



Fish Habitat Outcome



Gina Hunt
Maryland DNR
Action Team Chair

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



Goal: *Sustainable Fisheries*

Outcome: *Fish Habitat*

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



How You Can Help



The Fish Habitat outcome is on track, but team member capacity and jurisdiction priorities may not be in alignment with potential outcome actions.

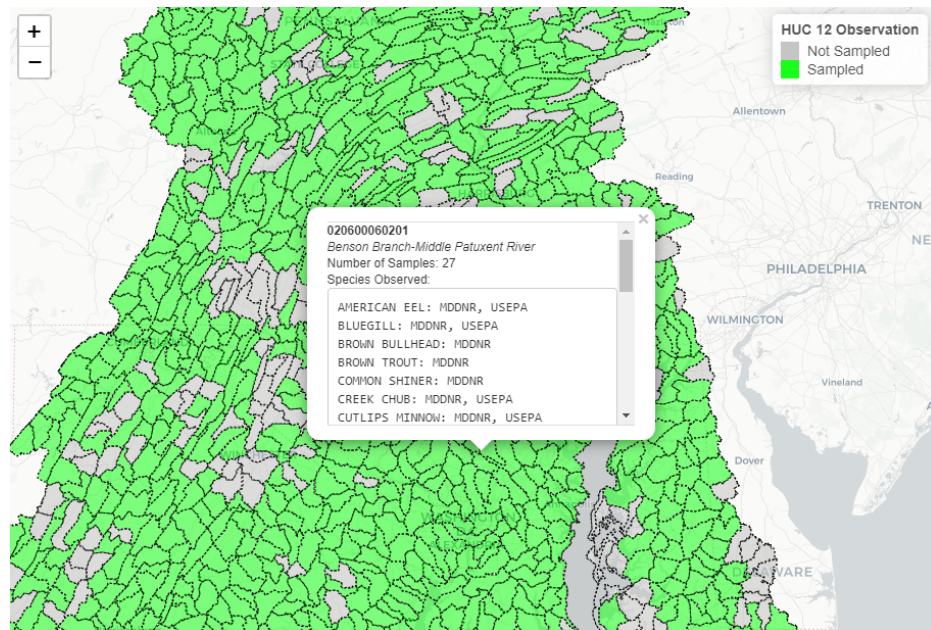


Progress

We have made progress on:

- Integrating data and providing information
- Analysis and methodology for Regional Fish Habitat Assessment

Fish Species Observations from Inland Chesapeake Bay Watershed Fish Samples





Successes

- Made strides on higher resolution regional fish habitat assessment
 - Metadata inventory,
 - Evaluation of different scales and methods,
 - Develop tidal analytical framework,
 - Hardened shoreline GIS layers.
- Living shoreline behavior change project. Toolkits for MD, VA, and DE.
- Communication
 - Watershed Educational Materials for Local Government.
 - Fisheries economic impact information to local government.





Challenges

This is a broad outcome with a diverse audience and diverse member expertise.

It is a challenge to include habitat considerations in fisheries management, local planning, and WIP BMP actions. There are two main audiences that require different tools/messages for each:

- **Habitat/Land Managers** need to communicate the benefits and encourage the conservation of rural landscapes and natural shorelines. Tools could inform and guide planning and zoning as well as delineate high priority areas.
- **Fisheries Managers** need tools to incorporate habitat condition into assessments so they can adjust management for habitat influences. Ideally, ecosystem based management, but presently feasible in single species management.



Challenges

Team capacity and jurisdictional priorities are a limitation:

- Team capacity does not match the breadth of the audience needs.
 - Communication actions are a challenge because that is not the expertise of team members. Rely on the CBP communications team or contractors.
- Try to narrow the breadth of the outcome by setting priorities, but we have difficulty gathering input on priorities for next action plan.
- It is difficult to find team members to champion projects.

Fish Habitat Action Team - Membership Survey (June, 2021)

Priorities

I really appreciated Ryan's presentation and the many directions it could head. Tying public health and the watershed/bay health is an overall smart alignment to engage the public and decision makers. Do you have any ideas/needs for that next step? A project for the next workplan or a GIT funding idea? (Link to Ryan's presentation: [https://www.chesapeakebay.net/channel_files/43103/tuesday_6.14.21_woodland_hat_\(1\).pptx](https://www.chesapeakebay.net/channel_files/43103/tuesday_6.14.21_woodland_hat_(1).pptx))

Your answer

The importance of shallow water habitat has risen to the top of our priorities. Do you have specific science needs/questions that the team can consider for the workplan or a GIT funding idea?

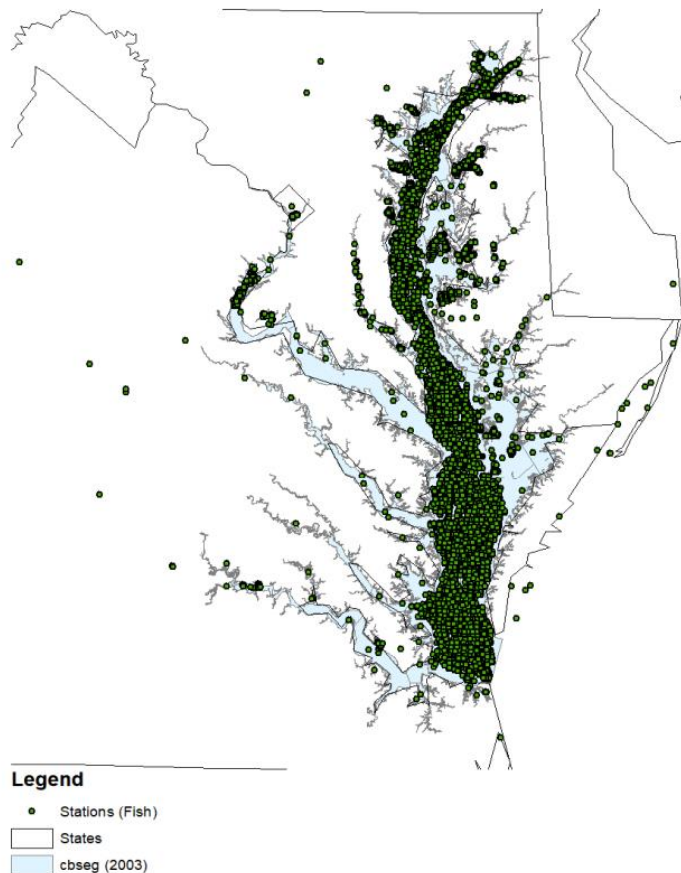


On the Horizon

Opportunities:

- An increased regional focus on supporting climate projects and ecosystem based fisheries management
- Synthesis/synergy across the various habitat/watershed assessment approaches (stream health, healthy watersheds, fish habitat assessment)
 - Cross Git mapping efforts (understanding all the mapping efforts and where the fish habitat assessment can be plugged in.)
 - Continued opportunities for data integration (ex. fish survey metadata inventory)

Map of fish survey sites collected in metadata analysis





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

Continued priorities:

- Progress on regional fish habitat assessment. Now selecting a joint assessment pilot area as the next step in the regional fish habitat assessment
- Continued cross-GIT collaboration (Mapping, assessment integration, communications)

New priorities:

- Development of products to inform fisheries management
- Focus on key shallow water habitats (collaborate with the Habitat GIT and workgroups)
- Consider metrics or developing an indicator to monitor progress
- NCBO and the Bay Program have momentum around improving hypoxia measurements, increasing telemetry capabilities, and linking observations to living resources by funding projects that quantify species response to various habitat stressors.



Help Needed

Capacity and engagement from jurisdictions:

Need active responsibility to the outcome. We surveyed the team on priorities and meeting goals with very little response.

- Engagement of jurisdiction MB member with outcome members even if not in member agency.
- Gather clear fish habitat priorities from each jurisdiction and align Fish Habitat Action Team membership to those priorities.





Discussion