



Maryland
Department of
the Environment

Commission for the Innovation and Advancement of Carbon Markets and Sustainable Tree Plantings

February 11, 2022
Regular Meeting



Meeting Agenda

- **2:00-2:10pm** - Welcome and updates
- **2:10-2:25pm** - Overview of MDA Implementation Strategies
 - **2:25-2:45pm** - Open discussion and questions
- **2:45-3:00pm** - Overview of CBT Urban Trees Program & NOI
 - **3:00-3:25pm** - Open discussion and questions
- **3:25-3:30pm** - Public comment period



Draft Work Plan and Timeline (Meetings on Fridays – 2-3:30pm)

- **February 11**
 - MDA Implementation Strategy
 - CBT Urban Tree Program Plan
- **March 11**
 - Communications plan/update
 - DNR Implementation Strategy
- **April 8**
 - MDE Tree Accounting and Quantifying Carbon
- **April 12 - End of Legislative Session**
- **May 6**
 - MDE and Invited Speakers: Intro to Carbon Markets and the role of the State
- **May 27**
 - MDE and Invited Speakers:
 - Private financing
 - Clean Water Commerce Act
 - Water Quality Revolving Loan Fund
 - Environmental Impact Bonds
- **June 17**
 - MDOT and DNR:
 - Tree mitigation for transportation projects



State Ethics Commission

- Members serving on another board or commission should note on their 2021 statement, Schedule X, that they also serve on the Markets and Trees Commission
- Those who have not filed and serve only on the Markets and Trees Commission, should file for this Commission only using Form #2 marked *Boards and Commissions*
- <https://efds.ethics.maryland.gov>



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Financial Disclosures



Implementation Leads

- **Maryland Department of Agriculture**
 - Manage one-time \$1000 per acre bonus for landowners who enroll forested streamside buffers via CREP

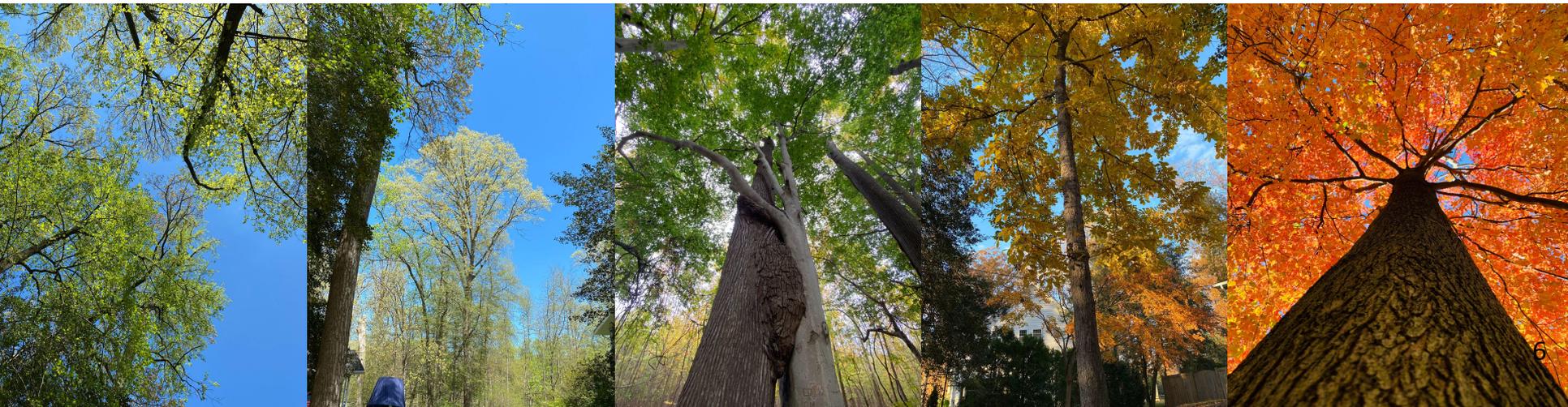




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Questions and Discussion

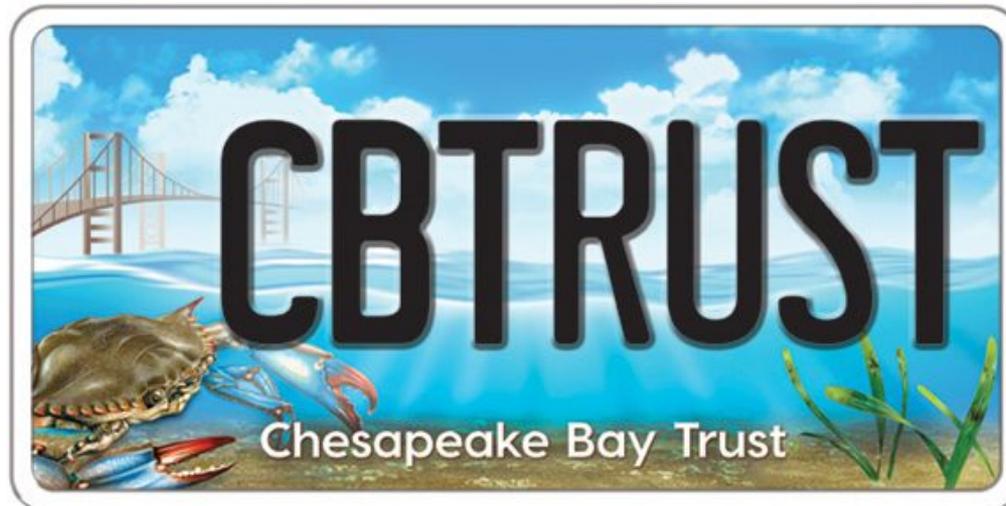
Commission Members and Implementation Leads





Implementation Leads

- **Chesapeake Bay Trust**
 - Development and management of new Urban Trees Program





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Questions and Discussion

Commission Members and Implementation Leads

- Urban Trees Grant Program - Year 1
- Anticipated Topics for Adaptive Management of Year 2 RFP
- Plans for Maintenance in Years 1-2 Post Planting
- Options for Maintenance in Years 3-8



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Public Comment Period

Please add name and affiliation in the chat box and we will take comments in the order received.



Staff Contact

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MDSG State Science Policy Fellow

Climate Change Program

Maryland Department of the Environment

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Draft Work Plan and Timeline (Meetings on Fridays – 2-3:30pm)

- **July 8**
 - Progress reports from all agencies
 - Key challenges: long-term tree maintenance
- **July 29**
 - Progress reports from all agencies
 - Key challenges: nursery stock or other logistical barriers
- **August 19**
 - Progress reports from all agencies
 - Key challenges: other policy barriers
- **September 9**
 - Walk through and discuss sections of draft report
- **September 30**
 - Walk through and discuss sections of draft report
- **October 10 - Final Report Distributed**
- **October 21**
 - Vote on final report

September 1 - Finish Draft Report

**October 30 - Submit Final Report
to General Assembly and
Governor's Office**

Conservation Has Its Rewards...

CREP

MARYLAND'S CONSERVATION RESERVE ENHANCEMENT PROGRAM



- Federal-state partnership that pays top dollar to landowners who agree to take environmentally sensitive cropland out of production for 10 to 15 years to plant:
 - streamside buffers
 - establish wetlands
 - protect highly erodible lands
 - create wildlife habitat
- Provides steady, dependable land rental income
- This completely voluntary program offers:
 - a one time signing bonus of up to \$250 an acre
 - attractive annual rental and incentive payments
 - cost-share assistance for streamside buffers, wetlands, livestock fencing and more
- 100,000 acre statewide goal
- Landowners have the option of selling a permanent easement on their land to the State of Maryland
- FY2020 - \$174,038 on 30 projects
- FY2020 - \$209,752 signing bonuses

CREP Rewards & Benefits

Five Types of CREP Payments Available

Maryland CREP participants are eligible for five types of payments. Qualifying incentives are based on the type of practice installed.

1 *Signing Bonus*

A one-time bonus payment of up to \$250 per acre for land enrolled.

2 *Annual Rental Payment*

The local soil rental rate plus a per acre incentive valued at between 80% and 200% of the local soil rental rate. Actual amount depends on the type of practice installed.

3 *Cost-Share Assistance*

Landowners are reimbursed for up to **100%** of the cost to install eligible best management practices (BMPs) on enrolled land.

4 *Practice Incentive Payment*

A one-time incentive payment worth 40% of the total cost of establishing qualifying BMPs. This payment is in addition to the cost-share that is available for most practices.

5 *Mid-Contract Management Payments*

Cost-share is available to help farmers implement approved management activities to support plant diversity and wildlife habitat. Farmers can receive up to 50% cost-share (not to exceed \$100-\$125 per acre for the life of the contract).

Annual Land Rental Payment Determination

CREP participants receive attractive annual rental payments that are above rates offered by the traditional Conservation Reserve Program (CRP). Landowners must agree to take streamside property, certain highly erodible land, or wetlands out of production for 10 to 15 years and maintain grass, shrubs, trees or wetlands for the life of the contract. Additional incentive payments offered through CREP add between 80% and 200% to the local soil rental rate. Here's how it works:

CREP Project	Annual Land Rental Payment
Forested Streamside Buffer A landowner who plants a forested streamside buffer receives the local soil rental rate for the enrolled acreage plus an additional incentive payment that is 200% of the local soil rental rate.	Soil Rental Rate + 200%
Grassed Streamside Buffer A landowner who plants a grassed streamside buffer receives the local soil rental rate for enrolled acreage plus an additional incentive payment that is 150% of the local soil rental rate.	Soil Rental Rate + 150%
Wetland A landowner who establishes a wetland receives the local soil rental rate for enrolled acreage plus an additional incentive payment ranging from 100% to 200% of the local soil rental rate. The percentage awarded depends on the type of wetland installed.	Soil Rental Rate + 100% to 200%
Habitat for Declining Species A landowner who creates habitat for declining species receives the local soil rental rate for enrolled acreage plus an additional incentive payment that is 150% of the local soil rental rate.	Soil Rental Rate + 150%
Highly Erodible Land A landowner who takes highly erodible land out of production receives the local soil rental rate plus an additional incentive payment that is 80% of the local soil rental rate.	Soil Rental Rate + 80%

Annual Rental Payment Formula

For Example: A landowner installs a forested streamside buffer on 10 acres of land with a local soil rental rate of \$80 per acre. The landowner's annual rental payment is:

$$\begin{aligned}
 & \$80 \text{ per acre} \times 10 \text{ acres} = \$ 800 \\
 & + 200\% \text{ CREP incentive payment} \times \$800 = \$ 1,600 \\
 & \text{Total Annual Payment to Landowner: } \mathbf{\$ 2,400}
 \end{aligned}$$



Enrollment Goals

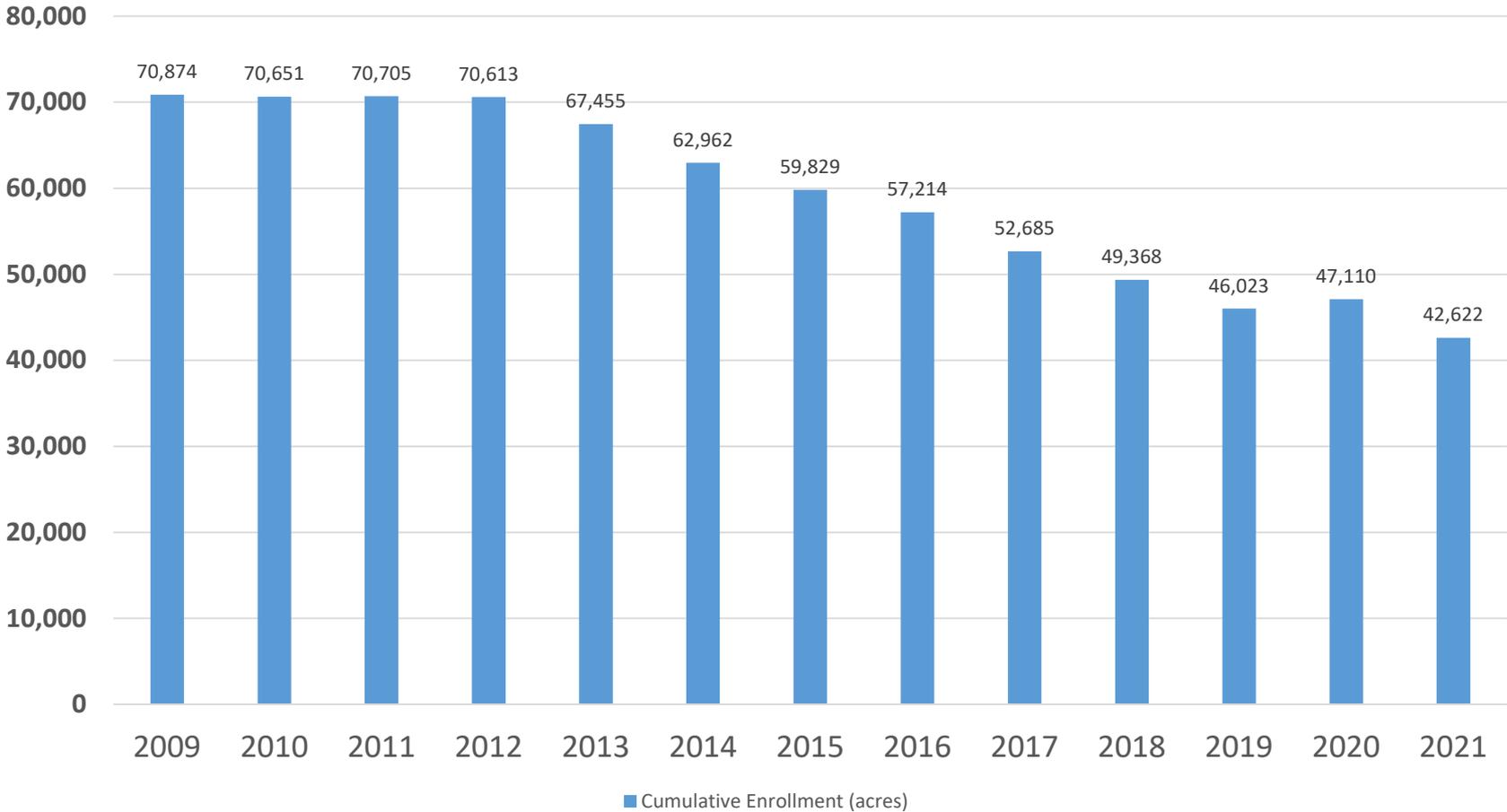
When fully implemented at 100,000 acres, CREP will help Maryland to achieve its water quality goals by:

- Reducing an estimated 11.5 million pounds of nitrogen and 1.1 million pounds of phosphorus from entering Maryland waterways each year.
- Reducing the amount of sediment entering the Bay and its tributaries by approximately 200,000 tons annually.
- Establishing and enhancing 77,000 acres of riparian buffers, 5,000 acres of wetland habitat and 2,000 acres of habitat for declining, threatened or endangered species, including the bald eagle and Eastern bog turtle.
- Stabilizing and protecting up to 16,000 acres of highly erodible land.

Eligible Cost-Share Practices

Best Management Practice	Cost-Share Rate	Eligible for 40% Practice Incentive Payment
Riparian Forest Buffer	Up to 100%	Yes
Herbaceous Buffer		
Wetlands Restoration		
Marginal Pastureland Wetland Buffer	Up to 87.5%	Yes
Stream Crossing		
Stream Fencing		
Watering Trough		
Marginal Pastureland Wildlife Habitat Buffer	Up to 50%	Yes
Shallow Water Area for Wildlife		
Retirement of Highly Erodible Land Adjacent to Waterways	Up to 100%	No
Habitat for Declining Species	Up to 50%	No

Cumulative Enrollment by FFY



Program Concerns & Actions

- Early program years saw strong interest in the program, but the program pace has been declining despite outreach efforts
- Decline is associated with several contributing factors, based on feedback to FSA,
 - Contracts transitioning to permanent easements (~11K acres)
 - Ground being returned to ag production (crop prices, enrollee's age, etc.)
 - Difficult maintenance requirements of CREP contract
 - Program fluxes per federal administration
 - Staff capacity particularly at FSA – often re-directed to new priority initiatives such as pandemic relief

Program Concerns & Actions

- Continuing to refine outreach
 - Targeted efforts based on GIS analysis
 - Staff placement in high priority areas
- Increased state cost-share up to 100%
- Increased state signing bonus for forest buffers
 - Forest buffers account for only 23% of enrolled acres (FFY21)
- MD CREP Advisory Committee has requested several program changes and Agreement amendments to National FSA
- Piloting state Conservation Buffer Initiative to complement CREP

Maryland CREP Advisory Committee

- State and federal CREP partners
- Quarterly meetings, lead by MDA staff, to review program rules and policy that accelerate CREP enrollment
- Members

Ducks Unlimited – Jacob McPherson, Mid-Atlantic Programs

Farm Bureau – Wilbur Levengood, President Caroline County Farm Bureau

Chesapeake Bay Foundation – Rob Schnabel, Maryland Restoration Scientist

Farm Services Agency – Robert Wevadou, Farm Programs Chief; Laura Pleasanton, Conservation Specialist

Maryland Department of Agriculture – Alisha Mulkey, Program Manager

Maryland Department of Natural Resources – Bob Long, Wildlife and Heritage Service; Ann Hairston-Strang, Forest Service

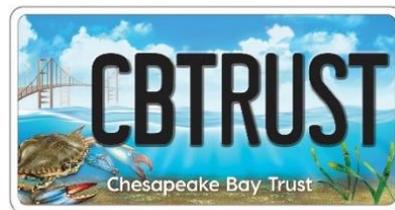
Natural Resources Conservation Service – Steve Strano, State Resource Conservationist; Julie Devers, State Biologist

U.S. Fish and Wildlife Service – Rich Mason, Biologist



Urban Trees Grant Program

FY23 Request for Proposals



Chesapeake Bay Trust

108 Severn Avenue, Annapolis, MD 21403

(410) 974 – 2941 ♦ www.cbtrust.org

Urban Trees Grant Program

At A Glance

Program Summary:

The Urban Trees Grant Program will support urban tree planting projects that enhance livability in underserved communities.

Deadline:

Thursday, March 3, 2022 at 4:00 PM EST

Eligible Project Locations:

This program will fund projects in underserved communities across Maryland that meet key criteria outlined below:

<https://legiscan.com/MD/text/HB991/id/2416376/Maryland-2021-HB991-Chaptered.pdf>

Request Amounts:

There will be no maximum request; however, requests will generally be at the following scales:

- Up to \$15,000 for projects serving a single small neighborhood (on the order of 25 to 100 trees)
- Up to \$45,000 for projects serving multiple neighborhoods within a community (on the order of 75 to 300 trees)
- Up to \$200,000 for projects serving multiple communities (on the order of 300 to 1,000 trees)
- Up to \$1,000,000 for projects serving communities across an entire county-scale (on the order of 2,000 to 6,000 trees)

Submitting Your Application:

Follow the instructions online at:

<https://cbtrust.org/grants/urban-trees/>

Contact:

Greg Burks, Program Manager, 410-974-2941 ext. 111, gburks@cbtrust.org



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Introduction and Program Goals

The Urban Trees Grant Program, called for by the Maryland General Assembly as a component of a 5,000,000-tree goal by 2031, welcomes requests for tree planting projects in urban, underserved communities. The goal of the Urban Tree Grant Program is to green communities; enhance quality of life, human health, and community livability by improving air quality and reducing urban heat island effect; and mitigate some of the effects of climate change. Improving tree quantity and quality in urban areas is a cost-effective way to improve the health of local waterways, strengthen the health of the Chesapeake Bay, provide urban wildlife habitat, help mitigate flooding issues in certain cases, and stimulate local green jobs markets and enable families to work where they live and play. This initiative will empower communities that have felt disenfranchised to gain better access to resources that support local improvements.



Increasing urban tree canopy can also strengthen communities by bringing residents together to create and maintain community green space and walkable neighborhoods.

The Chesapeake Bay Trust is seeking grant proposals from a wide range of applicants to plant trees in urban, underserved communities.

Eligible Project Locations

Tree planting projects proposed as part of this program must occur in urban, underserved areas, defined in Section 8–1911 of the Natural Resources Article of the Annotated Code of Maryland as:

- An urban area, as delineated by the United States Census Bureau AND
- An area that meets ONE or more of the following criteria:
 - o **Historic Disenfranchisement:** A neighborhood that was, at any point in time, redlined or graded as “hazardous” by the Home Owners’ Loan Corporation; OR
 - o **Unemployment:** A census tract with an average rate of unemployment for the most recent 24-month period for which data are available that exceeds the average rate of unemployment for the State; OR
 - o **Household Income:** A census tract with a median household income for the most recent 24-month period for which data are available that is equal to or less than 75% of the median household income for the state of Maryland during that period; OR
 - o **Housing Project:** A housing project as defined in Section 12-101 of the Housing and Community Development Article.

To help determine if a community is eligible, view the online map here:

<https://cbforg.maps.arcgis.com/apps/webappviewer/index.html?id=3bce1e558f5a46cd86287ee5929cf079>

This map was produced by the Chesapeake Bay Foundation and can be used as a guide: The applicant has the ultimate responsibility for site eligibility.

If your project does not meet the geographic criteria outlined above, you are encouraged to contact the Maryland Forest Service at 410-260-8510 to discuss other programs appropriate for your project type or consider the Chesapeake Bay Trust’s Green Streets, Green Jobs, Green Towns or Outreach and Restoration Grant Programs which can be found at www.cbtrust.org/grants.

Eligible Project Property Types

Tree planting projects can occur on sites including, but not limited to:

1. Streets and Right of Way projects – Street Tree Projects
2. Vacant Lots - Greening Vacant Lots by planting trees
3. Institutional Grounds, such as, but not limited to, faith, education, or health institutions
4. Other types of public or private property – Open Space

Proposed trees to be planted must not be required as mitigation for new or re-development, regulatory offset, or for any other regulatory reason.

Streets and Rights of Way - Street Tree Projects

Street trees are an important component of “green streets.” Street trees provide shade and improve air quality, which in turn improve livability and human health and reduce energy expenditures, and beautify areas, which can improve walkability and economic activity in downtown business districts.



While valuable due to these benefits, street tree projects can sometimes be challenging. Knowing these challenges in advance and explaining your approach to them in your proposal can make the ultimate project easier. A few questions to consider for your project that can help identify these challenges early in the application phase are:

- a) Do any local governments or utilities have rights of way, allowing them access and sometimes putting responsibility for trees on those entities? If so, permission, possibly permits, and support must be obtained from those entities. To determine whether this is the case, contact the department or planning and/or public works in the jurisdiction in which the project is located (either for the city/town if the project is located in an incorporated area within a county or the county if not). To inquire about roadside tree permits, contact the Maryland Forest Service via information found at: <https://dnr.maryland.gov/forests/Pages/programapps/newrflaw.aspx>
- b) Does your selected planting site(s) have underground utilities such as cable, water & sewer, gas lines etc.? Proposals must address in-ground precautions taken before excavation or digging. To help you determine if it safe to do so, contact Miss. Utility <https://www.missutility.net/> to ensure your planting project can proceed and/or map out specific areas to avoid.
- c) Are there overhead powerlines that put constraints on the size of trees that should be planted underneath? If so, choose the proper tree species (see Choosing the Right Tree Species section below)
- d) Do neighbors (residents, businesses, landowners) immediately adjacent want the trees? Proposals must address current level of support for the project and any efforts to increase it. Requests for personnel costs for this outreach work are allowed.

- e) Is there enough permeable space in the form of a tree pit in a sidewalk, for example, to plant the trees without risking tree mortality and/or buckling sidewalks with growing roots? Will tree pits need to be created or expanded, and will stumps need to be removed? Proposals must address the site conditions and any work needed to prepare the site(s) for tree(s).

Vacant Lots - Greening Vacant Lots by planting trees

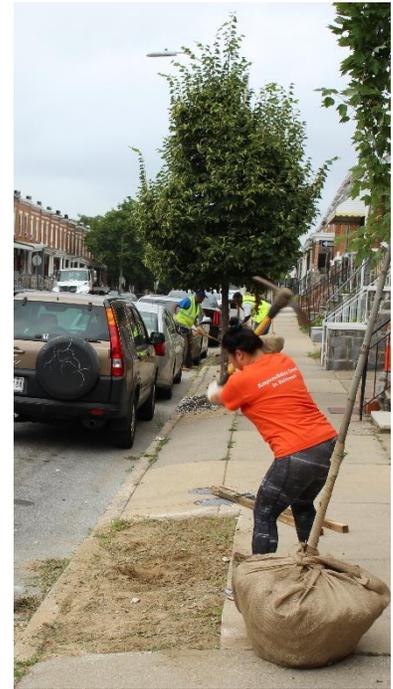
Studies show that neighborhoods with green spaces that can be used safely by residents have mental and physical health benefits.

Vacant lot greening can include many elements such as art, recreation amenities like benches, urban agriculture and community farms, pollinator habitat, and more. In many cases, installing trees is one vacant lot greening element. Leaders of vacant lot greening projects whose main elements are NOT trees are encouraged to apply to the Trust's Green Streets, Green Jobs, Green Towns Grant

Program: <https://cbtrust.org/grants/green-streets-green-jobs-green-towns/> which seeks to fund diverse vacant lot greening projects and also has a due date of March 3, 2021. Project leads who intend to focus on tree planting to green vacant lot(s) should apply to this Urban Trees Grant Program. Costs for non-tree elements of vacant lot projects can be requested, but they should be used and framed as a way to enable tree planting at those sites and a relatively small portion of the total budget request (see the Cost per Tree section below).

Project leads proposing vacant lot tree planting proposals must apply with permission in writing from the entity owning the vacant lot. For a list of vacant lot owners in Baltimore visit:

<https://dhcd.baltimorecity.gov/vacant-property-resources-and-information-page>



Example Vacant Lot - Before

Example Vacant Lot - After

Institutional Grounds

A way to plant trees at scale and at lower cost per tree is to plant many of them at once on one property. Many schools, faith-based institutions, health institutions, businesses, and other institutions offer that opportunity. Project leads seeking to green institutional grounds must include permission and support from the landowner for both the installation of trees and the maintenance afterwards.



Other types of public or private property - Open Space

Areas that are currently “open space” can provide an opportunity to increase tree canopy in urban areas; however, project leads seeking to plant in these areas must consider how the land is currently being used and by whom, and who might be affected if the area changes from open space to a treed area. Open space can also have positive impacts on the health and wellbeing of individuals in communities, so consider:

- a) Is the open space a designated play area for the youth and families in the community?
- b) Do residents, businesses, landowners utilize the open space for social events (e.g., sports, weddings, festivals)?

Proposals must address tradeoffs between tree plantings in the proposed space and existing land use.

Project Duration and Phases

In most cases, the implementation phase of projects (tree project phase) will be completed within 12 months upon receipt of the award, with 2 years of maintenance required beyond the implementation, leading to 3-year award durations. We recommend (but do not require) fall planting, when possible, to maximize survivorship.

Applicants may request funds for multiple planting seasons that extend over multiple years. In those cases, if awarded, applicants may receive funds for the first year as part of an initial award, with future years’ funding contingent upon availability.

Projects selected for funding must be fully or significantly focused on planting of trees (defined as “implementation”). Section 8–1911 of the Natural Resources Article of the Annotated Code of Maryland allows funds to be used for planning to support the implementation phase and a maintenance phase in addition to implementation. The Trust requires implementation and maintenance phases to be part of all requests to be eligible for funding.

Projects may include other components, such as workforce development activities, but the tangible result of projects selected for funding in this first year of the program must be measurable trees in the ground. An assessment will be made after the first year of the program to determine barriers and capacity to meet the 500,000 urban, underserved tree planting goal, and therefore to determine whether to consider projects that do not have a direct planting/implementation component.

Project Phases Required I: Planning and Outreach

For projects to be most successful (i.e., surviving and thriving trees), the people who live in, work in, own property around, and need access to the sites should welcome the trees and help ensure their long-term

sustainability. Trees planted in areas in which they are not welcomed for various reasons by any population such as residents, businesses, or owners of infrastructure face higher risk of vandalism, lack of maintenance, and even removal.

Leads of projects involving work on a small number (<5) of institutional and individual vacant lot projects (as opposed to large numbers of residents or businesses) must have landowner support for the project prior to application, such that funding is not allocated to projects that risk not being able to be completed.

Leads of projects involving work on multiple properties owned by a large number of entities or people (e.g., neighborhood-wide vacant lot greening projects that involve multiple vacant lots) will ultimately need numerous permissions and approvals. We understand that it can be time-consuming and therefore costly to coordinate with many stakeholders. Project leads of these types of projects are encouraged to obtain general community buy-in (e.g., from community or neighborhood leaders) prior to the application submission phase, but do not need to have all landowner permissions in hand at the time of application. Applicants working on these types of projects are allowed to ask for, within reason, costs to support the specific landowner/stakeholder buy-in phase. Proposals should explain what buy-ins have already been secured. If additional community or stakeholder support is required for your proposal to be successful, explain your action plan to obtaining the needed support.

Project Phases Required II: Implementation

Because trees in the ground is the key metric of this grant program, all project proposals must include a tree planting implementation phase.

Choosing the Right Native Tree Species

Trees must be native, as per statute. Lists of trees eligible can be found here:

- 1) Maryland State Archives Tree List:
<https://msa.maryland.gov/msa/mdmanual/01glance/html/trees.html>
- 2) The Maryland Department of Natural Resources (MDNR) recommended Tree list:
<https://dnr.maryland.gov/forests/pages/marylandersplanttrees/recommended-tree-list.aspx>

Several factors to consider as you choose your native tree species are listed below. You may choose to do the research and address these factors yourself or contact an arborist or other expert to talk these issues through. Contact the Trust for assistance finding a technical expert to discuss.

Purposes of the Project

- Consider the main goals of your project. Is the purpose of your project to provide shade for buildings, parks, or other infrastructure? If so, choose larger trees or trees with dense canopies (e.g., Hackberry). Is the purpose of your project to produce food? If so, choose native fruit or nut trees (e.g., Pawpaw, Serviceberry, or American Chestnut). Is the purpose of your project to beautify a community? (Choose trees that meet your aesthetic.) You may want to use the Chesapeake Bay Native Plant Center to help you choose which native trees work best for your site(s): <http://www.nativeplantcenter.net/>. Additionally, use the Site Constraints and Site Preparation considerations below to decide what native trees may work best for your sites(s)

Site Constraints

Below are common constraints that could affect what trees would be most appropriate for your project:

- **Power lines:** If your site has overhead power lines, you are encouraged to plant trees that will remain below a certain height. Utility companies such as BGE, Pepco, Delmarva Power, etc. provide guidance to help choose tree species for sites with immediate overhead power lines. Information can be found at: <https://www.bge.com/SafetyCommunity/Safety/Pages/PlantingTrees.aspx>
- **Salt Tolerance:** Consider tree susceptibility to salt damage from de-icing streets and sidewalks during the winter. Adverse soil changes from road and sidewalk salts are unfavorable to trees, so you may want to choose trees that are salt tolerant (see the MDNR recommended Tree list link above).
- **Parking:** Many street tree projects are in areas with street parking. You will want to choose trees that have minimal bark, seed, sap, twig, and fruit litter.
Tree pits: Small tree pits do not work for trees that will grow to be large. If your tree pit is 32 square feet or smaller, you will only be able to use smaller species of trees. In some cases, tree pits can be expanded to accommodate larger tree species. Contact your local government department of public works or roads office to learn more about how to enlarge existing tree pits.
- **Deer densities/access:** If you are planting near forest fragments or in parks, deer rubbing on young trunks and deer browse can quickly damage a planting. Note that choosing species that are deer resistant (i.e. unpalatable) will lower the chance of “browse” but not “rubbing.” Even resistant species will likely need trunk protection for the first 2 years of planting if deer are present. For more information visit: https://dnr.maryland.gov/wildlife/pages/hunt_trap/ddmtexclude.aspx

Aesthetics

The closer new trees align to expectations of the community, the more likely the community will invest in their care and advocate for their sustainability. For example, think about whether you want a dense canopy that will lead to lots of shade and will thus preclude understory plant growth (e.g., silver maple). Alternatively, you may choose species that provide more filtered light which will allow plant growth (e.g., honey locusts). Consider whether you want larger canopy species (e.g., Northern red oak) or smaller species (e.g., Eastern redbud). Consider whether you want trees that will grow quickly to provide benefits as soon as possible, or if you want species that might live longer, but would take longer to provide benefits. Consider whether a tiered planting (canopy, sub-canopy, and understory planting) or a guild planting (a community of plants that grow and support each other by recycling nutrients back into the soil) could be appropriate for your site(s). If the purpose of your project is to reduce stormwater or particulate pollution, choose a diversity of native trees that maximize these services. Consider as many aspects as possible of your desired final product, and make sure to choose species that are most likely to accomplish your vision.

Maintenance Needs and Care

Different species of trees often require different degrees or types of maintenance. Consider factors about each potential tree species you are considering that drive different maintenance needs. For example, while all trees drop leaves, not all tree species drop leaves in the same way. Some drop significant amounts in the fall and therefore need clean-up scheduled to avoid clogging nearby storm

drains. Other species such as evergreens do not drop as many leaves in fall. Yet others drop leaves in the fall, but the characteristics of the leaves are such that less intensive leaf removal is necessary.

Obtaining your Trees

The Maryland Native Plant Society maintains a self-reported native plant vendor list at: <https://mdflora.org/nurseries.html>. Not all of these nurseries will have sufficient supply to support the Urban Trees Grant Program. Please contact your local plant nursery to inquire about native trees and stock availability.

In addition, the Tree-Mendous Maryland program offers native trees for certain types of property. Information about the program can be found here:

<https://dnr.maryland.gov/forests/Pages/treemendous/default.aspx>

Site Preparation

Consider how you prepare your planting site as trees obtain nutrients and water through their network of roots:

- **Stump removal:** Sometimes a tree pit already exists with a dead tree or stump that must be removed. Costs can be requested for such activities, but the applicant must address why the previous tree did not survive, and why the new tree will.
- **Soil:** Amending soil for a newly planted tree is critical for survivorship in urban areas. Ensure that the soil at your planting site is thoroughly loosened, free and clear of stumps, debris, rocks, and competing vegetation. Aerate the soil to allow air and water to move freely. Consider adding additional nutrients such as soil conditioner and other organic matter to improve root and tree growth. If the soil is compacted with sand and clay, it may be unusable. If this is the case, consider replacing the planting site with fresh soil. When you are ready to plant, dig the hole 3 times wider than the root ball and mix amendments with the excavated soil. Dig the hole to the exact height of the root ball. Deeper and the tree will settle with the soil resulting in decreasing tree health.
- **Tree Guards:** In high activity areas, creating a barrier around your planting site may help protect your tree and its roots from animals, foot traffic, car and bicycle damage.

Project Phases Required III: Maintenance

Because tree planting projects that are not maintained, especially urban tree planting projects, are at risk of not persisting into the future, all requests to this grant program must include a written maintenance plan that describes at least 2 years of maintenance by the project leads. If project leads are doing work on land owned by someone else, permission and support for the maintenance phase by the landowner must be demonstrated in the proposal.

The 2-year post-planting maintenance phase must include at a minimum:

- **Watering:** At least 20 gallons of water should be applied to each tree every two weeks for the first growing season (e.g., from May 1- Oct 31st). Periods of extreme drought may require additional watering. After the second year, water can be reduced to as needed.
- **Mulching:** Mulching allows trees to retain water and mitigate soil erosion, reduce climbing invasives and other unwanted weeds, and protect tree roots from sudden temperature changes. Proper

mulching is key to protecting and promoting healthy root growth. Too much mulch can have the opposite effect and cause the tree to decline. To learn more about how to mulch and best practices visit: <https://extension.umd.edu/resource/mulching-trees-and-shrubs>

- **Pruning:** For young trees it will be necessary at the time of planting to remove girdling roots from the rootball, dead branches, and branches that are rubbing. These activities will shape the tree for the space and promote healthy growth. After the initial planting additional pruning is likely not needed for 2-3 years until the tree is vigorously growing again. To learn more about how to prune visit: <https://extension.umd.edu/resource/pruning-trees>
- **Pest and Disease:** Monitor your trees for leaf spots, fungi, insects, and canopy bare spots. If you have concerns about your trees' health, you can send a photo to a Maryland certified professional Horticulturists at the University of Maryland Extension at: <https://extension.umd.edu/programs/environment-natural-resources/program-areas/home-and-garden-information-center/ask-extension>. A horticulturalist will provide information on steps needed to ensure your tree thrives.
- **Climbing Invasives:** For any project that involves planting of more than 50 trees on one site, the proposed maintenance plan must address climbing invasives. We recommend manual treatment at least three times per year.
- **Leaf removal:** Ensure that an appropriate leaf removal strategy, based on the type of tree, is built into your plan.
- **Care/mowing around the tree:** One of the biggest threats to new trees isn't necessarily poor care of the tree itself, but incompatible maintenance of areas around the tree. For example, weed whacking activities that make contact with the trunk can kill a new tree. Make sure that the tree maintenance plan is integrated with the general site maintenance activities.

If you do not feel you have the capacity to provide maintenance for 2 years, you may either a) work with a partner to commit to taking on the 2-year post-planting maintenance, or b) find a partner that will submit the proposal and take the lead on the project with you as a partner. The Trust can help you find those partners: See the contact section below.

Cost Per Tree

To attempt to accomplish the ultimate goal of planting 500,000 trees in underserved urban areas within 9 years, we ask that applicants limit their costs wherever possible (though request enough for a successful implementation project).

Generally, street tree project requests should result in a budget averaging \$500 or less per tree (especially if tree pits need to be created or expanded), though if higher costs are required, they can be justified in the proposal. Other types of tree projects may be closer to \$100 per tree if less site preparation is required and smaller trees can be used (see Choosing the Right Native Tree Species section above).

The Trust at present is aiming for an overarching goal of an average of \$180 per tree in the overall program. However, individual applicants do not need to aim for that goal if their sites or projects do not allow. The cost per tree achieved in the overall program will be evaluated after the first year and this goal of \$180 may be deemed to be unrealistic and may be adjusted.

While one way to reduce cost per tree would be through matching resources, because the Trust aims to engage underserved communities for which providing matching funds could be a barrier, the program will not be requiring match in at least the first year. That said, applicants are encouraged to consider other resources that can bear some of the costs of their project. For example, several programs exist that will provide trees at reduced or no cost, depending on type of applicant and geographical location. Many counties offer discounted trees to certain landowner types. In addition, the Tree-Mendous Maryland program offers discounts for native trees that are to be planted on certain types of property.

<https://dnr.maryland.gov/forests/Pages/treemendous/default.aspx>.

Eligible Project Expenses

Funds may be used for supplies, site preparation, personnel costs, and other expenses and materials related to planning, implementing, and maintaining tree-planting projects in underserved areas (as per statute), and elements of all three of those stages (planning, implementing, and maintaining) must be included in each project proposal. Specific eligible expenses include those in the categories of project readiness (outreach and engagement activities to identify sites and engage residents/landowners); site readiness (tree pit creation, stump removal, etc.); tree planting (costs of trees, labor to plant the trees, tree shelters, mulch, and other materials); and tree maintenance.

If you plan to subcontract work (e.g., hire an entity to plant or water the trees), we suggest that you solicit estimates from at least three consultants or contractors.

Eligible Applicants

Funding Partners and the Trust welcome requests from non-profit organizations, schools, community associations; service, youth, and civic groups; institutions of higher education; counties; municipalities; and forest conservancy district boards and neighborhood/community associations (as per statute).

Also as per statute, grant applications from qualified organizations located in the underserved areas where the proposed tree planting projects will be implemented will be prioritized.

Contacts

Contact the Trust for assistance at any point in your application! Applicants to the Urban Tree Grant Program are **strongly encouraged** to contact the Program Manager early in proposal development.

Program Manager: Greg Burks, at (410) 974-2941 x 111 or gburks@cbtrust.org.

For Baltimore City Projects:

Organizations interested in applying for a project in Baltimore City should contact Charles Murphy, TreeBaltimore Program Manager, to discuss project location ideas and obtain information about existing tree pits in TreeBaltimore's targeted areas. <https://www.treebaltimore.org/maps>

Tree Baltimore Manager: Charles Murphy at (410)-458-7888 or charles.murphy@baltimorecity.gov

For Applicants with Projects that Include Significant Non-tree Components:

Contact Jeff Popp, Program Manager of the Trust's Green Streets, Green Jobs, Green Towns Grant Program, a partnership with the U.S. Environmental Protection Agency.

Program Manager: Jeffrey Popp, at (410) 974-2941 x 103 or jpoppp@cbtrust.org.

For Applicants Interested in Non-urban Projects:

Contact The Maryland Forest Service at 410-260-8510.

Evaluation Criteria

The following criteria will be used by reviewers to score your proposal:

- **Geographic Location: Is the project “urban” as defined by statute (see Eligible Project Locations above) and does it meet ONE or more of the following statutory requirements pertaining to underserved level (must meet one; 10 Points for each additional):**
 - **Historic Disenfranchisement:** A neighborhood that was, at any point in time, redlined or graded as “hazardous” by the Home Owners’ Loan Corporation; OR
 - **Unemployment:** A census tract with an average rate of unemployment for the most recent 24-month period for which data are available that exceeds the average rate of unemployment for the State; OR
 - **Household Income:** A census tract with a median household income for the most recent 24-month period for which data are available that is equal to or less than 75% of the median household income for the state of Maryland during that period; OR
 - **Housing Project:** A housing project as defined in Section 12-101 of the Housing and Community Development Article.
- **Likelihood of Immediate Project Success (Planting period Success) (15 points):**
 - Is the project planting plan sound - species, locations, timeline?
 - Has the applicant procured landowner permission, if necessary?
- **Likelihood of Long-term Project Success (Post-planting period Sustainability and Resiliency) (15 points):**
 - Are the relevant stakeholders on board with the project (neighbors, landowner, rights of way owners, etc.)?
 - Are the native trees selected for the project appropriate to the project location?
 - Has the applicant proposed a relevant and robust 2-year maintenance plan?
 - What is the likelihood that the tree persists after the 2-year maintenance plan proposed by the applicant?
 - Will the project persist and not be threatened by various types of disturbance (e.g., flooding, storms, insect outbreaks, trampling and vandalism)?
- **Cost-effectiveness/Budget (15 points):**
 - Is the budget appropriate and cost-effective? Costs will be compared to the standard of \$100-\$500 per tree planted, which includes the trees themselves, supplies, labor, one year of maintenance costs, and tree pit work when necessary.

Funding Availability

Funding Availability: The amount of funding available for this program will be determined by the State of Maryland's Fiscal Year 2023 budgeting process.

Deadline

Applicants will submit applications in the **Chesapeake Bay Trust Online System** by **4:00 PM EST on March 3, 2022**. Late applications will not be accepted, and the online funding opportunity will close automatically and promptly at **4 PM EST**. Applicants are strongly encouraged to submit at least a few days prior to the deadline given the potential for high website traffic on the due date. While the Trust aims to provide technical assistance throughout the process, due to high demand on the deadline date, the Trust cannot guarantee availability of technical assistance for our online system on the deadline date.

Application Review Process

Each application is reviewed by a technical external peer review committee, called the Technical Review Committee (TRC), composed of individuals who are experts in the fields and represent communities served by projects funded in this program. The TRC ranks and scores all applications based on the criteria listed in the "Evaluation Criteria" section above, then meets to discuss the application merits. The TRC then recommends a suite of applications to the Trust's Board of Trustees.

The funding partners reserve the right to fund projects and budget items that advance their missions and meet specific funding priorities and criteria.

The Trust will provide feedback from the Technical Review Committee for any application in order to explain the decision and improve future applications.

To allow applicants to set expectations prior to investing time in application, the Trust provides historical application approval rates for the same or similar programs. Because this is the first year of the Urban Tree Program, we do not have information to share on likelihood of being funded. However, the average approval rate from the last three rounds of the Trust's Green Streets, Green Jobs, Green Towns Grant Program, which funds similar types of projects, was 48%, including both fully and partially funded applications.

Award Notifications and Requirements of Successful Grantees

All applicants will receive a letter stating the decision on the grant request. An application may be declined, partially awarded, or fully awarded. If awarded, the Trust will send an award agreement with award conditions and due dates of status, progress, and final reports. The Trust will mail the first award payment to the requesting organization following satisfaction of any phase 1 payment award contingencies, including upload of the signed award agreement. In most cases, grantees receive funds in phases, driven by project periods, and 10% of the total award is held until the final report is submitted and approved. In cases where the awardee fails to submit a status report, progress report, or final report by the due date, the Trust reserves the right to terminate the award agreement and require a refund of funds already transferred to the awardee.

When the project is complete, awardees are required to complete final reports that may include but are not limited to submission of all receipts for supplies, invoices for subcontractors/contractors, and copies of timesheets for personnel time used (timesheets must include date, name, time worked per day, and coding to

tie the time worked to the award). All financial back-up documentation will be grouped and numbered to correspond to budget line items. Organizations with outstanding final, progress, or status reports will not be awarded additional grants.

We understand that producing this type of documentation may be a challenge for smaller organizations; however, this type of documentation is necessary to ensure accountability in the program. For smaller organizations who may not have the capacity for record keeping of this nature, we encourage partnership with larger organizations who can serve as the project lead for you.

Urban Tree awards will be announced in June 2022.

Online Application Submission Instructions

The Trust uses an online system for the application process, and if awarded, project management. To apply for an award, go to: <https://cbtrust.org/grants/urban-trees/> click on “Get Started” to begin a new application. This will open a new window asking you to log in or create an account on our online system. If you have applied in the past, use your existing username and password (if you have forgotten either of these use the ‘forgot password’ feature). If you have not used our online system before, click on “New Applicant” and follow the instructions.

We understand that the amount of information required can seem large, particularly for first-time users. The Trust does our best to balance our need to be accountable for the funds and ease of use by applicants. **We can help!** Any applicant who needs assistance filling out the materials should contact the Trust as early as possible (assistance may not be available the last week of the open period.)

Applicants must submit applications in the **Chesapeake Bay Trust Online System** by **4:00 pm on March 3, 2022**. Late applications will not be accepted, and the online funding opportunity will close promptly at 4:00 pm.

By submitting an application to this program, applicants acknowledge that: 1) they are compliant with federal employment and non-discrimination laws and 2) they have not been debarred, convicted, charged or had a civil judgment rendered against them for fraud or related offense by any government agency (federal, state or local) or been terminated for cause or default by any government agency (federal, state, or local). In addition, all final products will be provided to the funding partners for use and distribution at the sole discretion of the funding partners.

Watch our video on how to apply for and submit an application using our online system at: <https://cbtrust.org/grants/>.

You will be asked to provide the following information on the online application form. Some items are required in order to submit your application. Refer to the online application for details.

A. Eligibility Quiz

This three-question quiz is meant to assist you in determining if your project meets the requirements of this award program and that your staff/organizational structure best supports a successful application.

B. Applicant Information Tab

- Provide the organization’s name, mailing address, phone number, organization type, mission, EIN number (if known), and DUNS number (if known).
- Provide the Executive Officer and Project Leader’s name, title, address, phone, and email address.

- Both an Executive Officer and a Project Leader, two separate individuals, must be identified for all applications.
- The Executive Officer and Project Leader must both be able to make decisions on behalf of the organization either as a board member, an employee, or other approved position recognized by the organization but not a contractor of the application.
- The Executive Officer is the individual that oversees the organization (e.g., Executive Director, Chief Executive Officer, Mayor, President or Vice President, Principal (for schools), etc.) and has the authority to sign/execute award agreements on behalf of the organization. The Executive Officer information is tied directly to all the organization's applications and should not vary from application to application. If the Executive Officer could be listed as the Project Leader in a future proposal, we recommend listing a Board Member or other higher-ranking position of the organization as the Executive Officer in order to reduce the variation in the Executive Officer across applications.
- The Project Leader will be responsible for all project coordination and correspondence with the Trust for the duration of the project. The email address entered here **MUST** be the same as the email address you used to log in to the online system. The Project Leader is the primary point of contact for the application, and the email address used to submit the application via the online system must be that of the Project Leader. Applications in which the email address associated with the Project Leader in the applicant information tab of the online opportunity does not match the email address used to submit the application will not be considered for funding. The Trust cannot conduct any official correspondence with contractors or other project partners. If at any time the 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.

C. Project Information Tab

You will be asked on this tab to provide:

- a project title;
- project summary (one paragraph), in which you identify the main purpose of your tree planting project, the community(ies) and locations in which you intend to plant trees, and who will benefit from the tree planting project. Include the number of trees to be planted.
- the watershed in which the project is located (if known)
- the county in which the project is located
- legislative district in which the project is located
- the latitude and longitude coordinates of the project location (if known).

D. Timeline Tab

Add the project start and end date. Provide a project timeline that includes major tasks and their associated start and end dates.

E. Deliverables Tab

Provide estimated metrics for your proposed project such as number of trees and project participants. Leave those not relevant to your project blank.

F. Volunteers Tab

Provide a description of volunteer activities, the number of volunteers, and total number of volunteer hours.

G. 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.

H. Narrative and Supporting Documents - Project Narrative

You will be asked to upload a MS Word or PDF file (7-page limit, excluding material such as letters of commitment, planting plans, and conceptual sketches) addressing the following questions. Include any relevant information as described in the sections above that supports your project.

To ensure that you address all questions, please copy and paste the questions and use them as an outline for your narrative. Additional file attachments can be uploaded, not to exceed a total of four file attachments per application. Use the additional "Upload" option in the online grant system.

1) (Required) Detailed Project Description

Provide a detailed description of your project, including the goals, your tree planting sites, how your sites were selected, who owns the property(ies), the degree of community/landowner buy-in, how you chose the species in your planting plan, and other pertinent information. Describe the three project phases (what specifically will be done and who will do it):

- a) Phase I: planning you have undertaken or still need to undertake
- b) Phase II: implementation (tree planting)
- c) Phase III: maintenance (short-term and long-term)
 - short-term (first growing season and year 2, which must be included in the budget request and will be completed within the project period)
 - long term (years 3-10 ,post-award period)

2) Community Context

- *(Required)* Please describe the communities (neighbors, residents, businesses, etc.) who will benefit from this project.
- *(Optional)* Does this project fit into an already existing community improvement plan, urban tree canopy plan, or urban green infrastructure plan?
- *(Required)* What community groups (e.g., neighboring faith-based organizations or civic associations) will be engaged in this project?

3) (Required) Demographic Information:

In light of the Trust's commitment to the advancement of diversity in its award making, provide demographic information about the community or population involved in or served by the project.

Provide your organization's experience working within the specific communities that you will be prioritizing. If you have not had significant experience within your prioritized demographic, explain how you intend to address this issue; the Trust encourages applicants to establish partnerships with local organizations that may have greater cultural competencies within the targeted demographic(s).

4) *(Optional) Previous Experience:*

Describe your organization's experience in completing similar projects. You may, but are not required to, include recent photos of other implementation projects completed by your organization to demonstrate experience in implementation and maintenance.

5) *(Required) Regulatory*

Indicate if any element of your proposed project is required as part of a development/re-development, mitigation and/or enforcement action (for example, required as the result of a settlement, a specific project required as part of a permit obligation, etc.). If not part of a development/re-development, mitigation, and/or enforcement action, answer this question with "not applicable."

6) *(Required only if costs for consultant(s)/ contractor(s) are requested) Contractor Scope of Work and Qualifications*

Will contractors/consultants be used in this project? If yes, include a detailed scope of work with specific tasks and hours, describe how you have or will identify that contractor/consultant(s), and if multiple bids or estimates will be obtained or have been obtained. (Applicants are encouraged to have either already obtained cost estimates or quotes from at least three service providers prior to completing the application.) Describe the qualifications of the contractor(s)/consultant(s)

I. Narrative and Supporting Documents - Supporting Documents

- 1) Site plan/project design that includes:
 - i. (required) Vicinity map with address
 - ii. (optional) Site photos (optional)
 - iii. (required) Planting plan (species, sizes, area, spacing) –provide a rationale for species selection and planting timeline. If you are not planning to plant in the fall, please justify, explaining why your selected planting season will lead to acceptable survivorship.
- 2) Landowner Letter of Permission: For projects planned on property(ies) other those that owned by the applicant, a letter stating landowner permission; proof of permission to plant the trees by the landowner(s) (with the exception of street tree/neighborhood planting projects with multiple landowners/residents/stakeholders in which an engagement/outreach phase is needed).
- 3) A maintenance plan signed by the entity responsible for maintenance and the landowner, if different. The maintenance plan must cover short-term (first growing season and year 2, which must be included in the budget request and will be completed within the project period) and long-term (years 3-10, post award period). See p. 9 above for specific elements that must be included in the maintenance plan.

J. Budget Instructions

1) Financial Management Spreadsheet – Application Budget Upload

You will be asked to upload your budget using the “Application Budget” worksheet of the Chesapeake Bay Trust’s **Financial Management Spreadsheet** (FMS), an excel file template. The template can be found by visiting <https://cbtrust.org/forms-policies/> where you can also watch a video with instructions on how to complete the FMS.

2) Financial Management Spreadsheet – Application Budget Information

This online application component will ask you to enter budget category and request totals. These totals will be automatically calculated in the FMS Application Budget, so you will only need to copy and paste the values from the FMS to the Online Application.

3) Additional Budget Justification

This online application component will ask you to provide a descriptive budget narrative to justify and explain costs. If the success of the work is contingent upon award of other funds, make this clear in your budget justification section.

K. Terms and Conditions Tab

- Agree to the specified terms and conditions