



Watershed Assistance Grant Program

FY 24 Request for Proposals



Maryland
Department of
the Environment



Chesapeake Bay Trust | 108 Severn Avenue, Annapolis, MD 21403

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Introduction and Program Goals

The Chesapeake Bay Trust (Trust) is a nonprofit, grant-making organization dedicated to improving the bays, streams, rivers, forests, parks, and other natural resources of our local systems, in the Chesapeake Bay Watershed. The Trust, supported in large part by Maryland’s Chesapeake Bay License Plate and partnerships with other regional funders, engages and empowers diverse groups to take actions that enrich natural resources and local communities of the Chesapeake Bay Region. Since 1985, the Trust has awarded over \$160 million in grants to municipalities, nonprofit organizations, schools, and public agencies throughout the Chesapeake Bay watershed.

The Watershed Assistance Grant Program is a partnership between the Trust, Maryland Department of Natural Resources (MDNR), Maryland Department of the Environment (MDE), and – ***new this year*** – ***West Virginia’s Department of Environmental Protection (WVDEP)***.

This grant program welcomes requests from local governments and non-profit organizations for assistance with the earliest phases of watershed restoration projects. Funding is available for watershed restoration project designs and for watershed planning and programmatic development. The goal of the projects funded through this opportunity will be improved water quality in:



The entire State of Maryland

The West Virginia portion of the Chesapeake Bay watershed.

By funding the earliest phases of watershed restoration projects and planning, the funding partners provide local governments and non-profit organizations the ability to position themselves to quickly advance implementation work. The funding partners envision the products of grants funded under this opportunity will enable grantees to:

- Leverage resulting designs, plans, or projects to craft future proposals for implementation funding to the Maryland Chesapeake and Atlantic Coastal Bays Trust Fund, grant programs at the Chesapeake Bay Trust, or other sources of support and
- Develop deliverables that will support local planning efforts such as Financial Assurance Plans (FAPs), Total Maximum Daily Load (TMDL) Implementation Plans, county-wide Green Infrastructure Plans, watershed action plans, and state Watershed Implementation plans (WIPs).

In addition to funding restoration projects, the Trust is committed to the advancement of diversity and inclusion in its award-making and environmental work. As a result, the Trust strongly encourages applications directly from underrepresented groups, and for projects that increase awareness and participation of communities that are traditionally underrepresented, such as communities of color. For a full

At A Glance

Program Summary: The Watershed Assistance Grant Program offers grants for design of watershed restoration and protection projects or planning and programmatic development projects. Design requests will be accepted for the full suite of nonpoint source best management practices, including stream restoration. Planning and programmatic project requests may include watershed characterization, surveys, assessments, action plans, studies, program development, or financing strategies that build local capacity.

Deadline: Wednesday, December 6, 2023, at 4:00 PM EST

Eligible Project Locations: This grant program welcomes applications for projects in the:

- State of Maryland
- West Virginia portion of the Chesapeake Bay watershed

Request Amounts:

- \$100,000 for design of stormwater best management practices
- \$150,000 for design of stream restoration practices
- \$75,000 for watershed planning and programmatic development

Submit Your Application:

Follow the instructions online at <https://cbtrust.org/grants/watershed-assistance/>

Contact:

Sarah Koser, Program Manager
410-974-2941 ext. 106
skoser@cbtrust.org

Megan Diehl, Program Officer
410-974-2941 ext. 139
mdiehl@cbtrust.org

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description of the Trust's efforts to engage under-engaged groups, see our strategic plan at www.cbtrust.org/strategic-plan and <https://cbtrust.org/diversity-inclusion/>.

Eligible Project Locations

All communities in Maryland and throughout the Chesapeake Bay watershed in West Virginia are eligible. To determine if a project site is eligible, see our online map here: <https://cbtrust.org/wp-content/uploads/WAGP-eligibility-map-final.pdf>.

Eligible Applicants

The Trust, MDNR, MDE, and WVDEP welcome requests from the following organizations:

- Municipal, County, and Regional Agencies
- Nonprofit Organizations
- Faith-based Organizations
- Community and Homeowners Associations (HOAs)
- Soil/Water Conservation Districts & Resource Conservation and Development Councils
- Forestry Boards
- Public and Independent Higher Educational Institutions

If your organization category is not listed above, contact the Trust to verify eligibility prior to submitting your application. Applications submitted from organizations outside of these categories may not be eligible for funding. The Trust seeks applications from organizations new to environmental grant-making as well as organizations experienced in design and planning projects. All applicants, but particularly new applicants, are welcome to contact the Trust for assistance in applying. Additionally, this grant program is one element of the State of Maryland's Watershed Assistance Collaborative. This Collaborative includes other opportunities for local governments and non-profit organizations, such as training events and programs for watershed restoration financing and planning (see Appendix A and this link for further information: https://dnr.maryland.gov/ccs/pages/healthy_waters/wac.aspx).

Eligible Project Types and Funding Request

Maryland and West Virginia welcome requests for the design of stormwater best management practices, restoration designs, watershed assessments, and watershed planning projects in the below tracks:

Track 1 – Project Design

- Generally, **up to \$100,000 for the design of best management practices (BMPs), including the following:**
 - Bioretention cells and large-scale rain gardens;
 - Stormwater management practices, that include low impact development (LID) techniques, green infrastructure (GI), water quality BMPs, and environmental site design (ESD);
 - Submerged gravel wetlands; and
 - Agricultural BMPs.
- Generally, **up to \$150,000 for the design of restoration practices, including the following:**
 - Stream restoration;
 - Wetland and marsh creation/restoration; and
 - Living shorelines.



Track 2 – Watershed Planning and Program Development

- Generally, up to \$75,000 for planning and program development

For both tracks, applicants interested in requests exceeding the general funding level outlined above should talk with the Trust ahead of submission to: (a) provide a budget that is scalable in the event that an award is limited (itemize elements and separate project components into independent subtasks, if possible) and (b) provide rationale in the “Budget Justification Section” of the online application. For all projects, the scope of work must clearly articulate deliverables and include detailed budget requests.

Track 1 – Project Design (projects up to \$150,000)

Applicants may request funding to create construction-ready designs and obtain permits for specific watershed restoration projects. The strongest design proposals will:

1. Request funds to develop 100% design(s) for priority project(s) identified in jurisdiction-wide or watershed-wide planning documents, that incorporate the below:
 - a. For projects that are not specifically identified in a detailed watershed action plan or that are not among the top priority projects within an action plan, additional justification for the project and/or site selection must be provided (see Appendix B for Watershed Implementation Plan Resources) and
 - b. Applicants submitting to this track should be ready to begin design of specific projects upon award. For applicants that have not yet identified specific restoration projects to move forward into design, please consider Track 2 – Watershed Planning.
 - c. For stream restoration projects, Appendix C provides additional resources to ensure that your application includes important elements and required information.
2. Focus on water quality improvements, such as reducing the flow of nitrogen, phosphorus, sediment, and other pollutants into local waterways.
 - a. Although water quality and water quantity issues often intersect, proposed projects that deal solely with water quantity issues will not be competitive in this program.
 - b. Water Quality Improvements can be estimated using the Green Stormwater Infrastructure siMple Pollutant Load Reduction Estimator (Green SIMPLE) tool: https://cbtrust.org/wp-content/uploads/Green_SIMPLE.xlsx. See Appendix D for instructions on how to use the tool (and for a calculator developed specifically for Anne Arundel County, MD projects).
3. Ensure project is permittable by regulatory agencies. The output of the grant award, i.e., the design and specifications, must be permittable by MDE or WVDEP as well as any other appropriate local, state, and federal entities. Applicants are strongly encouraged to contact the appropriate permitting department during the conceptual design phase and to discuss their project with the permit reviewers:
 For projects in Maryland please visit the MDE permitting webpage: <https://mde.maryland.gov/programs/permits/Pages/index.aspx> and for
 For projects in West Virginia please visit the WVDEP permitting webpages: <https://dep.wv.gov/Permits/Pages/default.aspx> and <https://dep.wv.gov/WWE/Programs/nonptsource/streamdisturbance/Pages/default.aspx>.
4. Describe how your project is cost-effective. A reasonable budget is required that includes the following:
 - a. Providing assurance that the best price was provided (e.g., were multiple estimates/quotes obtained for contractors) and is reflective of current, market prices/values),
 5. Describing the cost-effectiveness of the project in terms of dollars per impervious acre treated and dollars per pounds of nutrients reduced and within the acceptable range presented in Appendix A, and
 - a. Justifying all budget line items (note: matching funds are encouraged but not required).

Applicants requesting funds for stream restoration design:

Stream restoration design applications must demonstrate project need, landowner permission, use of the

field's best practices and recent research, assessment of alternatives demonstrating the proposed restoration was appropriate for the site, minimization and avoidance of natural resources impacts like tree canopy, ability to proceed through the permit and construction process, and cost-effectiveness. See Appendix C for stream restoration criteria that will be used to evaluate this type of project. The Trust highly recommends applicants interested in stream restoration practices review and be familiar with the most recent science to make informed decisions on site selection and technique. Research gathered through the Pooled Monitoring Initiative's Restoration Research Program focused on stream restoration is included in Appendix C and has been shared on the Trust's website (<https://cbtrust.org/grants/restoration-research/> - found under the "Additional Information," "Awarded Projects and Final Products" tab). Appendix D provides additional resources to support your application and project.

If the applicant or the local jurisdiction anticipates claiming credit for the practice and/or the applicant anticipates applying to the MDNR Chesapeake and Atlantic Coastal Bays Trust Fund for implementation funding, please refer to the Expert Panel reports and budget for any required additional calculations, sampling, and/or modeling that will be completed during the design phase. The new Expert Panel reports can be found here: <https://www.chesapeakebay.net/who/publications-archive/bmp-expert-panels>.

Track 2 – Watershed Planning and Program Development (projects up to \$75,000)

Applicants may request funding for specific projects identified in existing planning documents, including the following: watershed characterization, watershed action plans, and other planning and programmatic development projects described below in more detail. Local entities may use these funds to help establish local area planning goals and/or to support their participation in the jurisdictions' planning efforts to advance either Maryland or West Virginia Phase III WIP goals. Planning efforts may focus on one or more of the activities defined in items 1 through 3 below. Applicants are strongly encouraged to contact the Trust prior to applying to discuss spatial and geographic scale for watershed planning projects. The proposal should address one of the three areas below with the ultimate intent of accelerating the reduction of nutrients and sediment loads. Before submitting a project in the watershed planning and program development track, please determine whether a relevant water quality plan already exists for all or part of your watershed. Watershed plans are a first step to assess the area with the community, identify potential target areas for restoration, propose restoration practice types if possible, and serve as a guiding document for future work, including applications for restoration projects. Applicants may propose watershed planning or watershed assessment projects; final products will include planning documents useful for future design and implementation of restoration projects. The strongest proposals will consider and include:

1. Watershed planning (assessment phase):
 - a. Funds are available for the following: watershed characterization, watershed survey, and stakeholder engagement.
 - b. These projects should establish a baseline of watershed conditions from which progress can be evaluated and create a framework for and identify future restoration and protection actions.
 - c. For small study areas, the strongest proposals will demonstrate collaborations with other entities (e.g., county agencies and watershed groups) to ensure the project integrates with a larger watershed plan.
2. Watershed planning (action plan phase):
 - a. Applicants may request funds for development of a watershed action plan in cases in which watershed assessment has been completed or as a second phase of a proposal that includes watershed assessment. Applicants may also request funds for localized green infrastructure/stormwater master plans (focused on faith-based organization, school, HOA, local park, or town property, for example) if watershed-wide action plans are not site-specific with prioritized practices identified.
 - b. Funding requests to develop action plans will generally be up to \$75,000 at the watershed-scale, up to \$30,000 at the community-scale, and up to \$15,000 at the individual property-scale.
 - c. For small watersheds or localized green infrastructure/master plans, the strongest proposals will demonstrate collaboration with other entities (e.g., county agencies and watershed groups) to ensure

Project Leader cannot continue in the position, the organization must contact the Trust and assign a new qualified Project Leader.

- To avoid conflict of interest issues, individuals associated with for-profit entities to be engaged in the project cannot serve in either role.

- Project Information Tab
 - Provide a project title; project abstract; the watershed, county, and legislative district in which the project is located; and the latitude and longitude coordinates of the project location.
- Timeline Tab
 - Add the project start and end date. Provide a project timeline that includes major tasks and their associated start and end dates.
- Deliverables Tab
 - Provide estimated metrics for your proposed project such as project participants and outreach and restoration outcomes.
- Volunteers Tab
 - Provide a description of volunteer activities, the number of volunteers, and total number of volunteer hours.
- Project Partnerships
 - Provide a list of project partner organizations or contractors, individuals, their areas of expertise, and their role(s) in your project.
 - Applicants are encouraged to upload a Letter of Commitment for the project from each partner describing in detail the partner’s role or contribution to the project. Applications including strong Letter(s) of Commitment often receive higher scores. If not submitted with the application, Letter(s) of Commitment may be required prior to the release of any awarded funding. To better understand the Trust’s definition of and policy on Letter(s) of Commitment, visit our Forms and Policies webpage: www.cbtrust.org/forms.
- Narrative & Supporting Documents Tab
 - Upload a Microsoft Word or PDF file that contains your answers to the narrative questions found in the Narrative Questions section of this RFP. Upload additional supporting documents, if needed/required.
- Budget Tab
 - Upload your application budget, provide budget category and request totals, and provide additional budget justification. Use the Trust’s Financial Management Spreadsheet and fill out the “Application Budget” worksheet. Refer to the Budget Instructions of this RFP.
- Terms and Conditions Tab
 - Agree to the specified terms and conditions for the program for which you are applying.

Appendix A: Proposal Development Assistance and Support

Proposal Development Assistance: For transparency, our state contacts are included below, but *all potential*

applicants are strongly encouraged to contact the Trust directly during proposal development.

Chesapeake Bay Trust	Maryland Department of Natural Resources	West Virginia Department of Environmental Protection
Sarah Koser (410) 974-2941 skoser@cbtrust.org Megan Diehl (410) 974-2941 mdiehl@cbtrust.org	Cory Russell (410) 260-8799 coryc.russell@maryland.gov Carrie Decker (410) 260-8723 carrie.decker@maryland.gov	Samuel Canfield 681-319-6306 samuel.a.canfield@wv.gov

Watershed Assistance Collaborative: This grant program is one element of the State of Maryland’s Watershed Assistance Collaborative: https://dnr.maryland.gov/ccs/Pages/healthy_waters/wac.aspx. The Collaborative is a partnership that provides services and technical assistance to communities to advance restoration activities and projects. By leveraging resources of existing programs, the Watershed Assistance Collaborative exists to provide coordinated capacity building opportunities to local implementers. As an additional element of the Collaborative, the University of Maryland Sea Grant Extension Watershed Restoration Specialists (WRS) work to help local jurisdictions secure expertise and funding, especially from the Chesapeake and Atlantic Coastal Bays 2010 Trust Fund, to implement restoration projects that produce measurable improvements in water quality. For assistance in identifying potential service providers, or identifying potential community partners, Maryland applicants are encouraged to contact the Watershed Restoration Specialist in their area* and County, as shown in the table below:

Central Maryland: (Frederick, Montgomery, and Howard) Amanda Rockler arockler@umd.edu	Upper and Central Eastern Shore (Caroline, Cecil, Kent, Queen Anne’s, and Talbot) Eric Buehl ebuehl@umd.edu	Southern Maryland (Charles, Calvert, St. Mary’s, Anne Arundel, and Prince George’s) Jackie Takacs jtakacs@umd.edu Extension Watershed Restoration Educator (Calvert and St. Mary’s) Caroline DiGiovanni cdigiova@umd.edu
Northern Maryland (Baltimore City, Baltimore, Harford, and Carroll) Claire Cambardella ccambard@umd.edu	Lower Eastern Shore (Dorchester, Somerset, Wicomico, and Worcester) Jennifer Dindinger jdinding@umd.edu	

*For Western Maryland (Allegany, Garrett, and Washington), please contact the Trust or MDNR

Cost-Effectiveness: For Watershed Planning and assessment projects, the cost-effectiveness for proposals is generally <\$75 per acre of drainage area considered. The table below provides dollar ranges in which approximately 75% of proposals in the most recent two rounds were funded for restoration design projects. Please contact the Trust for further support or questions regarding cost-effectiveness. *Matching funds, while not required, can improve the cost-effectiveness for your project for the below metrics:*

Design Practice Type	Dollars (\$) per Linear Feet	Impervious acre treated (\$/acre)	Dollars (\$) per pound (lb) Reduced:		
			Nitrogen	Phosphorus	Solids
Stream Restoration	\$571 to \$4,000	\$40 to \$90	\$52 to \$217	\$116 to \$373	<\$1
Best Management Practices (Stormwater)	NA	\$19,000 to \$71,000	\$900 to \$12,000	\$8,000 to \$205,000	<\$1 to \$46
Living Shoreline	<\$59	<\$23,000	\$9 to \$1,091	\$19 to \$1,200	<\$1
Combination Projects (Wetland/Stream Restoration)	<\$77	\$241 to \$1,000	\$33 to \$219	\$226 to \$820	<\$1

Appendix B: Watershed Implementation Plan Resources

Working with local partners, Maryland and West Virginia have both published their “Phase III Watershed Implementation Plans (WIPs)” outlining strategies to achieve water quality improvements (reduction of nitrogen, phosphorus, and sediment) in the Chesapeake Bay by 2025. As part of the accountability framework for implementation of these water quality improvement goals and strategies, each state develops milestones in two-year increments. It is requested that submitted applications include projects that concur with key components of the state WIPs. For example, projects will be more favorably reviewed if supporting local, big-picture planning efforts such as the implementation of Milestones developed to advance the WIP strategies. WIP strategies include a wide range of practices and project types, and contributors to these strategies may include a variety of partners and types of lead organizations. Applicants with questions on this topic or about how projects can inform or contribute to WIP strategies are encouraged to contact the Trust. Projects can also support other local, big-picture planning efforts such as Financial Assurance Plans (FAPs), Total Maximum Daily Load (TMDL) Implementation Plans, county-wide Green Infrastructure Plans, and watershed action plans, or similar plans. Please see the state links below for more information:

Maryland WIP Resources:

- Overview and History: <https://mde.maryland.gov/programs/Water/TMDL/TMDLImplementation/Pages/Phase3WIP.aspx>
- Maryland’s Phase III WIP: [Phase III WIP-Final Maryland 8.23.2019.pdf](#)
- Maryland’s Draft 2022-2023 Two-Year Milestone: [2022_2023.Maryland.CB.Milestones_2.1.22.pdf](#)
- 2022 Addendum: *The 2022 Addendum to Maryland’s Phase III WIP accounts for additional nutrient pollutant loads due to 2025 climate change conditions. An Appendix to the Addendum describes recent climate change related legislation, research, and incentives that are important to achieving Maryland’s broader climate mitigation and adaptation goals.* [MD Climate Change Addendum 2022.pdf \(maryland.gov\)*](#)

West Virginia WIP Resources:

- Overview and History: <https://dep.wv.gov/wve/watershed/wqmonitoring/pages/chesapeakebay.aspx>
- West Virginia’s Phase III WIP: <http://www.wvchesapeakebay.us/WIP/WIP3.cfm>
- Progress Reports and Two-Year Milestones: <http://www.wvchesapeakebay.us/progress/>

Appendix C: Stream Restoration Criteria and Resources

If your application includes stream restoration design, ensure that your application includes the following elements for consideration by reviewers:

1. Demonstrate project need, e.g., stream banks experiencing erosion, stormwater practices implemented/considered higher in the watershed draining to this site, etc.).
2. Present the alternative analysis (detail the alternative practices and/or practice types were considered at the site leading to the recommendation for the proposed practice and practice type).
3. Describe the practice type and the goals of the project to clearly link the goals to that practice type. Funding partners will consider stream restoration designs and/or implementation projects that aim to reduce erosion and provide enhancements to the hydrology, habitat, vegetation, etc. while reducing impacts to existing natural resources.
4. Describe the existing conditions of the site and how the project will avoid natural resource impacts; avoidance of natural resources is required, including avoidance of trees and existing wetlands, to the maximum extent practicable.
5. Describe existing utilities at the site and detail how you determined that the project will not adversely affect public safety, infrastructure, and/or properties.

6. Describe the assessment that has or will be done for the drainage above ground and through underground pipes (if present) and avoiding utilities.
7. Use of the field's best practices per the US EPA Chesapeake Bay Program Office, WV DEP, and the Trust. Refer to the US EPA's Expert Panel reports and budget for any required additional calculations, sampling, and modeling that will be completed during the design phase that are available at: <http://chesapeakestormwater.net/bmp-resources/urban-stream-restoration/>. The Trust highly recommends applicants interested in stream restoration practices review and be familiar with the most recent science to make informed decisions on site selection and technique. Research gathered through the Pooled Monitoring Initiative's Restoration Research Program focused on stream restoration has been shared on the Trust's website (<https://cbtrust.org/grants/restoration-research/> - found under the "Additional Information", "Awarded Projects and Final Products" tab). Particularly, applicants may find final products from the following projects of relevance:
 - a. Evaluating the Effectiveness and Sustainability of Novel Stream Restoration Designs for Coastal Plain Streams in Maryland: Integrating Existing and New Data from Stream Restoration Monitoring, University of Maryland Center for Environmental Science, Dr. Solange Filoso
 - b. Tree Trade-Offs in Stream Restoration Projects: Impact on Riparian Groundwater Quality, University of Maryland College Park, Dr. Sujay Kaushal
 - c. Quantifying the ecological uplift and effectiveness of differing stream restoration approaches in Maryland, University of Maryland Center for Environmental Science, Dr. Robert Hilderbrand
 - d. Determining realistic expectations for ecological uplift in urban stream restorations, University of Maryland Center for Environmental Science, Dr. Robert Hilderbrand
 - e. Evaluating the Performance of Regenerative Stormwater Conveyances in Urban Versus Rural Watersheds, Smithsonian Institution, Dr. Thomas Jordan
 - f. Improving Success of Stream Restoration Practices – Revised and Expanded, Virginia Polytechnic Institute and State University, Dr. Theresa Thompson
 - g. Determining the effects of legacy sediment removal and floodplain reconnection on ecosystem function and nutrient export, Towson University, Dr. Vanessa Beauchamp
 - h. Quantifying the cumulative effects of stream restoration and environmental site design on nitrate loads in nested urban watersheds using a high-frequency sensor network, University of Maryland Baltimore County, Dr. Claire Welty
 - i. Climate Impacts to Restoration Practices, Tetra Tech, Inc., Dr. Jon Butcher
 - j. Impacts of Regenerative Stormwater Conveyance on Iron in Restored Streams and Potential Effects on Aquatic Organisms, EA Engineering, Science, and Technology, Inc., PBC, Dr. Jamie Suski
 - k. Evaluating impacts of freshwater salinization on mobilization of nutrients and metals from stormwater best management practices, University of Maryland College Park, Dr. Sujay Kaushal
 - l. Literature Review on Techniques to Reduce Salt Loading to Streams, Center for Watershed Protection, Carol Wong.
 - m. Vertebrate Community Response to Regenerative Stream Conveyance (RSC) Restoration as a Resource Trade-Off, Tetra Tech, Inc., Mark Southerland
 - n. An Evaluation of Forest Impacts as Compared to Benefits Associated with Stream Restoration, Versar, Inc.
 - o. Reliability of Two-Dimensional Hydrodynamic Models for Assessing Susceptibility of Stream Restorations to Flood Damage and Potential Effects of Climate Change, University of Louisville Research Foundation, Inc., Dr. Arthur Parola.
8. Describe the experience with similar projects for the team proposing to do this work. Designs shall be done by licensed/registered professionals.
9. Detail how materials will be delivered to the site, where materials will be stored, and how construction equipment will be safely managed during the project.
10. Describe your ability to proceed through the permit and construction process:
 - a. The output of a design award must be permissible by the state, U.S. Army Corp of Engineers, and

- all other appropriate local, state, and federal entities.
- b. Applicants are strongly encouraged to contact the Trust during the conceptual design phase and make an appointment to discuss their project with the permit reviewers (see page 4 above for more information on permitting).
11. Describe proposed maintenance and long-term sustainability of the project. Designs will be evaluated to ensure that completed projects are self-sustaining and will not require continuous manipulation for future project sustainability. If stream restoration implementation is being proposed, describe how the project will persist and be well-maintained in the future (and not threatened by various types of disturbance), including addressing any ongoing resources needed to maintain the value of the project.
 12. Provide the following metrics for your project: linear feet to be designed, drainage area treated/planned (acres), impervious acre treated, estimated load reductions (lbs. of N, P, and S reduced), and estimated cost of design (\$).
 13. Justify the cost-effectiveness of the project. Provide assurances that the best price was provided (e.g., were multiple estimates/quotes obtained for contractors) and is reflective of current, market prices/values. **Benthic Data (for Maryland Projects only):** in the FY26 grant cycle (funds available July 1, 2025), applications that will be requesting funding to the MDNR’s Chesapeake and Atlantic Coastal Bays Trust Fund Grant Program (<https://dnr.maryland.gov/ccs/Pages/funding/grantsgateway.aspx>) will require that stream restoration projects in the below areas **provide pre-restoration Maryland Biological Stream Survey (MBSS) benthic macroinvertebrate data** in order to be eligible for funding:
 - a. Designated cold water streams (MDE Use Classes III and IV);
 - b. Existing cold water (identified by the presence of trout or benthic macroinvertebrate cold water obligates (*Tallaperla* and *Sweltsa*); or
 - c. High quality (MDE Tier II) stream catchments.
 - d. Mapping source for a, b, and c as noted above:
<https://www.arcgis.com/home/webmap/viewer.html?webmap=3c68c6a03266421d8036f70ac89d30de&extent=-78.9109,38.3342,-75.6727,39.7083>

To be considered consistent with MBSS protocols, benthic macroinvertebrate data must be collected by a person certified in benthic macroinvertebrate sampling, the sample must be processed by an individual who is certified in laboratory processing and subsampling, and a person who is a certified taxonomist in both EPT (E= Ephemeroptera, P= Plecoptera, T= Tricoptera) East and North American Chironomidae by the Society for Freshwater Science must perform the benthic macroinvertebrate taxonomy. The EPT Richness Index orders estimates water quality by the relative abundance of three major orders of stream insects that have low tolerance to water pollution. The contact information for individuals who are already certified can be found on the MBSS Registry of Certifications and information on how to become certified can be found on the 2023 MBSS Training website (<https://dnr.maryland.gov/streams/pages/mbsssfscertified.aspx>). Applicants with a project located in one of the above watersheds and that anticipate applying for the MDNR Trust Fund FY26 grant program must provide information on how you intend to collect these MBSS biological data.

Appendix D: Additional Resources

The resources below can support your application and project:

- **The Trust’s Additional Resources Page**, specifically the “Restoration,” “Living Shoreline,” and “Maintenance” categories: <https://cbtrust.org/additional-resources/>
- **Pollutant Load Reduction Calculators** that may be helpful to applicants:
 1. The Green Stormwater Infrastructure siMPle Pollutant Load reduction Estimator (Green SIMPLE) was developed to help Chesapeake Bay communities more easily and consistently estimate the

water quality benefits of proposed stormwater retrofit and community greening projects. The tool is an easy-to-use spreadsheet that is consistent with the pollutant loading rates and load reduction efficiencies used in the Chesapeake Bay Model. It allows users to estimate pollutant load reductions from individual projects as well as to compare a suite of candidate projects based on factors such as cost-effectiveness, pollutant load reduction, maintenance burden, and constructability. To do this, simply list the type of practice proposed, the size of the practice, or the total area treated by the practice to obtain the amount of nutrients/sediment reduced by the BMPs (calculate TN, TP, and TSS load reductions using existing guidance). Green SIMPLE tool full link: https://cbtrust.org/wp-content/uploads/Green_SIMPLE.xlsx

2. **If your design project is located within Anne Arundel County, MD**, you can determine nutrient and sediment loads reduced by your project using the County’s BMP Credit Calculator:

<https://www.aacounty.org/departments/public-works/wprp/bmp-credit-calculator/index.html>

- **Environmental Justice (EJ) Screening Tools/Maps:**
 - **Maryland EJ Screening Tool:** <https://p1.cgis.umd.edu/mdejscreen/>
 - **MDE EJ Screening Tool:** <https://mdewin64.mde.state.md.us/EJ/>
 - **EPA EJ Screening and Mapping Tool:** <https://ejscreen.epa.gov/mapper/>
- **Water Resources Registry (WRR):** includes site details (e.g., topographic lines, land uses, and soils):
 - Maryland WRR: <https://watershedresourcesregistry.org/states/maryland.html>
 - West Virginia WRR: <https://watershedresourcesregistry.org/states/westvirginia.html>
- **NRCS Web Soil Survey:** <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>
- **2023 Sea Level Rise Projections for Maryland:** <https://www.umces.edu/sea-level-rise-projections>
- **NOAA Sea Level Rise Viewer:** <https://coast.noaa.gov/digitalcoast/tools/slr.html>
- **MDNR Coastal Atlas:** <https://dnr.geodata.md.gov/CoastalAtlas/>
- **Climate Impacts to Restoration Practices** (supported through the [Pooled Monitoring Program](#)): https://cbtrust.org/wp-content/uploads/Grant16928-Deliverable11-FinalProjectReport_120820.pdf
- **Piloting the Development of Probabilistic Intensity Duration Frequency (IDF) Curves for the Chesapeake Bay Watershed** (supported through the [US EPA Goal Implementation Team program](#)): <https://www.rand.org/pubs/tools/TLA1365-1.html>

Appendix E: Service Providers for Contractual Work

If contractual costs greater than \$10,000 and less than \$250,000 are requested, **applicants must provide a description of the procurement method by which contractual services were/will be obtained.** Applicants must either (a) have already obtained cost estimates/quotes from at least three service providers or obtained bids through a publicly advertised, competitive, open solicitation prior to completing the application or (b) indicate in the proposal that at least three estimates/quotes will be obtained or a publicly advertised, competitive, open solicitation will be used. If neither route is indicated, the proposal will be deemed ineligible. Contracts over \$250,000 must be competitively bid through an open solicitation. For all subcontracted work, it must be demonstrated that Good Faith Efforts were used to engage minority/disadvantaged/women/small business enterprises (MBE/DBE/WBE/SBE) by reaching out to MBE/DBE/WBE/SBE firms to obtain estimates or bids. Efforts to engage MBE/DBE/WBE/SBE firms must be provided in the description of procurement method. The following websites may be helpful in identifying MBE/DBE/WBE/SBE firms in Maryland and West Virginia:

MD	https://marylandmdbe.mdbecert.com/
WV	http://apps.sos.wv.gov/business/corporations/searchadvanced.aspx

The grantee will be required to agree that it will not discriminate in any matter against an employee or applicant for employment because of gender, race, age, color, religion, creed, marital status, ancestry, gender identity and expression, genetic information, sexual orientation, national origin, or physical or mental handicap unrelated in nature and extent so as reasonably to preclude the performance of such employment; and the grantee will be required to agree to include a provision similar to that contained herein in any subcontract except at subcontract for standard commercial supplies or raw materials.