

Regional Fish Habitat Assessment User Needs Report

What is the utility of a regional Chesapeake Bay watershed fish habitat assessment?

Gina Hunt
Chesapeake Bay Program Fish Habitat Coordinator

Regional Fish Habitat Assessment User Needs



A guiding principal for the assessment framework is that it should **support planning and management decisions.**

Therefore, a user-needs questionnaire was developed to determine what land use and restoration planners, and habitat and fish managers need in a fish habitat assessment.

Land use decisions affect fish habitat.



"We're lucky. This stream could be next to a paper mill instead of a brewery."

Questionnaire Methods



What do you need to improve the watershed?

Habitat scientists from around the Chesapeake Bay watershed are looking to **better understand your information needs** for project and land-use planning. The goal of this effort is to compile data and resources that habitat and land-use project designers, planners, and implementers can easily access and utilize to improve and increase the effectiveness of their work.

How can we help you?

With your input, compiled resources and data would be made available in a regional habitat assessment that would include the Chesapeake Bay Watershed (District of Columbia, Delaware, Maryland, New York, Pennsylvania, Virginia, and West Virginia). The habitat assessment would focus on factors that impact the quality and quantity of fish habitat in your specified region, the species that utilize that habitat, and identify the factors/stressors influencing fish habitat.



How can you share your needs?

To help ensure this assessment is relevant and beneficial to you, [please complete this online survey by March 16, 2018](#). In **less than 10 minutes** you can answer 20 questions related to your experience and project or planning needs. Keep in mind that many land-use plans and habitat projects that you may work on have an impact on fish habitat even if that is not the primary focus. We request that you please participate even if fish habitat is not a primary project goal of your work.

Where will your response go?

A summary of the responses will be provided at a workshop on fish habitat stressors and assessment needs in April 2018. Your collective responses will be used to guide decisions and discussions for a future regional habitat assessment and the potential development of other resources.

Thank you for your valuable input!

If you have any concerns or questions about this survey, please contact Gina Hunt at (410) 948-9836.



Survey Monkey –
all online.
40% open rate

Newsletters

Duration- 2 weeks

Nineteen Questions

Questionnaire Results

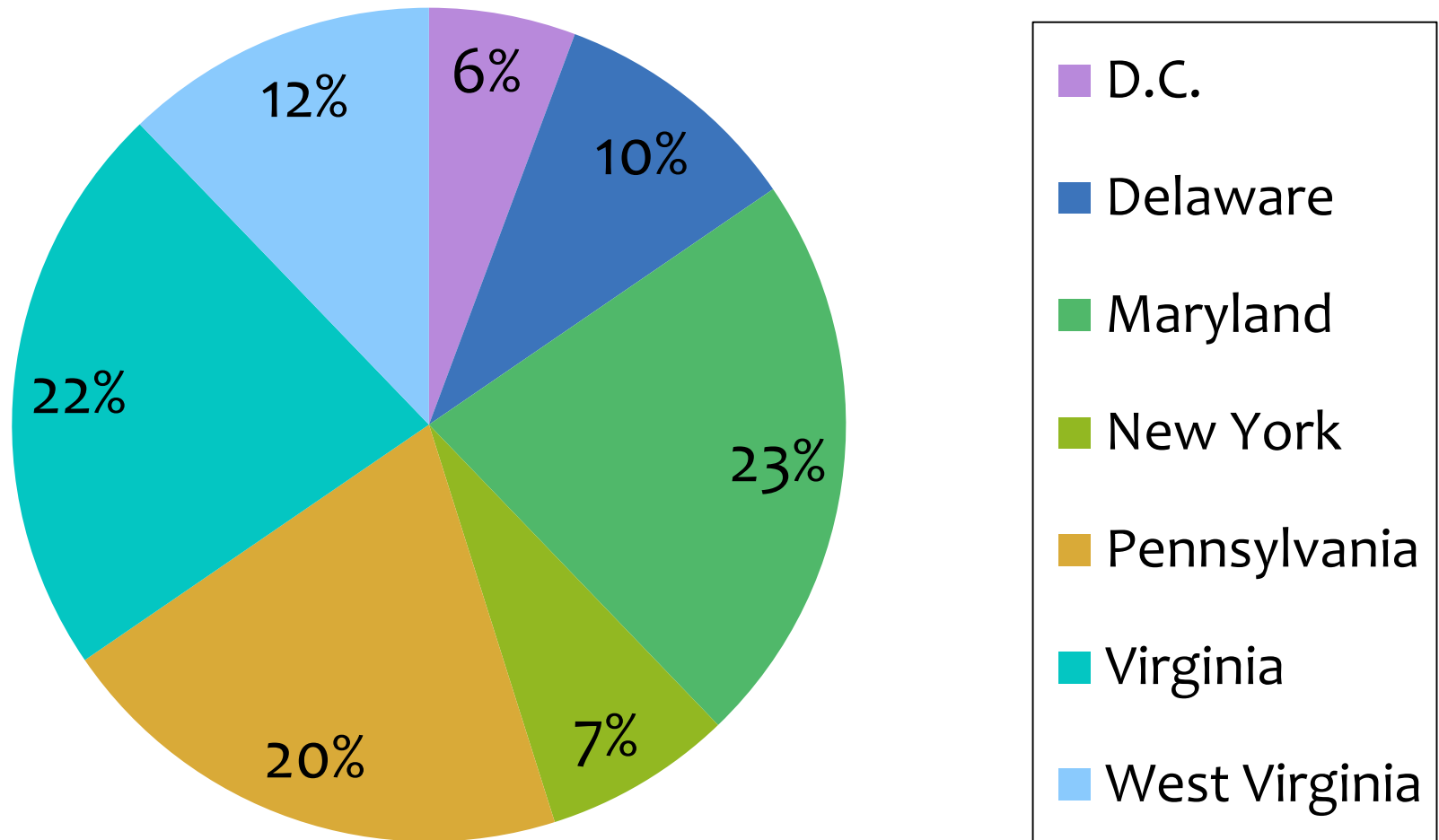


“This is interesting, 70% of the respondents to our survey said they don't respond to surveys.”

- Respondents-
 - 148 individuals responded to the questionnaire.
 - 41% work in local government. More than any other sector.
 - 64% are actively involved in habitat conservation or restoration projects.
 - Fish Managers?

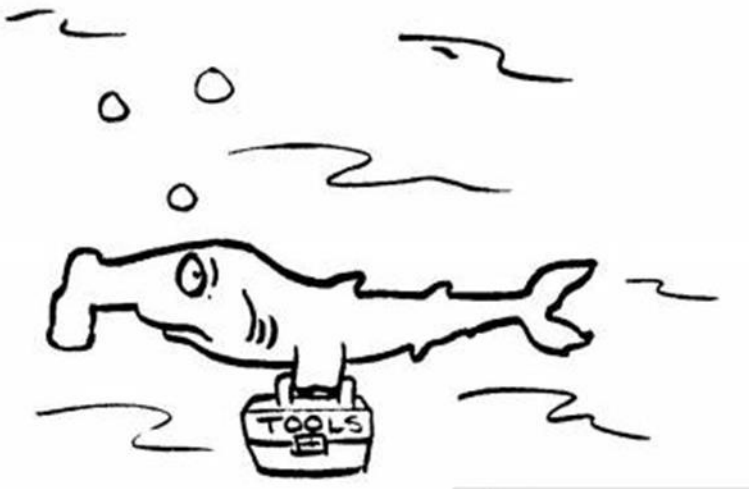
Questionnaire Results

Responses from all jurisdictions in the watershed



Questionnaire Results

Good News! 70% indicated that they would use a regional habitat assessment to prioritize potential sites for restoration/conservation.



But there are many existing spatial tools! Additional responses indicated it would need to complement their current process or tools.

Questionnaire Results

Tools/Data Sets:

Asked familiarity with twenty-seven spatial tools - all tools received some response.

While respondents stated they were familiar with many spatial tools, very few mentioned a tool when asked how they identify or select sites for restoration or conservation work.

Table. 1. Top Quartile of Tools

The Nature Conservancy Habitat Prioritization Tool	21
Climate Change predictors	23
Eastern Brook Trout Joint Venture	31
The Nature Conservancy Tools	33
United States Geological Survey Tool	37
Water Quality Standards Attainment (Clean Water Act 303d lists)	40
Chesapeake Bay United States Geological Survey Data	45

Questionnaire Results

What map scale is most appropriate so you could use a regional Habitat Assessment to improve your work?

Majority requested the smallest scale offered:
less than 1:24,000.

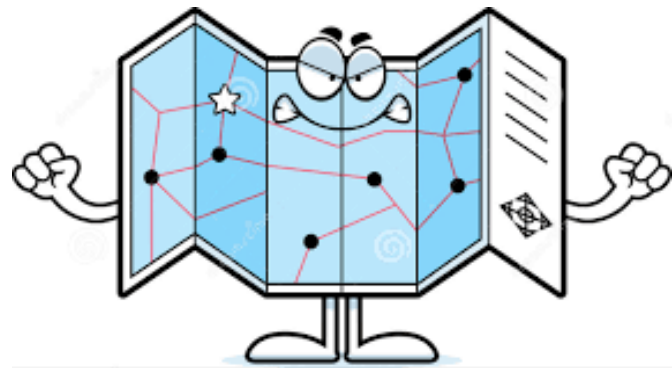
Others suggested the HUC 12 scale or smaller and the ability to switch from a Google Earth to Topo map scale.

Ability to move back and forth based on resolution of available data- Hierarchical assessment



Questionnaire Results

Most respondents (24 and 28 respectively) also requested the data be aggregated at the county, or reach (a continuous stretch of stream or river) level.



The scale and aggregate questions only received 97 and 80 responses respectively. These questions may not have been well understood by respondents.

Questionnaire Results

What data should be included for the assessment to be useful?

Water quality degradation – nutrient, sediment, and emerging contaminants	77
Development/urban land use	66
Impervious surface – patterns of growth and impervious surface percentage	65
Wetland distribution and type	60
Agricultural land use	59
Invasive species distribution and abundance (e.g., zebra mussels, rock snot, hydrilla)	58
Fish species distributions and abundance	57
Fragmentation by dams and culverts/barriers to fish migration	55
Shoreline armoring/hardened shoreline	43

Questionnaire Results

What species are important to your management efforts?

Most common response was for “recreational” or “game fish” were most important. In particular, “trout” and “black bass.”

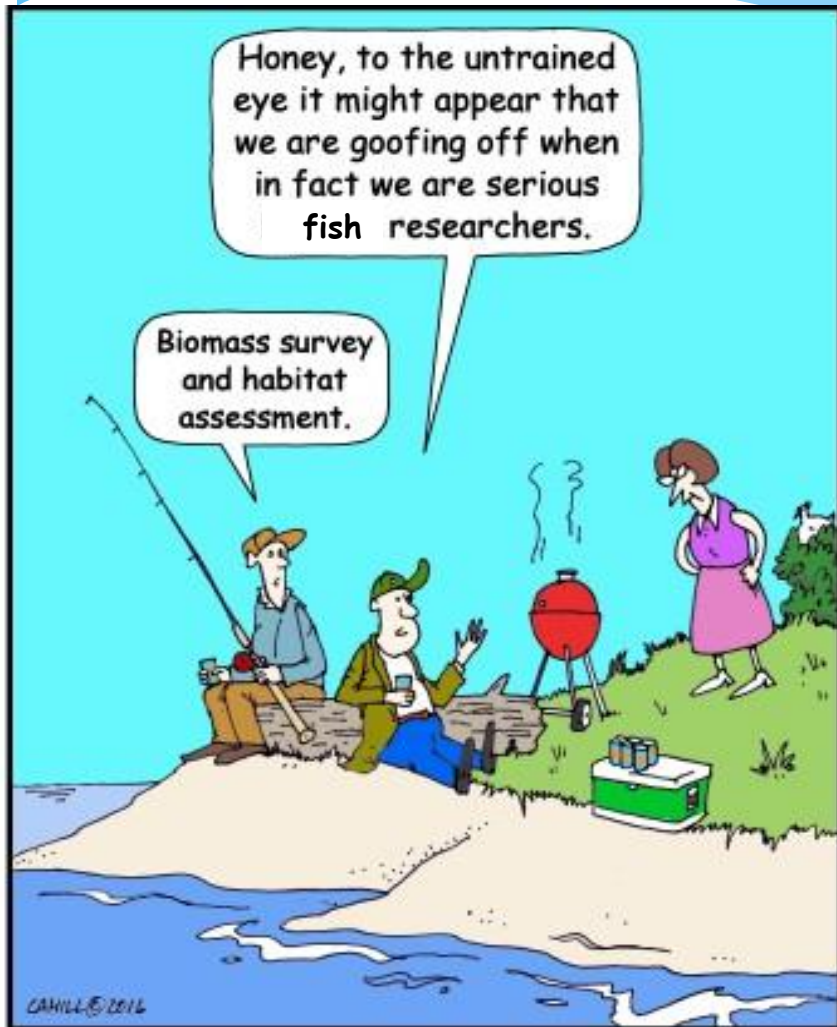


“It doesn’t seem to be covered in our invasive species management plan.”

Many responses were for “All” species or that they did not consider representative species.

Honorable mention to “invasive species” and “rare and threatened species”.

Questionnaire Conclusions



The assessment will not be the primary process for choosing a restoration or conservation area; but they will use it.

In order to be meaningful, it will need to work well with their existing tools and processes.

Questionnaire Conclusions

A regional assessment tool will need to provide resolution at a local scale and provide information that has been otherwise unavailable or scattered in its availability.

As one respondent suggested, “varying degrees of resolution are going to be important to the different stakeholder. Being able to adjust to those different resolutions is going to be crucial to the efficacy of the tool in the end.”

Questionnaire Conclusions

- *Other Needs-*
 - Economic impact information on fish resources and habitat projects.
 - Identify the associated mitigation measures with the prioritized factors and stressors.
 - Marketing- they need to know what it can do and where to get it. State Agencies are their trusted sources for this information.

Questions

