

[Trust Fund Targeting Map](#)

Introduction

To promote more holistic projects and more strategically identify all the co-benefits of practices and their locations, the Chesapeake and Atlantic Coastal Bays Trust Fund (Trust Fund) will incorporate co-benefits into project selection. The Trust Fund is looking for applications that, in addition to providing cost-effective and measurable nonpoint source pollution reductions, provide co-benefits including:

- Restoration of Aquatic Resources (i.e., submerged aquatic vegetation, oyster reefs);
- Climate Resilience;
- Carbon Sequestration;
- Creation of Wildlife Habitat;
- Local Employment Opportunities;
- Improvement or Provision of Recreational Opportunities; or
- Environmental Justice Benefits

Applicants are asked to identify the co-benefits achieved with project implementation by completing the 'Co-Benefits' section of the Common Application, as well as utilizing [the targeting map](#). Note: the targeting map encompasses five of the seven co-benefits that are able to be spatially depicted. The previous targeting map that utilizes SPARROW to show Trust Fund priority areas is a layer within the map. Furthermore, applicants are welcome to utilize additional data sets that they determine better represent the co-benefit of their project. Those additional data layers should be uploaded to the map or provided as a link for reviewers to access and analyze.

Layer Naming and Description

Climate Resilience

[Coastal Resiliency Assessment](#) - These layers identify priority restoration and conservation areas that would enhance coastal resiliency and reduce risk to communities impacted by sea level rise, inundation, erosion, and other coastal hazard impacts.

How to Use: There are several layers in the Climate Resiliency Assessment which have similar intended uses. For example, the Shoreline Hazard Index can be used to identify locations that may benefit from restoration due to being exposed to relatively high levels of storm-induced erosion and flooding such as through living shorelines.

[SLR Affecting Marsh Migration \(SLAMM\)](#) - This service shows the impacts sea level rise may have on Maryland's coastal marsh system, the Sea Level Affecting Marshes Model (SLAMM) was run for all 16 coastal counties and Baltimore City.

How to Use: Use this layer to identify areas of the state which may benefit from conservation actions such as beneficial use of dredged material, conservation easements, and/or wetland restoration due to sea level rise.

[Climate Ready Action Boundary \(CRAB\)](#) - The Coast Smart Climate Ready Action Boundary or CS-CRAB image service represents the county-wide depth of flooding given a 3 foot (vertical and associated horizontal) increase in water surface elevation above the current effective 100-year floodplain. This product is to be used as part of the siting and design criteria for the Coast Smart Council.

How to Use: Use this layer to consider the potential impact of sea level rise and flooding to your project. For example, are your proposed project's design and siting appropriate if the CRAB layer indicates potential future inundation from sea level rise and flooding?

[Current Floodplains](#) - This layer is the Effective Floodplain layer, the official regulatory floodplain as adopted by FEMA and provided to a local jurisdiction for the National Flood Insurance Program (NFIP).

How to Use: Use this layer to identify the regulated floodplain and flood prone areas. Many stream and wetland restoration projects will be located within the regulated floodplain and require permits for project design and implementation. Applicants are encouraged to coordinate with the floodplain manager of the local county or municipality where the project is located. Consider placement of stormwater practices upslope from the floodplain to help improve water quality and quantity concerns.

[Impervious Cover](#) - This layer shows the relative amount of impervious cover in each 12 digit watershed relative to all other 12 digit watersheds in the state of Maryland. Watersheds are ranked from 1 to 10 in terms of percent imperviousness; 10 being the highest % impervious, 1 being the lowest % impervious.

How to Use: Use this layer to help identify watersheds that may benefit from stormwater best management practices or impervious surface removal. Watersheds with high amounts of impervious surfaces may have more severe climate change induced flooding events due to relatively greater runoff. Stormwater best management practices may help minimize flooding in these locations.

[Urban Heat Island](#) - Heat islands are urbanized areas that experience higher temperatures than outlying areas. Structures such as buildings, roads, and other infrastructure absorb and re-emit the sun's heat more than natural landscapes such as forests and water bodies. Urban areas, where these structures are highly concentrated and greenery is limited, become "islands" of higher temperatures relative to outlying areas. Daytime temperatures in urban areas are about 1-7°F higher than temperatures in outlying areas and nighttime temperatures are about 2-5°F higher.

How to Use: Use this layer to help site urban tree planting projects. Areas with a greater urban heat island effect may greatly benefit from street trees and green street projects which can [dramatically reduce temperatures](#).

Environmental Justice Benefits

[Park Equity](#) - These layers can be used to determine which areas in the State are in need of new park space and which communities may be currently underserved or underutilized by

existing park space. Promoting park equity is one way to ensure communities - regardless of socio-economic, demographic, or geographic profile - have equal opportunity to a healthy environment.

How to Use: Use this layer to identify parts of Maryland with a lack of recreational amenities that may benefit from enhanced green spaces which could include green streets, tree plantings, etc.

[MD Environmental Justice Screen](#) - The Maryland Environmental Justice Screen Tool (MD EJSCREEN) assesses environmental justice risks among census tracts in the state of Maryland. EJ Scores near 1 represent areas of the greatest environmental justice concern. This score is calculated as a function of exposure to pollution, the relative effect of that pollution, population sensitivity, and population socioeconomic characteristics.

How to Use: Use this layer to identify parts of Maryland which may be exposed to relatively greater pollution and/or have relatively greater sensitivity and risk from that pollution. These parts of the state may benefit from restoration projects such as green streets, street trees, stormwater practices, etc.

[Climate and Health Equity Mapper](#) - The Maryland Park Equity Mapper application combines demographic and environmental health data from a variety of sources and maps that data onto Maryland census block groups in order to identify disparities in public climate and health equity. This application allows users to evaluate these factors in their community and see how it compares to the rest of Maryland. The Climate and Health Equity Mapper can be used by city planners and public health officials to identify communities in need of infrastructure revitalization.

How to Use: Use this layer to identify parts of Maryland that may benefit from restoration projects such as green streets, street trees, and open spaces which may improve air quality and minimize the urban heat island effect, among other benefits.

Recreational Opportunities

[Park Equity](#) - This layer can be used to determine which areas in the State are in need of new park space and which communities may be currently underserved or underutilized by existing park space. Promoting park equity is one way to ensure communities - regardless of socio-economic, demographic, or geographic profile - have equal opportunity to a healthy environment.

How to Use: Use this layer to identify parts of Maryland where your project would increase local access to park space by creating new park space or by improving existing park space or park access in an underserved area (in darker red). When clicking the link, a summary of the map is shown that describes what areas are in most need of new public park space based on population density, demographic information, and current distance to existing parks.

[Maryland Public Water Access Sites](#) provides information on Maryland's public water access sites.

How to Use: Use this layer to identify parts of Maryland where your project would improve or create public access to water. This is a helpful map to describe the rarity of public access to water in certain project areas and to detail how increased access would be a major benefit to a

project site. Please note that restricted community access (like a private neighborhood beach) is NOT considered public access, and therefore, is not included on this map.

[Maryland Water Trails](#) provides information on Maryland's State-designated water trails.

How to Use: Are there scenic water trails adjacent to your proposed boat launch facility that may enhance public access to the water trail? Use this layer to identify potential opportunities to provide additional public access to a water trail.

Restoration of Aquatic Resources and Creation of Wildlife Habitat

BUILD - Beneficial use projects, such as marsh enhancement, beach nourishment, island restoration and shoreline stabilization, can increase shoreline and community resilience while dramatically reducing the financial costs of dredged material disposal and coastal restoration projects. By aligning restoration and dredging projects, planners can save on costs that would otherwise be incurred to transport dredged material to an upland placement site or to bring fill material to a restoration site. Further, placement of dredged material in restoration projects can provide important environmental and social benefits. The key to implementing beneficial use projects is ensuring that restoration and dredging projects spatially align. BUILD, or "Beneficial Use: Identifying Locations for Dredge", is an ArcGIS layer that enables the spatial identification of beneficial use of dredged material opportunities. This tool primarily highlights dredging work done in partnership with the Waterway Improvement Fund (WIF) and includes permit information through MDE, facilitating the alignment of dredging with restoration efforts. BUILD allows project planners to proactively identify sources of dredged material to place in restoration projects, or vice versa.

How to Use: Use this layer to identify potential beneficial use opportunities near proposed dredging projects.

[Current Oyster Sanctuaries](#) - This layer shows public shellfishery areas in Maryland.

How to Use: If you are proposing an oyster restoration, it could be helpful to use this map to see if there is an Oyster Sanctuary nearby to encourage natural spat set or to enhance the benefits associated with the existing oyster population and reef community.

[Green Infrastructure Network](#)- These data map hub and corridor elements within the green infrastructure. Hubs are typically large contiguous areas, separated by major roads and/or human land uses, that contain one or more of the following: Large blocks of contiguous interior forest (containing at least 250 acres, plus a transition zone of 300 feet) Large wetland complexes, with at least 250 acres of unmodified wetlands; Important animal and plant habitats of at least 100 acres, including rare, threatened, and endangered species locations, unique ecological communities, and migratory bird habitats; relatively pristine stream and river segments (which, when considered with adjacent forests and wetlands, are at least 100 acres) that support trout, mussels, and other sensitive aquatic organisms; and existing protected natural resource lands which contain one or more of the above (for example, state parks and forests, National Wildlife Refuges, locally owned reservoir properties, major stream valley parks, and Nature Conservancy preserves). Corridors are linear features connecting hubs together to help animals and plant propagules to move between hubs. Generally speaking, corridors

connect hubs of similar type (hubs containing forests are connected to one another; while those consisting primarily of wetlands are connected to others containing wetlands). Corridors generally follow the best ecological or "most natural" routes between hubs. Typically these are streams with wide riparian buffers and healthy fish communities. Other good wildlife corridors include ridge lines or forested valleys. Developed areas, major roads, and other unsuitable features were avoided.

How to Use: If you are proposing a project that could help link natural corridors or hubs, use this tool to find out if the proposed project area is adjacent to valuable natural areas.

Fish Blockage Locations: This layer shows the locations of stream blockages such as dams, perched culverts, etc that limit the migration of fish through stream networks.

How to Use: Use this layer to find out if a project site has already been identified by the State as a location in need of restoration to improve fish passage. These locations would be especially helpful to reference if your project involves a dam removal, culvert removal, or stream daylighting in an area that is identified as preventing fish passage.

Targeted Ecological Areas Targeted Ecological Areas (TEAs) are lands and watersheds of high ecological value that have been identified as conservation priorities by the Maryland Department of Natural Resources (DNR) for natural resource protection. These areas represent the most ecologically valuable areas in the State: they are the "best of the best".

How to Use: Use this layer to find out if your project area falls within or next to a TEA, which could describe how a proposed project would support wildlife corridors or other biodiversity benefits beyond just the project area.