

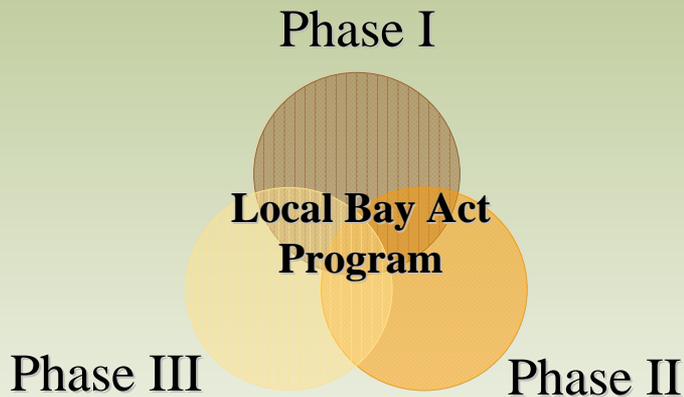
# Water Quality Planning through the Chesapeake Bay Preservation Act

Joan Salvati, Director  
DCR Division of Chesapeake Local Assistance





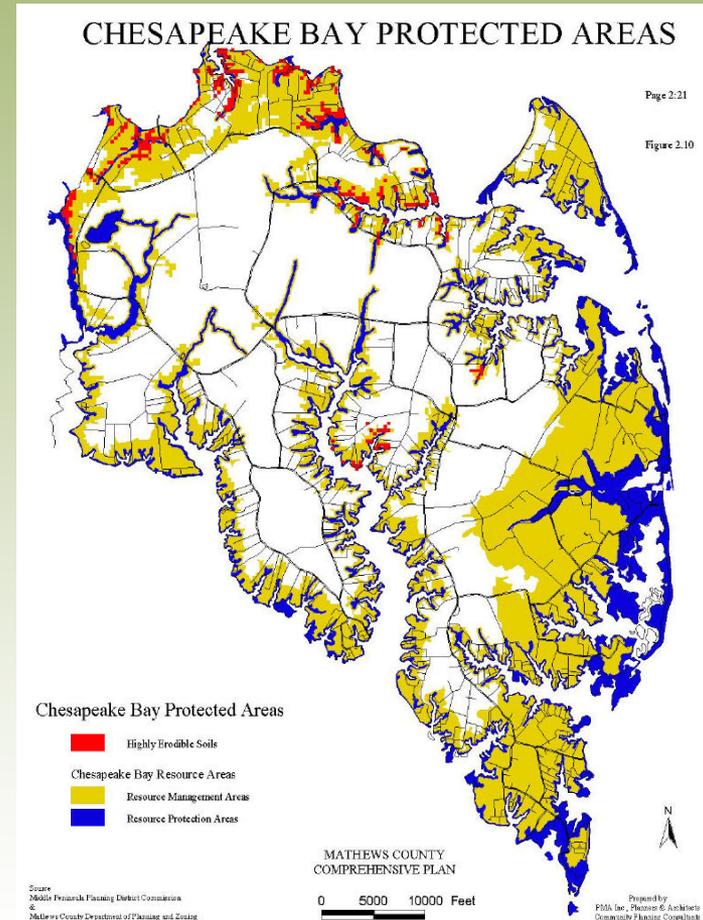
# Phased Implementation



- **Phase I:** Mapping of Chesapeake Bay Preservation Areas, adoption of management program & local ordinance provisions including 11 performance criteria
- **Phase II:** Adoption of Comprehensive Plan criteria
- **Phase III:** Review and revision of local codes for inclusion of specific standards that implement water quality performance criteria

# Phase I – Mapping and Ordinance Adoption

- Designate and map Chesapeake Bay Preservation Areas (CBPAs)
- Implement land use, development and redevelopment performance criteria within CBPAs



# CBPAs - RPAs & RMAs

- **Resource Protection Areas (RPAs)** - Lands adjacent to water bodies with perennial flow that have an intrinsic water quality value :
  - ✓ Tidal wetlands
  - ✓ Nontidal wetlands connected by surface flow and contiguous to tidal wetlands or tributary streams
  - ✓ Tidal shores
  - ✓ Other lands
  - ✓ A buffer of not less than 100 feet in width landward of these features and along both sides of any tributary stream
- Development generally prohibited
- Certain uses and activities are allowed
- Administrative or formal process for granting exceptions

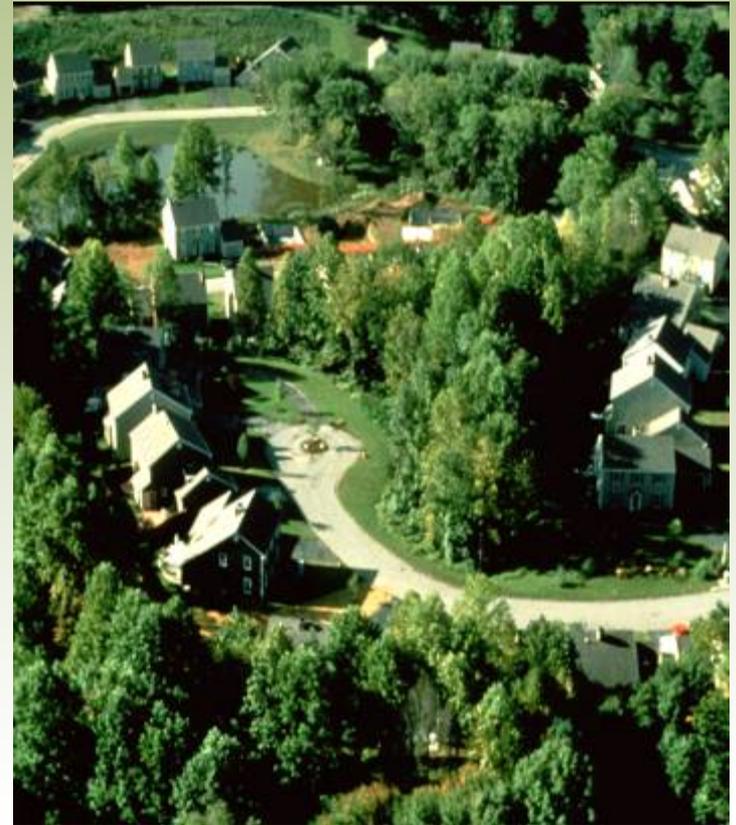
# CBPAs - RPAs & RMAs

- **Resource Management Areas (RMAs)** - Lands that if improperly used or developed have the potential for causing water quality degradation or for diminishing the functional value of the RPA :
  - ✓ Floodplains
  - ✓ Highly erodible soils, including steep slopes
  - ✓ Highly permeable soils
  - ✓ Nontidal wetlands not included in RPAs
  - ✓ Other lands
- Locality has some flexibility in area designated
- Compliance with 11 general performance criteria for the use, development & redevelopment of land required

# 11 Performance Criteria

Implementation of 11 land use and development performance criteria:

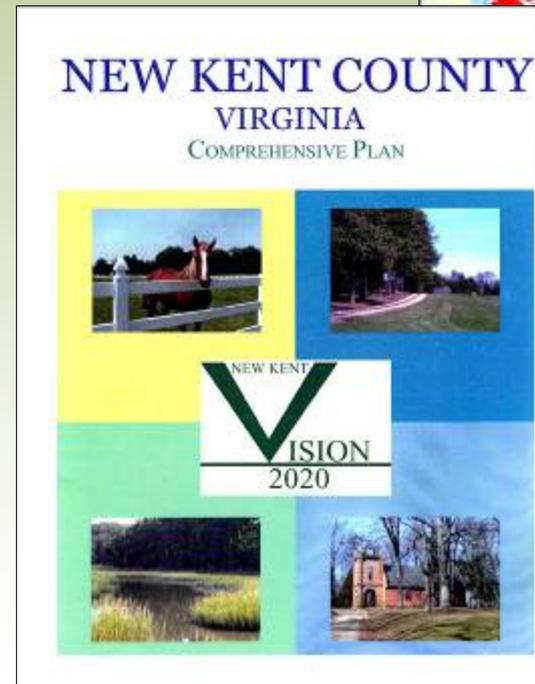
1. Minimize land disturbance
2. Preserve indigenous vegetation
3. BMP maintenance
4. Plan of Development review process
5. Minimize impervious cover
6. E & S for development > 2,500 sq. ft. vs.  
10,000 sq. ft. outside Bay Act area
7. Septic pump-out
8. Stormwater management
9. Agricultural conservation assessments
10. Silviculture conditional exemption
11. Wetlands permits



# Phase II - Comprehensive Plan Criteria

## Required Elements

- i. Summary of data (partial list)
  - Chesapeake Bay Preservation Areas
  - Existing & proposed land uses
  - Existing & potential sources of pollution
  - Shoreline and stream bank erosion problems
- ii. Identification of policies on land use issues relative to water quality protection based on data in item i.
- iii. Land use plan map
- iv. Implementing measures and time frame for their accomplishment



# Local Bay Act Program Compliance Status

As of October, 2010

**“Phase I Consistent”** means the required local ordinances (zoning, subdivision, maps, etc) are in place to designate CBPA’s and to require that the performance criteria are met.

**“Phase II Consistent”** means the required comprehensive plan components have been adopted

**“Compliant”** means the locality is properly implementing the required Phase I components of the local Bay Act program

Status as of September 2010:

Localities Phase I Consistent: 84

Phase II Consistent: 84

Compliance Reviews Completed: 84

Localities Compliant: 83

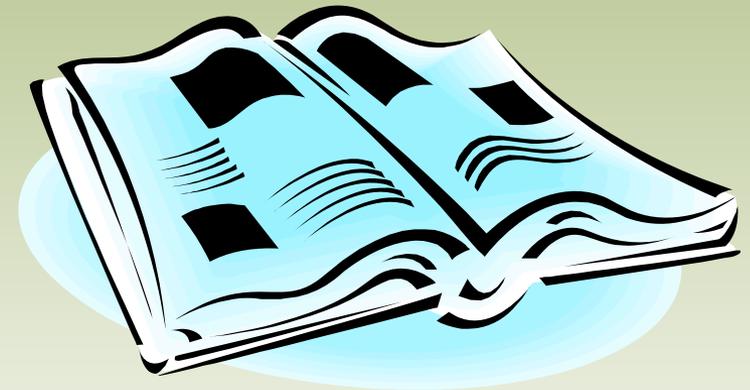
Localities Addressing Compliance Conditions: 1

Compliance Reviews in Progress (Second Round): 1

# Phase III – Land Use Code Review & Revision

## Local ordinances must:

- Include specific development standards to address the three general performance criteria must exist in ordinances
- Include six provisions applicable to approved plats and plans
- Identify and resolve obstacles and conflicts to achieving the “water quality goals of the Act” within local programs and ordinances



# The Phase III Review



- I. Advisory Reviews of Local Ordinances. Review local ordinances using the *Checklist for Advisory Review of Local Ordinances* and the *Plan and Plat Consistency Review Checklist*.
  - Localities will be encouraged to adopt ordinance amendments as needed to incorporate plan and plat requirements and to add ordinance provisions to assist in implementing the three performance criteria.
  - CBLA staff will provide assistance by providing access to example ordinance provisions as needed.
  
- II. Compliance Evaluations. CBLA compliance evaluations of local Bay Act programs will include an enhanced review of performance criteria implementation to gauge adequacy of ordinance standards.

# I. Advisory Reviews of Local Ordinances

## Checklist

Part 1 – Minimize Land Disturbance

Part 2 – Preserve Indigenous Vegetation

Part 3 – Minimize Impervious Cover

Part 4 – General Water Quality Provisions

9/1/2009

 **DCR** CHECKLIST FOR ADVISORY REVIEW OF LOCAL ORDINANCES  
Virginia Department of Conservation & Recreation  
State Parks • Fish & Wildlife Conservation • Natural Heritage  
• Chesapeake Bay Local Assistance • Land Conservation  
• Outdoor Recreation Planning • Dam Safety & Boathails

LOCALITY: \_\_\_\_\_  
DATE OF REVIEW: \_\_\_\_\_  
REVIEWER: \_\_\_\_\_

**GENERAL PERFORMANCE CRITERIA IMPLEMENTATION OPTIONS**

PART 1 – MINIMIZE LAND DISTURBANCE: \_\_\_\_\_ PROVISIONS  
PART 2 – PRESERVE INDIGENOUS VEGETATION: \_\_\_\_\_ PROVISIONS  
PART 3 – MINIMIZE IMPERVIOUS COVER: \_\_\_\_\_ PROVISIONS  
PART 4 - GENERAL WATER QUALITY PROTECTION PROVISIONS \_\_\_\_\_ PROVISIONS

\_\_\_\_\_ PROVISIONS

Page 1

# Status of Advisory Reviews

- Reviews completed: 39
- Reviews in progress: 8
- Completion of Remainder expected in Summer 2011
- Web-based inventory of ordinance provisions updated as reviews are completed



# Advisory Reviews

## Items of Particular Interest

- 9 localities have parking space maximums for some or all zoning districts
- Number of water quality provisions found ranges from 2 to 53
- Most common provisions:
  - ✓ Cluster zoning provisions (required for some localities)
  - ✓ Vegetation protection on construction sites
  - ✓ Allowance for alternative paving for overflow parking
  - ✓ Allowances for shared parking
  - ✓ Minimum parking requirements in line with industry standards
  - ✓ Required depiction on plans of construction footprint and limiting disturbance to construction footprint



# Water Quality Ordinance Provision Search Tool

The screenshot shows a web browser window with the URL [www.dcr.virginia.gov/chesapeake\\_bay\\_local\\_assistance/requirements\\_search.cfm](http://www.dcr.virginia.gov/chesapeake_bay_local_assistance/requirements_search.cfm). The page displays a grid of search results for ordinance provisions, each with a checkbox. The results are organized into sections for Cities and Counties. A tooltip is visible over 'Question 37', which asks: 'Is there an ordinance provision, or other adopted document, that sets maximum parking space requirements for some or all zoning districts?'. On the right side of the page, there is a banner for 'Phase III Ordinance Provisions for Local Governments' featuring an image of a construction site.

<input type="checkbox"/> Question 12	<input type="checkbox"/> Question 13	<input type="checkbox"/> Question 14	<input type="checkbox"/> Question 15
<input type="checkbox"/> Question 15.1	<input type="checkbox"/> Question 15.2	<input type="checkbox"/> Question 15.3	<input type="checkbox"/> Question 15.4
<input type="checkbox"/> Question 15.5	<input type="checkbox"/> Question 15.6	<input type="checkbox"/> Question 16	<input type="checkbox"/> Question 17
<input type="checkbox"/> Question 18	<input type="checkbox"/> Question 19	<input type="checkbox"/> Question 20	<input type="checkbox"/> Question 20.1
<input type="checkbox"/> Question 20.2	<input type="checkbox"/> Question 20.3	<input type="checkbox"/> Question 20.4	<input type="checkbox"/> Question 21
<input type="checkbox"/> Question 22	<input type="checkbox"/> Question 23	<input type="checkbox"/> Question 24	<input type="checkbox"/> Question 25
<input type="checkbox"/> Question 25.1	<input type="checkbox"/> Question 25.2	<input type="checkbox"/> Question 25.3	<input type="checkbox"/> Question 25.4
<input type="checkbox"/> Question 26	<input type="checkbox"/> Question 27	<input type="checkbox"/> Question 28	<input type="checkbox"/> Question 29
<input type="checkbox"/> Question 30	<input type="checkbox"/> Question 31	<input type="checkbox"/> Question 32	<input type="checkbox"/> Question 33
<input type="checkbox"/> Question 34	<input type="checkbox"/> Question 35	<input type="checkbox"/> Question 36	<input type="checkbox"/> Question 37
<input type="checkbox"/> Question 38	<input type="checkbox"/> Question 39	<input type="checkbox"/> Question 40	<input type="checkbox"/> Question 41
<input type="checkbox"/> Question 42	<input type="checkbox"/> Question 43	<input type="checkbox"/> Question 44	
<input type="checkbox"/> Question 46	<input type="checkbox"/> Question 47	<input type="checkbox"/> Question 48	
<input type="checkbox"/> Question 50	<input type="checkbox"/> Question 51	<input type="checkbox"/> Question 52	
<input type="checkbox"/> Question 54	<input type="checkbox"/> Question 55	<input type="checkbox"/> Question 56	
<input type="checkbox"/> Question 58	<input type="checkbox"/> Question 59	<input type="checkbox"/> Question 60	<input type="checkbox"/> Question 61
<input type="checkbox"/> Question 62	<input type="checkbox"/> Question 63	<input type="checkbox"/> Question 64	<input type="checkbox"/> Question 65
<input type="checkbox"/> Question 66	<input type="checkbox"/> Question 67	<input type="checkbox"/> Question 68	<input type="checkbox"/> Question 69
<input type="checkbox"/> Question 70	<input type="checkbox"/> SPPC1	<input type="checkbox"/> SPPC2	<input type="checkbox"/> SPPC3
<input type="checkbox"/> SPPC4	<input type="checkbox"/> SPPC5	<input type="checkbox"/> SPPC6	
<b>Cities</b>			
<input type="checkbox"/> Williamsburg	<input type="checkbox"/> Chesapeake	<input type="checkbox"/> Portsmouth	<input type="checkbox"/> Richmond
<b>Counties</b>			
<input type="checkbox"/> Hanover	<input type="checkbox"/> Accomack	<input type="checkbox"/> Caroline	<input type="checkbox"/> Gloucester
<input type="checkbox"/> Richmond	<input type="checkbox"/> Henrico	<input type="checkbox"/> New Kent	<input type="checkbox"/> Northampton
<input type="checkbox"/> Stafford	<input type="checkbox"/> York		

# Local Program Compliance Evaluations

## Review Elements

### What's new:

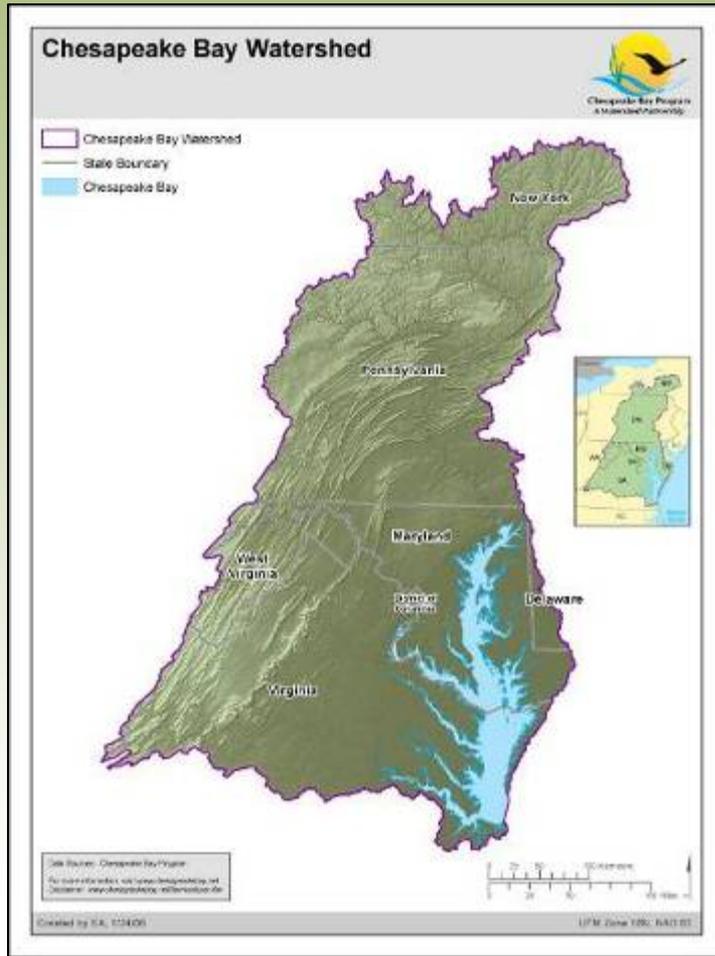
Review for the implementation of Phase III program requirements now includes:

- A review of ordinances for plan and plat requirements
- A review of approved development plans and files with a stronger focus on the implementation of the three general performance criteria (minimize impervious cover, preserve indigenous vegetation, minimize land disturbance)
- Where existing ordinances and approved plans do not address the Phase III requirements, conditions identifying non-compliance may be imposed by the Chesapeake Bay Local Assistance Board

# Bay Act as a Tool to advance:

- **Blue-green infrastructure** planning – through designation and protection of RPAs
- **Healthy waters** – through the Bay Act comprehensive plan criteria – “ *As part of the comprehensive plan, local governments shall clearly indicate local policy on land use issues relative to water quality protection....*”

# The Bay TMDL & the Bay Act



- Agricultural, septic tank pump out, stormwater and other requirements represent “reasonable assurance” that certain BMPs will be achieved
- Indirect benefits of improved land use through Phase III initiative

# Bay Act Practices and the Chesapeake Bay Watershed Model

## Practices currently being reported:

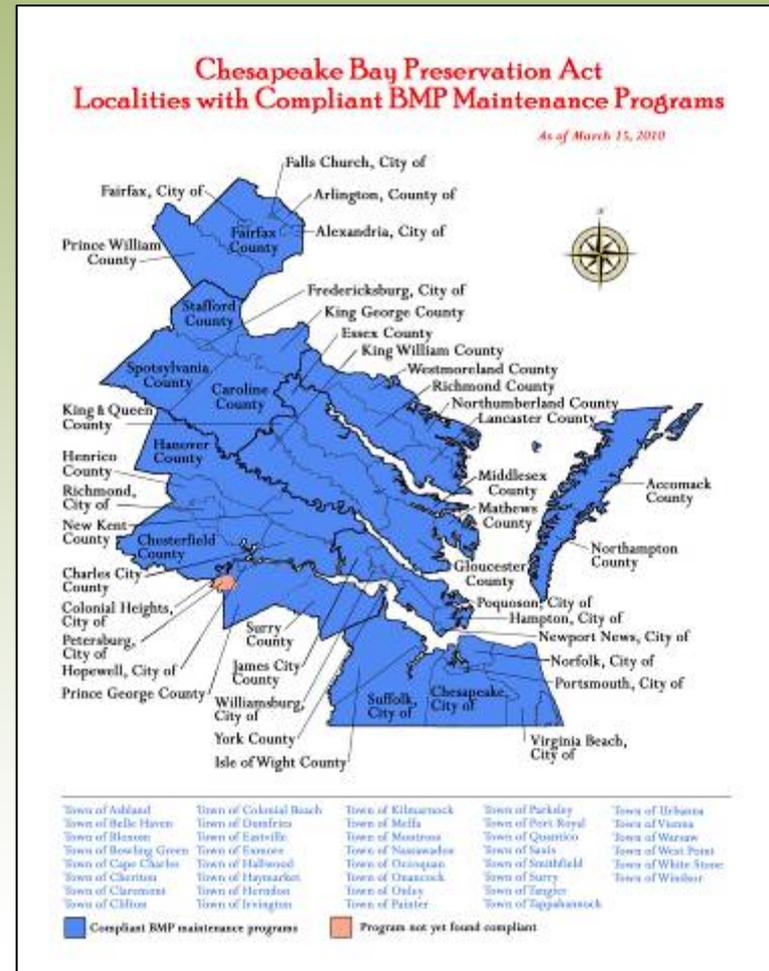
- Water quality BMPs
- Septic tank pump outs

## Other practices not currently reported but which the model accepts:

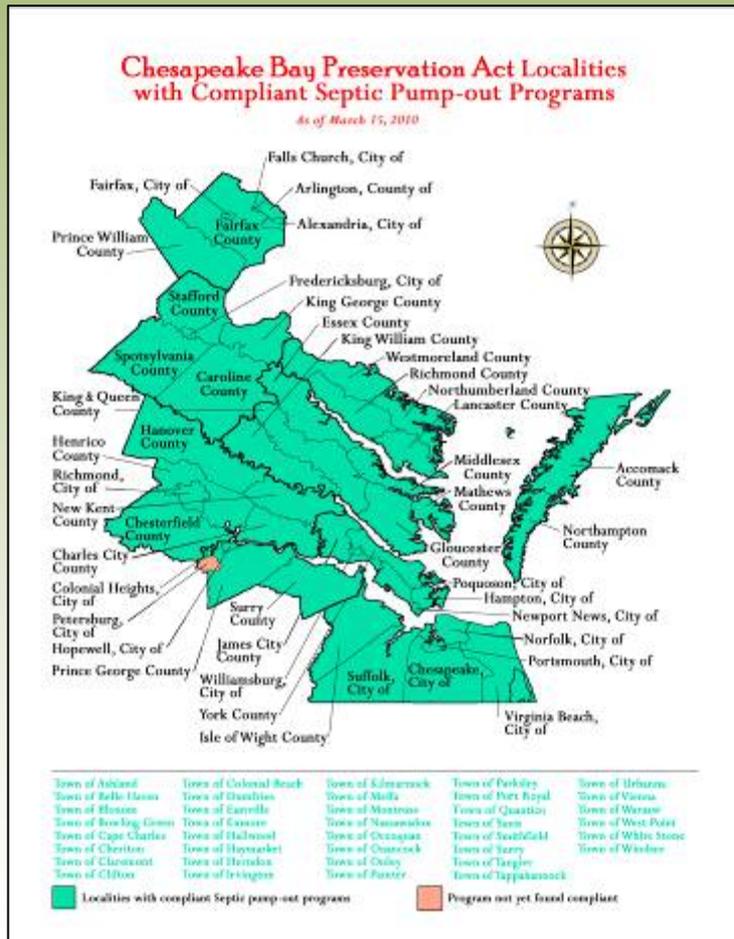
- Buffer restoration projects, particularly for currently unvegetated areas
- Nutrient management plans completed in compliance with Conservation Assessments or agricultural buffer encroachments
- Erosion & sediment control at the reduced threshold (2500 sq. ft.)

# Bay Act Performance: BMPs

- Localities requiring water quality BMPs and BMP Maintenance – 84 (100%)
- Acres treated reported through Annual Report process since 2008: 2166 new BMPs; 26,013 new acres treated



# Bay Act Performance: Septic Pump-Outs



- Localities with compliant septic pump-out programs – 84 (100%)
- **2009-10 – 50,061** notices were mailed for 56 localities
- **28,963** systems pumped, inspected or had a plastic filter installed – Reduction of **14,480** pounds of nitrogen achieved
- Cumulative total: **211,483** systems; **117,844** pump-outs



# Phase II Watershed Implementation Plan

## EPA Expectations

- Further divide final target loads for “39” segment sheds *“using a finer geographic scale such as counties, conservation districts, sub watersheds or where appropriate individual sources.”*
- Work with local stakeholders including elected officials, staff, conservation districts, watershed associations and citizens to identify specific controls and practices to be implemented by 2017.
- Provide additional detail on specific controls, technologies, and practices to which the States and local partners commit to implement by 2017.
- Include specific controls and practices in the first 2-year milestones submitted after the development of the Phase II WIP.
- Include updates resulting from revisions to the Bay Watershed Model.

# Recommended Approach and Team Structure

- Project management structure that will ensure on-time delivery of end product based on successful local engagement
- WIP II Project team, including “subject matter experts” from involved agencies
- Identification of a Project Manager will ensure key decisions and issues are resolved in a coordinated manner

## *Phase II Watershed Implementation Plan*

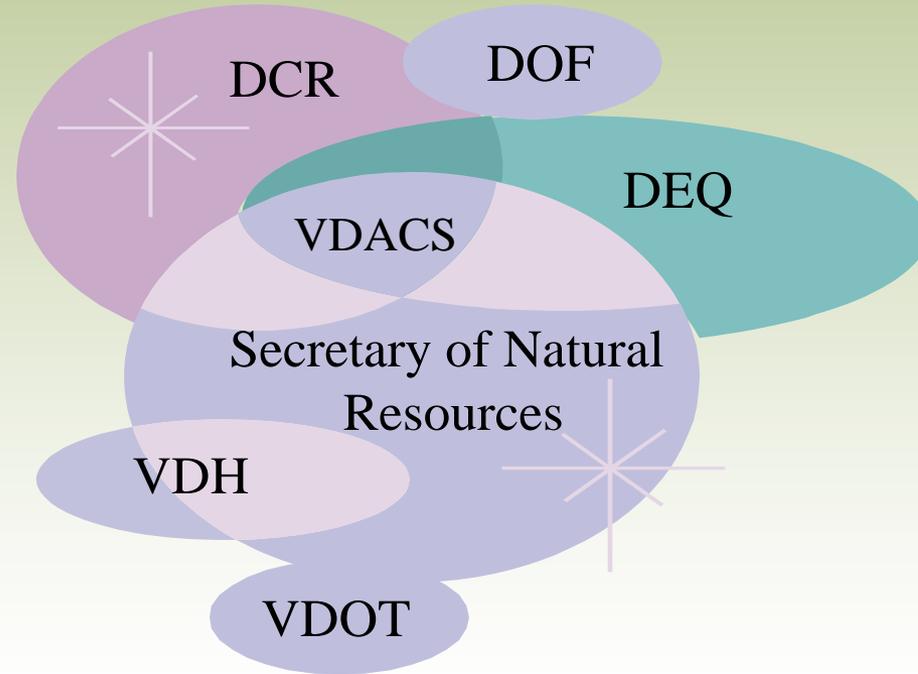


# WIP II Scope Project Elements

1. Local Target Load Development, based on these criteria:
  - ✓ Scale facilitates engagement with local partners
  - ✓ Scale is consistent with scale at which programs or actions identified in WIP are delivered (e.g. E & S and Bay Act programs administered by counties)
  - ✓ Partners exist at that scale who can be accountable for meeting local target goals
  - ✓ Chesapeake Bay Program models can track loads at the scale
2. Local Engagement and Data Collection – Significant reliance on Planning District Commissions
3. Document Production & 2012-2013 Milestone Development

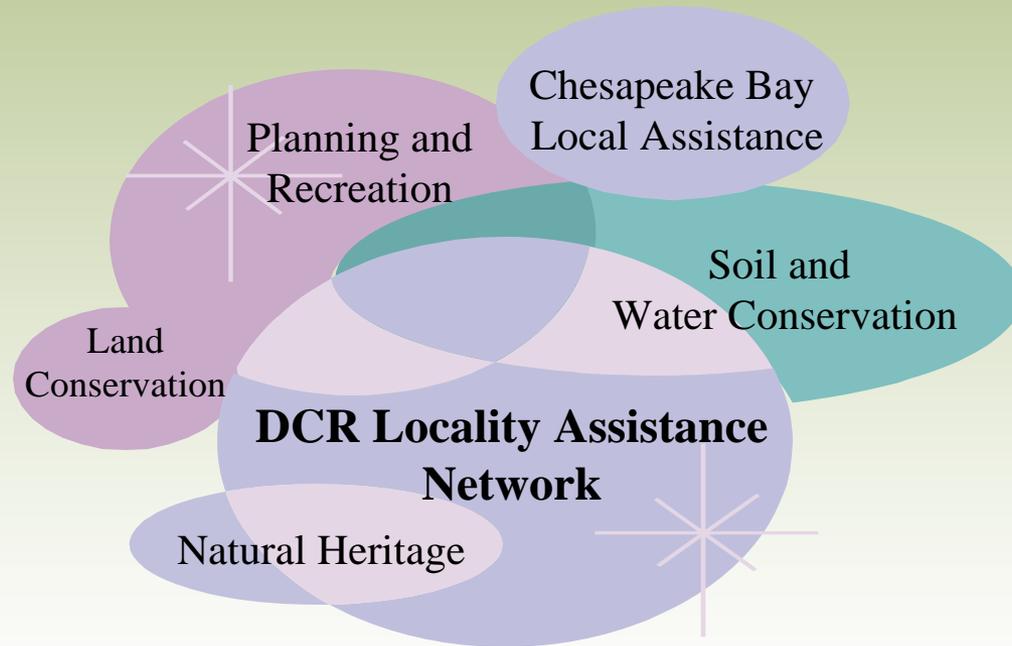
# Virginia's Chesapeake Bay Phase II Watershed Implementation Plan

## Recommended Collaborative, Project Management Approach



# Advancing DCR's Mission

A Team Working Together For Excellence





# Questions & Comments

