

COLUMBIA SLOUGH SCREENING LEVEL RISK ASSESSMENT

Results:

- 1994-1995: 300 “sites” evaluated
- 16 general areas were identified from the site survey with $RQ > 1.0$
- Interim remedial measures (IRMs) taken at the 16 sites:
 - Source removal or control (e.g., PCBs at Nu-Way Oil Recycling)
 - “Institutional control” of exposure (e.g., posting signs, community education)
- For areas with intermediate RQs ($0.1 < RQ < 1.0$) detailed follow-up: Remedial Investigation and Feasibility Study or RI/FS
- Buffalo Slough was first full RI/FS

SAMPLING BUFFALO SLOUGH

- Sediments sampled at 49 locations
- Samples of top 5 cm and also top 30 cm
- 62 chemicals of potential concern (COPCs) analyzed. These were chosen from results of the SLRA.
- Pore (interstitial water) collected at 13 locations for 32 COPCs.
- Fish tissues analyzed for five lucky carp for 39 COPCs. Looked at “whole fish” and at “fillets”

EXPOSURE PATHWAYS

- Direct exposure to sediments (skin contact or accidental ingestion)
- Exposure to contaminated water (dermal and ingestion)

Both these were negligible pathways.

- People who eat fish fillets (“general population”)
- People who eat whole fish (“high-use population”)

Total human exposure =
(COPC conc.) x (fish eaten) x (years)

Ranges of all three variables considered.