# Blue Infrastructure
## *Maryland's Chesapeake & Coastal Service*

The citizens of Maryland treasure and benefit in many ways from the State's aquatic resources, or "Blue Infrastructure". Our blue infrastructure provides shelter, nesting and nursery grounds for fish and wildlife and provides access to water-based recreation opportunities. The aquatic habitats and resources within Maryland's diverse regions are critical for commerce, recreation, energy, environment, and our quality of life. Like the built infrastructure we depend on for transportation, clean drinking water and community services, such as health care, education, and emergency response, we must also proactively invest in our blue infrastructure.

Increasing and new demands on Maryland's blue infrastructure, open spaces and their surrounding landscapes are becoming a reality as our state experiences continued growth. In order to ensure that our blue infrastructure continues to provide the environmental, economic, cultural and recreational benefits to our children and future generations, we must identify these important places and collectively work to protect, restore and manage these
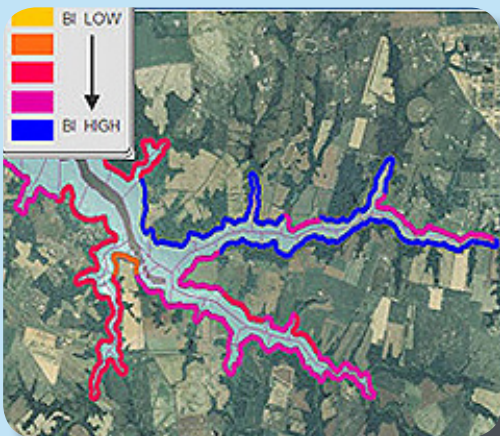
resources before they are irretrievably lost or damaged beyond repair. Working in partnership with regional, state and private partners, Maryland can make great strides to conserve and properly manage Maryland's Blue Infrastructure.

### Varied Resources, Varied Landscapes, Common Challenges

Each region of our State – from the forested mountains in the West to the coastal plains in the East – is home to unique portions of Maryland's blue infrastructure. Despite the fact that Maryland's aquatic ecosystems are so diverse from one region to another, there are many common challenges that we as resource managers and planners face regardless of place. This session will focus on statewide aquatic resource priorities, the landscapes that are linked to, the cumulative and secondary impacts that affect them, and the resources available to help inform decision making and planning.

### Blue Infrastructure Near-shore Assessment

The Blue Infrastructure (BI) Near-shore Assessment is a detailed spatial evaluation of coastal habitat, critical natural resources and associated human uses in the tidal waters and near-shore area of Maryland's coastal zone. The near-shore assessment serves as a link between Maryland's terrestrial and aquatic environments and contributes to prioritization systems that help target conservation and management activities to maintain and improve coastal habitats. It is designed to incorporate estuarine priorities into targeting and land use planning and to complement the Green Infrastructure (GI) network.

*Martin O'Malley, Governor*
*John R. Griffin, Secretary*

MARYLAND
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*Maryland's*
&Chesapeake
Coastal Service

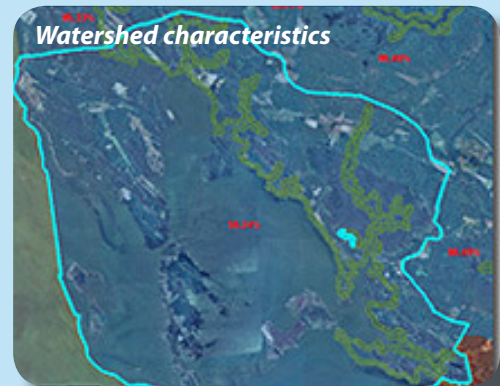Several coastal and watershed features are considered in the Blue Infrastructure near-shore assessment:

*Terrestrial near-shore*
The terrestrial shoreline is divided into unique 1 kilometer x 100 meter segments and assessed for land-cover characteristics; certain classes confer greater benefits than others in terms of buffering capacity, provision of habitat, and maintenance of natural processes. In addition, these segments are assessed for tidal wetland cores, sensitive and shoreline-dependent species, sandy beaches, point-source discharge and shoreline stabilization features.
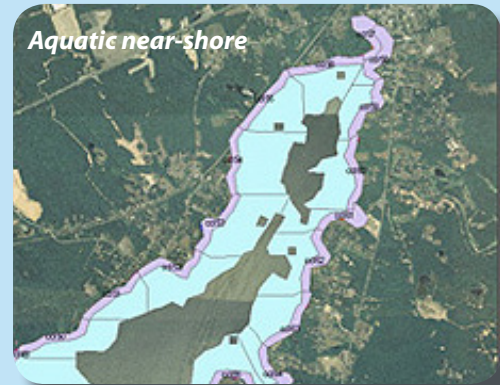

*Land segments*

*Watershed characteristics*
12-digit coastal watersheds are assessed for undeveloped, protected and Green Infrastructure lands, as well as for levels of impervious surface. Particularly for many finfish species, levels of impervious surface are important indicators. Once the watersheds are assessed for these characteristics, all shoreline reaches within the watershed are assigned watershed baseline values that provide information about the conditions of their unique watershed.


*Watershed characteristics*

*Aquatic near-shore*
Each terrestrial near-shore segment is associated with a corresponding aquatic segment that reaches out to a depth of 2 meter. The aquatic segments are assessed for resources such as oyster bars, SAV beds, other shellfish, access structures, sandy bottom and fish spawning and nursery areas.


*Aquatic near-shore*

The values from the terrestrial, aquatic and watershed values are combined and result in a final near-shore BI rank. We invite you to use the Coastal Atlas' Estuaries mapping tool to analyze and explore the data resulting from the Blue Infrastructure Near-shore Assessment and other useful aquatic resources data for the Chesapeake and Atlantic Coastal Bays.

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