SUSTAINABLE FISHERIES GOAL

Forage Fish Outcome



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.

PROGRESS AS OF 2021: The Forage Fish Outcome is on course. Over the last year, the Forage Action Team began development of three forage indicators: tracking the abundance of key invertebrates, the relationship of warming water temperatures to forage abundance and the relationship of the amount of suitable habitat to forage abundance. These initial indicators lay the foundation for the annual assessment of the condition of forage species in the Chesapeake Bay.

BACKGROUND: Forage refers to species that are food for predators. The Sustainable Fisheries Goal Implementation Team, along with other stakeholders, have long discussed the importance of forage in the Chesapeake Bay food web, as a robust and healthy forage base is essential in supporting valuable commercial and recreational fisheries. The Outcome aims to improve understanding of the role and status of forage in the Bay to inform habitat, fisheries and water quality management decisions.

Most forage species are not directly managed, but rather support valuable managed predator species. As analyses have shown that a diversity of forage species is important to predators, including invertebrates, in 2016 the Forage Action Team redefined "forage" under this outcome to refer to all forage species, not just fish.

BASELINE: In 2014, the Chesapeake Bay Program's Scientific and Technical Advisory Committee held a workshop, *Assessing the Chesapeake Forage Base: Existing Data and Research Priorities*, that sought to define the Chesapeake Bay forage base. The workshop put forward five actionable recommendations to better understand and quantify the forage base and its availability to predators. Additionally, the baseline for this outcome is informed by several studies conducted by the University of Maryland Center for Environmental Science, which highlighted the existing gaps in knowledge regarding forage, and the 2015 Atlantic Marine Fisheries Commission Menhaden Stock Assessment report.

<u>DATA SOURCE:</u> It is a desirable goal to maintain a balanced forage base throughout the Chesapeake Bay, but "balanced" is yet to be defined or quantified. The three indicators currently in development will help quantify the relationships between priority predators and prey and provide insight into the status of forage in the Bay.



