



Forage

*Bruce Vogt, NOAA
Coordinator,
Sustainable Fisheries GIT*

Through the Chesapeake Bay Watershed Agreement, the Chesapeake Bay Program has committed to...

Goal: *Sustainable Fisheries*



Outcome: Continually improve the partnership's capacity to understand the role of forage fish populations in the Chesapeake Bay. By 2016, develop a strategy for assessing the forage fish base available as food for predatory species in the Chesapeake Bay.



What is our Expected and Actual Progress?

- The outcome is on track
- Science is progressing and being used to describe the status of forage in the Bay



Learn

What have we learned in the last two years?



Successes and Challenges

- Received NOAA and CBP funding to address science priorities
- Linked variability in forage abundance with Bay conditions
- Prioritized indicators to describe forage status
- Remain interested in addressing monitoring gaps



On the Horizon

Science

- Some research findings show that environmental factors (e.g., spring warming, area of suitable habitat) drive forage species abundance; these findings inform indicator development
- New data may enhance indicators (new VIMS vessel and mesh size, telemetry arrays, striped bass abundance estimates, hypoxia profilers)

Fiscal

- NOAA and CBP funding helped address science priorities

Policy

- Emphasis on implementing Ecosystem Approaches to Fishery Management facilitates management application of science

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Adapt

How does all of this impact our work?



Based on what we learned, we plan to ...

- Pilot utility and evaluate maintenance costs of four indicators that assess the condition of forage in the Bay
 - warming water temperature
 - habitat suitability forecast
 - benthic invertebrate biomass
 - shoreline hardening
- Establish a process to regularly communicate indicator results and implications to managers and the public



Equitable and inclusive restoration ...

- Modify funding opportunities to better support researchers at HBCUs and MSIs and include students of color in projects
- Identify opportunities to connect forage condition, recreational fishing, and fish consumption in urban areas
- Coordinate with Fish Habitat Action Team on more diverse recreational fishing engagement



Help

*How can the Management Board
lead the Program to adapt?*



Help Needed

- Connect information on forage status and trends to habitat conservation, land use, and other policy decisions (e.g., incorporate findings into CBC meetings)
- Emphasize the need for shallow-water fish surveys and plankton monitoring through the PSC monitoring review



Discussion