Integrating juvenile groundfish and adverse effects habitat management options

Joint Habitat and Groundfish Committee Meeting
Omnibus EFH Amendment 2
May 17, 2013
## Status quo management options

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<th>Area type</th>
<th>Objectives</th>
<th>Management measures</th>
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<td>Status quo groundfish areas</td>
<td>Protect spawning fish; other objectives</td>
<td>Closed year round to gear capable of catching groundfish</td>
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<tr>
<td>Status quo habitat areas</td>
<td>Minimize adverse effects of fishing on EFH</td>
<td>Closed year round to bottom-tending mobile gear</td>
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<td>Status quo rolling closures</td>
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<tr>
<td>New juvenile groundfish areas</td>
<td>Protect seabed habitats where juvenile groundfish aggregate</td>
<td>Closed year round to bottom-tending mobile gear</td>
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<tr>
<td>New habitat areas</td>
<td>Minimize adverse effects of fishing on EFH; protect habitats to increase productivity</td>
<td>Closed year round to bottom-tending mobile gear or no-groundcable-trawl only (latter option in GSC, Georges Shoal)</td>
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<td>Dedicated Habitat Research Areas</td>
<td>Provide a place to focus habitat-related research</td>
<td>Closed to mobile bottom-tending gear year round, possibly other gears; possibility of sunset after 3 years</td>
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<tr>
<td>New spawning groundfish areas</td>
<td>Protect spawning fish where they aggregate during their spawning seasons (hotspots)</td>
<td>Seasonal closures to gear capable of catching groundfish in discrete areas in WGOM, central GOM, EGB, SNE</td>
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<tr>
<td>Modified rolling closures</td>
<td>Protect spawning fish – areas reduced in size to focus on spawner hotspots</td>
<td>Seasonal closures to gear capable of catching groundfish in the western GOM</td>
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<td>Seasonal implementation of existing groundfish areas</td>
<td>Protect spawning fish – areas considered seasonally vs. year round to focus on spawner hotspots</td>
<td>Seasonal closures to gear capable of catching groundfish in the WGOM and CAII areas</td>
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Integration framework for juvenile groundfish and adverse effects habitat areas

**Juvenile groundfish management areas**

**Habitat Management Areas for adverse effects minimization**

**Do they overlap?**

- **If yes, both objectives are addressed; protect year round from mobile bottom-tending gear impacts**

**If no, what are possible overlaps between the two sets of objectives?**

- **Groundfish areas have complex habitat vulnerable to fishing, but outside SASI domain, not singled out by PDT, or not selected by Habitat Committee for possible management area.**
  - Consider year-round protection of these areas from MBTG fishing to protect areas of juvenile aggregations/complex habitats

- **Habitat areas have overlap with the distribution of juveniles with mixed/complex substrate affinities, but there are no or few hotspots. Or, there are temporal or spatial gaps in survey coverage that lead to uncertainty in fish distributions in the area.**
  - In absence of hotspots, examine distribution of mixed/complex substrate species, and consider year round protection from MBTG if these species occur at some level of abundance. Also consider distributions of hotspots and catch for non-groundfish stocks. Also consider year-round protection in cases of gaps in sampling, if other information indicates that groundfish stocks of interest are present in the area.
How to compare?

Groundfish metrics
- Number of juvenile hotspots
- Weight of juvenile hotspots
- Species identified in hotspots
- Other species present in survey data that are not at hotspot-levels of local abundance

Habitat metrics
- Habitat vulnerability
- Habitat type (substrate, energy/stability)
- Depth
- Data quality

Other metrics
- Species diversity
- Net revenue
- Protected resource considerations
Overlapping/adjacent juvenile groundfish areas, adverse effects areas, and DHRAs

- Bigelow Bight/Jeffreys Ledge areas adjacent; overlap existing WGOM habitat closure and SERAII DHRA
- Mass Bay and Stellwagen areas overlap; overlap existing WGOM habitat closure and SERAII DHRA
- Toothaker Ridge and Jeffreys Bank overlap slightly; both overlap existing Jeffreys Bank area
- Eastern Maine GMA and DHRA overlap
- Northern Edge GMA and Georges Shoal East adjacent; GMA overlaps with existing CAII habitat area
Coastal juvenile groundfish habitat option

• Alternative to individual coastal GOM areas
• Would extend to 90 m or 15 nm from shore, whichever is closer to the coast
• Includes hotspots for a wide array of groundfish species
• Overlaps with Mass Bay, Stellwagen, Bigelow Bight, Toothaker Ridge, Eastern Maine, and Machias areas.
Other considerations

- Overlaps with possible Dedicated Habitat Research areas (SERA II, E Maine)
- Overlaps with Habitat Areas of Particular Concern for juvenile cod approved by the Council during OA2 Phase 1
  - Great South Channel
  - Inshore GOM to 20 meters
    - mostly in state waters