PENNSYLVANIA MOST EFFECTIVE BASINS GRANTS

2022 REQUEST FOR PROPOSALS

Full Proposal Due Date: ***Thursday, April 28, 2022 by 11:59pm ET***

OVERVIEW

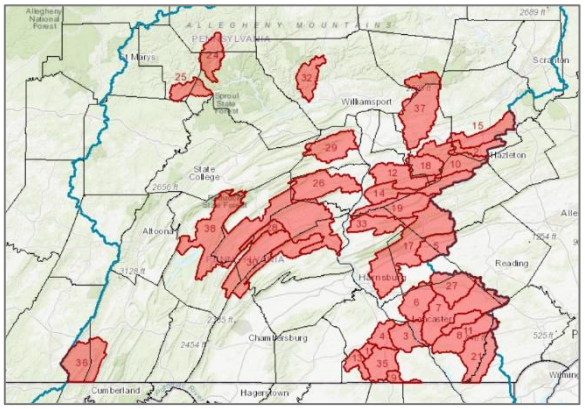
The National Fish and Wildlife Foundation (NFWF), in partnership with the U.S. Environmental Protection Agency (EPA) and the federal-state Chesapeake Bay Program partnership, is soliciting proposals to restore water quality and habitats of the Chesapeake Bay and its tributary rivers and streams in Pennsylvania.

NFWF is soliciting proposals under the **Pennsylvania Most Effective Basins (PA-MEB)** grants program for projects that accelerate implementation of cost-effective agricultural best management practices ("practices") in selected basins of the Chesapeake Bay watershed of Pennsylvania. The intent of the PA-MEB program is to assist the Commonwealth of Pennsylvania in achieving its 2025 water quality goals for the agricultural sector under the Chesapeake Bay Total Maximum Daily Load (TMDL) and Pennsylvania's Phase III Watershed Implementation Plan (WIP). NFWF will award grants of up to $1,000,000 for projects that result in the direct implementation of eligible agricultural best management practices.

NFWF estimates awarding up to $12 million in grants through the PA-MEB program in 2022 contingent on the availability of funding. Major funding comes from the EPA Chesapeake Bay Program Office.

GEOGRAPHIC FOCUS

All projects must occur wholly within selected basins of the Chesapeake Bay watershed in Pennsylvania, identified as the **most effective basins** for reducing the effects of excess nutrient loading to the Bay. EPA identified these most effective basins based on both cost effectiveness and the capacity of practices implemented in each basin to positively influence dissolved oxygen in the Bay. A map of the most effective basins in Pennsylvania and details on EPA's methodology for selecting them can be found here.



PROGRAM PRIORITIES

The primary purpose of the PA-MEB program is to maximize cost-effective reductions of agricultural nitrogen loads through the implementation of eligible agricultural conservation practices in Pennsylvania's most effective basins, consistent with the Chesapeake Bay Total Maximum Daily Load (TMDL) and Pennsylvania's Phase III Watershed Implementation Plan (WIP). In addition, NFWF will prioritize funding for proposals that can yield rapid implementation outcomes (with

consideration for design, engineering, and construction needs) and those that provide additional conservation and farm management co-benefits beyond water quality improvement.

Eligible Practices and Technical Assistance

EPA and NFWF have identified the following eligible practices for the PA-MEB program, based on the demonstrated ability of these practices to yield relatively low-cost reductions in agricultural nitrogen loading. Notably, these eligible practices include both annual (i.e., "management") practices that require ongoing implementation to yield creditable load reduction benefits in future years, as well as structural (i.e., "engineered") practices that, once implemented, generate multiple years of creditable load reductions based on their continued performance on the landscape.

- Tillage Management
- Tree Planting
- Wetland Restoration
- Prescribed Grazing
- Animal Waste Management Systems
- Manure Incorporation
- Manure Injection
- Manure Transport
- Barnyard Runoff Control
- Loafing Lot Management
- Alternative Crops
- Retirement of Highly Erodible Land
- Cover Crops –Traditional
- Cover Crops – Commodity
- Forest and Grass Buffers
- Forest and Grass Buffers with Stream Exclusion Fencing
- Core Nutrient Management -- Nitrogen
- Supplemental Nutrient Management – N Rate
- Supplemental Nutrient Management – N Placement
- Supplemental Nutrient Management – N Timing
- Soil and Water Conservation Plan

Additional information on each practice, including associated definitions and other common practice names, can be found in Appendix A. Further information on each practice, relevant qualifying conditions, and crediting methods is available through CBP's "Quick Reference Guide for Best Management Practices" and established protocols approved by CBP's BMP expert panels.

Technical assistance costs associated with conservation planning, the design and engineering of eligible practices, and oversight and management of practice implementation are eligible costs under the program. However, technical assistance costs, including personnel, fringe, and subawards or subcontractors to technical assistance providers may not exceed 10% of the total funding request.

Priority #1 – Cost-Effectiveness for Agricultural Nitrogen Load Reductions

For the purposes of the PA-MEB program, **cost-effectiveness for agricultural nitrogen load reduction** is defined as the **total project funding request** divided by the **total nitrogen load reduction potential** of the proposed practice(s) to be implemented (i.e., $/lb N reduced). Total nitrogen load reduction potential further considers both the estimated **annual nitrogen load reduction** from the proposed practice(s) to be implemented, calculated in accordance with established methods approved by the Chesapeake Bay Program for crediting under the Chesapeake Bay TMDL, as well as the **proposed timeframe** for generating creditable load reduction benefits for proposed practice(s) in future years.

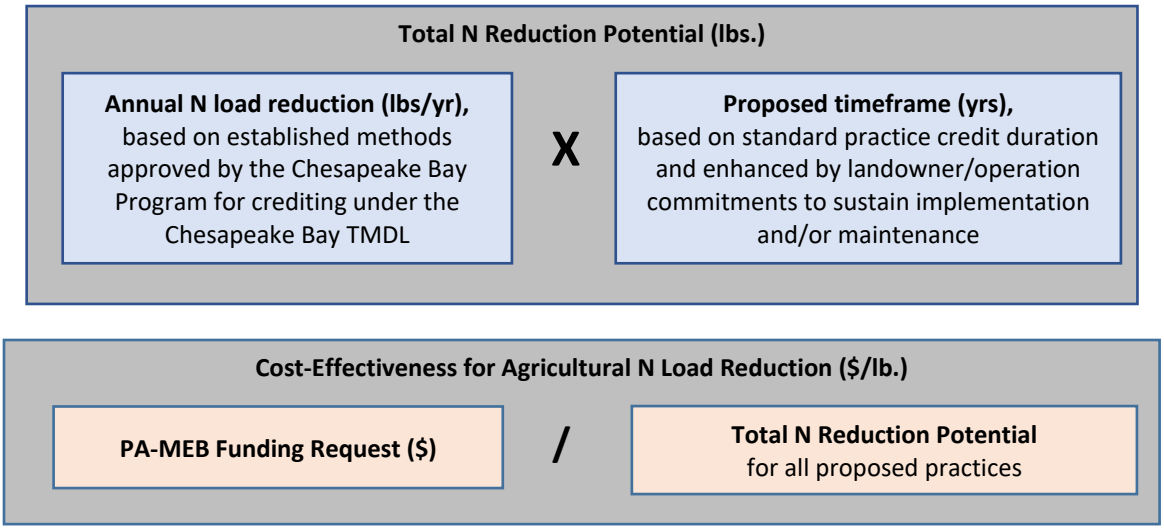
In determining proposed timeframe for generating creditable load reductions, NFWF will rely on both the default **practice credit durations** assigned by EPA and CBP, which specify the length of time specific

practices generate creditable load reductions for TMDL purposes, as well as proposed approaches put forward by applicants to sustain implementation and performance of funded practices beyond these standard practice credit durations.

NFWF encourages applicants to actively seek and propose methods and approaches to sustain load reductions beyond standard practice credit durations. Selected examples include obtaining signed agreements with eligible landowners/operators to sustain implementation of annual practices (e.g., cover crops) for multi-year periods and/or maintain structural practices beyond their standard practice credit duration, or by incorporating new practice implementation and maintenance requirements with new or amended conservation or agricultural land preservation easements. **Any proposal seeking to obtain credit for load reductions beyond the standard practice credit must include associated conditions, roles, and responsibilities in the Operations, Maintenance, and Repair Plan attachment to Landowner-Grantee Agreements.**

Applicants may further propose to bundle implementation of multiple practices across multiple operations and/or landowners. However, the total nitrogen load reduction potential will be calculated for each practice individually and summed to obtain a single total nitrogen load reduction potential value for the proposal. Signed Landowner-Grantee Agreements must also be provided for all proposed cooperating landowners/operators.

PA-MEB Program Metrics



To ensure consistency in estimating total load reduction potential across proposals and fairness in evaluating competing proposals, NFWF is requiring all applicants to utilize the FieldDoc platform to document proposed practices for implementation. FieldDoc will then calculate estimated load reduction potential for each practice and for each overall proposal using established methods approved by the Chesapeake Bay Program for crediting under the Chesapeake Bay TMDL. NFWF will entertain Applicants seeking to use other CBP-approved tools or methods to calculate load reduction potential must contact NFWF in advance of proposal submission and obtain prior written approval from NFWF in order for associated proposals to be considered.

Priority #2 – Readiness to Proceed

Given approaching 2025 goals for the Chesapeake Bay TMDL, NFWF is seeking projects for the PA-MEB program that can move quickly into implementation and delivery of load reduction benefits following award. Accordingly, NFWF will consider the status of necessary planning, design, and permitting required to proceed with implementation. As a result, while technical assistance costs associated with planning, design, and

construction of eligible practices are allowable under the PA-MEB program, the most competitive proposals will minimize technical assistance and administrative costs and maximize funding for implementation and associated load reduction outcomes.

Priority #3 – Conservation and Farm Management Co-Benefits

While the PA-MEB program prioritizes cost-effective agricultural nitrogen load reductions consistent with the Chesapeake Bay TMDL and the water quality goals of the Chesapeake Bay Watershed Agreement, NFWF and program partners are seeking proposals that can also benefit other goals and outcomes of the Watershed Agreement and NFWF's Chesapeake Bay Business Plan. Additional resources on the multiple benefits of nutrient and sediment best management practices, developed by CBP in support of Phase III WIP planning, can be found here.

In addition to co-benefits for regional ecosystem restoration efforts, NFWF is seeking proposals that deliver operational and/or financial benefits for eligible landowners/operators. Applicants will be asked to describe these benefits for proposed cooperating landowners/operators. Selected examples include reducing operating costs, simplifying or streamlining farm management processes, and increasing revenues from agricultural and non-agricultural products and services generated by cooperating landowners/operators.

PROJECT METRICS

To better gauge progress on individual grants and to ensure greater consistency of project data provided by multiple grants, NFWF has provided a list of metrics in *Easygrants* for grantees to choose from for reporting. For the PA-MEB program, applicants and awardees will be required to report both project-level metrics via *Easygrants* and more detailed site and practice-level data via FieldDoc.org (see below for additional details).

The following is a complete list of applicable metrics. It is in the applicant's best interest to be selective of the most relevant metrics that are well-aligned with the proposed project's objectives and outcomes. If you do not believe an applicable metric has been provided, please contact Nicole Thompson at nicole.thompson@nfwf.org or (202) 857-0166, to discuss acceptable alternatives.

Applicable Metrics	Metric Description/Instructions
CBSF - BMP implementation for nutrient or sediment reduction - Lbs N avoided (annually)*	Please use FieldDoc to develop estimates of the total nitrogen load reduction potential your proposed project. Enter FieldDoc-generated pollutant load reduction totals in this field then upload your FieldDoc Project Summary in the "Uploads" section.
CBSF - BMP implementation for nutrient or sediment reduction - Acres with BMPs	Enter the total number of acres under agricultural or non-urban BMPs to reduce nutrient or sediment loading. Do not double-count individual acres which have multiple BMPs.
CBSF - Riparian restoration - Miles restored	Enter the number of miles of riparian habitat restored through the implementation of forest or grass buffers that are at least 35 feet wide. If you're implementing livestock exclusion, report associated outcomes instead under the "CBSF - BMP implementation for livestock exclusion -- miles of fencing installed" metric. In the NOTES section, specify the landcover type prior to planting (barren, cropland, grassland, shrubland), the % of vegetation on the pre-project site (0-20%, 21-40%, 41-60%, 61-80%, 81-100%), the dominant vegetation being planted (Broadleaf, Conifer, Shrub, Grass, Marsh, Swamp), the buffer width, and the acres.
CBSF - BMP implementation for nutrient or sediment reduction - Acres with cover crops	Enter the number of cropland acres with cover crops practices. Please describe the cover crop practices in the NOTES section.
CBSF - BMP implementation for nutrient or sediment reduction - Acres with conservation tillage	Enter the number of cropland acres with conservation tillage practices. Please describe conservation tillage practices in the NOTES section.

Applicable Metrics	Metric Description/Instructions
CBSF - BMP implementation for nutrient or sediment reduction - Acres with enhances nutrient management	Enter the number of cropland acres with enhanced nutrient management practices other than or in addition to conservation tillage or cover crops. Please describe the nutrient management practices in the NOTES section.
CBSF - BMP implementation for nutrient or sediment reduction - Acres with managed grazing	Enter the number of acres with managed grazing (i.e., promoting plant growth above and below ground, improving wildlife habitat, and maximizing soil carbon through a variety of grazing approaches). Please describe the grazing practices in the NOTES section.
CBSF - BMP implementation for livestock fencing - Miles of fencing installed	Enter the number of miles of livestock exclusion installed. Assume activities include exclusion fencing and a 35-foot forest or grass buffer, unless otherwise noted.
CBSF - Wetland restoration - Acres restored	Enter the number of acres of wetland habitat restored, created, or enhanced.
CBSF - Conservation easements - Acres protected under easement	Enter the number of acres protected under long-term easement (permanent or >30-yr). Assuming the specific parcel(s) has been identified, in the NOTES indicate what % of natural land cover would have been cleared in the absence of the easement(s).
CBSF - Land, wetland restoration - Number of trees planted	Enter the number of trees planted for all non-urban projects/practices. In the NOTES section, specify the specify the landcover type prior to planting (barren, cropland, grassland, shrubland), # of acres, and average # of trees per acre.

ELIGIBILITY

Eligible Applicants for the PA-MEB program are limited to conservation districts, technical service providers certified by the Pennsylvania office of the USDA Natural Resources Conservation Service, countywide action planning coordinators identified through the Pennsylvania Department of Environmental Protection's Phase III WIP planning process. Non-profit 501(c) organizations and local and municipal governments are also eligible, but must demonstrate partnership and coordination with appropriate conservation districts, technical service providers, and/or countywide action planning coordinators by providing associated letters of support.

For-profit applicants: Please note that this is a request for grant proposals, not a procurement of goods and services; see the Budget section below for specific cost considerations.

Eligible Landowners/Operators are limited to individuals and entities with ownership or management control of an agricultural operation, as defined by applicable Pennsylvania statutes, and located within identified most effective basins. Awardees must also obtain signed agreements with all proposed landowners/operators prior to executing grant contracts with NFWF (see "OTHER"). In addition, landowners/operators must be able to document compliance with all applicable agricultural erosion and sediment control, manure, and/or nutrient management plan requirements prior to project completion.

Questions about applicant and landowner/operator eligibility should be directed to NFWF prior to application.

Ineligible Uses of Grant Funds

- **Equipment**: Applicants are encouraged to rent equipment where possible and cost-effective or use matching funds to make those purchases. NFWF acknowledges, however, that some projects may only be completed using NFWF funds to procure equipment. If this applies to your project, please contact the NFWF program staff listed in this RFP (p. 8, Application Assistance) to discuss options.
- Federal funds and matching contributions may not be used to procure or obtain equipment, services, or systems (including entering or renewing a contract) that uses telecommunications equipment or services produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities) as a substantial or essential component, or as critical technology of any system. Refer to Public Law 115-232, section 889 for additional information.
- NFWF funds and matching contributions may not be used to support political advocacy, fundraising, lobbying, litigation, terrorist activities or Foreign Corrupt Practices Act violations.

- For the purposes of the PA-MEB program, operations under enforcement action by the Pennsylvania Department of Environmental Protection, State Conservation Commission, or U.S. EPA are ineligible for program funding.

FUNDING AVAILABILITY AND MATCH

NFWF will award up to $12 million in grants through the PA-MEB program in 2022 through awards of up to $1,000,000. Multiple proposals may be submitted that benefit a single landowner/operator, but each proposal will be evaluated independently. Similarly, proposals may be submitted that provide benefits for multiple landowner/operators. However, total technical assistance and implementation funding will be capped at $450,000 per landowner/operator. Given program priorities for rapid implementation outcomes, NFWF generally expects awarded projects to be completed within 18-24 months. All proposed projects must begin on or after September 1, 2022 to facilitate necessary grant contracting and quality assurance activities.

Match is encouraged but not required for the PA-MEB program. However, proposals that can effectively leverage multiple funding sources to support implementation will be viewed favorably. Applicants will be encouraged, but not required, to document leveraged federal, state, local, or private funding supporting implementation of proposed practices.

EVALUATION CRITERIA

All proposals will be screened for relevance, accuracy, completeness, and compliance with NFWF and funding source policies. Each proposal will then be evaluated based on the extent to which it meets the following criteria for the PA-MEB program. **Underlined** criteria are considered the primary evaluation criteria for the program.

Conservation Outcomes

- **Total Agricultural Nitrogen Load Reduction Potential:** Proposal contributes meaningful agricultural nitrogen load reduction outcomes in support of the Chesapeake Bay TMDL, Pennsylvania's Phase III WIP and, as applicable, associated Countywide Action Plans.
- **Conservation and Farm Management Co-Benefits:** Proposed implementation actions yield clear and meaningful co-benefits for regional ecosystem conservation and restoration goals and farm management outcomes.

Budget

- **Cost-Effectiveness for Agricultural Nitrogen Load Reduction:** Proposals that demonstrate the greatest cost-effectiveness for agricultural nitrogen load reductions (i.e., $/lb. N reduced) will generally be the most competitive proposals.
- The quality and level of detail in the budget notes and budget narrative provide a clear and detailed understanding of the proposed funding request.
- Proposed costs are reasonable based on the work plan, local or regional costs for similar activities, and commensurate with project outcomes.
- If proposed work is partnership based, a clear indication of funding for project partners, stakeholders, and community members, is evident.
- Proposed funding request is well leveraged by the partners and other contributors through cash-, in-kind, and other match.
- The federal government has determined that a de minimis 10% indirect rate is an acceptable minimum for organizations without a NICRA. As such, NFWF reserves the right to scrutinize ALL proposals with indirect rates above 10% for cost-effectiveness.

Technical

- **Readiness:** Considering the status of necessary planning, design, and permitting and proposed implementation timeline, projects demonstrate a readiness to rapidly proceed to practice implementation.
- Proposal provides specific goals that correlate with a clear, logical and achievable work plan, milestones, and timeline.
- Proposed project team has the core competencies necessary to implement the proposed activities and achieve the proposed outcomes as well as the commitment to engage technical experts necessary to ensure activities are scientifically and technically sound and feasible.
- Proposal demonstrates an understanding of necessary permitting and environmental compliance requirements and the ability to obtain necessary approvals consistent with the proposed work plan and timeline.
- Applicant organization has demonstrated an ability to manage and implement similar projects on time and within budget.

OTHER

Quality Assurance – If a project involves monitoring, data collection or data use, grantees will be asked to prepare and submit quality assurance documentation. This includes any data collection activities described in the proposal as provided by match and partner activities. Examples of data collection or use which requires a Quality Assurance Project Plan (QAPP):

- New data collection.
- Existing data use (a new use for data collected for a different purpose, whether by the same or different groups).
- Data collection and analysis associated with development or design of plans and projects e.g. fish passage, watershed or water quality/habitat restoration project plans etc.
- Water or other environmental monitoring.
- Model development or use etc.
- Citizen or community based scientific data collection, monitoring etc.

Applicants *must* budget time and resources in their CBSF proposal to complete this task. No data collection or use may begin until a QAPP is approved and on file. Reimbursement for project activities, including non-data collection activities, may be delayed until quality assurance compliance requirements are complete. Plan to submit the draft QAPP to NFWF *at least* three months in advance of starting your data driven activity for review and comment. The timeline for receiving review feedback and comments and subsequent submittal for EPA approval is dependent upon the quality of the draft QAPP submission and may involve several iterations. General assistance will be available to grantees to help with scoping and review of the draft QAPPs. For more information, follow the link to EPA QA and CBSF Quality Assurance Project Plan Guidance. Please contact Stephanie Heidbreder (stephanie.heidbreder@nfwf.org) if you have any questions about whether your project would require a QAPP. Applicants interested in details of NFWF's quality assurance approach can visit our "Tools for Current Grantees" webpage in early March 2022 for revised QAPP templates and recorded training and educational webinars.

Nutrient and Sediment Load Reductions – As noted above, NFWF is requiring all applicants to utilize the FieldDoc platform to document proposed practices for implementation. When setting up proposed projects in FieldDoc, please be sure to list your application's 5-digit Easygrants number in the FieldDoc project title.

Upon grant award, NFWF will require all projects submitted under this solicitation to utilize FieldDoc for tracking and reporting of applicable water quality improvement activities during the course of their grant project. For technical support on FieldDoc utilization during the proposal development process, please contact the Commons at support@chesapeakecommons.org . Further help documentation can be found on our website.

Practice Specifications – Unless otherwise noted, all conservation and restoration practices implemented through the PA-MEB program must conform to established and recognized standards and practices specifications (e.g., NRCS practice standards, state stormwater manuals and retrofit guidance, approved Chesapeake Bay Program BMP Expert Panel reports). Applicants must note where proposed practices will deviate from established standards and provide reasonable justification for why an alternative is necessary.

Landowner/Operator Agreements – Awardees must obtain signed agreements with all proposed landowners/operators prior to executing grant contracts with NFWF. These agreements must identify whether the landowner/operator is the owner of the property or a tenant, secure appropriate site access for completion and maintenance of the project, and include provisions for refund of program funding to the awardee if the landowner/operator destroys or modifies the practices beyond regular maintenance and needed repairs. Agreements should also include an Operation, Maintenance and Repair Plan (see Appendix B). These agreements should further extend the duration of the longest practice credit duration among implemented practices on the property (see Appendix A).

Applicant Demographic Information – In an effort to better understand diversity in our grantmaking, NFWF is collecting basic information on applicants and their communities via a voluntary survey form (available in Easygrants). This information will not be shared externally or with reviewers. For more details, please see the tip sheet and the Uploads section of Easygrants.

Partnership and Community Impact – The applicant organization partners and engages collaboratively with diverse local community members, leaders, community-based organizations, and other relevant stakeholders to develop and implement the proposed project. This ensures long-term sustainability and success of the project, integration into local programs and policies, and community acceptance of proposed restoration actions. Non-traditional partners or communities are enlisted to broaden the sustained impact from the project. Describe the community characteristics of the project area, identify any communities impacted, describe outreach and community engagement activities and how those will be monitored and measured. Use demographic data to support descriptions and submit letters of support from community partners and/or collaborators demonstrating their commitment to the project and engagement in project activities as proposed.

Monitoring – NFWF may implement independent monitoring efforts in the future to measure the environmental outcomes from projects funded under this solicitation. Award recipients may be asked to facilitate granting of access to project sites for NFWF or its designees for future environmental monitoring purposes.

Budget – Costs are allowable, reasonable, and budgeted in accordance with NFWF's Budget Instructions cost categories. This funding opportunity will award grants of federal financial assistance funds; applicants must be able to comply with the OMB Uniform Guidance (2 CFR 200). While for-profit entities are eligible applicants, charges to a potential award may include actual costs only; recipients may not apply loaded rates or realize profit from an award of federal financial assistance funds.

Matching Contributions – Matching Contributions consist of cash, contributed goods and services, volunteer hours, and/or property raised and spent for the Project during the Period of Performance. Larger match ratios and matching fund contributions from a diversity of partners are encouraged and will be more competitive during application review.

Procurement – If the applicant chooses to specifically identify proposed Contractor(s) for Services, an award by NFWF to the applicant does not constitute NFWF's express written authorization for the applicant to procure such specific services noncompetitively. When procuring goods and services, NFWF recipients must follow documented procurement procedures which reflect applicable laws and regulations.

Publicity and Acknowledgement of Support – Award recipients will be required to grant NFWF the right and authority to publicize the project and NFWF's financial support for the grant in press releases,

publications and other public communications. Recipients will also be asked by NFWF to provide high-resolution (minimum 300 dpi) photographs depicting the project.

Receiving Award Funds – Award payments are primarily reimbursable. Projects may request funds for reimbursement at any time after completing a signed agreement with NFWF. A request of an advance of funds must be due to an imminent need of expenditure and must detail how the funds will be used and provide justification and a timeline for expected disbursement of these funds.

Compliance Requirements – Projects selected may be subject to requirements under the National Environmental Policy Act, Endangered Species Act (state and federal), and National Historic Preservation Act. Documentation of compliance with these regulations must be approved prior to initiating activities that disturb or alter habitat or other features of the project site(s). Applicants should budget time and resources to obtain the needed approvals. As may be applicable, successful applicants may be required to comply with additional Federal, state, or local requirements and obtain all necessary permits and clearances.

Permits – Successful applicants will be required to provide sufficient documentation that the project expects to receive or has received all necessary permits and clearances to comply with any Federal, state or local requirements. Where projects involve work in the waters of the United States, NFWF strongly encourages applicants to conduct a permit pre-application meeting with the Army Corps of Engineers prior to submitting their proposal. In some cases, if a permit pre-application meeting has not been completed, NFWF may require successful applicants to complete such a meeting prior to grant award.

Federal Funding – The availability of federal funds estimated in this solicitation is contingent upon the federal appropriations process. Funding decisions will be made based on level of funding and timing of when it is received by NFWF.

TIMELINE

Dates of activities are subject to change and contingent on the availability of funding. Please check the Program page of the NFWF website for the most current dates and information (http://www.nfwf.org/chesapeake).

Applicant Webinar (Registration)	*2:00PM, Tuesday, March 1st, 2022*
FieldDoc Webinar (Registration)	*10:00AM, Thursday March 3rd, 2022*
Proposal Due Date	*Thursday, April 28th, 11:59pm ET*
Proposal Review Period	*August*
Awards Announced	*September (anticipated)*

HOW TO APPLY

All application materials must be submitted online through NFWF's Easygrants system.

1. Go to easygrants.nfwf.org to register in our Easygrants online system. New users to the system will be prompted to register before starting the application (if you already are a registered user, use your existing login). Enter your applicant information.
2. Once on your homepage, click the "Apply for Funding" button and select this RFP's "Funding Opportunity" from the list of options.
3. Follow the instructions in Easygrants to complete your application. Once an application has been started, it may be saved and returned to at a later time for completion and submission.

APPLICATION ASSISTANCE

A *Tip Sheet* is available for quick reference while you are working through your application. This document can be downloaded from the Related Content section of the RFP. Additional information to support the

application process can be accessed on the NFWF website's "Applicant Information" page. Please disable the pop-up blocker on your internet browser prior to beginning the application process.

For more information or questions about this RFP, please contact Jake Reilly (jake.reilly@nfwf.org), Stephanie Heidbreder (stephanie.heidbreder@nfwf.org) or Nicole Thompson (nicole.thompson@nfwf.org) via e-mail or by phone at (202) 857-0166.

NFWF also offers on-demand, field-based project and partnership development support through field liaisons, providing broad geographic coverage across the Bay region for agricultural conservation, urban stormwater management, wetland and watershed science, and habitat experience and expertise relevant to Bay restoration goals. Applicants may also contact these field liaisons using the information below to discuss potential projects:

Field Liaison Contact	Email	Phone	Sector Expertise
Kristen Saacke Blunk	kristen@headwaters-llc.org	(814) 360-9766	• All Sectors
Kristen Hughes Evans	kristen@susches.org	(804) 544-3457	• Agricultural Conservation
Liz Feinberg	liz.feinberg63@gmail.com	(610) 212-2345	• All Sectors
Katie Ombalski	katie@woodswaters.com	(814) 574-7281	• Agricultural Conservation • Habitat Restoration

For issues or assistance with our online Easygrants system, please contact:

Easygrants Helpdesk

Email: Easygrants@nfwf.org
Voicemail: 202-595-2497
Hours: 9:00 am to 5:00 pm ET, Monday-Friday.
Include: Your name, proposal ID #, e-mail address, phone number, program to which you are applying, and a description of the issue.

Appendix A

Eligible Practices for the PA-MEB Program

CBP Practice Name (Practice Credit Duration)	Definition	Other Common Practice Names and Standards
Tillage Management (Annual, 1 year)	Conservation tillage involves the planting, growing and harvesting of crops with minimal disturbance to the soil. Includes: • **Low Residue Tillage**: Maintains 15 to 29 percent crop residue coverage immediately after planting • **Conservation Tillage**: maintains 30 to 59 percent crop residue coverage immediately after planting • **High Residue, Minimum Soil Disturbance Tillage**: Maintains at least 60 percent crop residue coverage immediately after planting	• Residue and Tillage Management, No Till (NRCS 329) • Residue and Tillage Management, Reduced Till (NRCS 345)
Tree Planting (10 years)	Any trees planted on agricultural land, except those used to establish riparian forest buffers, targeting lands that are highly erodible or identified as critical resource areas.	• Windbreak/shelter establishment (NRCS 380) • Tree/Shrub Establishment (NRCS 612) • Tree Planting (FSA CP3) • Hardwood Tree Planting (FSA CP3A)
Wetland Restoration (15 years)	Includes any of the following: • **Wetland Restoration (re-establishment)**: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former wetland. • **Wetland Rehabilitation**: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded wetland. • **Wetland Enhancement**: The manipulation of the physical, chemical, or biological characteristics of a wetland to heighten, intensify, or improve a specific function(s). • **Wetland Creation (establishment)**: The manipulation of the physical, chemical, or biological characteristics present to develop a wetland that did not previously exist at a site.	• Wetland restoration (NRCS 657); • CRP or CREP wetland restoration (CP23) and wetland restoration, non-floodplain (CP23A)
Prescribed Grazing (10 years)	Pasture management and grazing techniques to improve the quality and quantity of the forages grown on pastures and reduce the impact of animal travel lanes, animal concentration areas or other degraded areas. Prescribed grazing systems must maintain a vegetative cover of 60% or greater.	• Managed intensive grazing; Prescribed grazing (NRCS 528 or 528A)

Animal Waste Management Systems (15 years)	Any structure designed for collection, transfer and storage of manures and associated wastes generated from the confined portion of animal operations and complies with NRCS 313 (Waste Storage Facility) or NRCS 359 (Waste Treatment Lagoon) practice standards. Manure conserved through reduced storage and handling losses associated with AWMS implementation are available for land application or export from the farm.	• Waste storage facility (NRCS 313) • Waste treatment lagoon (NRCS 359)
Manure Incorporation (Annual, 1 year)	The mixing of dry, semi-dry, or liquid organic nutrient sources (including manures, biosolids, and compost) into the soil profile within a specified time period from application by a range of field operations. Includes: • **High disturbance incorporation**: Provides the highest degree of mixing of organic nutrient sources into the root zone, but effectively eliminates the erosion control benefits of conservation tillage. Incorporation plus additional field operations retain <30% of residue cover at planting. • **Low disturbance incorporation**: leaves greater quantities of organic nutrient sources on the soil surface, but maintains most of the benefits of conservation tillage. Incorporation plus additional field operations retains at least 30 % of residue cover at planting.	N/A
Manure Injection (Annual, 1 year)	A specialized category of placement in which organic nutrient sources (including manures, biosolids, and composted materials) are mechanically applied into the root zone with surface soil closure at the time of application. Total soil surface disturbance for injection plus planting and any other field operations should be less than 40%.	N/A
Manure Transport (Annual, 1 year)	Transport of excess manure in or out of a county. Manure may be of any type – poultry, dairy, or any animal categories. Movement within the same county should not be included.	N/A
Barnyard Runoff Control (10 years)	Includes the installation of practices to control runoff from barnyard areas. This includes practices such as roof runoff control, diversion of clean water from entering the barnyard and control of runoff from barnyard areas.	• Roof runoff structure (NRCS 558) • Diversion (NRCS 362) • Stormwater Runoff Control (NRCS 570) • Trails and Walkways (NRCS 575)

Loafing Lot Management (10 years)	The stabilization of areas frequently and intensively used by people, animals or vehicles by establishing vegetative cover, surfacing with suitable materials, and/or installing needed structures. This does not include poultry pad installation.	N/A
Alternative Crops (10 years)	Accounts for those crops that are planted and managed as permanent, such as warm season grasses, to sequester carbon in the soil	N/A
Retirement of Highly Erodible Land (10 years)	Agricultural land retirement takes marginal and highly erosive cropland out of production by planting permanent vegetative cover such as shrubs, grasses and/or trees.	• Critical area planting (NRCS 342); • Conservation cover (NRCS 327);
Cover Crops –Traditional (Annual, 1 year)	A short-term crop grown after the main cropping season to reduce nutrient losses to ground and surface water by sequestering nutrients and may not be harvested in the spring. Includes: • **Traditional cover crops**: This type of cover crop may not receive nutrients in the fall. • **Traditional cover crops wit fall nutrient application**: This type of cover crop is planted upon cropland where manure is applied following the harvest of a summer crop and prior to cover crop planting.	• Cover Crop (NRCS 340)
Cover Crops – Commodity (Annual, 1 year)	A winter cereal crop planted for harvest in the spring which does not receive nutrient applications in the fall. Any winter cereal crop which did receive applications in the fall is not eligible for nutrient reductions.	N/A
Forest and Grass Buffers (10 years)	Linear vegetated areas that help filter nutrients, sediments and other pollutants from runoff as well as remove nutrients from groundwater. Includes: • **Forest Buffer**: Wooded buffer at least 35' wide, with recommendation for 100' • **Grass Buffer**: Grass or other non-woody vegetative buffer at least 35' wide, with recommendation for 100'	• Riparian Forest Buffer (NRCS 391) • Riparian Buffer (FSA CP22) • Riparian Herbaceous Cover (NRCS 390) • Filter Strip (NRCS 393) • Filter Strip (FSA CP21) • Field Border (NRCS 386) • Grass Waterway (NRCS 412) • Grass Waterway, Noneasement (FSA CP8A)
Forest and Grass Buffers with Stream Exclusion Fencing (10 years)	When buffers are implemented, pasture exclusion fencing is installed to prevent livestock from grazing and trampling the buffer or entering the stream. May include supporting practices like the use of alternative drinking water sources, such as permanent or portable livestock water troughs placed away from the stream corridor.	• See **Forest and Grass Buffers**
Core Nutrient Management – Nitrogen (Annual, 1 year)	The implementation of a site-specific combination of nutrient source, rate, timing, and placement into a strategy that seeks to optimize agronomic and environmentally efficient utilization of nitrogen (N).	• Nutrient management (NRCS 590)* *Acres of nutrient management cost-shared under the NRCS 590 or enhanced 590 standards do not automatically fulfill the Core or Supplemental NM definitions. However, partners can verify how many of the acres meet which Core and/or Supplemental NM definitions.
Supplemental Nutrient Management – N Rate (Annual, 1 year)	Applications of nitrogen are made in accordance with all elements of the **Nitrogen Core Nutrient Management** practice, and one or more of the following practices are implemented resulting in a reduction in application rate of nitrogen: • Nitrogen application rate made at less than land-grant university recommendations.	

	• Nitrogen applications split across the growing season, resulting in lower-than-planned applications. • Nitrogen applications are made using variable rate goals, resulting in lower-than-planned applications.	
Supplemental Nutrient Management – N Placement (Annual, 1 year)	Applications of nitrogen are made in accordance with all elements of the **Nitrogen Core Nutrient Management** practice, and one or more of the following practices are implemented resulting in better placement and utilization of nitrogen: • Applications of inorganic nitrogen are injected into the subsurface or incorporated into the soil. • Applications of nitrogen are made with setbacks from surface water features.	
Supplemental Nutrient Management – N Timing (Annual, 1 year)	Applications of nitrogen are made in accordance to all elements of the **Nitrogen Core Nutrient Management** practice, and are split across the growing season into multiple applications to increase utilization of nitrogen.	
Soil and Water Conservation Plans (Annual, 1 year)	Farm conservation plans that involve a combination of agronomic, management and engineered practices that protect and improve soil productivity and water quality and prevent deterioration of natural resources on all or part of a farm. Plans must meet applicable NRCS technical standards.	N/A

Appendix B

OPERATION, MAINTENANCE AND REPAIR PLAN

Proper operation and maintenance of nutrient and sediment load reduction practices ("practices") is critical for their success and longevity. The goal of this project is the establishment of for improvement of water quality.

1) Components of the Project (List all practices being installed within this project):

Practice	Location Summary	Practice Extent

2) Parties agree to perform all Maintenance Tasks as described in the chart at the end of this document.

3) Allowed activities:

-
-
-
-

Prohibited activities:

-
-
-

4) Other Special Conditions:

-
-
-
-

Maintenance Tasks

Practice	
Maintenance required	
Schedule	
Responsible Party	
Practice	
Maintenance required	
Schedule	
Responsible Party	
Practice	
Maintenance required	
Schedule	
Responsible Party	