

Support for Inventory & Evaluation of Environmental and Biological Response Data for Fish Habitat Assessment

Bob Murphy and Nancy Roth, Tetra Tech AK Leight, NOAA Oxford Laboratory









Northeast Regional Habitat Assessment

- Quantity and quality of inshore and offshore habitats from Maine to NC/SC border
- Led by MAFMC, NEFMC, NOAA and others including ACFHP
- Workplans are developed, data collection and analysis expected July 2019-2022
- Habitat Areas of Particular Concern, fisheries management, EAFM

Chesapeake Bay Regional Fish Habitat Assessment

- Data-driven approach using biological, stressor and habitat information at best available spatial resolution
- Led by Sustainable Fisheries GIT
- GIT Supported Contractor Began May 2019
- Guide conservation and restoration including land use planning and BMPs

Atlantic Coast Fish Habitat Partnership Northeast Assessment

- Prioritization of diadromous and estuarine dependent fish habitat from Maine to Virginia
- Based on the scoring of existing data layers
- Led by ACFHP through ASMFC
- Kick off meeting May 2019, final product expected by December 2019
- Identify project priority areas

Habitat Climate Vulnerability Assessment

- Scoring of vulnerability (exposure and sensitivity) of key habitats (rock cobble, salt marsh, riverine water column) to climate stressors from Maine to North Carolina
- Expert opinion process and scoring rubric
- Led by NOAA Fisheries
- Pilot scoring began April 2019



2014 Chesapeake Bay Agreement - Fish Habitat Outcome

Continually improve the effectiveness of fish habitat conservation and restoration efforts by identifying and characterizing critical fish and shellfish spawning, nursery and forage areas within the Chesapeake Bay and its tributaries. Use existing and new tools to integrate information and conduct assessments to inform restoration and conservation efforts.







Project Team



Bruce Vogt

- NMFS/Chesapeake Bay Office, and CBP Sustainable Fisheries Goal Implementation Team coordinator

A.K. Leight, Suzanne Skelley, Erin Markin

 NOAA/National Centers for Coastal Ocean Science/Cooperative Oxford Laboratory



Stephen Faulkner, John Young, Kelly Maloney, Kevin Krause

- USGS Leetown Science Center/Aquatic Ecology Laboratory



Gina Hunt

- MD DNR Fisheries Service and Chesapeake Bay Program
Fish Habitat Action Team coordinator

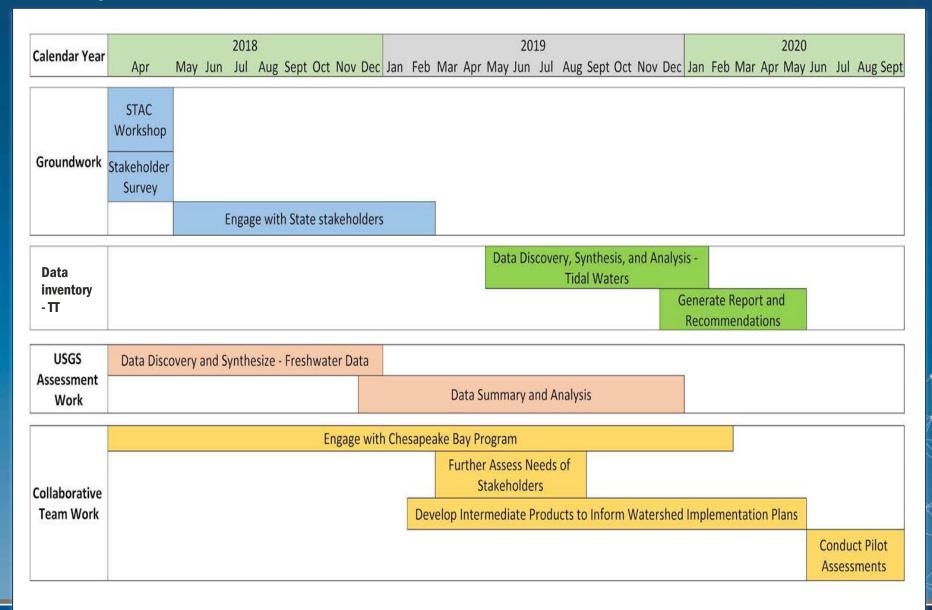


Bob Murphy, Nancy Roth, Erik Leppo

- Tetra Tech Center for Ecological Sciences

Project Schedule







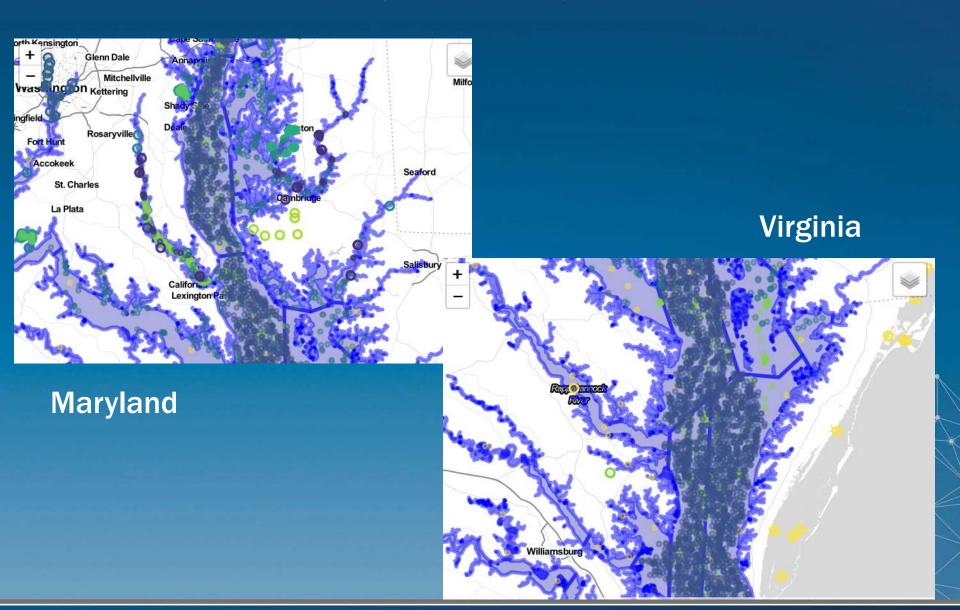
Data Inventory – In Progress

Datasets

- 111 datasets identified and described (metadata)
- Biological (fish, oysters, invertebrates)
- Habitat (wetland mapping, SAV coverage, oyster bottom, etc.)
- Abiotic parameters (salinity, temp, DO, etc.)
- Temporal coverage (1990's present), although this largely depends on data availability
- Spatial coverage Irregular, depending on jurisdiction



Data Inventory – In Progress





Next Steps

- Finalize data inventory and metadata
- Finalize capture of available data sets
- Summarize scope of available data
- Compare to other regional fish habitat assessments (e.g. Gulf of Mexico)
- Develop recommendations

