SFY23 Trust Fund Targeting

<u>Introduction</u>

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 encouraged to identify the co-benefits achieved with project implementation by completing the 'Co-Benefits' section of the Common Application, as well as utilizing the beta-version targeting map. Note: the beta-version targeting map emcompasses five of the seven co-benefits that are able to be spatially depicted. This map serves as an introduction to incorporating co-benefits and will be assessed for improvement in subsequent solicitations. As such, the previous targeting map that utilizes SPARROW will also be accepted for this fiscal year. 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

<u>Coastal Resiliency Assessment</u> - This layer identifies priority restoration and conservation areas that would enhance coastal resiliency and reduce risk to communities impacted by inundation, erosion, and other coastal hazard impacts.

<u>SLR Affecting Marsh Migration (SLAMM)</u> - 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.

<u>Climate Ready Action Boundary (CRAB)</u> - 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.

<u>Current Floodplains</u> - This layer offers the anticipated floodplain boundaries and the Effective Floodplain layer represents the official regulatory floodplain as adopted by FEMA and a given local community for the National Flood Insurance Program (NFIP).

<u>Impervious Cover</u> - This layer shows the relative amount of impervious cover in a watershed relative to all watersheds in the state of Maryland.

<u>Urban Heat Island</u> - 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.

Environmental Justice Benefits

<u>Park Equity</u> - 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.

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.

<u>Climate and Health Equity Mapper</u> - 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.

Recreational Opportunities

<u>Park Equity</u> - 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.

<u>Maryland Public Water Access Sites</u> provides information on Maryland's public water access sites.

Maryland Water Trails provides information on Maryland's State-designated water trails.

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. BUILD allows project planners to proactively identify sources of dredged material to place in restoration projects, or vice versa.

Current Oyster Sanctuaries - This layer shows public shellfishery areas in Maryland.

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.

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

<u>Targeted Ecological Areas</u> 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".