Cleaning up the Ottawa River

A Recent History

Kurt Erichsen
VP Environmental Planning
Toledo Metropolitan Area Council of Governments
Cleaning up the Ottawa River

- Cleanup > 15 year process
- Recap of what’s been done
- Several speakers tonight on current projects
Fish Impacts

- **OEPA Advisories**
  - Do not consume fish
  - Do not swim or wade
  - Ottawa River RM 0-18

- **Fish PCBs 0.17-1.06 ppm**

- **Tumors, eroded fins, other fish anomalies common**
Narrowing in on contaminants:
What? Where? How deep?

- Late 1980s: we knew we had a problem — didn’t know for sure what or where
- 1990s: site investigations, source cleanups
- 1992-2002: Riverwide bioassays, sediment cores
- 2002-2004: Lagrange-Stickney study

Speakers tonight on:
- 2005-2007: Stickney Depositional Zone study
- 2005-2006: Lagrange-Stickney-Sibley sediment grid
The sources

- 7 old landfills / contaminated sites in immediate area
- Multiple sources of contaminants
- Cleanup projects by City of Toledo, US EPA, OEPA, and dozens of businesses
Tyler Landfill

- 77 acre landfill operated by the City of Toledo early 1950s to 1968.
- $24 million
Textileather / Gencorp

- 40-acre RCRA facility, plastic coated fabrics
- PCB remediation: 114 rail cars of contaminated sediment / soil transported to TSCA facility
- Storm sewer between site and “Unnamed Tributary” power washed to remove sediment containing PCBs. 123,000 gallons treated
- $6-$8 million
Fraleigh Creek

- “Unnamed Tributary” flowed through property adjacent to the Textileather site.
- Remediated in 1998, rerouting 5 storm sewers
- The new Fraleigh Creek, eliminated “unnamed tributary”
Dura Landfill

- 70-acre site operated from 1952 to 1980
- Municipal, commercial and industrial wastes
- Wall along river 780’ x 40’ high, 30’+ into ground
- 2001 landfill cover installed, completing the remediation
- $8.5 million
Stickney Landfill

- 55 acre site: municipal, commercial & industrial landfill from 1958 to 1966
- Leachate outbreaks along entire streambank
- Stickney/Tyler Administrative Group (20 PRPs) capped the site in 1998
Royster

- Fertilizer facility 1900-80, salvage yard 1980s-90s.
- 100,000 cy solid waste and 75,000 cy of contaminated soils removed
- Asbestos, storage tanks removed 1998-9
- $2.3 million
XXKem

- 13 acre hazardous waste facility: reclaiming and recycling chlorinated solvents 1959-1986

- Pump & treat groundwater remediation system installed by City of Toledo. Operated until January 2004, when EPA allowed it to discontinue.
The sources: conclusion

- Remediation process: about 15 years
- Total cost so far over $50M
- Source controls in place or underway at these sites
The sediments

- Chemicals from sites drained into the river
- Sources addressed, but chemicals remain in river sediments
- Next step is cleaning up the sediments
Sediment PCBs
Risk Assessments

- Human and Ecological Health Risk Assessments, 2001
- What do we need to be most concerned about?
Eating fish is the primary risk.

Cancer risks to individuals who consume fish

Water & sediment contact cancer risks not significant.

Total PCBs and lead highest risk, followed by PAHs

Stickney-Lagrange reach has greatest risk to wildlife
Lagrange-Stickney Study (2004)

- Roughly 13,400 cy sediment to remove & dispose of
- $5.13 - $6.42 M
- "based on data available" — improved on by 2005-6 US EPA study
Great Lakes Legacy Act
Ottawa Proposal 2004-7

- Congress authorized $50M/year for 5 years to clean up stream sediment
- City of Toledo, TMACOG, Hull submitted “Legacy Act” proposal in ’04
- Legacy is an important funding source, but not the only one
- Another speaker will discuss funding options
Tonight’s Speakers

2005 Sediment Grid

Stickney Ave Depositional Zone

Sibley Creek

Funding options