U.S. Geological Survey

Notice of Funding Opportunity

Cooperative Agreement for affiliated Partner with Colorado Plateau Cooperative Ecosystem Studies Unit

Funding Opportunity Number

G27AS00060

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BASIC INFORMATION

Announcement Type: Initial

Funding Opportunity Number: G27AS00060

Assistance Listing Number(s): 15.808

Estimated Total Program Funding: $150,000

Expected Number of Awards: 1

Award Ceiling: $150,000

Award Floor: $1

Cost Sharing Required?
No

Closing Date Explanation
Electronically submitted applications must be submitted no later than 11:59 PM, ET, on the listed application due date

Have Questions?
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Executive Summary
The U.S. Geological Survey (USGS) Arizona Water Science Center (AZWSC) is offering a funding opportunity to a CESU partner for research related to water quality modeling in reservoirs and free-flowing sections of the Colorado River from Lake Powell to the delta. Harmful algal blooms (HABs) are increasingly affecting freshwater systems across the western United States, and the Lower Colorado River has emerged as a hotspot of concern. Historically oligotrophic and clear reservoirs have experienced significant cyanobacterial bloom events in the past decade, including documented microcystin (a potent algal toxin) concentrations over a hundred times higher than the Environmental Protection Agency's limit for safe recreational exposure.

ELIGIBILITY

Eligible Applicants
Others (see text field entitled "Additional Information on Eligibility" for clarification)

Additional Information on Eligibility
This financial assistance opportunity is being issued under a Cooperative Ecosystem Studies Units (CESU) Program. CESU's are partnerships that provide research, technical assistance, and education. Eligible recipients must be a participating partner of the **Colorado Plateau Cooperative Ecosystem Studies Unit.**

Cost Sharing Requirement

Cost Sharing Required?
No

GET READY TO APPLY

Required System Registrations

Unique Entity Identifier and SAM.gov Registration

Before applying, all **applicants** except individuals applying as a natural person **must be registered in SAM.gov**. During the SAM.gov registration the entity will obtain their Unique Entity Identifier (UEI).

The SAM.gov registration process can take several months. If your organization is not already registered in SAM.gov, begin the registration process as soon as possible.

To register in SAM.gov, go to the SAM.gov website and use the available resources to complete registration.

- **Financial assistance registrants** must review and certify compliance with the SAM.gov "Financial Assistance General Representations and Certifications".
- **Already registered?** You already have a Unique Entity ID. Before applying, check that your "Financial Assistance General Representations and Certifications" on SAM.gov is complete. Remember to renew your registration every year to keep it active while you have an award or application in progress. You can update your registration whenever you need, including during renewal.
- **Need help?** For additional information and contact information on the SAM.gov Help page.

GRANTS.GOV

This program accepts applications through Grants.gov so once you receive your UEI return to Grants.gov to register with Grants.gov. Please allow 30 days to register and set up a Workspace in Grants.gov. See Submission Instructions section below for additional details.

Refer to Attachment – Submission Instructions & Tips.

PROGRAM OVERVIEW

Program Goals

- Research Objectives:

  The overarching objective of the agreement is to deliver remote sensing-based predictive chlorophyll-a models that use the AquaMatch tool for inputs into ensemble modeling to robustly estimate potential harmful algae blooms for reservoirs in the Colorado River Basin. This work will consist in two parts: first updating our remote sensing pipeline using AquaMatch to work with chlorophyll-a sampling locations provided by partners and extracting the thousands of remote sensing images collected over time at these locations. Second, we will use this new data and data previously collected from our own efforts to build spatially explicit chlorophyll-a models for the reservoirs Lake Mead, Lake

Mohave, and Lake Havasu. Finally, this work will drive development of a software package that will allow integration of model results with public facing web maps and make the code adoptable by other users in the future. CESU, AZWSC, and BOR scientists will collaborate on model and software development and prepare one or more manuscripts for peer-reviewed journals and(or) USGS or cooperator publications. Specific tasks of the agreement:

* Using the AquaMatch software pipeline, compile remote-sensing "stacks" of all available Landsat imagery at chlorophyll-a sampling locations provided by USGS scientists

* Develop a machine learning (e.g., random forest) model to predict chlorophyll-a at reservoirs (Powell, Mead, Mohave, Havasu) and free-flowing reaches of the Colorado River that are wider than 90 meters and thus visible from Landsat satellites.

* With USGS scientists, publish one or more journal articles describing data, models, and interpretation

Program Description

A specific project associated with this Funding Opportunity involves an ongoing project between the USGS, Bureau of Reclamation (BOR), and Southern Nevada Water Authority. That project entails publishing a multi-decade dataset of laboratory-analyzed chlorophyll samples, deploying new sensors to improve monitoring in under-sampled areas, and developing a physically based reservoir dynamics model of water chemical and physical characteristics for major reservoirs. This CESU funding opportunity is intended to extend the modeling effort to machine-learning based models of water quality–and chlorophyll-a concentration in particular–based on remote sensing imagery and supplementary hydrologic and meteorologic data.

Through this CESU agreement, the federal and state university partners will cooperate fully in development of a research program that will produce final products to provide resource managers with better information on which to base decisions regarding reservoir monitoring efforts and early warning of potential HABs. Cooperation between the USGS and its CESU partner brings a combination of expertise to address this objective that is greater than that possessed by either partner on its own.

This research supports priorities identified in Executive Order (EO) 14239 -Achieving Efficiency Through State and Local Preparedness (March 19, 2025), EO 13956: Modernizing America's Water Resources Management and Water Infrastructure (October 16, 2020), EO 14303 - Restoring Gold Standard Science (May 23, 2025), Secretarial Order (SO) 3441 Implementing the Requirements of Executive Order 14303, Restoring Gold Science Standard, May 23, 2025 (August 29, 2025), and SO 3435 - Implementation of the Expanding Public Lands Outdoor Recreation Experiences Act (June 25, 2025), by providing information for risk-informed decision making and actionable water data that strengthens state and local preparedness. Products from this research are reproducible, peer-reviewed science that clearly identifies uncertainty, and contributes to managing and protecting resources on public lands.

Legislative Authority

Authority: **54 U.S.C. § 100703. Cooperative study units** [Source (U.S. Code)16 U.S.C. § 5933]; Public Law 99-591 bestows permanent authority on the USGS to "prosecute projects in

cooperation with other agencies, Federal, state, and private" [43 U.S.C. § 36(c)]; the USGS Organic Act of March 3, 1879, as amended (43 U.S.C. § 31 et seq.); 16 U.S.C. § 1(a)(2)(j); 16 U.S.C. § 1(g); 16 U.S.C. § 753(a).

Type of Award

Projects will be funded through CA (Cooperative Agreement).

Recipient should expect the Federal agency to have substantial involvement in the project.

The project will be carried out through a close partnership between USGS and the recipient. The work described represents a major part of the USGS partner's core research. We anticipate that the selected recipient will also have substantial experience integrating different datasets and producing peer-reviewed manuscripts. Once selected, the recipient and USGS scientists will discuss the objectives from a strategic perspective and develop a line to address those objectives. We anticipate the work will evolve over time as needed through a collaborative process. Results obtained through the work will be disseminated through oral presentations, journal publications, and communications with partner federal agencies for natural resource management. Dissemination of data and research results will follow USGS guidelines for data management and peer review and will be done in a collaborative manner for mutual benefit. USGS will have co-authorship on publications that result from this work.

PREPARE YOUR APPLICATION

Application Content and Format

Pre-Application Requirements

Prior to applying, applicants should review presidential actions found at: https://www.whitehouse.gov/presidential-actions/ and DOI Secretary's Orders found at: https://www.doi.gov/document-library/secretary-order. By applying in response to this Notice of Funding Opportunity, the applicant certifies awareness and compliance with all currently effective and applicable executive orders and secretary's orders. Applicants are responsible for ensuring their proposed activities are consistent with the intent and requirements of these directives.

It is anticipated that one award will be made with one base year and two additional budget years. The total estimated funding for this project is $150,000. Funding in the amount of $50,000 is estimated to be available for Budget Year 1. Additional funding for Budget Years 2 and 3 will be based upon satisfactory progress and the availability of funding. The recipient should submit the proposal to reflect the three-year project period.

Application Documents

Applicants must submit the following forms with their application as specified below. Instructions for accessing and submitting application forms are provided in the Submission Instructions section of this document below. For instructions on completing form fields, see the form instructions on the Grants.gov Forms Repository.

Forms/Assurances/Certifications	Submission Requirement
SF-424, Application for Federal Assistance	Required from all applicants

Forms/Assurances/Certifications	Submission Requirement
Note: For applicants requesting more than $100,000 in Federal funds, the Authorized Representative's signature (or electronic equivalent) on the Application for Federal Assistance form also represents their certification of the statements in Appendix A to 43 CFR 18-Certification Regarding Lobbying	
SF-424A, Budget Information – Non-Construction Programs	Required for non-construction projects
SF-424C: Budget Information – Construction Programs	Required for construction projects
SF-429 (Cover Page & Attachment B), Request to Acquire, Improve, or Furnish Real Property Note: The SF-429 forms are only available in the Grants.gov Forms Repository. Applicants must download the form and include the completed form as an application attachment.	Required if requesting to acquire, improve, or furnish real property.
SF-LLL, Disclosure of Lobbying Activities	Required if requesting more than $100,000 in Federal funds and the applicant has used or plans to use funds other than Federal appropriated funds for lobbying related to the proposed project.
Project Abstract Summary (OMB 4040-0019). Must include, in plain language: • Award purpose, • Activities to be performed, • Expected deliverables or outcomes, • Intended beneficiaries, Subrecipient activities (if known or specified at time of award)	Required from all applicants
DOI Research and Development (R&D) – Current and Pending (Other) Support Note: This form is available on the DOI website. Applicants must download the form and include the completed form as an application attachment.	Required for research projects.
DOI Research and Development (R&D) – Biographical Sketch Note: This form is available on the DOI website. Applicants must download the form and include the completed form as an application attachment.	Required for research projects.

Project Narrative
Content and Form of Application:

Cover page of written technical narrative:

1. Anticipated award recipient's name
2. Project title
3. Proposed project start date
4. Anticipated Principal Investigator Name (individual who will oversee the cooperative agreement) including title, address, phone number, , and email address
5. Authorized Representative administrative contact (Recipient staff member(s) in the recipient's research office who will administer the cooperative agreement) including name, title, address, phone number, and email address
6. Include names and affiliations of Co-PIs, and if they are funded by the project or in kind
7. Include names, titles, and contact information for expected USGS collaborators on the project
8. List any other cooperators and partners
9. List laboratories, equipment, study area(s), and facilities available for project work.
10. State experience of project staff to conduct the stated work objectives of the project

Proposal text should include the following:

a. Introduction and Statement of Problem. Give a brief introduction to the research problem. Provide a brief summary of findings or outcomes of any prior work that has been completed or is ongoing in this area.

b. Objectives. Clearly define goals of project. Include geographic scope. State how the proposal addresses USGS goals and its relevance and impact. Explain why the work is important.

c. Procedures/Methods. This section should include a fairly detailed discussion of the work plan and technical approach to both field and laboratory techniques.

d. Planned Products, Dissemination of Research Results, and Technology Transfer. List product(s) (reports, analyses, digital data, etc.) that will be delivered at the end of the project period. The USGS considers dissemination of research data and results to potential users of those results to be an integral and crucial aspect of projects funded by this program. Beyond the requirements for a final report, describe your plan for dissemination of project data and results that will result in the greatest possible benefit to customers as defined by your proposal. Applicants are strongly encouraged to disseminate research results to the scientific community and appropriate professional organizations; local, State, regional and Federal agencies; and the public. The USGS encourages the Recipient to publish project reports in scientific and technical journals. *All products must adhere to USGS Fundamental Science Practices.*

e. Schedule, Duration of Study, and Reporting Schedule. Provide anticipated project start and end dates and a project timeline of key milestones.

e. References Cited. List all references to which you refer in text and references from your past work in the field that the research problem addresses. Be sure to identify references as journal articles, chapters in books, abstracts, maps, digital data, etc.

f. Legal and Policy-Sensitive aspects (if applicable)

g. Animal Use or Human subjects (if applicable)

Budget Narrative

Applicants must describe and justify items and costs listed in their budget. The budget narrative must identify the following cost items: total estimated costs, non-Federal cost share, third-party contributions, and any pre-award costs. Total project cost is the sum of all allowable costs, including required and voluntary cost share and third-party contributions.

Budget items must be**:**

- Reasonable, allowable, allocable, and necessary
- Compliant with 2 CFR §200 Subpart E cost principles

Indirect Costs: Applicants must indicate in their budget narrative how they will charge indirect costs, including the rate to be applied:

- De Minimis Rate: If eligible, state if your organization is opting to use the de minimis rate of up to 15% of total modified direct costs. Entities that do not have a current Federal negotiated indirect cost rate (including provisional rate) may propose to use the de minimis rate. For more information, refer to 2 CFR 200.414(f).
- Negotiated Rate: State if you will negotiate with your cognizant agency. If your organization has previously negotiated a rate, attach a copy of the most recently negotiated rate agreement (active or expired).

This program has a mandated cap on indirect costs or approved rate deviation.

17.5% IDC CESU

Budget Narrative - This information will provide details and a breakdown of funds requested on the SF 424A form. Organize the narrative by Object Class Category titles on the SF-424A and ensure the amounts correspond to the SF-424A. Break out ANNUALLY and show all project budget years you are applying for in your budget documents (budget narrative and SF-424A). Include the following:

a. **Personnel:** For salaries and wages, list names, position/job title, job category/classification, rate of compensation, and how the rate was determined, or what it is based on. Include their total time/level of effort. For each personnel member also include role on the project.

b. **Fringe benefits**: Indicate the rates/amounts in conformance with normal accounting procedures and recipient policy. Explain what costs are covered in this category and the basis of the rate computations. Attach fringe benefit rate sheet or agreement or provide a link to official rates if posted online.

c. **Supplies**: Supplies include all tangible personal property other than those described in the equipment definition. A computing device is a supply if the acquisition cost is below the lesser of the capitalization level established by the recipient or subrecipient for financial statement purposes or $10,000, regardless of the length of its useful life. Enter the cost for all tangible property. Include the cost of office, laboratory, computing, and field supplies separately. Provide detail on any specific item, which represents a significant portion of the proposed amount.

d. **Equipment**: Equipment means tangible personal property (including information technology systems) having a useful life of more than one year and a per-unit acquisition cost that equals or exceeds the lesser of the capitalization level established by the recipient or subrecipient for financial statement purposes, or $10,000. Show the cost of all equipment necessary for achieving the objectives of the project. Each item should be itemized and include a full justification and a dealer or manufacturer quote, if available.

*Title to non-expendable personal property shall be vested solely with the Recipient. Under no circumstances shall property title be vested in a sub-tier recipient.

e. **Contractual:** Identify the tasks or problems for which such services would be used. List the contemplated consultant, the estimated amount of time required (level of effort), and the quoted rate per day or hour.

* Lab Analyses. Include geochemical analyses, radiocarbon age dating, etc. Briefly itemize cost of all analytical work (if applicable); Could also fall under Other Direct Costs.

f. **Travel:** State the purpose of each budgeted trip and itemize the estimated travel costs for each trip required. Include purpose of travel, to and from locations, persons traveling by name if known, number of days for each trip, the per diem (lodging and M&IE) rates (in accordance with GSA allowable published rates and recipient travel policy), the cost of each method of transportation and how that cost was determined, and any miscellaneous expenses for each trip. Calculations of other special transportation costs (such as charges for use of applicant-owned vehicles or vehicle rental costs) should also include a justification of cost

*Field Expenses. Briefly itemize the estimated travel costs (i.e., number of people, number of travel days, lodging and transportation costs, and other travel costs).

g. **Other direct costs:** Itemize the different types of costs not included elsewhere; such as, shipping, computing, equipment-use charges, or other services.

*Publication costs. Show the estimated cost of publishing the results of the research, including the final report. Include costs of drafting or graphics, reproduction, page or illustration charges, and a minimum number of reprints.

h. **Total Direct Charges**: Totals for items a - j.

i. **Indirect Charges (Overhead):** Indirect cost/general and administrative (G&A) cost. Show the proposed rate, modified total direct cost base, and total proposed amount for indirect costs based on the cost principles applicable to the Applicant's organization. If the Applicant has separate rates for recovery of labor overhead and G&A costs, each charge should be shown. Provide copy of recipient's official negotiated indirect cost rate agreement. NOTE: CESU NEGOTIATED IDC RATE IS APPROVED AT 17.5%.

j. **Total:** Total items h and i.

Missing budget details will delay awarding timelines. USGS will not support any costs incurred prior to the start date established on the award by the Grant Officer.

Conflict of Interest and Unresolved Matters Disclosures:

If any actual or potential conflict of interest exists related to this project at the time of application, the applicant must provide sufficient information to support a program determination of significance per 2 CFR 1402.112. Refer to 2 CFR 200.112 Conflict of Interest and 2 CFR 200.113.

Overlap or Duplication of Effort Statement:

Applicants must state in their application if the activities, costs, or time commitment of key personnel proposed in this application overlap with those in any other Federal proposal or award or not. If no overlap exists, include a statement to that effect. If any overlap exists, provide:

- Activities: Description any overlapping activities.
- Costs: Description of any overlapping costs.
- Time: Description of any overlapping key personnel time.
- A copy of any overlapping or duplicative proposal submitted to any other potential funding entity.
- Details on when any overlapping proposal was submitted, to whom, and the expected date of the funding decision.

Other Required Information
USGS Data Management Plan Requirements

Proposals submitted to USGS must include a supplementary document labeled "Data Management Plan" (DMP). This supplementary document should describe how the proposal will conform to USGS policy on the dissemination and sharing of research results and associated data. A valid DMP may include only the statement that no detailed plan is needed (e.g. "No data are expected to be produced from this project"), as long as the statement is accompanied by a clear justification. This supplementary document may include:

- the types of data, samples, physical collections, software, curriculum materials, and other materials to be produced over the course of the project;
- the standards to be used for data and metadata format and content (where existing standards are absent or deemed inadequate, this should be documented along with any proposed solutions or remedies);
- policies for access and sharing including provisions for appropriate protection of privacy, confidentiality, security, intellectual property, or other rights or requirements;
- provisions for re-use, re-distribution, and the production of derivatives; and
- plans for archiving data, samples, and other research products, and for preservation of free public access to them.

Additional guidance on data management plans is available from the USGS Data Management website here: https://www.usgs.gov/data-management/data-management-plans

Simultaneously submitted collaborative proposals and proposals that include subawards are a single unified project and should include only one supplemental combined DMP by the lead PI that also addresses all subaward data management needs, regardless of the number of non-lead collaborative proposals or subawards included.

A summary of the quality assurance procedures and considerations for each of the project elements should be submitted to the USGS for review and approval before work begins to ensure that the quality of the data to be generated will be suitable for federal and state decision making.

Prohibition on Issuing Financial Assistance Awards to Entities that Require Certain Internal Confidentiality Agreements

Section 743 of Division E, Title VII of the Consolidated and Further Continuing Resolution Appropriations Act of 2015 (Pub. L. 113-235) prohibits the use of funds appropriated or otherwise made available under that or any other Act for grants or cooperative agreements to an entity that requires employees or contractors of such entity seeking to report fraud, waste, or abuse to sign internal confidentiality agreements or statements prohibiting or otherwise restricting such employees or contractors from lawfully reporting such waste, fraud, or abuse to a designated investigative or law enforcement representative of a federal department or agency authorized to receive such information.

Recipients must not require their employees or contractors seeking to report fraud, waste, or abuse to sign internal confidentiality agreements or statements prohibiting or otherwise restricting such employees or contractors from lawfully reporting such waste, fraud, or abuse to a designated investigative or law enforcement representative of a federal department or agency authorized to receive such information.

Recipients must notify their employees or contractors that existing internal confidentiality agreements covered by this condition are no longer in effect.

Biographical Sketch Common Format (Attachment A)

This Biographical Sketch Common Form provides instructions for submission of a biographical sketch by each individual identified as a senior/key person on a Federally funded research project. The biographical sketch used to assess how well qualified the individual, team, or organization is to conduct the proposed activities.

Consistent with NSPM-33, individuals are required to disclose contracts associated with participation in programs sponsored by foreign governments, instrumentalities, or entities, including foreign government-sponsored talent recruitment programs. Further, if individuals receive direct or indirect support that is funded by a foreign government-sponsored talent recruitment program, even where the support is provided through an intermediary and does not require membership in the foreign government-sponsored talent recruitment program, that support must be disclosed. Individuals must also report other foreign government sponsored or affiliated activities. In accordance with 42 USC § 19232, individuals are prohibited from being a party in a malign foreign talent recruitment program.

A table entitled, NSPM-33 Implementation Guidance Pre- and Post-award Disclosures Relating to the Biographical Sketch and Current and Pending (Other) Support1 has been created to provide helpful reference information regarding pre-award and post-award disclosures. The table includes the types of activities to be reported, where such activities must be reported in the application, as well as when updates are required in the application and award lifecycle. A final column identifies activities that are not required to be reported.

Individuals are reminded not to submit any personal information in the biographical sketch. This includes items such as: home address; home telephone, fax, or cell phone numbers; home e-mail

address; driver's license number; marital status; personal hobbies; and the like. Such personal information is not appropriate for the biographical sketch and is not relevant to the merits of the proposal. The Federal research funding agency is not responsible or in any way liable for the release of such material.

The Biographical Sketch Common Form is provided in Attachment A. DOI does not currently have a required format for this document. The format of the information is at the discretion of the applicant, however the required information and attestation with signature must be present. Templates provided by other federal agencies are acceptable.

Current And Pending (Other) Support Common Format (Attachment B)

The individual agrees to update this disclosure at the request of the Federal research funding agency prior to the award of support and at any subsequent time the agency determines appropriate during the term of the award. (Refer to the Federal research funding agency's policy on updating award support).

Instructions for Submission of the Current and Pending (Other) Support Common Form.

Current and pending (other) support information is used to assess the capacity or any conflicts of commitment that may impact the ability of the individual to carry out the research effort as proposed. The information also helps assess any potential scientific and budgetary overlap/duplication with the project being proposed.

This document provides instructions on submission of current and pending (other) support information for each individual identified as a senior/key person on a Federally funded research project.

A separate submission must be provided for each proposal and active project, as well as in-kind contributions using the instructions and format specified below. Note that there is no page limitation for this section of the application, though some fields have character limitations for consistency and equity.

Consulting activities must be disclosed under the proposals and active projects section of the form when any of the following scenarios apply:

The consulting activity will require the senior/key person to perform research as part of the consulting activity;

The consulting activity does not involve performing research, but is related to the senior/key person's research portfolio and may have the ability to impact funding, alter time or effort commitments, or otherwise impact scientific integrity; or

The consulting entity has provided a contract that requires the senior/key person to conceal or withhold confidential financial or other ties between the senior/key person and the entity, irrespective of the duration of the engagement.

Consistent with NSPM-33, individuals are required to disclose contracts associated with participation in programs sponsored by foreign governments, instrumentalities, or entities, including foreign government-sponsored talent recruitment programs. Further, if individuals receive direct or indirect support that is funded by a foreign government-sponsored talent recruitment program, even where the support is provided through an intermediary and does not

require membership in the foreign government-sponsored talent recruitment program, that support must be disclosed. Individuals must also report other foreign government sponsored or affiliated activities. In accordance with 42 USC § 19232, individuals are prohibited from being a party in a malign foreign talent recruitment program.

In accordance with the NSPM-33 Implementation Guidance, senior/key persons typically do not include graduate students.

A table entitled, NSPM-33 Implementation Guidance Pre- and Post-award Disclosures Relating to the Biographical Sketch and Current and Pending (Other) Support2 has been created to provide helpful reference information regarding pre-award and post-award disclosures. The table includes the types of activities to be reported, where such activities must be reported in the application, as well as when updates are required in the application and award lifecycle. A final column identifies activities that are not required to be reported.

Individuals are reminded not to submit any personal information in the current and pending (other) support. This includes items such as: home address; home telephone, fax, or cell phone numbers; home e-mail address; driver's license number; marital status; personal hobbies; and the like. Such personal information is not appropriate for the current and pending (other) support template and is not relevant to the merits of the proposal. The Federal research funding agency is not responsible or in any way liable for the release of such material.

The format for submission of the two types of support: (a) proposals and active projects; and (b) in-kind contributions are provided in Attachment B. DOI does not currently have a required format for this document. The format of the information is at the discretion of the applicant, however the required information and attestation with signature must be present. Templates provided by other federal agencies are acceptable.

SUBMISSION REQUIREMENTS AND DEADLINES

Address to Request Application Package

Applications should be submitted via grants.gov in accordance with the instructions stated in this announcement.

Submission Dates and Times

Closing Date for Applications: 12/07/2026

Closing Date Explanation

Electronically submitted applications must be submitted no later than 11:59 PM, ET, on the listed application due date

Submission Instructions

Apply Through Grants.gov

To apply through Grants.gov, please follow the instructions in the Quick Start Guide for Applicants. Before applying, ensure that at least one person at your organization is registered and has the Authorized Organization Representative (AOR). Only the AOR can submit the

application. If you need more users, they must create their own Grants.gov account. Follow these steps below to apply:

- *Create a Workspace*: Creating a workspace allows you to complete it online and route it through your organization for review before submitting.
- *Complete a Workspace*: Invite participants to the workspace so you can collaborate on the application. Required applications forms are included in the Grants.gov Funding Opportunity Package and can be completed in the Workspace, unless noted otherwise in the Required Forms table above. Check for errors before submission.
- *Submit a Workspace*: An application may be submitted through workspace by clicking the Sign and Submit button on the Manage Workspace page, under the Forms tab
- *Track a Workspace Submission*: After successfully submitting a workspace application, a Grants.gov Tracking Number (GRANTXXXXXXXX) is automatically assigned to the application.

The system generates a date and time stamp and sends it to the applicant's AOR via email as proof of submission. Make sure your application passes the Grants.gov validation checks. Do not encrypt, zip, or password-protect any files. Only registered individuals in SAM as both a user and an AOR can submit applications. Please allow 30 days to register in Grants.gov.

Application System Technical Support: For Grants.gov technical registration and submission, downloading forms, and application packages, contact Grants.gov Customer Support at 1-800-518-4726 or by email at Support@grants.gov.

APPLICATION REVIEW INFORMATION

Eligibility Review

During the eligibility review, the application is checked for timely submission, completed packages (see Application Documents above) and alignment with the requirements of this announcement. The Federal agency may remove an application if it does not pass the eligibility review.

Review and Selection Process: Applications are considered based on the completeness of documentation, meeting of stated basic eligibility (reference Eligibility Information above), and other category requirements. Specific evaluation factors are identified below. Budget information will be evaluated for reasonableness and appropriateness to applicant project goals.

Proposals are reviewed, evaluated, and scored by U.S. Geological Survey technical personnel. The evaluations and scores will be submitted to the Grant Officer for final award determination.

If an applicant selected for funding hasn't finished their SAM.gov registration (see 2 CFR 25.200 and 2 CFR 25.110) when the federal agency is ready to make an award, we may decide that the applicant is ineligible for the award and choose to grant it to someone else. Please refer 2 CFR 25.205 for more information.

Prior to making an award, the DOI checks the anticipated recipient and their key project personnel against the current list of prohibited or restricted persons or entities in the System for Award Management (SAM.gov) Exclusions database. We are prohibited from making an award if a recipient or any key personnel are found ineligible, prohibited, restricted, or otherwise

excluded from receiving or participating in an award, as their ineligibility condition applies to this program.

If removed from consideration for ineligibility, the Federal agency will notify the applicant in writing.

Merit Review

Review and Selection Process: Applications are considered based on the completeness of documentation, meeting of stated basic eligibility (reference Eligibility Information above), and other category requirements. Specific evaluation factors are identified below. Budget information will be evaluated for reasonableness and appropriateness to applicant project goals.

Proposals are reviewed, evaluated, and scored by U.S. Geological Survey technical personnel. The evaluations and scores will be submitted to the Grant Officer for final award determination.

Review and Selection Process

This program reviews proposed budgets to ensure:

- figures are correct
- estimated costs are necessary and reasonable and clearly linked to project narratives
- avoid obviously unallowable costs
- identify costs requiring prior approval
- ensure indirect cost rates are applied correctly
- confirm cost sharing requirements are reflected in the budget.

This program reviews applications for potential overlap or duplication between the proposed project and any other funded or proposed project. Depending on the circumstances, DOI may choose to not make an award.

Prior to conducting the comprehensive merit review, an initial review will be performed to determine whether: (1) the applicant is eligible for an award; (2) the information required by the NOFO has been submitted; (3) all mandatory requirements of the NOFO are satisfied; (4) the proposed project is responsive to the program objectives of the NOFO (program determination). If an applicant fails to meet the requirements or objectives of the NOFO, or does not provide sufficient information for review, the applicant will be considered non-responsive and eliminated from further review.

Proposals will be evaluated based on the following criteria:

Purpose, Objectives, and Relevance: (30 points)

(a) The proposal clearly demonstrates alignment with applicable Executive Orders and Secretarial Orders identified in the Notice of Funding Opportunity. EO 14239 -Achieving Efficiency Through State and Local Preparedness (March 19, 2025), EO 13956: Modernizing America's Water Resources Management and Water Infrastructure (October 16, 2020), EO 14303 - Restoring Gold Standard Science (May 23, 2025), SO 3441 Implementing the Requirements of Executive Order 14303, Restoring Gold Science Standard, May 23, 2025 (August 29, 2025), and SO 3435 - Implementation of the Expanding Public Lands Outdoor Recreation Experiences Act (June 25, 2025).

(b) How well are the proposal's objectives defined, measurable, and realistic for the project's anticipated time frame?

Technical Approach: (25 points)

(a) How well does the project summary provide a description of the relationship between partners, tasks, milestones, and goals? Are the milestones supported by a schedule that can be accomplished during the period of performance?

(b) How well does the applicant demonstrate they can address remote sensing analysis, machine learning, and software development using proven software and methodologies?

(c) How closely do the analysis methods follow proven approaches?

Budget Justification and Clarity: (25 points)

(a) Is the staff sufficient to accomplish proposed goals?

(b) Are the budget line items appropriate, reasonable and commensurate with the level of effort needed to accomplish project objectives?

Qualifications, Experience, Past Performance: (20 points)

(a) How well does the applicant demonstrate their expertise in satellite remote sensing and related fields, and analysis of chlorophyll-a and associated data?

(b) What is the applicant's depth of experience in such research as demonstrated by scientific publications and completed projects in the research area?

(c) How does the applicant demonstrate that they are capable of doing the proposed project?

(d) How does the applicant demonstrate they have applied these methods on other projects?

(e) How well does the applicant's past and current assistance demonstrate they have completed project goals associated with remote sensing and water quality analyses?

Risk Review

Prior to making an award, the applicant will be assessed for their level of risk per 2 CFR 200.206. This assessment includes the applicant's financial management capabilities, project delivery experience, staffing resources, past award performance, administration and reporting compliance records, and overall project complexity and potential for challenges. If an award will be made, special conditions may be applied to the award corresponding to the assessed risk. For awards over the simplified acquisition threshold (currently $350,000), a review of the applicant's eligibility and financial integrity information in the applicant's SAM.gov records will also be performed per 2 CFR 200.206.

AWARD NOTICES

Notices of Federal Award are sent electronically via GrantSolutions or e-mail. These notices outline the terms, conditions, and payment instructions per 2 CFR 200.211. The Notice of Federal Award signed by an authorized Grants Officer is the legal instrument obligating financial assistance to a recipient. Any other prior notice is not an authorization to begin work. If the program allows pre-award costs per 2 CFR 200.458, beginning performance before receiving a Notice of Federal Award is at the applicant's own risk.

Anticipated Project Start Date: 04/01/2027

Anticipated Project End Date: 03/31/2030

The applicant should include their preferred project start date on the SF-424.

POST AWARD REQUIREMENTS AND ADMINISTRATION

Administration and National Policy Requirements

For award administration and national policy requirements, see the DOI General Terms and Conditions. Infrastructure projects require the use of American iron, steel, manufacture products, and construction materials per 2 CFR 184.

Geospatial Data

If you receive financial assistance from the Department of the Interior (DOI), recipient must follow these rules for geospatial data:

Follow Federal Standards: All geospatial data you collect or create must meet the standards set by the Federal Geospatial Data Committee (FGDC) or the Department of the Interior. This is required by the Geospatial Data Act of 2018, which is part of Public Law 115-254, specifically in Subtitle F (Geospatial Data), sections 751-759C (codified at 43 U.S.C. §§ 2801–2811).

Include Metadata: Your Geographic Information Systems (GIS) files must include complete metadata. Metadata is information that describes the data, such as where it came from, how accurate it is, and how it should be used. This is to ensure that anyone using the data understands its context and quality.

Check for Existing Data: Before you start collecting new geospatial data, you need to check GeoPlatform.gov. This is to see if there is already existing geospatial data from federal, state, local, or private sources that can meet your needs and is available for free. If such data is available, you should use it instead of gathering new data.

These rules help ensure that geospatial data is reliable, high-quality, and that resources are used efficiently.

Reporting

The recipient's Notice of Award will detail all reporting requirements, including frequency, due dates, and instructions for requesting extensions. In general, but not limited to, recipients must:

- Submit Federal Financial reports and Program Performance reports.
- Use the Federal Financial Report (SF-425) form for financial reporting,
- Monitor award activities and report on program performance per 2 CFR 200.329,

- Promptly notify the awarding program in writing of any issues, delays, or conditions impairing award objectives per 2 CFR 200.329(e),
- Disclose any conflicts of interest related to their award that arise during the award period per 2 CFR 1402.112,
- Report on the status of real property acquired under the award in which the Federal government retains an interest per 2 CFR 200.330, and
- Report all violations of Federal criminal law involving fraud, bribery, or gratuity violations potentially affecting the Federal award per 2 CFR 200.113.
- Report any matters related to recipient integrity and performance to SAM.gov per Appendix XII to 2 CFR 200.
- If the Federal share of the award is more than $100,000 and the recipient makes or agrees to make any payment using non-appropriated funds for lobbying in connection to the award, disclose those activities using the Disclosure of Lobbying (SF-LLL) form per 43 CFR 18.100.
- Federal Funding Accountability and Transparency Act of 2006 (FFATA) and 2 CFR 170 requires certain recipients to report information on executive compensation, and information on all sub-awards, subcontracts and consortiums equal to or over $30,000 to SAM.gov.

Other Information
Terms and Conditions applicable to the Award:

The Award will contain the U.S. Geological Survey (USGS) Terms and Conditions, which incorporates the DOI General Terms and Conditions, available on the internet at: https://www.doi.gov/grants/doi-standard-terms-and-conditions. Full text is available upon request.

Award Administration Information

Award recipients are responsible for managing the day-to-day operations of the grant/cooperative agreements and sub-award supported activities to assure compliance with applicable Federal requirements and regulations and to ensure that performance goals are being achieved.

Recipient Responsibilities Regarding Subrecipients and Contractors

Recipients who pass Federal funds to subrecipients and contractors must ensure that the entities understand and comply with the applicable award statutes, regulations, and agency requirements. Recipients should carefully review their official award documents for any additional administrative and programmatic requirements. See also, 2 CFR § 200.332 "Requirements for pass-through entities."

Publications

a. Acknowledgment of Support

Recipient is responsible for assuring that an acknowledgment of USGS support:

1. is made in any publication (including World Wide Web pages) of any material based on or developed under this agreement, in the following terms: This material is based upon

work supported by the U.S. Geological Survey under Grant/Cooperative Agreement No. (see page 1, block 4 titled: Grant No.).

2. is orally acknowledged during all news media interviews, including popular media such as radio, television and news magazines.

b. Disclaimer

Recipient is responsible for assuring that every publication of material (including World Wide Web pages) based on or developed under this agreement, contains the following disclaimer:

> The views and conclusions contained in this document are those of the authors and should not be interpreted as representing the opinions or policies of the U.S. Geological Survey. Mention of trade names or commercial products does not constitute their endorsement by the U.S. Geological Survey.

c. USGS Logo

Use of the USGS logo (also known as "visual identity" or "identifier") constitutes the recipient's agreement to and acceptance of the following terms:

- The USGS identifier is trademarked and not in the public domain.
- Use of the trademarked USGS identifier is authorized by USGS for use only by recipients of USGS funding.
- Use is authorized on information products that result from research funded by the financial assistance award.
- Use of the USGS identifier for any other purpose without written permission from USGS is prohibited; doing so constitutes trademark infringement.
- Recipient will adhere to the design requirements, which are as follows:
    - The USGS identifier must appear in black, white, or green only.
    - The USGS identifier cannot be modified in any way except for proportional sizing.
    - The USGS identifier should appear at the same size as logos of other agencies, if any.
    - If used on a digital product, the USGS identifier should link to www.usgs.gov

d. Publication

Publication of the results of any project carried out under this assistance award is authorized in professional journals, trade magazines, or may be made by the USGS. Such manuscripts or publications submitted to journals or professional publications for publication shall be accompanied by the following notation:

> *"This manuscript is submitted for publication with the understanding that the United States Government is authorized to reproduce and distribute reprints for Governmental purposes."*

e. Copies for USGS

Recipient is responsible for assuring that the USGS Project Office is provided a digital version, preferably as a MS Word DOCx file, of every accepted manuscript upon acceptance for publication by the journal.

f. Department of Interior Requirements

Two copies of each publication produced under a grant or cooperative agreement shall be sent to the Natural Resources Library with a transmittal that identifies the sender and the publication. These copies can be in print or digital format. If a publication in a born-digital document only available online, a digital copy or a link to where the publication may be available on the Internet must be sent to. The address of the library is:

U.S. Department of the Interior Library

1849 C Street, NW, Room 1151, MS 1151

Washington, DC 20240

Payment

Payments under financial assistance awards must be made using the Department of the Treasury Automated Standard Application for Payments (ASAP) system (www.asap.gov).

a) The recipient agrees that it has established or will establish an account with ASAP. USGS will initiate enrollment in ASAP. If the recipient does not currently have an ASAP account, they must designate an individual (name, title, address, phone and e-mail) who will serve as the Point of Contact (POC).

b) With the award of each grant/cooperative agreement, a sub-account will be set up from which the recipient can draw down funds. After recipient's complete enrollment in ASAP and link their banking information to the USGS ALC (14080001), it may take up to 10 days for sub-accounts to be activated and for funds to be authorized for drawdown in ASAP.

c) Inquiries regarding payment should be directed to ASAP at 855-868-0151.

d) Payments may be drawn in advance only as needed to meet immediate cash disbursement needs.

2 CFR 1402.315 Availability of Data

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

(b) The Federal Government has the right to:

(1) Obtain, reproduce, publish, or otherwise use the data, methodology, factual inputs, models, analyses, technical information, reports, conclusions, or other scientific assessments, produced under a federal award; and

(2) Authorize others to receive, reproduce, publish, or otherwise use such data, methodology, factual inputs, models, analyses, technical information, reports, conclusions, or other scientific assessments, for federal purposes, including to allow for meaningful third-party evaluation.

Recipient Integrity and Performance

Award Term and Condition for Recipient Integrity and Performance Matters: Appendix XII to 2 CFR Part 200. Applies to awards with a total Federal share of more than $500,000, except for awards to foreign public entities. See also § 200.113 Mandatory Disclosures.