

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

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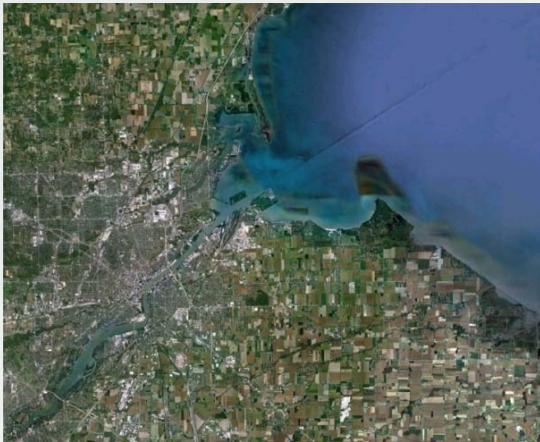


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Environmental Windows

- 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

Measurement endpoint (lethal or sublethal)	Significant response to 72 hr exposure to total suspended solid concentration (mg/L) treatment in laboratory?			
	0 (control)	100	250	500
Reference TSS concentration	Background ~25; storm events ~100 to 300			
Field exposure?	NA	No	No	No
Egg hatch (%)	No	No	No	No
Egg mass (mg/egg-wet)	No	No	No	No
Egg viability (%)	No	No	No	No
Fingerling survival (%)	No	No	No	No
Fingerling gill lamellae (prop)	Yes*	No	No	No
Fingerling scoliosis (prop)	No	Yes*	No	No

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? . . .



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