



Dredging and Material Management of a Superfund Alternative Project Located Within a Historic Town



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Overview

- Site Background and Description
- Objective
- Dredging and Material Management Activities
- Lessons Learned



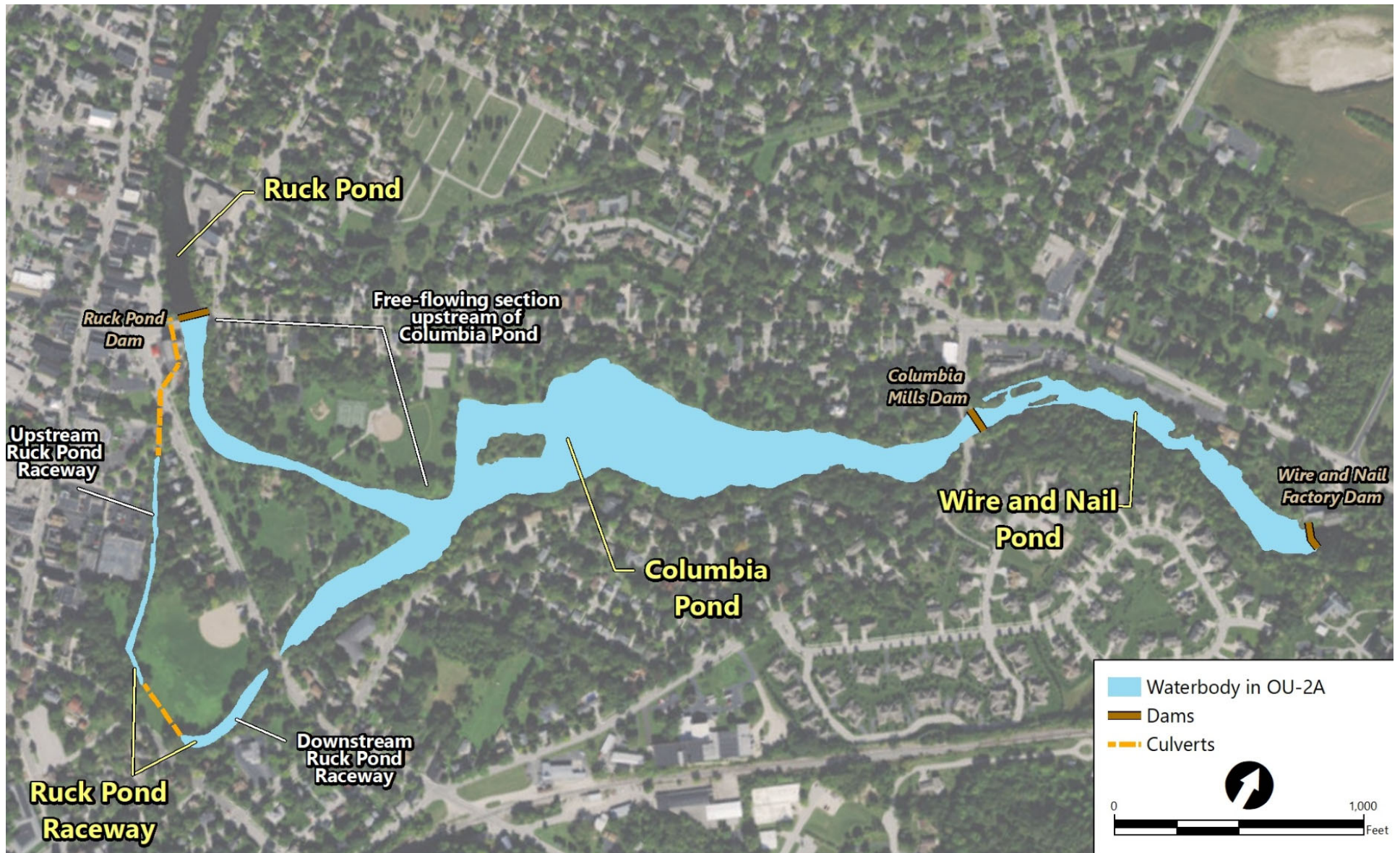
Site Background and Description

Site Background

- Part of Cedar Creek Superfund Alternative Site
- PCBs entered Cedar Creek through stormwater connections
- Project implemented as a Non-Time-Critical Removal Action (NTCRA)



Cedar Creek Site – Operable Unit 2A



Objective



- Remove more than 70,000 cy of sediment and soil
- Maintain separate waste streams for TSCA and non-TSCA material
- Complete project in two seasons

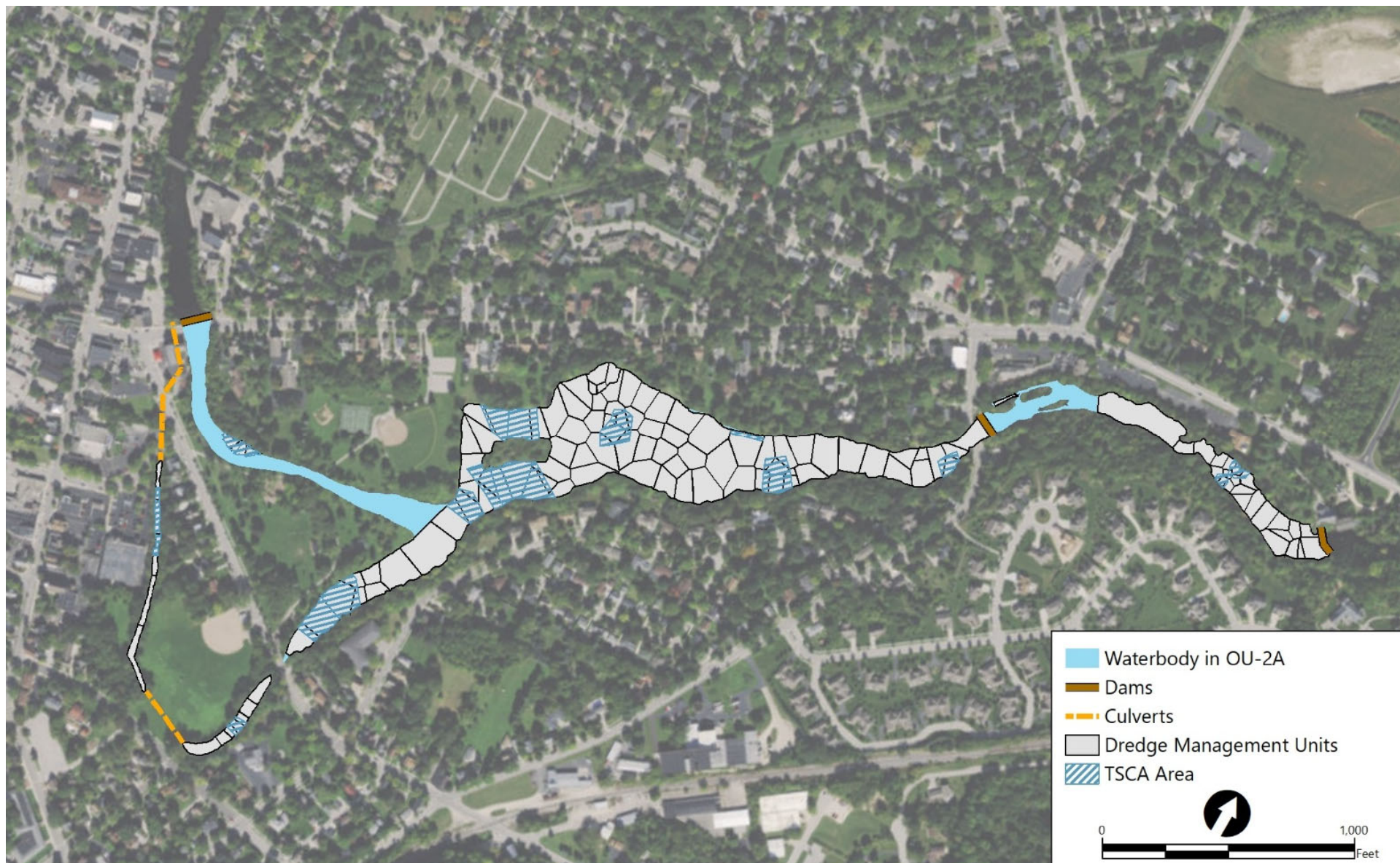
Dredging and Material Management Activities

J.F. Brennan Selected Contractor

- Infrastructures Alternatives, Inc. performed dewatering and water treatment
- Rams Contracting, Ltd assisted with clearing and grubbing, excavation, and trucking



Intermixed TSCA and Non-TSCA Material





Removal in Ponds

- 8-inch hydraulic dredges
 - Cutterhead
 - Vic Vac attachment
- More than 67,000 cy removed with average rate of 425 cy/day

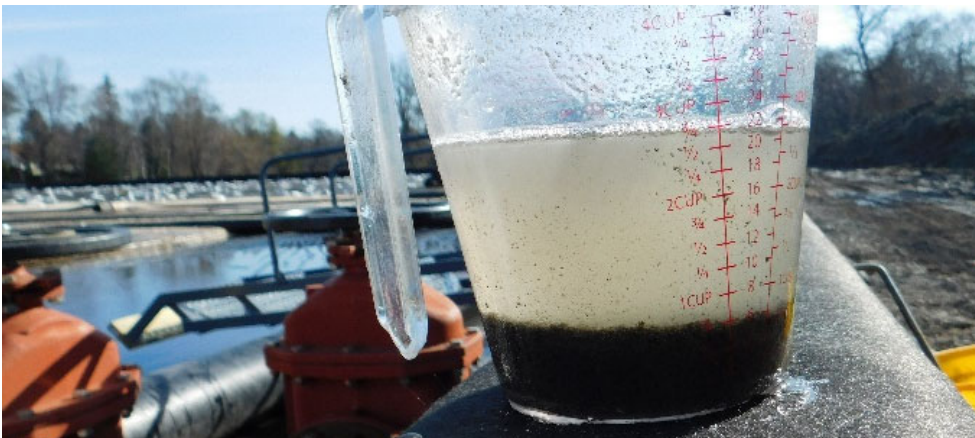
Managing Waste Streams: From Water

- Pre-planned operations for efficiency of waste stream-specific removal
- Used customized software for operator visibility of removal operations
- Mapped sediments throughout removal



Sediment Processing Area





Managing Waste Streams: From Land

- Processed flow from both dredges (3,000 gpm)
- Maintained separate TSCA and non-TSCA geotextile tube areas
- Conditioned slurry to optimize dewatering



Water Treatment

- Treated contact water with 3,000-gpm water treatment plant
 - Clarification
 - Filtration
 - Carbon absorption
- Discharged back to creek

Sediment Loadout

- Transferred material from tubes to trucks with material handlers
- Coordinated loadout for three separate disposal facilities



Lessons Learned

Lessons Learned

- Management of separate waste streams
 - Planned removal operations to maintain efficiency
 - Used engineering and administrative controls on slurry lines
 - Accurate chemical conditioning was key to sediment dewatering



Lessons Learned (cont.)

- Small remediation support footprint
 - Managed trucking and deliveries
 - Maintained tight tolerances on pad, sump, and haul road sizes
 - Stacked geotextile tubes to minimize footprint



Lessons Learned (cont.)

- Disposal of dewatered material
 - TSCA risk-based disposal option reduced total trucking mileage
 - Understanding landfill planned operations are key with unmeasurable “workability” criteria



Questions/Discussion

