

# VALUE TO THE NATION

★ CHESAPEAKE BAY ★

**18M** PEOPLE LIVING IN WATERSHED → **21M** PEOPLE FORECAST IN 2040

**5%** NATION'S POPULATION ON 2% OF NATION'S LAND MASS

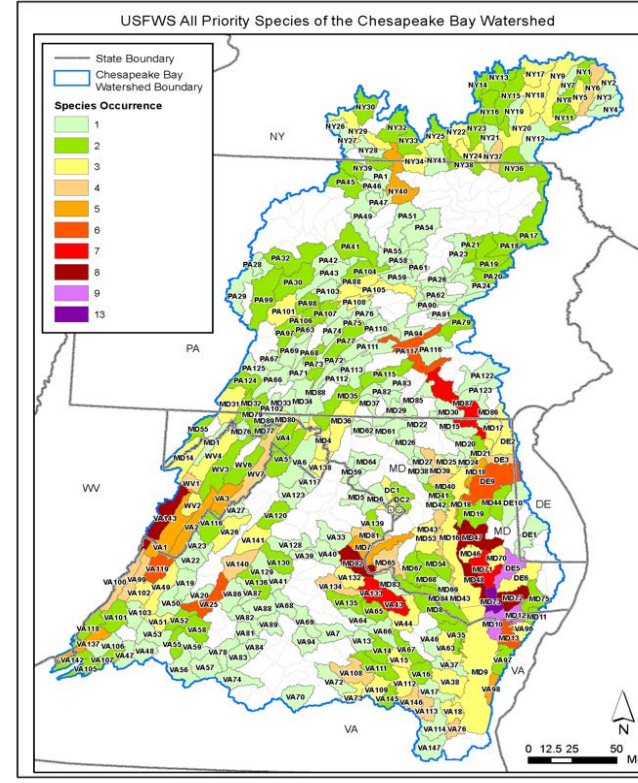
**~33%** OF WATERFOWL WINTERING ALONG ATLANTIC COAST WINTER HERE

**16** NATIONAL WILDLIFE REFUGES

**1** Largest estuary in U.S.; 3rd in world



The U.S. Army Corps of Engineers plays a key leadership role in watershed planning and integrated water resources management. Communities partner with USACE for planning, engineering and construction assistance. This study is the Chesapeake Bay partnership at work!



## 2014 CHESAPEAKE BAY AGREEMENT

- Sustainable Fisheries (oysters)\*
- Vital Habitats (fish passage, buffers)\*
- Water Quality & Toxic Contaminants\*\*
- Healthy Watersheds (remote island habitat)\*
- Local Governments\*\*
- Streams and Wetlands\*
- Public Access/Work at Reservoir\*\*
- Environmental Literacy\*\*
- Climate Resiliency (monitoring, assessment, adaptation)\*

\* Aligns with USACE mission areas for planning, design, construction

\*\* Additional opportunity to use USACE technical assistance programs

# CHESAPEAKE BAY COMPREHENSIVE WATER RESOURCES AND RESTORATION PLAN

PROVIDING A **COMPREHENSIVE AND INTEGRATED** RESTORATION PLAN TO ASSIST WITH IMPLEMENTATION OF THE CHESAPEAKE BAY AGREEMENT BY:



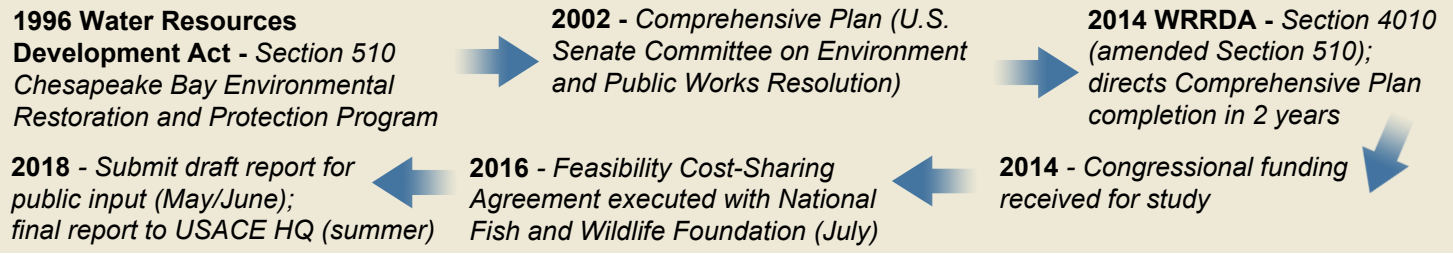
- Effectively and efficiently engaging Bay stakeholders to identify **problems, needs and opportunities** in the watershed and to avoid duplication of ongoing or planned actions by others
- Leveraging existing geospatial data to identify locations for restoration opportunities to maximize co-benefits (the set of multiple benefits or synergies returned from an explicit action to address multiple 2014 Bay Agreement outcomes) and make the most efficient use of implementation resourcing
- Determining where and how USACE programs could be used to support implementation



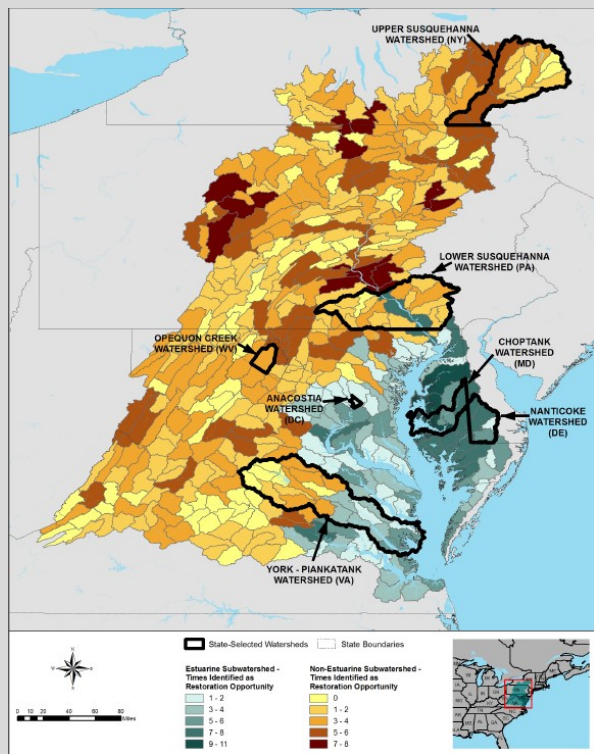
## OBJECTIVES

- ◆ Develop a comprehensive, strategic and integrated water resources plan to guide the implementation of projects to assist in meeting the 2014 Bay Agreement objectives
- ◆ Identify at least one project in each of the six states and D.C. that can be considered for implementation or technical assistance by USACE and that support the 2014 Bay Agreement objectives
- ◆ Identify areas for ecosystem restoration, protection or preservation that will assist in meeting the 2014 Bay Agreement objectives
- ◆ Identify new policies or programs or improve upon existing policies and programs that will help achieve an environmentally and economically sustainable and resilient Chesapeake Bay Watershed

## BACKGROUND AND AUTHORITY







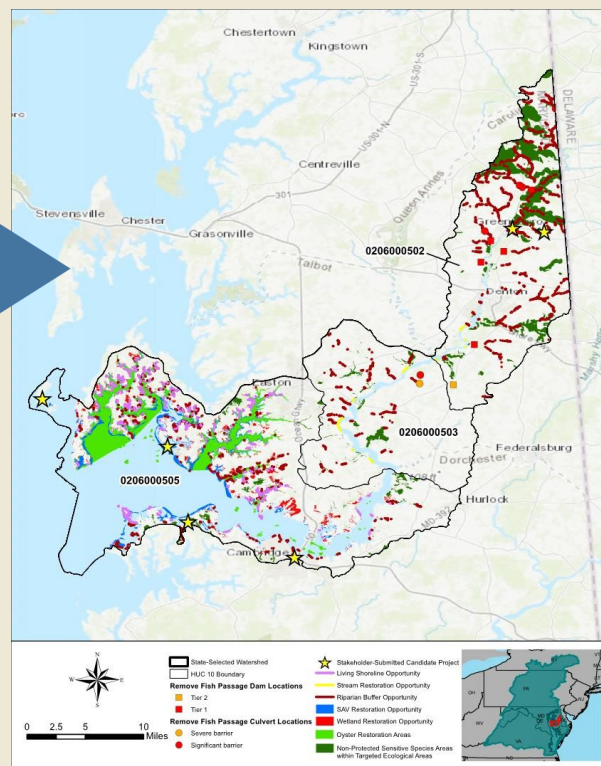
## \*RESTORATION ROADMAP\*

### STATE SELECTED WATERSHED ACTION PLANS

- ◆ One completed for each state + D.C., and recommended for every subwatershed
- ◆ Reduce duplication
- ◆ Identify gaps in restoration
- ◆ Reveal collaboration opportunities
- ◆ Maximize leveraging of resources
- ◆ Create partnerships

### FINDINGS

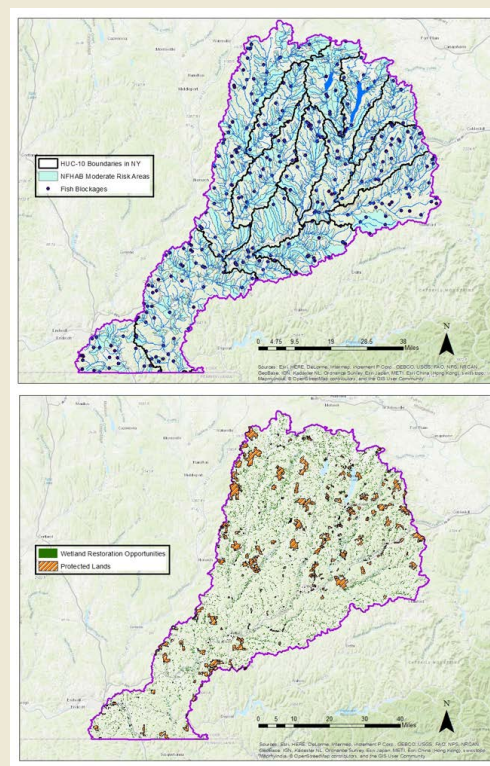
- ◆ Prioritize actions geographically to maximize benefits and contribution to Bay goals
- ◆ Promote conservation/enhancement adjacent to existing healthy, high-value habitat and restoration in highly degraded areas
- ◆ Track restoration actions, water quality, habitat metrics
- ◆ Develop relationships to support implementation partnerships
- ◆ Promote Integrated Water Resource Management and plan for future threats
- ◆ Minimize adverse impacts from future stressors (sea level change, population growth)



### CHOPTANK RIVER, MD

#### ACTIONS

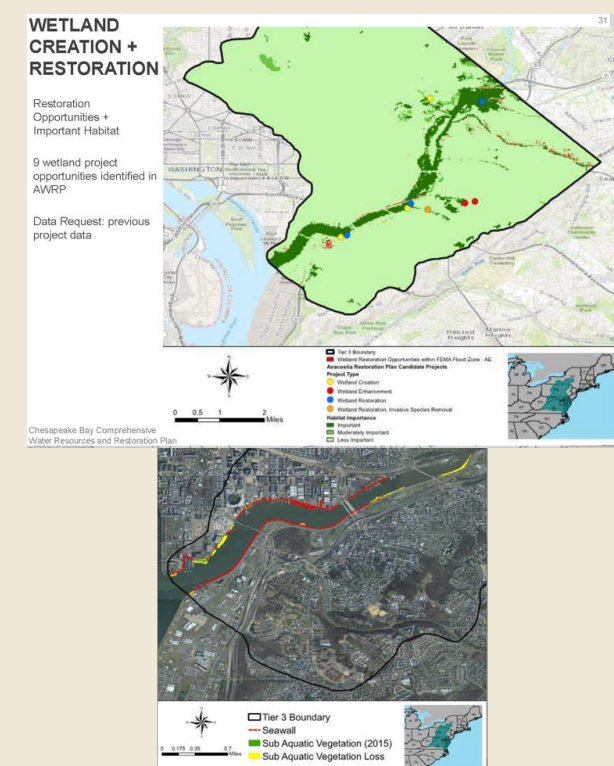
- ◆ Agriculture Best Management Practices
- ◆ Living shorelines
- ◆ Fish passage
- ◆ Wetland restoration
- ◆ Riparian buffers



### UPPER SUSQUEHANNA, NY

#### ACTIONS

- ◆ Agriculture Best Management Practices
- ◆ Stream restoration
- ◆ Fish passage (culverts)
- ◆ Wetland restoration
- ◆ Riparian buffers



### ANACOSTIA RIVER, DC

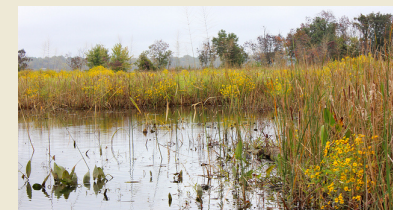
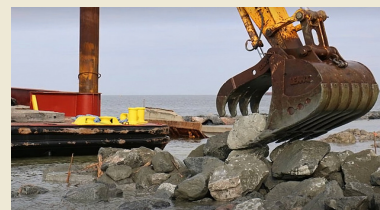
#### ACTIONS

- ◆ Living shorelines
- ◆ Wetland restoration



## RECOMMENDATIONS FOR USAGE

PROGRAM	IMPLEMENTATION
General Investigation Restoration Studies • <\$3M, 3 years • 50% federal/50% non-federal	• Requires Congressional authorization for construction • Project-specific, cost-shared (i.e., oysters, Elizabeth River, Anacostia River) • Watershed Assessments (Section 729)
DOD and other federal agencies • Planning, design, implementation • Reimbursable services	Subwatershed planning and implementation



PROGRAM	IMPLEMENTATION
Section 510 Program • Design/Implementation • <\$10M total cost • 75% federal/25% non-federal	• Sediment and erosion control • Protection of eroding shorelines • Ecosystem restoration, including SAV • Protection of essential public works • Beneficial use of dredged material • Other projects that may enhance the living resources of the estuary
Continuing Authorities Program • Limited planning • <\$15M Design/Implementation • Cost-sharing varies	Primarily: • Section 14 (Emergency Stabilization) • Section 204 (Beneficial Use of Dredged Material) • Section 206 (Ecosystem Restoration)
Technical Assistance • Action Plans, technical analyses and concept plans for implementation by others or other USACE programs • Cost-sharing varies	• Planning Assistance to States • Floodplain Management Services • Does not lead to construction

### STAKEHOLDER COLLABORATION

- ◆ Study Initiation Notice in October 2016
- ◆ Coordination letters - U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, National Marine Fisheries Service, and Natural Resources Conservation Service
- ◆ 280+ stakeholders representing 126 stakeholder groups
- ◆ Stakeholder workshop Nov. 7, 2016
- ◆ Stakeholder webinars: Feb. 27, 2017; April 20, 2017; May 7, 2018
- ◆ Strategic Engagements: Cross Goal Implementation Team (GIT), Systems Approach to Geomorphic Engineering (SAGE), U.S. Fish and Wildlife Service (USFWS), and Department of Defense (DOD) Chesapeake Bay Action Team
- ◆ Stakeholders provided input including restoration and conservation priorities and specific priority projects.