

AGENCY: U.S. Environmental Protection Agency (EPA)

TITLE: Chesapeake Bay Program Office Fiscal Year 2019 Request for Applications for Chesapeake Bay Optimization Tool Development

ANNOUNCEMENT TYPE: Request for Applications

RFA NUMBER: EPA-R3-CBP-19-05

CATALOG OF FEDERAL DOMESTIC ASSISTANCE (CFDA) NUMBER: 66.466

08/15/2019	Issuance of RFA
09/30/2019	Application Submission Deadline (see Section IV for more information)
11/14/2019	Approximate date for EPA to notify applicants of results
12/10/2019	Approximate date for applicant to submit federal cooperative agreement application
01/24/2020	Approximate date of award

EPA will consider all applications that are submitted via Grants.gov by 11:59 pm EST on **September 30, 2019**. Any proposals submitted after the due date and time will not be considered for funding. No proposals will be accepted by facsimile or e-mail. EPA will only accept applications submitted via Grants.gov except in limited circumstances where applicants have no or limited Internet access (see section IV.).

SUMMARY

The U.S. Environmental Protection Agency's (EPA) Chesapeake Bay Program Office (CBPO) is announcing a Request for Applications (RFA) addressing the ongoing investigation, development, programming, testing, and implementation of an optimization system built around the CBP's Chesapeake Assessment and Scenario Tool (CAST) model. The CBP partners include federal agencies, the seven watershed jurisdictions of Delaware, the District of Columbia, Maryland, New York, Pennsylvania, Virginia, and West Virginia, and many non-federal organizations. Work funded under this RFA will support the seven watershed jurisdictions and other non-federal partners.

FUNDING/AWARDS: This RFA will cover the project period up to and including six years from an expected start date of **January 24, 2020**. EPA CBPO plans to award one cooperative agreement under this RFA.

Applicants must apply for both activities. The total estimated funding for both activities for six years is approximately \$956,400 (of which \$56,400 includes in-kind), with an estimated

\$159,400 (of which \$9,400 includes in-kind) available each year. There is no guarantee of funding throughout this period or beyond. It should be noted that these ranges are a broad representation of the two activities combined, and specific funding ranges may vary by activity as noted in this RFA. Therefore, applicants should refer to each specific activity for the actual funding amount when developing its applications.

Applicants must apply for both activities described in Section I.B and must submit only one application.

FULL TEXT OF ANNOUNCEMENT

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I: FUNDING OPPORTUNITY DESCRIPTION

A. Background

1. About the Chesapeake Bay Program

The Chesapeake Bay is North America's largest and most biologically diverse estuary. A resource of extraordinary productivity, it is worthy of the highest levels of protection and restoration. Authorized by Section 117 of the Clean Water Act, 33 U.S.C. Section 1267, the Chesapeake Bay Program is responsible for supporting the Chesapeake Executive Council through many actions, including the coordination of federal, state, and local efforts to restore and protect living resources and water quality of the Chesapeake Bay and its watershed. Section 117 also authorizes EPA to provide assistance grants to support the goals of the program.

The Chesapeake Bay Program is a unique regional partnership that has led and directed the restoration of the Chesapeake Bay since 1983. The CBP partners include the states of Delaware, Maryland, New York, Pennsylvania, Virginia, and West Virginia; the District of Columbia; the Chesapeake Bay Commission, a tri-state legislative body; EPA, representing the federal government; and participating citizen, local government, and scientific and technical advisory groups.

The CBP partnership is guided at the direction of the Chesapeake Executive Council (Executive Council). Through the development and implementation of Chesapeake Bay Agreements, the Executive Council sets the policy direction for the restoration and protection of the Chesapeake Bay and its watershed and uses its leadership to rally public support for Chesapeake Bay and watershed restoration and protection. The Executive Council also signs directives, agreements,

and amendments that set goals and guide policy for Chesapeake Bay and watershed restoration and protection.

The Principals' Staff Committee (PSC) acts as the senior policy advisor to the Executive Council, accepting items for Executive Council consideration and approval and setting agendas for Executive Council meetings. The PSC also provides policy and program direction to the Management Board.

The Management Board provides strategic planning, priority setting, and operational guidance through implementation of a comprehensive, coordinated, accountable implementation strategy for the Chesapeake Bay Program. It directs and coordinates all of the Goal Implementation Teams (GITs) and their respective workgroups.

The membership of the GITs and the Scientific, Technical Assessment and Reporting Team include federal and non-federal experts from throughout the watershed. Thus, academic experts, advocacy organizations, and others become active members of the broad Chesapeake Bay and watershed restoration and protection partnership.

Pursuant to Clean Water Act Section 117(b)(2), 33 U.S.C. Section 1267 (b)(2), the Chesapeake Bay Program Office is the office within EPA charged with providing support to the Executive Council in the restoration and protection of the Chesapeake Bay. The Chesapeake Bay Program Office and Chesapeake Bay Program, both mentioned above, are two distinct entities.

2. The 2014 Chesapeake Bay Watershed Agreement

In 2014, the Executive Council signed into effect the latest Chesapeake Bay Watershed Agreement. This Agreement has 10 goals and 31 outcomes that the CBP partnership commits to achieve. A key goal is to reduce pollutants to achieve the water quality necessary to support the aquatic living resources of the Bay and its tributaries and protect human health. The CBP partnership agrees to achieve this goal through the Bay TMDL and jurisdiction-specific WIPs. Other goals include sustainable fisheries, habitat restoration, land conservation and access, and stewardship. Efficient achievement of these goals through the 31 outcomes relies on optimizing actions to achieve multiple outcome co-benefits.

3. The TMDL and WIPs

The U.S. Environmental Protection Agency (EPA) has established the Chesapeake Bay Total Maximum Daily Load (TMDL), a historic and comprehensive loading reduction allocation framework with rigorous accountability measures to initiate sweeping actions to restore clean water in the Chesapeake Bay and the region's streams, creeks and rivers.

The TMDL – the largest ever developed by EPA – identifies the necessary pollution reductions of nitrogen, phosphorus, and sediment across Delaware, Maryland, New York, Pennsylvania, Virginia, West Virginia, and the District of Columbia and sets pollution limits (allocations) necessary to meet applicable state water quality standards in Chesapeake Bay, its tidal rivers and embayments. These pollution limits were further divided by jurisdiction and major river basin based on state-of-the-art modeling tools, extensive monitoring data, peer-reviewed science, and close interaction with and acceptance by jurisdictional partners.

Watershed Implementation Plans (WIPs) are plans for how each of the seven Chesapeake Bay watershed jurisdictions (jurisdictions), in partnership with federal and local governments, will achieve their respective Chesapeake Bay TMDL goals, allocations and planning targets. The Phase I WIPs were developed in 2010 by the jurisdictions to inform the 2010 Chesapeake Bay TMDL waste load and load allocations. The Phase II WIPs were developed in 2012 by the jurisdictions to meet nitrogen, phosphorus, and sediment planning targets based on updated information generated through CBP Partnership's Phase 5.3.2 Chesapeake Bay watershed model. The Phase III WIPs were developed in a 2017 Midpoint Assessment by the jurisdictions to meet nitrogen, phosphorus, and sediment planning targets by 2025 based on updated information generated through CBP Partnership's Phase 6 Chesapeake Bay suite of airshed, watershed, and estuary models. The goal of the Chesapeake Bay TMDL and supporting jurisdictional WIP process is for all nutrient and sediment pollutant load reduction and prevention measures needed to fully restore water quality in Chesapeake Bay and its tidal rivers to be in place by 2025.

EPA expected practices in place by 2017 to meet 60 percent of the necessary reductions and the partnership has concluded a 2017 Chesapeake Bay TMDL Midpoint Assessment in to review progress and adjust nutrient and sediment goals as necessary to address growth, Conowingo Reservoir infill, and the future climate risk on the Chesapeake water quality standards. The CBP Partnership has updated and reviewed the latest science, data, models, and decision support tools to be used to estimate progress in nutrient and sediment pollutant load reductions in order to develop the Phase III WIPs. The Phase III WIPs will provide information on actions the seven watershed jurisdictions intend to implement between 2018 and 2025 to meet their respective Chesapeake Bay TMDL goals.

3. The Chesapeake Assessment and Scenario Tool

The Chesapeake Assessment and Scenario Tool (CAST), <https://cast.chesapeakebay.net/>, is a web-based tool developed by the CBP partnership that allows users to rapidly develop and run management scenarios with varying best management practices (BMPs). Inputs include land use, BMPs, and point source loads. Outputs include nitrogen, phosphorus, and sediment, both edge-of-stream and delivered loads, from all pollutant source sectors and sources along with costs for the scenario for any area in the Chesapeake Bay watershed.

Users can compare among scenarios to select the practices that reduce the most pollutant loads or are most cost-effective and target these practices to the highest impact areas. Scenarios can be used for preparing Watershed Implementation Plans, developing two-year milestones, or for local planning purposes.

In the current version of CAST, the estimated loads are consistent with the Chesapeake Bay Program's Phase 6 Chesapeake Bay suite of models. The next version of CAST will have expanded information on local co-benefits of BMP implementation beyond the estimation of reductions in nitrogen, phosphorus, and sediment pollutant loads. Major version releases of CAST are approximately every 5-10 years but CAST also has continual updates to include new or revised BMP efficiencies and other parameters of direct relevance to management.

4. Scientific and Technical Advisory Committee Workshops

The CBP's Scientific and Technical Advisory Committee (STAC) held two workshops in February of 2016 that were relevant to this RFA. The work to be done under this RFA follows directly from a workshop entitled *Cracking the WIP: Designing an Optimization Engine to Guide Efficient Bay Implementation*. The workshop discussed potential user requirements and optimization methods. The agenda and presentations from this workshop are available here: http://www.chesapeake.org/stac/workshop.php?activity_id=251. The *Assessing Uncertainty in the Chesapeake Bay Modeling System* workshop also contained relevant decision support and model response discussions. Workshop related materials, including the agenda and presentation, can be found at this address: http://www.chesapeake.org/stac/workshop.php?activity_id=250.

B. Scope of Work

This RFA is soliciting cost-effective applications from eligible applicants to develop, implement, and verify an optimization tool that will be directly linked with the CAST model, described above in Section A.3., in support of non-federal agencies and organizations that are members of the CBP partnership. While the CBP partnership is comprised of federal and non-federal agencies and organizations, the activities funded under this RFA shall only support the non-federal partners. The recipient of the cooperative agreement awarded under this RFA may work directly with federal agencies, but the nature of that work will result only in benefits to the non-federal agencies, organizations, partners, and the general public. The non-federal partners of the CBP will provide programmatic direction to the cooperative agreement recipient through the CBP partnership's Water Quality Goal Implementation Team and its workgroups and the CBP partnership's Scientific, Technical, Assessment and Reporting team and its Modeling Workgroup.

The EPA Chesapeake Bay Program Office plans to award one cooperative agreement under this RFA to an organization oriented towards providing highly specialized scientific and technical support and direction as well as complex computer programming, mathematical formulations, and numerical methods and analysis. The total estimated funding for the two activities for six years is \$836,400 to \$956,400 with an estimated \$139,400 to \$159,400 available for each year.

If your organization has an interest in this project, has the skills to accomplish the activities, and is eligible to receive a federal assistance agreement as described in Section III of this announcement, we encourage you to submit an application. Each eligible application will be evaluated using the criteria described in Section V. The activities are multi-year projects (up to six years), and the application should have a work plan and budget for the first year and an estimated budget detail for all subsequent years.

Applicants must address both activities listed below in their application:

Activity 1: Investigate, Develop, Program, Verify, and Implement an Optimization System Built around the CBP's CAST Model - \$129,400 to \$144,400 (including in-kind) per annum

To support this activity, the selected applicant will provide staff who, for matters of efficiency, will be located at the U.S. EPA CBPO located in Annapolis, Maryland. Office space will be provided by EPA as in-kind assistance under the cooperative agreement. The staff should have significant and broad academic and/or professional experience in optimization algorithms, uncertainty methods, computing skills across multiple programming languages and platforms, good communication skills, and knowledge of watershed optimization routines, watershed processes, models, and BMPs.

The following are examples of the types of activities that the non-federal CBP partners have indicated they based on the outcomes of the two STAC-sponsored workshops discussed in section I.A.4 above. Applicants are encouraged to consider these examples but also describe alternative approaches to providing optimization support for the CBP partnership to inform state, regional, and local decision-making.

Investigate, Develop, and Expand an Optimization Framework

- Investigate CAST, its uses, algorithms, inputs, outputs, and the needs of the CBP decision-makers that utilize CAST to develop specifications for the development and refinement of a multi-objective, multi-constraint optimization framework.
- Determine possible simplifications to reduce the number of optimized parameters or in other ways improve the capabilities and applications of the optimization framework.
- Work with CAST developers to design an efficient interface between CAST and the optimization software.
- Work with user requirements developers to ensure that the user interface gathers necessary information for running the optimization software and meets the needs of CBP decisions-makers.
- Meet with decision-makers and users of CAST (e.g. jurisdictions, local governments, and NGO's) to learn and then implement their optimization needs for ongoing WIP development and maintenance.
- Generate a plan for further developing and expanding the optimization methods and techniques as well as the underlying computer software for CBP application.

Implement, Test, Deploy, and Support a Fully Operational Optimization System

- Implement and refine optimization engine through the use of open source or commercial software and methods for effective assessment, evaluation, and communication of the resultant response surfaces to gain understanding into the behavior of CAST for management applications.
- Develop and test the optimization engine through best available numerical methods and algorithms to provide new functionalities and capabilities to CBP partners to support accelerated implementation of most cost-effective, efficient, and geographically targeted nutrient and sediment reduction practices.
- Apply the optimization tool for developing, documenting, and dissemination of cost-effective strategies and alternatives through case studies for targeted implementation of management practices for achieving partnerships and local jurisdictions Watershed Agreement goals.

- Deploy optimization engine and software interface for supporting and assisting decision-makers and CBP partners and stakeholders in adaptive development and evaluation of management practice implementation solutions and analyses.
- Test, maintain, and refine the optimization engine through anticipated CAST updates and in response to user feedback.
- Develop data inventory requirements for constraining complex optimization problems. For example, when riparian/forest buffers are implemented in the optimization, it must be within constraints of stream length and acres available.
- Provide technical outreach, technology transfer, and other support to aid appropriate application of the optimization tool in the CBP community. Particular attention should be paid to local and municipal decision-makers in the outreach effort.
- Include BMP benefits such as stream health or flood mitigation within the optimization scheme.

The CBP partnership already has initial optimization capacity in CAST that will be expanded under this RFA. Hardware computing resources will be provided by the CBPO.

Activity 2: Provide Expert Oversight of and Troubleshooting Support to Guide Activity 1 \$10,000 to \$15,000 per annum

The selected applicant will provide support for the staff carrying out Activity 1 by assembling a small team of no more than three regionally- and nationally-recognized expert advisors in the fields of optimization and uncertainty analysis. The optimization staff should have access to advisors with the combined knowledge of a broad spectrum of optimization methods and who are already oriented toward and have extensive applied experience with the application of optimization that includes cost-effectiveness of BMPs in environmental decision-making.

The following are examples of the types of activities that that advisory team could undertake in support of the staff carrying out the investigation, development, computer programming, and other tasks described above in Activity 1. Applicants are encouraged to consider these examples, but to also describe alternative approaches to providing optimization support to the staff:

- Conduct semi-annual or as-needed teleconferences with advisors and optimization staff to assist in establishing a particular optimization implementation approach for the CBP partnership.
- Provide *ad hoc* written and verbal communications with optimization staff and modeling workgroup.
- Research and evaluate different optimization routines in support of the optimization staff and modeling workgroup.
- Participate, as requested by the modeling workgroup coordinator or chair, in the modeling workgroup's quarterly meetings during review and approval of the optimization work. Review written and presented optimization results, implementation strategies, and provide written feedback and direction to the modeling workgroup.

The advisory team members should be regionally- or nationally-recognized experts in optimization and uncertainty analysis. The advisory team would not need to include experts in

watershed modeling or Chesapeake-specific user requirements as these capabilities are already available from within the CBP partnership.

The total estimated funding for both activities for six years is approximately \$836,400 to \$956,400 with an estimated \$139,400 to \$159,400 available for the first year and each additional year per activity. EPA makes no commitment of annual funding amounts for any fiscal year(s), as funds may be limited based on funding availability, satisfactory performance, Agency priorities, contributions from other state and federal agencies, partners, and organizations, and other applicable considerations.

If your organization has an interest in this project, has the skills to accomplish the activities listed below, and is eligible to receive a federal assistance agreement as described in Section III of this announcement, we encourage you to submit an application. Each eligible application will be evaluated using the criteria described in Section V. The activities are multi-year projects, so the application should have a work plan, budget, and budget narrative for the first and all subsequent years.

For an application to be considered eligible for funding, project-related work included in the application must take place within the Chesapeake Bay watershed, which includes portions of Delaware, Maryland, New York, Pennsylvania, Virginia, and West Virginia, and all of the District of Columbia. The activities identified below are covered under this announcement.

Each application must address each activity and component identified under that activity.

C. EPA Strategic Plan Linkage & Anticipated Outcomes and Outputs

Pursuant to Section 6a of EPA Order 5700.7, “Environmental Results under EPA Assistance Agreements,” EPA must link proposed assistance agreements to the Agency’s Strategic Plan. EPA also requires that grant applicants and recipients adequately describe environmental outputs and outcomes to be achieved under assistance agreements (see EPA Order 5700.7, Environmental Results under Assistance Agreements, accessible at <https://www.epa.gov/grants/epa-order-57007a1-epas-policy-environmental-results-under-epa-assistance-agreements>).

1. Linkage to EPA’s Strategic Plan

The overall objective of this competition is to provide technical, programmatic, and administrative support for the CBP partnership in support of the most cost-effective, efficient, and targeted pollutant load reduction and other implementation actions toward reaching the goals and outcomes of the 2014 *Chesapeake Bay Watershed Agreement* under Section 117(d)(1) of the Clean Water Act.

The activities to be funded under this announcement support EPA’s FY 2018-22 Strategic Plan. Awards made under this announcement will support Goal 1: Core Mission and Objective 1.2: Provide for Clean and Safe Water Goal of the EPA Strategic Plan. All applications must be for projects that support the goals and objectives identified above.

[EPA Order 5700.7A1](#) also requires that grant applicants adequately describe environmental outputs and outcomes to be achieved under assistance agreements. Applicants must include specific statements describing the environmental results of the proposed project in terms of well-defined outputs and, to the maximum extent practicable, well-defined outcomes that will demonstrate how the project will contribute to the priorities described above.

2. Outputs

The term “output” means an environmental activity, effort, and/or associated work product related to an environmental goal and objective 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. Expected Activity 1 outputs from the project(s) to be funded under this announcement may include the following:

- Production of optimization software, accessible through a web interface, that interacts directly with the CBP’s CAST model and is widely available to the CBP partnership
- Analysis of the relative cost-effectiveness of BMPs and systems of BMPs under varying conditions including future climate risk conditions.

Progress reports and a final report will also be required outputs for each of the above two Activities, as specified in Section VI.C., Reporting, of this announcement.

3. Outcomes

The term “outcome” means the result, effect, or consequence that will occur from carrying out an environmental program or activity that is related to an environmental or programmatic goal or objective. Outcomes may be qualitative and environmental, behavioral, health-related, or programmatic in nature, but must also be quantitative. They may not necessarily be achievable within an assistance agreement funding period. Example outcomes under Activity 1 of this application could include the following:

- Cost-effective, multiple objective, pollutant load reduction efficient Phase III WIPs as updated in the 2022-2023 and 2024-2025 milestones.
- Better understanding and quantification of local BMP implementation costs and local co-benefits associated with varying management strategies.

D. Authorizing Statutes and Regulations

The grant made as a result of this announcement is authorized under the Clean Water Act Section 117(d), 33 U.S.C. Section 1267(d). Under Clean Water Act Section 117(d) (1), 33 U.S.C. Section 1267(d)(1), EPA has the authority to issue grants and cooperative agreements for the purposes of protecting and restoring the Chesapeake Bay's ecosystem. This project is subject to the Office of Management and Budget’s (OMB) Uniform Grants Guidance (2 C.F.R. Part 200) and EPA-specific provisions of the Uniform Grants Guidance (2 C.F.R. Part 1500).

E. Minority Serving Institutions:

EPA recognizes that it is important to engage all available minds to address the environmental challenges the nation faces. At the same time, EPA seeks to expand the environmental

conversation by including members of communities which may have not previously participated in such dialogues to participate in EPA programs. For this reason, EPA strongly encourages all eligible applicants identified in Section III, including minority serving institutions (MSIs), to apply under this opportunity.

For purposes of this solicitation, the following are considered MSIs:

1. Historically Black Colleges and Universities, as defined by the Higher Education Act (20 U.S.C. § 1061). A list of these schools can be found at Historically Black Colleges and Universities
2. Tribal Colleges and Universities (TCUs), as defined by the Higher Education Act (20 U.S.C. § 1059c(b)(3) and (d)(1)). A list of these schools can be found at American Indian Tribally Controlled Colleges and Universities
3. Hispanic-Serving Institutions (HSIs), as defined by the Higher Education Act (20 U.S.C. § 1101a(a)(5)). A list of these schools can be found at Hispanic-Serving Institutions
4. Asian American and Native American Pacific Islander-Serving Institutions; (AANAPISIs), as defined by the Higher Education Act (20 U.S.C. § 1059g(a)(2)). A list of these schools can be found at Asian American and Native American Pacific Islander-Serving Institutions; and
5. Predominately Black Institutions (PBIs), as defined by the Higher Education Act of 2008 , 20 U.S.C. 1059e(b)(6). A list of these schools can be found at Predominately Black Institutions

II: AWARD INFORMATION

A. Funding Amount and Expected Number of Awards

The U.S. EPA Chesapeake Bay Program Office plans to award one cooperative agreement under this RFA. The total estimated funding for both activities for six years is approximately \$836,400 to \$956,400 with an estimated \$139,400 to \$159,400 available for the first year and each additional year, including EPA in-kind. However, it should be noted that these ranges are a broad representation of all the activities combined and specific funding ranges vary by activity as noted in the RFA. Therefore, applicants should refer to each specific activity for the actual funding amount when developing their applications.

EPA reserves the right to reject all applications and make no award under this announcement. or less than the estimated funding amounts above. Funding for each activity depends on funding availability, satisfactory performance, Agency priorities, and other applicable considerations. EPA makes no commitment of annual funding amounts for any fiscal year(s), as funds may be limited based on these applicable considerations.

EPA reserves the right to make additional awards under this announcement, consistent with Agency policy and guidance, if additional funding becomes available after the original selection

is made. Any additional selection for awards will be made no later than six months after the original selection decision.

B. Award Type

The successful applicant will be issued a cooperative agreement. A cooperative agreement is an assistance agreement that is used when there is substantial federal involvement with the recipient during the performance of an activity or project. EPA awards cooperative agreements for those projects in which it expects to have substantial interaction with the recipient throughout the performance of the project. EPA will negotiate the precise terms and conditions of “substantial involvement” as part of the award process. Federal involvement may include close monitoring of the recipient’s performance; collaboration during the performance of the scope of work; in accordance with 2 C.F.R. 200.317 and 2 C.F.R. 200.318, as appropriate, review of proposed procurements; reviewing qualifications of key personnel; and/or review and comment on the content of printed or electronic publications prepared. EPA does not have the authority to select employees or contractors employed by the recipient. The final decision on the content of reports rests with the recipient.

For this project, federal involvement would typically be in the form of participation with other CBP partners and stakeholders in an advisory capacity to the grantee. This participation is expected to include involvement through the various CBP Goal Implementation Teams and related committees and workgroups (on which EPA also participates to ensure that all the recommendations for technical work support the CBP partners). All work conducted is to support the efforts to restore the Chesapeake Bay ecosystem and its surrounding watershed.

C. 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 a project, it will do so in a manner that does not prejudice the applicant 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.

D. Expected Project Period

The expected project period for the cooperative agreement is six years, with funding provided on an annual basis. No commitment of funding can be made beyond the first year. The expected start date for the award resulting from this RFA is **January 24, 2020**.

E. Pre-Award Costs

Recipients may incur otherwise eligible and allowable pre-award costs up to 90 days prior to award at their own risk without prior approval of EPA’s award official. Pre-award costs must comply with 2 C.F.R. 200.458 and 2 C.F.R. 1500.8. If EPA determines that the requested pre-award costs comply with the relevant authorities, and that the costs are justified as allocable to the project, then these costs may be included as allowable expenditures at the time that the assistance award document is prepared.

However, if for any reason EPA does not fund the application or the amount of the award is less than the applicant anticipated, then EPA is under no obligation to reimburse the applicant for these costs incurred. Thus, applicants incur pre-award costs at their own risk. Costs incurred more than 90 days prior to award require the approval of EPA Region 3's grant official.

III: ELIGIBILITY INFORMATION

A. Eligible Applicants

Nonprofit organizations, state and local governments, colleges, universities, and interstate agencies are eligible to submit an application in response to this RFA. For-profit organizations are not eligible to submit an application in response to this RFA.

B. Cost-Share or Matching Requirements

Pursuant to Clean Water Act Section 117(d)(2)(A), 33 U.S.C. Section 1267(d)(2)(A), the agency shall determine the cost-share requirements for awards. The CFDA Number 66.466 states that assistance agreement applicants must commit to a cost-share ranging from five to 50 percent of eligible project costs as determined at the sole discretion of EPA. For this RFA, EPA has determined that an applicant must provide a minimum of five percent of the total cost of the project as the non-federal cost-share.

Cost-share may be in the form of cash or in-kind contributions. Involvement from foundations, watershed groups, private sector, eligible governmental, as well as non-conventional partners can help with the match. This match must be met by eligible and allowable costs and is subject to the match provisions in grant regulations. Applications that do not demonstrate how the five percent match will be met will be rejected.

C. Threshold Eligibility Criteria

Only applications from eligible entities (see Section III.A above) that meet the following threshold eligibility criteria will be evaluated against the criteria in Section V.B. Applicants must meet the following threshold criteria to be considered for funding. Applicants deemed ineligible for funding consideration as a result of the threshold eligibility review will be notified in writing within 15 calendar days of the ineligibility determination.

1. Applications must substantially comply with the application submission instructions and requirements set forth in Section IV of this announcement or else they will be rejected. Where a page limit is expressed in Section IV with respect to the project narrative, pages in excess of the page limitation will not be reviewed.
2. In addition, initial applications must be submitted through [Grants.gov](https://www.grants.gov) as stated in Section IV of this announcement (except in the limited circumstances where another mode of submission is specifically allowed as explained in Section IV) on or before the application submission deadline published in Section IV of this announcement.

Applicants are responsible for following the submission instructions in Section IV of this announcement to ensure that their application is timely submitted.

3. Applications submitted after the submission deadline will be considered late and deemed ineligible without further consideration unless the applicant can clearly demonstrate that it was late due to EPA mishandling or because of technical problems associated with [Grants.gov](https://www.grants.gov) or relevant [SAM.gov](https://www.sam.gov) system issues. An applicant's failure to timely submit their application through [Grants.gov](https://www.grants.gov) because they did not timely or properly register in [SAM.gov](https://www.sam.gov) or [Grants.gov](https://www.grants.gov) will not be considered an acceptable reason to consider a late submission. Applicants should confirm receipt of their application with James Hargett at hargett.james@epa.gov (see Section VII, Agency Contact) as soon as possible after the submission deadline—failure to do so may result in your application not being reviewed.
4. The project funded under this announcement must be linked to the strategic goal outlined in Section I.C.1.
5. For applications to be considered eligible for funding, substantive project-related work included in the application must take place within the Chesapeake Bay watershed, which includes portions of Delaware, Maryland, New York, Pennsylvania, Virginia, and West Virginia, and all of the District of Columbia.
6. Applications must demonstrate how they will meet the five percent cost-share requirement of Section III.B.
7. Applications requesting more than the maximum funding amount listed in the range for the applicable activity will be rejected.
8. Applicants must apply for both of the activities described in Section I.B and submit only one application.
9. Applicants must address each component for both activities listed in Section IB.
10. If an application is submitted that includes any ineligible tasks or activities, 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.

IV: APPLICATION AND SUBMISSION INFORMATION

A. How to Obtain an Application Package

Applicants can download individual grant application forms from the application package associated with this opportunity on [Grants.gov](https://www.grants.gov).

B. Content and Form of Application Submission

Each application will be evaluated using the criteria referenced in Section V.B. of this announcement. You must submit a single-spaced project narrative of up to 15 pages in length by the date and time specified in Section IV.C below. Excess pages will not be reviewed. The format for this application is contained in Appendix A of this announcement. Review the directions for the preparation of the application. Applications that are not prepared in substantial compliance with the requirements in Appendix A will not be considered for funding and will be returned to the applicant.

The application package **must** include all of the following materials:

1. **Standard Form (SF)-424, Application for Federal Assistance** – Complete the form. There are no attachments. Please be sure to include organization fax number and email address in Block 8 of SF-424. Please note that the organizational Dunn and Bradstreet (D&B) Data Universal Number System (DUNS) number must be included on the SF-424. Organizations may obtain a DUNS number at no cost by calling the toll-free DUNS number request line at 1-866-705-5711 or visiting their website at <http://fedgov.dnb.com/webform>.
2. **SF-424A, Budget Information** – Complete the form. There are no attachments. The total amount of federal funding requested for the project period should be shown in Section A on Line 5(e) and on Line 6.k of Column (1) of Section B while recipient's total cost-share should be shown in Section A on Line 5(f) and Line 6.k of Column (2) of Section B. The amount of indirect costs should be entered on line 6(j). The indirect cost rate (i.e., a percentage), the base (e.g., personnel costs and fringe benefits), and the amount should also be indicated on line 22.
3. **SF-424B, Assurances for Non-Construction Programs**
4. **EPA Form 4700-4, Preaward Compliance Review Report for All Applicants and Recipients Requesting EPA Financial Assistance**
5. **EPA Key Contacts Form**
6. **Project Narrative Attachment Form** – The format for the project narrative and the budget narrative are contained in Appendix A of this announcement. Review the directions for the preparation of the application.
7. **Budget Narrative Attachment Form** – The budget narrative should include a spreadsheet that shows each year's cost for the salaries, fringe benefits, total salaries/wages, travel expenses, equipment, supplies, contractual expenses, other cost, and indirect cost.

Requirements for Project Narrative — See Appendix A

All application review criteria in Section V must be addressed in the project narrative. The project narrative shall not exceed **15** pages in length. Pages refer to one side of a single-spaced, typed page. Font size should be no smaller than 10, and the application must be submitted on 8

½" x 11" paper. Note that the **15** pages include all supporting materials such as resumes or *curriculum vitae* and letters of support. Documentation for the budget narrative, non-profit status, cost-share letters of commitment, and the SF-424 and SF-424A forms are **not** included in the page limit.

C. Intergovernmental Review

Executive Order 12372, Intergovernmental Review of Federal Programs, may be applicable to awards resulting from this announcement. EPA implemented the Executive Order in 40 CFR Part 29. EPA may require applicants selected for funding to provide a copy of their application to their State Point of Contact (SPOC) for review as provided at 40 CFR 29.7 and 40 CFR 29.8. The SPOC list can be found on the webpage below.

- Office of Federal Financial Management Resources and Other Information

EPA may require successful applicants from states that do not have a SPOC to provide a copy of their application for review to directly affected state, area-wide, regional and local government entities as provided at 40 CFR 29.7 and 40 CFR 29.8. These reviews are not required before submitting an application. Only applicants that EPA selects for funding under this announcement are subject to the Intergovernmental Review requirement.

D. Funding Restrictions

Administrative Cost Cap Requirement under Statutory Authority

Grantees applying for CBP assistance agreements must adhere to the requirements for "Administrative Costs" under the Section 117 (d)(4) of the Clean Water Act, 33 U.S.C. Section 1267 (d)(4), which states that administrative costs shall not exceed 10 percent of the annual grant award (annual grant award = federal share plus cost-share). **Appendix B: Administrative Cost Cap Worksheet** is provided as an example of a method to calculate the 10-percent limitation. You are not required to submit Appendix B with your application.

Allowable Costs

EPA assistance agreement funds may only be used for the purposes set forth in the grant and must be consistent with the statutory authority for the award. Federal funds may not be used for cost sharing for other federal grants (except where authorized by statute), lobbying, or intervention in federal regulatory or adjudicatory proceedings. In addition, federal funds may not be used to sue the federal government or any other government entity. All costs identified in the budget must conform to the provisions of 2 C.F.R. Part 200, Subpart E, Cost Principles. During the grant negotiation, any ineligible costs outlined in the application (i.e. lobbying activities) will be excluded in the final grant award.

E. Requirement to Submit Through Grants.gov and Limited Exception Procedures

Applicants, except as noted below, must apply electronically through Grants.gov under this funding opportunity based on the grants.gov instructions in this announcement. If an applicant does not have the technical capability to apply electronically through grants.gov because of

limited or no internet access which prevents them from being able to upload the required application materials to Grants.gov, the applicant must contact OMS-ARM-OGDWaivers@epa.gov or the address listed below in writing (e.g., by hard copy, email) at least 15 calendar days prior to the submission deadline under this announcement to request approval to submit their application materials through an alternate method.

Mailing Address:

OGD Waivers
c/o Jessica Durand
USEPA Headquarters
William Jefferson Clinton Building
1200 Pennsylvania Ave., N. W.
Mail Code: 3903R
Washington, DC 20460

Courier Address:

OGD Waivers
c/o Jessica Durand
Ronald Reagan Building
1300 Pennsylvania Ave., N.W.
Rm # 51278
Washington, DC 20004

In the request, the applicant must include the following information:

- Funding Opportunity Number (FON)
- Organization Name and DUNS
- Organization's Contact Information (email address and phone number)
- Explanation of how they lack the technical capability to apply electronically through Grants.gov because of 1) limited internet access or 2) no internet access which prevents them from being able to upload the required application materials through Grants.gov.

EPA will only consider alternate submission exception requests based on the two reasons stated above and will timely respond to the request -- all other requests will be denied. If an alternate submission method is approved, the applicant will receive documentation of this approval and further instructions on how to apply under this announcement. Applicants will be required to submit the documentation of approval with any initial application submitted under the alternative method. In addition, any submittal through an alternative method must comply with all applicable requirements and deadlines in the announcement including the submission deadline and requirements regarding application content and page limits (although the documentation of approval of an alternate submission method will not count against any page limits).

If an exception is granted, it is valid for submissions to EPA for the remainder of the entire calendar year in which the exception was approved and can be used to justify alternative submission methods for application submissions made through December 31 of the calendar year in which the exception was approved (e.g., if the exception was approved on March 1, 2018, it is valid for any competitive or non-competitive application submission to EPA through December

31, 2018). Applicants need only request an exception once in a calendar year and all exceptions will expire on December 31 of that calendar year. Applicants must request a new exception from required electronic submission through Grants.gov for submissions for any succeeding calendar year. For example, if there is a competitive opportunity issued on December 1, 2018 with a submission deadline of January 15, 2019, the applicant would need a new exception to submit through alternative methods beginning January 1, 2019.

Please note that the process described in this section is only for requesting alternate submission methods. All other inquiries about this announcement must be directed to the Agency Contact listed in Section VII of the announcement. Queries or requests submitted to the email address identified above for any reason other than to request an alternate submission method will not be acknowledged or answered.

F. Submission Instructions

The electronic submission of your application must be made by an official representative of your institution who is registered with [Grants.gov](https://www.grants.gov) and is authorized to sign applications for Federal assistance. For more information on the registration requirements that must be completed in order to submit an application through [Grants.gov](https://www.grants.gov), go to Grants.gov and click on “Applicants” on the top of the page and then go to the “Get Registered” link on the page. If your organization is not currently registered with [Grants.gov](https://www.grants.gov), please encourage your office to designate an Authorized Organization Representative (AOR) and ask that individual to begin the registration process as soon as possible. Please note that the registration process also requires that your organization have a Unique Entity Identifier (e.g. DUNS number) and a current registration with the System for Award Management (SAM) and the process of obtaining both could take a month or more. Applicants must ensure that all registration requirements are met in order to apply for this opportunity through Grants.gov and should ensure that all such requirements have been met well in advance of the submission deadline. Registration on [Grants.gov](https://www.grants.gov), [SAM.gov](https://www.sam.gov), and DUNS number assignment is FREE.

Applicants need to ensure that the AOR who submits the application through [Grants.gov](https://www.grants.gov) and whose Unique Entity Identifier (e.g. DUNS number) is listed on the application is an AOR for the applicant listed on the application. Additionally, the DUNS number listed on the application must be registered to the applicant organization’s SAM account. If not, the application may be deemed ineligible.

To begin the application process under this grant announcement, go to [Grants.gov](https://www.grants.gov) and click on “Applicants” on the top of the page and then “Apply for Grants” from the dropdown menu and then follow the instructions accordingly. Please note: To apply through Grants.gov, you must use Adobe Reader software and download the compatible Adobe Reader version. For more information about Adobe Reader, to verify compatibility, or to download the free software, please visit [Adobe Reader Compatibility Information on Grants.gov](https://www.adobe.com/reader/compatibility.html).

You may also be able to access the application package for this announcement by searching for the opportunity on [Grants.gov](https://www.grants.gov). Go to Grants.gov and then click on “Search Grants” at the top of the page and enter the Funding Opportunity Number, EPA-R3-CBP-19-05

or the CFDA number that applies to the announcement (CFDA 66.466), in the appropriate field and click the Search button

Please Note: All applications must now be submitted through [Grants.gov](https://www.grants.gov) using the “Workspace” feature. Information on the Workspace feature can be found at the [Grants.gov Workspace Overview Page](#).

Application Submission Deadline

Your organization’s AOR must submit your complete application package electronically to EPA through [Grants.gov](https://www.grants.gov) no later than **September 30, 2019 at 11:59 PM ET**. Please allow for enough time to successfully submit your application process and allow for unexpected errors that may require you to resubmit.

Please submit all of the application materials described below using the grants.gov application package that you accessed using the instructions above

Application Materials

The following forms and documents are required under this announcement:

- 1. Standard Form (SF)-424, Application for Federal Assistance**
- 2. SF-424A, Budget Information**
- 3. SF-424B, Assurances for Non-Construction Programs**
- 4. EPA Form 4700-4, Preaward Compliance Review Report for All Applicants and Recipients Requesting EPA Financial Assistance**
- 5. EPA Key Contacts Form**
- 6. Project Narrative Attachment Form**
- 7. Budget Narrative Attachment Form**

See Section IV. B. for additional instructions on preparing these materials.

Applications submitted through Grants.gov will be time and date stamped electronically. If you have not received a confirmation of receipt from EPA (not from Grants.gov) within 30 days of the application deadline, please contact James Hargett at hargett.james@epa.gov. Failure to do so may result in your application not being reviewed.

G. Technical Issues With Submission

1. Once the application package has been completed, the “Submit” button should be enabled. If the “Submit” button is not active, please call [Grants.gov](https://www.grants.gov) for assistance at 1-800-518-4726. Applicants who are outside the U.S. at the time of submittal and are not able to access the toll-free number may reach a [Grants.gov](https://www.grants.gov) representative by calling 606-545-5035. Applicants should save the completed application package with two different file names before providing it to the AOR to avoid having to re-create the package should submission problems be experienced, or a revised application needs to be submitted.

2. Submitting the application. The application package must be transferred to [Grants.gov](https://grants.gov) by an AOR. The AOR should close all other software before attempting to submit the application package. Click the “submit” button of the application package. Your Internet browser will launch, and a sign-in page will appear. Note: Minor problems are not uncommon with transfers to [Grants.gov](https://grants.gov). It is essential to allow sufficient time to ensure that your application is submitted to [Grants.gov](https://grants.gov) BEFORE the due date identified in Section IV of the solicitation. The [Grants.gov](https://grants.gov) support desk operates 24 hours a day, seven days a week, except Federal Holidays.

A successful transfer will end with an on-screen acknowledgement. For documentation purposes, print or screen capture this acknowledgement. If a submission problem occurs, reboot the computer – turning the power off may be necessary – and re-attempt the submission.

3. Transmission Difficulties. If transmission difficulties that result in a late transmission, no transmission, or rejection of the transmitted application are experienced, and following the above instructions do not resolve the problem so that the application is submitted to Grants.gov by the deadline date and time, follow the guidance below. The Agency will make a decision concerning acceptance of each late submission on a case-by-case basis. All emails, as described below, are to be sent to James Hargett with the FON in the subject line. If you are unable to email, contact James Hargett at 410-267-5743. Be aware that EPA will only consider accepting applications that were unable to transmit due to [Grants.gov](https://grants.gov) or relevant www.Sam.gov system issues or for unforeseen exigent circumstances, such as extreme weather interfering with internet access. Failure of an applicant to submit timely because they did not properly or timely register in [SAM.gov](https://sam.gov) or [Grants.gov](https://grants.gov) is not an acceptable reason to justify acceptance of a late submittal.

a. If you are experiencing problems resulting in an inability to upload the application to Grants.gov, it is essential to call Grants.gov for assistance at 1-800-518-4726 before the application deadline. Applicants who are outside the U.S. at the time of submittal and are not able to access the toll-free number may reach a [Grants.gov](https://grants.gov) representative by calling 606-545-5035. Be sure to obtain a case number from [Grants.gov](https://grants.gov). If the problems stem from unforeseen exigent circumstances unrelated to [Grants.gov](https://grants.gov), such as extreme weather interfering with internet access, contact James Hargett at 410-267-5743.

b. Unsuccessful transfer of the application package: If a successful transfer of the application cannot be accomplished even with assistance from [Grants.gov](https://grants.gov) due to electronic submission system issues or unforeseen exigent circumstances, and you have already attempted to resolve the issue by contacting [Grants.gov](https://grants.gov), send an email message to James Hargett at hargett.james@epa.gov prior to the application deadline. The email message must document the problem and include the [Grants.gov](https://grants.gov) case number as well as the entire application in PDF format as an attachment.

c. Grants.gov rejection of the application package: If a notification is received from [Grants.gov](https://grants.gov) stating that the application has been rejected for reasons other than late submittal and it is too late to reapply, promptly send an email to James Hargett at hargett.james@epa.gov with the FON in the subject line within one business day of the closing date of this solicitation. The email should include any materials provided by [Grants.gov](https://grants.gov) and attach the entire application in PDF format.

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

H. Additional Provisions for Applicants Incorporated into the Solicitation

Additional provisions that apply to this solicitation and/or awards made under this solicitation, including but not limited to those related to confidential business information, contracts and sub-awards under grants, and application assistance and communications, can be found at <https://www.epa.gov/grants/epa-solicitation-clauses>. These, and the other provisions that can be found at the website link, are important, and applicants must review them when preparing applications for this solicitation. If you are unable to access these provisions electronically at the website above, please communicate with the EPA contact listed in this solicitation to obtain the provisions.

V: APPLICATION REVIEW INFORMATION

A. Evaluation Process

After EPA reviews applications for threshold eligibility purposes as described in Section III, CBPO will conduct a merit evaluation of each eligible application. Reviews will be performed by a team of professionals from EPA and other CBP partner organizations with a working knowledge of the technical analysis and programmatic evaluation needs of CBP partnership. All reviewers will sign a conflict of interest statement indicating they have no conflict of interest.

B. Evaluation Criteria: Maximum score: 100 points

The evaluation criteria below apply to Activity 1 and Activity 2 of this RFA.

Criteria	Points
1. Organizational Capability, Scope and Approach: Under this criterion, reviewers will evaluate the application based on: a. The quality of the application as related to the ability to timely and successfully complete the major milestones and achieve the relevant activities to support the CBP partners as described in Section I.B (20 points) . b. Extent and quality of the application's schedule of milestones in carrying out technically and logically complex computer coding and expert oversight and troubleshooting while working with multiple management agencies, research institutions, non-governmental organizations, and stakeholder collaborative efforts (10 points) .	30
2. Programmatic Capability and Past Performance: Under this criterion, reviewers will evaluate the application based on the applicant's programmatic capability to successfully perform the proposed activity taking into account the applicant's:	34

<p>a. Past performance in successfully completing federally- and non-federally-funded assistance agreements (assistance agreements include federal grants and cooperative agreements but not federal contracts) similar in size, scope, and relevance to the proposed project within the last three years (no more than five, and preferably EPA agreements). (4 points).</p> <p>b. Extent and quality to which the applicant adequately documented and/or reported on their progress in achieving the expected results (e.g., outcomes and outputs) and your organization's history of meeting reporting requirements and submission of acceptable final technical reports under federal agency assistance agreements performed within the last three years, and if such progress was not being made, whether the applicant adequately documented and/or reported why not (4 points).</p> <p>c. Skill and experience in size, complexity, and relevance to:</p> <ul style="list-style-type: none"> i. Investigating, developing, testing and implementing an optimization system linked with operational environmental models, providing such models with full optimization functionality that includes cost-effective BMPs options in scenario mode (14 points). ii. Providing expertise oversight and troubleshooting in the development, testing, and implementing optimization systems that includes cost-effective BMPs options (12 points). <p>Note: In evaluating applicants under Items a. and b. of these criteria, the reviewers will consider the information provided by the applicant and may also consider relevant information from other sources, including Agency files and prior/current grantors (e.g., to verify and/or supplement the information supplied by the applicant). If you do not have any relevant or available past performance, please indicate this in the application and you will receive a neutral score for these sub-factors; a neutral score is half of the total points available in a subset of possible points. If you do not provide any response for these items, you may receive a score of zero for these.</p>	
<p>3. Cost-effectiveness: Under this criterion, reviewers will evaluate each application based on the degree of cost-effectiveness, considering the following factors: organizational overhead, budget breakdown, and ability to control cost for each relevant activity listed in Section I. (6 points)</p>	6
<p>4. Transferability of Results to Similar Projects and/or Dissemination to the Public: Under this criterion, reviewers will evaluate the application based on the degree to which the application includes an adequate plan to:</p> <ul style="list-style-type: none"> a. Gather information and lessons learned from the project(s) (5 points) b. Effectively transfer optimization documentation, information, data, results, and recommendations to CBP partners and stakeholders in the Chesapeake Bay watershed in a timely manner (5 points) 	10

<p>5. Seamless Transition: Applicants will be evaluated based on:</p> <p>a: The extent the applicant addresses the development of recommendations for modernization of methods to be used over the course of the six-year project period to take advantage of the best available optimization code (5 points)</p> <p>b. The extent the applicant can become fully functional in the roles described in the announcement once the cooperative agreement is awarded and how the applicant will bring about a “seamless” transition in the provision of the described support to the CBP partnership and its management structure. (5 points)</p>	10
<p>6. Timely Expenditure of Grant Funds: Under this criterion, reviewers will evaluate the application based on the approach, procedures, and controls for ensuring that awarded grant funds will be expended in a timely and efficient manner. (5 points)</p>	5
<p>7. Environmental Results: Applicants will be evaluated based on their plan and approach for tracking and measuring their progress towards achieving the environmental outputs and outcomes identified in Section I.C of the RFA. (5 points)</p>	5

C. Review and Selection Process

Eligible applications will be evaluated and ranked using the criteria stated in Section V.B. above by a panel of reviewers from EPA and other CBP partner organizations with a working knowledge of the technical analysis and programmatic evaluation needs of the CBP partnership. The review team will then forward the highest-ranked applications for each activity to the director or deputy director of CBPO for final selection. EPA expects to select one application for both activities. In making the final funding decisions, the selection official may also consider programmatic goals and priorities, including those described in the 2014 *Chesapeake Bay Watershed Agreement* at https://www.chesapeakebay.net/what/what_guides_us/watershed_agreement.

D. Additional Provisions

Additional provisions that apply to this solicitation and/or awards made under this solicitation including the clause on Reporting and Use of Information Concerning Recipient Integrity and Performance can be found at EPA Solicitation Clauses. These points and the other provisions that can be found at the website link <https://www.epa.gov/grants/epa-solicitation-clauses>, are important, and applicants must review them when preparing an application for this solicitation. If you are unable to access these provisions electronically at the website above, please communicate with the EPA contact listed in this solicitation to obtain the provisions.

VI: AWARD ADMINISTRATION INFORMATION

A. Award Notices and Instructions for Submission of Final Application

It is expected that applicants will be notified in writing of funding decisions on or around **November 14, 2019** either via email or U.S. Postal Service. This notification, which informs the applicant that its application has been selected and is being recommended for award, is not an authorization to begin work. The official notification of an award will be made by the EPA Region 3 grants office. Applicants are cautioned that only a grant award official is authorized to bind the government to the expenditure of funds; selection does not guarantee an award will be made. For example, statutory authorization, funding, or other issues discovered during the award process may affect the ability of EPA to make an award to an applicant. The award notice, signed by an EPA grant award official, is the authorizing document and will be provided either via email or U.S. Postal Service.

Notification of selection does not indicate that the applicant can start work on the project. The selected applicant will be asked to submit a full federal assistance agreement application package. A federal project officer provides assistance in the application process and negotiates a work plan, budget, and starting date. Processing for this particular cooperative agreement award is expected to take 60 days.

B. Administrative and National Policy Requirements

If your application is selected, the following information will be helpful in preparing your cooperative agreement application. Any information about general EPA regulations applicable to the award of assistance agreements may be found at: <https://www.epa.gov/grants/>

Federal Requirements

An applicant whose application is selected for federal funding must complete additional forms prior to award. EPA reserves the right to negotiate and/or adjust the final cooperative agreement amount and work plan content prior to award consistent with agency policies.

Indirect Costs Competition

Indirect costs (IDCs) may be budgeted and charged by recipients of Federal assistance agreements in accordance with [2 CFR Part 200](#). EPA's [Indirect Cost Policy for Recipients of EPA Assistance Agreements](#) (IDC Policy) implements the Federal regulations, and the following applies to all EPA assistance agreements, unless there are [statutory or regulatory limits on IDCs](#).

In order for an assistance agreement recipient to use EPA funding for indirect costs, the IDC category of the recipient's assistance agreement award budget must include an amount for IDCs and at least one of the following must apply:

- With the exception of “exempt” agencies and Institutions of Higher Education as noted below, all recipients must have one of the following current (not expired) IDC rates, including IDC rates that have been extended by the cognizant agency:
 - Provisional;
 - Final;

- Fixed rate with carry-forward;
- Predetermined;
- 10% de minimis rate authorized by 2 CFR 200.414(f)
- EPA-approved use of one of the following:
 - 10% de minimis as detailed in section 6.3 of the IDC Policy; or
 - Expired fixed rate with carry-forward as detailed in section 6.4.a. of the IDC Policy.
- “Exempt” state or local governmental departments or agencies are agencies that receive up to and including \$35,000,000 in Federal funding per the department or agency’s fiscal year, and must have an IDC rate proposal developed in accordance with [2 CFR 200 Appendix VII](#), with documentation maintained and available for audit.
- Institutions of Higher Education must use the IDC rate in place at the time of award for the life of the assistance agreement (unless the rate was provisional at time of award, in which case the rate will change once it becomes final). As provided by [2 CFR Part 200, Appendix III\(C\)\(7\)](#), the term “life of the assistance agreement”, means each competitive segment of the project. Additional information is available in the regulation.

IDCs incurred during any period of the assistance agreement that are not covered by the provisions above are not allowable costs, and must not be drawn down by the recipient. Recipients may budget for IDCs pending approval of their IDC rate by the cognizant Federal agency or an exception granted by EPA under section 6.3 or 6.4 of the IDC Policy. However, recipients may not draw down IDCs until their rate is approved or EPA grants an exception.

The 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 [2 CFR 200.331\(a\)\(4\)](#) when establishing indirect cost rates for subawards.

See the [Indirect Cost Guidance for Recipients of EPA Assistance Agreements](#) for additional information.

Incurred Costs

Funding eligibility ends on the date specified in the award. The time expended, and costs incurred in either the development of the application or the final assistance application, or in any subsequent discussions or negotiations prior to the award, are neither reimbursable nor recognizable as part of the recipient’s cost share.

EPA Requirements for Quality Management Plans and Quality Assurance Plans

In accordance with 2 C.F.R. Section 1500.11, projects that include the generation or use of environmental data are required to submit a Quality Management Plan (QMP) and Quality Assurance Project Plan (QAPP).

The QMP must document quality assurance policies and practices that are sufficient to produce data of adequate quality to meet program objectives. The QMP should be prepared in accordance with EPA QA/R-2: EPA Requirements for Quality Management Plans (refer to <https://www.epa.gov/quality/epa-qar-2-epa-requirements-quality-management-plans>, Chapter 2). The recipient's QMP should be reviewed and updated annually as needed. The QMP must be submitted to the EPA project officer at least 45 days prior to the initiation of data collection or data compilation.

The recipient must develop and implement quality assurance and quality control procedures, specifications and documentation that are sufficient to produce data of adequate quality to meet project objectives. The Quality Assurance Project Plan (QAPP) is the document that provides comprehensive details about the quality assurance/quality control requirements and technical activities that must be implemented to ensure that project objectives are met. The QAPP should be prepared in accordance with EPA QA/R-5: EPA Requirements for Quality Assurance Project Plans. The QAPP must be submitted to the EPA project officer at least 30 days prior to the initiation of data collection or data compilation. Requirements for QAPPs can be found at <https://www.epa.gov/quality/template-developing-generic-quality-assurance-project-plan-or-plan-elements-model>.

Deliverables

Awarded applicant will be required to provide a chart or list of deliverables, providing items and due dates.

C. Reporting

Quarterly or semiannual progress reports, as determined by the federal project officer, will be required as a condition of this award.

D. Debriefings

Unsuccessful applicants interested in requesting a debriefing should refer to the procedures for debriefings in the [Dispute Resolution Procedures](#), which can also be found at 70 FR (Federal Register) 3629, 3630 (January 26, 2005). Copies of these procedures may also be requested by contacting the person listed in Section VII of the announcement. Please note that the FR notice referenced above refers to regulations at 40 CFR Parts 30 and 31 that have been superseded by regulations in 2 CFR parts 200 and 1500. Notwithstanding this, the procedures for competition-related debriefings and disputes remains unchanged from the procedures described at 70 FR 3629, 3630, as indicated in 2 CFR Part 1500, Subpart E.

E. Disputes

Assistance agreement competition-related disputes will be resolved in accordance with the dispute resolution procedures published in 70 FR (Federal Register) 3629, 3630 (January 26, 2005) which can be found at [Grant Competition Dispute Resolution Procedures](#). Copies of these procedures may also be requested by contacting the person listed in Section VII of the announcement. Note, the FR notice references regulations at 40 CFR Parts 30 and 31 that have

been superseded by regulations in 2 CFR parts 200 and 1500. Notwithstanding the regulatory changes, the procedures for competition-related disputes remains unchanged from the procedures described at 70 FR 3629, 3630, as indicated in 2 CFR Part 1500, Subpart E.

F. Additional Provisions for Applicants Incorporated into the Solicitation

Additional provisions that apply to this solicitation and/or awards made under this solicitation, including but not limited to those related to DUNS, SAM, copyrights, disputes, and administrative capability, can be found at <https://www.epa.gov/grants/epa-solicitation-clauses>. These, and the other provisions that can be found at the website link, are important, and applicants must review them when preparing an application for this solicitation. If you are unable to access these provisions electronically at the website above, please communicate with the EPA contact listed in this solicitation to obtain the provisions.

VII: AGENCY CONTACT

For administrative and technical issues regarding this RFA, please contact James Hargett via email at hargett.james@epa.gov. All questions must be received in writing via email or fax at 410-267-5777 with the reference line referring to this RFA (Re: RFA EPA-R3-CBP-19-XX). All questions and answers will be posted on <https://www.epa.gov/grants/grants-your-region-information-specific-epa-region-3>.

VIII: OTHER INFORMATION

In developing your application, you may find the following documents helpful. Websites for guidance documents are listed here. If you prefer a paper copy, please call 1-800-YOUR BAY.

Chesapeake Bay Watershed Agreement and Management Strategies
https://www.chesapeakebay.net/what/what_guides_us/watershed_agreement

Electronic copy of the *CBP Guidance for Data Management*
https://www.epa.gov/sites/production/files/2016-01/documents/attachment8cimsgrant_guidance.pdf

Electronic copy of the *Chesapeake Bay Program Office Grant and Cooperative Agreement Guidance*
<https://www.epa.gov/restoration-chesapeake-bay/chesapeake-bay-program-grant-guidance>

EPA Requirements for Quality Management Plans and Quality Assurance Plans
<https://www.epa.gov/grants/implementation-quality-assurance-requirements-organizations-receiving-epa-financial>

Please visit the EPA Grants website (<https://www.epa.gov/grants>), the EPA Region 3 Grants website (<https://www.epa.gov/grants/grants-your-region-information-specific-epa-region-3>) or the Chesapeake Bay Program website (<https://www.epa.gov/restoration-chesapeake-bay>)

bay/chesapeake-bay-program-grant-guidance) if you have questions about grant issues such as costs or eligibility.

Further information on CBP committees is located at:
https://www.chesapeakebay.net/who/how_we_are_organized.

Appendix A
Project Narrative Format
U. S. ENVIRONMENTAL PROTECTION AGENCY, Region III
Chesapeake Bay Program Office Fiscal Year 2019 Request for Applications (RFA) for
Chesapeake Bay Optimization Tool Development
EPA-R3-CBP-19-05

The following information must be provided, or the application may not be considered complete and may not be evaluated.

- A. **Project Narrative Format:** Use the Project Narrative Attachment Form (see Section IV.F.) to submit this document. Project narratives as described below shall not exceed 15 single-spaced pages. The project narrative must be submitted on 8 ½" x 11" paper, and font size should be no smaller than 10. Note that the 15-page limit includes all supporting materials, resumes or *curriculum vitae*, and letters of support but **excludes** the budget narrative, documentation of non-profit status, and forms 1 through 5 as listed in Section IV. F. Applicants must ensure that the project narrative clearly identifies the activity number. Applicant's responses should be numbered and submitted according to the format listed below.

1. Name, address (street and email), and contact information of the applicant

2. Background - Include the following in this section:

- i) Project title.
- ii) Brief description of your organization.
- iii) Documentation of non-profit status, if applicable.
- iv) Brief biographies of applicant lead(s) including resumes and/or curriculum vitae.
- v) Funding requested. Specify total cost of the project. Identify funding from other sources, including cost-share or in-kind resources.
- vi) DUNS number — See Section VI of RFA.

3. Work plan - Include the following in this section:

- i) A clear and concise discussion of how your organization will meet the objectives and requirements of the Program as described in Section I of the announcement for the relevant activity;
 - ii) Environmental Results – Outputs and Outcomes: Address how the application will meet the expected outputs and outcomes of this project and your plan for tracking and measuring your progress towards achieving them.
1. Output: An output is an environmental activity, effort, or work product related to an environmental goal or objective that will be produced within the assistance agreement period. Expected outputs from the activities to be funded under this announcement are identified in Section I of this solicitation.

2. Outcome: An outcome is a result, effect, or consequence that will result from carrying out an environmental program or activity that is related to an environmental programmatic goal or objective. Outcomes are quantitative measures that may not necessarily be achievable within the assistance agreement period. Examples of potential outcomes under this announcement are identified in Section I of this solicitation.

iii) Review Criteria: Address in narrative form each of the review criteria identified in Section V.B of the RFA. Identify by the review criteria number and title followed by your narrative.

With specific respect to the Programmatic Capability Past Performance factor in V.B: Submit a list of federally and/or non-federally funded assistance agreements (assistance agreements include federal grants and cooperative agreements but not federal contracts) similar in size, scope and relevance to the proposed project that your organization performed within the last three years (no more than five agreements and preferably EPA agreements) and describe (i) whether, and how, you were able to successfully complete and manage those agreements and (ii) your history of meeting the reporting requirements under those agreements, including whether you adequately and timely reported on your progress towards achieving the expected outputs and outcomes of those agreements (and if not, explain why not) and whether you submitted acceptable final technical reports under the agreements.

In addition, provide information on your organizational experience and plan for timely and successfully achieving the objectives of the proposed project as well as your staff's expertise/qualifications, staff knowledge, and resources, or the ability to obtain them, to successfully achieve the goals of the proposed project.

B. Budget Narrative - Use the Budget Narrative Attachment Form (see Section IV.F.) to submit this document. For the first year and each of the subsequent years, provide a budget narrative breakdown by the major budget categories (i.e. personnel, fringe benefits, travel, equipment, supplies, contractual, construction, other, and indirect). In each of the budgets, include the cost-share amount (a minimum of five percent for each of the total project costs) and demonstrate how the cost-share will be met, including, if applicable, letters of commitment from any third-party contributors. Please note that subaward costs must be itemized under a separate sub-line item within the "Other" budget cost category.

In addition, grantees applying for CBP assistance agreements must adhere to the requirement for "Administrative Costs" under the Clean Water Act Section 117 (d)(4), 33 U.S.C. Section 1267 (d)(4), which states that administrative costs shall not exceed 10 percent of the annual grant award. Information on how to calculate the 10 percent administration cost cap is located in Appendix B: Administrative Cost Cap Worksheet. To calculate the specific cost-share amount, follow these two-steps:

- 1) EPA amount (including any in-kind) ÷ 95% = 100% of Total Grant Amount
- 2) 100% of Total Grant Amount × 5% = Applicant's Cost-Share Amount

Appendix B
EPA-R3-CBP-19-05

SAMPLE
(DO NOT SUBMIT WORKSHEET WITH APPLICATION)

CHESAPEAKE BAY PROGRAM ADMINISTRATIVE COST CAP
WORKSHEET

INSTRUCTIONS: In accordance with Section 117(d)(4) and 117(e)(6) of the Clean Water Act (CWA), the costs of salaries and fringe benefits incurred in administering a grant under Section 117(d) or 117(e) of the CWA shall not exceed 10 percent of the annual grant award. The annual grant award is the total costs including Federal and cost share amounts. The worksheet below is provided to assist you in calculating allowable administrative costs. The Budget Detail of your Application for Federal Assistance (SF-424) should reflect how your administrative costs will comply with the cap. For specific guidance refer to page 2 of this sample “Compliance with CWA Section 117 Requirements Restricting Administrative Costs.”

Total Costs	\$ _____
Cap %	X .10
Limit on Administrative Costs	\$ _____ (a)
List Administrative Costs: (Budgeted costs for application)	
_____	\$ _____
_____	_____
_____	_____
_____	_____
Total	\$ _____ (b)

Line (b) cannot exceed Line (a).

COMPLIANCE WITH CWA SECTION 117 RESTRICTING ADMINISTRATIVE COSTS

Statutory Authority

Under statutory authority, grantees applying for Chesapeake Bay Program grants or cooperative agreements under Section 117 (d) or (e) must adhere to the requirement on administrative costs as follows:

Under Section 117(a)(1) Administrative Cost - The term “administrative cost” means the cost of salaries and fringe benefits incurred in administering a grant under this section.

Under Section 117(d)(4) - Administrative Costs. - Administrative costs shall not exceed 10 percent of the annual grant award.

Under Section 117(e)(6) - Administrative Costs. -Administrative costs shall not exceed 10 percent of the annual grant award.

Guidance for Determining Administrative Costs

As determined by EPA/CBPO, the following provides guidance in determining administrative costs for grants/cooperative agreements under Section 117 (d) and (e) of the Clean Water Act.

1. Administrative Costs

Salaries and fringe benefits charged against the project or program element for the sole purpose of administering the grant/cooperative agreements shall not exceed 10% of the annual grant award (Federal and cost share). One hundred percent of the salaries and fringe benefits related to these functions are considered administrative costs. Examples of administrative costs include, but are not limited to:

- preparation and submission of grant application
- fiscal tracking of grants funds
- maintaining project files
- collection and submission of deliverables

2. Non-administrative Costs

Salaries and fringe benefits related to the implementation of the project or program element of the grant/cooperative agreement are not considered administrative costs. None of the salaries and fringe benefit costs related to these functions shall be considered administrative costs. Example:

- the salaries and fringe benefits for technical staff to conduct work to accomplish specific Bay Program goals as outlined in the program or project elements are not administrative costs.

3. Calculation of Administrative Costs

In order to ensure compliance with this requirement, use the sample format provided below or a similar format to calculate the costs and include in the Budget Detail of your Application for Federal Assistance (SF-424).

4. Questions Regarding Administrative Costs

The grantees shall direct questions to the EPA Project Officer who will determine what costs should be included as administrative costs on a case-by-case basis.