

# Tittabawassee River, Saginaw River & Bay Site Major Tasks and Timeline

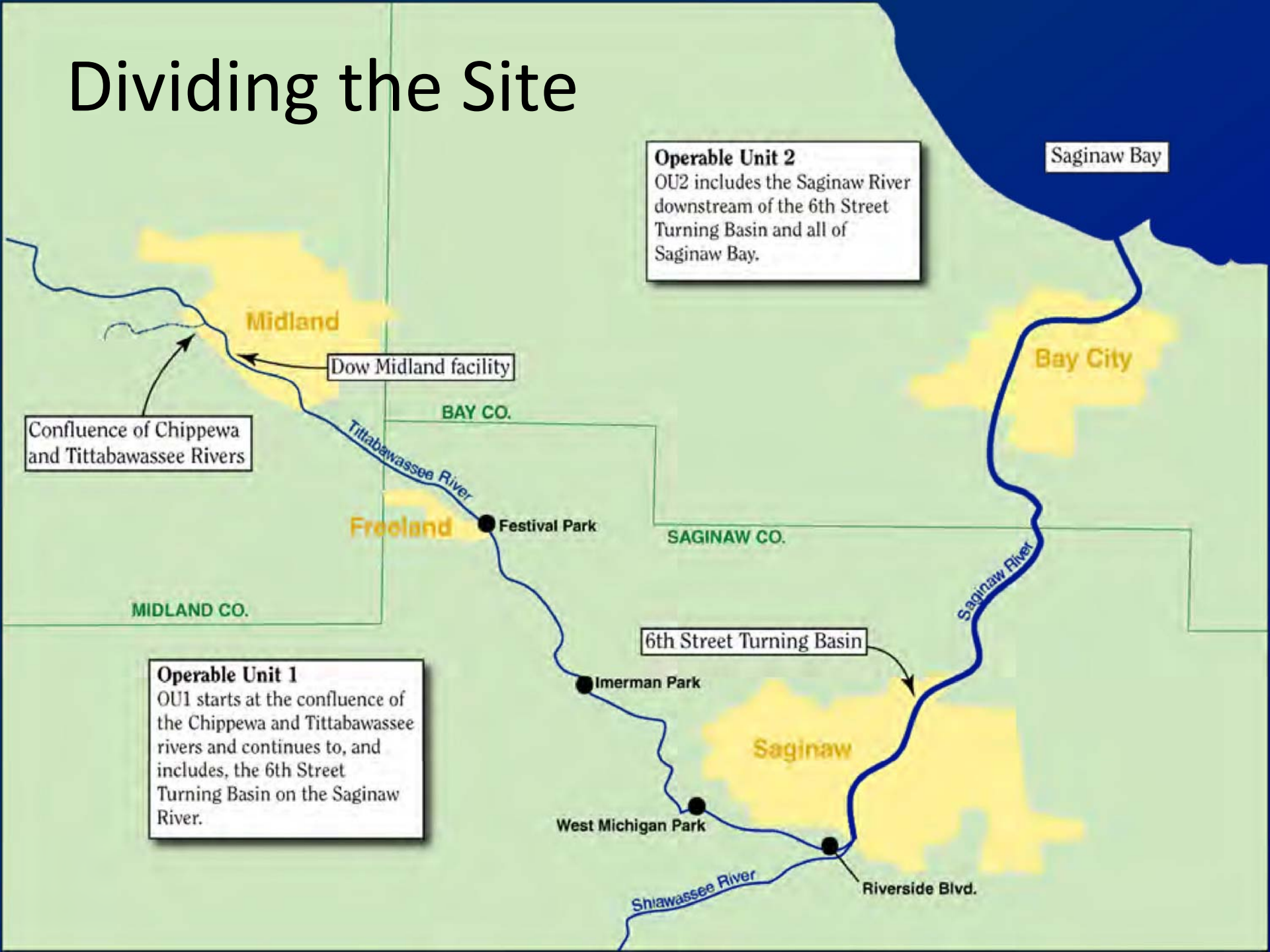
Mary P. Logan – U.S. EPA  
CAG Meeting – March 15, 2010



# CAG Feedback

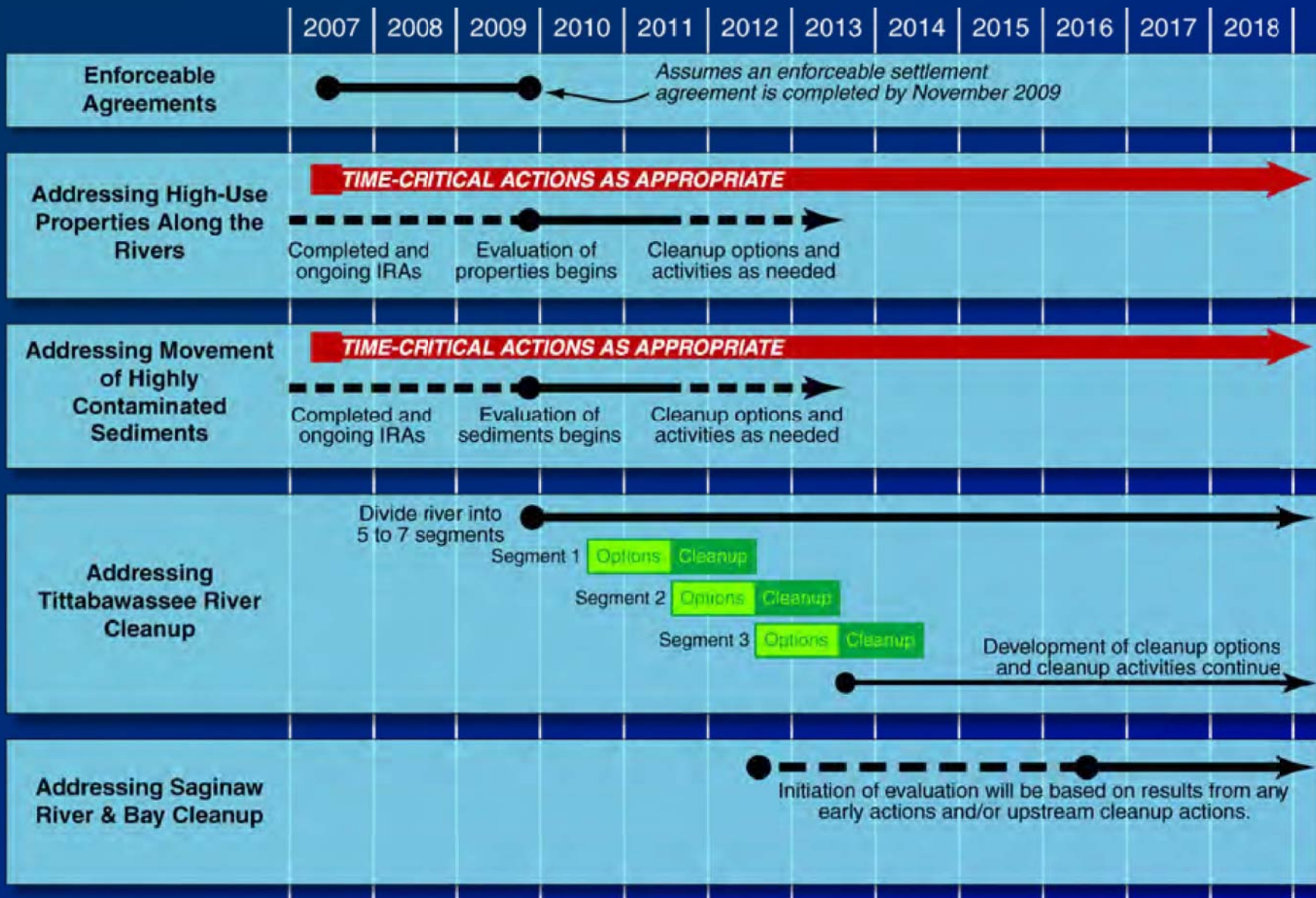
- Discussion and questions on work to be conducted
- General feedback on timing of the work
- General feedback on factors that may be used to segment the Site

# Dividing the Site



# Major Work

- Three major Tasks
  - Exposure control at high-use properties (Task 1)
  - Controlling major contaminant transport (Task 2)
  - Segment-by-segment approach (Task 8)
- Each of these Tasks will be phased
- Work on each will occur concurrently



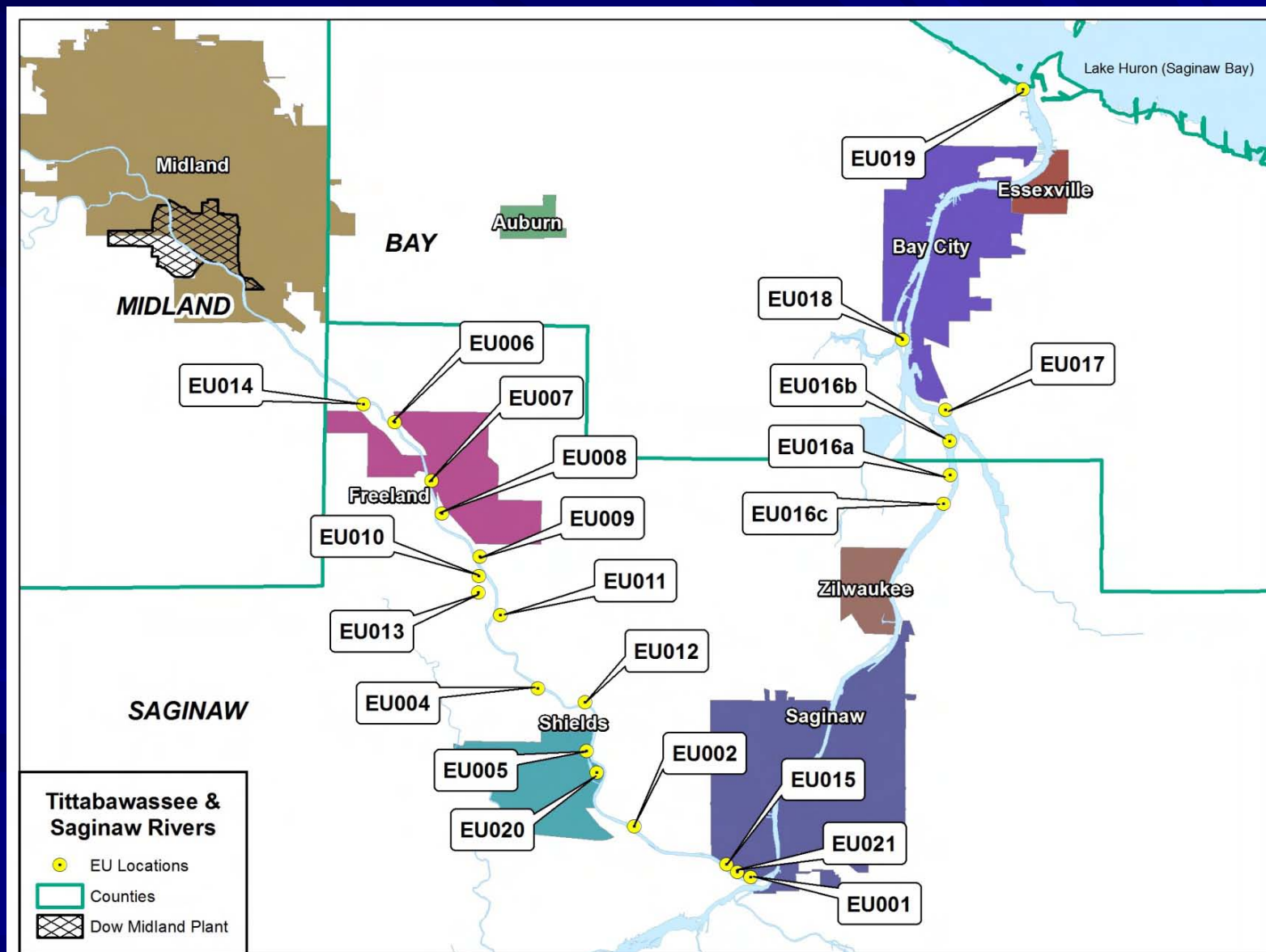
# Key Objectives for Task 1

- Develop options to address potential acute or near-term exposure risks
  - Focus on areas of high human use
  - Focus on exposure control
  - Not intended to be comprehensive cleanup
- Balance – benefits of early action vs. comprehensive segment cleanup

# Exposure Units (EUs)

- EPA and MDEQ identified EUs in early to mid-2008, using:
  - Data available at the time (Dow's and MDEQ's)
  - Information about previous flooding (and assumptions about potential contamination)
  - Topography
  - Property use designations
- EUs → 4 - 15, 20, and 21 (Tittabawassee); and 16 - 19 (Saginaw)

# General Location of Exposure Units



# Task 1 Sequencing

Do we know enough about:

Then:

Contaminant distribution,  
actual property use and  
conditions, and effectiveness of  
any existing exposure controls?

YES

Develop response  
options (Task 1.4)

NO

Contaminant distribution?

YES

Assess property use and  
conditions, and existing  
controls (Task 1.3)

NO

Fill data gaps (Task 1.2)

# Task 1 Work and Timeline

Work	Approximate Date
Draft Technical Memorandum sequencing areas	Late March 2010
Draft response options report (Task 1.4 areas)	Summer (July) 2010
EPA proposes response options to public for comment (Task 1.4 areas)	Late 2010
EPA selects response actions (Task 1.4 areas)	Early 2011
Selected response actions designed and ready to implement (Task 1.4 areas)	Fall 2011
Draft Assessment Report (Task 1.3 areas)	Summer 2010
Draft Data Gap Work Plan (Task 1.2 areas)	Spring 2010

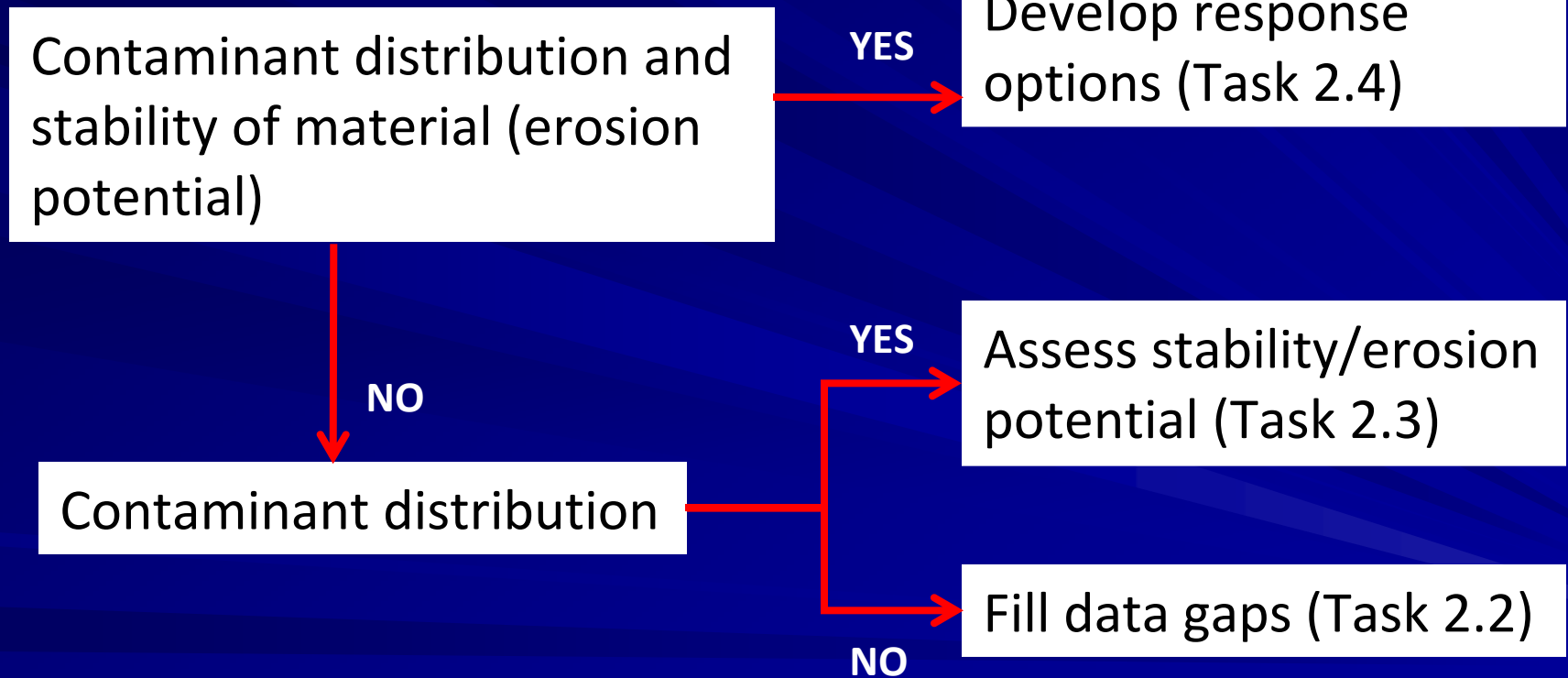
# Key Objectives for Task 2

- Develop options to address potential acute or near-term contaminant transport risks
  - Focus on highly eroding areas and surface areas that are highly contaminated
  - Not intended to be comprehensive cleanup
- Balance – benefits of early action vs. comprehensive segment cleanup

# Task 2 Sequencing

Do we know enough about:

Then:



# Task 2 Work and Timeline

Work	Approximate Date
Draft Technical Memorandum sequencing areas	Mid-April 2010
Draft response options report (Task 2.4 areas)	Summer (August) 2010
EPA proposes response options to public for comment (Task 2.4 areas)	Late 2010
EPA selects response actions (Task 2.4 areas)	Early 2011
Selected response actions designed and ready to implement (Task 2.4 areas)	Fall 2011
Draft Assessment Report (Task 2.3 areas)	Fall 2010
Draft Data Gap Work Plan (Task 2.2 areas)	Spring 2010

# Segment-by-Segment Approach

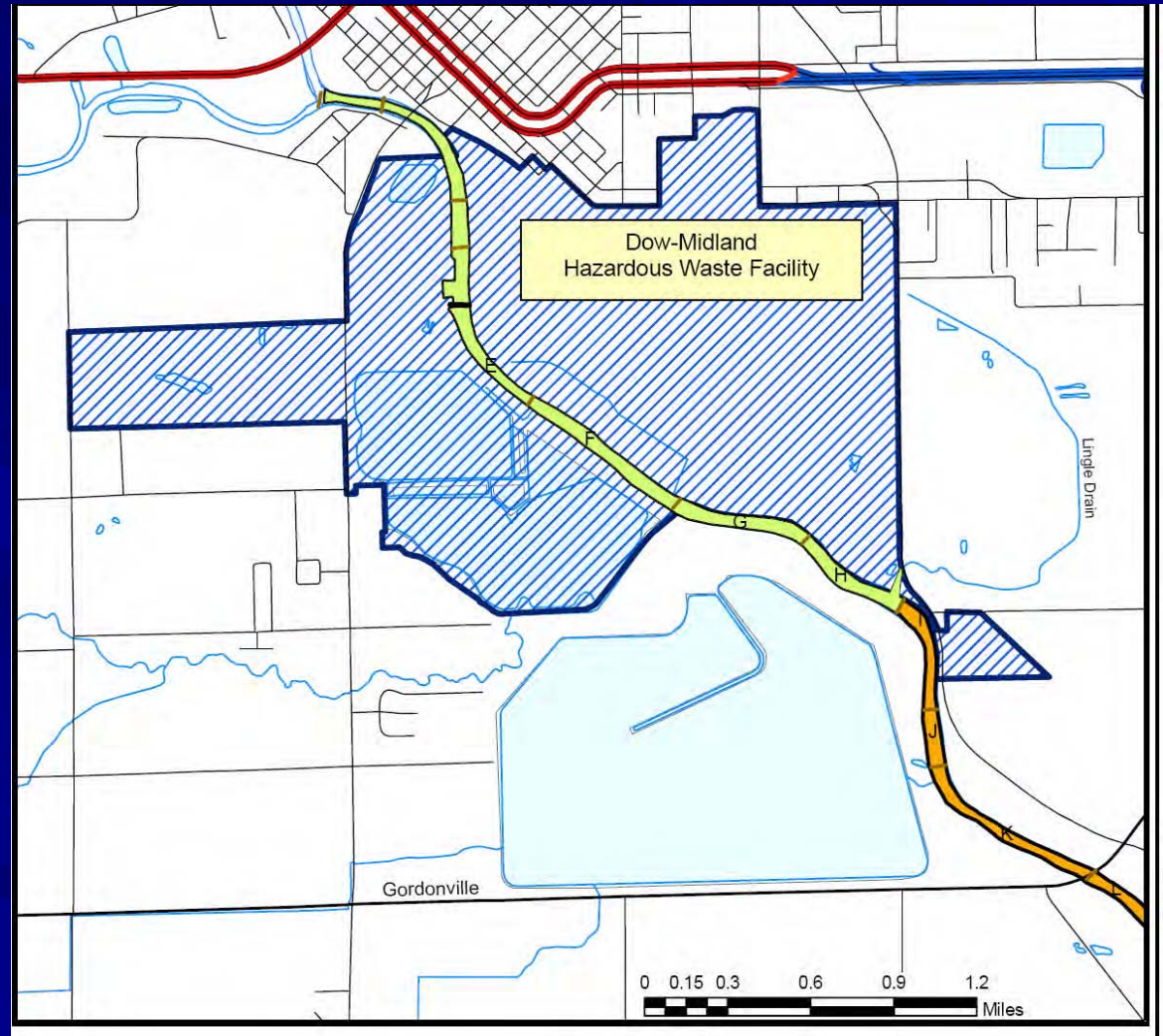
- Divide OU 1 into manageable segments
- Upstream to downstream approach
- Segment-Specific Response Proposals (Task 8)
  - Build on existing work, filling data gaps as needed
  - Response actions may be performance-based
  - Options evaluated against established criteria

# Key Objectives for Task 8

- Comprehensive response options for the entire segment
  - Floodplains
  - Sediments
- Overarching goals:
  - Reduce movement of contaminants that may contribute to unacceptable risks.
  - Reduce unacceptable human health and ecological risks.

# Tittabawasse River – Segment 1

- Segment 1 has been defined
- Three miles next to the Midland plant
- Unique conditions in this segment



# Dividing the Rest of OU 1

- Upper Saginaw River (~ 5 miles) – proposed final segment
- Remaining 21 miles of Tittabawassee River needs to be divided
- Timing and schedule will important considerations

# Dividing the Site

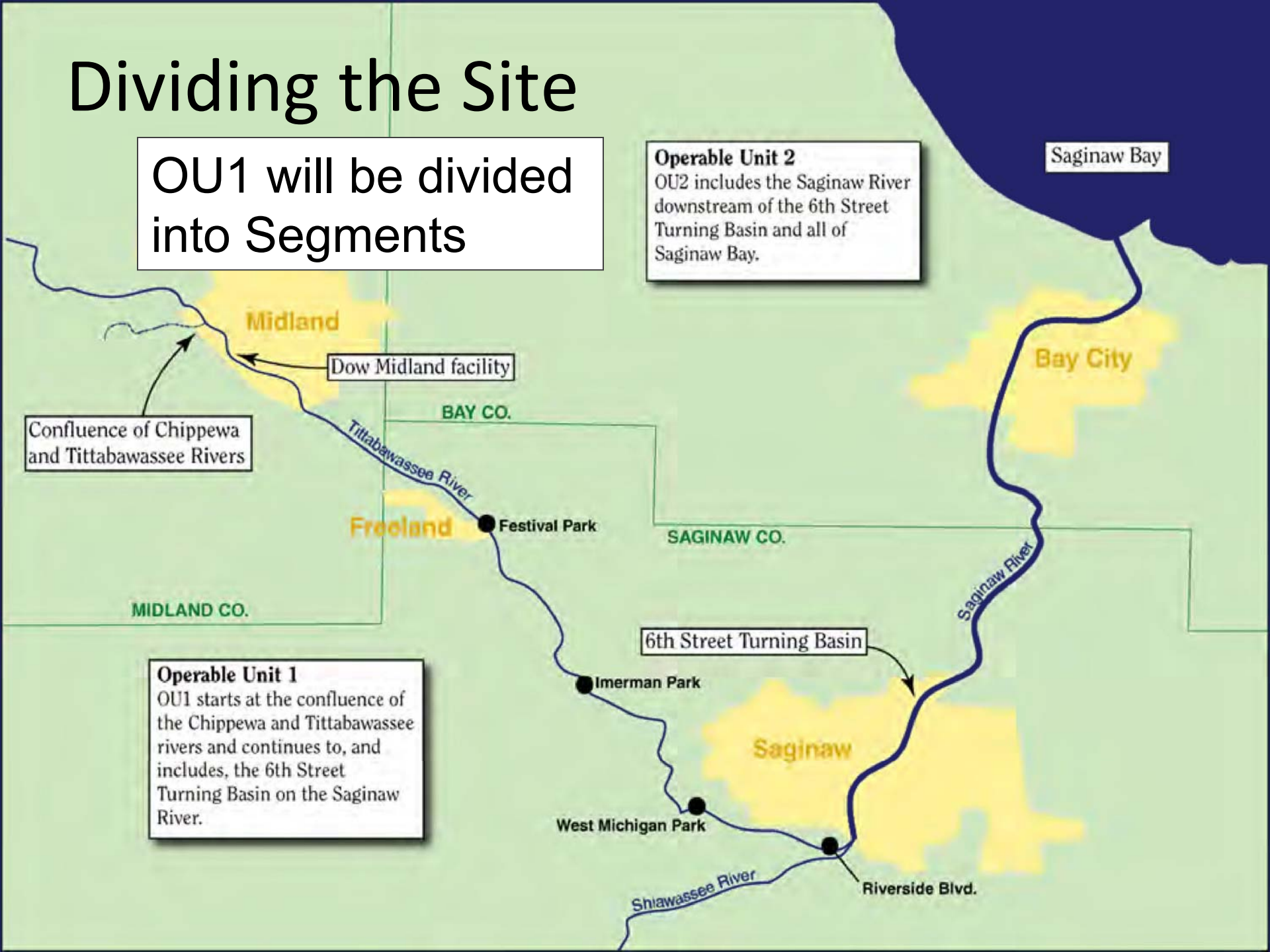
OU1 will be divided into Segments

## Operable Unit 2

OU2 includes the Saginaw River downstream of the 6th Street Turning Basin and all of Saginaw Bay.

## Operable Unit 1

OU1 starts at the confluence of the Chippewa and Tittabawassee rivers and continues to, and includes, the 6th Street Turning Basin on the Saginaw River.



# Proposed Criteria to Help Define Remaining OU 1 Segments

- Floodplain land use
- Location of EUs
- Number of properties
- Floodplain surface contaminant concentrations
- River miles
- Physical features (bridges, dams)
- Political boundaries
- Bank features
- Floodplain acres
- Others?

# Segment 1 Work and Timeline

Work	Approximate Date
Data Gap identification (if any) and collection	Summer 2010
Draft Segment-Specific Response Proposal	November 2010
EPA proposes Segment 1 response options to public for comment	Spring 2011
EPA selects response actions for Segment 1	Summer 2011
Selected response actions designed and ready to implement	Fall 2012