



# Choptank Complex Habitat Focus Area

## CBP STAR— October 23, 2014





# NOAA's Habitat Blueprint

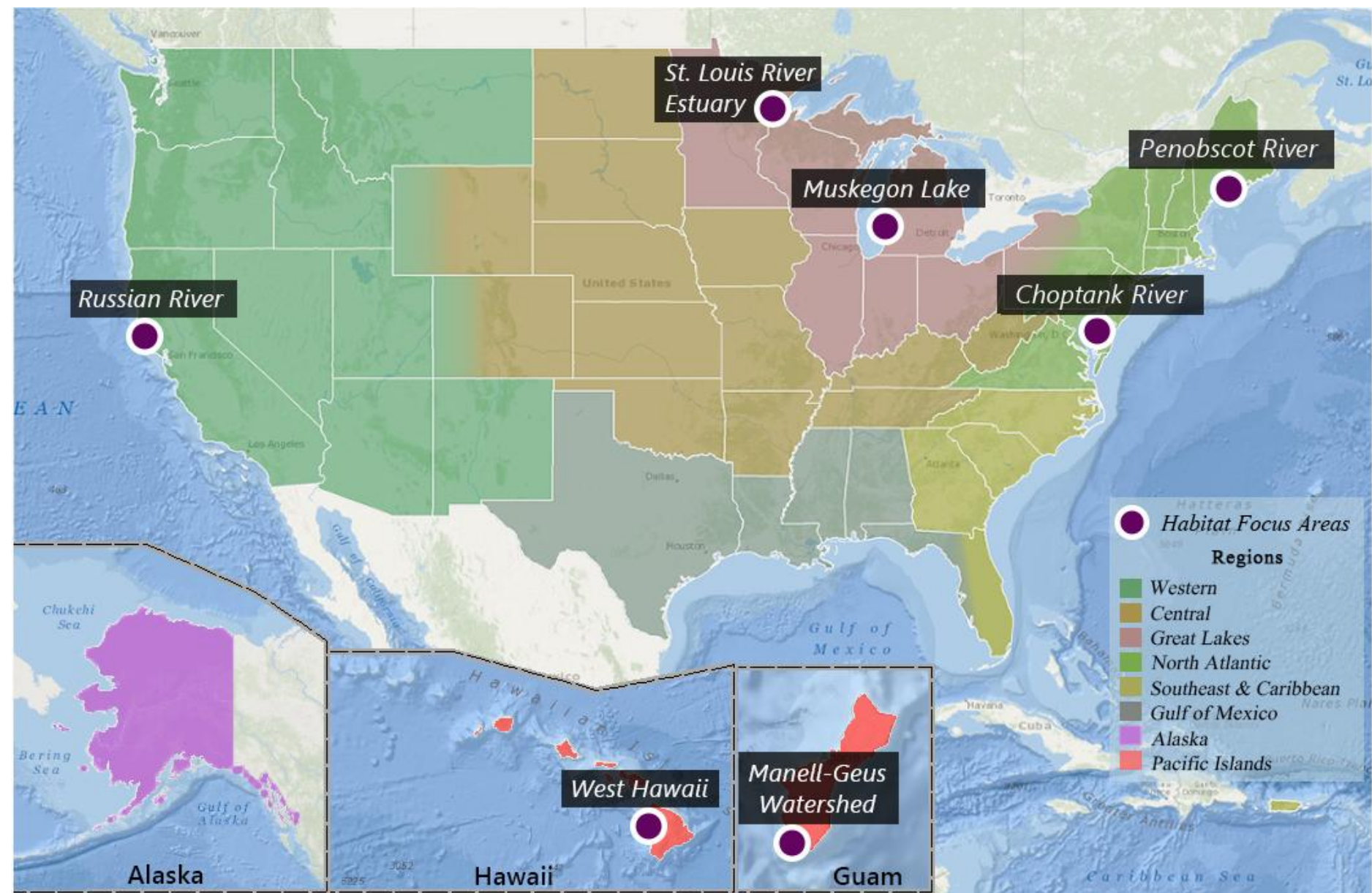


## ***Blueprint Guiding Principles:***

- Prioritize resources and activities across NOAA to improve habitat conditions
- Make decisions in an ecosystem context and consider competing priorities
- Foster and leverage partnerships
- Improve delivery of habitat science to facilitate decision-making

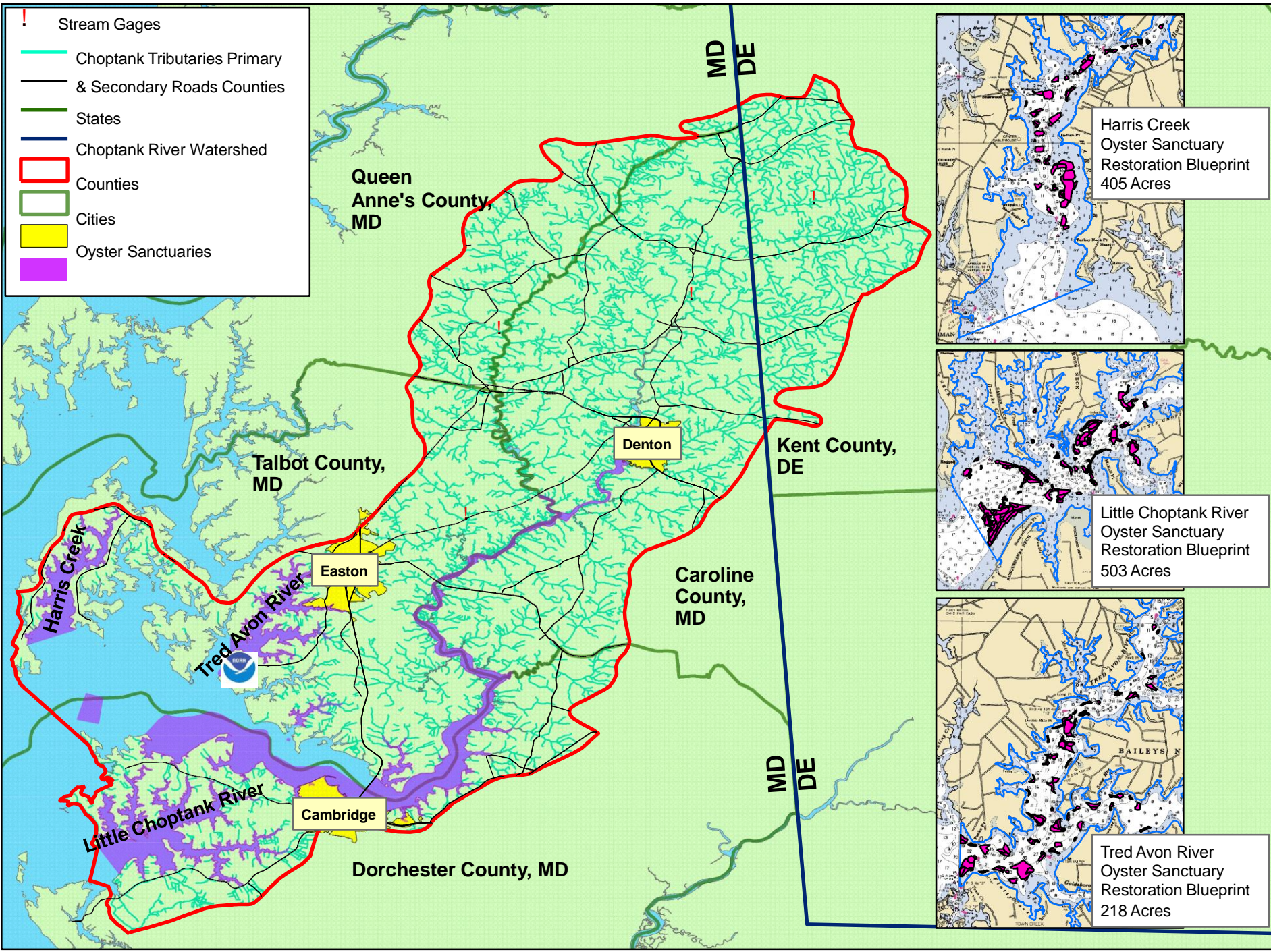


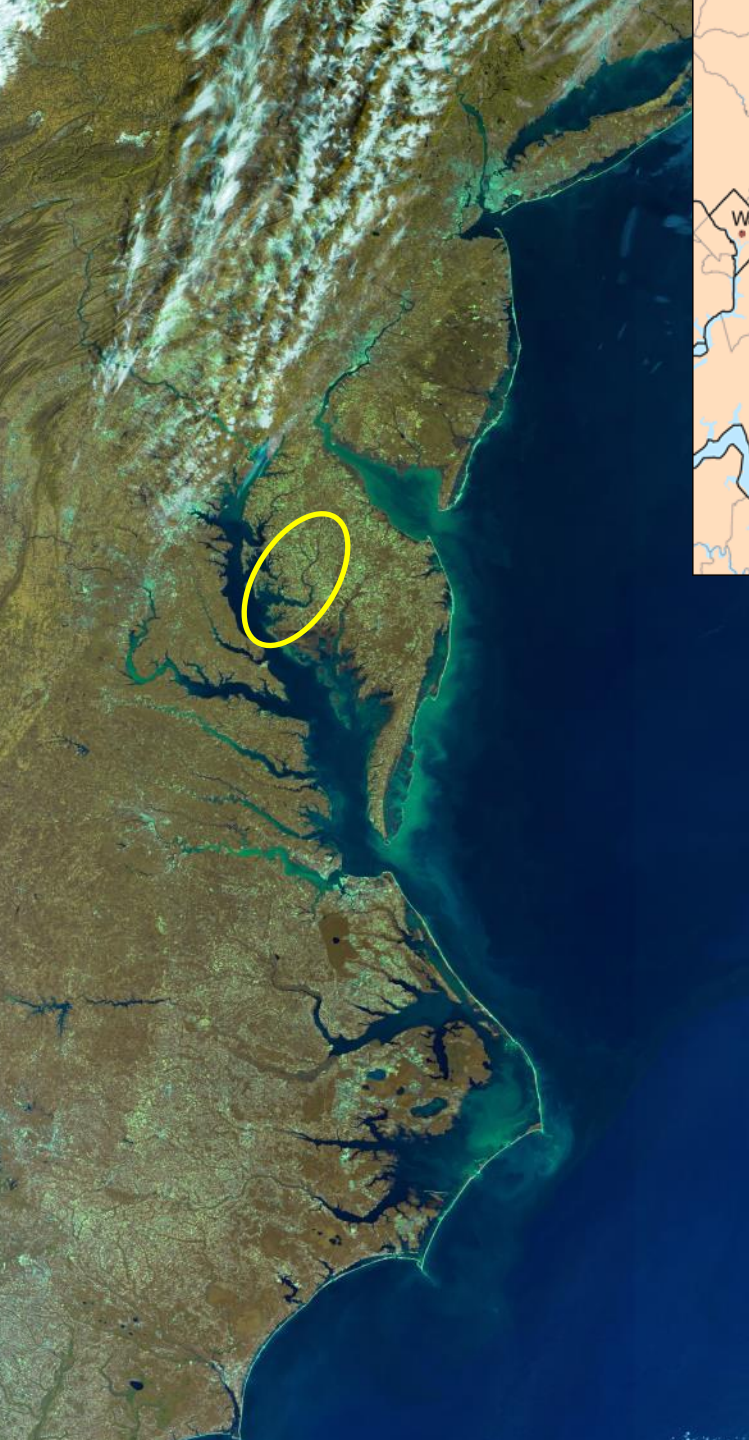
# NOAA's Habitat Focus Areas



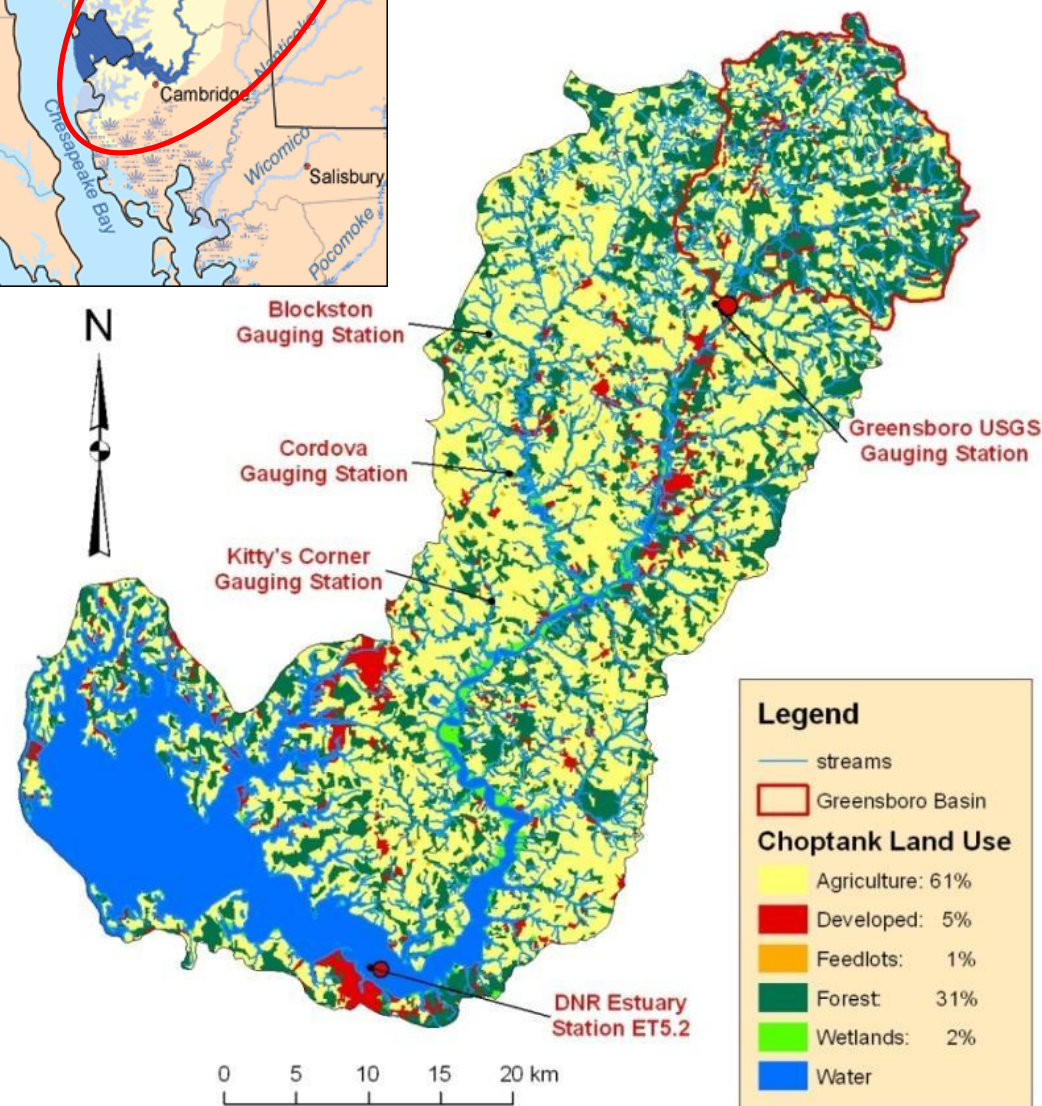
# Delmarva Peninsula: The Choptank River Complex



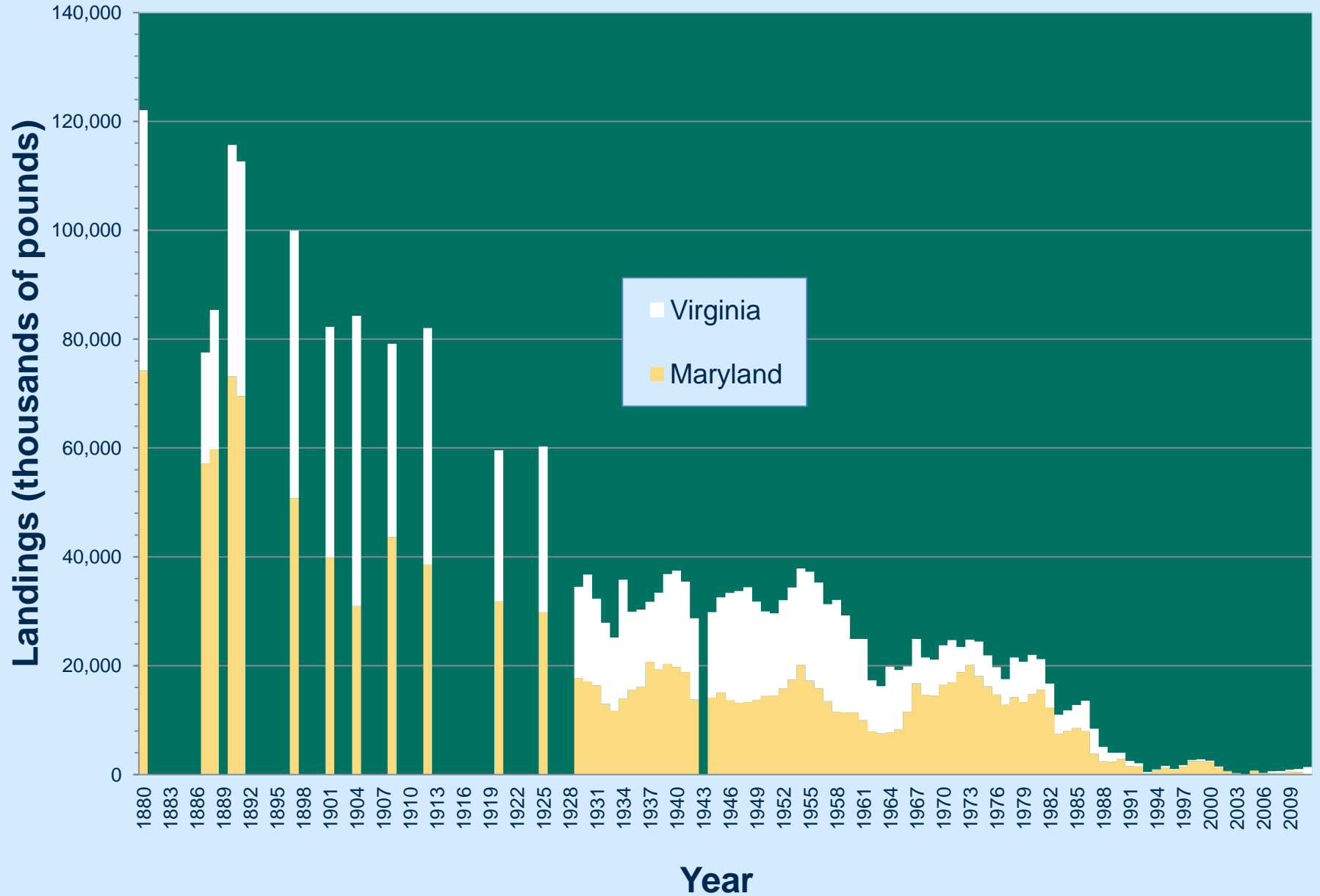




## Choptank River Basin

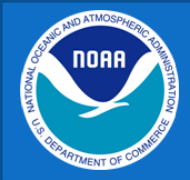


# Chesapeake Bay Oyster Landings by State, 1880-2011











# Choptank Complex Objectives



- ***Restore oyster reef habitat*** and significantly increase native oyster populations
- ***Quantify the benefits oyster reefs*** and associated habitats provide
- ***Improve the delivery*** of NOAA's habitat and climate science
- ***Engage communities*** to ensure involvement and ownership



# Fish Passage

The background image shows a wide river with a concrete dam structure in the middle ground. To the left of the dam is a concrete structure with a ramp and a metal railing. The river flows from the background towards the foreground, with some white water visible at the dam. The sky is blue with scattered white clouds. The overall scene is a natural landscape with a man-made structure.

## Primary Objective:

Remove fish blockages in the Choptank River at priority locations as identified through the Chesapeake Fish Passage Prioritization tool

# Wetlands/ Living Shorelines

## Primary Objective:

Identify priority wetlands restoration sites in the Choptank River through a collaborative effort with The Nature Conservancy



Photo: IAN, Hilary Stevens



## Ecosystem Services

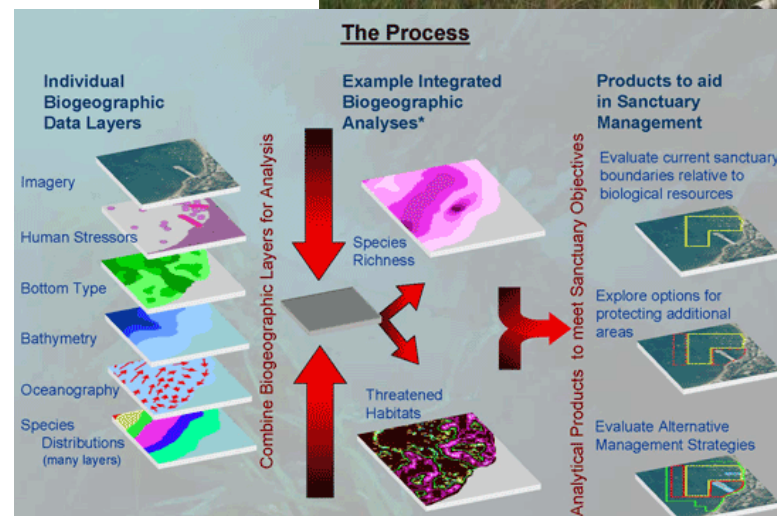
- *More Habitat = More Fish*
- *Nitrogen removal*
- *Economic valuation*





# Improve Delivery of Habitat and Climate Science

- Climate resiliency
- Water Column Habitat
- Biogeographic Assessment





## Community Engagement

Engage coastal communities in a way that ensures their increased involvement in and ownership of the protection and restoration of coastal habitats.

- Collective Impact
- K-12 Education
- Community Outreach
- Climate Outreach



# Partnerships



## Business Plan for the Chesapeake Bay Stewardship Fund

A strategy to guide conservation investments  
in the Chesapeake Bay region through 2025



# You?



**Chesapeake Bay Program**  
*Science. Restoration. Partnership.*



July 13, 2012





## Water Column Habitat Monitoring

- Assess impacts of land use changes on WQ parameters important to sustaining oyster habitat (pre and post restoration) \$50k
  - **Monitoring Assets in the Study Area**
  - **Create a Data Management Structure with STAR**
  - **Conduct Pilot of new water quality sensors**



## Discussion/Questions

How can we design a collaborative monitoring network to track water quality and other ecosystem health parameters as restoration efforts move forward?

# Photo Credits

Jane Thomas, Ashley Samonisky, Caroline Wicks, Integration and Application Network, University of Maryland Center for Environmental Science ([ian.umces.edu/imagelibrary/](http://ian.umces.edu/imagelibrary/)).



# Science and Monitoring

## OBJECTIVE: SCIENCE and MONITORING

<i>Objective Coordinators</i>	CLIMATE RESILIENCY (science)	BIOGEOGRAPHIC ASSESSMENT	WATER COLUMN HABITAT
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