

# Protecting and Improving Estuaries with Smart Growth Tools

## Maryland Coastal Bays Program

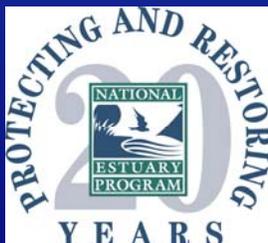
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Part of the National Estuary Program since 1995, the Maryland Coastal Bays Program provides leadership and coordination to restore and maintain the water quality and ecological integrity of small, shallow Maryland bays, including Assawoman Bay, Isle of Wight Bay, Chincoteague Bay, Sinepuxent Bay, and Newport Bay.



The National Estuary Program (NEP) was established under the 1987 Clean Water Act Amendments. It is a unique voluntary program that operates through partnerships with EPA and other public and private sector entities. Each NEP uses an inclusive, collaborative decision-making process to deliver on-the-ground results, making the NEP a leading model of watershed management.



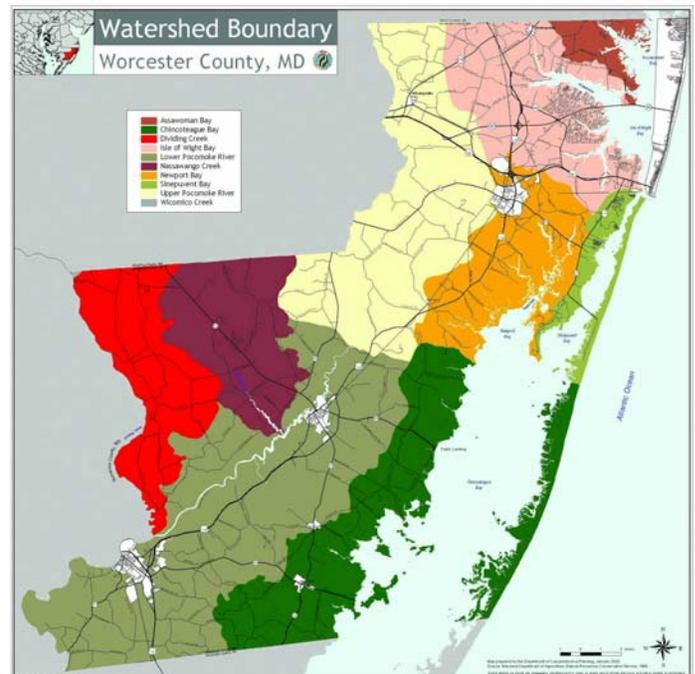
### Why Is Smart Growth Important For Estuary Protection And Improvement?

Nationally, runoff is the second most common source of water pollution for estuaries. Runoff from developed areas often contains nutrients, pathogens, and metals. Cumulative impacts from conventional development -- including increased stormwater volume and flow rates -- lead to erosion, estuary degradation, and habitat destruction. Conventional stormwater management practices address peak flows and suspended solids, but are only partially effective in managing cumulative impacts. Compact development paired with preservation of critical natural areas can help protect estuaries by (1) using land more efficiently, (2) reducing the amount of impervious surface per capita, and (3) allowing open lands to filter rainwater naturally, thus recharging local groundwater aquifers and supporting improved hydrologic function.

### How Did The Maryland Coastal Bays Program Use Smart Growth To Protect Their Estuaries?

The Maryland Coastal Bays Program (MCBP) protects and enhances the estuaries, classified as coastal lagoons, in Worcester County, Maryland. Tidal exchange here is limited, taking place mainly in small channels around nearby barrier islands. While the coastal bays receive drainage from only 175 square miles of land, this limited tidal exchange significantly increases the impacts of nutrient runoff from agricultural and urban sources.

Historically a rural and agricultural area, tourism and development have become integral parts of Worcester County's economy. In fact, in terms of employment, tourism is now the county's second largest industry. Recognizing that development is essential to the county's economy, yet can be a major driver of estuary degradation, the MCBP established a framework for addressing these issues in its 1999 Comprehensive Conservation and Management Plan (CCMP).



In 2001, when the Worcester County Planning Commission voted to update the county's comprehensive plan, the MCBP seized the opportunity to incorporate environmentally responsible development principles in the new plan. First developed in 1989, Worcester County's comprehensive plan is the basis for all of the county planning commission's decisions about zoning and land use.

In 2004, the MCBP began using EPA grant funding to bring together builders, architects, engineers, and other key stakeholders to help develop revised planning and zoning laws for the county. This collaborative process culminated in 2006 in a revised comprehensive plan for Worcester County. The plan protects the county's distinctive character and its estuaries, by (1) directing development to existing communities and to the marginal agricultural lands adjacent to them, (2) directing development away from highly productive agricultural lands, and (3) directing development away from sensitive natural areas such as floodplains, forests, groundwater recharge areas, and sensitive species habitat.

### Principles of Smart Growth

- Create Range of Housing Opportunities and Choices
- Create Walkable Neighborhoods
- Encourage Community and Stakeholder Collaboration
- Foster Distinctive, Attractive Communities with a Strong Sense of Place
- Make Development Decisions Predictable, Fair and Cost Effective
- Mix Land Uses
- Preserve Open Space, Farmland, Natural Beauty and Critical Environmental Areas
- Provide a Variety of Transportation Choices
- Strengthen and Direct Development Towards Existing Communities
- Take Advantage of Compact Building Design

### For Additional Information:

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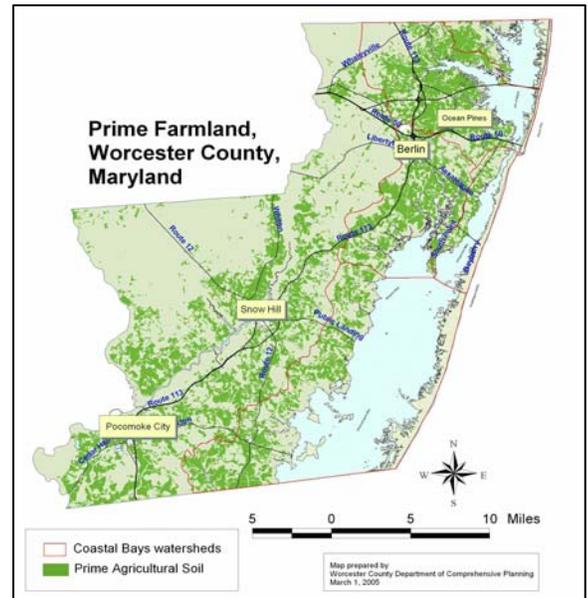
US EPA Office of Wetlands, Oceans, and Watersheds (OWOW)  
 Coastal Management Branch  
 Phone: 202-566-1260  
[www.epa.gov/owow/estuaries](http://www.epa.gov/owow/estuaries)

US EPA Smart Growth Program  
 Development, Community, and Environment Division (DCED)  
 Phone: 202-566-2878  
[www.epa.gov/smartgrowth](http://www.epa.gov/smartgrowth)

### How Did Smart Growth Tools Help MCBP Achieve Its Goals?

The MCBP recognized that it was essential to help create a collaborative vision for development and estuary protection in Worcester County. To achieve this goal, the MCBP used visioning exercises and meetings to establish common ground. The MCBP actively encouraged collaboration among stakeholders with opposing viewpoints. As part of a \$20,000 public education campaign, the MCBP also published a series of newsletters and a comprehensive planning guide to educate the public about the benefits of incorporating smart growth elements into the comprehensive plan.

To better protect the county's rural character, the MCBP helped to improve agricultural zoning. Agricultural lands comprise 80 percent of the county. The MCBP advocated zoning which directed growth towards lower quality agricultural lands adjacent to existing towns and infrastructure, and away from environmentally sensitive areas. These changes will protect the open space for which the county is known – and that draws a substantial tourist trade – while allowing sufficient development to accommodate the 18,000 additional residents expected by 2015. The development will have the additional benefit of providing affordable work-force housing near expected employment centers.



### How Can Other NEPs Learn From The MCBP Experience?

When Worcester County initiated its comprehensive plan revision, the MCBP saw and seized an opportunity to both protect the estuaries and protect the county's quality of life. Other NEPs can look for similar opportunities by asking themselves these questions:

- Are any of your counties planning to update their comprehensive plans and/or land use ordinances?
- Is your area undergoing new growth that you could use as an opportunity to open a dialogue about how smart growth can protect your estuary?
- Can you participate in a quarterly, annual, or biannual planning process and help educate local government officials about the connection between smart growth and estuary protection?