

## Fish Habitat Priorities and Approaches

Developed at the February 10<sup>th</sup> Fish Habitat Meeting in Annapolis, MD

## Tidal Saltwater

Habitat Classification	Species of Interest	Factors Influencing (* indicates factors with the most votes for each section)	Approaches
Sub-tidal (<10m)	<ul style="list-style-type: none"> <li>• Bay Anchovy</li> <li>• Atlantic Sturgeon</li> <li>• Blue Crab</li> <li>• Oyster</li> <li>• Spot</li> <li>• Croaker</li> <li>• Summer Flounder</li> <li>• Striped Bass</li> <li>• Forage (general)</li> </ul>	<ul style="list-style-type: none"> <li>• Water Quality (specifically DO and sedimentation)*</li> <li>• Land use change/urbanization*</li> <li>• Bottom type/loss of habitat structure *</li> <li>• Shoreline hardening</li> <li>• SAV availability</li> <li>• Climate change</li> <li>• Fishing activities (dredging, etc)</li> </ul>	<ol style="list-style-type: none"> <li>1. Comprehensive spatial mgmt. for competing bottom uses.</li> <li>2. Proactively identify high quality productivity areas.</li> <li>3. Integration and synthesis of habitat information.</li> <li>4. Determine quantity of available habitat and thresholds for species.</li> </ol>
Intertidal/Nearshore	<ul style="list-style-type: none"> <li>• Juvenile sciaenids</li> <li>• Horseshoe Crab</li> <li>• Mummichog</li> <li>• Juvenile Crabs</li> <li>• Grass Shrimp</li> <li>• Detrital production</li> <li>• Nursery utilization</li> </ul>	<ul style="list-style-type: none"> <li>• Land use change/urbanization*</li> <li>• Shoreline hardening*</li> <li>• Climate Change*               <ul style="list-style-type: none"> <li>○ SLR</li> </ul> </li> <li>• Water Quality (DO and turbidity)</li> <li>• Vegetation cover               <ul style="list-style-type: none"> <li>○ SAV</li> <li>○ Wetlands</li> </ul> </li> </ul>	<ol style="list-style-type: none"> <li>1. Proactively identify high quality productivity areas.               <ol style="list-style-type: none"> <li>a. Benthos</li> <li>b. WCH</li> </ol> </li> <li>2. Show differences between hardened and natural shorelines.</li> <li>3. Maximize value of living shorelines (BMPs).</li> </ol>

# Freshwater

Habitat Classification	Species of Interest	Factors Influencing (* indicates factors with the most votes for each section)	Approaches
Non-tidal— <b>Cold</b>	<ul style="list-style-type: none"> <li>• Brook Trout</li> <li>• Trout (general)</li> </ul>	<ul style="list-style-type: none"> <li>• Land use change/urbanization*               <ul style="list-style-type: none"> <li>○ Impervious surface</li> <li>○ Loss of forest cover</li> </ul> </li> <li>• Climate change</li> </ul>	<ol style="list-style-type: none"> <li>1. Cold water stream not a top priority for this group, but this team would identify overlaps with interests of groups like EBTJV.</li> <li>2. Identify other priority cold water streams that benefit other trout species in addition to brook trout.</li> </ol>
Non-tidal— <b>Warm</b>	<ul style="list-style-type: none"> <li>• Freshwater Mussels</li> <li>• Black Basses</li> <li>• Shad</li> <li>• Eel</li> <li>• River Herring</li> </ul>	<ul style="list-style-type: none"> <li>• Land use change/urbanization*               <ul style="list-style-type: none"> <li>○ Impervious surface</li> </ul> </li> <li>• Water Quality (specifically nutrient and sediment loads)*</li> <li>• Fish Passage</li> <li>• Climate change</li> <li>• Gas and mineral extraction</li> </ul>	<ol style="list-style-type: none"> <li>1. Identify high priority areas for conservation/protection (use MBSS/IBI).               <ol style="list-style-type: none"> <li>a. Link to PA Conservation Regulations</li> <li>b. Link to SWAPs</li> </ol> </li> <li>2. Promote activities to restore affected areas.               <ol style="list-style-type: none"> <li>a. Link to Water Quality GIP (BMPs)</li> </ol> </li> <li>3. Outreach to public and decision-makers.</li> </ol>
Tidal	<ul style="list-style-type: none"> <li>• Striped Bass</li> <li>• Atlantic Sturgeon</li> <li>• Largemouth Bass</li> <li>• Shad</li> <li>• River Herring</li> <li>• American Eel</li> </ul>	<ul style="list-style-type: none"> <li>• Land use change/urbanization*</li> <li>• Water Quality (specifically turbidity)*</li> <li>• Loss of wetlands*</li> <li>• Climate Change*               <ul style="list-style-type: none"> <li>○ SLR</li> <li>○ Salt water intrusion</li> </ul> </li> </ul>	<ol style="list-style-type: none"> <li>1. Identify areas with restoration potential.</li> <li>2. Identify and map critical spawning and nursery areas for conservation.</li> <li>3. Develop criteria for healthy</li> </ol>

	<ul style="list-style-type: none"><li>• White Perch</li><li>• Yellow Perch</li></ul>	<ul style="list-style-type: none"><li>• Predatory invasive species</li></ul>	habitats . 4. Develop protection policies/regulations.
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