

RECLAMATION

Managing Water in the West

Funding Opportunity Announcement No. BOR-DO-19-F012

WaterSMART- Applied Science Grants



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

May 2019

Mission Statements

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

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

Synopsis

Federal Agency Name:	Department of the Interior, Bureau of Reclamation, Policy and Administration
Funding Opportunity Title:	WaterSMART: Applied Science Grants
Announcement Type:	Funding Opportunity Announcement (FOA)
Funding Opportunity Number:	BOR-DO-19-F012
Catalog of Federal Domestic Assistance (CFDA) Number:	15.557
Dates: (See FOA Sec. D.4)	<p>This FOA covers two application submittal periods:</p> <p>Proposals received before October 30, 2019, 4:00 p.m. Mountain Daylight Time (MDT), will be considered for Fiscal Year (FY) 2019 funding.</p> <p>This FOA will be updated to provide a second application deadline in FY 2020 for proposals to be considered for FY 2020 funding, contingent on appropriations.</p>
Eligible Applicants: (See FOA Sec. C.1)	<p>Category A: States, Indian tribes, irrigation districts, water districts, or other organizations with water or power delivery authority located in the Western United States or United States Territories including Alaska, Arizona, California, Colorado, Hawaii, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, Wyoming, American Samoa, Guam, the Northern Mariana Islands, and the Virgin Islands.</p> <p>Category B: Universities, nonprofit research institutions, and nonprofit organizations.</p>
Recipient Cost Share: (See FOA Sec. C.2)	50 percent or more of total project costs.
Federal Funding Amount: (See FOA Sec. B.1)	<p>Funding Group I: Up to \$150,000 per agreement for a project that can be completed within 2 years, or</p> <p>Funding Group II: Up to \$300,000 per agreement for a project that can be completed within 3 years.</p>
Estimated Number of Agreements to be Awarded: (See FOA Sec. B.1)	It is anticipated that approximately 8 - 12 agreements each fiscal year may be funded under this FOA.
Estimated Amount of Funding Available for Award: (See FOA Sec B.1)	Reclamation will make approximately \$2 million of the President's FY 2019 budget for the Basin Study Program available for the development of Applied Science Tools under this FOA in FY 2019. Applications submitted under this FOA may also be considered and funded in FY 2020, contingent on appropriations. Information about FY 2020 funding available for award will be updated when appropriation information is released.

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Application Checklist

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

√	What to submit	Required content	Form or format	When to submit
	Mandatory Federal Forms: Application for Federal Financial Assistance Budget Information Assurances	See Sec. D.2.2.1	Standard Form (SF)-424, SF-424A, SF-424B, and SF-LLL forms may be obtained at: www.grants.gov/web/grants/forms/sf-424-family.html	*
	Title page	See Sec. D.2.2.2	Page 15	*
	Table of contents	See Sec. D.2.2.3	Page 15	*
	Technical proposal: Executive summary Project description Project location Data management Evaluation criteria	See Sec. D.2.2.4	Page 15	* *
	Project Budget: Funding plan Budget proposal Budget narrative	See Sec. D.2.2.7 See Sec. D.2.2.7 See Sec. D.2.2.7	Page 17 Page 18 Page 20	* * * *
	Environmental and cultural resources compliance	See Sec. D.2.2.5	Page 17	*
	Required permits or approvals	See Sec. D.2.2.6	Page 17	*
	Letters of Funding Commitment	See Sec. D.2.2.8	Page 23	
	Official Resolutions	See Sec. D.2.2.9	Page 24	**
	Unique Entity Identifier and System for Award Management	See Sec. D.3	Page 24	***

* Submit materials with your application.

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

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

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Acronyms and Abbreviations

ASAP	Automated Standard Application for Payments
ARC	Application Review Committee
CE	Categorical Exclusion
CEC	Categorical Exclusion Checklist
CFDA	Catalog of Federal Domestic Assistance
CFR	Code of Federal Regulations
CWA	Clean Water Act
CWMP	Cooperative Watershed Management Program
Department	U.S. Department of the Interior
DUNS	Data Universal Number System
EA	Environmental Assessment
EIS	Environmental Impact Statement
ESA	Endangered Species Act
FAPIIS	Federal Award Performance Integrity Information System
FOA	Funding Opportunity Announcement
FOIA	Freedom of Information Act
FONSI	Finding of No Significant Impact
FY	Fiscal Year
GIS	Geographic Information System
MDT	Mountain Daylight Time
MST	Mountain Standard Time
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NOAA	National Oceanic and Atmospheric Administration
P.L.	Public Law
Reclamation	Bureau of Reclamation
ROD	Record of Decision
SAM	System of Award Management
SECURE	Science and Engineering to Comprehensively Understand and Responsibly Enhance
SF	Standard Form
U.S.C.	United States Code
USFWS	U.S. Fish and Wildlife Service
USPS	United States Postal Service
WaterSMART	Sustain and Manage America's Resources for Tomorrow

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Section A. Funding Opportunity Description

A.1. Program Information

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

Through WaterSMART Applied Science Grants, Reclamation provides cost shared financial assistance to States, Indian tribes, irrigation districts, water districts, or other organizations with water or power delivery authority, universities, nonprofit research institutions, and nonprofit organizations for projects to develop hydrologic information and water management tools and improve modeling and forecasting capabilities. Increased access to information and improved modeling and forecasting capabilities will help avoid water conflicts and improve our ability to meet a variety of water management objectives, including: support for water supply reliability, management of water deliveries, water marketing activities, drought management activities, conjunctive use of ground and surface water, water rights administration, ability to meet endangered species requirements, watershed health, conservation and efficiency, and other water management objectives.

This FOA supports projects to develop hydrologic information and water management tools and improve modeling and forecasting capabilities to increase water supply reliability.

Through this FOA, Reclamation provides funding for projects that improve use of forecasts to inform water availability and the use of technology to increase water reliability consistent with Sections 3 and 4 of the October 19, 2018, Presidential Memorandum on Promoting the Reliable Supply and Delivery of Water in the West.

Applied Science Grants are a component of Reclamation's WaterSMART Basin Study Program. For more information on the WaterSMART Basin Study Program, please see www.usbr.gov/watersmart/bsp/index.html.

A.2. Objective of this Funding Opportunity Announcement

The objective of this FOA is to invite eligible non-Federal entities to leverage their money and resources by cost sharing with Reclamation on applied science projects to develop hydrologic information and water management tools and improve modeling and forecasting capabilities. Results from these projects will be used by water managers to increase water supply reliability, provide flexibility in water operations, and improve water management. Project results must be readily applicable by water managers, resulting in tools and information that can be used to: support water supply reliability, management of water deliveries, water marketing activities, drought management activities, conjunctive use of ground and surface water, water rights administration, ability to meet endangered species requirements, watershed health, conservation and efficiency, and other water management objectives.

A.3. Statutory Authority

This FOA is issued under the authority of Section 9509 (Research Agreement Authority) of the Science and Engineering to Comprehensively Understand and Responsibly Enhance (SECURE) Water Act, Subtitle F of Title IX of the Omnibus Public Land Management Act of 2009, Public Law (P.L.) 111-11 (42 United States Code (U.S.C.) 10364), as amended.

A.4. Other Related Funding Opportunities

Reclamation provides funding for water management projects through several programs under WaterSMART. Through WaterSMART Grants, Reclamation provides three funding opportunities. The **Water and Energy Efficiency Grants** focus on projects that result in quantifiable and sustained water savings and projects that increase hydropower use. The **Small-Scale Water Efficiency Projects Grants** provide funding for small-scale water management projects (up to \$75,000 in Federal funding for each project) that have been identified through previous planning efforts. Through **Water Marketing Strategy Grants**, Reclamation provides support for entities exploring actions that can be taken to develop or facilitate water marketing or water marketing activities.

Through the **Drought Response Program**, Reclamation provides funding to help build resilience to drought. Through Drought Contingency Planning, Reclamation supports the development of drought contingency plans with participation from a diverse set of stakeholders. Reclamation also provides funding for Drought Resiliency Projects supported by an existing drought contingency plan to build long-term resilience to drought.

Section A. Funding Opportunity Description

In addition, through the **Cooperative Watershed Management Program (CWMP)**, Reclamation provides funding to watershed groups to encourage diverse stakeholders to form local solutions to address their watershed management needs. Reclamation provides funding through Phase I of the CWMP for watershed group development, restoration planning, and watershed management project design and through Phase II for the implementation of watershed management projects.

Through the **Title XVI Water Reclamation and Reuse Program**, authorized by P.L. 102-575 in 1992, Reclamation provides financial and technical assistance to local water agencies for water reclamation and reuse research and the planning, design, and construction of water reclamation and reuse projects. For information on the FOAs listed here, please visit the WaterSMART Program website: www.usbr.gov/watersmart.

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Section B. Award Information

B.1. Total Project Funding

Appropriations in FY 2019 include \$2 million for applied science projects eligible under Section 9503(a) and Section 9509 (Research Agreement Authority) of the SECURE Water Act. Applications submitted under this FOA may also be considered in FY 2020. Information about FY 2020 funding available for award will be updated when appropriation information is released.

Please refer to Reclamation's WaterSMART website (www.usbr.gov/WaterSMART) for updated funding information.

B.2. Project Funding Limitations

The Federal share (Reclamation's share in addition to any other sources of Federal funding) for any one proposed project shall not exceed 50 percent of the total costs. Generally, the non-Federal share of project costs must be expended at the same or greater rate as the Federal share of project costs.

Applicants are invited to submit proposals under one of two funding groups to implement applied science projects:

Funding Group I: Up to \$150,000 in Federal funds per agreement provided through this FOA will be available for projects that generally should be completed in 2 years from the date of award.

Funding Group II: Up to \$300,000 in Federal funds per agreement provided through this FOA will be available for larger projects that may take up to 3 years to complete from the date of award.

B.3. Assistance Instrument

Project awards will be made through grants or cooperative agreements as applicable to each project. A cooperative agreement is likely to be required where additional oversight by Reclamation is warranted due to uncertainties about the level of involvement of stakeholders, or where Reclamation facilities, operations, or data are included in the project. In general, the determination of when a cooperative agreement will be required will be made on a project-by-project basis.

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If a cooperative agreement is awarded, the recipient should expect Reclamation to have substantial involvement in the project.

Substantial involvement by Reclamation may include:

- Collaboration and participation with the recipient in the management of the project and close oversight of the recipient's activities to ensure that the program objectives are being achieved (e.g., oversight to support appropriate stakeholder involvement, or collaboration with Reclamation on projects involving Reclamation facilities, operations, or data).
- Oversight may include review, input, and approval at key interim stages of the project.

At the request of the recipient, Reclamation can provide technical assistance after award of the project. For example, Reclamation staff with expertise in hydrologic modeling, reservoir operations, or the management of hydrologic data could be contracted to assist you with implementation of your project if selected for funding. If you seek technical assistance from Reclamation, you must account for these costs in your proposed 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 under this FOA include:

1. **Category A:** States, Indian tribes, irrigation districts, water districts, or other organizations with water or power delivery authority. These applicants must be located in one of the following states or territories: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, Wyoming, American Samoa, Guam, the Northern Mariana Islands, and the Virgin Islands.
2. **Category B:** Universities, nonprofit research institutions, federally-funded research and development centers, and non-profit entities (including 501(c)(3) organizations) and others not identified as ineligible below. These applicants must be located in the United States or American Samoa, Guam, the Northern Mariana Islands, or the Virgin Islands. These applicants *must* also include, as a partner, at least one entity from Category A that meets the eligibility requirements described above as documented by a letter included with the application stating that the partner commits to *participate* in the project and supports the need for the project (e.g., a university may partner with an irrigation district or water district, or other entities eligible under Category A). A letter of participation must demonstrate that the partner intends to participate in the project in some way, for example, by providing input, feedback or other support for the project. *Note: partners do not necessarily need to contribute cost share funding.*

Those not eligible include, but are not limited to, the following entities:

- Individuals
- Commercial/Industrial organizations
- Private entities
- 501(c)(4) Nonprofit organizations
- 501(c)(6) Organizations

C.2. Cost Sharing Requirements

Applicants must be capable of cost sharing **50** percent or more of the total project costs. The total project cost is defined as the total allowable costs incurred under a Federal award and all required cost share and voluntary committed cost share contributions, including third-party contributions.

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Cost share may be made through cash, costs contributed by the applicant, or third-party in-kind contributions. Third-party in-kind contributions is the value of non-cash contributions of property or services that benefit the federally assisted project and are contributed by non-Federal third parties without charge. Cost share funding from sources outside the applicant's organization (e.g., loans or state grants) should be secured and available to the applicant prior to award.

Please see *Section D.2.2.9. Official Resolution* and *Section D.2.2.7. Project Budget* for more information regarding the documentation required to verify commitments to meet cost sharing requirements.

Other sources of Federal funding may not be counted towards the required cost share. The exception to this requirement is where the Federal statute authorizing a program specifically provides that Federal funds made available for such program can be applied to matching or cost sharing requirements of other Federal programs, such as awards to tribal organizations under P.L. 93-638, as amended. *If it is determined that the Federal funding cannot be applied towards the non-Federal cost share, the work associated with the funding may be removed from the proposed project.*

C.2.1. Cost Share Regulations

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

C.2.2. Third-Party In-Kind Contributions

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

C.3. Eligible Projects

Reclamation will provide funding for applied science projects to develop or improve hydrologic information, water management tools, and modeling and forecasting capabilities. Results from these projects will be used by water managers to increase water supply reliability, provide flexibility in water operations, and improve water management. To be eligible, projects must:

- be designed for use by water managers located in the following states or territories: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, Wyoming, American Samoa, Guam, the Northern Mariana Islands, and the Virgin Islands;
- be based on known and available (or “mature”) technologies and may not include the development of new or novel methods or technologies; and
- support one or more of the following water management objectives:
 - water supply reliability,
 - improved management of water deliveries,
 - water marketing activities,
 - drought management activities,
 - conjunctive use of ground and surface water,
 - water rights administration,
 - ability to meet endangered species requirements,
 - watershed health,
 - conservation and efficiency, or
 - other improvements to water supply reliability.

C.3.1. Eligible Project Types

Projects must support the types of water management objectives described in the bullets immediately above and may include but are not limited to:

- 1. Projects to enhance modeling capabilities to improve water supply reliability and increase flexibility in water operations.** Modeling tools can improve water supply reliability and flexibility by providing an accurate representation of the physical system and more reliable information about water availability. This information can be used by water managers to help meet constraints or requirements (e.g., endangered species, administrative, or water delivery requirements). Projects may include improvements to the spatial and temporal resolution of a model, improvements to model calibration, enhancements to make a model more interactive and agile so that it can be used to answer specific questions as they arise or other enhancements to modeling tools. Projects could include improvements to hydrologic models, reservoir operations models, or other types of water management models.
- 2. Projects to develop reservoir operating alternatives and/or to develop frameworks to compare and analyze different reservoir operation alternatives (this may include improvements to modeling capabilities to support this type of analysis).** The ability to compare reservoir operating scenarios can help water managers identify opportunities to better meet management objectives. Eligible projects could include the development of different operating alternatives, and/or the development of a framework to analyze one or more benefits associated with reservoir operating alternatives. This could include a framework to analyze how different operating scenarios

benefit flood risk management, sediment management, water quality, water demand management, economic benefits, conjunctive use of ground and surface water, or a combination of the types of water management objectives described in the bulleted list at the beginning of this section. Projects should consider how different reservoir operating scenarios would impact existing constraints at the reservoir (e.g., can you improve sediment management without increasing flood risk?). *Note: If the applicant is not a reservoir operator or owner, the applicant must submit a letter expressing support for the project from the owner and operator of at least one reservoir where operating alternatives or frameworks will be developed for the project to be considered eligible.*

- 3. Projects to improve or adapt forecasting tools and technologies to enhance management of water supplies and reservoir operations.** Reliable forecasts are an important water management tool that can be used to optimize operations and improve water management, manage risks, and inform water allocation strategies, or even water marketing. Projects can include the development or adaptation of forecasting tools to meet the needs of water managers. Projects may also include the adaptation of existing forecasts to better meet operational needs. Applicants are encouraged to explore whether there are existing data sets and forecast products that may be leveraged. *Note: Applicants must demonstrate how the forecast or data will be used to enhance management of water supplies and reservoir operations, for example, by using the tool in connection with an operations model.*
- 4. Projects to improve access to and use of water resources data, or to develop new types of data to inform water management decisions.** The availability of quality assured, quality controlled hydrologic data is critical to inform water management decisions. Eligible projects may include improvements to data acquisition, data analysis and data delivery. Data acquisition projects may include the incorporation or development of new or previously unavailable data, such as remote sensing imagery, hydrologic data acquired using unmanned aerial systems, or paleo reconstructions of naturalized flows, for example. Projects may include the development of hydrologic databases or decision support tools that resource managers can use to query or analyze data for the purposes of improving water management. Projects may also include improved data delivery, such as making data available to a broader audience, or improvements to make data systems compatible with existing systems (e.g., State or Federal databases).

C.4. Required Project Components

Applicants whose projects are selected for funding under this FOA must participate in at least one Reclamation-sponsored webinar to discuss application of deliverables to management questions. In most cases, the webinar will be scheduled when the final report is ready to be submitted for Reclamation review. The presentation should inform Reclamation about project accomplishments, the

final results of the identified tasks, and any lessons learned. This presentation may be open to the public as a webinar and may be recorded and made available on the WaterSMART website.

C.4.1. Ineligible Projects

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

- projects to develop new and novel methods or technologies;
- planning studies, such as feasibility studies, appraisal investigations, water marketing strategies and drought contingency plans;
- projects to develop or demonstrate tools and technologies supporting water reuse, water recycling and desalination projects (e.g., projects that are eligible under the Desalination and Water Purification Research funding opportunity);
- construction projects to improve water management; and
- projects funded under other Federal grants.

C.4.2. Length of Projects

Projects funded under Funding Group I of this FOA should be completed within 2 years of award, and projects funded under Funding Group II of this FOA should be completed within 3 years of award.

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Section D. Application and Submission Information

D.1. Address to Request Application Package

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

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

By mail: Bureau of Reclamation
Financial Assistance Support Section
Attn: Matthew Reichert
P.O. Box 25007, MS 84-27810
Denver, CO 80225

By email: mreichert@usbr.gov

By telephone: 303-445-3865

D.2. Content and Form of Application Submission

All applications must conform to the requirements set forth below.

D.2.1. Application Format and Length

The technical proposal and evaluation criteria section (defined 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. Margins should be standard 1-inch margins. Oversized pages will not be accepted.

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

D.2.2. Application Content

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

- Mandatory Federal Forms
 - SF-424 Application for Federal Assistance

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- SF-424 Budget Information (A Form)
- SF-424 Assurances (B Form)
- 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 **20** pages)
 - Executive summary
 - Technical project description and milestones
 - Project location
 - Data management practices
 - Evaluation criteria
- Project budget
 - Funding plan and letters of funding commitment
 - Budget proposal
 - Budget narrative
- Environmental and cultural resources compliance (as applicable to the project)
- Required permits or approvals (if applicable to the project)
- Letters of support for the project and letters of participation (will not count towards the page limitation)
- Official resolution (will not count towards the page limitation)

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:

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.

SF-424 Budget Information

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

Section D. Application and Submission Information

SF-424 Assurances

A SF-424B Assurances Non-Construction Programs signed by a person legally authorized to commit the applicant to performance of the project shall be included. Questions regarding whether to use SF-424B should be referred to the Grants Management Point of Contact under Agency Contacts. Failure to submit a properly signed SF-424B may result in the elimination of the application from further consideration.

D.2.2.2. Title Page

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

D.2.2.3. Table of Contents

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

D.2.2.4. Technical Proposal and Evaluation Criteria

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

- (1) Executive summary
- (2) Technical project description and milestones
- (3) Project location
- (4) Data management practices
- (5) Evaluation criteria

Executive Summary

The executive summary should include:

- The date, applicant name, city, county, and state
- A one paragraph project summary that specifies the work proposed, including how funds will be used to accomplish specific project activities and briefly identifies how the proposed project contributes to accomplishing the goals of this FOA
- The length of time and estimated completion date for the proposed project
- Whether or not the proposed project is located on a Federal facility

Technical Project Description and Milestones

The technical project description should describe the work in detail, including specific activities that will be accomplished. This description shall have sufficient detail to permit a comprehensive evaluation of the proposal. Please include a preliminary project schedule that shows the stages and duration of the proposed work including major tasks, milestones, and dates. *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.*

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Please indicate whether you are a Category A applicant or a Category B applicant. If you are a Category B applicant, describe who you are partnering with, or plan to partner with, why you chose to collaborate with that specific partner, and how the partner plans to contribute to the project. *(Note: Category B applicants **must** include a letter of participation with the application stating that the partner commits to participate in the project and supports the need for the project. Please refer to Section C.1. Eligible Applicants).*

Project Location

Provide specific information regarding the proposed applied science project's geographic area of focus (for example, the proposed project may focus on a particular watershed or basin, county, State, Territory, or other region. Include a map showing the geographic location of the project area in one of the following formats:

1. Shapefile (.shp)
2. KMZ/KML (.kmz or .kml) aka Google Earth File
3. AutoCAD (.dwg)
4. PDF map (.pdf)

Data Management Practices

Please briefly describe any established project-level data management practices, data documentation, format standards, and product delivery processes that will be used throughout the project. *Note: An official data management plan will not be required.*

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

Evaluation Criteria

See Section E.1. Evaluation Criteria for additional details, including a detailed description of each criterion and subcriterion and points associated with each.

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

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

Section D. Application and Submission Information

D.2.2.5. Environmental and Cultural Resources Compliance *(as applicable to the project)*

Please answer the questions from *Section H.1. Environmental and Cultural Resource Considerations* in this section.

D.2.2.6. Required Permits or Approvals

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

Note that improvements to Federal facilities that are implemented through any project awarded funding through this FOA must comply with additional requirements. The Federal government will continue to hold title to the Federal facility and any improvement that is integral to the existing operations of that facility. Please see P.L. 111-11, Section 9504(a)(3)(B). Reclamation may also require additional reviews and approvals prior to award to ensure that any necessary easements, land use authorizations, or special permits can be approved consistent with the requirements of 43 CFR Section 429, and that the development will not impact or impair project operations or efficiency.

D.2.2.7. Project Budget

The project budget includes:

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

Budget proposals must not include costs that are anticipated to be incurred prior to the date of selection. Please refer to section *E.4. Anticipated Announcement and Federal Award Date.*

Please note that the costs for preparing and submitting an application in response to this FOA, including the development of data necessary to support the proposal, as well as costs to prepare and publish academic journal articles are not eligible project costs under this FOA and must not be included in the project budget.

Funding Plan and Letters of Funding Commitment

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

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

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- The amount of funding commitment
- The date the funds will be available to the applicant.
- Any time constraints on the availability of funds
- Any other contingencies associated with the funding commitment

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

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

Please identify the sources of the non-Federal cost share contribution for the project, including:

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

Budget Proposal

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.

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Table 1.—Total Project Cost Table

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

The budget proposal should include detailed information on the categories listed below and must clearly identify *all* items of 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. Unit costs must be provided for all budget items, including the cost of services or other work to be provided by consultants and contractors. Applicants are strongly encouraged to review the procurement standards for Federal awards found at 2 CFR §200.317 through §200.326 before developing their budget proposal. If you have any questions regarding your budget proposal or eligible costs, please contact the grants management specialist identified in *Section G. Agency Contacts*.

It is also strongly advised that applicants use the budget proposal format shown below in Table 2 or a similar format that provides this information. If selected for award, successful applicants must submit detailed supporting documentation for all budgeted costs. It is not necessary to include separate columns indicating which cost is being contributed as non-Federal cost share or which costs will be reimbursed with Federal funds.

Table 2.—Sample Budget Proposal Format

BUDGET ITEM DESCRIPTION	COMPUTATION		Quantity Type	TOTAL COST
	\$/Unit	Quantity		
Salaries and Wages				
Employee 1				\$
Employee 2				\$
Employee 3				\$
Fringe Benefits				
Full-Time Employees				\$
Part-Time Employees				\$
Equipment				
Item A				\$
Item B				\$
Item C				\$
Supplies and Materials				
Item A				\$

Table 2.—Sample Budget Proposal Format

BUDGET ITEM DESCRIPTION	COMPUTATION		Quantity Type	TOTAL COST
	\$/Unit	Quantity		
Item B				\$
Contractual/Construction				
Contractor A				\$
Contractor B				
Third-Party In-Kind Contributions				
Contributor A				
Contributor B				\$
Other				
Other				\$
TOTAL DIRECT COSTS				\$
Indirect Costs				
Type of rate	percentage	\$base		\$
TOTAL ESTIMATED PROJECT COSTS				\$

Budget Narrative

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

Salaries and Wages

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

The budget proposal and narrative should include estimated hours for compliance with reporting requirements, including the final financial and performance reports. Please see *Section F.3. Reporting Requirements and Distribution* information on types and frequency of reports required.

Section D. Application and Submission Information

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

Fringe Benefits

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

Travel

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

Equipment

If equipment will be purchased, itemize all equipment valued at or greater than \$5,000. For each item, identify why it is needed for the completion of the project and how the equipment was priced. *Note: if the value is less than \$5,000, the item should be included under materials and supplies.*

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

Materials and Supplies

Itemize supplies by major category, unit price, quantity, and purpose, such as whether the items are needed for office use, research, etc. Identify how these costs were estimated (i.e., quotes, previous similar project, or other methodology).

Contractual

Identify all work that will be accomplished by consultants or contractors, including a breakdown of all tasks to be completed, and a detailed budget estimate of time, rates, supplies, and materials that will be required for each task. For each proposed contract, identify the procurement method that will be used to select the consultant or contractor and the basis for selection. Please note that all procurement transactions with an anticipated aggregate value that exceed the Micro-Purchase Threshold (currently \$10,000) must use a competitive procurement method (see 2 CFR §200.320 – *Methods of procurement to be followed*). Qualifications-based procurement methods (i.e., only the competitors' qualifications are valued, and the most qualified competitor is selected) cannot be used for projects funded under this FOA. See 2 CFR §200.317 through §200.326 for additional information regarding procurements, including required contract content. *Note: A modification to an existing contract for services without first obtaining multiple quotes or proposals is considered a noncompetitive procurement, regardless of the method used to award the existing contract.*

Third-Party In-Kind Contributions

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

Environmental and Regulatory Compliance Costs (as applicable to the project)

If the proposed project includes pilot activities, including monitoring, measurement, or other field work, the applicant must include a line item in the budget to cover environmental compliance costs. Note that pilot projects can incur relatively high environmental compliance costs (e.g., between \$30,000 and \$50,000 per project).

“Environmental compliance costs” refer to costs incurred by Reclamation and the recipient in complying with environmental regulations applicable to an award under this FOA, including costs associated with any required documentation of environmental compliance, analyses, permits, or approvals. Applicable Federal environmental laws could include National Environmental Policy Act (NEPA), Endangered Species Act (ESA), National Historic Preservation Act (NHPA), Clean Water Act (CWA), and other regulations depending on the project. Such costs may include, but are not limited to:

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

In order to estimate environmental compliance costs, please contact compliance staff at your local Reclamation Office for additional details regarding the type and costs of compliance that may be required for your project. *Note, support for your compliance costs estimate will be considered during review of your application.* Contact the Program Coordinator (see *Section G. Agency Contacts*) for Reclamation contact information regarding compliance costs and requirements.

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Other Expenses

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

Indirect Costs

Applicants with a federally approved indirect cost rate agreement may include indirect costs as part of the project budget. Show the agreed upon rate, cost base, and proposed amount for allowable indirect costs. It is not acceptable to simply incorporate indirect rates within other direct cost line items.

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

If the applicant does not have a federally approved indirect cost rate agreement and is proposing a rate greater than the *de minimis* 10 percent rate, include the computational basis for the indirect expense pool and corresponding allocation base for 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 www.doi.gov/ibc/services/finance/indirect-cost-services.

If selected for award, the applicant will be required to submit an indirect cost rate proposal with their cognitive within 3 months of award. Reimbursement of indirect costs will not be allowable until the recipient enters into the indirect cost rate agreement.

D.2.2.8. Letters of Support and Letters of Participation

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 FOA will not be considered in the evaluation of the proposed project.

Category B Applicants, including universities, non-profit research institutes, and federally sponsored research institutes, are required to include one letter of participation by a partner that meets the eligibility requirements for Category A applicants, as explained in section C.1 of this FOA. The letter of participation must demonstrate that the partner intends to participate in the project in some way, for example, by providing input, feedback or other support (this does not necessarily need to include the contribution of cost share funding by the partner). To ensure your proposal is accurately reviewed, please attach the letter of participation (if applicable) as an appendix to the application. Applications

submitted by Category B applications that do not include a letter of participation will not be reviewed.

D.2.2.9. Official Resolution

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

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

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

D.3. Unique Entity Identifier and System for Award Management

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

- (i) be registered in the System for Award Management (SAM) before submitting its application,
- (ii) provide a valid unique entity identifier in its application, and
- (iii) continue to maintain an active SAM registration with current information at all times during which it has an active Federal award or an application or plan under consideration by a Federal awarding agency.

Meeting the requirements set forth above is mandatory. If the applicant is unable to complete registration by the application deadline, the unique entity 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 make a Federal award to an applicant until the applicant has complied with all applicable unique entity identifier and SAM requirements and,

Section D. Application and Submission Information

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

D.4. Submission Date and Time

This FOA includes two submittal periods. The deadlines for submitting an application are:

- October 30, 2019, 4:00 p.m. MDT for FY 2019 funding; and
- The FOA will be updated in FY 2020 to provide a second deadline for FY 2020 funding, contingent on appropriations.

Applications 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), the upload of documents to Grants.gov or an applicant's SAM registration are not considered technical issues with the Grants.gov system.

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

D.4.1. Application Delivery Instructions

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

By mail or United States Postal Service (USPS) overnight services:

Bureau of Reclamation
Financial Assistance Support Section
Attn: Mr. Matthew Reichert
P.O. Box 25007, MS 84-27810
Denver, CO 80225

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All other express delivery:

Bureau of Reclamation mail services
Attn: Mr. Matthew Reichert Denver
Federal Center
Mail Room Bldg. 56, Rm. 1940 Dock S-6
6th Avenue and Kipling Street
Denver, CO 80225

By courier services:

Bureau of Reclamation
Attn: Mr. Matthew Reichert Denver
Federal Center
Mail Room Bldg. 56, Rm. 1940 Dock S-6
6th Avenue and Kipling Street
Denver, CO 80225

D.4.2. Instructions for Submission of Project Application

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

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

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

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

Section D. Application and Submission Information

D.4.2.2. Applications Submitted Electronically

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

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

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

D.4.2.3. Acknowledgement of Application Receipt

If an application is submitted by mail, express delivery, or courier, Reclamation will notify you via email that your application was received.

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

Notification will be sent to the points of contact identified on the applicant's SF-424 Application for Federal Assistance.

D.5. Intergovernmental Review

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

D.6. Automated Standard Application for Payments Registration

All applicants must also be registered with and willing to process all payments through the Department of Treasury Automated Standard Application for Payments (ASAP) system. All recipients with active financial assistance agreements with Reclamation must be enrolled in ASAP under the appropriate Agency Location Code(s) and the Data Universal Number System (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 and the enrollment mailbox can be found at www.usbr.gov/mso/aamd/asap.html.

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

Section E. Application Review Information

E.1. Evaluation Criteria

The evaluation criteria portion of your application should be addressed in the technical proposal section. Applications should thoroughly address each criterion and any sub-criterion in the order presented below to assist in complete and accurate evaluation of your proposal.

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. *Note: Projects may be prioritized to ensure balance among project types and to ensure that the projects funded address the goals of the FOA.*

Evaluation Criteria: Scoring Summary	Points:
A. Project Benefits	40
B. Need for Project and Applicability of Project Results	25
C. Project Implementation	15
D. Dissemination of Results	10
E. Department of the Interior Priorities	10
<i>Total</i>	<i>100</i>

The following evaluation criteria will be used by the Application Review Committee (ARC) to rank proposals submitted under this FOA. *It is suggested that applicants copy and paste the evaluation criteria and sub-criteria immediately below into their applications to ensure that all necessary information is adequately addressed.*

E.1.1. Evaluation Criterion A — Benefits to Water Supply Reliability (40 points)

Up to **40 points** may be awarded based on the benefits that are expected to result from implementing the proposed project. This criterion considers a variety of benefits, including how the project will support better management of water deliveries, water marketing and drought management activities, and improved ability to meet water administration or endangered species requirements, among other water management objectives. **Please respond and provide support for your responses to each of the following sub-criteria.**

Describe how your project will benefit water supply reliability:

1. Describe the *water management issue(s)* that your project will address. For example, will your project address water supply shortfalls or uncertainties, the need to meet competing demands for water, complications arising from drought, conflicts over water, or other water management issues? Describe the severity of the water management issues to be addressed through your project.
2. Explain *how* your project will address the water management issues identified in your response to the preceding bullet. In your response, please explain how your project will contribute to one or more of the following water management objectives and provide support for your response:
 - a. water supply reliability,
 - b. management of water deliveries,
 - c. water marketing activities,
 - d. drought management activities,
 - e. conjunctive use of ground and surface water,
 - f. water rights administration,
 - g. ability to meet endangered species requirements,
 - h. watershed health,
 - i. conservation and efficiency, or
 - j. other improvements to water supply reliability.
3. Describe *to what extent* your project will benefit one of the water management objectives listed in the preceding bullets. In other words, describe the significance or magnitude of the benefits of your project, either quantitatively or qualitatively, in meeting one or more of the listed objectives.
4. Explain how your project complements other similar applicable to the area where the project is located. Will your project complement or add value to other, similar efforts in the area, rather than duplicate or complicate those efforts? Applicant should make a reasonable effort to explore and briefly describe related ongoing projects.

E.1.2. Evaluation Criterion B — Need for Project and Applicability of Project Results (25 points)

Up to **25 points** may be awarded based on the extent to which the project will result in readily useful applied science tools or information that meet an existing need and are highly likely to be used by water resource managers in the West. Applicants that demonstrate a clear need for the project, have committed partners,

Section E. Application Review Information

and can explain how the project results will be applied will receive the most points under this criterion. **Please respond and provide support for your responses to each of the following sub-criteria.**

Explain how your project will result in readily useful applied science tools that meet an existing need:

1. Does your project meet an existing need identified by a water resource manager(s) within the 17 Western States?
 - a. Explain who has expressed the need and describe how and where the need for the project was identified (even if the applicant is the primary beneficiary of the project). For example, was the need identified as part of a prior water resources planning effort, through the course of normal operations, or raised by stakeholders? Provide support for your response (e.g., identify the entities that have expressed a need or cite planning or other documents expressing a need for the project).
 - b. Provide letters of support from any resource managers, stakeholders or partners that have stated that they will benefit from the project, or, for Category B applicants, letters of participation from partners who have committed to participate in the proposed project. Identify any contribution (e.g., cost share, staff time, or other resources) by partners other than the applicant to the non-Federal cost share requirement for the project.

Note: Category B applicants will be evaluated under this criterion based on the *extent* of demonstrated support for their project beyond meeting this minimum requirement (i.e., to what extent project partners are committed to participating in the project).

2. Will the project result in an applied science tool(s) or information that is readily applicable, and highly likely to be used by water resource managers in the West?
 - a. How will the project results be used?
 - b. Will the results of your project inform water resource management actions and decisions immediately upon completion of the project, or will additional work be required?
 - c. Will the results of your project be transferrable to other users and locations?
 - d. If the applicant is not the primary beneficiary of the project (e.g., if the applicant is a university or research institute), describe how the project beneficiaries have been or will be involved in planning and implementing the project?

E.1.3. Evaluation Criterion C — Project Implementation (15 points)

Up to **15 points** may be awarded based upon the extent to which the applicant is capable of proceeding with the project upon entering into a financial assistance agreement. Applicants that describe a detailed work plan (e.g., estimated schedule that shows the stages and duration of the proposed work, and identifies major tasks, milestones, and dates) and a budget that is appropriate for the work proposed and has a reasonable level of detail will receive the most points under this criterion. Your responses to the following sub-criteria should reflect an understanding of the tasks required to complete the project within the required 2 or 3-year timeframe. **Please respond and provide support for your responses to each of the following sub-criteria.**

Describe your project implementation plan:

1. Describe the objectives of the project and the methodology and approach that will be undertaken. Provide support for your methodology and approach.
2. Describe the work plan for the project. Include an estimated project schedule that shows the stages and duration of the proposed work, including major tasks, milestones, and dates.
3. Describe the availability and quality of existing data and models applicable to the project.
4. Identify staff with appropriate credentials and experience and describe their qualifications. Describe the process and criteria that will be used to select appropriate staff members for any positions that have not yet been filled. Describe any plans to request additional technical assistance from Reclamation or via a contract.
 - a. Have the project team members accomplished projects similar in scope to the proposed project in the past either as a lead or team member?
 - b. Is the project team capable of proceeding with tasks within the proposed project immediately upon entering into a financial assistance agreement? If not, please explain the reason for any anticipated delay.
5. Provide a summary description of the *products* that are anticipated to result from the project. These may include data, metadata, digital or electronic products, reports and publications.

E.1.4. Evaluation Criterion D — Dissemination of Results (10 Points)

Up to **10 points** may be awarded for proposals that can articulate how the results will be disseminated, transferred, and communicated directly with partners and resource managers within the western United States. **Please respond and provide support for your responses to each of the following sub-criteria.** *Note: All applicants whose projects are selected for funding will be expected to participate in at least one Reclamation-sponsored webinar to disseminate deliverable(s) and discuss application of deliverables to management questions. Under this criterion, proposals will be evaluated based on other efforts, beyond the required webinar, that they will take to disseminate the results of their project.*

Explain how project results will be disseminated, including:

1. Describe how the tools, frameworks, or analyses being developed will be disseminated, communicated, or made available to water resources managers who may be interested in the results.
 - a. If the applicant is the primary beneficiary of the project, explain how the project results will be communicated internally, and to interested stakeholders and interested water resources managers in the area, if appropriate.
 - b. If the applicant is not the primary beneficiary of the project (e.g., universities or research institutes) describe how project results will be communicated to project partners and interested water resources managers in the area.
 - c. Explain why the chosen approach is the most effective way to disseminate the information to end users in a usable manner.

E.1.5. Evaluation Criterion E — Department of the Interior Priorities (10 points)

Up to **10 points** may be awarded based on the extent that the proposal demonstrates that the project supports the Department priorities. Please address those priorities that are applicable to your project. It is not necessary to address priorities that are not applicable to your project. A project will not necessarily receive more points simply because multiple priorities are addressed. Points will be allocated based on the degree to which the project supports one or more of the priorities listed, and whether the connection to the priority(ies) is well supported in the proposal.

Explain how your project supports Department of the Interior Priorities (or at least one priority):

- 1. *Creating a conservation stewardship legacy second only to Teddy Roosevelt***
 - a. utilize science to identify best practices to manage land and water resources and adapt to changes in the environment;
 - b. examine land use planning processes and land use designations that govern public use and access;
 - c. revise and streamline the environmental and regulatory review process while maintaining environmental standards;
 - d. review DOI water storage, transportation, and distribution systems to identify opportunities to resolve conflicts and expand capacity;
 - e. foster relationships with conservation organizations advocating for balanced stewardship and use of public lands;
 - f. identify and implement initiatives to expand access to DOI lands for hunting and fishing;
 - g. shift the balance towards providing greater public access to public lands over restrictions to access.

- 2. *Utilizing our natural resources***
 - a. ensure American Energy is available to meet our security and economic needs;
 - b. ensure access to mineral resources, especially the critical and rare earth minerals needed for scientific, technological, or military applications;
 - c. refocus timber programs to embrace the entire ‘healthy forests’ lifecycle;
 - d. manage competition for grazing resources.

- 3. *Restoring trust with local communities***
 - a. Be a better neighbor with those closest to our resources by improving dialogue and relationships with persons and entities bordering our lands;
 - b. Expand the lines of communication with Governors, state natural resource offices, Fish and Wildlife offices, water authorities, county commissioners, Tribes, and local communities.

- 4. *Striking a regulatory balance***
 - a. Reduce the administrative and regulatory burden imposed on U.S. industry and the public;
 - b. Ensure that Endangered Species Act decisions are based on strong science and thorough analysis.

5. ***Modernizing our infrastructure***
 - a. support the White House Public/Private Partnership Initiative to modernize U.S. infrastructure;
 - b. remove impediments to infrastructure development and facilitate private sector efforts to construct infrastructure projects serving American needs;
 - c. prioritize DOI infrastructure needs to highlight:
 1. construction of infrastructure,
 2. cyclical maintenance, and
 3. deferred maintenance.

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 FOA. Awards will be made for projects most advantageous to the Federal Government. The evaluation process will be comprised of the steps described in the following subsections.

E.2.1. Initial Screening

All application packages will be screened to ensure that:

1. The applicant meets the eligibility requirements stated in this FOA.
2. The applicant meets the unique entity identifier and SAM registration requirements stated in this FOA (this may be completed up to 30 days after the application deadline).
3. The application meets the content requirements of the FOA package, including submission of a technical proposal, including responses to the evaluation criteria, a funding plan, budget proposal, and budget narrative.
4. The application contains a properly executed SF-424, Application for Financial Assistance, form SF-424B, Assurances Non-Construction Programs, and a completed SF-424A, Budget Information Construction Programs.
5. 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).
6. The application and funding plan meets or exceeds the minimum non-Federal cost share requirements identified in this FOA.

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

E.2.2. Application Review Committee

Evaluation criteria will comprise the total evaluation weight as stated in the *Section E.1. Evaluation Criteria*. Application Review Information. Applications will be scored against the evaluation criteria by an ARC, made up of experts in relevant disciplines selected from across Reclamation. The ARC will also review the application to ensure that the project meets the description of eligible projects and meets the objective of this FOA.

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

E.2.3. Red-Flag Review

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

In addition, during this review, Reclamation will address any specific concerns or questions raised by members of the ARC, 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 FOA. 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.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 (approximately 1 to 3 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.2.5.1 Environmental Review

Reclamation will forward all proposals that include ground disturbing activities to the appropriate Reclamation Regional or Area Office for completion of environmental compliance. To the extent possible, environmental compliance will be completed before a financial assistance agreement is signed by the parties. However, in most cases, the award will be made contingent on completion of environmental compliance. The financial assistance agreement will describe how compliance will be carried out and how the costs will be paid. Ground disturbing activities may not occur until this second level of environmental analysis is completed and a notice to proceed is issued.

Even in cases where environmental compliance work has been completed previously or is being completed by another Federal agency, Reclamation must still review and adopt such environmental compliance and issue a notice to proceed before ground disturbing activities may be initiated.

E.2.5.2. Budget Analysis and Business Evaluation

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

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

E.3. Federal Award Performance Integrity Information System

Prior to making an award with a Federal total estimated amount greater than \$150,000, Reclamation is required to review and consider any information about the applicant that is in the designated integrity and performance system accessible through SAM (currently Federal Award Performance Integrity Information System [FAPIIS]) (see 41 U.S.C. §2313). An applicant, at its option, may review information in the designated integrity and performance systems accessible through SAM and comment on any information about itself that a Federal awarding agency previously entered and is currently in the designated integrity and performance system accessible through SAM. Reclamation will consider any comments by the applicant, in addition to the other information in FAPIIS, in making a judgment about the applicant's integrity, business ethics, and record of performance under Federal awards when completing the review of risk posed by applicants as described in 2 CFR §200.205 Federal awarding agency review of risk posed by applicants.

E.4. Anticipated Announcement and Federal Award Date

Reclamation expects to contact potential award recipients and unsuccessful applicants in the fall of 2019 regarding selections for FY 2019 funding, and in 2020 regarding selections for FY 2020 funding, subject to the timing and amount of final FY 2020 appropriations. Financial assistance agreements will be awarded to applicants that successfully pass all pre-award reviews and clearances.

Section F. Federal Award Administration Information

F.1. Federal Award Notices

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

F.2. Administrative and National Policy Requirements

F.2.1. Environmental and Cultural Resources Compliance

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

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

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

Under no circumstances may an applicant begin any ground-disturbing activities (e.g., grading, clearing, and other preliminary activities) on a project before environmental and cultural resources compliance is complete and a Reclamation Grants Officer 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

FOA. Costs incurred for ground-disturbing activities performed prior to award are not eligible for reimbursement or cost share unless the recipient can provide documentation that Federal environmental and cultural resource clearances were obtained for the Project prior to the commencement of the activities.

F.2.2. Approvals and Permits

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

F.2.3. Intangible Property (2 CFR §200.315)

(a) 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].

(b) 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.

(c) 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 Part 401, “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Awards, Contracts and Cooperative Agreements.”

(d) The Federal government has the right to:

- (1) obtain, reproduce, publish, or otherwise use the data produced under a Federal award; and
- (2) authorize others to receive, reproduce, publish, or otherwise use such data for Federal purposes.

(e) Freedom of Information Act

- (1) 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

Section F. Federal Award Administration Information

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 USC 552(a)(4)(A)).

(2) Published research findings means when:

- (i) Research findings are published in a peer-reviewed scientific or technical journal; or
- (ii) 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.

(3) 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:

- (i) 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
- (ii) 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.

F.3. Reporting Requirements and Distribution

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

F.3.1. Financial Reports

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

F.3.2. Interim Performance Reports

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

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

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

F.3.3. Final Performance Reports

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:

- Whether the project objectives and goals were met
- Discussion of the benefits achieved by the project, including information and/or calculations supporting the benefits
- How the project demonstrates collaboration, if applicable
- 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 may be made available on Reclamation's website or as requested.

F.4. Conflicts of Interest

F.4.1. Applicability

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

F.4.2. Requirements

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

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

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

F.4.3. Notification

Non-Federal entities, including applicants for financial assistance awards, must disclose in writing any conflict of interest to the Department's awarding agency or pass-through entity in accordance with 2 CFR 200.112, Conflicts of Interest. Recipients must establish internal controls that include, at a minimum, procedures to identify, disclose, and mitigate or eliminate identified conflicts of interest. The recipient is responsible for notifying the Financial Assistance Officer in writing of any conflicts of interest that may arise during the life of the award, including those that have been reported by subrecipients.

F.4.4. Restrictions on Lobbying

Non-Federal entities are strictly prohibited from using funds under this grant or cooperative agreement for lobbying activities and must provide the required certifications and disclosures pursuant to 43 CFR Part 18 and 31 USC 1352.

F.4.5. Review Procedures

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

F.4.6. Enforcement

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

F.5. Data Availability

F.5.1. Applicability

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

F.5.2. Use of Data

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

F.5.3. Availability of Data

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

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

F.6. Releasing Applications

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

Section G. Agency Contacts

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

G.1. Reclamation Financial Assistance Contact

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

By mail: Bureau of Reclamation
Financial Assistance Support Section
Attn: Mr. Matthew Reichert
Mail Code: 84-278510
P.O. Box 25007
Denver, CO 80225

By email: mreichert@usbr.gov

By phone: 303-445-3865

G.2. Reclamation Program Coordinator Contact

Questions regarding applicant and project eligibility and application review may be submitted to the attention of Ms. Avra Morgan, Program Analyst, as follows:

By mail: Bureau of Reclamation
Water Resources and Planning Division
Attn: Ms. Avra Morgan
P.O. Box 25007, MS 84-51000
Denver, CO 80225

By email: aomorgan@usbr.gov

By phone: 303-445-2906

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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 FOA. The descriptions below are intended to provide you with information about the environmental compliance issues that may apply to your projects and to help you budget appropriately for the associated compliance costs.

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.2. Background on Federal Environmental and Cultural Resource Laws

H.2.1. 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 make a decision to fund an award under this FOA, 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 (e.g., 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 **Interior 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 (e.g., 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. Agency Contacts*).

H.2.2. 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 FOA. 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 recipient 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

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document its findings and the Section 106 process will be concluded. This can take anywhere from a couple of days to 1 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 2 months.
- Among the types of historic properties that might be affected by projects proposed under this FOA 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.2.3. Endangered Species Act

Pursuant to Section 7 of the ESA, each Federal agency is required to consult with the U.S. Fish and Wildlife Service (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 1 day to 1 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.

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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.