

INNOVATIVE WATER TECHNOLOGIES FOR LAGOON WASTEWATER SYSTEMS IN SMALL COMMUNITIES Informational Webinar for Applicants

EPA Water Technology RFA

February 3, 2022

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Webinar Objectives

- Review application information for the EPA RFA: "INNOVATIVE WATER TECHNOLOGIES FOR LAGOON WASTEWATER SYSTEMS IN SMALL COMMUNITIES"
- Provide guidance for eligibility, submission, technical aspects of application process
- Answer questions about the application process

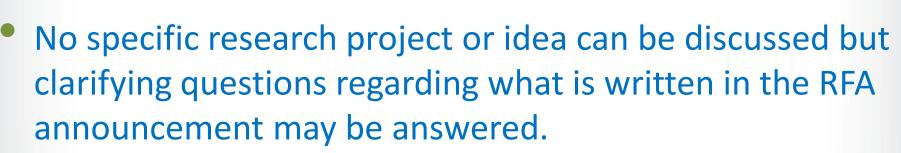
Read the RFA very carefully, all necessary information is provided

Webinar Objectives

Webinar Ground Rules

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- Please hold your questions until all EPA presentations have been made.
- You may type your questions in the comments box.



- These slides are posted on the RFA webpage.
- Please keep yourself muted during the presentation.





 Technical Contact: Sarah Ludwig-Monty, Project Officer (Ludwig-monty.sarah@epa.gov); phone: 202-566-1072

- Eligibility Contact: Ron Josephson, Eligibility Officer (josephson.ron@epa.gov); phone: 202-564-7823
 - Electronic Submissions: Debra M. Jones, Administrative Officer (jones.debram@epa.gov); phone: 202-564-7839



Overarching Research Topics SSWR PROGRAM

Clean Water Act

Safe Drinking Water Act



SAFE AND SUSTAINABLE WATER RESOURCES RESEARCH PROGRAM

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RFA & Award Information

- Estimated Number of Awards: 2
- Anticipated Federal Funding Amount: \$1,000,000 per award
- Proposed federal budget must not exceed \$1,000,000
- A minimum cost share/match of 35% of the total allowable project costs (equivalent at a minimum to 53.8462% of the federal amount) is required
- Maximum Project Period of 4 years
- RFA will close on March 7, 2022, at 11:59:59 pm Eastern Day Time

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Background

- EPA is seeking applications for the purpose of accelerating innovative and alternative wastewater treatment technologies in lagoon/pond systems serving small communities (population less than 10,000) that:
 - May require infrastructure improvements or process modifications in effluent quality.
 - Focus only on nutrients (total phosphorous and/or total nitrogen) and ammonia.
 - Help determine the performance, capital costs, operations and maintenance (O&M) costs, and O&M requirements of innovative water technologies that can efficiently and consistently remove nutrients.

Research Areas

Research Areas:

- Research Area #1 Lagoon Technologies and Treatment Performance, Variability, and Life Cycle Cost Analyses
- Research Area #2 Lagoon System Life Cycle Impact Analyses

There are two distinct, but interconnected research areas described below. Applications should be **responsive to both** research areas.



Research Area 1

Lagoon Technologies and Treatment Performance, Variability, and Life Cycle Cost Analyses

Research is needed to address both technological and financial gaps for:

- Treatment/Technology Performance
 - Technology Options
 - Capital Costs
- Operation and Maintenance (O&M) costs and;
 - O&M Requirements of Technologies

in small lagoon systems for efficient and consistent removal of ammonia, total nitrogen, and total phosphorous in different types of lagoon/pond wastewater treatment systems to various ranges of low-level effluent concentrations

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Research Area 2

Lagoon System Life Cycle Impact Analyses

Research is needed to analyze the life cycle impacts and benefits of various lagoon technology systems. A life cycle impact assessment (LCIA) can be conducted to quantify the impacts and benefits of various treatment systems identified for nutrient removal in lagoon systems.

Specific research components for the LCIA may include impacts and benefits for different treatment scenarios such as:

- At least three of the most commonly used types of lagoons and one example of lagoon conversion to mechanical upgrade
- Differences in in-line technologies, add-on technologies, and non-discharging lagoon systems
- Impacts of global warming potential
- Potential water use impacts due to displaced water supply if lagoon effluent is reused
- Reuse of lagoon effluent for land application and spray irrigation
- Sludge disposal or land application

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- The term "output" means an environmental activity, effort, and/or associated work products related to an environmental goal or objectives outlined in the RFA.
- Example outputs are provided for each Research Area and Topic of Interest in the RFA.
- The research conducted should build a comprehensive technological and financial framework that can assist small communities deploy demonstrated innovative water technologies for lagoon systems to achieve better nutrient management in a cost-effective manner.

Expected Outcomes

Expected outcomes of this agreement help foster public health improvements and cleaner waterways for small, rural, and tribal communities by providing accessible and coordinated information for both technical and financial options that will promote sustainable wastewater management practices in lagoon systems.

The resulting data will inform states, tribes, communities' consultants, and state regulators and enable more effective management of nutrient removal in lagoons.



III. ELIGIBILITY INFORMATION A. Eligible Applicants

Eligible to Apply:

Public water systems

Regional water organizations

Institutions of higher education (IHEs), research institutions or foundations

Certain nonprofit organizations



III. ELIGIBILITY INFORMATION A. Eligible Applicants

NOT Eligible to Apply:

Certain nonprofit organizations

Profitmaking firms and individuals are NOT ELIGIBLE to apply but may be consultants (See Budget Justification, IV.C.7.b.(6))

Foreign entities are NOT ELIGIBLE to apply but may receive subawards

State and local government agencies not described above, but those may be subawardees.

National laboratories funded by Federal Agencies (Federally-Funded Research and Development Centers, "FFRDCs") may not apply

Federal Agencies may not apply. Federal employees are not eligible to serve in a principal leadership role



B. Cost Share

- A minimum cost share/match of 35% of the total allowable project costs (equivalent at a minimum to 53.8462% or 7/13 of the federal amount) is required
- Account for cost share in each section of Budget Justification
- Applications which do not demonstrate how the applicant will provide the required non-federal cost share/match will be deemed ineligible

C. Substantial Compliance

- Application must contain all required elements and submitted as described in Section IV
- See Section IV.F.3.(e) for elements of Project Narrative Attachment [Table of Contents, Abstract, Research Plan, Quality Assurance Statement, Human Subjects Research Statement, Scientific Data Management Plan, References, Budget Justification, Resumes, Current and Pending Support, and Letters of Intent/Support]
- Letters of support from EPA employees are not allowed
- Do not exceed funding or project period term limits. Date you put down to begin research does not matter, but it should be 6-9 months after 3/7/2022 close of RFA.



Other Information

Please refer to the following RFA sections for additional Information:

IV. Application And Submission Information

- Required application package materials including:
 - EPA Human Subjects Research Statement (HSRS)
 - Scientific Data Management Plan (SDMP)

V. Application Review Information

- Peer Review Criteria
- Relevancy Review Criteria

Application Materials

 To apply under this solicitation, use the application package available at Grants.gov

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- For further submission information see: RFA Section IV.F.
 "Submission Instructions and other Submission Requirements"
- Note: All necessary forms are included in the electronic application package, with the exception of the current and pending support form, available at: Research Funding Opportunities: How to Apply and Required Forms

Make sure to include the current and pending support form in your Grants.gov submission

Electronic Submissions

Be sure your SAM.gov registration is ACTIVE before submitting

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- If you have issues submitting via Grants.gov, call help line at 1-800-518-GRANT (4726) and obtain a case number
- Submit the case number with explanation of submission difficulty to Ms. Debra Jones (<u>jones.debram@epa.gov</u>)
- You may submit more than one application, but each one must be significantly different from the others
- If you submit a duplicate application before the deadline, please let us know which one you want us to remove
- No changes to applications are allowed after the submission deadline

Sepa Agency Contacts

- Technical Contact: Sarah Ludwig-Monty, Project Officer (ludwig-monty.sarah@epa.gov); phone: 202-566-1072
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Interested in becoming a Peer Reviewer?

Contact Aaron Wishnuff (wishnuff.aaron@epa.gov)





Thank you!