

# DRAFT MANAGEMENT STRATEGY FORAGE FISH

## 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.

### CURRENT EFFORTS

- Scientific and Technical Advisory Committee Forage Workshop (2014) put forward actionable recommendations to better understand and quantify the forage base and their availability to predators.
- Fisheries Ecosystem Planning for Chesapeake Bay (2006) provides guidance for ecosystem-based fisheries management in the Bay and coastal region.
- Maryland Sea Grant Single Species Briefs (2009) identify critical ecosystem stressors for alosines, blue crab, striped bass and menhaden.
- Monitoring: Some predators and forage species are monitored by benthic and fisheries surveys conducted in all jurisdictions.
- Indicator development efforts are currently underway by some fishery management agencies to evaluate the status of specific forage species and their predators .

### GAPS

- Trends of some forage species, especially small invertebrates and zooplankton.
- Definition of "balanced" state and natural variability for forage species (species abundance, habitat, water quality).
- Economic data on the value of these species

### MANAGEMENT APPROACHES

- Define forage species and what comprises the forage base.
  - Explain their role both as an economic value to humans and as a food source for commercially/recreationally valuable predator species.
- Determine the status of the forage base including a definition of "balanced" state.
  - Guidance documents exist for indicators of forage supply and demand in Chesapeake Bay.
  - STAC workshop participants agreed that enough data exist to perform a preliminary analysis of the predominant and most important forage to support predatory demand in the Chesapeake system.
- Inform management decisions to better address sustainability of the forage base.
  - Establish management objectives for forage species.
  - Develop indicators based on forage management objectives and priority factors affecting forage base.
  - Use indicators to identify and promote actions to manage fisheries and protect habitats that support forage.
- Maximize the efficiency of monitoring programs and build on existing efforts
  - Map areas and habitats important for the production and maintenance of forage, with special emphasis on shoreline habitat, land use change and developments in the tributaries throughout the watershed.
  - Consider options to improve phytoplankton and zooplankton monitoring Baywide.
- Approaches targeted to local participation
  - Indicators of forage health will help local governments better understand the factors affecting the forage base and better identify local management actions that can be taken to reduce impacts to the forage base.
  - Targeted efforts will likely focus on commercial and recreational fishing organizations and stakeholders.

