Dredging Environmental Windows and Open-lake Placement of Dredged Material - An Update to the Great Lakes Dredging Team

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Environmental Windows

- Regroup and convene the Work Group
- Final manuscript on suspended sediment effects on early life stages of walleye submitted for publication
## Environmental Windows

### Summary Findings of 2007-2012 Research

<table>
<thead>
<tr>
<th>Measurement endpoint (lethal or sublethal)</th>
<th>Significant response to 72 hr exposure to total suspended solid concentration (mg/L) treatment in laboratory?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 (control)</td>
</tr>
<tr>
<td>Reference TSS concentration</td>
<td>Background ~25; storm events ~100 to 300</td>
</tr>
<tr>
<td>Field exposure?</td>
<td>NA</td>
</tr>
<tr>
<td>Egg hatch (%)</td>
<td>No</td>
</tr>
<tr>
<td>Egg mass (mg/egg-wet)</td>
<td>No</td>
</tr>
<tr>
<td>Egg viability (%)</td>
<td>No</td>
</tr>
<tr>
<td>Fingerling survival (%)</td>
<td>No</td>
</tr>
<tr>
<td>Fingerling gill lamellae (prop)</td>
<td>Yes*</td>
</tr>
<tr>
<td>Fingerling scoliosis (prop)</td>
<td>No</td>
</tr>
</tbody>
</table>
Environmental Windows

- New environmental window waiver policy in Ohio (Ohio Department of Natural Resources [ODNR])
  - New decision matrix for waiver requests
  - Conservatively applies criteria intended for environmental dredging (remediation) projects
  - While it allows for "environmental credits," it doesn't allow for consideration of new science
Open-lake Placement of Dredged Material

- Regroup and convene the Work Group
- Emerging, more risk-based evaluation approach (Joe Kreitinger’s presentation)
- Recent dredged material evaluations
  - Duluth-Superior Harbor
  - Cleveland Harbor (upper Cuyahoga River Channel)
Open-lake Placement of Dredged Material

- Open-lake Placement Summit Goals (proposed)
  - Communicate
    - Articulate and review Federal requirements used for decision-making
    - Define technical/scientific concerns used to establish State policies
  - Plan
    - Identify specific and measureable risk endpoints to focus technical discussion
    - Identify data gaps
    - Define research priorities
  - Execute
    - Synthesize information generated and conduct research
    - Provide recommendations to USACE, USEPA and State regulatory agencies
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Questions...