#### Sustainable Fisheries Goal Implementation Team: Key Accomplishments



**Peyton Robertson, Fisheries GIT Chair PSC Meeting** 

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#### Outline

- Who is the Fisheries GIT?
- Collaborative Oyster Restoration
  - Challenge
  - Goals and Strategy
  - Success metrics
  - □ Harris Creek and Great Wicomico Examples
  - Next Steps
- Invasive Catfish
  - What's the problem?
  - Bay-wide Invasive Catfish Policy



# Sustainable Fisheries Goal Implementation Team

- A diverse group of managers, scientists, and stakeholders working to promote sustainable fisheries across all bay jurisdictions
- Near-term Focal Areas
  - Establish and apply Oyster Restoration Success and Performance Metrics
  - Develop Bay wide policy agreement on blue catfish management
  - □ Revise Blue Crab Abundance Targets
  - Identify Communication Pathways to Influence Land use Decision-making



## Background: Ecological Value

- Oysters as filters = water clarity
- Oyster reef structure = habitat
- Food source for humans and fish







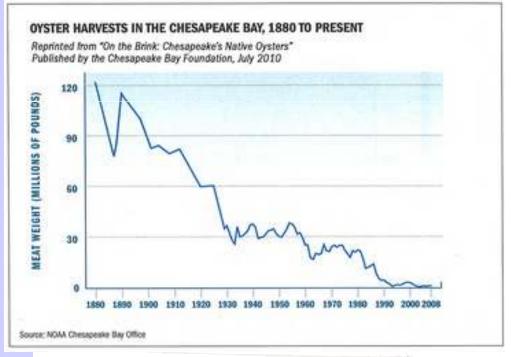


# Background: Status of the Resource

 Disease, overfishing, habitat degradation have reduced oyster populations to less than 1%

historical abundance

The 2007 harvest of 0.165 million bushels had a value (in 2000 constant dollars) of \$4.27 million



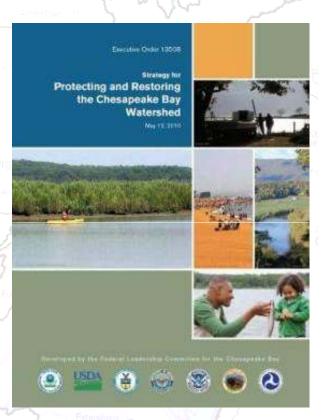


### Goals and Strategy

Outcome: Restore native oyster habitat and populations in 20 out of 35-40 candidate tributaries by 2025. (Current condition: 0 tributaries with fully restored oysters populations; several with successful living oyster reef habitat)

#### Actions:

- Collaboratively select and restore priority tributaries
- Apply science-based tools to plan and evaluate oyster restoration





# Action 1: Select and Restore priority tributaries

- A team effort: Bay-wide federal and state coordination and oversight for native oyster restoration!
- In 2012, partners will identify 4-6 tributaries to target efforts
- Tribs selected to date:
  - □ Initiate large-scale restoration in Harris Creek and Little Choptank sanctuaries in Maryland
  - Evaluate existing large-scale efforts in Lynnhaven and Great Wicomico Rivers in Viscision



NOAA







# Action 2: Use science to evaluate progress

- "Oyster Metrics Team"
  established common, Bay-wide
  reef and tributary-level
  restoration targets and
  "success metrics"
- Science-driven consensus process among the primary governmental agencies involved in oyster restoration in the Bay



#### The Team:

- NOAA (Stephanie Westby)
- MD DNR (Eric Weissberger)
- VMRC (Jim Wesson)
- PRFC (AC Carpenter)
- U.S. Army Corps (Angle Sowers)
- VIMS (Mark Luckenbach)
- UMCES (Ken Paynter)
- Consulting scientists



## Oyster Metrics Approach

Reef Level:

Trib Level:

Functional Goals

Functional Goals

Ultimate goals of restoration: How it functions over time

Operational Goals

Operational Goals

Practical goals: What you plan for; put in the water

www.chesapeakebay.net



#### Reef-level Goals & Metrics

#### Target Oyster density:

- Mean density of 50 oysters/m<sup>2</sup> and 50 grams dry weight /m<sup>2</sup>
- 2) At least two year classes present



- 3) Covers at least 30% of the reef area
- 4) Stable or increasing spatial extent, reef height and shell budget

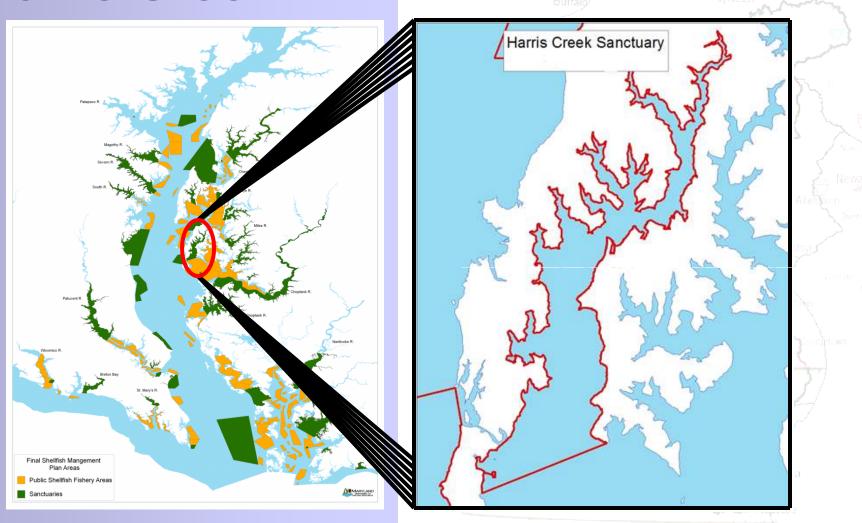


## Tributary-Level Goals & Metrics

- 1) Tributary defined as those meeting TNC 'creek' and 'small tributary' size classifications.
- 2) Restore 50 -100% of <u>currently restorable</u> oyster habitat to the reef-level targets.
  - Note: Recommend that this be pursued in tributaries for which currently restorable bottom minimally meets the USACE targets related to the percent of historical bottom (min. of 8% of Yates/ Baylor ground)



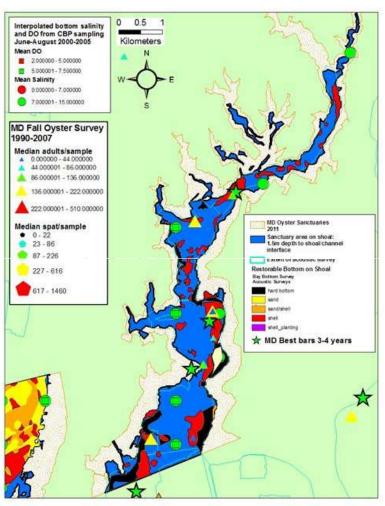
## Harris Creek





#### An Example: Harris Creek

- MD Sanctuary
- Meets USACE Master Plan criteria
- Mapped by NOAA
- 600 restorable acres (300 acre minimum goal per Oyster Metrics)
- USACE plans to build 22 acres of new reefs
- NOAA funded ORP to plant 81.5 million spat onto 33 acres of shell





Lynnhaven and Great Wicomico

Apply Oyster metrics to evaluate restoration projects in these tributaries





#### **Next Steps**

- Select list of 4-6 priority tributaries
- Apply metrics to plan and evaluate restoration progress
- Address substrate limitations (decline in available shell)
- ...Be Adaptive!







#### **Invasive Catfish**









### **Adopted Policy**

- The potential risk posed by blue catfish and flathead catfish on native species warrants action...The Sustainable Fisheries Goal Implementation Team Executive Committee agrees to work together to:
  - Raise public awareness
  - Improve scientific understanding of blue and flathead catfish and their potential impacts
  - Develop, evaluate, and implement a set of management measures aimed at mitigating adverse effects

