Efforts of State Coastal Programs to Support Chesapeake Bay Water Quality Goals



John Kuriawa, NOAA

Overview

- Introduction to the CZMA and State Coastal Programs
- Maryland water quality initiatives:
 - Trust Fund / BMP Targeting
 - Innovative Technology Fund
 - Watershed Assistance Collaborative
- Virginia water quality initiatives:
 - Incentivizing Voluntary BMPs
 - Redevelopment as a TMDL Strategy
 - Policy and Planning Guidance / Technical Assistance

National CZM Program

- Voluntary partnership program between the federal government and coastal states and territories
- Authorized by the Coastal Zone Management Act (CZMA) of 1972
- Comprehensive approach to coastal resource management using enforceable policies, coordination, and planning
- Balancing act between coastal resource use, economic development, and conservation

Program Goals

- Preserve, protect, and develop the nation's coastal resources
- Resolve conflicts among competing users
- Develop, approve and use comprehensive state management programs
- Improve cooperation and coordination among federal, state, and local governments
- Encourage public participation

CZMA "Enhancement Areas" Focus Areas for Policy Changes

- 1. Public Access
- 2. Wetlands
- 3. Coastal Hazards
- 4. Energy Facility Siting
- 5. Ocean Governance
- 6. Special Area Management Plans (SAMPs)
- 7. Cumulative and Secondary Impacts (Water Quality)
- 8. Marine Debris
- 9. Aquaculture

Allocation of CZMA Funds Nationally

 Enhancing Public Access (\$4.2M Federal; \$5.0M Matching)

The National CZM Program protects, creates, and enhances public access to the coast, providing a substantial economic benefit to coastal communities.

Planning for Our Ocean and Coastal Waters (\$4.0M Federal; \$1.6M Matching)

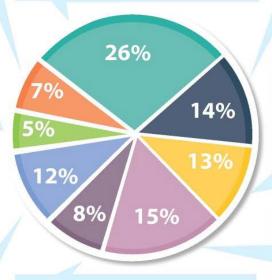
The National CZM Program supports comprehensive ocean planning to ensure our oceans are used in a balanced way to support jobs, reduce use conflicts, and sustain natural resources.

Coordination and Public Involvement (\$9.0M Federal; \$4.9M Matching)

The National CZM Program coordinates agencies at multiple levels of government and engages the public in critical government decision making.

 Protecting and Restoring Coastal Habitat (\$16.0M Federal; \$13.4M Matching)

The National CZM Program protects and restores coastal habitats, which buffer communities from storms and are needed to maintain sustainable fisheries, robust recreation and tourism industries, and thriving wildlife populations.



State Program Management (\$5.8M Federal; \$3.0M Matching)

The National CZM Program supports state staff and program needs to carry out national and state coastal priorities.

Mitigating Coastal Hazards (\$10.8M Federal; \$6.2M Matching)

The National CZM Program enhances state and community resilience by minimizing risk to coastal hazards such as storms, flooding, erosion, and sea level rise.

Protecting Coastal
Water Quality (\$6.0M
Federal; \$9.3M Matching)

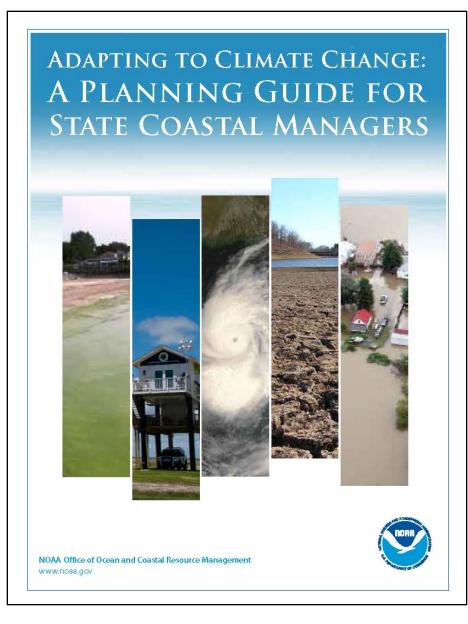
The National CZM Program prevents and reduces polluted runoff and marine debris resulting in safe, swimmable, and fishable coastal waters.

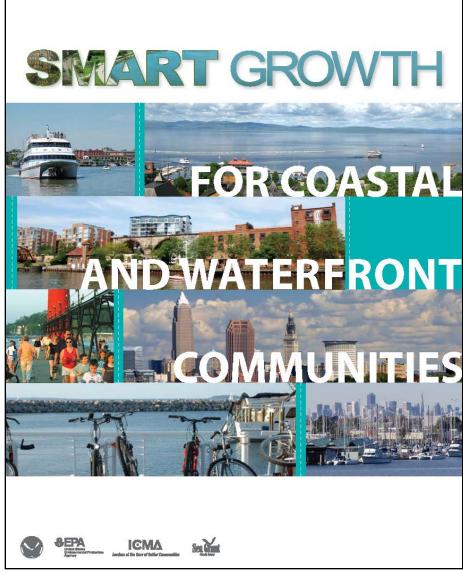
Promoting Coastal
Community Development
(\$9.5M Federal; \$7.9M
Matching)

The National CZM Program helps coastal communities manage development to promote water dependent uses and industries and protect coastal character and health.









Native Plants of Accomack and Northampton





Maryland's Coastal Atlas

Maryland's Chesapeake & Coastal Service

The Coastal Atlas is an online mapping and planning tool that allows state and local decision-makers to visually analyze and explore data for coastal and ocean planning activities.

Maryland's Blue Infrastructure

Our ocean and estuarine environments today face an era of unprecedented activity. Wind farms and other energy facilities, commercial fishing, diverse recreational uses, and shipping highways are all competing for use and space. To ensure the protection of Maryland's critical ocean and estuarine resources-our Blue Infrastructure-and the coastal economies that depend on them, the Coastal Atlas has been developed to provide direct access to available data needed for coastal and ocean planning efforts. From finding the best location for renewable energy projects to locating sand resources needed for beach replenishment to helping local communities identify areas vulnerable to sea level rise and erosion - the Coastal Atlas will assist users in identifying potential conflicts so that they can be avoided early in the planning process.



"By having a real understanding of where resources are located and what they provide to us, the Coastal Atlas will help us better protect ocean resources and balance the many commercial and recreational demands they face."

- Governor Martin O'Malley

Better Decision-Making

The Coastal Atlas is the result of a collaborative effort among the Maryland Department of Natural Resources, the Maryland Energy Administration, Towson University, the University of Maryland, The Nature Conservancy and the National Oceanic and Atmospheric Administration.

The data available through the Coastal Atlas includes physical characteristics, human uses and ecological resources.

Through the Coastal Atlas, users are able to visualize, query, map, and analyze available data to better manage our marine and estuarine resources.

The tools currently available, and those that will be continually updated for the Coastal Atlas, are designed to support better decisionmaking by transforming available data into information tailored for specific issues.

Coastal Zone Counties: Anne Arundel Baltimore Calvert Charles St. Mary's Talbot Wicomico Worcester and **Baltimore City** nond, Chuck Prahl Laura Younger, Chris Paulis orge Close and 1/2012 14-12222009-428 inted on recycled pape

To help concerned citizens address specific coastal issues, the Coastal Atlas offers several mapping applications for Maryland's Blue Infrastructure:

Ocean

Allows users to view ocean data and access tools to understand and balance multiple ocean uses, including shipping, offshore renewable energy, recreation and fishing.



Screen shot of the Coastal Atlas' Ocean mapping tool

Screen shot of the Coastal Atlas' Shorelines mapping tool

Shorelines

Allows users to access state shoreline erosion data, understand basic information about coastal flooding and identify areas at risk to sea level rise.



Screen shot of the Coastal Atlas' Estuaries mapping too

Estuaries

Allows users to identify and access critical habitats in estuarine and near-shore environments for targeted conservation, protection and restoration activities such as tidal wetlands, priority finfish habitat and submerged aquatic vegetation.

Coastal Atlas Training

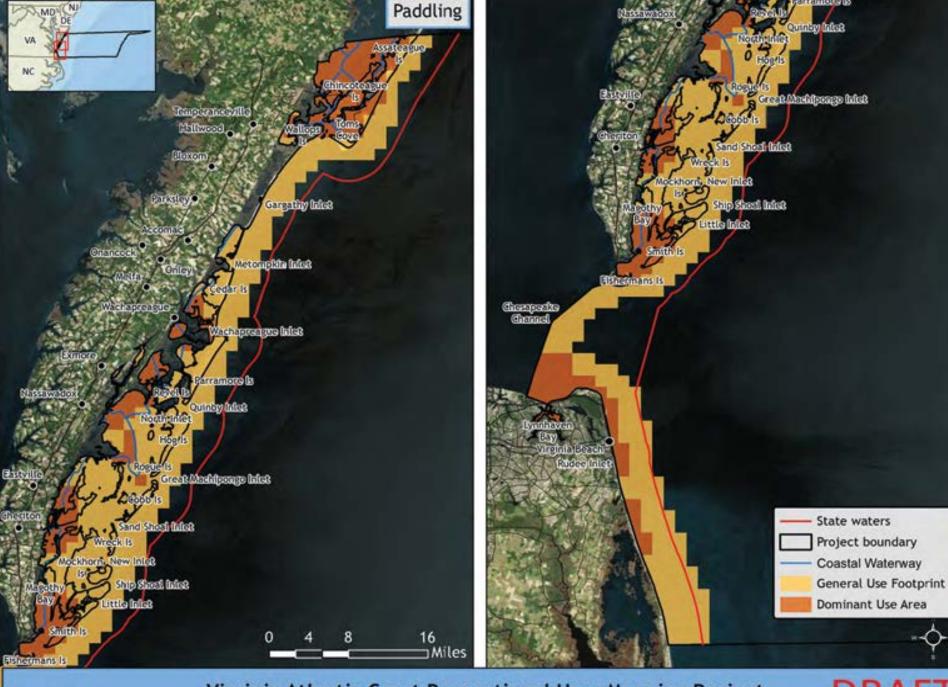
The Chesapeake & Coastal Service will offer training opportunities to help users make the most of the data and tools found on the Coastal Atlas.

The State is interested in receiving comments on the Coastal Atlas as well as feedback on the data and tools needed to help users address specific coastal issues. For questions, additional information or to view Maryland's Coastal Atlas, visit: http://dnr.maryland.gov/ccp/coastalatlas.

> Chris Cortina | Maryland's Chesapeake and Coastal Service Maryland Department of Natural Resources | Tawes State Office Building, E-2 580 Taylor Avenue Annapolis, Maryland 21401 Toll free in Maryland: 1-877-620-8DNR ext. 8732 Out of state call: 410-260-8774 Fax: (410) 260-8739 Email: ccortina@dnr.state.md.us | http://dnr.maryland.gov/ccp/coastalatlas











CBP/GIT Connections

- Promoting better land use:
 - Coastal smart growth incorporating resilience
 - Blue-green infrastructure planning
- CWA/TMDLs focus on development of state-specific planning assistance, education, and collaboration
- Pollution Marine debris reduction
- Habitat loss Land acquisition and conservation
- Shoreline erosion Living shorelines
- Public access New sites and water trails
- Climate change Vulnerability assessments and adaptation plans
- Fisheries declines Oyster protection and restoration

NOAA's Coastal Office

- Administers the National CMP and the National Estuarine Research Reserve System (NERRs)
- Approves State Programs and changes to the programs
- Negotiates annual work plans/grants with the states
- Conducts evaluations of State CMPs and NERRs
- Formulates national coastal and ocean policy
- Provides management & technical assistance to all CZMA stakeholders
- Mediates disputes between states and federal agencies
- Provides training, geospatial tools, facilitation, and other services to partners

State Coastal Programs

- Implement Federally-approved Management Programs using ~ \$2.5M annually (VA/MD), ~ \$1.2M (DE)
- Establish and enforce state policies through federal consistency
- Coordinate with other state agencies & local governments
- Ensure public involvement
- Assess and update Management Programs
- Identify gaps and emerging issues
- Develop Best Management Practices and inform national policies

Maryland and Virginia Water Quality Initiatives

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