Notice of Funding Opportunity

Applications Due: **Wednesday, April 30, 2025**

EPA Office of Mission Support

Fiscal Year 2025 National Environmental Information Exchange Network Grant Program Solicitation Notice

Funding Opportunity Number: **EPA-OMS-25-01**

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1. Basic Information

U.S. Environmental Protection Agency

Office of Mission Support (OMS) –Information Technology/Information Management

Fiscal Year 2025 National Environmental Information Exchange Network (EN) Grant Program Solicitation Notice

A. Executive Summary:

The Exchange Network (EN) was launched in 2002 as an inter-governmental, collaborative partnership of EPA, states, territories, and Tribes to foster better environmental management and decision-making through increased access to timely, high quality environmental information. This was achieved through a standards-based approach to facilitate environmental data sharing among EPA, states, Tribes, and territories. The framework adopted allows organizations to exchange data over the Internet regardless of the specific information technology used. (See https://www.epa.gov/exchangenetwork and http://www.exchangenetwork.net/).

The EN continues to evolve to adapt to emerging technologies and to meet new programmatic needs. Applicants are encouraged to participate in EPA's EN Forum which is a call that is held monthly to discuss how to improve and better use the EN services and partnerships. The Forum is open to all participants; see https://exchangenetwork.net/exchange-network-forum/.

The EPA EN Grant Program is soliciting project applications to:

- Facilitate sharing of environmental data, especially through shared and reusable services.
- Reduce burden and avoid costs for co-regulators and the regulated community.
- Streamline data collection and exchanges to improve its timeliness for decision making.
- Increase the quality and access to environmental data through discovery, publishing, outbound and analytical services so it is more useful to environmental managers.
- Increase data and IT management capabilities needed to fully participate in the EN.

B. Key Information:

Opportunity Number:

EPA-OMS-25-01

Assistance Listing:

66.608

Announcement Type:

Initial

Funding Available:

$9,500,000

Number of Awards:

Approximately 30 – 35

C. Key Dates:

April 30, 2025 11:59 pm ET	Application Submission Deadline
July 2025	Anticipated Notification of Selection
September 2025	Anticipated Award Notification

D. Funding Details:

It is anticipated that up to 35 award(s) will be made under this announcement. Awards are expected to be in the $200,000 to $600,000 range, depending on Agency funding levels, the quality of applications received, agency priorities, and other applicable considerations.

Applicants applying under an individual opportunity may request up to $400,000 in funding. Applicants applying under a partnership opportunity may request funds up to $600,000 if the partnership eligibility criteria outlined in Section 4C is met. Applicants specifically applying under the Individual Capacity Building with Mentorship opportunity as described in on Page 53 may request up to $415,000 if all requirements are met.

Awards funded under this opportunity are expected to have a 3-year project period.

E. Agency Contact Information:

Further information, if needed, may be obtained from the EPA contact(s) indicated below.

Technical Contact: **EN Grant Program;** ENGrantProgram@epa.gov

Eligibility Contact: **EN Grant Program;** ENGrantProgram@epa.gov

Regional Contact(s): **See:** https://www.epa.gov/exchangenetwork/forms/contact-us-about-environmental-information-exchange-network

EN Project Opportunity Contacts:

EN Project Opportunity	Contact Type	Email/Link
Adv. Water Quality Monitoring […]	Program Email	WQX@epa.gov
Open Data, Data Modern., Digital Transform.[…]	POC: Dwane Young	young.dwane@epa.gov
EIS	Website: See Contact List	https://www.epa.gov/air-emissions-inventories/air-emissions-points-contact
CAER	Website: See 'Contact Us'	https://www.epa.gov/combined-air-emissions-reporting/forms/contact-us-about-combined-air-emissions-reporting
ICIS	Support Portal	https://usepa.servicenowservices.com/oeca_icis?id=icis_homepage
NPDES	"Ask a Question" Portal	https://usepa.servicenowservices.com/oeca_icis
RCRAInfo	POC: Rebecca Kane	kane.rebecca@epa.gov
UST Finder Application	Website: See Contact List	https://www.epa.gov/ust/underground-storage-tank-ust-headquarters-contacts
eBeaches	Website: See 'Support'	https://www.epa.gov/beaches/submitting-beach-data-epa
SDWIS	POC: Justin Wright	wright.justin@epa.gov
WQX	Program Email	wqx@epa.gov
ATTAINS	Program Email	attains@epa.gov
DWSRF/CWSRF	POC: Howard Rubin	Rubin.HowardE@epa.gov
Capacity Building	POC: Beth Jackson	Jackson.elizabeth@epa.gov
Note: Applicants proposing projects that do not fall under a specific EN project opportunity should reach out to the EN Grant Program (ENGrantProgram@epa.gov) for the appropriate technical contact.		

F. Other Funding Considerations:

Tribal Commitment: EPA remains committed to awarding Tribal assistance agreements equal to at least 20 percent of the appropriated funds. The actual award amounts and number of Tribal assistance agreements awarded under this set-aside may differ from the estimated amounts for many reasons including the number of meritorious applications received, agency priorities, and funding availability. In addition, EPA reserves the right to increase or decrease (including decreasing to zero) the total number of and award amount under this set-aside or change the ratio of assistance agreements awarded.

Additional Awards: EPA reserves the right to make additional awards under this solicitation, consistent with Agency policy and guidance, if additional funding becomes available after the original selections are made. Any additional selections for awards will be made no later than 6 months after the original selection decisions.

Partial Funding: In appropriate circumstances, EPA reserves the right to partially fund applications by funding discrete portions or phases of proposed projects. If EPA decides to partially fund an application, it will do so in a manner that does not prejudice any applicants or affect the basis upon which the application, or portion thereof, was evaluated and selected for award, and therefore maintains the integrity of the competition and selection process.

2. Eligibility

A. Eligible Applicants

Only these types of organizations may apply. Organization types are consistent with definitions at 2 CFR 200.1:

- Federally recognized Indian Tribes and Alaska Native Villages.
- Inter-Tribal Consortia of federally recognized Tribes.
- States.
- U.S. Territories (i.e., American Samoa, the Commonwealth of the Northern Mariana Islands, the District of Columbia, Guam, Palau, Puerto Rico, the U.S. Virgin Islands).
- Instrumentality of a State or Tribe (i.e., some regional air pollution control districts or public/Tribal universities)
    - Entities asserting they are agencies or instrumentalities of a state **must** provide a letter from the appropriate state Attorney General (AG) certifying the applicant is an agency or instrumentality of the state.
    - Entities asserting they are instrumentalities of a Tribe **must** provide a certification and supporting documentation from the Tribal council or other appropriate tribal government official certifying they are an instrumentality of the Tribe.
    - **EPA will not accept or review an application which does not include the required documentation.**

The EPA recognizes that environmental programs and associated reporting obligations are sometimes delegated to local governments. Local governments are eligible to apply for EN assistance agreements if they can demonstrate that they are an instrumentality of the state by providing the documentation described in the preceding bullets. However, most local governments implementing EPA programs are not agencies or instrumentalities of the state and therefore not eligible to apply. Interstate commissions and other interstate entities, likewise, are not eligible. **EPA encourages ineligible parties to partner with an eligible lead applicant** (see Section 4C).

(1) Other Eligibility Requirements

Applications must meet the following threshold criteria to be considered eligible:

1. Initial applications must be submitted through Grants.gov as stated in Section 5 of this announcement (except in the limited circumstances where another mode of submission is specifically allowed for as explained in Section 5D on or before the application submission deadline noted in Section 5A of this solicitation. Applicants are responsible for following the submission instructions in Section 5C to ensure their application is timely submitted. Please note that applicants experiencing technical issues with submitting through Grants.gov should follow the instructions provided in Section 5D, which include both the requirement to contact Grants.gov and email a full application to EPA prior to the deadline.

2. Applications submitted after the submission deadline will be considered late and deemed ineligible without further consideration unless the applicant can clearly demonstrate it was late due to EPA mishandling or because of technical problems associated with Grants.gov or SAM.gov. An applicant's failure to submit their application on time through Grants.gov because they did not allow enough time to properly register in SAM.gov or Grants.gov will not be considered an acceptable reason to consider a submission received outside of Grants.gov.

3. An application must explain how the proposal supports one or more of the three (3) FY25 EN funding areas. Applicants should note that all three EN funding areas are of equal priority and that there is no preference given for applications which support more than one.
    - Funding Area 1: Increased Data Access and Innovative Business Processes;
    - Funding Area 2: Eliminate Paper Submittals and Expand e-Reporting;
    - Funding Area 3: Augment the Information Management Capacity of EN Partners (open to U.S. Territories, federally recognized Indian Tribes and Alaska Native Villages, and inter-Tribal consortia of federally recognized Tribes ONLY).

4. An application must include goal(s) leading to completion of activities listed in Appendix A, B, or C, or others consistent with the EN funding areas. Applicants must also clearly state the anticipated outputs and outcomes which will result from the completion of their goals and objectives. Examples include but are not limited to: any data flow(s) brought into production, any Application Programming Interfaces (API) service(s) brought into production, and the creation of any new API documentation, data management plan(s), data standards or schema, open data portals, web applications, etc.

5. An application must substantially comply with the application submission instructions and requirements set forth in Section 5 and Appendix E of this announcement or else they will be rejected. However, where a page limit is expressed in Section 4A with respect to the application, or parts thereof, pages in excess of the page limitation will not be reviewed. Applicants are advised that readability is of paramount importance and should take precedence in application format, including selecting a legible font type and size for use in the application.

6. Applications must not request more than:
    - $400,000 for single applicant applications (except eligible applicants under the Individual Capacity Building with Mentorship opportunity (see Appendix C), which can request up to $415,000); or
    - $600,000 for eligible EN partnership applications (see Section 4C).

7. Applicants may only submit 1 application under this opportunity. This restriction applies both to single applicants and, in the case of a EN partnership (coalition) application, to applicants applying either as the lead applicant or as an eligible formal partner. Applicants that submit more than 1 application will be contacted to determine which application to evaluate. The remaining application(s) will be deemed ineligible.

8. Applicants must not have more than four active Exchange Network assistance agreements with the Agency as of as of December 31, 2024. EPA considers an assistance agreement active if the Agency has not yet approved the final technical report. EPA will consider an agreement inactive if the Regional Project Officer (RENC) approves the applicant's final technical report on or before this date.
    - Applicants that are applying under an EN partnership but are not the lead recipient will not be considered as having an active assistance agreement. Also, agencies within a state are treated as separate applicants under this criterion (e.g., Alabama Department of Environmental Quality and Alabama Department of Public Health).

9. Applications must not request funds for activities or deliverables for which the applicant has previously received funds. If a proposed goal is similar to one previously funded, the application must describe how previously funded activities differ from those currently proposed or how the current application will complement past or ongoing work.

10. Applicants must not use EN funding for the following functions:
    - Construction costs;
    - Operations and maintenance of:
        - previously developed or implemented EN projects;
        - flows, including minor schema updates for existing flows;
    - Workshops and Conferences not initiated, advertised, and conducted for the benefit of the recipient and other state, Tribal, territorial, or local representatives or public participants or are conducted primarily for EPA's benefit;
    - Pre-Award Costs not previously requested to cover pre-award costs incurred 90 days or less before the award date;
    - Management Fees more than the direct costs and indirect costs at the rate approved by the applicant's cognizant audit agency or at the rate provided for by the terms of the agreement negotiated with EPA;
    - Development and deployment of new physical nodes implementing the Exchange Network protocol and specification;
    - Statutory Prohibition on Certain Telecommunications & Video Surveillance Equipment Services
        - Unless an exception or waiver applies, Section 889 of the National Defense Authorization Act for Fiscal Year 2019, Public Law 115-232 (section 889), prohibits the use of Federal funds by recipients and subrecipients to procure (enter into, extend, or renew contracts) or obtain equipment, systems, or services that use "covered telecommunications equipment or services" as a substantial or essential component of any system, or as critical technology as part of any system. Section 889 also prohibits the use of Federal funds by recipients and subrecipients to enter into a contract with an entity that "uses any equipment, system, or service that uses covered telecommunications equipment or services" as a substantial or essential component of any system, or as critical technology as part of any system.

- The Office of Management and Budget's implementing regulations at 2 CFR 200.216 provide additional information on the prohibitions in section 889. These regulations state, among other things, that "[A]s described in Public Law 115-232, section 889 covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities)." Other prohibitions may also apply. Certain prohibited equipment, systems, or services, including equipment, systems, or services produced or provided by entities identified in section 889, are recorded in the System for Award Management (SAM) exclusion list.

If an application includes any ineligible tasks or activities (e.g., does not fall within the EN Funding Areas, has been previously funded, falls under the above funding restrictions), that portion of the application will be ineligible for funding and may, depending on the extent to which it affects the application, render the entire application ineligible for funding.

Please see Section 6 for additional threshold criteria.

B. Cost Sharing

Cost sharing is not a requirement to be eligible to apply to this funding opportunity. Please note only Federal funds should be listed on the SF-424, SF-424A, and Budget Detail.

(1) Performance Partnership Grants

Funds for a grant awarded under this opportunity may be included in a PPG. Applicants should indicate in their application submission if they anticipate incorporating the proposed project, if selected for funding, into an already existing PPG or if they intend to create a new PPG that would include the project proposed under this funding opportunity. The PPG should be in place before the time of award or created concurrently with the award of the assistance agreement funds. The proposed project under this grant solicitation must have a project period that is within the PPG project period. It cannot be longer than the PPG project period.

A PPG enables entities to combine funds from more than one environmental program assistance agreement into a single assistance agreement with a single budget. Under this competition, state and interstate agency applications must first be selected under the competitive grant process described in this solicitation and, in accordance with 40 CFR 35.138, the work-plan commitments that would have been included in the work-plan must be included in the PPG work-plan. After the funds have been included in the PPG, the recipient does not need to account for these funds in accordance with the funds' original program source, as long as all the competitive work plan components are completed.

Similarly, Tribal and inter-Tribal consortia applications must first be selected under this competitive grant process in accordance with 40 CFR 35.535. If a proposed PPG work-plan differs significantly from the work-plan approved for funding under this competition, the Regional Administrator must consult the National Program Office (see 40 CFR 35.535). The purpose of this consultation requirement is to address the issue of ensuring that a project which is awarded funding under this competition is implemented as proposed once combined with other grant programs in a PPG.

For further information for awards included in PPG, see the final rules on Environmental Program Grants for state and interstate agencies at 40 CFR Part 35, Subpart A and Tribes and inter-Tribal Consortia at 40 CFR Part 35, Subpart B. Local governments are not eligible for PPGs.

3. Program Description

A. Purpose, Priorities, and Activities

The three EN Funding Areas described below are open to either individual applicants, EN partnership applicants, or both, unless otherwise specified. An individual applicant is a single eligible organization that submits a project proposal that includes work that will be managed and completed by that organization. An EN partnership entails the submission of a coalition proposal by an eligible lead organization who will share in the work, coordination, and benefit of the proposed project with one or more partnering organizations. The lead applicant organization may distribute a portion of awarded funds to their partner(s) through subaward(s); see Section 4C for requirements and further information.

Please note that the phrase 'EN project opportunity' refers to the specific EPA data flow/project write-ups – (see Appendices A-C) that fall under one of the three EN Funding Areas below. These project opportunity write-ups (which are listed and hyperlinked below) include a project description, relevant program status and plans, suggested project activities and estimated costs, options for in-kind services and continuation of funding (if applicable), and additional links and resources. Applicants are encouraged to use the suggested potential activities as project goals or objectives, as applicable.

The FY25 EN Funding Areas and associated EN project opportunities include:

- **Funding Area 1: Increased Data Access and Innovative Business Processes:**
  EN Project Opportunities under EN Funding Area 1 are detailed in Appendix A and include:
  - Advanced Water Quality Monitoring Using Sensor Technologies (see page 25)
  - Open Data, Data Modernization, & Digital Transformation Projects including Geospatial Data (see page 27)

  These EN project opportunities under EN Funding Area 1 are open to both individual applicants (up to $400,000) and eligible EN partnership applicants (up to $600,000).

  Note: Projects under EN project opportunities appropriately utilizing Virtual Exchange Services (VES) capabilities in their implementation can be considered for funding in FY25. VES provides foundational EN capabilities for exchanging data, comparable to physical nodes. VES continues to be a supported capability that can be leveraged to deliver on many of the data exchange opportunities outlined in Appendices A-C. EPA encourages applicants to consider the options under the 'Open Data, Data Modernization, and Digital Transformation Projects including Geospatial Data' project opportunity to support foundational activities (e.g., ICIS Digital Services projects, eBeaches projects, Drinking Water State Revolving Fund & Clean Water State Revolving Fund projects).

- **Funding Area 2: Eliminate paper submittals and expand e-reporting.**
  EN Project Opportunities under EN Funding Area 2 are detailed in Appendix B and include:
  - AIR:
    - Emission Inventory System (EIS) (see page 31)
    - Combined Air Emissions Reporting (CAER) (see page 32)
  - ENFORCEMENT & COMPLIANCE:
    - Integrated Compliance Information System (ICIS) Digital Services (see page 34)
    - Electronic Reporting of Nat. Pollutant Discharge Elimination System (NPDES) Data (see page 36)

- LAND MANAGEMENT:
  - Resource Conservation and Recovery Act Information System (RCRAInfo) (see page 38)
  - UST Finder Application (V2) to Support National and State Underground Storage Tank Programs (see page 39)
    - NOTE: This opportunity is open to state applicants (excluding state universities), as well as some US territories and Tribes with appropriate delegated authority.
- WATER:
  - eBeaches (see page 41)
  - Safe Drinking Water Information System (SDWIS) (see page 42)
    - NOTE: Some activities under this opportunity are restricted by applicant type; see the 'potential activities' table on page 42 for more details.
  - Water Quality Exchange (WQX) (see page 44)
  - Assessment TMDL Tracking And ImplementatioN System (ATTAINS) (see page 46)
  - Drinking Water State Revolving Fund (DWSRF) & Clean Water State Revolving Fund (CWSRF) (see page 48)

Unless otherwise noted, EN project opportunities under EN Funding Area 2 are open to both individual applicants (up to $400,000) and eligible EN partnership applications (up to $600,000).

- **Funding Area 3: Augment the information management capacity of EN partners.**
  EN Project Opportunities under EN Funding Area 3 are detailed in Appendix C and include:
  - Individual Capacity Building (see page 51)
    - Individual applicant opportunity (up to $400,000).
  - Individual Capacity Building with Mentorship (see page 53)
    - Individual applicant opportunity (up to $400,000) with optional mentor funding (up to $15,000) (for a total of up to $415,000).
  - Collaborative Capacity Building (see page 55)
    - EN partnership opportunity (up to $600,000).

  The "EN project opportunities" within Appendix C are only available to U.S. Territories, federally recognized Indian Tribes and Alaska Native Villages, and inter-Tribal consortia of federally recognized Tribes (e.g., the Northwest Indian Fisheries Commission). Note: State applicants or applicants who are instrumentalities of the state or a Tribe (see Section 2A Eligible Applicants) are not eligible for projects under Funding Area 3.

Applicants should specifically state which EN funding area(s) and EN project opportunities they are applying under within the 'Project Description' section of their project narrative. For example, an applicant who proposes a project incorporating both the EN project opportunities 'Water Quality Exchange (WQX)' and 'Individual Capacity Building' should explicitly name both of these EN project opportunities and state that these opportunities support EN Funding Area 2 (WQX) and EN Funding Area 3 (Individual Capacity Building).

Applicants may also propose projects other than the potential options listed in Appendices A, B, and C, provided they conform to EN technologies, services, and specifications. **If an applicant is proposing a project which does not correspond to a specific EN project opportunity, this should be clearly stated in the project narrative within the 'Project Description' section. The applicant should also note which EN Funding Area(s) would be supported by the proposed project.**

For example, a Toxic Release Inventory (TRI) data exchange project (which doesn't relate to a specific EN project opportunity described in this announcement) supports the elimination of industry paper reporting and expansion of e-reporting. Therefore, this proposed project would fall under Funding Area 2: Eliminate paper submittals and expand e-reporting.

B. Program Goals and Objectives

The activities to be funded under this funding announcement support the FY 2022-2026 EPA Strategic Plan. All activities must support **one or more** of the following agency goals and objectives:

- Goal 1 - Tackle the Climate Crisis;
  - Objective 1.1 - Reduce Emissions that Cause Climate Change;
  - Objective 1.2 - Accelerate Resilience and Adaptation to Climate Change Impacts;
  - Objective 1.3 - Advance International and Subnational Climate Efforts;
- Goal 2 - Take Decisive Action to Advance Environmental Justice and Civil Rights;
  - Objective 2.1 - Promote Environmental Justice and Civil Rights at the Federal, Tribal, State and Local Levels;
- Goal 3 - Enforce Environmental Laws and Ensure Compliance;
  - Objective 3.2 - Detect Violations and Promote Compliance;
- Goal 4 - Ensure Clean and Healthy Air for All Communities;
  - Objective 4.1 - Improve Air Quality and Reduce Localized Pollution and Health Impacts;
  - Objective 4.2 - Reduce Exposure to Radiation and Improve Indoor Air;
- Goal 5 - Ensure Clean and Safe Water for All Communities;
  - Objective 5.1 - Ensure Safe Drinking Water and Reliable Water Infrastructure;
  - Objective 5.2 - Protect and Restore Waterbodies and Watersheds;
- Goal 6 - Safeguard and Revitalize Communities;
  - Objective 6.1 - Clean Up and Restore Land for Productive Uses and Healthy Communities;
  - Objective 6.2 - Reduce Waste and Prevent Environmental Contamination;
  - Objective 6.3 - Prepare for and Respond to Environmental Emergencies; and
- Goal 7 - Ensure Safety of Chemicals for People and the Environment
  - Objective 7.1 - Ensure Chemical and Pesticide Safety; and
  - Objective 7.2 - Promote Pollution Prevention.

Applicants must identify in the 'project description' section of their project narrative (see Appendix E) which goal(s) and objective(s) from the EPA Strategic Plan are supported by their proposed project. Include both the number and title of each supported goal and objective (e.g., 'Goal 1: Tackle the Climate Crisis, Objective 1.2 Accelerate Resilience and Adaption to Climate Change Impacts'), and briefly describe for each supported goal/objective how the proposed project will support them. All applications must support at least one strategic goal and strategic objective, but multiple may be supported.

Applicants should also identify which EPA strategic goal and objective **is most supported by each project goal** as identified in the 'Project Goals, Outputs, and Outcomes' section of the project narrative. Applicants should only list one strategic goal and objective per project goal; if there are multiple options, applicants should choose the best fit. Please note that the same strategic goal and objective may be listed for multiple project goals.

Additionally, the project narrative should include specific statements describing the environmental results of the proposed project. EPA requires that applicants adequately describe the environmental outputs and outcomes to be achieved under their assistance agreements (see EPA Order 5700.7A1) to demonstrate how funded projects will contribute to the EPA strategic goals and objectives above. An example of how applicants might capture supported strategic goals, objectives, and environmental results is available in the optional project narrative template.

C. Statutory Authority

This program is authorized by the Consolidated Appropriation Act, 2024, H.R. 4366.

D. Funding Type

It is anticipated that **grants and cooperative agreements** will be funded under this funding opportunity.

Grants represent direct funding to a recipient to support an identified project with defined environmental results. If the recipient does not identify a preference, EPA's default award will be a grant.

Cooperative agreements provide for substantial involvement between the EPA Project Officer and the selected applicant(s) in the performance of the work supported. Although the EPA will negotiate precise terms and conditions relating to substantial involvement as part of the award process, the anticipated substantial federal involvement for these projects may include:

- close monitoring of the successful applicant's performance to verify the results proposed by the applicant;
- collaboration during performance of the scope of work;
- in accordance with 2 CFR 200.317 and 2 CFR 200.318, review of proposed procurement;
- approving qualifications of key personnel (the EPA will not select employees or contractors employed by the award recipient); and
- review and comment on reports prepared under the cooperative agreement (the final decision on the content of reports rests with the recipient).

Applicants should identify their preferred assistance agreement type (grant or cooperative agreement) in both their cover letter and project narrative. EPA will consider an applicant's preferences when the Agency decides what type of assistance to award, with one exception: the 'UST Finder Application (V2)' project opportunity (see Appendix B) is only offered as a cooperative agreement.

In-Kind Services: EPA will consider grant recipient requests to use all or a portion of awarded grant funds to provide in-kind services to the recipient through an EPA contract vehicle. Interested applicants should request and justify project efficiencies they expect from this approach. EPA reserves the right to decide whether in-kind services will be provided. The recipient may not direct the work provided through in-kind services. These services are managed by EPA.

Indirect Costs: Indirect costs (IDCs) may be budgeted and charged by award recipients in accordance with 2 CFR Part 200. Indirect costs help ensure that grant recipients are compensated for costs incurred for allowable, allocable, and reasonable facilities and administrative costs that benefit EPA assistance agreements. These costs are for functions that are necessary to the general operations of the organization, such as space costs, utilities, accounting services, human resource services, etc. as well as other activities recipients carry out that may or may not be federally funded.

To charge indirect costs, an indirect cost rate agreement must be used according to 2 CFR 200 and must be valid until at least 9/30/2025.

- See the budget guidance in Appendix D for more information on budgeting for indirect costs.
- See the 'Negotiated Indirect Cost Rate Agreements' information on page 75 in Appendix E for information on indirect cost rates and associated requirements and attachments.

Subawards and Contracts: EPA will consider applications where all or a portion of awarded assistance agreement funds will be distributed as a subaward or procurement contract. EPA strongly recommends that applicants interested in these funding mechanisms carefully review EPA's Best Practice Guide for Procuring Services, Supplies, and Equipment Under EPA Assistance Agreements. Applicants that intend to distribute all anticipated EPA funding through subaward(s) and/or procurement contracts must explain how they will manage these transactions in compliance with applicable Federal requirements without EPA funding applied to personnel. EPA also reminds applicants that they remain accountable to EPA for proper expenditures of EPA funding, even in cases where they pass-through all funding to third parties. Applicants should not identify contractors, subrecipients or program participants unless they demonstrate that applicable requirements have been met.

- **Subawards:** Under 2 CFR 200.1, a subaward is an award provided by a pass-through entity to a subrecipient for the subrecipient to carry out part of a Federal award received by the pass-through entity. It does not include payments to a contractor or payments to an individual that is a beneficiary of a federal program. A subaward may be provided through any form of legal agreement, including an agreement that the pass-through entity considers a contract. Appendix A of EPA's Subaward Policy provides detailed guidance on distinguishing between subawards and procurement contracts.
    - Like grant recipients, subrecipients measure performance against program objectives, comply with award requirements, use funds to carry out program activities, and make programmatic decisions.
    - Funds that are distributed to partnering organizations through eligible EN partnership awards (see Section 4C) to carry out assistance agreement activities for, and in coordination with, the lead applicant should be distributed as a subaward.
    - For-profit firms and individual consultants are not eligible for subawards without prior EPA approval, which is rarely provided. For-profit firms and individual consultants are procurement contractors subject to state or Federal competitive procurement requirements.
    - **Subawards should be captured under the budget category 'other';** see Appendix D for further information on including subaward(s) in a proposed project budget.

- **Contracts:** A contractor operates in a competitive environment, with contractors providing goods and services to the assistance agreement recipient that are ancillary to program operations. See Section 4B 'Applicants Using Contractors' for more information.

4. Application Contents and Format

A. Application Forms

The following forms and documents are required under this announcement:

Mandatory Documents:

1. Cover Letter (see page 66)
   - *Use 'Other Attachments Form' from Grants.gov to submit.*
2. Project Narrative (see page 66)
   - *Use 'Project Narrative Attachment Form' from Grants.gov to submit.*
   - *The project narrative has a strict page limit of 10 pages; applicants should note that the application review panel will not review any information past this 10-page limit.*
3. Budget Narrative Attachment Form (see page 74)
4. Application for Federal Assistance (SF-424) (see page 74)
5. Budget Information for Non-Construction Programs (SF-424A) (see page 75)
6. EPA Key Contacts Form 5700-54 (see page 75)
7. EPA Form 4700-4 Preaward Compliance Review Report (see page 75)

Additional Attachments (Mandatory if applicable)

Use 'Other Attachment Form' from Grants.gov to submit.

8. Negotiated Indirect Cost Rate Agreement (see page 75)
9. Additional Information for Inter-Tribal Consortia (see page 76)
10. Formal Project Partners (see page 76)
    - Support Letter(s)
    - Roles and Responsibilities
    - Distribution of Funds & Overview of Subaward Budget
11. Formal Project Mentors (see page 76)
    - Support Letter(s)
    - Roles and Responsibilities
    - Distribution of Funds & Overview of Subaward Budget
12. List of Prior Exchange Network Assistant Agreement(s) (see page 76)
13. Documentation Certifying Applicant Status as an Instrument. of a State or Tribe (see page 77)

Additional Guidance Tools/Resources for Applicants:

- Appendix D provides guidance on how to identify tools/resources available for reuse, additional guidance on the EEDS, and a helpful guide to composing a budget.
- Appendix F provides a pre-submission checklist tool to help applicants avoid common application errors and to ensure a complete application package.
  Optional templates for an applicant's cover letter, project narrative, and budget narrative are available at: www.epa.gov/exchangenetwork/exchange-network-grant-program#Resources.

Applicants are advised that readability is of paramount importance and should take precedence in application format, including selecting a legible font type and size for use in the application.

B. Applicants Using Contractors

Applicants must compete contracts for services and products, including consultant contracts, and conduct cost and price analyses, to the extent required by the procurement provisions of the regulations at 2 CFR Part 200.

Do not name a procurement contractor (including a consultant) as a "partner" or otherwise in your application unless the contractor has been selected in compliance with competitive procurement requirements. If an applicant selected for award has named a specific subrecipient, contractor, or consultant in the application, it does not relieve the applicant of its obligations to comply with subaward and/or competitive procurement requirements.

The EPA will not consider the qualifications, experience, and expertise of named subrecipients and/or named contractor(s) during the application evaluation process unless the applicant provides documentation that it has complied with these requirements.

For additional guidance, applicants should review EPA's Best Practice Guide for Procuring Services, Supplies, and Equipment Under EPA Assistance Agreements, EPA's Subaward Policy, and EPA's Subaward Policy Frequent Questions. The EPA expects recipients of funding to comply with competitive procurement contracting requirements in 2 CFR Parts 200 and 1500 as well as the EPA's rule on Participation by Disadvantaged Business Enterprises in EPA Programs in 40 CFR Part 33.

Non-competitive procurement is not allowable without EPA approval, which is provided only in select cases. Applicants must provide a detailed justification when using this procurement method. See 2 CFR 200.320(c) for more information.

- *Note:* An existing relationship or a history of prior work completed by a contractor, consultant, or vendor does not justify the use of non-competitive procurement. Similarly, proximity of a contracting firm to an applicant's organization is not sufficient reasoning. One example of a valid non-competitive procurement rationale is that software required for the proposed project is proprietary and developed by the contractor; therefore, the item is available only from a single source.

Contractor/consultant/vendor costs should be captured under the budget category 'contractual' and calculated by multiplying the estimated projected hours by the estimated contractor rate. See Appendix D for further contract budget guidance.

- Note: Individual consultants are subject to an hourly wage cap of $93.53.

C. Coalition (EN Partnership) Applications

EPA will consider the higher funding limit ($600,000) for projects including one or more qualifying Exchange Network partners, as defined below, to form an EN partnership (coalition) application. A coalition is formed when two or more eligible applicants coordinate to submit a single application. Coalitions must identify which single eligible organization will be the recipient of the grant (the 'lead applicant') and which eligible organization(s) (EN partners) will receive subawards from the recipient (the "pass-through entity").

The pass-through entity that administers the grant and subawards will be accountable to the EPA for proper expenditure of the funds and reporting and will be the point of contact for the coalition. Subawards must be consistent with the definition of that term in 2 CFR 200.1 and comply with the EPA's Subaward Policy.

The lead applicant must meet the eligibility requirements under the EN Grant Program (see Section 2A). The lead applicant, or prime recipient, of a partnership application must also demonstrate how the proposed project supports the identified EN priorities and **explain how the partnership components justify additional funding**. Partnership applications that do not demonstrate this will be deemed ineligible.

Eligible partners are separate units of government (e.g., a state partnering with another state, a state partnering with a non-federally recognized Tribe, a federally recognized Tribe partnering with a state university, or a territory partnering with a non-profit). Examples of ineligible partnerships include an eligible lead applicant partnering with a local government as defined by 2 CFR 200.1 within the same state jurisdiction (e.g., a state and a city within the state's boundaries), an eligible lead applicant partnering with a university (public or private) within the state's boundaries, or an eligible lead applicant partnering with a for-profit firm or individual consultant.

EPA will not consider partnerships formed from within a single state, territorial, or Tribal government as eligible.

D. Other Program Specific Application Information

Quality Assurance (QA) Document Submittal Requirements

EPA will review applications to determine what QA documentation is required, if any. QA requirements will be communicated to the grantee at the time of award by the applicant's Regional Exchange Network Coordinator (RENC).

EN grant projects which include environmental information operations (EIO) such as collection and/or data monitoring, etc., will be required to submit applicable QA documentation such as a Quality Assurance Project Plan (QAPP) and/or a Quality Management Plan (QMP). Grant recipients are responsible for submitting any required QA documentation within 90 days of the award issuance date.

RENCs may reject semi-annual progress reports (see Section 8B) for grant recipients who fail to submit and implement required QA documentation. Additionally, project work (goals and outputs) which includes EIO cannot begun until the formal approval of submitted QA documentation by EPA.

Applicants who believe their projects include EIO are encouraged to budget for the preparation and submission of QA documentation within their project workplan (as the first goal(s) and output(s) of the proposed project).

Applicants are encouraged to review the following links for additional information on QA:

- Quality Management Plan (QMP) Standard and EPA's Quality Assurance Project Plan (QAPP) Standard; contain quality specifications for EPA and non-EPA organizations and definitions applicable to these terms and conditions.
- EPA QA/G-5: *Guidance for Quality Assurance Project Plans*.
- EPA's Quality Program website has a list of QA managers, and Specifications for EPA and Non-EPA Organizations.
- The Office of Grants and Debarment Implementation of Quality Assurance Requirements for Organizations Receiving EPA Financial Assistance.

EN Reusability Requirement

Applicants must commit, in writing within their application's project narrative, to reuse existing data flows, EN services, and other IT resources (e.g., widgets, RESTful web services, etc.). Please see Appendix D for further information on the Exchange Network's emphasis on reusability and to access applicant resource links for exploring prior EN projects and identifying components appropriate for reuse.

EN IT Component Registration Requirement

Applicants must also commit to register any newly developed resources and the reuse of existing resources within their project narrative (see Appendix E). At the time of grant close-out, EN grant recipients must work with the Regional Exchange Network Coordinator (RENC) in the region that their organization is located to complete this registration using the 'IT Component and Project Registration Form'.

EPA requires all assistant agreement recipients issued under this solicitation notice to meet the above terms and conditions. EPA reserves the right to withhold or rescind awarded funds if the administrative policy requirements as described above are not met.

5. Submission Requirements and Deadlines

A. Submission Dates and Times

April 30, 2025 11:59 pm ET	Application Submission Deadline

Grants.gov creates a date and time record when it receives the application. If you submit the same application more than once, we will accept the last on-time submission.

B. Unique Entity Identifier (UEI) and System for Award Management (SAM.gov)

SAM.gov

You must have an active account with SAM.gov. SAM.gov will provide a UEI for your organization, which is required to apply for grants using Grants.gov. To register, go to SAM.gov Entity Registration and click Get Started. From the same page, you can also click on the Entity Registration Checklist for the information you will need to register. Make sure you are current with SAM.gov and UEI requirements before applying for the award.

SAM.gov registration can take several weeks. Begin that process today.

Grants.gov

You must also have an active account with Grants.gov. You can see step-by-step instructions at the Grants.gov Quick Start Guide for Applicants.

Please visit How to Register to Apply for Grants for additional information.

C. Submission Instructions

You must submit your application through Grants.gov. See Section 5.B. above for information on getting registered.

Important tips:

- To begin the application process under this grant announcement, go to Grants.gov and click the red “Apply” button at the top of the view grant opportunity page associated with this opportunity.
- See the Quick Start Guide for Applicants for instructions on how to submit.
- Make sure your application passes the Grants.gov validation checks.
- Do not encrypt, zip, or password protect any files.
- Your application must be submitted by an official representative of your organization who is registered with Grants.gov and is authorized to sign applications for Federal financial assistance.
- If you receive an error or the button is grayed out, it may be because you do not have the appropriate role to submit in your organization. Contact your organization’s EBiz point of contact or contact Grants.gov for assistance at 1-800-518-4726 or support@grants.gov.
- See Grants.gov Errors for information on other Grants.gov errors.
- The UEI listed on the application must be registered to the applicant organization's SAM.gov account. If not, the application may be deemed ineligible.

D. Technical Issues with Submission

If applicants experience technical issues during the submission of an application that they are unable to resolve, follow these procedures **before** the application deadline date:

- Contact Grants.gov Support Center before the application deadline date.
- Document the Grants.gov ticket/case number.
- Send an email with the EPA-OMS-25-01 in the subject line to ENGrantProgram@epa.gov before the application deadline time and date and must include the following:
    - Grants.gov ticket/case number(s)
    - Description of the issue
    - The entire application package in PDF format.

Without this information, the EPA may not be able to consider applications submitted outside of Grants.gov. Any application submitted after the application deadline time and date deadline will be deemed ineligible and **not** be considered.

Please note that successful submission through Grants.gov or email does not necessarily mean your application is eligible for award.

E. Intergovernmental Review

The application is not subject to Intergovernmental Review.

6. Application Review Information

A. Responsiveness Review

Applications must meet the threshold criteria requirements described in Section 2 to be evaluated. Applicants not meeting these requirements will be deemed ineligible and will be notified within 15 calendar days of the determination.

- Applications must adhere to the page limit requirements. Any pages over the limit(s) in Section 4 will not be reviewed.
- Initial applications must be submitted *on or before* the application deadline through Grants.gov or through limited circumstances as expressed in Section 5. The EPA will not evaluate applications that are not submitted on time.
- *Technical difficulties applying:* Applicants having technical difficulties applying must contact the Grants.gov hotline at 1-800-518-4726 *and* then must email a PDF of the full application to the EPA contact listed in Section 1. The submission must be received prior to the application deadline for consideration.

B. Review Criteria

<table>
<tr><th>Criteria Name and Description</th><th>Points</th></tr>
<tr><td colspan="2">1. Project Outputs and Outcomes Leading to Environmental Results</td></tr>
<tr><td>A. Supporting EPA Strategic Goals/Environmental Results (5 Points)

Applicants will be evaluated on the quality and extent to which their application (1) sufficiently details and describes how projects will support specified EPA strategic goal(s) and objective(s) (see Section 3B) and (2) adequately describes how projects at the time of their completion will achieve anticipated environmental results (aka outputs and/or outcomes).</td><td rowspan="2">12</td></tr>
<tr><td>B. Timely Expenditure of Grants Funds and Evaluation of Progress (7 points)

Applicants will be evaluated on the quality and extent to which their approach, procedures, and controls for ensuring that awarded grant funds will be expended in a timely and efficient manner.

Applicants will also be evaluated on their plan for tracking, evaluating, and measuring progress over the project's period of performance, and on how the associated output scheduled completion dates were selected/deemed appropriate to accomplish the proposed work.</td></tr>
<tr><td colspan="2">2. Project Feasibility and Approach</td></tr>
<tr><td>A. Project Roles and Responsibilities (5 points)

Applicants will be evaluated on the extent and quality to which their application (1) identifies applicable project roles <u>and</u> (2) provides the name, current job title, current organization, and anticipated project role(s) and responsibilit(ies) as described in Appendix E, for the following roles:</td><td></td></tr>
</table>

- the project manager; - at least one formal partner (if applicable); and - at least one mentor (if applicable). If the contact in any of these roles is not yet known (e.g., a portion of this assistance agreement will be used to hire key personnel), the applicant will be evaluated on the statement of skills, knowledge, abilities, and qualifications from the position's recruitment package, and future project role(s) and responsibilit(ies). Applicants utilizing a contractor/vendor should explicitly state this and detail the anticipated project role(s) and responsibilit(ies) of said contractor/ vendor.	**7**
B. Commitment to Registering New and/or Reused Resources (2 points) Applicants will be evaluated on the extent to which their application (1) explicitly states their commitment to register any new resource they develop and (2) explicitly states their commitment to register the reuse of any existing EN resource(s) in their project.	
3. Alignment with Exchange Network Funding Areas	
A. Defining Project Goals, Outputs, and Outcomes (6 points) Applicants will be evaluated on the extent and quality to which their application (1) clearly states project goals and associated project outputs and outcomes in sufficiently detailed language and (2) provides at least one output and at least one outcome for each goal.	
B. Project Alignment with EN Program Funding Areas (5 points) Applicants will be evaluated on the extent and quality to which their application (1) names the EN Grant Program Funding Areas (Section 3A) and (2) specific EN project opportunit(ies) (if applicable) they are applying under in their proposed project. Applicants should explicitly state if their application does not fall under one or more specific EN project opportunities.	
C. Connecting Goals to Business and Administrative Needs (5 points) Applicants will be evaluated on the extent and quality to which their application (1) identifies business and/or administrative needs which will be met by proposed project and (2) clearly connects at least one of these needs to each project goal.	
D. Demonstrating Technical Understanding (12 points) Applicants will be evaluated on the extent and quality to which their application: (1) names/identifies each of the project's proposed technical solution(s); (2) describes why each of the proposed solution(s) are necessary and appropriate to complete the project's scope of work; (3) identifies the business and/or administrative need(s) met by each of the proposed solution(s); and (4) describes why the applicant feels confident in their ability to successfully implement and maintain each of the proposed solution(s).	

If specific solutions and/or technological aspects of the project are not yet known (e.g., a contactor will be used), applicants will instead be evaluated on the extent and quality to which: (1) they clearly state who will make the project's technical decisions; (2) describe why they are the qualified/the appropriate party; and (3) identify which business/administrative needs the selected technology or solutions will need to address.	
E. Enhancing Data Sharing and Availability (8 points) Applicants will be evaluated on the extent and quality to which their application explains how the knowledge, data, or technology outputs developed during the proposed project will enhance data sharing and data availability (1) in the applicant's own organization and for any formal partners (if applicable) and (2) for other organizations across the Exchange Network.	
F. Supporting the E-Enterprise Digital Strategy (EEDS)[1] (9 Points) Applicants will be evaluated on the extent and quality to which their application explains how the project's proposed technology solution(s) support and align with each of the three principles of the E-Enterprise Digital Strategy (EEDS).	**53**
G. Commitment to Reuse Existing Resources (8 points) Applicants will be evaluated on the extent and quality to which their application demonstrates a commitment to reuse existing resources by naming and describing project-appropriate EN tools, resources, services, widgets or applications developed by other EN partners which will be incorporated in the project. If none will be incorporated, applicants will be evaluated on the extent and quality to which their application clearly states this and justifies why no tools, resources, services, widgets, or applications have been identified for reuse in the proposed project.	
4. Appropriate Budgeting	
A. Clearly Outlining a Detailed Budget (*6 points)* Applicants will be evaluated on the extent to which their application budget is clearly stated in sufficient detail within the project narrative, including (1) budget amounts for each proposed project goal, (2) budget amounts for each proposed output, and (3) a sufficiently detailed overview of other project costs.	
B. Appropriate Budgeting (8 points) Applicants will be evaluated on the extent to which the goals and outputs costs in the application budget are appropriate to accomplish the proposed project.	

For each project output, applicants should provide (1) a clear and detailed rationale for how they estimated this cost and (2) why these funds are necessary to accomplish the work. *EPA may consult with Subject Matter Experts on budget appropriateness to ensure reasonable costs.*	20
C. Qualifications of the Project Manager/Contractors/Vendors (6 points) Applicants will be evaluated on how well their application demonstrates that the qualifications of the project manager and contractors/vendors (if applicable) are sufficient to complete the proposed work. Applicants should include (1) an overview of the project manager's past experiences working in project management and (2) an overview of the project manager's past experiences working in financial management (e.g., working with a set budget). If the project manager is not yet hired, applicants should include a statement of project and financial management experience from the position's recruitment package. Applicants utilizing contractors or vendors for their proposed project should indicate the (1) planned procurement method and the (2) planned vetting method to ensure they are qualified to complete work as assigned.	
5. Past Performance	
EPA will evaluate the past performance of an applicant with previous Exchange Network Grant Program assistance agreements as a prime recipient based on: ➢ The overall percentage of progress reports submitted by their due date as required in the terms and conditions of prior assistance agreements **(4 Points).** ➢ Whether recipients with past assistance agreements funded since 2011 have registered [2] tools, resources, services, data flows and/or the reuse of existing resources, per the terms and conditions of EN assistance agreements **(4 Points)**. Please note in evaluating applicants under the Past Performance criteria, the Agency will consider the information provided by the applicant in the 'Past Performance' section of the project narrative as well as semi-annual and technical report submissions. The Agency may also consider relevant information from other sources including agency files and prior or current grantors (to verify or supplement the information supplied by the applicant). If an applicant does not have any previous EN Grant Program assistance agreements and the application explicitly states this, they will receive a neutral score of **4 points**. If an applicant has no past performance with the EN Grant Program and does not explicitly state that this is their first EN assistance agreement, they will receive a score of **0 points**.	**8**
Total:	**100**
[1] The three principles of EEDS are the 'Information Centric Approach', the 'Shared Platform Approach', and the 'Customer Centric Approach'; see the EEDS guidance in Appendix D for more details. [2] As of March 2023, all new registrations should be captured using the 'IT Component and Project Registration Form' as described under Section 4D 'Other Program Specific Application Information'. At the time of grant close-out, grant recipients should work with their RENCs to complete this form, which is then uploaded to the EN	

website and tagged for basic searchability. Past grant recipients who have not met this requirement can likewise submit these forms to their RENC to avoid point loss under evaluation criterion 5.

Applicants will be evaluated based on the extent and quality to which they demonstrate that they have the capability to successfully perform the project as described in Section 3 of this funding opportunity.

Only eligible entities whose applications meet the threshold criteria in Section 2 of this announcement will be evaluated. **Applicants should explicitly address these criteria as part of their application package submittal in the project narrative.** Each application will be rated using a point system. Applications will be evaluated based on a total of 100 possible points.

Examples of how an applicant might address the evaluation criteria within their project narrative is available in the optional, fillable project narrative template on the EN website. Applicants may also refer to guidance provided in Appendix E – under Mandatory Attachment 2: The Project Narrative.

C. Review and Selection Process

EPA will first evaluate all applications against the threshold eligibility criteria listed in Section 2A(1) of this announcement. EPA review panels will then evaluate and rank eligible applications based on the criteria listed in Section 6B.

EPA review panels will have the opportunity to consult with Subject Matter Experts (SME) to inform their evaluations. **The Subject Matter Experts are not reviewers and will not score applications.** The EPA review panels will submit comments and rankings and make selection recommendations to the selection official, the Principal Deputy Assistant Administrator of the Office of Mission Support (OMS) or his or her designee, who will make the final funding decisions.

Applicants may submit more than one application; however, applicants are not eligible to receive more than one award under this solicitation.

Other Evaluation Factors

Final funding decisions will be made by the selection official. In making the final funding decisions, the selection official may also consider the following factors:

- Geographic distribution of funding.
- Selection of priority activities over other assistance activities.
- Ensuring participation in the Exchange Network by federally recognized Indian Tribes, inter-Tribal consortia and Alaska Native Villages.
- EPA's capacity to provide any requested in-kind services.
- Excessive unliquidated obligations (ULOs).
- Previous funds awarded to the applicant through the EN Grant Program for similar project goals and/or outputs.

D. Risk Review

The EPA will consider any comments by the applicant, along with information available in the responsibility/qualification records in SAM.gov., when doing the risk review as required by 2 CFR 200.206.

7. Award Notices

The EPA anticipates notification to successful applicants will be made by EN Grant Program staff within the Data Interoperability Partnership Branch (DIPB) at EPA HQ**.** The notification will be sent to the original signer of the application or the project contact listed in the application. This notification is not an authorization to begin work. The official notification of an award will be made by the Grants and Interagency Agreement Management Division (GIAMD). Selection does not guarantee an award will be made. Statutory authorization, funding, or other issues during the award process may affect the ability of the EPA to make an award. The award notice, signed by an EPA grants officer, is the authorizing document and will be provided through electronic or postal mail. The successful applicant may need to prepare and submit additional documents and forms, which must be approved by the EPA, before the grant can officially be awarded. The time between notification of selection and award of a grant can take up to 90 days or longer.

8. Post-Award Requirements and Administration

A. Administrative and National Policy Requirements

The recipient and any sub-recipient must comply with the applicable General Terms and Conditions. These terms and conditions are in addition to the assurances and certifications made as part of the award, terms and conditions, and restrictions reflected on the official assistance award document.

Awards issued as a result of this funding opportunity are subject to the requirements of the Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards; Title 2 CFR Part 200 and 2 CFR Part 1500.

B. Reporting

EPA's General Terms and Conditions in the Notice of Award will have information on performance and financial reports, including:

- How often you will report.
- Any required form or formatting.
- How to submit them.

C. FFATA and FSRS Reporting

The Federal Financial Accountability and Transparency Act (FFATA) requires:

- Data entry at the FFATA Subaward Reporting System (FSRS) for all subawards and subcontracts you issue for $30,000 or more.
- Reporting executive compensation for both recipient and subaward organizations.

9. Other Information

A. Additional Provisions for Applicants

Additional provisions that apply this funding opportunity and/or awards made under this funding opportunity, can be found at EPA NOFO Clauses. If you are unable to access these provisions electronically at the website above, please contact the EPA point of contact to obtain the provisions.

Other Relevant Applicant/Grantee Information:

EPA may require applicants to submit missing or updated documents to complete the funding package of an application selected for award. Key contacts for a submitted application are requested to check their email inboxes and voicemail frequently in the months of April - September, as EPA may reach out with further instructions for the submittal of updated or additional documents.

Award recipients will submit semi-annual and final technical reports electronically through EPA's Central Data Exchange (CDX). EPA Regional Exchange Network Coordinators (RENCs) will provide successful applicants with detailed instructions for registering with and reporting through CDX at the time of award. Applicants should note that the timely submission of semi-annual progress reports contributes to an applicant's past performance score in future assistant agreement applications (see Section 6B).

Appendix A
EN Project Opportunities Under EN Funding Area 1
Increased Data Access and Innovative Business Processes

Environmental agencies increasingly face pressure to meet their missions while reducing costs, increasing transparency, and delivering faster outcomes. These challenges require process innovation, modern technology solutions, and improved access to information. The opportunities under Funding Area 1 are designed to help agencies adopt innovative business processes and modernize the critical data services that power their systems and workflows.

The E-Enterprise Digital Strategy (EEDS) prioritizes building a modern environmental protection enterprise that is information-centric and based on shared platforms. As part of this strategy, the Exchange Network will evolve to keep pace with new business requirements and technologies (see Appendix D for more information on EEDS). As programs and systems modernize, agencies can take advantage of new technological capabilities and new patterns of data exchange. Large, infrequent data payloads may be replaced by smaller, real-time exchanges of data. The next generation of the Exchange Network will make use of REST-based Application Programming Interfaces (APIs) to help make this transition possible.

Applicants are encouraged to use existing data standards wherever possible;
see: https://www.exchangenetwork.net/data-standards/ and https://www.epa.gov/data-standards.

The cost estimates that appear in this appendix were developed by the Subject Matter Experts (SMEs) who manage the featured service. Acknowledging that each state, Tribe, and territory has different IT configurations and solutions for the programs they manage, it is permissible for application cost estimates associated with any individual suggested activity to differ from the estimates included in this appendix. If your estimate exceeds the estimate in this notice, you must provide an appropriate justification for the variation in costs as part of your cost rationale for each project output within your project narrative (see 'Overview of Project Budget' section of Appendix E). A similarly detailed cost rationale should also be included for any project outputs which are not derived from activities listed in EN project opportunities.

Contact information for the EN project opportunities in Appendix A are included in Section 1E 'Agent Contact Information'. Please note that, while these SMEs can offer general guidance and address high-level questions, they are restricted with the level of information that can be shared during the pre-award stage due to EPA competition policies.

Advanced Water Quality Monitoring Using Sensor Technologies 25
Open Data, Data Modernization, and Digital Transformation Projects incl. Geospatial Data 27

Each of the EN project opportunities can be applied for as an individual assistance agreement or an EN partnership assistance agreement (see Section 4C).

Advanced Water Quality Monitoring Using Sensor Technologies

Description:

This project opportunity supports EPA's goal to promote the use of innovative technology in the sharing and use of sensor data (*see:* Data Standards for Continuous Monitoring Data, EPA Office of Water's (OW) Continuous Monitoring Strategy, EPA Office of Water's Technology Blueprint and E-Enterprise Digital Strategy). Long term deployments of *in situ* water quality sensors that can measure a particular parameter or suite of parameters automatically at frequent set intervals (e.g., every 15 minutes, 1 hour, 4 hours, etc.) are becoming common. Sensors are deployed for a single day, week, month, or for multiple years depending on the project. Collected data may support water quality or quantity assessments, real-time alerts, and research on changes that are occurring in the waterbody at different time scales. Today, data from sensors can be retrieved from the monitoring device at the end of a deployment or can be accessed in real time if a device is web enabled – and data sharing standards and strategies vary depending on these real-time vs. long-term sensor data use cases. EPA is evaluating sensor data sharing standards and options for collating data together for public consumption and variable use cases (real-time vs. long term analyses).

Successful grant recipients under this EN project opportunity **are requested** to archive all sensor data in the Water Quality Portal (WQP) through the Water Quality eXchange (WQX) (centralized solution) – and to work with the WQX team during the data submission process to help refine best practices and standardized approaches for capturing and sharing metadata relevant to water sensors through WQX, and for discovering data through the WQP. Note that this is not a real-time data solution, because it takes about one week for data to become available in the WQP after it is submitted to WQX. Our current recommendation is to report a single deployment as single activity in which you store the sensor measurements as daily statistics with the corresponding complete raw set of probe measurements as a .txt or .zip file attachment. WQX data submissions may be made annually or more frequently (for example, weekly). Guidelines for submitting continuous data through WQX can be found at https://www.epa.gov/waterdata/water-quality-exchange-web-template-files.

If real-time use is needed, we also invite grant recipients under this project opportunity to make the data publicly available through a publishing standard (Application Programming Interface (API) or web service) for real-time sensor data, such as the Sensor Things API (decentralized solution) or other Open Geospatial Consortium (OGC) compliant standard. Real time web services should make the most recent data available (e.g., the last two weeks), however we also request data be archived for long term storage in WQX. Web services delivering the real-time data should be consumable by web applications including EPA's How's My Waterway. For example, the United States Geological Survey (USGS) developed a customized OGC SensorThings API and FROST docker deployment for their Instantaneous Values Service, which is leveraged by USGS's National Water Dashboard and EPA's How's My Waterway to make sensor data available to the public in real-time. Grant recipients who have been successfully awarded funding under this EN project opportunity **are required** to evaluate publishing standards for real-time sensor data and share solutions including any real time web services developed with the EPA (WQX helpdesk: WQX@epa.gov), and **are requested (optional)** to work with EPA to make the data searchable and discoverable through How's My Waterway.

Finally, given the advancements being made, EPA invites grant applicants to contribute to the development of open-source tools to help format and quality control continuous sensor data for real-time display on public web applications and/or archival in WQX, and to help assess continuous sensor data already in the WQP. Where possible, tools being developed should build on, and not re-create, functionality that can be leveraged from existing tools such as EPA's ContDatSumVis and ContDataQC R Shiny applications and R package. These tools include quality control (QC) enhancements for water quality results - such as calculation of relative percentage variance with blanks and replicates, creation of reports, graphs or Excel exports of QC data, and ability to compare discrete and continuous data.

Potential Activities Under This Opportunity:

Project Activity	Cost Range
Publish Sensor Data via Public Web Services Begin archiving continuous sensor data in the WQP through WQX – and work with the WQX team during the data submission process to help refine best practices and standardized approaches for capturing and sharing metadata relevant to water sensors through WQX, and for discovering data through the WQP. In addition, evaluate real-time publishing standards and make real-time sensor data available via web services that are easily consumable by web applications (such as EPA's How's My Waterway) that make the data publicly searchable and discoverable. Share solutions including any real time web services developed with EPA.	(Individual Applicant) $50,000 - $100,000 (EN Partner Application) $100,000 - $300,000
Develop Open-Source Tools for Sharing, Integrating and Analyzing Sensor Data from Multiple Sources including WQX/WQP Develop tools to help efficiently quality control, format, and submit continuous sensor data to WQX; and retrieve, quality control, and analyze continuous sensor data from the WQP. Tools may also be designed to retrieve and harmonize data from other compatible, publicly available continuous data sources. Share open source tools developed with EPA.	(All Applicant Types) $50,000 - $100,000
Note: Applicants can propose costs which exceed the estimates above (if within their funding threshold); however, this should be detailed within the project output(s) budgeting rationale as required in section seven of the project narrative.	

Shared Services/Reusable Components Available:

- EPA's Water Quality eXchange (WQX) and Water Quality Portal (WQP)
- OGC's Sensor Things API (code available on GitHub: https://github.com/opengeospatial/sensorthings)
- EPA's ContDatSumVis (code available on GitHub: https://github.com/USEPA/dmap-ContDataQCSumViz) and ContDataQC (code available on GitHub: https://github.com/USEPA/ContDataQC) R Shiny applications and R package

More Information/Helpful Links:

- Grant recipients under this opportunity **are required** to: 1) share publishing solutions for real-time sensor data including any web services developed, and 2) share new or improved open-source tools and services for sharing, integrating, and analyzing sensor data. Solutions, tools, and services are required to be shared back with the community (through the WQX Helpdesk: WQX@epa.gov) and if applicable, made publicly available via GitHub; see the registration requirement under Section 4D for further details on this requirement (mandatory for grant recipients).

- Grant recipients under this opportunity **are requested (optional)** to (through the WQX Helpdesk: WQX@epa.gov): 1) archive continuous sensor data in the WQP through WQX and share feedback with the WQX team to help improve best practices and standardized approaches for capturing and sharing data and metadata relevant to water sensors in WQX, and 2) work with EPA to make real-time sensor data (from any new real-time web services that were developed) searchable and discoverable through How's My Waterway (optional for grant recipients).

- For general questions related to this opportunity, applicants can contact: WQX@epa.gov.

Open Data, Data Modernization, and Digital Transformation Projects, including Geospatial Data

Description:
Environmental protection agencies rely on data for every aspect of their work — from environmental monitoring to permitting and enforcement. Nearly every mission-critical workflow and management decision depends on ready access to quality information. Agencies also face increasing demand for data from the public, the regulated community, co-regulators, and other stakeholders. Meeting these demands requires new investments in interoperable technology platforms and services to promote collaboration and facilitate the integration of data needed to improve environmental management among partner agencies and organizations. This EN project opportunity promotes applications for projects that will improve environmental decisions by making data more open, interoperable, and readily usable. Projects should support (1) the development of environmental data catalogs to serve as the foundation for the larger development of environmental data hubs which includes the integration with data registries (e.g., Substance Registry System, Facility Registry System, or others) and (2) the promotion of sustainable data integration practices by working with external partners to cultivate modern environmental data infrastructure and address the difficult and universal challenge of legacy data.

Potential Activities Under This Opportunity:

Project Activity	Cost Range
Identifying and prioritizing environmental data to be held and/or served 1. Conduct an environmental data inventory. The purpose of a data inventory is to catalog available environmental data, identify areas for improved accessibility and discoverability, and usability. 2. Develop criteria to identify the most important datasets, and rank and prioritize them for inclusion in data/data exchange standardization processes.	(Individual Applicant) $25,000 – 150,000 (Partner Applications) $50,000 - 600,000
Designing the technical framework for the creation of accessible environmental data collections 1. Define the system for publishing and sharing data collections including usability, standardization of metadata, data harmonization, data discovery, data access, security, metadata, and scalability requirements. Data delivery will comply with open data standards to maximize interoperability. 2. Develop or adopt data and metadata standards for each data type to be represented in the data collection, such as those published by the Open Geospatial Consortium (e.g., TimeSeriesML for time series sensor data, groundwaterML for groundwater observations, WQX for water quality samples, etc.). Data content standards, where possible, should reference controlled vocabularies to be developed and published by the agency or referenced to existing ones. Identify or develop tools for creating, editing, and curating metadata that advance standardization. 3. Develop a conceptual framework for ingesting or integrating data from each contributing data source into systems capable of sharing data in standard formats and application programming interfaces (APIs). This could involve establishing systems for automated uptake of data, where appropriate (e.g., data preparation	(Individual Applicant) $25,000 - 75,000 (Partner Applications) $50,000 - 200,000

and development of intrastate exchanges and Centers for Disease Control (CDC) upload for radon).	
Developing an environmental data catalog platform 1. Acquire and/or develop software for data storage, cataloging, and dissemination through APIs. 2. Develop the data ingestion process conceptualized pilot with 2-5 identified data streams.	(Individual Applicant) $25,000 - 100,000 (Partner Application) $50,000-600,000
Developing use cases to demonstrate the utility of the standardized data and data exchange 1. Convene stakeholders to identify and develop personas and use cases of value to environmental policy and planning. 2. Develop and document an environmental data management plan considering your entire data lifecycle from collection, through analysis and dissemination and eventually disposal. 3. Select and develop conceptual frameworks for use cases based on stakeholder feedback. 4. Identify potential data visualizations and tools for selected use cases and develop wireframes for data visualizations. 5. Develop pilot data tools and visualizations.	(Individual Applicant) $25,000 - 50,000 (Partner Application) $25,000 - 75,000
Promote sustainable data modernization and integration within and across state agencies 1. Compile and disseminate best practices for data management. 2. Create supporting and educational materials to build knowledge about and capacity for integrated data management.	(Individual Applicant) $25,000 - 75,000 (Partner Application) $50,000 - 300,000
Note: Applicants can propose costs which exceed the estimates above (if within their funding threshold); however, this should be detailed within the project output(s) budgeting rationale as required in section seven of the project narrative.	

Shared Services/Reusable Components Available:

- **Facility Registry Service APIs.** These services provide access to facility information and can be reused to identify unique information for regulated entities**:** https://www.epa.gov/frs/frs-data-resources**.**
- **Substance Registry Service APIs.** The Substance Registry Services (SRS) is EPA's authoritative resource for information about chemicals, biological organisms, and other substances tracked or regulated by EPA. These APIs allow for direct interaction with these data for inclusion in an application or platform. https://cdxapps.epa.gov/oms-substance-registry-services/automated-services.
- **Source Classification Codes APIs.** These codes are meant to be used with the Emissions Inventory System and provide the universe of unique source classification codes**:** https://sor-scc-api.epa.gov/sccwebservices/swaggerV2.
- **All other System of Registries APIs.** The System of Registries (SoR) is a resource for environmental system developers and enterprise architects. It also provides environmental program managers and users of environmental information with automated services to enable better understanding of environmental terminology and data used by the Agency: **https://ofmpub.epa.gov/sor_internet/registry/sysofreg/sorservices/sorServices.html.**

- **CROMERR Tools and Resources.** These tools and templates are designed to help determine CROMERR applicability and assist application preparation for state, tribal and local governments authorized to administer EPA programs.**: https://www.epa.gov/cromerr/application-tools-and-templates**.

More Information/Helpful Links:

Projects should maximize the use of REST-based web APIs as the foundation for creating interoperability and openness. All applications or platforms, whether desktop, mobile, web app, or dashboards, should follow an API- first design methodology. Project deliverables could include, but are not limited to:

- APIs, microservices and platforms for data access that include accessing records, querying, filtering, aggregating, and analyzing data and other data access services. Example platforms may include API-driven commercial Software as a Service/ low code/ no code platforms (e.g., ArcGIS Online, Microsoft Powerapps, QlikSense, Tableau), open source platforms, or applicant-developed platforms.
- Geospatial or remote sensing technology (including Unmanned Aircraft Systems), tools and data services to address environmental problems (including use of geocoding and field methods to improve locational accuracy of environmental interests).
- Desktop, laptop, and tablet/smartphone applications enabling access, analysis, and display of environmental data.
- Dashboards or other analytical tools providing real-time program status and decision support information to program managers and executives. Wherever possible dashboards should be built upon open APIs to connect directly to source data rather than one time/one off data collections.
- Incorporating open data registries as part of the proposed open data activity (see EPA's System of Registries at https://www.epa.gov/sor for more information) to improve data harmonization and interoperability.
- Incorporating electronic signature services to meet Cross-Medial Electronic Reporting Rule Requirements thereby enabling digital transformation for electronic reporting.
- Sharing of documentation and project lessons learned with exchange network partners.

Grant recipients should publish data in open machine-readable formats through standards-compliant data services that are accessible through REST APIs. Data should be available in:

- JavaScript Object Notation (JSON); eXtensible Markup Language (XML) format; Comma Separated Values (CSV or flat file); or
- As business needs or data complexity dictate, another machine-readable format (e.g., GeoJSON for vector spatial data, GeoPackage for vector or raster data, COGTIFF for imagery, NetCDF for multidimensional data).

Grantee's REST APIs should strongly consider using established, open API, or industry supported standards appropriate for data types rather than building completely custom APIs if practicable. Examples of such standards include:

- Geospatial vector data: OGC API - Features (OAF), Web Feature Service (WFS).
- Geospatial raster data: OGC API - Coverages components are available to use with this opportunity.

For general questions related to this opportunity, applicants can contact: Dwane Young at young.dwane@epa.gov.

Appendix B
EN Project Opportunities Under EN Funding Area 2
Eliminate Paper Submittals and Expand E-Reporting

States, territories, Tribes, and the EPA exchange large quantities of environmental data to analyze problems, make policy and tactical decisions, implement programs, and comply with statutory and regulatory requirements. Traditionally these reports have been submitted by regulated entities and states in paper form. Over the last twenty years, EPA and its partners have increasingly opted to eliminate paper submittals and move towards standardized electronic reporting approaches based on EN data standards and technology. This evolution has included streamlining and modernizing multiple data collection processes through the web-based applications and portals, shared platforms, and the use of EN services/APIs to enable interoperable exchange and access to data. **The opportunities under Funding Area 2 are designed by EPA National Program Offices to help their stakeholders submit and share programmatic data for twelve EPA programs.**

Applicants are encouraged to use existing data standards wherever possible;
see: https://www.exchangenetwork.net/data-standards/ and https://www.epa.gov/data-standards.

The cost estimates that appear in this appendix were developed by the Subject Matter Experts (SMEs) who manage the featured service. Acknowledging that each state, Tribe, and territory has different IT configurations and solutions for the programs they manage, it is permissible for application cost estimates associated with any individual suggested activity to differ from the estimates included in this appendix. If your estimate exceeds the estimate in this notice, you must provide an appropriate justification for the variation in costs as part of your cost rationale for each project output within your project narrative (see 'Overview of Project Budget' section of Appendix E). A similarly detailed cost rationale should also be included for any project outputs which are not derived from activities listed in EN project opportunities.

Contact information for the EN project opportunities in Appendix B are included in Section 1E 'Agent Contact Information'. Please note that, while these SMEs can offer general guidance and address high-level questions, they are restricted with the level of information that can be shared during the pre-award stage due to EPA competition policies.

Air
Emission Inventory System (EIS) 31
Combined Air Emissions Reporting (CAER) 32
Enforcement and Compliance
ICIS (Integrated Compliance Information System) Digital Services 34
Electronic Reporting of National Pollutant Discharge Elimination System (NPDES) Data 36
Land Management
Resource Conservation and Recovery Act Information System (RCRA Info) 38
**UST Finder Application (Version 2) to Support National and State UST Programs 39
Water
eBeaches 41
*Safe Drinking Water Information System (SDWIS) 42
Water Quality Exchange (WQX) 44
Assessment TMDL Tracking And Implementation System (ATTAINS) 46
Drinking Water State Revolving Fund & Clean Water State Revolving Fund 48
*This opportunity has multiple activity restrictions by applicant/entity type; see write-up for details.
**This opportunity is only offered as a cooperative agreement (not a direct grant); see write-up for details
Unless marked, opportunities in this appendix are open to individual applicants and eligible EN partnerships.

Emissions Inventory System (EIS)

Description:

The Emissions Inventory System (EIS) is the system for storing all current and historical emissions inventory data. EPA uses it to receive and store emissions data and generate annual and triennial National Emissions Inventory.

The National Emissions Inventory (NEI) is EPA's compilation of estimates of air pollutants discharged on an annual basis and their sources. EPA uses the NEI to track emissions trends over time, develop regional pollutant reduction strategies, set, and analyze regulations, perform air toxics risk assessments including inhalation risks and multi-pathway exposure, model air pollutant dispersion and deposition and measure environmental performance as required by the Government Performance and Results Act.

Status and Plans:

Pending signature (expected November 2024), updates to the Air Emissions Reporting Rule (AERR) will impact requirements for many sectors. As an example of the impacts to current state/local or Tribal air agency (SLT) systems, additional data fields will need to be included in Point emissions submissions to meet the requirements under the new AERR. This Exchange Network (EN) project opportunity offers successful grant recipients funding in support of their organization implementing these changes.

Potential Activities Under This Opportunity:

Project Activity	Cost Range
Develop Services that Facilitate Online Collection and Submission of Emissions Inventory Data Develop a data system based on program requirements, IT requirements, and design for online data collection and submission of emissions inventory data.	\$50,000 - 100,000
Support updates to existing SLT systems for new requirements[1]	\$20,000 - 100,000
Note: Applicants can propose costs which exceed the estimates above (if within their funding threshold); however, this should be detailed within the project output(s) budgeting rationale as required in section seven of the project narrative. [1]Pending AERR signature (expected November 2024)	

Shared Services/Reusable Components Available:

- SCC searches: https://epa.gov/scc
- SCC webservices: https://sor-scc-api.epa.gov/sccwebservices/
- WebFIRE emission factors searches: https://cfpub.epa.gov/webfire/
- WebFIRE webservices: https://cfpub.epa.gov/webfire/efwebservices/efwebservice.html
- CAERS: https://www.epa.gov/combined-air-emissions-reporting/forms/contact-us-about-combined-air-emissions-reporting

More Information/Helpful Links:

- See contact information for the Air Emissions program at: https://www.epa.gov/air-emissions-inventories/air-emissions-points-contact

Combined Air Emissions Reporting (CAER)

Description:

The Combined Air Emissions Reporting System (CAERS) system seeks to streamline air emissions reporting processes whereby regulated entities can report shared data once, and have that data made available to other programs and systems where that shared data is also required to be reported. Currently, air emissions information is collected by EPA and state/local or Tribal air agencies (SLTs) through numerous separate regulations, in a variety of formats per different reporting schedules and using multiple routes of data transfer. CAERS is the reporting system that was created towards shared data reporting for industry and SLTs.

CAERS is expected to reduce the cost to industry and government for providing and managing important environmental data, and to improve decision-making capacity for state, local, and Tribal partners through more timely availability of data. Current SLT CAERS users are reporting the ability to spend more time on advanced QA of their data, reduced corrections needed for industry reports after they have been submitted to EIS, and the ability to finish their point source submissions before EPA's deadline for annual reports.

Currently, CAERS addresses electronic reporting of both facility and emissions data, which includes the National Emissions Inventory (NEI), and Toxics Release Inventory (TRI), and plans to include data reported to the Compliance and Emissions Data Reporting Interface (CEDRI), the Greenhouse Gas Reporting Program (GHGRP) and potentially others. More information can be found at: Combined Air Emissions Reporting | US EPA. In addition, a suite of webservices have been created for use with CAERS as part of a broader CAER effort. These include websites and webservices for SCCs, and emission factors from WebFIRE, and eventually, QA and QC checks and potentially others, that will be available to support SLTs to use with their own systems. CAERS also allows SLTs to retrieve their data via CAERS' API webservices. Finally, some SLTs have developed code to retrieve their data using the CAERS API that may also be reusable by other SLTs with some adjustments.

Status and Plans:

EPA builds the backbone of features needed by EPA or multiple state, local, or Tribal (SLT) agencies, and SLT agencies can use this base of CAERS if they do not need custom features. In addition, CAERS can be used by SLTs in multiple ways depending on the Case the SLT chooses, i.e., whether the SLT wants to adopt CAERS for reporting, or prefers to keep their reporting system but would like to use the ability of CAERS to share data with or from other EPA federal air emissions reporting programs.

Potential Activities Under This Opportunity:

Project Activity	Est. Cost Range
Collect SLT Data Program Requirements: The CAERS design ensures that all participating *federal* air program requirements will be met through CAERS. In addition, SLTs may have requirements of their own that must be gathered so that they can also be implemented in their own data system or to allow their data to be reported to CAERS. This activity funds SLTs to obtain support for gathering requirements such as how an existing data system will interact with CAERS, additional QA checks they may need in CAERS, and additional required or optional data fields that should be present in CAERS.	$25,000 - $55,000

Define SLT IT Requirements: This activity would be needed for any SLT that intends for their existing emissions data system to interact directly with CAERS or with a module within CAERS. This activity funds SLTs to obtain support to define the IT design and requirements to implement in the SLT data system or to develop a module to allow their data to be reported to CAERS, depending on the nature of the SLT program requirements.	$40,000 - $80,000
Data Curation before Onboarding This activity would support SLTs with resources to do facility and emissions data testing and curation, ultimately allowing industry to have a smooth transition to the use of CAERS. Through this activity, SLTs will be able to pull data into the CAERS test environment, decide on any changes or updates needed to data in EIS before final data is migrated to the CAERS production environment, and reporting commences.	$25,000 - $55,000
Upgrade, Customize and/or Test SLT System to Work with CAERS: This activity would be needed for any SLT that intends for their existing emissions data system to interact directly with CAERS. The activity funds SLTs to update and test an existing data system based on program requirements, IT requirements, and CAERS design for connection to CAERS. Cost estimates for this activity outside of the range provided might suggest SLTs should consider a different integration approach with CAERS.	$40,000 - $100,000
Train Users and Deploy CAERS to the SLT: This activity includes time and effort in the development and delivering of SLT-specific training materials for SLT system or process updates (such as user guides, training materials, video webinars, and or video tutorials) to allow facilities that use CAERS to report data to SLTs. SLTs will have access to EPA-developed training about the base CAERS software to build custom training.	$15,000 - $25,000
Note: Applicants can propose costs which exceed the estimates above (if within their funding threshold); however, this should be detailed within the project output(s) budgeting rationale as required in section seven of the project narrative.	

Shared Services/Reusable Components Available

The following are already publicly available and a state, local, or Tribal agency (SLT) may use them without having to commit to the use of CAERS:

- **SCC searches:** https://epa.gov/scc
- **SCC webservices:** https://sor-scc-api.epa.gov/sccwebservices/
- **WebFIRE emission factors searches:** https://cfpub.epa.gov/webfire/
- **WebFIRE webservices:** https://cfpub.epa.gov/webfire/efwebservices/efwebservice.html

More Information/Helpful Links:

EPA will be flexible in working with SLTs and their specific timelines. Interested states should consider discussing a potential timeline of work with EPA even if funds are not yet available. It may be possible to begin some aspects of the work even if the SLT has not been fully funded.

- See also the CAERS website at https://www.epa.gov/combined-air-emissions-reporting and use the "Contact Us" link at the bottom to send questions.

ICIS (Integrated Compliance Information System) Digital Services

Description:

State, Tribal, local, and territorial partners send data to ICIS to meet reporting requirements. The data are used to support Clean Water Act National Pollutant Discharge Elimination System (CWA NPDES) wastewater discharge program functions (e.g., permitting, compliance monitoring, enforcement, and special regulatory programs), as well as compliance and enforcement programs related to Clean Air Act (CAA) stationary sources. State, Tribal, and local partners provide data to ICIS for which they have authority via node and node client technology. This includes XML formatted submissions of CWA NPDES and CAA data via physical nodes on the Exchange Network, and Virtual Exchange Services (VES), which is a cloud-based platform for creating data exchanges on the Exchange Network.

Status and Plans:

EPA has completed a concept of operations (CONOPS) to inform the long-term modernization of how compliance and enforcement data are managed at EPA. In May 2024, EPA initiated stakeholder engagement sessions to document business processes, identify use cases and develop system requirements. The CONOPS was the first step to ensure business requirements for the national CWA NPDES and CAA stationary source programs are supported now and in the future. Through the ICIS modernization initiative, the Agency will explore ways to expand data sharing capabilities and advance digital strategies to reduce operational costs with states, local agencies, Tribes, and territories. The Agency anticipates initiating development of the new solution in FY28.

States, Tribes, and local partners can contribute to advancing digital strategies by considering shared platforms that allow regulators to work together using consistent data standards for information related to facility, permit, compliance, and enforcement data. The Agency will continue to grow its efforts to establish support for shared services. However, recognizing the investment to transition to digital services, activities that use existing nodes on the Exchange Network will continue to be supported. Grant applicants should consider participating in ongoing stakeholder engagement sessions through the EN Forum: https://exchangenetwork.net/exchange-network-forum/.

Potential Activities Under This Opportunity:

Project Activity	Cost Range
Service: ICIS-NPDES **Activity: Upgrades to meet NPDES Electronic Reporting Rule** Activities might include support for states to modify their NPDES systems to ensure that they can capture, store, and transmit to EPA all necessary data elements that are required or are in support of the NPDES eReporting Rule as described in 40 CFR part 127.	$35,000 - $200,000
Service: ICIS-NPDES or ICIS-Air **Activity: Develop Application Programming Interfaces (APIs)** Develop the capability to exchange structured and unstructured information through APIs. Develop APIs that send, receive and process notifications and data related to CWA NPDES or CAA-stationary source programs, such as: list of forms, documents, user registration information and functionality, confirmation codes from user registration, email availability, email notifications to regulated entities, and account confirmation emails. Expose data and content that describes the data to other computers in a machine-readable format (i.e., provide web APIs).	$25,000 - $200,000

Service: ICIS-NPDES or ICIS-Air **Activity: Modify System to Provide or Consume Shared Services** Develop, modify, or consume shared services that support environmental business processes, including but not limited to user registration process, user authorization and authentication, enable entering data and viewing human readable data, facilitate search functions, and create, maintain, and archive a copy of record. Develop and implement a framework that results in reference table shared services for data and data standards related to, for example: states, counties, permit types, permit status, chemicals, pollutants, form status, form types, titles, and roles/user types.	$25,000 - $200,000
Service: ICIS-NPDES or ICIS-Air **Activity: Enhance Compliance and Enforcement Dataflow** Extract and convert the data from State NPDES and air systems into the XML format needed to submit data to ICIS electronically; modify state/Tribal/territorial systems to accommodate the data requirements for ICIS-NPDES and ICIS-Air and related e-reported compliance data; and install and configure ICIS-NPDES and ICIS-Air plug-ins available on the Exchange Network.	$35,000 - $200,000
Service: ICIS-NPDES or ICIS-Air **Activity: Prepare for Transition to Modernized System** Prepare for the transition to the modernized ICIS system by implementing transition activities intended to address findings documented in the ICIS Modernization CONOPS document (please see the links below in “More Information”).	$35,000 - $200,000
Service: ICIS-NPDES, ICIS-Air, or NPDES eReporting Tool **Activity: Coalitions for Above Listed Activities** States with shared services or software solutions are strongly encouraged to apply as a ‘coalition’ (with one state listed as lead) to jointly make updates to the shared system under one of the five activities listed above.	$35,000 - $400,000
Note: Applicants can propose costs which exceed the estimates above (if within their funding threshold); however, this should be detailed within the project output(s) budgeting rationale as required in section seven of the project narrative.	

Shared Services/Reusable Components Available:

- **Shared CROMERR Services** - This includes two-factor authentication, signature service, and identity proofing.
- **Copy of Record (COR) captured in CDX CROMERR Repository** - The Copy of Record (COR) category of services addresses all activities and functions for storing, maintaining, and retrieving the COR and associated notifications.
- **Impaired Waters and TMDLs (ATTAINS)** - Exchange Network Service.
- **ICIS Data Access (“ICISDA”) Dataflow** - This provides the ability for any participating EN partner or node (e.g., a state agency node, EPA Regional node, etc.) to request and receive ICIS data in XML format. ICIS currently holds data from various EPA programs such as NPDES, FE&C (Federal Enforcement and Compliance), and RCRA (Resource Conservation and Recovery Act).

More Information/Helpful Links:

- If you have additional questions or for regional points of contact, please visit the ICIS Support Portal or contact Jay Stubbs at stubbs.jay@epa.gov.

ICIS Support Portal	ICIS Modernization CONOPS	NPDES eReporting Tool Help
CWA-NPDES Electronic Reporting website		Further information on ICISDA

Electronic Reporting of National Pollutant Discharge Elimination System (NPDES)

Description:

Electronic reporting of Clean Water Act National Pollutant Discharge Elimination System (NPDES) general permit forms, program reports, and Discharge Monitoring Reports (DMRs) lowers burden for permittees and regulators; improves data quality, availability, and timeliness; and ultimately improves compliance. In support of these goals, EPA published the National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Rule ("NPDES eRule") on 10/22/15. The 2015 rule required EPA and states to modernize Clean Water Act (CWA) reporting for municipalities, industries, and other facilities and to share these NPDES program data with EPA (see 40 CFR 127.23). The rule divided implementation into two "Phases." The deadline for Phase 1 implementation passed on 12/21/16. Most states and permittees have successfully implemented Phase 1 of the NPDES eRule, which includes electronic submission of DMRs and the Federal Biosolids Annual Report where EPA is the Regulatory Authority. On 11/2/2020, EPA published its NPDES eRule Phase 2 Extension rule, which provides states and EPA additional time to implement electronic reporting for certain Clean Water Act discharge permitting requirements, notably general permit information and program reports other than the Federal Biosolids Annual Report. [85 FR 69189]. In this final rule, EPA extended the compliance deadline for implementation of Phase 2 of the eRule by five years to 12/21/25.

EPA currently has two tools to accomplish NPDES electronic reporting and implement the NPDES eRule: NetDMR for DMRs and the NPDES eReporting Tool (NeT) for general permits and program reports.

Status and Plans:

NeT is available to authorized NPDES programs (see: https://www.epa.gov/npdes/npdes-state-program-authority) as a multi-tenant platform that uses PaaS. This cloud approach manages the infrastructure, operating system, run time and middleware allowing EPA to focus on developing, deploying, and using applications rather than managing infrastructure.

Current deployments of NeT include the following sectors: Construction Stormwater (general permit); Industrial Stormwater (general permit); Oil and Gas Extraction (general permit); Aquaculture (general permit); Pesticide Application (general permit and permit-specific annual report); Groundwater Remediation, Dewatering, and Hydrostatic Testing (general permit); Urban Stormwater – MS4 (general permit and program report); Domestic Wastewater and Drinking Water (general permit); Sewer Overflow/Bypass Report (program report); Biosolids Annual Program Report (program report); and Pretreatment Program Annual Report.

EPA is expanding use of the NeT platform over the next few years to include the following sectors: Concentrated Animal Feeding Operations (general permit and program report); and Miscellaneous Discharges (general permit and 316(b) program report).

Deployments of NeT for general permits and program reports are documented on the "NPDES eRule Phase 2 Implementation Dashboard."

Potential Activities Under This Opportunity:

Project Activity	Est. Cost Range
State Use EPA's NeT Solution Where needed and appropriate, new web services and application program interfaces (APIs) will be developed and made available to states, Tribes, and territories to support electronic reporting of NPDES permits and program reports. States that elect to use the EPA's NeT platform may need to use APIs or develop shared services that can be invoked by EPA applications in order to integrate with the NeT platform. For example,	$45,000 - $70,000

states may consider how they might access or collect the data or information provided by permittees through the NeT application.	
States Develop Own NPDES eReporting Solution Development, testing, and implementation of a CROMERR compliant system for reporting electronic NPDES permit forms [e.g., Notices of Intent (NOI)] for individual or general permit coverage or program reports. The solution should implement the NPDES eRule data sharing requirements (40 CFR 127.23) and leverage the ICIS Data Submission and ICIS Data Submission services. See: https://exchangenetwork.net/.	$35,000 - $200,000
States Develop Upgrade NPDES Data Sharing Protocols Development, testing and implementation of OpenNode2, which allows states to automate the sending of data to EPA. OpenNode2 comes pre-packaged with a variety of plugins for the commons data flows. It is available for deployment in either a .Net or Java environment. These activities cover the costs that states incur in integrating this software into their data sharing protocols.	$55,000 - $85,000
Note: Applicants can propose costs which exceed the estimates above (if within their funding threshold); however, this should be detailed within the project output(s) budgeting rationale as required in section seven of the project narrative.	

Available EPA In-Kind:
In-kind funding may be available to complete one or more activities as listed within this EN project opportunity write-up. Applicants may request all or a portion of awarded grant funds to be added to an existing EPA IT contract if/when available, to be distributed to the successful applicant as in-kind funding. EPA's ability to meet applicant requests for in-kind services is dependent on availability, timing, and funding, and will be considered on a case-to-case basis. Applicants interested in learning more about this option should reach out via the contact information listed under 'More Information'.

Shared Services/Reusable Components Available:

- ICIS Digital Services (see project opportunity on page 34).
- Shared CROMERR Services: User Management, Identity Management, Signature Device, Signature, Sign and Store Copy of Record.
- ICIS Data Submission - provides ability for states to send data to EPA in XML format.
- ICIS Data Access - provides the ability for states to request and receive ICIS data in XML format.
- Searchable IT Component and Project Registration Forms : https://www.epa.gov/exchangenetwork/searchable-it-component-and-project-registration-forms.

More Information/Helpful Links:

- ICIS, NetDMR, NeT and ECHO Support Portal ("Ask a Question"): https://usepa.servicenowservices.com/oeca_icis
- CWA-NPDES Electronic Reporting website: https://www.epa.gov/compliance/npdes-ereporting
- NPDES eRule Phase 2 Implementation Dashboard: https://edap.epa.gov/public/extensions/eRule_Phase2/eRule_Phase2.html

Resource Conservation and Recovery Act Information System (RCRAInfo) Data Exchange REST API Services

Description:
RCRAInfo is the national program system that supports implementation of the Resource Conservation and Recovery Act (RCRA) hazardous waste program and e-Manifest Act, as administered by EPA and authorized states. RCRAInfo tracks and reports on hazardous waste handlers and their regulated activities, waste generation and shipments, permits, compliance with federal and state regulations, and cleanup activities. Most authorized state agencies and many regulated facilities enter data directly into RCRAInfo and retrieve data directly from RCRAInfo or its reporting application Metabase, while some take advantage of data exchange services.

Funding awarded under this EN project opportunity allows grant recipients to update state systems to exchange RCRA data with EPA via REST APIs. RCRAInfo REST APIs provide lightweight, flexible methods of data exchange between state systems and RCRAInfo. These data exchange services use JSON, which is computer language-agnostic, and require no special software to maintain. States that maintain their own system can save resources by opting in to RCRAInfo's Industry Application features, letting regulated industry users submit data directly into RCRAInfo, and then connect with RCRAInfo REST APIs to automatically pull data into their own systems as needed. This process offers direct support from the RCRAInfo Team, along with built-in security, auditing, and error handling.

Potential Activities Under This Opportunity:

Project Activity	Cost Range
Implementation of RCRAInfo REST APIs Implement RCRA data exchange with RCRAInfo via RCRAInfo REST APIs in order to modernize existing exchange processes, eliminate duplicate data entry, and/or facilitate opting in to RCRAInfo Industry Application features. Use of RCRAInfo APIs supports the Information Centric Approach under the E-Enterprise Digital Strategy.	\$50,000 - \$100,000
Note: Applicants can propose costs which exceed the estimates above (if within their funding threshold); however, this should be detailed within the project output(s) budgeting rationale as required in section seven of the project narrative.	

Shared Services/Reusable Components Available:
- **[RCRAInfo REST APIs]:** RCRAInfo APIs are designed to be reusable and are documented in Swagger, which can be accessed via the RCRAInfo application. This reduces duplication of effort and code, improving efficiency and consistency. Users of these data exchange services can choose to implement lookup services to automatically keep all application menus up-to-date, securely retrieve data from RCRAInfo from one or more system modules, and/or securely send data to RCRAInfo for one or more modules, to meet the specific state agency needs. Exchange services include ability to add, update, and delete data, as appropriate.

More Information/Helpful Links:
- RCRAInfo User's Guide and REST API Swagger documentation: log into https://rcrainfo.epa.gov/.
- Examples of e-Manifest data exchange APIs are available in the e-Manifest GitHub area: https://github.com/USEPA/e-manifest).
- For general questions related to applying for the RCRAInfo opportunity, contact Rebecca Kane (kane.rebecca@epa.gov).

UST Finder Application (Version 2) to Support National and State Underground Storage Tank Programs

Description:

UST Finder is the central repository of national underground storage tank (UST) and UST release data that assists EPA, states, territories, and Tribes implement and manage their programs. The mapping application, which is being expanded in version 2, currently contains detailed attributes and locations of active and closed USTs, UST facilities, and UST releases in states, US territories, and Tribal lands. UST Finder contains information about proximity of UST facilities and UST releases potentially impacting surface and groundwater public drinking water and private domestic wells. It also contains demographic information and populations living nearby. Lastly, it includes data on extreme weather events, including flooding and wildfires. UST Finder relies on a combination of data sourced from states, territories, and EPA (for Indian country).

This EN project opportunity is open to state applicants (excluding state universities), as well as some US territories and Tribes with appropriate delegated authority. However, states are the primary implementers of UST program, and they maintain all programmatic data in their own individual data systems. Grant recipients under this EN project opportunity will be able to modernize their data and streamline the exchange of data between States and the EPA using the cloud-based technologies to maintain the latest available data sets on USTs. This will enable States, the EPA and other stakeholders, e.g., emergency response personnel, to have the most up-to-date data in making time-critical decisions in protecting water quality and improving emergency response operations. Standardizing the data and improving data exchange will also reduce costs and increase transparency.

This opportunity will be a cooperative agreement with EPA, which involves substantial federal involvement during the performance of a project (see full definition of a cooperative agreement in Section 3D). The application must clearly explain EPA's role in the proposed project, in addition to the other standard requirements of the project narrative (see Appendix E). **This opportunity encompasses the design, development, testing, and, at a minimum, limited deployment of the service.** Creation of a prototype, pilot, or other limited-type functioning IT product is an example of limited deployment of the service.

UST Finder and associated data are publicly available and free to use. Located on EPA's GeoPlatform, it incorporates UST data into a user-friendly GIS environment where stakeholders, decision-makers, and emergency responders, from the national level to the local level, can easily access UST information on a computer, tablet, or smartphone.

The objectives under this EN project opportunity are for applicants to 1) assemble state underground storage tank data into standardized schema for use by UST Finder and 2) use a cloud-based exchange service to improve data flow and cost effectiveness. This will enhance the ability for data exchange among states and nationally to assess UST assets and vulnerabilities.

Status and Plans:

EPA first published UST Finder in 2020, and is currently working on UST Finder version 2, expected to be released in 2025. EPA is working with every state in curating the current data. The new version will feature several enhancements, including a more robust dataset from states. EPA is working with state programs to harmonize unique state datasets into a common template for use by UST Finder. While some states have mapped their data to the standardized templates, some states need support to standardize and map their data. Additionally, for the future, a cloud-based data exchange will significantly enhance the exchange of data and minimize future data management costs.

UST Finder 2 will include additional layers relevant to UST facilities and UST release sites, including: NOAA's data on inland flooding and sea level rise; areas subject to wildfires; USGS landslide hazards; and ground water impacted by PFAS. These curated data sources will, in turn, assist state programs in making time critical decisions in their tank's programs.

Potential Activities Under This Opportunity:

Project Activity	Cost Range
Assembling data into standardized underground storage tanks schema and enhancing existing state data systems Standardizing state and territorial naming conventions for tank infrastructure and fuel characteristics enhances the ability for data exchange among states and assess UST assets and vulnerabilities at a national level within UST Finder. See More Information/Helpful links section for standardized data templates. States can also enhance their databases and improve their ability for data exchange. However, changes to a state's internal database are not required as part of this activity.	$75,000 - $200,000
Cloud-based exchange service A cloud-based approach to data exchange will improve the flow of data and reduce long term data management costs. Effective management of data in this sector is critical. As fuel is a key resource in emergency response operations, especially for those operations of national significance, this data and ease of access will improve response operations.	$75,000 - $200,000
Note: Applicants can propose costs which exceed the estimates above (if within their funding threshold); however, this should be detailed within the project output(s) budgeting rationale as required in section seven of the project narrative.	

Shared Services/Reusable Components Available:

The EPA has been working with stakeholder entities in developing a national database on underground storage tanks, UST Finder.

- EPA is working with states and territories in 2024 to compile and curate existing underground storage tank data, updating an earlier version. A standardized schema has been developed toward exchanging the data. While a few states have been able to map the data and provide an API, many states can use assistance in both the mapping and developing a cloud-based approach to share the data (see under More Information/Helpful Links).
- Initial work by prior EN grant recipients improved their data services and laid the groundwork for this EN project opportunity. Further efforts are needed to enhance a cloud-based approach to the data exchange; applicants interested in learning more about this earlier project should contact the UST program using the contact information under More Information/Helpful Links.

More Information/Helpful Links

- Link to the program site that includes contact information: https://www.epa.gov/ust and https://www.epa.gov/ust/ust-finder
    - Data templates for underground storage tanks: visit https://www.epa.gov/ust/templates-exchange-network-grant-applications to access.
- UST Finder version 1:
    - https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=b03763d3f2754461adf86f121345d7bc.

eBeaches

Description:

eBeaches is the electronic data transmission system that allows EPA to securely receive and display jurisdiction (state, Tribe, territory) beach water quality and swimming advisory data two hours after jurisdictions send the data. eBeaches supports the Beaches Environmental Assessment and Coastal Health (BEACH) Act grant program that enables jurisdictions (state, Tribe, territory) to fulfill the requirement to collect, store, and display beach public right-to-know pollution occurrence data. Jurisdictions should consider submitting spatial representations of the beaches reported in the Beach Notification (PRAWN) and monitoring stations in Beach Monitoring (WQX) submissions.

Status and Plans:

For both Beach Notification and Beach Monitoring the Version Status is "Supported" and the Data Exchange Status is "Flowing". There are no plans to modify the Beach Notification schema. The Beach Monitoring flow uses the WQX schema version 3.0.

Potential Activities Under This Opportunity:

Project Activity	Cost Range
Implement eBeaches data exchange	$40,000 - $80,000
Map systems to the approved national XML schemas: http://www.exchangenetwork.net/data-exchange/beach-notification/.	$10,000 - $30,000
Validate XML instance documents prior to submission via CDX (node or ENSC).	$10,000 - $20,000
Verify in WQX/WQP (formerly STORET) organization name (org_id) to sample station (station_id) to beach name (project _id aka beach_id and national project id (EPABEACH) relationship/links to ensure correct stations are linked to corresponding beach.	$20,000 - $40,000
Note: Applicants can propose costs which exceed the estimates above (if within their funding threshold); however, this should be detailed within the project output(s) budgeting rationale as required in section seven of the project narrative.	

More Information/Helpful Links:

- See the following Beach Program websites for Data-related information and program contact information: https://www.epa.gov/beach-tech/submitting-beach-data-epa.
- See general Beach Program information including BEACH Act Grants: https://www.epa.gov/beaches and https://www.epa.gov/beach-tech/beach-grants.
- Also see: http://www.exchangenetwork.net/communities-of-interest/water/.
- Read all support documentation at: https://www.epa.gov/beach-tech/submitting-data-epa.
- Participate in biweekly/monthly Beach conference calls: [contact Bill Kramer at kramer.bill@epa.gov to be added to distribution list].
- Check with other internal jurisdiction offices for existing VES access & Node capability before developing capability for each beach data flow.

Safe Drinking Water Information System (SDWIS) Program

Description:

The SDWIS Program provides systems (SDWIS State, the Compliance Monitoring Data Portal (CMDP), and Drinking Water State-Federal-Tribal Information Exchange System (DW-SFTIES)) designed to assist primacy agencies (states, Tribes, US territories with primacy over their drinking water programs; and EPA Regions) in managing their Public Water System Supervision (PWSS) programs under the Safe Drinking Water Act (SDWA).

- SDWIS State is the current system used by 54 of 65 drinking water primacy agencies. Primacy agencies use XML files (SDWA Schema v3.6) to submit drinking water data to EPA for quarterly reporting.
- CMDP is a centralized, CROMERR- compliant web-based application, for electronic reporting of water samples data, compliance, and non-compliance data from laboratories and water systems to primacy agencies.
- DW-SFTIES is a cloud-hosted program management and reporting system for primacy agencies; a sustainable long-term replacement for the SDWIS State suite of applications. Like SDWIS State, the objective of DW-SFTIES is to support primacy agency drinking water program implementation—taking advantage of new technologies and opportunities to do things better and more sustainably in the DW-SFTIES product than they currently are done in SDWIS State.

Status and Plans:

- SDWIS State's 3.7 update was released in August 2024 and is available to drinking water primacy agencies.
- CMDP has been operating since October 2016. As of December 2024, twenty-five (25) primacy agencies have adopted CMDP. DW-SFTIES will include a modernized CMDP, called the Electronic Samples Portal
- Development of DW-SFTIES commenced January 9, 2023, and is currently still under development as of October 2024 (most recently released version 0.13). The initial production release of DW-SFTIES is currently "to be determined". The EPA team is currently forecasting a November 2025 delivery, however, this estimate may change moving forward. To monitor DW-SFTIES development progress, please access the resources identified under "More Information/Helpful Links" and review the identified actions below that grant applicants should consider.

Grant applicants should consider:

- Participating in monthly All Things SDWIS calls (send an email to aderosa@asdwa.org if not already on the contact list)
- Joining the SDWIS User Community Discussion Forums managed by the Association of State Drinking Water Administrators (ASDWA): https://www.asdwa.org/data-management/

Potential Activities Under This Opportunity

Project Activity	Cost Range
Note: *The two activities in this row are open to individual Tribal applicants ONLY (excluding non-Tribal applicants and EN partnership applications):* Tribal Utilities: **Implementing data systems to manage water systems to enable electronic reporting of Tribal water system data to CMDP or SDWIS State (via Lab-to-State)** or similarly updating of existing data systems to enable electronic reporting. Tribal applicants without primacy status should confirm compliance system requirements with their respective EPA region prior to applying for this opportunity to ensure that the proposed solution can successfully flow information between the Tribal drinking water system	

and applicable Regional Tribal Direct Implementation (DI) drinking water compliance system(s). 1. Tribal Utility implementation of new data system for managing and reporting to EPA information on Tribal drinking water systems. 2. Tribal Utility improvement of existing data systems to facilitate drinking water system data sharing with EPA (or NNPWSSP in the case of Navajo Nation).	1. $20,000 - $65,000 2. $6,000 - $20,000
Note: *The two activities in this row are open to* *__individual__* *__Tribal__* *applicants ONLY (excluding non-Tribal applicants and EN partnership applications):* Tribal Utilities: **Improving data quality of existing systems that are used to facilitate drinking water system data sharing with EPA** (or NNPWSSP in the case of Navajo Nation) by reporting data to CMDP, SDWIS State, or DIME.	$30,000 - $65,000
Note: *This activity in this row is open to eligible EN Partnership applicants ONLY (see Section 4C) (two or more states, Tribes, or US territories with primacy over their drinking water programs, or an eligible combination thereof):* **Modernizing existing interfacing applications or developing replacements for existing interfacing applications** that can be used by/shared with other primacy agencies implemented as a shared service/application.	$65,000 - $500,000
Note: Applicants can propose costs which exceed the estimates above (if within their funding threshold); however, this should be detailed within the project output(s) budgeting rationale as required in section seven of the project narrative.	

Available EPA IT Contract(s):

In-kind funding may be available to complete one or more activities as listed within this EN project opportunity write-up. Applicants may request all or a portion of awarded grant funds to be added to an existing EPA IT contract if/when available, to be distributed to the successful applicant as in-kind funding. EPA's ability to meet applicant requests for in-kind services is dependent on availability, timing, and funding, and will be considered on a case-to-case basis. Applicants interested in learning more about this option should reach out via the contact information listed under 'More Information'.

Shared Services/Reusable Components Available:

- CMDP ReST APIs: https://usepa.servicenowservices.com/sdwisprogram
- Available APIs for DW-SFTIES can be found in the release notes; https://usepa.servicenowservices.com/sdwisprogram?id=kb_search&kb_knowledge_base=4251afe41b9705547b16ea04bc4bcbd2&spa=1&kb_category=571cfdf51baea1508e946311f54bcbd2

More Information/Helpful Links:

- Public Water System Supervision (PWSS) program overview: https://www.epa.gov/tribaldrinkingwater/tribal-public-water-system-supervision-program
- Current list of Regional PWSS Tribal DI Coordinators:
  - https://www.epa.gov/tribaldrinkingwater/regional-tribal-drinking-water-coordinators
- SDWIS Program documents including DW-SFTIES CONOPS and release notes, and transition resources:
  - DW-SFTIES CONOPS
  - DW-SFTIES Release Notes
  - DW-SFTIES Transition Resources
- For more information, potential applicants can reach out to Justin Wright: wright.justin@epa.gov.

Water Quality eXchange (WQX)

Description:
The Water Quality eXchange (WQX) defines the framework by which EPA accepts and compiles water quality monitoring data (physical, chemical, biological, habitat, metrics, and index). Grant recipients selected under this opportunity collect water quality monitoring data and submit it to EPA utilizing the WQX format and a node or node client. http://www.exchangenetwork.net/data-exchange/wqx/

All partner data submitted to EPA is made publicly available and can be queried using the Water Quality Portal (WQP), a cooperative service by EPA and USGS under the National Water Quality Monitoring Council. The Water Quality Portal provides standard REST services, allowing interoperable access to water quality monitoring data. These services provide data to the user in tab, comma separated, Excel and WQX formats. More information on the WQP and WQX can be found at: https://www.epa.gov/waterdata/water-quality-data-wqx.

Status and Plans:
The WQX team is currently enhancing a submission quality checks service for the WQX schema results and locations to promote data consistency and quality. These QAQC services are available for data submitters to provide additional submission processing reports aligning data consistent with guidance documents. WQX Web is traditionally a way to submit excel, text, or xml files manually. Now, WQX Web can also be used to automate data submission via REST API web services from a local database or application.

EPA continues to explore approaches for sharing continuous monitoring data. Demonstration projects and internal agency reviews of data sharing standards are underway. For more information on this effort, see example data for recommendations and best practices using the WQX Web templates found at: https://www.epa.gov/waterdata/water-quality-exchange-web-template-files

WQX Program Office Activities	
Milestone	**Target Completion Date**
Publicly accessible REST URL to retrieve QA/QC reports and submission documents for inbound WQX via transaction id.	September 2023
System readiness to support full WQX 3.0 schema via WQX Web Tool and WQP outbound services. Developing a new WQP web site re-design, domain value services, and data download reports.	July 2024
Performance Tuning of WQX Web in the Azure cloud for enhanced data submission, review reports, efficient access to web services, scalability, and increased computing efficiency.	December 2024
Develop WQX 3.0 outbound profiles to support full WQX 3.0 schema.	July 2025
QA/QC shared web services for utilization in outbound Water Quality Portal (WQP).	December 2025

Potential Activities Under This Opportunity:

Project Activity	Cost Range
WQX data submission	$40,000 - $80,000

Mapping state/Tribal/territorial data system to WQX Schema and/or collaborate on collecting monitoring data with formal EN partners (EN partnership grant).	
Water Quality Portal (WQP) application services • Integrating data from Water Quality Portal using outbound REST Services (attribute and/or spatial) for data integration and analysis. • This could include informal collaboration with EPA (not through a cooperative agreement) on the development of open- source tools for discovering data and performing water quality analyses (e.g., establish links to water impairment, water permit facilities, watershed resource planning).	$40,000 - $80,000
WQX automated data submission services Utilize recently developed inbound RESTful web services for WQX to publish data collected using a mobile application.	$40,000 - $80,000
Quality Assurance and Quality Check reports Development of shared services such as QA/QC checks & reports and assessment services to improve data consistency.	$40,000 - $80,000
Partner with other entities (not through a formal EN partnership award) to collect monitoring data (e.g., local governments, watershed groups), to assist them in putting the WQX data flow into production.	$40,000 - $80,000
Note: Applicants can propose costs which exceed the estimates above (if within their funding threshold); however, this should be detailed within the project output(s) budgeting rationale as required in section seven of the project narrative.	

Shared Services/Reusable Components Available:

- WQX exchange network data flow: https://www.epa.gov/waterdata/wqx-flow-configuration-30
- Water Quality Portal Web Services Guide: https://www.waterqualitydata.us/webservices_documentation/
- WQX Web RESTful web services: https://www.epa.gov/waterdata/wqx-web-application-programming-interface

More Information/Helpful Links:

- WQX program contact email: wqx@epa.gov
- WQX schema and documentation: http://www.exchangenetwork.net/data-exchange/wqx/ (WQX last released April 2020)
- About WQX and more information: https://www.epa.gov/waterdata/water-quality-data-wqx
- Water Quality Portal Homepage: https://www.waterqualitydata.us/
- WQX Web User Guide: https://www.epa.gov/waterdata/user-guide-version-30-water-quality-exchange-web

Assessment TMDL Tracking And Implementation System (ATTAINS)

(Integrated Reporting (303(d)/305(b))

Description:

The Assessment, Total Maximum Daily Load (TMDL) Tracking and Implementation System (ATTAINS) is an online system for accessing information about the conditions in the Nation's surface waters. ATTAINS transitioned Integrated Reporting (IR)—the integration of Clean Water Act (CWA) Sections 303(d) and 305(b)--to a paperless process as envisioned by EPA's E-Enterprise initiative. The data available in ATTAINS reside in a web-based application that states, territories, Tribes and EPA can use to track water quality assessment decisions, TMDLs, and priority areas, as well as report on performance measures. ATTAINS also includes the capability to publish IR data via web services, which can be used by other data systems.

The ATTAINS data exchange allows states/territories/Tribes to submit CWA Sections 106, 303(d)/ 305(b)/ Integrated Reporting (IR) water quality decision data as well as TMDL information through the Exchange Network (EN). The ATTAINS data flow allows these stakeholders to:

- Identify and describe Assessment Units (portions of waterbodies used for tracking water quality), including size and extent;
- Report water quality assessment information (including use support, causes of impairment, and probable sources of impairment);
- Provide and receive information about TMDLs and other restoration or protection plans;
- Provide references to water quality monitoring location data relevant to the water quality Assessments (submitted via the Water Quality Exchange [WQX]); and
- Identify activities that states/territories/Tribes are performing leading to water quality restoration.

States, territories, and Tribes can use either the Exchange Network ATTAINS data flow or the web-based ATTAINS data system (or some combination of the two). Organizations may begin as a web-based ATTAINS user and transition to an Exchange Network flow for future cycles as they build out capability and are seeking to gain efficiencies. Activities under this opportunity should focus on the automated exchange or analysis of ATTAINS-related data, which includes building capability in these areas, rather than on the use or adoption of the ATTAINS web-based interface.

Potential Activities Under This Opportunity:

Project Activity	Cost Range
Implement ATTAINS data flow for Assessment Units, Assessments or Actions. Stakeholders can flow data to ATTAINS for one or more ATTAINS modules, including Assessment Unit definitions, Assessment decisions or Actions (such as TMDLs).	$40,000 - $120,000
Build capability to retrieve data from ATTAINS outbound Exchange Network services. Stakeholders can use the Exchange Network Query and Solicit services to retrieve Assessment Units, Assessments or Actions from ATTAINS.	$40,000 - $80,000
Develop capability for integrating WQX and ATTAINS workflows and making use of monitoring data for automated water quality analyses. Identify, develop, and implement innovative, reusable water quality assessment services and screening tools (e.g., this could include implementing or enhancing Tools for Automated Data Analysis (TADA) or other workflows, web-based services or applications that compare monitoring data with standards or thresholds to automate an initial water quality assessment recommendation, which could then be reviewed and edited by the stakeholder organization before final decisions are made.).	$40,000 - $120,000

Project Activity	Cost Range
Build capability to consume outbound RESTful services from ATTAINS to incorporate data into state, Tribal or territorial websites or applications. ATTAINS publishes public data with outbound RESTful services, which can be consumed by other applications. Stakeholders can incorporate data from those outbound RESTful services, which do not require user logins, into customized websites or applications.	\$40,000 - \$100,000
Develop tools or services to integrate monitoring and nonpoint source data with water quality assessments. Identify, develop, and implement innovative services integrating monitoring and nonpoint source data with water quality assessments (e.g., web-based services accessing monitoring or nonpoint source data from another system and relate them to water quality assessments in a useful way).	\$40,000 - \$80,000
Develop capacity for initiating e-reporting of assessments into ATTAINS. Develop or improve procedures for performing assessments needed to begin e-reporting of assessments, including the development or adoption of automated assessment tools and standard operating procedures (e.g., establishing an Assessment Methodology, establishing an SOP for assessments, incorporating updated thresholds for water quality standards).	\$10,000 - \$80,000
Provide Technical Assistance and/or Training to ATTAINS participating organizations. Support other organizations to establish ATTAINS data flow when they are onboarding to ATTAINS or help reestablish ATTAINS data flow when they are experiencing staff turnover.	\$15,000 – \$50,000
Note: Applicants can propose costs which exceed the estimates above (if within their funding threshold); however, this should be detailed within the project output(s) budgeting rationale as required in section seven of the project narrative.	

Shared Services/Reusable Components Available:

- **[ATTAINS Exchange Network Services]:** The ATTAINS Flow Configuration Document (FCD) contains information about ATTAINS EN services that allow registered users to upload or download data for their organization through the EN, including draft data.
  Available at: https://www.exchangenetwork.net/data-exchange/assessment-tmdl-tracking-and-implementation-system/
- **[ATTAINS Public Web Services]:** ATTAINS publishes public data using JSON-formatted REST-based web services. Documentation is available on the ATTAINS website: (https://www.epa.gov/waterdata/attains)
- **Tools for Automated Data Analysis (TADA)]:** Stakeholders may leverage components of TADA and/or work with EPA to contribute code to meet your additional requirements. Code is available on GitHub: https://github.com/USEPA/EPATADA and https://github.com/USEPA/TADAShiny.

More Information/Helpful Links:

- **[Contact Information]:** General ATTAINS questions may be directed to attains@epa.gov.
- **[ATTAINS Website]:** Information about ATTAINS can be found on the ATTAINS website: https://www.epa.gov/waterdata/attains
- **[TADA Website]:** Information about the Tools for Automated Data Analysis project can be found on the TADA website: https://www.epa.gov/waterdata/TADA

Drinking Water State Revolving Fund and Clean Water State Revolving Fund

Description:

The Drinking Water State Revolving Fund (DWSRF) program and Clean Water State Revolving Fund (CWSRF) program are a federal-state partnership to provide communities a permanent, independent source of low-cost financing for a wide range of drinking water and wastewater infrastructure and other water quality projects. The State Revolving Fund (SRF) database will capture the range of activities that states pursue with their DWSRF and CWSRF funds. These funds are provided as assistance agreements to states to establish and capitalize (fund) infrastructure banks. The states primarily make loans to drinking water and wastewater systems from these state infrastructure banks. The new SRF system will capture project level data from each state's bank (what was the funding for, how much, etc.), as well as financial data about the flow of funds between the state bank and other entities, including but not limited to: disbursements of funds, repayment of funds, funds borrowed.

Most states already have state systems to track a subset of this data. Some of those states currently push data electronically to the present EPA system. States should be able streamline reporting to EPA by enabling a data bridge to maintain and expand the flow of data from those states. The new SRF system will use REST APIs and other opportunities to connect to existing state databases to import data. The new SRF system will also allow a user to upload an excel file and map data fields to batch upload to the New SRF system. The new SRF System will be developing an excel sheet model/template as a guide for states interested in that method of batch uploads. All imported data will include checks to ensure it meets Quality Assurance Requirements and it should allow users to edit or modify fields within the new SRF system after import. This data will be instrumental to reporting on SRF BIL grant progress.

Status and Plans:

The new SRF system was launched on 5/27/21.

Potential Activities Under This Opportunity:

Project Activity	Cost Range
Mapping state SRF system to New SRF system	$125,000 - $175,000
Mapping state data files to upload to New SRF templates	$75,000 – $100,000
Modifying state applications to interact with New SRF system using REST API calls	$100,000 - $120,000
Develop checks of the data being downloaded from New SRF system to the state applications to ensure it meets state system needs	$150,000 - $200,000
Note: Applicants can propose costs which exceed the estimates above (if within their funding threshold); however, this should be detailed within the project output(s) budgeting rationale as required in section seven of the project narrative.	

Available EPA In-Kind:

In-kind funding may be available to complete one or more activities as listed within this EN project opportunity write-up. Applicants may request all or a portion of awarded grant funds to be added to an existing EPA IT contract if/when available, to be distributed to the successful applicant as in-kind funding. EPA's ability to meet applicant requests for in-kind services is dependent on availability, timing, and funding, and will be considered on a case-to-case basis. Applicants interested in learning more about this option should reach out via the contact information listed under 'More Information'.

Shared Services/Reusable Components Available:

- EPA can furnish mappings of the new SRF database and templates to any grantee or SRF state program that requests it.
- New SRF system REST APIs for data access and uploading data available Winter 2024; when available, this will be accessible upon request.

Options for Continuation of Funding:

Following the completion of project activities as listed under this EN Project Opportunity, applicants may later seek funds to operate and maintain this service through the following funding options:

- DWSRF/CWSRF Grant Administrative Funds: SRF grants include a percentage available for administration. Equipment, indirect costs, and staff (personnel) are eligible expenses.

Note: The above list is not intended to be exhaustive; applicants are encouraged to search grants.gov for additional funding opportunities that can support the operation and maintenance of project deliverables.

More Information/Helpful Links:

- Drinking Water State Revolving Fund: https://www.epa.gov/dwsrf
- Clean Water State Revolving Fund: https://www.epa.gov/cwsrf
- Applicants with questions can reach out to: Howard Rubin at Rubin.HowardE@epa.gov

Appendix C
EN Project Opportunities Under EN Funding Area 3
Augment the Information Management Capacity of EN Partners

The Exchange Network encompasses a diverse set of partners with a wide array of IT and data management capabilities. Being able to take advantage of the full range of the EN services depends on a partner's ability to create and maintain network data flows, to enable the discovery and publication of their information, and to take advantage of services and APIs that enable organizations to obtain, analyze and share data. Some existing and potential EN partners have limited experience with managing data, facilitating electronic reporting, and sharing those via services. They also often do not have an operational knowledge of the EN or the relevance it may have to their environmental management programs. This hinders them from taking advantage of the many EN features useful to their environmental program planning and decision making in more cost-effective ways.

Opportunities in this appendix are designed to enable applicants to build the IT and data management capacity necessary to effectively manage their environmental programs and to identify the most valuable ways for their programs to participate in the EN.

Please note that applicants are encouraged to use existing data standards wherever possible; see: https://www.exchangenetwork.net/data-standards/ and https://www.epa.gov/data-standards.

The opportunities found within Appendix C are only available to U.S. Territories, federally recognized Indian Tribes and Alaska Native Villages, and inter-Tribal consortia of federally recognized Tribes.

The cost estimates that appear in this appendix's EN project opportunities do not include specific cost estimates per fundable activity. Applicants must provide cost rationale for each project output within the project narrative (see 'Overview of Project Budget' project narrative section in Appendix E).

Contact information for the EN project opportunities in Appendix C are included in Section 1E 'Agent Contact Information'. Please note that, while these SMEs can offer general guidance and address high-level questions, they are restricted with the level of information that can be shared during the pre-award stage due to EPA competition policies.

Interested applicants should apply for only one of the three Exchange Network (EN) project opportunities found within this appendix. However, these capacity building opportunities may be applied for in conjunction with opportunit(ies) listed in Appendices A and/or B.

Other resources for capacity building applicants include:

- An FAQ document for Tribal applicants is available on the EN website at: https://www.epa.gov/exchangenetwork/exchange-network-grant-program#Resources
- Prior capacity building assistance agreements can be identified in two areas on the EN Website: https://www.epa.gov/exchangenetwork/previous-exchange-network-grant-projects and https://www.epa.gov/exchangenetwork/searchable-it-component-and-project-registration-forms
- The Tribes and the Exchange Network Website provides information for Tribes on the EN and other innovative approaches for managing and sharing environmental data using modern technology tools and solutions: http://www.tribalexchangenetwork.org/

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Individual Capacity Building

Description:
U.S. territories, Tribes, and inter-Tribal consortia are eligible to apply for a capacity building assistance agreement of up to $400,000 to enhance the applicant's environmental program by increasing their ability to manage and share environmental data electronically across their organization, as well as for stakeholders across the Exchange Network and other Tribal citizens.

Applications must identify project goals and outputs which increase their organization's ability to share environmental information electronically, either within their own Tribe and/or territory, to other EN participants, and/or with EPA.

This opportunity is designed to provide applicants the flexibility to determine which project activities are key to building their organization's capacity for data collection, management, and reporting, as well as increased participation in the EN.

Status and Plans:
As of FY25, successful applicants utilizing contractor, individual consultant, or vendor services may, upon award, submit draft proposals (RFPs) to EPA for feedback, to ensure that relevant elements and technical specifications are included as needed to support the successful completion of the grant project.

Potential Activities Under This Opportunity:
For all activities, applicants must provide a detailed cost rationale explaining how costs were estimated and how they were deemed appropriate for the proposed project, as detailed in Appendix E's project narrative overview. **Please note that applicants are not limited to the potential project activities listed in the table below.** Proposed projects can also incorporate activities from other EN project opportunities.

Project Activity	Cost Range
Develop a strategic data management plan for collecting, managing, and assessing data and making the best use of available technology to support the business needs of the applicant's organization.	**Up To A Combined Total of $400,000**
Assessment of current systems and available tools/updates and comparing them against the business processes requirements for desired system updates/assessment tools.	
Preparing an Organization's Existing Systems and Tools for Participation in EPA National Program Data Flow(s) (see EN project opportunities in Appendix B).	
Planning and Implementation of Improved Database and Management Systems and Associated Tools.	
Develop website and user tool development to inform the public of critical environmental projects undertaken or issues monitored by the applicant organization.	
Develop and implement geospatial tools and technologies to improve monitoring, reporting, data visualization, analysis of environmental and public health problems and decision support (see the Open Data EN project opportunity in Appendix A).	
Increasing participation in the Exchange Network through participating in or convening associated trainings, webinars, and technical assistance activities for the benefit of your organization.	
Building reporting capacity for the applicant's organization through other activities.	

Options for Continuation of Funding:
Following the completion of project activities as listed under this EN Project Opportunity, applicants may later seek funds to operate and maintain this service through additional funding options. Depending on the scope and nature of the proposed project, the following funding options may be applicable:

- **Tribal Grants under Section 106 of the Clean Water Act:** https://www.epa.gov/water-pollution-control-section-106-grants/tribal-grants-under-section-106-clean-water-act#tribaleligible. Section 106 of the Clean Water Act (CWA) authorizes EPA to provide financial assistance to states and eligible interstate agencies to establish and administer programs for the prevention, reduction, and elimination of water pollution.
- **Tribal Grants under Section 319 of the Clean Water Act:** https://www.epa.gov/nps/tribal-nonpoint-source-program. Under CWA §319, EPA provides grants and technical assistance to support Tribal environmental programs in assessing and managing nonpoint source (NPS) pollution problems and threats.
- **Air Grants and Funding:** https://www.epa.gov/grants/air-grants-and-funding. EPA's Office of Air and Radiation (OAR) announces grant and rebate opportunities for projects and programs relating to air quality, transportation, climate change, indoor air and other related topics.

Note: The above list is not intended to be exhaustive; applicants are encouraged to search grants.gov for additional funding opportunities that can support the operation and maintenance of project deliverables.

More Information/Helpful Links:

- Tribal Environmental Information Resources: https://www.epa.gov/tribal/tribal-environmental-information-resources
- Tribal Exchange Network Group website: https://www.tribalexchangenetwork.org/
- Program Point of Contact: Beth Jackson: jackson.elizabeth@epa.gov

Individual Capacity Building with Mentorship*

Description:

Individual applicants who have never been awarded an Exchange Network (EN) assistance agreement may identify a mentor to help them with their capacity building project. This EN project opportunity allows up to $15,000 for mentorship support costs on top of the $400,000 threshold for individual capacity building assistance agreements (for a possible total of up to $415,000).

The identified mentor should be a Tribe, state, or territory that has successfully completed an EN assistance agreement and that currently reports or publishes data for one or more environmental programs using an EN node, Virtual Exchange Services (VES), or application program interfaces (APIs).

An applicant applying under this opportunity should include a commitment letter from the mentoring organization, as well as a summary of other relevant details, as part of Additional Attachment D (see Appendix E for full details). Applicants must also identify their mentor within the project narrative (see project narrative section 'Identifying Key Personnel and Associated Roles, Responsibilities, and Qualifications') and outline their anticipated role, key contact name(s), and the affiliated budget for the mentoring activity. Mentors will also be required to report out during semi-annual reporting periods.

Please reference the 'Individual Capacity Building' write-up on the prior page (page 51**),** for a more detailed project opportunity description, relevant status and plans, potential activities, options for continuation of funding, and helpful links.

Potential Applicant Activities Under This Opportunity:

Applications must, for all project activities, provide a detailed cost rationale explaining how costs were estimated and how they were deemed appropriate for the proposed project, as detailed in Appendix E's project narrative overview. **Please note that applicants are not limited to the potential project activities listed in the table below.** Proposed projects can also incorporate activities from other EN project opportunities.

Project Activities – Individual Applicants	Cost Range
Please see potential project activities in the table under 'Individual Capacity Building' on page 51.	Up To a Combined Total of $400,000 (excluding $15,000 for mentorship activities)

Applications utilizing a mentor must provide a detailed summary of proposed mentor costs, issued as a subaward, within Attachment D: Formal Project Mentors – Roles and Responsibilities, Distribution of Funds, and Overview of Subaward Budget (see page 76).

Potential Support Activities for Mentoring Organization	Cost Range
Demonstrating the Mentor's Implemented System	**Up To a Combined Total of $15,000**
Fine-Tuning/Providing Feedback on the Project Workplan This activity must follow assistance agreement award, as providing this feedback prior to application submission is not allowable in a competitive grant program.	
Providing Technical Assistance to Set Up Data Exchange(s)	
Providing Training on Data Entry, Data Analysis, and Report Generation	
Giving Ongoing Support after Installation/Implementation	

This may include addressing questions on data and the Exchange Network and/or providing guidance on submitting reports and completing close-out activities.	
Providing Guidance on EN and TXG Participation Offering guidance on how to actively participate in the Exchange Network, as well as Tribal Exchange Network Group (TXG) trainings and assistance.	
NOTE: Mentoring activities may take place by phone, over web conferencing, or in person, as needed.	

***An applicant may request funding (up to $15,000) for the following mentorship activities:**

- Personnel costs to compensate mentoring organization for staff support in carrying out mentorship activities;
- Travel costs for mentoring organization employees authorized by 2 CFR 200.475 to include, but not limited to, lodging, per diem and incidentals, rental car, mileage, airfare, etc.

The 'up to $15,000' for mentoring is only available for subawards to the mentoring Tribes (including inter-Tribal consortia meeting the requirements of 40 CFR 35.504), states or territories and the total amount of subaward funding must be placed in the "Other" budget category in the Standard Form 424 budget table. The project budget narrative for the application should provide detailed information on anticipated subrecipient costs (e.g., amounts for personnel compensation and travel) for mentoring by budget category. Additionally, mentoring subrecipients should provide the successful applicants with assurances that controls are in place to ensure that the costs charged to subawards are not borne by other funding sources including grants from EPA and other Federal agencies.

Subawards must comply with Federal requirements specified in 2 CFR 200.331 and 2 CFR 200.332 as well as EPA's Subaward Policy. The EPA Subaward Policy includes an optional template within the policy's Appendix D for agreements with subrecipients that successful applicants may, but are not required to, use. Additional information and resources on subawards are available in the policy's Section II-A. For information on capturing a subaward correctly within a proposed project budget, see SN Appendix D.

NOTE: To prevent unfair competitive advantages, no funds awarded under an Exchange Network (EN) assistance agreement may go towards reimbursing a mentor for assistance with writing an EN assistance agreement application.

- Additionally, successful applicants may not use the mentoring funding to hire consultants or other contractors.

More Information/Helpful Links:
For assistance in finding an appropriate mentor, applicants may consider the following resources:

- For suggestions on potential state or territorial mentors, contact Kurt Rakouskas, Program Manager, Environmental Council of the States (ECOS), at krakouskas@ecos.org.
- For suggestions on potential Tribal mentors, contact Lydia Scheer, Project Manager, Institute for Tribal Environmental Professionals (ITEP), at txg@tribalexchangenetwork.org OR visit the Tribal Exchange Network Group website: https://www.tribalexchangenetwork.org/.
- Applicants may also find the following websites helpful for identifying potential mentors: E-Enterprise Community Inventory Platform (EECIP); Previous Projects Page of the EN Website; or Searchable IT Component and Project Registration Forms .
- Tribal applicants who have received prior EN grants and are ineligible to apply for this mentorship opportunity can visit the Tribal Exchange Network Group (TXG) website supported by the Institute for Tribal Environmental Professionals (ITEP) for additional free customized technical assistance opportunities.

Collaborative Capacity Building

Description:

Please reference the 'Individual Capacity Building' write-up (page 51), for a project opportunity description, relevant status and plans, options for continuation of funding, and helpful links. Unlike the individual capacity building opportunity, however, territories, Tribes, and inter-Tribal consortia applying under this collaborative EN project opportunity can apply for up to $600,000 as part of an EN partnership assistance agreement, which includes one or more eligible partners. Eligibility requirements for partnership assistance agreements can be found in Section 4C.

Potential Activities Under This Opportunity:

For all activities, applicants must provide a detailed cost rationale explaining how costs were estimated and how they were deemed appropriate for the proposed project, as detailed in Appendix E's project narrative overview. **Please note that applicants are not limited to the potential project activities listed in the table below.** Proposed projects can also incorporate activities from other EN project opportunities.

Project Activity	Cost Range
Develop a strategic data management plan for collecting, managing, and assessing data and making the best use of available technology to support the business needs of the applicant's organization.	**Up To a Combined Total of $600,000**
Assessment of current systems and available tools/updates and comparing them against the business processes requirements for desired system updates/assessment tools.	
Preparing an Organization's Existing Systems and Tools for Participation in EPA National Program Data Flow(s) (see EN project opportunities in Appendix B).	
Planning and Implementation of Improved Database and Management Systems and Associated Tools.	
Develop website and user tool development to inform the public of critical environmental projects undertaken or issues monitored by the applicant organization.	
Develop and implement geospatial tools and technologies to improve monitoring, reporting, data visualization, analysis of environmental and public health, problems and decision support (see the Open Data project opportunity in Appendix A).	
Increasing participation in the Exchange Network (EN) through associated trainings, webinars, and technical assistance activities.	
Building reporting capacity for lead applicant and partners through other activities.	

Options for Continuation of Funding:

- Please see this section under 'Individual Capacity Building' write-up (page 51).

More Information/Helpful Links:

- Please see this section under 'Individual Capacity Building' write-up (page 51).

Appendix D: Reusability, EEDS, and Budget Guidance and Resources

Identifying Items for Reuse - Exchange Network Partner Products

The Exchange Network Community strives to improve the efficiency and effectiveness of environmental management by collectively learning about successful business processes, data management and technology approaches as utilized by past and current EN grant recipients. Applicants must research and consider available technologies and IT components prior to submitting a project proposal. As outlined in Section 4D and reflected in application evaluation criteria (see Section 6B), applicants explicitly identify which EN data and technology management resources as developed by prior EN grant recipients will be reused or repurposed in their proposed project within the 'Commitment to Reuse' section of their project narrative (see page 66).

If no items are deemed appropriate for reuse, the applicant's project narrative should explicitly state this and provide a detailed justification explaining why available technologies/components will not be used.

Applicants may use several tools on the Exchange Network website (www.epa.gov/exchangenetwork) to discover opportunities to reuse or build on the work of prior Exchange Network grant recipients:

Searchable IT Component and Project Registration Forms

This web area, created in FY23, provides a table of prior EN assistance agreements which met the EN term and condition to complete an 'IT Component and Project Registration Form' at the time of grant close-out (see Section 4D). These forms help to ensure that products and services continue to be available for use and/or collaboration in future EN projects. To reflect an understanding of this registration requirement, applicants must commit to register any newly developed resources (required since 2011) and must also commit to register the reuse of existing resources (required since 2018). Applicants should acknowledge their understanding of this requirement by including two explicit commitment statements within the 'Commitment to Reuse' section of their project narrative.

Applicants are encouraged to view and explore previously completed IT Component and Project Registration Forms for project ideas and to identify IT components which can be reused in their proposed project. To view these forms:

- Visit the EN website at: https://www.epa.gov/exchangenetwork/searchable-it-component-and-project-registration-forms.
- Use the filters available on the page to search for projects that fit your interest area(s).
- View your results in the page's populated table, including the grantee organization name, grant number, award year, award amount, and a short project description.
- Click the hyperlinked grant number in the project table to view available IT Component and Project Registration Form PDFs that meet your search parameters.

Other Resources:

- Applicants can view all previously awarded Exchange Network assistance agreements, organized by fiscal year, in the PDF documents available through this link: https://www.epa.gov/exchangenetwork/previous-exchange-network-grant-projects.
- Applicants may also find EECIP a helpful resource for identifying items available for reuse.

Alignment with the E-Enterprise Digital Strategy (EEDS)

The EN Grant Program awards points through its evaluation criteria to projects that align with the three principles of the E-Enterprise Digital Strategy (EEDS) (see criterion 3F in Section 6B). The EEDS is a shared vision to unlock the power of digital information, better coordinate IT systems and services, and deliver more responsive environmental protection. Applicants should provide specific information in the 'Project Alignment with the E-Enterprise Digital Strategy (EEDS)' section of their project narrative that addresses how their proposed project reflects the three principles of EEDS.

EEDS Principle 1 - Build with an Information-Centric Approach: Environmental protection depends on access to quality information. The EEDS calls on state and Tribal environmental agencies to invest in their data as a mission-critical asset that is accurate, available, and secure. Projects with an information-centric approach strive to make data FAIR: Findable, Accessible, Interoperable, and Reusable. Data that are FAIR can be more easily integrated across agencies and programs and can be adapted to meet a variety of business needs. Information-centric projects treat data as a discrete product that can be accessed and reused in different contexts and for different purposes.

Information-centric projects should embrace **an API-first approach** whenever possible. APIs or Application Programming Interfaces are powerful connectors that make data available in machine-readable formats. When data are made openly and securely available through APIs, they can be tagged, shared, secured, mashed up and presented to data consumers in an unlimited number of ways. Well-designed APIs can deliver the information needed to support a range of agency business needs including programmatic workflows, management and policy decisions, and public data access.

An **API-first approach** seeks to follow these industry best-practices: (1) the API is the first user interface of an application; (2) the API comes first, followed by implementation; and (3) the API is described in usable documentation, enhancing searchability and functionality.

The emphasis on an API-first approach, as reflected increasingly throughout the global technical community, is a development ethos that moves away from time-intensive, 'code first' development work to a more streamlined and integrated approach. Leveraging an API-first strategy, when coupled with a low-code/no-code development platform, minimizes the likelihood of slow development cycles, removes the need to recreate existing software, and enables developers to focus on innovation and improved core functionalities for users. This API-first method helps decouple the internal dependencies of a given workflow while minimizing the underlying complexities of connecting data/services to external parties. Organizations who adopt this approach are likely to experience faster project implementation, more adaptable products, and an overall reduction of organizational costs and labor burdens.

Example activities (1st EEDS Principle & API-First Approach): This principle broadly emphasizes the importance of data access and availability, and there are various ways proposed EN projects can demonstrate alignment with this component of the strategy. As an example, projects that implement elements of the FAIR principle are considered information-centric. Specific examples of projects and project activities that reflect the FAIR principle include:

- Findable: A project that connects data across legacy and cloud native systems via webservices and makes the data more discoverable. Another example is a project to develop a data catalog including metadata standards that enable users to find the right data sets for conducting environmental analyses.
- Accessible: A project that uses REST API enabled systems connected via webservices, providing REST endpoints to improve data accessibility. The data catalog project referenced above also can provide a common point of access for navigating to important data sets.

- Interoperable: A project that leverages APIs to enable or expand data sharing or exchanges across internal or external systems. Similarly, a project to adopt and implement data standards across multiple Tribes or state agencies will improve their ability to more seamlessly share and exchange data. Interoperable data also uses common terminology or references common ontologies that enables data to be combined with minimal rework.
- Reusable: A project which adopts an existing API (e.g., a federal or industry API) and adapts it to meet organizational business needs, or a project which develops a new API to provide access to environmental data across multiple programs. Data that are reusable are documented with sufficient metadata such that other users of that data are aware of the relevant quality of that data.

EEDS Principle 2 - Adopt Shared Platforms: Agencies that share platforms and adopt a "build once, use many times approach" can reduce costs, accelerate innovation, eliminate wasteful duplication, and more easily share information. Taking a shared platform approach may include using common standards and practices, implementing collaborative technology solutions, reusing existing services and contracts, building for multiple use cases, participating in open-source communities, and leveraging public crowd- sourcing. Cloud-based platforms, in particular, create transformative opportunities to share data more seamlessly, collaborate on interactive modeling initiatives, and match computing resources with workloads.

Example activities (2nd EEDS Principle):

- A state or Tribe proposes to modify an existing application to accept data from a different environmental media (e.g., expanding an air data collection and reporting application to collect and report water quality data).
- An applicant proposes to expand an application's functionality to enable field inspectors to access and utilize data from a system that was originality developed to store permit data.
- A state environmental agency proposes to develop a new application by leveraging the state's centrally provided cloud-based development platform.

EEDS Principle 3 - Adopt Customer-Centric Approaches: Customer voices should always drive the design of technology projects and process streamlining activities. Projects that use a customer-centric approach take the time at the outset to fully understand and document the customers' business needs. Customer-centric projects make content, data, and services more broadly available, accurate, accessible, and usable.

Example activities (3rd EEDS Principle):

- An applicant proposes to develop a data catalog and repository to make data more accessible to multiple Tribes for conducting water quality analyses. The application describes an agreement reached among the Tribes to establish a Stakeholder Review and Product Acceptance Team. This Team is tasked with reviewing and approving the catalog and repository's conceptual and final designs as well as its functionality and usability.
- A state or Tribe proposes a project to develop a new environmental application using an Agile Development Methodology. Agile Development emphasizes active customer involvement in short, focused development sprints designed to create a more cohesive, quality application.

How to Correctly Calculate and Capture a Project Budget Across Attachments

Applicants are required to detail their proposed project budgets across multiple mandatory application attachments. It is critical that this information is appropriately detailed, correctly calculated, and consistent across all forms. This document provides an overview of where and how budget information should be captured, including specific guidance to help applicants correctly calculate and capture costs across direct and indirect budget categories. **All applicants are highly encouraged to read this guidance carefully.**

WHERE budget information should be captured in your application package:

- Project Narrative Attachment Form: Section Two and Section Seven
- Budget Narrative Attachment Form
- Application for Federal Assistance - Standard Form (SF) 424
- Budget Information for Non-Construction Programs - Standard Form (SF) 424A
- (if applicable) Formal Project Partner(s)
- (if applicable) Formal Project Mentor

WHAT: Applicants may propose EN project funding for costs associated with personnel salaries and fringe benefits, Intergovernmental Personnel Act Agreements (IPAs) travel, travel related to EN activities, equipment, supplies, contractual costs including in-kind services provided by EPA, and indirect costs. Applicants may propose EN project funding for development, modernization, implementation, and enhancement activities. All proposed project costs must be necessary and reasonable and in accordance with Federal guidelines. Determinations of allowable costs will be made in accordance with 2 CFR 200 Subpart E - Cost Principles found in the Office of Management and Budget's Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards. Cost restrictions are listed in Section 2A(1).

- **Budget information to include in the Project Narrative Attachment Form:**
    - Section Two: Provide the cost for each goal and each output.
    - Section Seven: Provide details on the following:
        - Provide, for each project output, a two-part cost rationale which includes:
            - How costs were estimated; and
            - Why costs are necessary for the success of the proposed project;
        - In-kind funds (if applicable);
        - Subawards to partnering or mentoring organizations (if applicable);
        - Contractor/consultant/vendor costs (if applicable), with the procurement method and a rationale for using sole-source/non-competitive procurement (if applicable);
        - Indirect costs (if applicable), with the current IDC rate and expiration date;
        - Total travel costs (if applicable), with each travel destination, purpose, number of travelers, and cost per trip.

- **Budget information to include in the Budget Narrative Attachment Form:** Applicants should itemize and detail the following project costs, as applicable to the proposed project:
    - Personnel Costs: List cost per staff position and total (sum) personnel costs over the 3-year period of performance; also include the staff position, staff name (if known), annual salary, and percentage of staff time devoted to the project.
    - Fringe Costs: List cost per staff position and total (sum) fringe costs over the 3-year period of performance; also include the staff position, staff name (if known), 3-year personnel costs as calculated in the personnel budget category, and the applicable fringe benefit rate.

- Travel Costs: List the cost per trip and total (sum) travel costs; for each trip, also include trip item (e.g., 'airfare', 'mileage', 'hotel', 'per diem', etc.), estimated cost per trip item, trip duration, number of travelers, trip destination, and purpose of travel.
- Equipment Costs: List the cost per equipment item and total (sum) equipment costs; also include the item name/description, item quantity, and price per item.
- Supply Costs: List the cost per supply item and total (sum) supply costs; also include the supply category (e.g., 'laboratory supplies' or 'office supplies'), item name/description, item quantity, and price per item. Please be sure to itemize supply items; lump funds (e.g., $300 for 'office supplies') will not be funded.
- Contractual Costs: List the cost per contract and total (sum) contractor costs; also include the contract type (individual consultant, contracting firm, or vendor firm), a brief contract description, duration (number of hours), hourly rate, contract purpose summary, and procurement method (e.g., 'sealed bid'). Provide a detailed justification for non-competitive/sole-source procurement, if applicable, and a brief statement of how contractors will be vetted to ensure they are qualified for the proposed work.
- Other Costs: List the cost per 'other cost' item and total (sum) 'other' costs; also include the item category (e.g., 'subaward', 'participant support cost', etc.); item name/description, item quantity, and price per item.
- Indirect Cost: List your organization's current indirect cost rate, base amount, and total (calculated) indirect cost amount; also include the effective period and description of base from your organization's Negotiated Indirect Cost Rate Agreement.

- **Information to include in the Application for Federal Assistance - Standard Form 424 (SF-424):**
  - Section 18: Estimated Funding: Provide the cost per budget cost category.

- **Information to include in the Budget Information for Non-Construction Programs - Standard Form 424A (SF-424A):**
  - Section A, Part 1: Provide total project cost in Column E and Column G.
  - Section A, Part 5: Provide total project cost in Column E and Column G.
  - Section B, Part 6, A-K: Provide cost per budget cost category in columns 1 & 5.
  - Section D*, Lines 13 & 15: Provide total annual cost for project year one and project costs per quarter (in that first year), as align with the project workplan.
  - Section E*, Line 16 & 20: Provide a breakdown of project costs over the 3-year period of performance (using columns b, c, and d), as align with the project workplan.
    - As a cost match is not applicable under the EN grant program, do not include any non-federal funds.

- (If applicable) **Formal Project Partner(s) Attachment(s):**
  - Within a Word document or similar, include the following two subjects:
    - The distribution of funds between the lead applicant verses funds for partnering entit(ies); and
    - An overview of subaward budget(s) for each partnering entity receiving grant funds, by cost category.

- (If applicable) **Formal Project Mentor Attachment:**
  - Within a Word document or similar, include the following two subjects:
    - The distribution of funds between the lead applicant verses mentor; and

- An overview of the subaward budget (up to $15,000) for the mentoring entity, by cost category.

HOW to correctly capture and calculate budget costs across direct and indirect cost categories:

- NOTE: Use the exact formulas as described below to calculate your costs per budget category.
- NOTE: Do not include penny amounts; round up or down to the nearest whole number for each step in the formulas below. Likewise, round unit costs or hourly rates to the nearest whole number.
    - For example, in the first row under 'personnel costs' below, the annual salary ($78,123) multiplied the percentage of time dedicated to the project (10%) is $7,812.30. Round this down to $7,812 before the next step (multiplying by 3 for the period of performance).

How to Calculate Personnel Costs: For each position, first multiply the annual salary for that position by the percent of their time dedicated to the project to get an annual cost. Then, multiply this product by 3 (the EN grant period of performance). Sum the personnel cost for each staff position to find the total personnel cost.

Staff Position (Project Role)	Staff Name (If Known)	Annual Salary	% of Time	Annual Cost	Period of Performance (Years)	3- Year Personnel Cost
Project Manager	Neal XXX	$78,123	10%	$7,812	3	$23,436
IT Specialist	Diana XXX	$64,322	15%	$9,648	3	$28,944
Environmental Specialist	Karen XXX	$53,992	15 %	$8,099	3	$24,297
Environmental Specialist	Carlos XXX	$49,982	10%	$4,998	3	$14,994
Total Personnel Costs						$91,671

How to Calculate Fringe Benefits: For each position, multiple the 3-year personnel cost calculated in the prior category by the fringe benefit rate. Sum the fringe cost for each staff position to find the total fringe cost.

Staff Position	Staff Name	3-Year Personnel Cost	Fringe Benefit Rate	3-Year Fringe Cost
Project Manager	Neal XXX	$23,436	22%	$5,156
IT Specialist	Diana XXX	$28,944	12%	$3,473
Env. Specialist	Karen XXX	$24,297	25%	$6,074
Env. Specialist	Carlos XXX	$14,994	17%	$2,549
Total Fringe Costs				$17,252

- *Note:* These costs are allowances and services that you provide to your employees as compensation in addition to regular salaries and wages; examples include cost of leave, employee insurance, pensions and unemployment, and holiday benefits.
- *Note*: Only include fringe benefits for the percentage of time devoted to the project.
- *Note:* EPA will compare listed fringe benefit rates against similarly situated recipients to reasonable rates. The Bureau of Labor Statistics website publishes average rates that can be used as a reference.

How to Calculate Travel Costs: For each trip, multiply the estimated cost of each trip item by the duration and number of travelers. Sum these costs to find the total cost per trip. Sum the total costs per trip to find the total travel cost.

Trip	Trip Item	Estimated Cost	Duration	# of Travelers	Travel Cost
1	Airfare	$550	N/A	2	$1,100
	Per Diem	$22 meals (x3 daily) + $124 lodging = $190	3 Days	2	$1,140
	Rental Car	$60	4 Days	2	$480
	Mileage	80 miles x $0.50 per mile = $40	4 Days	2	$320
	Hotel	$120	4 Nights	2	$960
Trip Destination		San Francisco, California (EPA R9)			
Travel Purpose		Participation in Annual Regional Exchange Network Meeting			
Trip One Cost		$4,000			
Total Travel Costs		$4,000			

- *Note:* EPA recognizes that travel destinations may not be known at the time of application submittal; applicants should compose their travel to the best of their ability based on travel estimates to likely or comparable past destinations.

How to Calculate Equipment Costs: For each equipment item, multiple the quantity by the price per unit to find the total cost per equipment item. Then, sum these costs to find the total equipment cost.

Item Name/Description	Quantity	Price Per Unit	Equipment Cost
Pix4Dmapper	1	$12,050	$12,050
SLEIS Software Upgrade and License	1	$11,135	$11,135
Total Equipment Costs			$23,185

How to Calculate Supply Costs: For each supply item, multiple the quantity by the price per unit to find the total cost per supply item. Then, sum these costs to find the total supply cost.

Supply Category	Item Name/Description	Quantity	Price Per Unit	Supply Cost
Monitoring Supplies	Pressure Transducer	2	$723	$1,446
Computing Device	Laptop Computer	8	$1400	$11,200
Total Supply Costs				$12,646

- *Note:* Supply items cost less than $10,000 (per individual item); items costing $10,000 and above should be categorized as 'equipment'.

How to Calculate Contractual Costs: For each contractor/consultant, multiple the estimated hours by the estimated hourly rate to find the total cost per contract. Then, sum these costs to find the total contractual cost.

Type	Brief Description	Hours	Hourly Rate	Contract Purpose	Procurement Method	Contract. Cost
Contracting Firm	IT System Contractor	110	$107	Contractor will provide system access and support to new Tribal users.	Request for Proposals (RFPs)	$11,770
Individual Consultant	Tech Consultant	50	$75	IT solutions consultant to support project planning under goal 2.	Sealed Bid	$3,750
Non-Competitive Procurement Rationale			N/A – non-competitive/sole-source procurement is not being utilized by either contract.			
Method of Vetting to Ensure the Candidate is Qualified:			Review proposals to ensure at least 2 instances over the past 5 years of successfully implementing a new IT system.			
Total Contractual Costs						$15,520

- *Note*: The contract cost should exactly equal the duration in hours multiplied by the hourly rate.
- *Note:* 'Type' categories include 'individual consultant', 'contracting firm', and 'vendor firm'.
- *Note:* For individual consultants, the hourly rate may not exceed $93.53 per hour; this consultant hourly wage cap applies to "consultation services of designated individuals with specialized skills who are paid at a daily or hourly rate". That is, an individual paid directly by the grantee, rather than through a contractual body or vendor.
- *Note:* Non-competitive procurement is only allowable under certain conditions, see Sections 3D and 4B for more information; a detailed rationale must be provided for this method, which is subject to EPA approval.
- *Note:* Training costs not related to staff travel should be categorized as 'contractual'; procurement method and method of vetting can be marked as 'N/A' for these costs.

How to Calculate Other Costs: For each item, multiple the quantity by the price per unit to find the total cost per other item. Sum these costs to find the total other cost.

Category	Name/Description	Quantity	Price Per Unit	Est. Cost
Light Food and Beverage	Coffee (Gallon)	6	$16	$96
Participant Support Cost	Community Member Training Fees	10	$250	$2,500
Subaward	Subaward to (EN Partner Org.)	1	$9,000	$9,000
Total Other Costs				$11,596

- *Note:* Under 2 CFR 200.432, the costs of meals and light refreshments for conferences are allowable if the work continues during the meal, unless expressly restricted. See additional restrictions on the allowability of the costs for meals and light refreshments at: EPA's General Terms and Conditions.
- *Note:* Funds for eligible partnering and mentoring organizations should be distributed as a subaward under the cost category of 'other'.
- *Note*: This cost category includes only those types of direct costs that do not fit in any of the other specific budget categories.

How to Calculate Indirect Costs: Identify your organization's approved, current indirect cost rate and calculate the base amount from the allowable costs as outlined in the base description of your organization's Negotiated Indirect Cost Rate Agreement. Multiply the indirect cost rate by the calculated base amount to find your total indirect costs.

Effective Period	IDC Rate	Description of Base	Base Amount	Total
10/01/24 – 09/30/25	11.6%	Total direct costs excluding subawards.	$147,816	$17,147
Total Indirect Costs				$17,147

- *Note:* These are costs incurred to facilitate the general operations of your organization. They include, but are not limited to, space costs, utilities, accounting services, and services associated with human resources that are included in an applicant's indirect cost rate.
- *Note:* Applicants without a current indirect cost rate agreement may elect to charge indirect costs at a 15% de minimus rate of modified total direct costs (MTDC) (see Appendix E: Negotiated Indirect Cost Rate).
- *Note:* Tribal applicants may also charge indirect costs using their draft rate as submitted to the Department of Interior (DOI); this draft agreement must be submitted with the application package.
- *Note:* An applicant can elect to charge less indirect costs than is allowable per their IDC rate.

Indirect Cost Example:

In this example, the applicant's rate, according to their Negotiated Indirect Cost Rate (IDC) agreement, is 19.6% and expires on 9/30/2025, making it valid through the period of performance start date:

Type	From	To	Rate (%) Location	Applicable to
FIXED	10/1/2024	09/30/2025	19.60	All Programs (On or Off Site)

The base, as written in the applicant's IDC rate agreement, states the following:

BASE: Total direct costs excluding capital expenditures (buildings, individual items of equipment, and alterations and renovations), subawards, and pass-through.

The applicant's direct cost budget is as follows:

Cost Category	Amount
Personnel	$15,072
Fringe Benefits	$6,782
Travel	$4,500
Equipment	$118,035
Supplies	-
Contractual	-
Other	$20,804 (as a subaward to their partnering organization)
Total Direct Cost:	$165,193

- The base amount is then calculated as total direct cost MINUS unallowable costs (per the base): $165,193 (total direct costs) – $20,804 (subaward cost) - $118,035 (equipment) = $26,354.
- To calculate the allowable indirect cost, the applicant then multiples the base amount by their rate: 26354 (base amount) x 0.196 (rate) = $5,165.384.
- The applicant rounds this to the nearest whole dollar, for a total indirect cost amount of: $5,165.
- The total budget for this project (direct and indirect costs) is: $170,358.

Additional Budget Resources:

- Optional templates for the cover letter, project narrative, and budget narrative attachment form are available on the EN website here: Exchange Network Grant Program | US EPA.
- An optional budget calculation tool is available on the EN website here: Exchange Network Grant Program | US EPA.

Appendix E: Detailed Instructions for Preparing and Submitting Applications

Applicants for the FY25 Exchange Network Grant program must submit an application package to EPA by **11:59 PM Eastern on Wednesday, April 30, 2025.** Except as noted in Section 5, applicants must apply electronically through Grants.gov under this funding opportunity based on the Grants.gov instructions in this announcement.

Please allow for enough time to successfully submit your application and allow for unexpected errors that electronically. Please note that successful submission of your application through Grants.gov does not necessarily mean your application is eligible for award. Any application submitted after the application deadline time and date deadline will be deemed ineligible and not be considered.

The following forms and documents are required under this announcement (fillable forms can be obtained from https://www.epa.gov/grants/epa-grantee-forms.) All packages must contain a cover letter, project narrative, budget narrative, and the applicable forms and attachments listed below in the 'overview of application materials.' Please ensure all documents are final and unlocked prior to submittal through Grants.gov.

Overview of Mandatory Application Materials:

(1) Cover Letter……………(see optional template here) (submit with 'Other Attachments Form' from Grants.gov)

(2) Project Narrative Attachment Form……………………………………………………………(see optional template here)

(3) Budget Narrative Attachment Form……………………………………………………………(see optional template here)

(4) Application for Federal Assistance……………………………………………………………(Standard Form (SF-424)

(5) Budget Information for Non-Construction Programs……………………………………………(SF-424A)

(6) Key Contacts Form……………………………………………………………………………(EPA Form 5700-54)

(7) Pre-award Compliance Review Report……………………………………………………(EPA Form 4700-4)

Additional Attachments (Mandatory if Applicable to the Applicant/Proposed Project):

Note: Use 'Other Attachment Form' to submit applicable attachments in this category.

(A) Negotiated Indirect Cost Rate Agreement

(B) Additional Information for Inter-Tribal Consortia

(C) Formal Project Partner(s)(see Section 4C):

- Support Letter(s)
- Roles & Responsibilities
- Distribution of Funds & Itemized Overview of Subaward Budget (by cost category)

(D) Formal Project Mentor (see Appendix C):

- Support Letter
- Roles & Responsibilities
- Distribution of Funds & Itemized Overview of Subaward Budget (by cost category)

(E) List of Prior Exchange Network Assistance Agreements

(F) Documentation Certifying Applicant Status as an Instrumentality of the State or Tribe

Note: Successful applicants requesting over $100,000 are required to submit the 'EPA Lobbying Form 6600-06' to ENGrantProgram@epa.gov upon notification of award selection. Applicants do not need to submit this form with their initial application.

Key contacts are requested to check their email inboxes frequently in the months of April – September, as EPA may need to contact you about this form and/or other aspects of your submitted application.

Additional guidance tools have been posted to the Exchange Network website at www.epa.gov/exchangenetwork/exchange-network-grant-program#Resources, including:

- An optional, fillable Cover Letter Template
- An optional, fillable Project Narrative Template
- An optional, fillable Budget Narrative Attachment Form Template
- An optional, fillable and self-calculating Budget Tool

Though applicants are not required to follow these templates, they have been provided as a tool to help ensure that all required information is appropriately captured within each of these

Mandatory Attachment 1: The Cover Letter

The application must include a cover letter signed by an authorized organizational representative (AOR) who, by virtue of their position, is able to obligate staff time on the proposed project, which includes:

- Applicant information;
- Project title;
- Type of assistance requested (Grant/Cooperative Agreement);
- PPG/CG request, if applicable;
    - If a Performance Partnership Grant (PPG) or Consolidated Grant (CG) is preferred, state this clearly in the cover letter and include the relevant grant number if possible;
- Proposed amount of grant (broken down into direct funding and in-kind services if relevant);
- Partners on the assistance agreement (if applicable);
- Mentor on the assistance agreement (if applicable);
- Brief project summary including a statement of project goal(s);
- Contact information for the project lead; and
- Signature of executive level Authorized Organizational Representative (AOR).

An optional cover letter template is available on the EN website.

Mandatory Attachment 2: The Project Narrative

Applicants must include a project narrative or work plan which describes their proposed project in detail and clearly addresses each scoring criterion as outlined on Section 6B. Review panels will score applications based on how well they meet these criteria.

Project Narrative Language and Formatting Tips:

- Do not exceed 10 single-spaced pages in length-

  Number each page of your workplan and note that EPA application reviewers will not review any work plan elements appearing after the tenth page.

- Strive for clear and succinct language-

  Applicants should address each section of the project narrative in detail using clear and concise language to ensure the best comprehension and scoring by EPA program staff and reviewers.

- Include headers for each of the eight project narrative sections-

To help the review panel easily navigate through the project narrative, applicants are requested to include the eight section headers in **bold font** above the section's text, in size 11 or 12 font.

- Use standard margins and fonts-

  Applications should use 11-point fonts, apart from section headers and the proposal title, which may be increased to size 12. Please use 1-inch margins and single line spacing. Calibri or similar font is requested.

- Use EN terminology as written in the Solicitation Notice and the project narrative guidance -

  For improved clarity and consistency, applicants are requested to use the language and terms as reflected in the Solicitation Notice. For example, use "goals", "outputs", and "outcomes" in place of synonyms such as "objectives", "targets", "tasks" or "milestones". This helps to ensure that application reviewers can identify met requirements and score your application correctly.

The following section lists the eight (8) required sections of the project narrative, in order, and provides a detailed description on the information to include within each:

Note: Where optional tables are provided below, blue text enclosed in brackets signifies sections of text to be edited/expanded upon by the applicant; change this text back to black before submission. For example, '[Enter Descriptive Output Title]' would become 'Output 1.2: Implement User Testing'.

Note: Where optional tables are provided below, add rows and/or expand the table as necessary to capture all relevant information.

1. Project Description

The purpose of this section is to help reviewers better understand what is being proposed. Include a brief description of the applicant's organization, describe its scope of work, and identify the general organizational business and/or administrative need(s) which will be supported by the proposed project. In addition, name the specific EN Funding Area(s) and EN project opportunit(ies), if applicable, that they are applying under. Remember: each project must support one or more EN Funding Area(s), as listed in Section 3A, but applicants are not required to propose projects related to the listed EN project opportunities in appendices A-C. Applicants proposing projects that do not reflect an EN project opportunity should explicitly state this.

In this section, establish project alignment with the **EPA's FY 2022-2026 Strategic Plan** by stating which specific strategic goals and objectives as listed in Section 3B are supported by the proposed project. Include both the number and title of each supported goal and objective (e.g., 'Goal 1: Tackle the Climate Crisis, Objective 1.1 Reduce Emissions that Cause Climate Change'), and briefly describe for each how they will be supported. In addition, list specific anticipated environmental outputs and/or outcomes as associated with the supported EPA strategic goals and objectives.

Use of the following table format to capture the above information is recommended, but not required:

Table 1. Supported EPA Strategic Goals and Objectives			
Strategic Goal	**Strategic Objective**	**Description of Project Support:**	**Associated Environmental Output(s) and/or Outcome(s)**
Goal [#]: [Enter Full Title]	Objective [#]: [Enter Full Title]	[Briefly describe how this EPA strategic goal & objective is supported by the proposed project].	[List associated environmental output(s) and/or outcome(s)].

2. Project Goals, Outputs, and Outcomes

The purpose of this section is to provide a detailed project plan for tracking, evaluating, and measuring progress over the proposed project's period of performance. The project plan should contain the following:

(1) **each** project goal and its cost;
(2) a descriptive title for all output(s) associated with that project goal;
(3) **each** output cost;
(4) a scheduled completion date for **each** output;
(5) anticipated project outcome(s) affiliated with the completion of each project goal;
(6) the business and/or administrative need(s) which will be supported by each project goal;
(7) the **one** EPA strategic goal and objective which is most supported by each project goal[1]; and
(8) a general rationale for how output dates were selected and deemed appropriate.

Note[1]: Applicants must only list one strategic goal and objective per project goal; if there are multiple options, applicants should choose the best fit. Please note that the same strategic goal and objective may be listed for multiple project goals.

Note: If a proposed goal and/or output is similar to one(s) previously funded, the applicant should describe in detail how the previously funded activities differ from those currently proposed or how the current application will complement past or ongoing work.

Use of the following table format to capture the above information is recommended, but not required:

Table. 2 Goals, Outputs, and Outcomes (Project Workplan)			
Goal:	**Output Cost:**	**Output(s):**	**Completion Date**
Goal 1: [Enter Descriptive Title] **Goal 1 Cost:** $[Enter]	**$** [Enter]	**1.1:** [Enter Descriptive Title]	[mm/dd/yyyy]
	$ [Enter]	**1.2:** [Enter Descriptive Title]	[mm/dd/yyyy]
	$ [Enter]	**1.3:** [Enter Descriptive Title]	[mm/dd/yyyy]
Anticipated Outcome(s):		[Enter outcome(s) from this goal].	
Admin./Business Need(s):		[Enter admin. and/or business needs supported by this goal, as identified in project narrative section 1) Project Description].	
EPA Strategic Goal & Objective:		[Enter the one (1) EPA strategic goal & objective most supported by this goal].	
- Expand Table to Include More Goals as Applicable to the Proposed Project -			
Rationale for Selected Output Completion Dates:		[Provide a general rationale for how the proposed completion dates were selected and deemed appropriate for the project].	
a. Total Budget for (All) Goals:		**$** [Enter Sum of Goal Costs]	
b. Personnel Costs not otherwise included in Goal Costs:		**$** [Enter, if applicable to the project and not already included in the costs for project goals]	
c. Fringe Costs not otherwise included in Goal Costs:		**$** [Enter, if applicable to the project and not already included in the costs for project goals]	
Total Direct Costs:		**$** [Enter Total Direct Costs (Sum of A-C)]	
Total Indirect Costs:		**$** [Enter Total Indirect Costs, if applicable to project]	
Total Project Budget*:		**$** [Add Total Direct Costs & Indirect Costs]	
** Note: Must exactly match the total requested funds, as listed in all application attachments.*			

3. Identifying Key Personnel and Associated Roles, Responsibilities, and Qualifications

The purpose of this section is to explicitly identify which project roles are applicable to the proposed project and to provide the required additional information for that role, including (as applicable) identifying information, project roles and responsibilities, and qualifications.

(A) If a role is applicable to a project and that position has been hired, please explicitly state this, and provide the following for at least one key contact in that role:

- Full name[2];
- Current job title;
- Current organization;
- Anticipated role and responsibilities; and
- Key contact organization and relationship to applicant (for roles held by outside parties).

Note[2]: Please note that this should not be provided for any project contractor/consultants.

(B) If a role is applicable to a project but it has not yet been hired/is not yet known, the following information should instead be provided:

- Statement of skills, knowledge, abilities, and qualifications necessary for the role; and
- Future project role(s) and responsibilit(ies).

Applicants should explicitly state whether each of the following roles are applicable to the project and if so, provide the information from either bullet list (A) or bulleted list (B). Please note that some roles also require additional information, as detailed below:

- **Project Manager**: This role is applicable to all projects and, in the case of EN partnerships, must be held by a staff member from the lead organization.
  - Provide the information from bulleted list A or list B, above.
  - Additionally, provide an overview of the project manager's qualifications in project and financial management, including relevant past work experience.

- **Formal Partner(s):** The role of formal partner is applicable to any project applying as an EN Partnership (see Section 4C). Applications which involve more than one partnering organization need only list these details for one contact from one partnering organization. (Additional partners should be detailed in the attachment titled: 'Formal Project Partners - Roles and Responsibilities and Distribution of Funds' attachment (see 'Additional Attachments').
  - State if this role is or is not applicable to the proposed project and:
    - If applicable: provide the information from bulleted list A or list B, above.

- **Formal Mentor:** The role of formal mentor is applicable to any project applying under the 'Individual Capacity Building with Mentorship' (see Appendix C) EN project opportunity.
  - State if this role is or is not applicable to the proposed project.
  - If applicable:
    - Provide the information from bulleted list A or list B, above;
    - Describe the mentoring organization's involvement with the EN;
    - List at least one EN assistance agreement successfully completed by the mentoring organization; and
    - Provide a statement verifying that the mentor currently reports or publishes one or more environmental programs using an EN node, Virtual Exchange Services (VES), or APIs.

- **Contractor/Individual Consultant/Vendor[3]:** This role is applicable to any projects utilizing a contracting firm, an individual consultant, and/or a vendor firm.
    - State whether this role is applicable to the proposed project; if multiple entities will be procured, provide this information for all.
    - If applicable, do not provide the contact name or current job title, but do:
        - Provide the entity type (contractor firm, vendor firm, or individual consultant);
        - Provide the anticipated project roles and responsibilities;
        - Name the planned procurement method (and rationale, if applicable); and
        - Describe the planned method of vetting to ensure the selected candidate is qualified to complete assigned work.

Note[3]: In the case that 100% of requested funds will be distributed as a contract or subaward, applicants must also explain how these transactions will be managed in compliance with applicable Federal requirements without project funding for personnel costs.

Use of Table 3. Applicable Key Contacts and Table 4. Contractor/Individual Consultant/Vendor to capture the above information is recommended, but not required:

Table. 3 Applicable Key Contacts				
Personnel Role	**Applicable(?)**	**Name**	**Current Job Title**	**Organization**
Project Manager	Y	[Enter Name]	[Enter Current Title]	[Enter Org. Name]
Roles and Responsibilities:		[Describe role's proposed project roles and responsibilities].		
Experience or Qualifications in Project and Financial Management:		[Enter description of project manager's experience in project management and financial management].		
Formal Partner	[Enter Y/N]	[Enter Name]	[Enter Current Title]	[Enter Org. Name]
Project Role(s)/ Responsibilit(ies):		[Describe role's proposed project roles and responsibilities].		
Partnering Organization's Relation to the Lead Applicant:		[Enter brief description of relationship between lead applicant and the partner contact's organization]		
Formal Mentor	[Enter Y/N]	[Enter Name]	[Enter Current Title]	[Enter Org. Name]
Project Role(s)/ Responsibilit(ies):		[Describe role's proposed project roles and responsibilities].		
Mentoring Organization's Prior Exchange Network Experience:		[Enter brief summary of mentor organization's EN experience/history].		
Mentor's Most Recent EN Grant:		[List grant number and fiscal year of at least one prior EN grant].		
Confirmation of Mentoring Data Reporting/Publishing Requirement:		[This mentor currently [reports and/or publishes] data for [list one or more EPA environmental programs] using [EN Node, VES, or an API].		

Note: Mark 'N' for no in the second column titled 'Applicable (Y/N)' for any role that is not applicable and write N/A in all other fields in that section.

Note: If the role has not yet been hired: (1) mark 'Y' for yes in the second column titled 'applicable(?)'; (2) write 'Not Yet Hired' in the third column titled 'Name'; (3) write 'Not Yet Hired' in the fourth column titled 'Current Job Title'; (4) write 'Not Yet Hired' in the fifth column titled 'Organization'; and (5) fill out the 'Project Role(s)/ Responsibilit(ies)' row. Then, (6) add and fill the following row below the 'Project Role(s)/Responsibilities' row:

Required Skills, Knowledge, Abilities, and Qualifications:	[Enter brief summary of necessary skills, knowledge, abilities, and qualifications as outlined in the position's recruitment package]

Table 4. Contractor/Individual Consultant/Vendor		
Contractor Role Type	**Applicable(?)**	**Planned Procurement Method**
[Contracting Firm/Individual Consultant/Vendor Firm]	[Enter Y/N]	[Enter 'sealed bid', 'request for proposals', or 'non-competitive procurement'].
Method of Qualification Vetting:		[Describe method for how the applicant organization will vet the contractor to ensure they are qualified to complete assigned work].
Roles and Responsibilities:		[Describe role's proposed project roles and responsibilities].

Note: Expand the table if more than one individual or firm will be utilized in the proposed project. If this role is not applicable (no contracting firm, vendor firm, or individual consultant will be utilized), mark 'N' in the second column and write N/A in all other fields.

Note: For any role(s) utilizing non-competitive (aka 'sole-source') procurement, add and fill the following row; see 'contracts' under Section 3D and 4B for more information on when this procurement type is allowable per EPA guidance. The rationale must match the allowable circumstances as defined under 2 CFR 200.320(c).

'Non-Competitive' or 'Sole-Source' Procurement Method Justification:	[This method is allowable per EPA guidelines because [provide a detailed justification of why this method is allowable/appropriate, citing 2 CFR 200.320(c)].

4. Commitment to Reuse and Register Shared Tools and Services

Applicants should not spend assistance agreement funds on tools already developed and available from other EN partners. The purpose of this section is for the applicant to clearly name and describe which existing project-appropriate tools and shared services will be incorporated into their proposed project.

Additionally, applicants must provide two specific commitment statements confirming that the applicant will register their own project information at the time of project close-out, to perpetuate the availability of reusable components for future grants.

Guidance for identifying tools and services for reuse is available in Appendix D.

- If the proposed project is reusing IT Components[4], the applicant should provide the component name/title(s), type, and a brief description.
- If the proposed project is not reusing IT components[4], the applicant should explicitly state this and provide a detailed justification for why no tools, resources, services, widgets, etc. were identified as appropriate for reuse.

Use of the following table format to capture the above information is recommended, but not required:

Table 5. Reused Components		
Name/Title	**Type**	**Description**
[Enter Component Name or Title]	[Enter Component Type]	[Provide a brief description of the component and why it is appropriate for the proposed project].

Note[4]: IT Component types include: Software; Web-Based Service(s); Cloud-Based Service(s); Shared Platform; API; XML Schema; Monitoring Tool/Service; Mobile Data Collection Tool; Remote Sensing Tool; GIS; Data Sharing Tool; Data Flow; Data Exchange Template; Data Service and/or Download; Data Standards; Training Tools and Resources; Flow Configuration [Document]; Standard Exchange Protocols; or Other.

Applicants must also include two commitment statements as relate to a EN term and condition (see Section 4D). In the first statement, applicants must explicitly commit to register any new tools/IT components developed as part of the project at the time of grant close-out. In the second statement, applicants must explicitly commit to register the reuse of any tools/IT components at the time of grant close-out.

5. Technical Solutions and Data Availability

The purpose of this section is for the applicant to identify each technical solution (e.g. technologies, tools, methods) that will be utilized in the project, detail why the solution(s) are appropriate for the proposed project and describe why their organization and/or participating EN partners feel confident they have the requisite technical understanding to successfully perform the proposed technical work.

To do this, applicants must name or provide a descriptive title for each data/IT management/ technological solution that will be utilized in the proposed project and, for each, detail:

(1) why this technology is necessary and appropriate for the project;
(2) which business/administrative need(s) the technology helps meet; and
(3) why the applicant feels confident in their organization's ability to successfully implement and maintain the solution.

If specific solutions and/or technological aspects of the project are not yet known (e.g., if the applicant is utilizing a contractor to implement the technical solution and therefore cannot address the 3 items in the paragraph above), applicants should instead (1) clearly state who will make the project's technical decisions, (2) describe why they are the qualified/the appropriate party, and (3) identify which business/administrative needs the selected technology or solutions will need to address.

Additionally, all applicants should use this section to explain how the knowledge, data, or technology outputs developed during the proposed project will enhance data sharing and availability for (1) the applicant's own organization, (2) any formal partners (if applicable), and (3) for other organizations (e.g., other participants in the Exchange Network).

6. Project Alignment with the E-Enterprise Digital Strategy (EEDS)

The purpose of this section is for applicants to identify how the proposed technical solution(s) align with each of the three (3) principles of the E-Enterprise Digital Strategy (EEDS):

(1) 1st Principle; Build with an Information-Centric Approach;
(2) 2nd Principle: Adopt Shared Platforms; and
(3) 3rd Principle: Adopt Customer-Centric Approaches.

Note: More information on the EEDS and a link to the full text is available in Appendix D.

7. Overview of Project Budget

Applicants should have already clearly stated budget amounts for each project goal and each project output within 'Section Two: Project Goals, Outputs, and Outcomes' of the project narrative. The purpose of this section (Section 7) is for applicants to establish the appropriateness of these budget amounts by providing a detailed, two-part cost rationale for each project output, as well as provide a general overview of other pertinent project costs.

For each project output, a clear and detailed rationale should be provided which:

(1) describes how costs were estimated; and
(2) why these funds are necessary to accomplish the work.

Applicants who are applying under an EN project opportunity as listed in Appendices A-C may find it helpful to reference the estimated cost ranges within the relevant opportunity's 'Potential Activities Under This Opportunity' table.

Use of the following table format to capture the above information is recommended, but not required:

Table. 6 Project Output Budget Appropriateness	
Output Number	Project Output Title
[Goal #].[Output #] (e.g., 1.1)	[Enter project output title, as listed in Section 2 of the project narrative].
How Were Costs Estimated:	[Enter a clear and detailed rationale, specific to this output].
Why Costs are Necessary:	[Enter a clear and detailed rationale, specific to this output].
Output Number	Project Output Title
[Goal #].[Output #] (e.g., 1.2)	[Enter project output title, as listed in Section 2 of the project narrative].
How Were Costs Estimated:	[Enter a clear and detailed rationale, specific to this output].
Why Costs are Necessary:	[Enter a clear and detailed rationale, specific to this output].

In addition, provide the following if applicable to the proposed project:

- *If using in-kind funding*[5]: provide a breakdown of direct grants funding vs. in-kind;
- *If a partnership project*: provide a breakdown of funds for lead grantee vs. funds for EN partner(s);
- *If utilizing an EN mentor*: provide the sum total of mentorship costs (up to $15,000);
- *If charging contractual costs*: provide the total contractual costs and the procurement method;
- *If charging indirect costs*: provide the sum total of indirect costs, the current indirect cost (IDC) rate, and the expiration date of the IDC rate agreement;
- *If charging travel*[6] *costs*: provide the sum total of travel costs and each travel destination, purpose, number of travelers, and cost per trip.

Note[5]: See definition of in-kind to determine if this is applicable to your project; this is not referring to voluntary cost share (aka, the inclusion of the applicant organization's own funds, in addition to the awarded EN grant funds, to support the work of the proposed project).

Note[6]: EPA recognizes that travel destinations may not be known at the time of application submittal; applicants should compose their travel to the best of their ability based on travel estimates to likely or comparable past destinations.

Use of the following table format to capture the above information is recommended, but not required:

Table 7. Project Travel			
#	**Destination and Travel Purpose**	**# of Travelers**	**Total Trip Cost**
1	[Enter trip location and purpose] (e.g., EN Regional Conference, NY)	[Enter #]	$[Enter amount]
2	[Enter trip location and purpose]	[Enter #]	$[Enter amount]
Total Travel Costs:			$[Enter amount]

8. Past Performance

Explicitly state how many prior EN assistance agreements the applicant (lead) organization has received or explicitly state that the lead organization has never received an EN assistance agreement.

Note: Applicants should not list prior EN grants in this section; this information should instead be included in the attachment titled 'List of Prior Exchange Network Assistance Agreements.'

NOTE: An optional, fillable project narrative template is available on the EN Website at https://www.epa.gov/exchangenetwork/exchange-network-grant-program#Resources.

Mandatory Attachment 3: The Budget Narrative Attachment Form

- This form is used to attach your budget narrative document.
- Please note that the document submitted under this form is a *separate* attachment from the Project Narrative, although at times they ask for similar information.
- Please refer to the budget category guidance in Appendix D when completing this form and use the exact budget formulas as described.
- This budget narrative is required to help the grants office process the award, if selected.

NOTE: An optional, fillable budget narrative template is available on the EN Website at https://www.epa.gov/exchangenetwork/exchange-network-grant-program#Resources.

NOTE: An optional, self-calculating budget tool is available on the EN Website at https://www.epa.gov/exchangenetwork/exchange-network-grant-program#Resources.

Mandatory Attachment 4: Application for Federal Assistance (SF 424)

- Please note the organizational UEI number must be included on the SF-424.
  - Please see Section 5B for more information on UEI numbers and how to obtain them.
- Please include the county/parish in the applicant address on line 8(d).
- Please note that congressional district should be 2-digit code on line 16(a); do not put 'all' unless there is no congressional district associated with the organization address (e.g., for a territory).
- Please list the project start date as October 1, 2025, and use the entire project period of performance, with an end date of September 30, 2028, on line 17(a & b).

Mandatory Attachment 5: Budget Information for Non-Construction Programs (SF-424A)

- Please refer to the budget category guidance in Appendix D when completing this form and be sure that the numbers and totals depicted on this form **exactly match** those depicted on the Budget Narrative Attachment form (see mandatory attachment 3, above).
- Total amount of federal funding requested for the project period should be shown on line 5(e), 5(g), and on line 6(k) of SF-424A.
- Total amount of direct costs should be shown on line 6(i) and on line 21.
- The total amount of indirect costs should be indicated on line 22; please include the IDC cost rate (percentage) and the base line 23 under 'remarks'.
    - See Section 3D and Additional Attachment A (below) for more details on indirect costs.
- Please do not include monetary amounts less than one dollar (round all budget items to the nearest whole number when calculating).

Mandatory Attachment 6: Key Contacts Form (EPA Form 5700-54)

- Please note the Authorized Representative and Payee cannot be the same person.

Mandatory Attachment 7: Pre-Award Compliance Review Report (EPA Form 4700-4)

- See tips for completing this form here.

Additional Attachment A: Negotiated Indirect Cost Rate Agreement

This is a mandatory attachment for any applicants charging indirect costs, unless using the de minimus rate.

- To charge indirect costs, an indirect cost rate agreements must be included in accordance with 2 CFR 200.414 and **must be valid until at least 9/30/2025**.
- IDC rates are negotiated for each recipient by a cognizant Federal agency, which is the agency that typically provides the most direct funding to the recipient.
- Except for 'exempt' agencies and Institutions of Higher Education (see current NOFO clauses here), all recipients must have one of the following current (not expired) IDC rate types:
    - Provisional;
    - Final;
    - Fixed rate with carry-forward;
    - Predetermined;
    - 15% de minimus rate of modified total direct costs (MTDCs).
- EPA Indirect Cost (IDC) Policy does not govern indirect rates for subrecipients or recipient procurement contractors under EPA assistance agreements.
    - Pass-through entities are required to comply with CFR 200.332(b)(4)(i) and (ii) when establishing indirect cost rates for subawards. Indirect costs for subawardees (e.g., an EN partner) should be included in the overall subaward to that organization under the budget category of 'Other'. These costs must be calculated using the subawardee's own current indirect cost rate.
- IDCs incurred during any period of the assistance agreement that are not covered by the provisions above are not allowable costs and cannot be drawn down by the recipient.
    - Tribal recipients may budget for IDCs pending approval of their IDC rate by the cognizant Federal agency (DOI); however, recipients may not draw down IDCs until their rate is approved.
    - Similarly, exceptions may be granted by EPA according to EPA IDC Policy, but recipients may not draw down IDCs until this has been fully approved and processed.
- See the Indirect Cost Guidance for Recipients of EPA Assistance Agreements for additional information.

Additional Attachment B: Information for Inter-Tribal Consortia

This is a mandatory attachment for any inter-Tribal consortia applying for an EN assistance agreement.

- Inter-Tribal consortia applicants must include attachment(s) showing:
  - A formal partnership exists among the Tribal governments' members of the inter-tribal consortium and the majority of the members are federally recognized Indian Tribes;
  - The consortia federally recognized Tribal members have authorized the consortium to apply for and receive assistance from the EN Grant Program.

Additional Attachment C: Formal Project Partners – Roles and Responsibilities, Distribution of Funds, and Overview of Subaward Budget

This is a mandatory attachment for any projects with formal EN partners (see Section 4C).

- If the proposed project involves formal project partners who will actively participate in implementing the project, provide a description of the roles and responsibilities of each partner in carrying out each of the project goals and the method of financing the partner's participation.
  - Provide letter(s) of support confirming each partner's participation in the proposed project.
  - Describe how the recipient would coordinate work among the partner(s), using methods such as regular teleconferences, meetings, or written status reports.
  - Describe how the recipient would coordinate with partner(s) to ensure that partner activities are reflected in semi-annual and final reporting (see Section 8B).
  - If the recipient plans to distribute funding to partners:
    - Describe the method for doing so; and
    - Provide an overview of the proposed subaward budget.
- EN projects including one or more formal partners can have budgets up to $600,000 if the partnership eligibility criteria outlined in Section 4C is met.
- *Note:* Partnerships formed from within a single state, territorial or Tribal government (e.g., a partnership of Environment and Public Health Departments within a single state) are not eligible partnerships and are limited to the individual applicant funding threshold of $400,000.

Additional Attachment D: Formal Project Mentor – Roles and Responsibilities, Distribution of Funds, and Overview of Subaward Budget

This is a mandatory attachment for any projects with a formal mentor applying under the EN project opportunity 'Individual Capacity Building with Mentorship' (see Appendix C).

- If the proposed project involves formal project mentors who will actively participate in the project, provide a description of the mentoring activities and support:
  - Provide a letter of support confirming project participation by the mentoring organization.
  - Describe how the recipient would coordinate with the mentor using methods such as regular teleconferences, meetings, or written status reports.
  - Describe how the recipient would coordinate with partner(s) to ensure that partner activities are reflected in semi-annual and final reporting (see Section 8B).
  - If the recipient plans to distribute funding to mentors, describe the method for doing so.
  - Provide an overview of the proposed subaward budget (up to $15,000).
- *Note:* EN assistance agreements projects including a formal mentor can have budgets up to $415,000, of which up to $15,000 can be allocated to mentorship costs.

- *Note:* Applicants must meet all requirements as outlined in the 'Individual Capacity Building with Mentorship' opportunity in order to apply and have mentorship funds awarded.

Additional Attachment E: List of Prior Exchange Network Assistance Agreements

This is a mandatory attachment for any applicants who have received prior EN assistance agreements.

- Provide a list in descending order of previously awarded EN assistance agreements to the primary applicant since 2002 listing the year the grant was awarded and the project title, if known.

Additional Attachment F: Documentation Certifying Applicants Status as an Instrumentality of the State or Tribe

This is a mandatory signed attachment for applicants applying as an instrumentality of the state or Tribe.

- States and Territories: Provide a signed attorney general letter certifying this status.
- Tribes: Provide a certification and supporting documentation from the Tribal council or other appropriate Tribal government official, certifying this status.

Note: Successful applicants requesting over $100,000 are required to submit the '**EPA Lobbying Form 6600-06**' to ENGrantProgram@epa.gov upon notification of award selection. Applicants do not need to submit this form with their initial application.

Appendix F: Optional Pre-Submission Checklist

The below checklist was designed to help applicants ensure all required documents in their application package are included and to help applicants avoid common applicant errors and unnecessary point loss.

The successful completion of the checklist does not guarantee a high application score nor ensure funding.

Eligibility

- ☐ If applying as an EN partnership (see Section 4C), are you and your partnering organization(s) separate units of government from distinct states, Tribes, and/or U.S. territories?
- ☐ If applying under EN Funding Area 3 (as detailed in Appendix C), are you a Tribe or U.S. territory?
- ☐ If applying specifically under the 'Individual Capacity Building with Mentorship' EN project opportunity, are you a Tribe or U.S. territory who has never received an EN assistance agreement?
- ☐ If not a state, a U.S. territory, or a federally recognized Tribe, Alaska Native Village, or consortia of federally recognized Tribes, does your organization have status as an agency or instrumentality of a state or tribe under applicable laws? Do you have the required documentation to submit to EPA?
- ☐ Have you carefully read each bullet under the threshold eligibility criteria in Section 2A(1), ensuring that all eligibility criteria are met?

General

- ☐ Have you checked https://www.epa.gov/exchangenetwork/searchable-it-component-and-project-registration-forms for reusable components that can be incorporated into your proposed project?
- ☐ If using the optional templates (available on the EN website), have you changed all blue text to black after editing and deleted the template notes provided in black italicized text?
- ☐ Do the numbers captured in the 'Project Goals, Outputs, and Outcomes' section of your Project Narrative exactly match the numbers in your Budget Narrative Attachment Form AND the numbers in your project's SF-424A form?
- ☐ Have you checked the unallowable costs under Section 2A(1) and ensured that your budget does include any of these restrictions (including operations and maintenance)?
- ☐ If you are charging indirect costs as part of your project budget, have you followed all the indirect cost guidance on page 75 and ensured that your rate agreement does not expire prior to 9/30/2025?
- ☐ Have you ensured that all application documents are final and unlocked prior to submittal?
- ☐ Have you double-checked that you are including all seven (7) mandatory attachments?
  - ☐ Cover Letter
  - ☐ Project Narrative Attachment
  - ☐ Budget Narrative Attachment Form
  - ☐ Application for Federal Assistance (424)
  - ☐ Budget Information for Non-Construction Programs (SF-424A)

- ☐ Key Contacts Form (EPA Form 5700-54)
- ☐ Pre-award Compliance Review Report (EPA form 4700-4)

☐ Have you included all additional attachments that are applicable to your project?

- ☐ Current Negotiated Indirect Cost Rate Agreement
- ☐ Additional Information for Inter-Tribal Consortia
- ☐ Formal Project Partner(s): Support Letter(s), Roles and Responsibilities, and Method of Fund Distribution and Overview of Subaward Budget
- ☐ Formal Project Mentor: Support Letter(s), Roles & Responsibilities, and Method of Fund Distribution & Overview of Subaward Budget
- ☐ List of Prior Exchange Network Assistance Agreements (in descending order)
- ☐ Documentation Certifying Applicant Status as Instrumentality of the State or Tribe

Cover Letter:

☐ Has your cover letter been signed by an authorized organizational representative (AOR)?

☐ If you are requesting a Performance Partnership Grant (PPG) or Consolidated Grant (CG) (see Section 2B(1))does your cover letter note this and include the PPG or CG grant number?

☐ If you are working with any formal partners or mentors, have you noted them in your cover letter?

Project Narrative:

☐ Is your project narrative a maximum of 10 single-spaced pages?

☐ Does your project narrative include all eight of the sections noted in Appendix E's project narrative overview, marked clearly with bold section headers?

☐ Within the 'Project Description' section of the project narrative, have you stated which specific EPA strategic goals and objectives as listed in Section 3B are supported by the proposed project, and provided a brief description of this support for each? Have you also included associated environmental outputs and/or outcomes?

☐ Have you named the one EPA strategic goal and objective most supported by each of your project goals within the 'Project Goals, Outputs, and Outcomes' section of your project narrative?

☐ Within the 'Project Goals, Outputs, and Outcomes' section of your project narrative, is the sum of your outputs equal to the total amount budgeted for that goal?

☐ Within the 'Commitment to Reuse' section of the project narrative, have you included two separate commitment statements? One which commits to registering new products developed as part of your project and one which commits to registering existing EN products reused in the project?

☐ Within the 'Overview of Project Budget' section of the project narrative, have you provided a clear and detailed rationale describing how each project output's cost was estimated and why these funds are necessary to accomplish the work?

☐ Within the 'Past Performance' section of the project narrative, have you clearly stated whether you have/have not received prior EN assistance agreements? *Please remember* not to list prior grants here; they should instead be listed in descending order in the 'Prior EN Assistance Agreements' attachment.

Budget Narrative Attachment Form:

- ☐ Have you followed the budget category guidance provided in Appendix D and used the exact formulas as described to calculate your budget amounts?

- ☐ Did you round up or down to the nearest whole number for each step of your budget calculations, and likewise use whole numbers for equipment and supply unit costs, contractor hourly rates, etc.?

- ☐ If the following are applicable to your project budget, are they listed under the 'Other' budget category: Subaward(s); Participant support costs, such as registration fees or travel costs for outside participants; and light food and refreshments costs.

- ☐ If applicable to your application, have you categorized training costs for internal staff that is not related to project travel as 'contractual'?
    - *Note:* Training related to budgeted staff travel should be charged under 'travel'.

- ☐ If applicable to your application, do you provide the itemized cost of supply and/or equipment according to price per unit and quantity? Have you avoided lump sum items (e.g., 'office equipment')?
    - Have you ensured that all individual items which cost between $1 – $9,999 are categorized as 'supplies' and all items $10,000+ are categorized as 'equipment'?

- ☐ If applicable, does your travel cost include the number of travelers per event, trip destination, the purpose of travel, and associated trip items such as airfare, per diem, mileage, hotel, etc.?

- ☐ If utilizing a contractor, have you listed the procurement method?
    - If utilizing a non-competitive or single-source procurement, have you ensured that you meet the eligibility requirements of this procurement method outlined here Best Practice Guide for Procuring Services, Supplies, and Equipment Under EPA Assistance Agreements?
    - Have you provided your detailed justification for using non-competitive procurement?

- ☐ If utilizing an individual consultant, have you verified that their hourly rate does not exceed the current hourly wage cap of $93.53?

Standard SF-424 Form (Application for Federal Assistance):

- ☐ Does your SF-424 form show a project start date of 10/1/25 and an end date of 9/30/28?

- ☐ Have you included your county/parish on your SF-424 form (line 17 a & b)?

- ☐ Is the congressional district noted on your SF-424 form depicted as a 2-digit code (line 16 a)?

- ☐ Does the UEI number on the SF-424 form also belong to the organization listed on this form?

For Tribal Applicants:

- ☐ If you are charging indirect costs according to a draft rate agreement submitted to the Department of Interior (see Additional Attachment A: Negotiated Indirect Cost Rate Agreement), have you included this draft agreement as part of your application package?

Appendix G: Glossary of Terms, Phrases, and Acronyms

Administrative Needs: See 'business and administrative needs'.

Application Programming Interface (API): When used in the context of web development, an API is a set of Hypertext Transfer Protocol (HTTP) request messages (SOAP or REST), along with a definition of the structure of response messages, which is usually in an Extensible Markup Language (XML) or JavaScript Object Notation (JSON) format. The term web API is virtually synonymous with the term web service.

Assessment Units: A waterbody or portion of a waterbody that is identified and used to track water quality.

Assistance Agreement: Assistance Agreement is an agreement with the primary purpose to provide appropriated funds to stimulate an activity, including but not limited to, grants and cooperative agreements.

Authorized Organizational Representative (AOR): An Authorized Organizational Representative (AOR) is the individual who is authorized to sign on behalf of the proposing organization.

Business and Administrative Needs: In the context of the EN Grant Program, this phrase indicates statements that define organizational requirement(s) that must be met in order to get an organization from where they currently are to where that organization would like to be. This could be improvements to or the implementation of programmatic workflows, improved management and policy decisions, improved public data access and/or usability, the implementation of strategic business processes, improvements to process and staff efficiencies, etc. When applicants are asked to identify business and administrative needs, they are essentially being asked 'what are some weaknesses, dependencies, or risks of the organization that will be partially or fully addressed through the proposed EN project'.

CAA Stationary Source: Generally, any source of an air pollutant except those emissions resulting directly from an internal combustion engine for transportation purposes or from a nonroad engine or nonroad vehicle as defined in section 7550 of the Clean Air Act. Stationary sources of air pollution include, for example, factories, refineries, boilers, power plants, gas stations, and dry cleaners.

CEDRI: Compliance and Emissions Data Reporting Interface.

Central Data Exchange (CDX): CDX is the gateway through which environmental data enters the Agency and is EPA's point of presence on the Exchange Network and for many EPA services. CDX provides the capability for submitters to access their data using web services. CDX enables EPA and participating Program Offices to work with stakeholders - including state, Tribal, and local governments, and regulated industries - to enable streamlined, electronic submission of data via the Internet.

Conference(s): Conference is defined as a meeting, retreat, seminar, symposium, workshop, or event whose primary purpose is the dissemination of technical information beyond the non-Federal entity and is necessary and reasonable for successful performance under the Federal grant award.

Consolidated Grant (CG): Territories may consolidate their various assistance agreements through a single Consolidated Grant (CG). A territorial applicant whose territory has a Consolidated Grant (CG) with EPA may request new awards be incorporated into the CG. An applicant should include the CG number in both their cover letter and project narrative. An applicant may also request to create a new CG that includes the project proposed under this solicitation. Absent a request from the recipient for inclusion in or creation of a CG, EPA will award the grant in a stand-alone vehicle.

Construction: Construction is the erection, building, alteration, remodeling, improvement, or extension of buildings, structures, or other property. Construction also includes remedial actions in response to a release, or a threat of a release, of a hazardous substance into the environment as determined by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980.

Contract: Contract is a legal instrument by which a non-Federal entity purchases property or services needed to carry out the project or program under a federal award.

Cooperative Agreement: Cooperative Agreement is a legal instrument of financial assistance between a Federal awarding agency or pass-through entity and a non-Federal entity that provides substantial involvement in carrying out the Federal grant award activities. See Section 3D for more information.

Cross-Media Electronic Reporting Rule (CROMERR): The Cross-Media Electronic Reporting Rule (CROMERR) provides the legal framework for electronic reporting under EPA's regulatory programs. The Rule sets performance-based, technology-neutral system standards and provides a streamlined, uniform process for Agency review and approval of electronic reporting. The CROMERR program ensures the enforceability of regulatory information collected electronically by EPA and EPA's state, Tribal and local government partners. Both new and existing electronic reporting programs require EPA approval, and the regulation establishes a process for applying for and obtaining such approval. CROMERR also addresses electronic reporting directly to EPA. See the Open Data EN Project Opportunity.

Data Access Services (Publishing): Data access services are a specific subset of the many possible types of web services. Network publishing is a term that refers to using Exchange Network technologies, services, and specifications for web services to make data available to Network users by running a query and returning environmental data in the form of XML or JSON documents. These services are also called data services. Once these data services are deployed, they can be used in a number of ways such as populating web pages, synchronizing data between sites, viewing data in a web service client, or building new sources of data into an integrated application. Other web service types include data submission, security, quality assurance, notification, and status. RESTful services are particularly useful for data publishing.

Data Appliance: A reusable component that can be used to ingest sensor data and publish that data using open standards.

Data Element: A data element is the smallest unit of information stored in, and exchanged among, Exchange Network partners' information systems. Examples of data elements are the facility name or inspection date.

Data Standard: A data standard documents an agreement on representation, format, and definition of common data exchanged. Exchange Network partners must use EN approved data standards. See more information here.

De Minimus: The **15%** *de minimis* indirect cost rate is a Federally-recognized rate that non-Federal entities may apply to modified total direct costs to recover allowable indirect costs on grants or cooperative agreements.

Direct Funding: Direct funding is funding that is provided to an organization directly by a government entity.

Direct Costs/Charges: Direct costs are those costs that can be identified specifically with a particular final cost objective. Typical costs charged directly to a Federal grant award are the compensation (including fringe benefits) of employees who work on that award, and the costs of materials and other items of expense incurred for the Federal award.

Discharge Monitoring Report (DMR): The EPA uniform national form, including any subsequent additions, revisions, or modifications for the reporting of self-monitoring results by permittees.

DUNS: A Data Universal Numbering System or DUNS number is a unique, nine-digit series of numerals that identifies a business; please see RAIN-2021-G01 for information about EPA's implementation of the upcoming Government-wide transition from DUNS to Unique Entity Identifier (UEI).

E-Enterprise: E-Enterprise for the Environment is a collaborative partnership through which EPA, states, and Tribes work together to improve the way we protect the environment and human health.

Equipment: Equipment is tangible personal property (including information technology systems) having a useful life of more than one year and a per-unit acquisition cost which equals or exceeds $10,000. This is considered a capital expenditure in the base amounts for Negotiated Indirect Cost Rates.

Exchange Network Discovery Services (ENDS): The Exchange Network Discovery Services (ENDS) is a set of directory services for all nodes in EN. This central catalog approach supports the automated consumption of services using tools such as the EN Browser and the EN Services Center via an XML document that contains the service metadata. ENDS automate both the discovery and retrieval of service metadata for the Network and supports the Administration and export of node services via the web and web Service interfaces. ENDS is composed of two main components: the first, is a set of services that allows EN partners to submit and query the service descriptions stored in the ENDS repository; the second, is a web interface that simplifies the data entry of service metadata into ENDS. The services all accept or return a common XML schema. This XML schema provides a structured, standard way to represent EN services across all EN Nodes. A second ENDS schema defines the Data Element Description Language (DEDL) that can be used by individual Exchange Network nodes for describing acceptable parameters and valid allowable values and making them available as services. DEDL further enhances the ability for EN partners to build rich, user-friendly applications using EN services. More information on ENDS is available at: http://www.exchangenetwork.net/exchangenetwork-discovery-service-ends/.

Exchange Network Services Center (ENSC): The ENSC is a browser-based portal that provides Exchange Network partners access to a broad range of Network services. Among the most notable features of the Service Center is the ability to submit data to EPA systems, monitor the status of data submissions, and access a variety of Network administrative data. Essentially, the ENSC offers most of the functionality of a Node, but it is not automated and cannot respond to data requests. It simplifies access to Network services because it requires no software to install or configure. It can be accessed from any computer with a browser and internet access. The ENSC is available here.

Environmental Information Exchange Network (Exchange Network; EN): The Exchange Network is an Internet and standards-based information network among EPA and its partners in states, Tribes, and territories. It is designed to help integrate information, provide secure real-time access to environmental information, and support the electronic collection and exchange of high-quality data and information. The EN provides a more efficient way of exchanging environmental information at all levels of government. It significantly improves the way EPA and its state, Tribal, and territorial partners send and receive information.

Environmental Information Operations (EIO): Defined in the context of the Exchange Network and Quality Assurance (QA) requirements as the collection, production, evaluation, or use of environmental information.

(EN) Project Opportunity: In the context of the Exchange Network Grant Program, the phrase 'project opportunities' refers to specific project write-ups that provide potential applicants with the information needed to design a proposal for a particular data exchange, data service, or project type. These write-ups contain essential descriptions and background information, suggested project activities and estimated costs, and helpful links and resources. Applicants can apply under one or multiple EN project opportunities or propose projects that do not have a specific project opportunity write-up (see I-B. EN Assistance Activities and Funding Areas). Applicants should explicitly state in the 'Project Description' section of their project narrative which EN Project Opportunit(ies) they are applying under.

Extensible Markup Language (XML): Extensible Markup Language is a flexible self-describing language for creating common information formats and sharing both the format and content of data over the Internet and elsewhere. XML is a formatting language recommended by the World Wide Web Consortium (W3C). For more guidance, see the Exchange Network website.

Geospatial Data: Geospatial data are data that identify, depict, or describe the geographic locations, boundaries, or characteristics of the Earth's inhabitants or its natural or human-constructed features. Geospatial data include geographic coordinates (e.g., latitude and longitude) that identify a specific location on the Earth and data that are linked to geographic locations or have a geospatial component (e.g., socio-economic data, land use records and analyses, land surveys, homeland security information, and environmental analyses).

Geospatial data may be obtained using a variety of approaches and technologies, including things such as surveys, satellite remote sensing, Global Position System (GPS) hand-held devices, and airborne imagery and detection devices.

GHGRP: Green House Gas Program.

Goal: In EPA grant terminology, a goal is a self-contained project (e.g., implementing WQX, implementing an electronic reporting system using shared CROMERR services). This differs from the more common definition of goal—a desired end. An Exchange Network grant application must list one or more goals.

Grant(s): Grant is a legal instrument of financial assistance between a Federal awarding agency or pass-through entity and a non-Federal entity. See Section 3D for more information.

Indirect Costs/Charges: *Indirect cost are* those costs incurred for a common or joint purpose benefitting more than one cost objective, and not readily assignable to the cost objectives specifically benefitted. Indirect costs are sometimes referred to as 'Facilities and Administrative' costs.

Individual Consultant: An individual with specialized skills selected to provide consultation services at a daily or hourly rate that is subject to the consultant cap, as provided in 2 CFR 1500.10. See the information under 'Contracts' in Sections 3D and 4B for additional information.

In-Kind Services: Services provided by EPA contractors and consultants on specific parts of the project for the recipient. The recipient can request this type of service as part of the assistance agreement application, if the in- kind work is directly related to the recipient's application and the applicant is the primary beneficiary of the work. However, EPA reserves the right to decide whether in-kind services will be provided. The recipient may not direct the work provided through in-kind services. These services are managed by EPA.

Instrumentality of the State or Tribe: An instrumentality is an organization created by or pursuant to state or Tribal statute and operated for public purposes. Generally, an instrumentality performs governmental functions, but does not have the full powers of a government, such as police authority, taxation, and eminent domain.

Integrated Project Team: A group of individuals comprised of partner and EPA staff, support contractors, and technology vendors organized to design and implement a specific exchange.

Inter-Tribal Consortia: Inter-Tribal consortium is a coalition of two or more separate Indian Tribes that join for the purpose of applying for an assistance agreement. An inter-Tribal consortium is eligible to receive a Cooperative Agreement from EPA only if the inter-Tribal consortium demonstrates that all members of the consortium meet the eligibility requirements for the Cooperative Agreement, and all members authorize the consortium to apply for and receive assistance.

IR: Integrated Reporting combines Clean Water Act Sections 303(d) and 305(b).

JSON: JavaScript Object Notation is a lightweight data-interchange format.

Management Fees: When formulating budgets for applications, applicants must not include management fees or similar charges in excess of the direct costs and indirect costs at the rate approved by the applicant's cognizant audit agency, or at the rate provided for by the terms of the agreement negotiated with EPA. The term management fees or similar charges refers to expenses added to the direct costs in order to accumulate and reserve funds for ongoing business expenses, unforeseen liabilities, or for other similar costs that are not allowable under EPA assistance agreements. Management fees or similar charges may not be used to improve or expand the project funded under this agreement, except to the extent authorized as a direct cost of carrying out the scope of work.

Metadata: Metadata are data or information that describes other data. Examples include data that describe how or where the data were collected, whether or not the data comply with agreed-upon data standards, or how the data will be used.

Mileage: Mileage is an allowance for traveling expenses at a certain rate per mile.

Modified Total Direct Cost (MTDC): As defined in 2 CFR 200.1, this includes all direct salaries and wages, applicable fringe benefits, materials and supplies, services, travel, and up to the first $50,000 of each subaward (regardless of the period of performance of the subawards under the award). MTDC excludes equipment, capital expenditures, charges for patient care, rental costs, tuition remission, scholarships and fellowships, participant support costs, and the portion of each subaward in excess of $50,000. Other items may only be excluded when necessary to avoid a serious inequity in the distribution of indirect costs and with the approval of the cognizant agency for indirect costs.

Negotiated Indirect Cost Rate Agreement: Negotiated Indirect Cost Rate Agreement is the documentation that issues the reimbursement rate(s) negotiated between the Federal government and a grantee organization to substantiate its request for the establishment of an indirect cost rate.

NEI: National Emission Inventory.

Node: A Node is a web service enabled server (hardware and software) that provides a point for exchanging information over the Internet. Exchange Network Nodes can gain access to and transmit information using web services. In order to achieve interoperability among Nodes, all Nodes must be set up according to the EN specifications. Freely available Node software is available at http://www.exchangenetwork.net/exchange-network-products/. Specifications, protocols, tools, code, and documentation for building a functioning Exchange Network Node are available at http://www.exchangenetwork.net/knowledge-base/.

Node Client: A Node client is an application (software code) that can generate web service messages for using the Exchange Network. A Node client can (1) submit data in XML format to EPA or other partners using the Exchange Network; and request data in XML format from EPA or other partners using the Exchange Network.

Several Node clients that are very user friendly are available on the Exchange Network website already. A Node client software developer kit (SDK) is also available to help you integrate Node client requests into your applications. Unlike Nodes, Node clients *cannot* publish data on the Exchange Network (i.e., they cannot listen for or respond to data queries from other EN partners).

OGC: Open Geospatial Consortium.

Operations and Maintenance (O&M): During O&M an asset is in operation and produces the same product or provides a repetitive service. Maintenance is the activities necessary to keep an IT asset functioning as designed. This includes operating system upgrades, technology refreshes, and security patch implementations. **Maintenance excludes activities that expand the capacity of an asset or otherwise upgrade it to serve needs different from or significantly greater than those originally intended.** Operations are the day-to-day management of assets in the production environment and include activities to operate data centers, help desks, operational centers, telecommunication centers, and end user support services.

Outcome: The term "outcome" means the result, effect, or consequence of carrying out a project leading to an environmental or programmatic goal. Outcomes may be environmental, behavioral, health- related or programmatic in nature, may be quantitative or qualitative, and may not necessarily be achievable within an assistance agreement funding period.

Output: The term "output" means an environmental activity, effort, or associated work products leading to an environmental goal, that will be produced or provided over a period of time or by a specified date. Outputs may be quantitative or qualitative but must be measurable during an assistance agreement funding period.

Participant Support Costs: These costs include expenses that your organization pays on behalf of participants, including stipends, training fees, travel assistance for trainees and other program participants who are not employees of your organization, relocation expenses (with adequate justification), incentives paid to participants in research experiments, focus groups, surveys, or similar research activities, and/or rebates or other subsidies, as provided in EPA's Participant Support Cost Guidance.

These costs should be listed under the 'other' budget category in an applicant's 424A form and budget narrative attachment form.

Per Diem: Per diem is the allowance for lodging (excl. taxes), meals and incidental expenses for each day.

Performance Partnership Grant (PPG): In 1996, Congress authorized EPA to award Performance Partnership Grants (PPGs). As a result, states, certain interstate agencies, and Tribes can now choose to combine two or more environmental program assistance agreements into a single PPG. An applicant whose organization has an existing Performance Partnership Grant (PPG) with EPA may request that any new assistance agreement recommended for funding be incorporated into the PPG. applicant may also request to create a new PPG that includes the project proposed under this solicitation. See Section 2B(1) for additional information on PPGs.

Period of Performance: The time interval between the start of a federal award and the planned end date. For Exchange Network grants, the period of performance is set at three years.

Persona: This term refers to a semi-fictional representation of a typical user of a product. Personas are used to help teams understand their users and develop products that meet their needs.

Pre-Award Costs: Pre-award costs are those incurred prior to the effective date of the Federal award directly pursuant to the negotiation and in anticipation of the Federal award where such costs are necessary for efficient and timely performance of the scope of work.

Regional Exchange Network Coordinator (RENC): A Regional Exchange Network Coordinator, or RENC, acts as the coordinator and facilitator of the EN and the EN grant program for the region in which they work. In this role, the RENC's primary responsibility is to serve as the regional project officer for awarded EN assistance agreements, which includes providing necessary support and guidance for grant recipients, performing grant monitoring functions, and reviewing/approving grant reporting forms and extensions. See the current list of RENCs here.

Representational State Transfer (REST) / RESTful Web Service: Software system designed to support machine-to-machine interaction over a network. Representational State Transfer (REST) services do not require XML, SOAP, or WSDL (Web Services Description Language) but rely on the exchange of requests and responses between the resources and their corresponding states. REST-style services facilitate the aggregation of services into more complex services and the development of mashups. REST services are usually accessed via HTTP (like a web URL or link).

RESTful APIs: Representational state transfer (REST) is a software architectural style that defines a set of constraints to be used for creating Web services. Web services that conform to the REST architectural style, called RESTful Web services, provide interoperability between computer systems on the internet.

SLT: State, Tribal, and Local <agencies>.

Simple Object Access Protocol (SOAP): SOAP is a protocol specification for exchanging structured information for the implementation of web services on a computer network. It allows machines to interoperate in a loosely coupled manner using simple standard messages over the Hypertext Transfer Protocol (HTTP or others) and uses Extensible Markup Language (XML) as the mechanisms for information exchange.

Subawards: A subaward ("subgrant") is an award of financial assistance provided by a pass-through entity to a subrecipient to carry out part of a Federal award received by the pass-through entity. It does not include payments to a contractor or payments to an individual that is a beneficiary of a Federal program. See Section 3D for more information.

Subawardee: See subrecipient.

Subrecipient: Subrecipient is a non-Federal entity that receives a subaward from a pass-through entity to carry out part of a Federal program but does not include an individual that is a beneficiary of such program. In the context of the EN program, this word is synonymous with the term 'Subawardee.'

Subject Matter Experts (SMEs): A subject matter expert is an individual who exhibits the highest level of expertise in a specified topic or field of work.

Supplies: Supplies are all tangible personal property. A computing device is a supply if the acquisition cost per unit is less $10,000, regardless of the length of its useful life.

Supply Category: Supply costs should be categorized by major supply categories such as, but not limited to, office supplies, computing devices, and monitoring equipment.

Technical Solution(s): A technical solution is a method or system that addresses an information management need by using technology, tools, or processes. Technical solutions may include methods that enable automation, integration, and consistency and leverage either custom-created solutions or off-the-shelf solutions to address the need.

TMDL: Total Maximum Daily Load is a calculation of the maximum amount of a pollutant allowed to enter a waterbody so that the waterbody will meet and continue to meet water quality standards for that particular pollutant.

Unique Entity Identifier (UEI): Unique Entity Identifier (UEI) means the identifier assigned by SAM to uniquely identify business entities. This is the replacement identifier for a business's DUNS number. Beginning April 4, 2022, DUNS numbers will no longer be used as a UEI and only the SAM.gov created UEI will be accepted. All EPA competitive funding opportunities with a close date on or after April 1, 2022, will use UEI-compatible grant application packages. All entities applying for EPA competitive funding opportunities with a close date on or after April 1, 2022, will need to use their UEI to complete the UEI-compatible grant application packages and associated forms. See Section 5B and RAIN-2021-G01-R1 | US EPA for more information.

Unliquidated Obligations (ULOs): Unliquidated obligations are obligations incurred by the non-Federal entity that have not been paid (liquidated).

WaterML 2: Water Markup Language 2.

Web Services: Web services are a software system designed to support interoperable machine-to-machine interaction over a network. They make it easier to conduct work across organizations regardless of the types of operating systems, hardware/software, programming languages, and databases that are being used. The term web API is virtually synonymous with the term web service.

Widget: A software tool that uses a small (smaller than a page) graphical interface to provide a function or service and that can be added to a web application or to a web page.

Workshops: Workshop is defined as a meeting, retreat, seminar, symposium, conference, or event whose primary purpose is the dissemination of technical information beyond the non-Federal entity and is necessary and reasonable for successful performance under the Federal award.

XML Schema: An XML schema defines the structure of a XML document including data elements and attributes can appear in a document, how the data elements relate to one another, whether an element is empty or can include text, which types of data are allowed for specific data elements and attributes, and what the default and fixed values are for elements and attributes. A set of Network quality assurance web services is available to validate your XML documents against the schemas using a standard parser. A list of procedural and guidance documents related to schema development is available on the Exchange Network website at: http://www.exchangenetwork.net/knowledge-base/.