Budget
P.L.	Public Law
PSC	Product Service Code
Q&A	question and answer
QA/QC	Quality Assurance/Quality Control
Reclamation	Bureau of Reclamation
SAM	System for Award Management
TRL	technology readiness level
UEI	Unique Entity Identifier
U.S.C.	United States Code

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Section A. Funding Opportunity Description

A.1. Authority

This Notice of Funding Opportunity (NOFO) is issued under the authority of the Reclamation Act of 1902, Sec.1 and Sec.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. DWPR program activities further support multiple related initiatives related to the Water Subcabinet such as the Water Reuse Action Plan and Water Security Grand Challenge. The program also aligns with Executive Order 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.

In Phase I, applicants submit technical proposals in the required format and length as specified in Section D.2.1. *Application Format and Length* with the required content further detailed in Section D.2.2. *Application Content*. Submission to Phase I is required for Phase II consideration.

Reclamation's application review committee (ARC) will select a set of highly qualified applications from Phase I to move to Phase II of the application process. Submission to Phase I is required for Phase II consideration. If the selected applicants are not present for Phase II, their proposals are automatically disqualified from proceeding further and will be ineligible for an award. Reclamation will be able to fund invitational travel for one representative to attend the in-person meeting at Reclamation's offices in Denver, Colorado up to a maximum of \$3,000 total for lodging and travel expenses. Phase II might be conducted virtually if needed—subject to travel restrictions and developments associated with the COVID-19 pandemic.

A.3. Notice of Funding Opportunity Purpose and Objectives

The objectives of this NOFO are to develop innovative and disruptive new technologies or processes to:

- Reduce the costs, energy requirements, and/or environmental impacts of treating impaired and unusable water to standards necessary for an identified beneficial use.
- Improve efficiency of water treatment processes—either by improvements to pre-treatment, post-treatment, monitoring, sensors, or other innovative process/technology.
- Increase effectiveness of reverse osmosis/nanofiltration concentrate management by reducing cost, energy, and/or environmental impacts.
- Treat brackish groundwater in a less energy-intensive way than current processes and technologies.
- Address costs, energy usage, and/or environmental impacts of seawater desalination, including intakes and/or outfalls
- Improve the detection, characterization, monitoring, separation, or destruction of per- and polyfluoroalkyl substances and other contaminants of concern.

A.4. Other Related Funding Opportunities

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

- Water Reclamation Research under the **Title XVI Water Reclamation and Reuse Program** supports projects to apply commercially available water reclamation and reuse technologies. See <https://www.usbr.gov/watersmart/title/index.html>.
- **DWPR Research Projects:** This funding opportunity supports projects at the laboratory and pilot scale research studies to determine the viability of a novel process, new materials, or process modifications in conjunction with eligible applicants. See https://www.usbr.gov/research/dwpr/DWPR_Reports.html.

Section B. 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) 2022 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 2022.

B.2. Expected Award Amount

Maximum Award: \$200,000

Minimum Award: No minimum award amount

Applications for projects requiring more time will be considered for funding only under limited circumstances. Reasons for requiring additional time should be included in the application.

The funds provided through this NOFO will be available for each agreement to design, construct, install, and test a pilot-scale process at an already known location with real water. Reclamation's Brackish Groundwater National Desalination Research Facility (BGNDRF) in Alamogordo, New Mexico, and Water Quality Improvement Center (WQIC) in Yuma, Arizona, may also be available if a location for testing is needed. The number of awards and the aggregate amount awarded will be based on the quality of the applications received and congressional funding available.

B.3. Expected Award Funding and Anticipated Dates

Anticipated Award Date: 03/30/2023

Reclamation expects to contact Phase I applicants if selected/not selected for Phase II in July 2022 and expects to contact potential award recipients and unsuccessful applicants for Phase II in December 2022 (or later if necessary), subject to the timing of final FY 2022 appropriations.

Anticipated Project Completion Date: 09/30/2024

B.4. Number of Awards

Approximately five 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.

Substantial involvement by Reclamation may include:

- 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.

At the request of the successful applicant, Reclamation can provide technical assistance after project award. If you anticipate requesting Reclamation technical assistance, you must account for these costs in your budget. If BGNDRF is identified as a location for testing, there is no need to include any costs for energy, water, and space at BGNDRF, but costs for additional technical assistance if required need to be included. To discuss available assistance and these costs, contact the program coordinator identified in Section G.2. *Reclamation Program Coordinator Contact*.

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. Agency Contacts*.

Section C. Eligibility Information

C.1. Eligible Applicants

Applicants eligible to receive an award to fund activities include:

- Individuals/entrepreneurs
- Institutions of higher education
- Commercial or industrial organizations
- Private entities
- State and local governmental entities
- Federally funded research and development centers
- Tribal governments and organizations
- Non-profit organizations

C.2. Ineligible Applicants

Those not eligible are:

- Federal governmental entities
- Foreign entities

C.3. Cost Sharing Requirements

Non-Federal cost share is not required but is highly encouraged. 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. Cost share funding is an evaluation criterion; see Section E.1.7.

Evaluation Criterion G—Non-Federal Cost Share.

C.3.1. Cost Share Funding Sources

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.

C.3.2. Cost-share Regulations

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

C.3.3. Third-Party Contributions

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

Eligible projects are pilot-scale technologies or processes that incorporate or are innovative and disruptive technologies involving flow rates above one gallon per minute and that need to be tested using natural water sources rather than synthetic or laboratory-made feed water. These projects are typically used to determine the technical, practical, and/or economic feasibility of a process. Preliminary costs can be developed for capital and operation and maintenance costs. The description of the technology or process should identify the uniqueness and the disruptive nature of the technology or process itself and/or the testing of it.

C.6. Ineligible Projects

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

- Proposals for research on projects that are part of a congressionally authorized Title XVI project under Title XVI Water Reclamation and Reuse. A list of congressionally authorized Title XVI projects is at www.usbr.gov/watersmart/title/authorized.html.
- Proposals for research on projects that are part of an approved Title XVI feasibility study under Title XVI Water Reclamation and Reuse: Desalination and Water Recycling Feasibility Studies. A list of approved Title XVI feasibility studies is at www.usbr.gov/watersmart/title/feasibility.html.
- Proposals of work currently funded under an existing Reclamation financial assistance agreement.
- Proposals for the construction of permanent research facilities

Section D. Application and Submission Information

D.1. Address to Request Application Package

This document contains all information, forms, and electronic addresses required to obtain the information required 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. Two phases comprise the application process:

- **Phase I:** A technical proposal is required to be submitted in the required format and length as specified in Section D.2.1 *Application Format and Length* as well as with the required content further detailed in Section D.2.2. *Application Content*.
- **Phase II:** A set of highly qualified applications from Phase I will be selected by the application review committee (ARC) to move to Phase II of the application process. The criteria described in Section E.1 *Technical Proposal: Phase I Evaluation Criteria* will be used to make that determination. Phase II applicants are required to prepare a Microsoft PowerPoint presentation for an in-person pitch in front of the ARC at Reclamation's office in Denver, Colorado. Phase II might be conducted virtually if needed—subject to travel restrictions and developments associated with the COVID-19 pandemic. Presentations will be evaluated using the criteria described in Section E.2. *Presentation: Phase II Evaluation Criteria*.

D.2.1. Application Format and Length

The technical proposal and responses to evaluation criteria section of the application shall be limited to a maximum of eight consecutively numbered pages. If this section of the application exceeds eight pages, only the first eight pages will be evaluated. Other required application content will not count towards the page limitation. 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. Margins should be standard 1-inch margins. Oversized pages will not be accepted.

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

D.2.2. Application Content

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

- Mandatory Federal Forms
 - SF-424 Application for Federal Assistance
 - SF-424A Budget Information
 - SF-424B Assurances for Non-Construction Activities (if applicable)
 - Project Abstract Summary (Office of Management and Budget [OMB] Number 4040-0019)
 - SF-LLL Disclosure of Lobbying Activities (if applicable)

These forms may be obtained at www.grants.gov/web/grants/forms/sf-424-family.html.

- Title page
- Table of contents
- Technical proposal and evaluation criteria (limited to eight pages)
 - Executive summary
 - Problem Statement
 - Prior work and results
 - Technical approach and project activities
 - Research work plan and schedule (Gantt chart or similar)
 - Environmental impact
 - Quality assurance/quality control (QA/QC) plan
 - Responses to evaluation criteria
 - Summary slides (no more than two, not counted towards the page limit)

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

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. Agency Contacts*.

SF-424 Application for Federal Assistance.

A fully completed 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. Failure to submit a properly signed SF-424 may result in the elimination of the application from further consideration. For application purposes, an SF-424A can be used for both construction and non-construction projects.

SF-424A Budget Information.

A fully completed SF-424A Budget Information must be submitted with the application. If you request more than \$100,000 in Federal funding, you must certify that all statements in 43 CFR Part 18, Appendix A-Certification Regarding Lobbying are true. The Authorized Official's signature on the appropriate SF-424, Application for Federal Assistance form also represents the entity's certification of the statements in 43 CFR Part 18, Appendix A.

SF-424B Assurances

A SF-424B Assurances for Non-Construction Programs signed by a person legally authorized to commit the applicant to performance of the project shall be included. A SF-424B Assurances for Non-Construction Programs signed by a person legally authorized to commit the applicant to performance of the project shall be included. *Failure to submit a properly signed SF-424B may result in the elimination of the application from further consideration.*

Project Abstract Summary

A fully completed Project Abstract Summary (Office of Management and Budget [OMB] Form 4040-0019) must be submitted with the application. The Project Abstract Summary should 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.

SF-LLL Disclosure of Lobbying Activities

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.2.2.2. Title Page

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

D.2.2.3. Table of Contents

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

D.2.2.4. Technical Proposal and Evaluation Criteria

The technical proposal and evaluation criteria (eight pages maximum) include:

- 1) Executive summary
- 2) Problem Statement
- 3) Prior work and results
- 4) Technical approach and project activities
- 5) Research work plan and schedule (Gantt chart or similar)
- 6) Environmental impact

- 7) QA/QC
- 8) Responses to evaluation criteria

D.2.2.5. Executive Summary

The executive summary should:

- Include the date, applicant name, city, county, and state.
- In one paragraph, state the problem to be solved and the proposed solution.
- In one paragraph, summarize the project. Specify the work proposed, including how funds will be used to accomplish specific project activities and briefly identifies how the proposed project contributes to accomplishing the goals and objectives of this NOFO. Also include information on what success looks like for the proposed work and what a commercialization path looks like for this work. State the length of time and estimated completion date for the proposed project.
- Identify the proposed project location and if the work will be conducted at a Federal facility (e.g., Alamogordo BGNDRF or Yuma WQIC)

D.2.2.6. 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 due to previous research done or a literature review. 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*.

D.2.2.7. Prior Work, Experience, and Results

Describe previous work and/or technology development that supports the need for pilot testing with real water sources. Identify relevant experience of key project team members in the proposed field of study. Identify the current technology readiness level (TRL) of the proposed technology (using the TRL definitions in Section E.1.4. *Evaluation Criterion D—Readiness Level*).

D.2.2.8. Technical Project Description

Describe the technical approach and proposed research and testing 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 will 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 and expertise, the number of staff hours, and the schedule for completing each task. Provide the location of the proposed pilot testing, 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 TRL that can be achieved if the proposed project is implemented (using the TRL definitions in Section E.1.4. *Evaluation Criterion D—Readiness Level*).

D.2.2.9. Research Work Plan and Schedule

Provide a research work plan based on the technical approach and project activities. The research work plan should include a schedule showing 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. The pilot testing should include obtaining a minimum one full month of non-disrupted data collection. Time for final report preparation should be included in the work plan. The final report will be posted publicly.

D.2.2.10. Quality Assurance and Quality Control Plan

Identify the proposed procedures for QA/QC protocols to be used throughout the project, including statistical data analysis, peer review, instrument calibration, etc. If your institution 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.2.2.11. Environmental Impact

Describe any potential environmental impacts of the proposed work and plans for disposal of wastes if any result from 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.2.2.12. Summary Slides

Please include no more than two Microsoft PowerPoint slides summarizing the proposed project. The slides must be submitted in pdf format and will be used during the evaluation process. The summary slides don't need to follow any template—but must have the following information:

- Project title, Project Manager, and their institution/company if applicable
- A technology summary
- Impact of the proposed work
- Proposed goal(s)
- Any key graphics (picture, illustration, charts, and/or tables)
- Requested Reclamation funds and any proposed non-Federal cost share (if applicable)

D.2.2.13. Evaluation Criteria

Section E.1. Technical Proposal: Evaluation Criteria provides a detailed description of each criterion and sub-criterion and points associated with each.

The evaluation criteria portion of your application should thoroughly address each criterion and sub-criterion in the order presented to assist in the complete and accurate evaluation of your proposal. *Copying and pasting the evaluation criteria and sub-criteria in Section E.1. Technical*

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Proposal: Evaluation Criteria *into your applications is suggested to ensure that all necessary information is adequately addressed.*

D.2.2.14. Overlap or Duplication of Effort Statement

Applicants must 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.2.2.15. Conflict of Interest Disclosure Statement

Conflict of Interest Disclosure Per the Financial Assistance Interior Regulation (FAIR), 2 CFR §1402.112, you must 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 sub recipients.

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 USC §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.2.2.16. 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.2.2.17. Certification Regarding Lobbying

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

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

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

- Be registered in SAM before submitting an application. Instructions for registering for SAM are located at <https://sam.gov/content/home>
- Provide a valid unique entity identifier in its application.
- 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 award agency.

The applicant must meet the mandatory requirements stated above. If the applicant is unable to complete registration by the application deadline, the unique identifier must be obtained, and SAM registration must be initiated within 30 days after the application deadline in order to be considered for selection and award. Reclamation will not award a grant to an applicant until the applicant has complied with all applicable UEI and SAM requirements. If an

applicant has not fully complied with the requirements by the time Reclamation is ready to award the grant, Reclamation may determine the applicant is not qualified to receive a Federal award and use that determination as a basis for awarding to another applicant.

There is no cost to register with Dun and Bradstreet (D&B) or SAM.gov. There are third-party vendors who will charge a fee in exchange for registering entities with D&B and SAM.gov; **please be aware you can register and request help for free.**

D.3.1. Register with the System for Award Management

Register on the 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.

Federal award recipients must also continue to maintain an active SAM.gov registration with current information through the life of their Federal award(s). See the “Submission Requirements” section of this document below for more information on SAM.gov registration.

D.3.2. Obtain a 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 with SAM.

D.4. Submission Date and Time

Due Date for Applications: July 12, 2022

Application submission date deadline:

Phase I: July 12, 2022, at 4:00 p.m. Mountain Daylight Time

Phase II for selected applicants: September 27 to 29, 2022 at Reclamation’s offices in Denver, Colorado

Submission to Phase I is required for Phase II consideration. If the applicant selected for Phase II is not present for Phase II, the proposal is automatically disqualified from proceeding further and will be ineligible for an award. Phase II might be conducted virtually if needed—subject to travel restrictions and developments associated with the COVID-19 pandemic.

Applications must be submitted (not postmarked by) no later than this due date and time.

Electronic 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](#) 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 to www.grants.gov. Under no circumstances will applications received through any other method (such as e-mail or fax) be considered eligible for award.

D.4.2. Instructions for Submitting the Project Application

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

D.4.2.1. Applications Submitted Electronically

Electronic applications must be submitted through Grants.gov. Reclamation encourages applicants to submit their applications for funding electronically through 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 also available at: www.grants.gov/applicants/apply-for-grants.html.

- Please note that submission of an application electronically requires prior registration through Grants.gov, which may take 7 to 21 days. Please see registration instructions at www.grants.gov/applicants/apply-for-grants.html. ***In addition, please note that the Grants.gov system only accepts applications submitted by individuals that are registered 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. If you plan to submit your application through Grants.gov, you are encouraged to submit your application several days prior to the application deadline. If you are a properly registered Grants.gov applicant and encounter problems with the Grants.gov application submission process, you must contact the Grants.gov Help Desk to obtain a case number. This case number will provide evidence of your attempt to submit an application prior to the submission deadline.

You must ensure that your proposal arrives by the date and time deadline stated in this NOFO. Applications received after this date and time will not be considered for award. Late applications will not be considered unless it is determined that the delay was caused by Reclamation mishandling or 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. Acknowledgement of Application Receipt.

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

D.5. Intergovernmental Review

This NOFO is subject to 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, <https://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 Executive Order 12372. The names and addresses of the SPOCs are also listed on the Office of Management and Budget's website, <https://www.whitehouse.gov/wp-content/uploads/2020/04/SPOC-4-13-20.pdf>.

D.6. Funding Restrictions: Pre-Award Costs

D.6.1. Environmental and Regulatory Compliance Costs

Project pre-award costs that have been incurred prior to the date of award, but after notification of selection, may be submitted for consideration as an allowable reimbursable expense. In no case will pre-award costs be incurred prior to a recipient’s notification of selection be considered for reimbursement or non-Federal cost-share purposes.

For example, such costs might include design or construction plans and environmental compliance costs directly supporting the proposed project. Reclamation will review the proposed pre-award costs to determine if they are allowable in accordance with the authorizing legislation and applicable to cost principles. To be considered allowable, the pre-award cost must comply with all applicable requirements under this NOFO, including all applicable administrative and cost principles criteria established in 2 CFR §200, available at www.ecfr.gov.

D.6.2. 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.

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 §200.68.

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, Office of Indirect Cost Services, at <https://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 OMB. If the Department of

Section D. Application and Submission Information

the Interior 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. See <https://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.

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Section E. Application Review Information

E.1. Technical Proposal: Evaluation Criteria

The evaluation criteria portion should be addressed in the technical proposal section of the application. Applications should thoroughly address each criterion and any sub-criterion in the order presented below. **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	Points:
A. Impact of the proposed work	25
B. Familiarity in the field of work	15
C. Innovation and disruptiveness	15
D. Technology readiness level	15
E. Schedule and Quality Assurance/Quality Control	10
F. Alignment with objectives	10
G: Non-Federal cost share	10
Total	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 (25 points)

Impact of the proposed work on the field of water treatment and/or currently used technologies and on its related economics. The impact can be measured by the promise 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 as to what a successful outcome would be for the proposed project.

E.1.2. Evaluation Criterion B. Familiarity in the Field of Work (15 points)

Demonstrate familiarity with the current technology in the field of work. Identify relevant experience of key project team members. 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.1.3. Evaluation Criterion C. Innovation and Disruptiveness (15 points)

Describe how the proposed work and/or technology development is innovative or disruptive in the water treatment industry. Innovative is defined herein as an approach, process, and/or technology that is not being implemented at full scale in the United States but shows promise for scaled-up implementation in the field of water treatment. Disruptive is defined herein as either displacing an established approach, process, and/or technology or creating a completely new industry.

E.1.4. Evaluation Criterion D. Technology Readiness Level (15 points)

Describe prior research on the proposed technology or process and how this prior work supports the need for pilot testing. Information such as a process flow diagram, mass and energy balances, and data from previous testing will help support the need for pilot testing. Provide the location of the proposed pilot testing, water type(s) to be tested, and system flow rate (one gallon per minute minimum).

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 4 to 6, but technologies at other TRLs will also be considered if sufficient justification is provided for the need for pilot testing.

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.1.5. Evaluation Criterion E. Schedule and Quality Assurance/Quality Control (10 points)

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 period of 18 months. Describe QA/QC protocols to be used throughout the project, including statistical data analysis, peer review, instrument calibration, etc.

E.1.6. Evaluation Criterion F—Alignment with Objectives (10 points)

Describe how the proposed work aligns with one or more of the objectives shown in Section A.2. *Objectives of this Notice of Funding Opportunity*. 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.1.7. Evaluation Criterion G—Non-Federal Cost Share (10 points)

Non-Federal cost share points will be awarded for voluntarily committed non-Federal cost share. A breakdown of these points by percentage of cost share for the total cost of the project is below.

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. Presentation: Phase II Evaluation Criteria

Phase II provides the opportunity to provide more in-depth information where your presentations will be evaluated directly against the evaluation criteria listed below. Descriptions of each criterion are provided above in Section E.1. *Technical Proposal: Phase I Evaluation Criteria*.

Evaluation Criteria Scoring Summary	Points:
A. Impact of the proposed work	35
B. Familiarity in the field of work	20
C. Innovation and disruptiveness	20
D. Technology readiness level	15
E. Schedule and Quality Assurance/Quality Control	10
Total	100

E.3. 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.3.1. Initial Screening

All application packages will be screened to ensure that:

- The applicant meets the eligibility requirements stated in this NOFO.
- The applicant meets the unique entity identifier and SAM registration requirements stated in Section D.3.
- The application meets the content requirements of the NOFO package, including submission of a technical proposal, responses to the evaluation criteria, budget proposal, and budget narrative.
- The application contains properly executed forms SF-424, Application for Financial Assistance and SF-424B, Assurances Non-Construction Programs, and a completed SF-424A, Budget Information Non-Construction Programs
- The application includes an official resolution, adopted by the applicant's board of directors, governing body, or appropriate authorized official (this may be submitted up to 30 days after the application deadline).

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.3.2. 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 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.

The ARC will make recommendations for a select group of applications to proceed to Phase II. The ARC will provide comments and feedback to the selected group of applications that will be moving forward to Phase II. These applicants will have an opportunity to review the comments and prepare for an in-person meeting with the ARC to discuss their proposal. The applicants will be invited to attend this in-person review at Reclamation's offices in Denver, Colorado.

During the Phase II event, each applicant will have 30 minutes to present their proposal and address the comments to the ARC. After the presentation there will be a 20-minute question and answer (Q&A) session where the ARC will have the ability to ask questions, the information gathered from the Q&A session will be used for the evaluation of the proposal.

The ARC will then score all presentations against the evaluation criteria in Section E.2. *Presentation: Phase II Evaluation Criteria* and make a final recommendation.

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

E.3.3. 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.3.4. 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.

E.3.5. 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 (approximately one to three months from the date of initial selection). If the results of pre-award reviews and clearances are unsatisfactory, consideration of funding for the project may be withdrawn.

E.3.5.1. Environmental Review

If the project includes ground-disturbing activities, Reclamation will forward the proposal to the appropriate Reclamation Regional or Area Office for completion of environmental compliance. To the extent possible, environmental compliance will be completed before a financial assistance agreement is signed by the parties. However, in most cases, the award 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.3.5.2. 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 Office of Management and Budget circular

E.3.6. Project Budget

Applicants whose proposals are selected for funding must provide a detailed project budget. The project budget includes:

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

Additional information regarding project budget requirements will be provided to recipients after selection.

E.4. Federal Award Performance Integrity Information System

Prior to making an award with a Federal total estimated amount greater than \$150,000, Reclamation is required to review and consider any information about the applicant that is in the designated integrity and performance system accessible through SAM (currently Federal Award Performance Integrity Information System [FAPIIS]) (see 41 United States Code [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 addition to the other information in FAPIIS, in making a judgment about the applicant's integrity, business ethics, and record of performance under Federal awards when completing the review of risk posed by applicants as described in 2 CFR §200.205 *Federal awarding agency review of risk posed by applicants*.

Section F. Federal Award Administration Information

F.1. Federal Award Notices

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

F.2. Administrative and National Policy Requirements

See the “[DOI Standard Terms and Conditions](#)” for the administrative and national policy requirements applicable to Department 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 DUNS Number prior to the award of funds. If a recipient has multiple DUNS numbers, they must separately enroll within ASAP for each unique DUNS Number and/or Agency. All of the information on the enrollment process for recipients, including the enrollment initiation form, 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 in order to process payments.

F.2.2. Environmental and Cultural

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 Federal, state, 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. *Note: 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 and should be included in the Project budget.**

Under no circumstances may an applicant begin any ground-disturbing activities (e.g., grading, clearing, and other preliminary activities) on a Project before environmental and cultural resources compliance is complete—and Reclamation explicitly authorizes work to proceed. This pertains to all components of the proposed Project, including those that are part of the applicant’s non-Federal cost share. Reclamation will provide a successful applicant with information once such compliance is complete. An applicant that proceeds before environmental and cultural resources compliance is complete may risk forfeiting Reclamation funding under this 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 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 Department requires fully compliant metadata on all Geographic Information Systems 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 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 geographic information system (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 §200.59 *Intangible Property* [of this CFR]). 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. 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 §200.329 *Reporting on real property*, recipients will be required to submit reports on the status of real property acquired or improved under a financial assistance agreement issued under this 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 that 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.

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For further information on the Buy America preference, please visit <http://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/.

F.2.7.1. Waivers

When necessary, recipients may apply for, and the 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 DO Notice of Award).

Section F. Federal Award Administration Information

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.

F.2.7.2. 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. Additional Bipartisan Infrastructure Law Requirements: Wage Rate Requirements (Davis-Bacon Act)

Section 41101 of the Bipartisan Infrastructure Law requires that all laborers and mechanics employed by contractors or subcontractor in the performance of construction, alteration, or repair work on a project assisted in whole or in part by funding made available under the Bipartisan Infrastructure Law (P.L. 117-58) shall be paid wages at rates no less than those prevailing on similar projects in the locality, as determined by the Secretary of Labor in accordance with Subchapter IV of Chapter 31 of Title 40, United States Code (commonly referred to as the Davis-Bacon Act).

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 at least a semiannual 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

Recipients will be required to submit the following technical project reports during the term of the Agreement. The specific terms and conditions pertaining to the reporting requirements will be included in the financial assistance agreement. Interim performance reports submitted at least twice a year, which include the following information:

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

F.3.3. Final Performance Report

Recipients will be required to submit a final performance report encompassing the entire period of performance. The specific terms and conditions pertaining to the reporting requirements will be included in the financial assistance agreement. The final performance report must include, but is not limited to, the following information:

- Whether the project objectives and goals were met.
- Complete data set of conducted test(s).
- If applicable, a copy of the completed Watershed Restoration Plan.
- Photographs documenting the project are also appreciated.

Note: Reclamation may print photos with appropriate credit to the applicant. Also, final reports are public documents and will be made available on Reclamation's website

F.3.4. Technical Project Reports

Recipients will be required to submit the following technical project reports during the term of the Agreement. The specific terms and conditions pertaining to the reporting requirements will be included in the financial assistance agreement.

F.3.4.1. Interim Technical Reports

Reports shall be submitted on a semi-annual basis by the Project Manager and will be used by Reclamation to ensure that the goals and objectives of the project are being met. Each report shall include:

- Identify the start date and anticipated completion date and describe the work conducted within the reporting period for each project or activity within a task.
- Describe any significant accomplishments as well as any unanticipated delays encountered during the reporting period.
- Discuss whether the activities comprising the agreement are on schedule to meet expected completion date. If not, discuss the actions being taken to bring the activities back on schedule.
- State the progress of spending within each task.
- Compare spending in each task relative to the planned expenditures and provide an explanation for any discrepancies.
- Provide enough information to allow for tracking of project expenditures for each task.
- Provide, in pdf format, copies of presentations given at conferences and any journal publications that have resulted in this study during the reporting period.
- Provide up to two Microsoft PowerPoint slides in a pdf format. The slides should summarize the problems and objectives, project description, research process, and any findings up to that date. Do not include any intellectual property or confidential information.

F.3.4.2. Final Technical Project Report

Publication guidelines and published final reports from previous projects are at: www.usbr.gov/research/dwpr. Recipients will use the provided template and provide a final report in a Microsoft Word document. Recipients will address review comments from Reclamation in a timely manner for Reclamation to print. Please note the final project reports are public documents and will be made available on Reclamation's website. The final technical report must include, but is not limited to, the following information:

- Whether the project objectives and goals were met
- Complete data set of conducted tests(s)

Photographs documenting the project are also appreciated.

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 Department, including being available in a manner that is sufficient for independent verification.

The Federal Government has the right to:

- 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

- 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.

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Section G. Federal Awarding Agency Contacts

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 the attention of the Notice of Funding Opportunity Team at bor-sha-fafoa@usbr.gov. Please note that 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 Ms. Yuliana Porras-Mendoza, Program Administrator

By mail: Bureau of Reclamation
Research and Development Office
Attn: Ms. Yuliana Porras-Mendoza
P.O. Box 25007, MS 08-10000
Denver, CO 80225

By email: dwpr@usbr.gov

By phone: 303-445-2265