

Toledo Dredging Roundtable

Water Quality Standards and Beneficial Reuse

Maumee Bay State Park

March 10, 2009





What's the problem?

- Silt is the most common pollutant in Ohio.
- Impacts both water quality & habitat.
- Low levels of contaminants.
- Increases turbidity & resuspends.
- Degrades coarser substrates (sand & gravel).
- Good for carp, bad for walleye.

401 Water Quality Certification

- USACE submitted a 401 Water Quality Certification application to Ohio EPA January 8, 2003
- This represented an increase in the amount of open lake disposal

401 Water Quality Certification

- Ohio EPA issued a Water Quality Certification on June 3, 2003.
- This certification contained conditions to limit the amount of open lake disposal and to promote beneficial reuse of dredged material.
- The issuance of the certification was appealed on June 24, 2003.

401 Water Quality Certification

- USACE submitted a new application to Ohio EPA September 29, 2003.
- This represented the same increase in the amount of open lake disposal as the previous application.

401 Water Quality Certification

- Ohio EPA issued a Water Quality Certification on April 28, 2004.
- This certification contained 16 detailed conditions to limit the amount of open lake disposal and to promote beneficial reuse of dredged material.
- The issuance of the certification was appealed on May 27, 2004.

Resolution of 401 Appeals

- The Ohio Department of Natural Resources (DNR) submits a letter intent to cooperate on a Section 204 Project (Habitat Restoration) on May 24, 2004.
- A Memorandum of Agreement was signed by Ohio DNR, Ohio EPA, and the Buffalo District of USACE on July 7, 2005.

Resolution of 401 Appeals

- The Ohio EPA modified the 401 Water Quality Certification on July 14, 2005.
- Benefits of this resolution package:
 - Dredging can proceed
 - A specific beneficial reuse was identified
 - Specific roles for each agency were identified

Good News / Bad News

- Sediments are getting cleaner
- The USACE application submitted on August 7, 2007 requested an increase in the amount of open lake disposal.
- The 401 Water Quality Certification issued on May 15, 2008 allowed up to 900,000 CY of dredged material in calendar year 2009.

Next Steps at Ohio EPA

- A series of rules were sent out for Interested Party Review by Ohio EPA on August 15, 2008.
- These rules included changes to the Water Quality Standards (WQS) for Lake Erie.
- These rules generated significant public comment unrelated to the WQS change for Lake Erie

Water Quality Standards Rules

- The Lake Erie WQS (OAC 3745-1-31) were reissued on March 3, 2009 as part of a reduced rule package
- Comment Period closes on April 17, 2009

Effective January 1, 2011, open lake disposal of dredge material in Ohio waters of the Western Lake Erie basin shall be limited to a maximum of fifty thousand cubic yards per applicant per any twelve month period. The Western Lake Erie basin is the area of Lake Erie west of a line drawn from Pelee Point, Canada to Scott Point on Catawba Island. All applicants wishing to dispose of dredge material in Ohio waters of the Western Lake Erie basin in the amounts limited by this paragraph shall seek authorization in accordance with Chapter 3745-32 and rule 3745-1-05 of the Administrative Code.



<http://www.epa.state.oh.us/dsw/>

Toledo-Lucas County Port Authority Beneficial Reuse Projects

- NuSoil Production - Since 2000, the Port Authority has been blending dredged material with solids from the Toledo WWTP to produce a bulk material that can be used in parks and highway buffer zones for a variety of landscape features.

Toledo-Lucas County Port Authority Beneficial Reuse Projects

- Mine Reclamation Project - Funding is being sought to use dredged material for strip mine reclamation in eastern Ohio. The project is estimated to utilize approximately 200,000 cubic yards of dredged material. If successful, this concept could also be employed to restore old quarry operations.

Toledo-Lucas County Port Authority Beneficial Reuse Projects

- Soils+ Production - dredged material is blended with power plant ash to produce a high quality building material. When completely developed, this project could utilize 200,000 cubic yards of dredged material annually.
- Ohio EPA approved the land application management plan on January 23, 2009

Toledo-Lucas County Port Authority Beneficial Reuse Projects

- Other Blending Opportunities - Private individuals and local business have obtained dredged material for other blending projects. One process currently being tested is using the fine grained dredge material for brick production.

Other Beneficial Reuse Projects

- The City of Oregon is proposing to utilize dredged material to restore a 57 acre industrial site (Wynn Road Section 204 RSM Project)
- The State of Ohio is working with the USACE on developing a habitat restoration project (Maumee Bay Section 204 RSM Project)