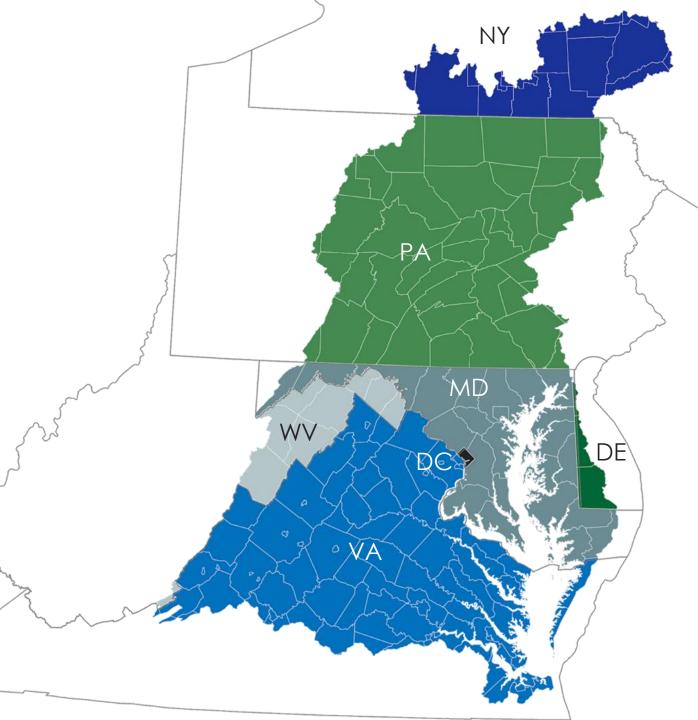


# **Empowering local decisions**

A Local Government Guide to the Chesapeake Bay is a series of seven educational modules to inform and empower decision at local levels.

As a local leader, your decisions set the course for your community. Your actions determine the health and vitality of your jurisdiction, as well as that of your local waterways and the Chesapeake Bay. You can achieve mutually beneficial outcomes by prioritizing local economic development, infrastructure resiliency, public health, and education, while also protecting your environment.

Local Leaders



# **About the modules**

Developed as self-guided, very visual PowerPoint presentations. Each module is under 30 slides, <u>designed to be easily customized and shared</u>, along with a companion one-page handout. The icons below represent key local government priorities and are used throughout the modules to help you better understand how the information in the modules aligns with your specific priorities and interests.



**Economic Development** 



Public Health & Safety



Infrastructure Maintenance & Finance



Education



# Overview of Modules

Each module consists of a customizable presentation, one page handout, a .pdf and video versions of the presentation. In addition to the module themes below, we have included connections to Diversity, Equity, Inclusion, and Justice, and Climate throughout the modules. Each features an overview of the full list of modules and a bottom of slide tracker.





#### 1. How Your Watershed Works

Foundational knowledge of the Chesapeake Bay watershed and water cycle and connects the importance of a healthy watershed to the economic development, public health and safety, infrastructure maintenance and finance, and education priorities of local government officials.

### 2. Foundations of Clean Water

An overview of the laws and agreements relevant to protecting and restoring the Chesapeake Bay. These protections are the foundations for healthy local waterways across the region.

# **Modules Overview**



## 3. Clean Water for the Economy

Highlights the economic importance of clean water and healthy habitats to lucrative fisheries, like blue crab and oyster, and recreational activities, like hunting, bird watching, and fishing.



## 4. Capitalizing on the Benefits of Trees

Presents how tree canopy, forest buffers, and forest conservation can provide a broad spectrum of benefits for local communities, from economic development to significant public health and safety benefits.



## 5. Preserving Local Character and Landscapes

Highlights the economic, ecological, cultural, and recreational value of the conserved landscapes around the Chesapeake Bay watershed to the people and communities of the region. Conserving these landscapes protects water quality, quality of life, and the many community values associated with these lands.

# **Modules Overview**



## 6. Protecting Community Infrastructure Through Stormwater Resiliency

An overview on how managing stormwater runoff and increasing resiliency can mitigate flooding and flood-related damages to local community infrastructure, while also improving water quality.



## 7. Building the Workforce of Today and Tomorrow

Highlights the growth in stormwater management and green infrastructure projects and the importance of educating a strong and diverse workforce in operating and maintaining projects.

# **Module Features**

The modules are developed to be cohesive but can be taken any order. For consistency, each identifies learning objectives, local case studies, and resources for local implementation.

- What You'll Learn learning objectives and questions that will be answered throughout the module.
- What You Can Do actionable items to engage your community and where applicable, financial assistance to support local actions.
- To Learn More additional resources for further learning about each of the module topics.

Each module references a variety of statistics and data to support its learning objectives. **Reference sources** for statistics, data, and photos can be found along with photo credits within the notes for each of the individual slides. **Glossaries** defining keywords can also be found at the end of each module.

Modules Overview

Features

# What is the Chesapeake Bay Program and how did it begin? What governs watershed protection and restoration efforts? What can I do to make my local waterways healthier?

oundations of Clean Water

What You'll Lean

#### What You Can Do



Reduce impervious surfaces in your jurisdiction to reduce pollutants entering your local waterways. Use these EPA resources to get started:

- The Green Infrastructure Municipal Handbook
- Enhancing Sustainable Communities With Green Infrastructure
- Local Water Policy Innovation: A Road Map for Community Based Stormwater Solutions



**Plant trees and preserve forested areas.** Trees provide a wide array of community and ecosystem benefits.



Invest in environmental education and projects within your school systems to provide dividends in citizen stewardship, community health, and clean water protections.

• EPA provides \$2 to \$3.5 million in environmental education grant funding each year. Learn more here.

Q

Lead your community to achieve environmental and local government goals by exploring technical and



Share this information with others to create an even stronger, more resilient community

#### To Learn More

- Chesapeake Bay Commission's 40th Anniversary Webinar recording and presentation
- Learn about the history of the Chesapeake Bay watershed protections
- Chesapeake Bay Program's Restoring the Chesapeake Watershed
  - Hear a brief overview of the formation and progress in this five-minute video
- Chesapeake Bay Program's <u>Understanding Chesapeake Bay Modeling</u> <u>Tools: A history of updates, governance, policy and procedures</u>
  - Explore TMDLs, the Chesapeake Bay Watershed Model, and more in this short document
- The EPA Administrators: Looking back at 50 years of environmental protection
- Hear EPA administrators throughout history talk about their time at the EPA in a 7minute video

# **Overview One Pager**

# A Local Government Guide to the Chesapeake Bay EDUCATIONAL MODULES OVERVIEW

A Local Government Guide to the Chesapeake Bay is a seven-module series created by the Chesapeake Bay Program to support decision making by local officials. As a local leader, your decisions set the course for your community. Your actions determine the health and vitality of your jurisdiction, as well as that of your local waterways and the Chesapeake Bay, which spans more than 64,000 mi² and includes seven jurisdictions. You can achieve mutually beneficial outcomes by prioritizing local economic development, infrastructure resiliency, public health, and education, while also protecting your environment.

#### **ABOUT THE MODULES**

Each module is a self-guided PowerPoint presentation, designed to be easily customized and shared. The icons below represent key local government priorities and are used throughout the modules to help you better understand how the information in the modules aligns with your specific priorities and interests.



**Economic Development** 



Public Health & Safety



Infrastructure Maintenance & Finance



Education

#### **HOW TO USE THE MODULES**

Each module is a self-guided PowerPoint presentation, designed to be easily customized and shared. All modules contain the slides listed below to identify learning objectives, local case studies, and resources for local implementation.

- . What You'll Learn provides learning objectives and questions that will be answered throughout the module.
- What You Can Do identifies actionable items to engage your community and where applicable, financial
  assistance to support local actions.
- To Learn More provides additional resources for further learning about each of the module topics.

Each module references a variety of statistics and data to support its learning objectives. **Sources** for any referenced statistics, data, and photos can be found within the notes for each of the individual slides. A **glossary** defining keywords can also be found at the end of each module.

#### A Local Government Guide to the Chesapeake Bay

## EDUCATIONAL MODULES OVERVIEW

#### The modules include the following:



#### 1. How Your Watershed Works

How Your Watershed Works provides foundational knowledge of the Chesapeake Bay watershed and water cycle and connects the importance of a healthy watershed to the economic development, public health and safety, infrastructure maintenance and finance, and education priorities of local government officials.

#### 2. Foundations of Clean Water

Foundations of Clean Water provides an overview of the laws and agreements relevant to protecting and restoring the Chesapeake Bay. These protections are the foundations for healthy local waterways across the region.

#### 3. Clean Water for the Economy

Clean Water for the Economy highlights the economic importance of clean water and healthy habitats to lucrative fisheries, like blue crab and oyster, and recreational activities, like hunting, bird watching, and fishing.



The Benefits of Trees explains how tree canopy, forest buffers, and forest conservation can provide a broad spectrum of benefits for local communities, from economic development to significant public health and safety benefits.

#### 5. Preserving Local Character and Landscapes

Preserving Local Character and Landscapes highlights the economic, ecological, cultural, and recreational value of the conserved landscapes around the Chesapeake Bay watershed to the people and communities of the region. Conserving these landscapes protects water quality, quality of life, and the many community values associated with these lands.



#### 6. Protecting Community Infrastructure Through Stormwater Resiliency

Protecting Community Infrastructure Through Stormwater Resiliency provides an overview on how managing stormwater runoff and increasing resiliency can mitigate flooding and flood-related damages to local community infrastructure, while also improving water quality.

#### 7. Building the Workforce of Today and Tomorrow

Building the Workforce of Today and Tomorrow highlights the growth in stormwater management and green infrastructure projects and the importance of educating a strong and diverse workforce in operating and maintaining projects.

# **History of Chesapeake Bay Protections**

**O**1972

The Federal Water
Pollution Control Act of
1948 was amended
and became known as
the Clean Water Act.

**O**1987

<u>Chesapeake Bay</u>
<u>Agreement</u> called for a Local Government
Advisory Committee to be formed.

**Q**2009

Obama issues

Executive Order
recognizing the
Bay as a national
treasure. EPA was also
sued over
inadequate
Chesapeake Bay
protection measures.

2014

Chesapeake Bay
Watershed Agreement
signed by representatives of
the whole watershed, not
just the Bay states.

The Chesapeake
Bay Program was
established under the first
Chesapeake Bay
Agreement with broad bipartisan support.

1983

<u>Participation Action</u>
<u>Plan signed</u>
(updated in 2002).

1996

As a settlement in the 2009 lawsuit, a legally enforceable agreement with EPA leads to federal pollution limits.

2010

Statement in Support of Diversity, Equity, Inclusion, and Justice adopted.

2020

# **Living Shorelines**

A living shoreline refers to a shoreline management practice or suite of stabilization and erosion control measures. A living shoreline can be non-structural with only vegetated and natural elements, or hybrid with vegetation plus hard structures such as stone sills. Benefits include reduced erosion, improved water quality, shoreline access for wildlife, visual appeal, and a lower cost than bulkheads and rock walls.



Sea levels are predicted to rise around the Bay, increasing erosion risk.

See how your area may be impacted with the Sea Level Rise Viewer. Learn more about whether sites in your community are a good fit for a living shoreline project with this guide from NOAA. If you want to move forward, these planning tools can get you started.

# **Next Steps**



Audience





Trusted Source





Translators



Subject Matter Experts





Harry R. Hughes
CENTER FOR AGRO-ECOLOGY

**Hughes Center for Agro-Ecology's mission:** Provide leadership to promote environmentally sound and economically viable agriculture and forestry as Maryland's preferred land use through research, outreach and collaboration.

# Government officials and staff are key players

Examples of the Hughes Center's engagement with officials and staff:

- Local Government Exchanges
- Watershed Implementation Plan Workshops
- Healthy Waters Roundtable

# Wise Words from Government Officials and Staff

- Information needs to be easy to access and understand
- Explain how this work is relevant to the constituents
- Provide a glossary of terms
- Provide resources including costs, examples, contacts



# **Educational Modules: Two Examples**

## Module 3: Clean Water for the Economy

Highlights the economic importance of clean water and healthy habitats to lucrative fisheries, like blue crab and oyster, and recreational activities, like hunting, bird watching, and fishing.

...and...

## Module 5: Preserving Local Character and Landscapes

Highlights the economic, ecological, cultural, and recreational value of the conserved landscapes around the Chesapeake Bay watershed to the people and communities of the region. Conserving these landscapes protects water quality, quality of life, and the many community values associated with these lands.

## **Common Themes in the Two Modules**

- Economy
- Water Quality
- Recreational

# Conversation might look different based on the stakeholders' interests

# <u>Clean Water for the Economy Module:</u>

- Job creation or retention
- Growth in the community
- New Recreational Opportunities

# <u>Preserving Local Character and Landscapes Module:</u>

- Maintaining a quality of life and community values
- Protection of the environmental features including water quality
- Conserving the landscape and providing recreational opportunities



## **Lessons Learned**

- 1. Do your homework
- Be respectful of the government officials' and staff's time
- 3. Develop a relationship
- 4. LISTEN!!
- 5. Be flexible about your approach
- 6. Follow up on a regular basis



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