

Tittabawasse River, Saginaw River & Bay Site



Project Summary and CAG 2015 Involvement

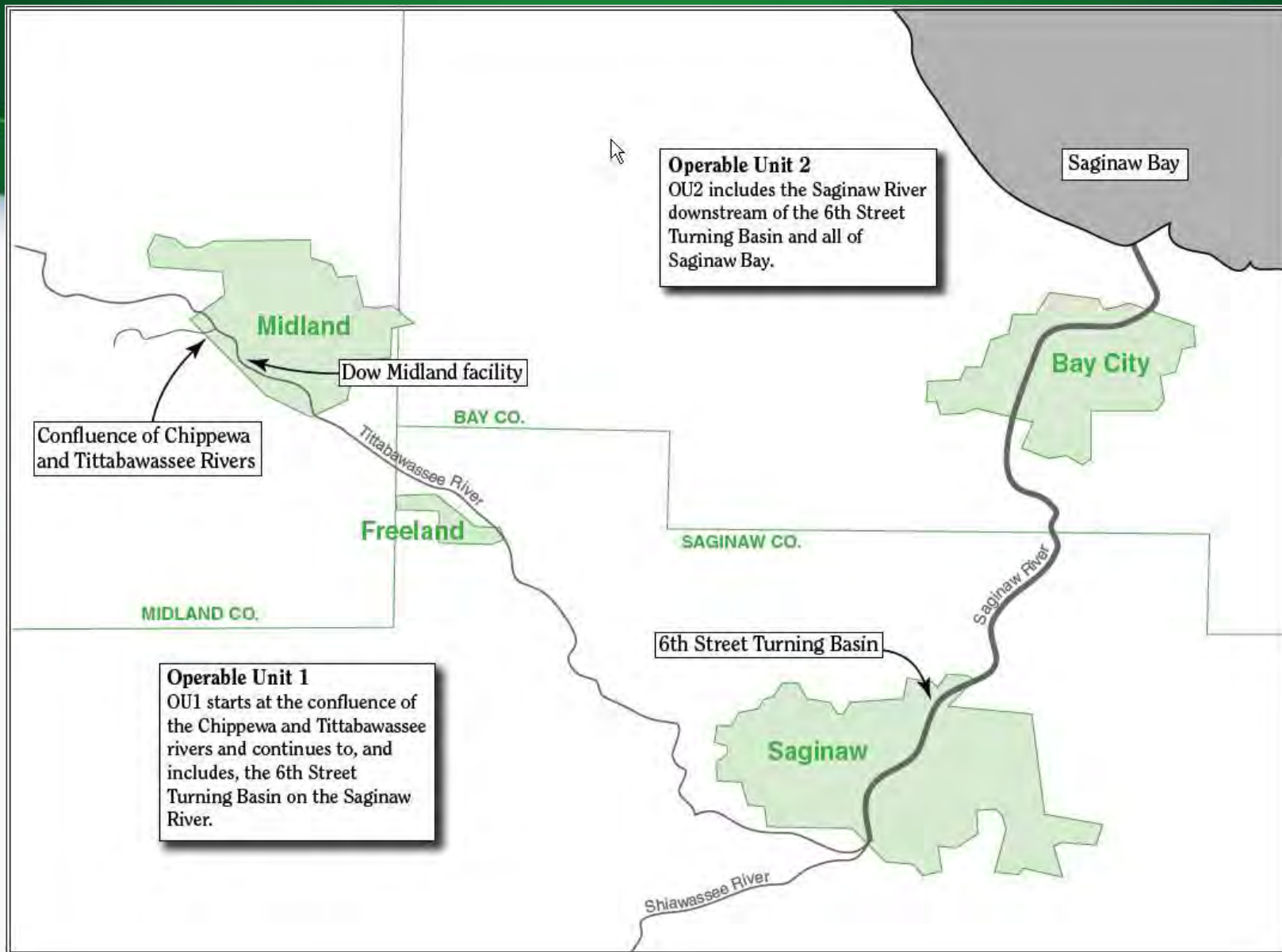
Mary Logan – U.S. EPA

*CAG Meeting
November 17, 2014*

Outline

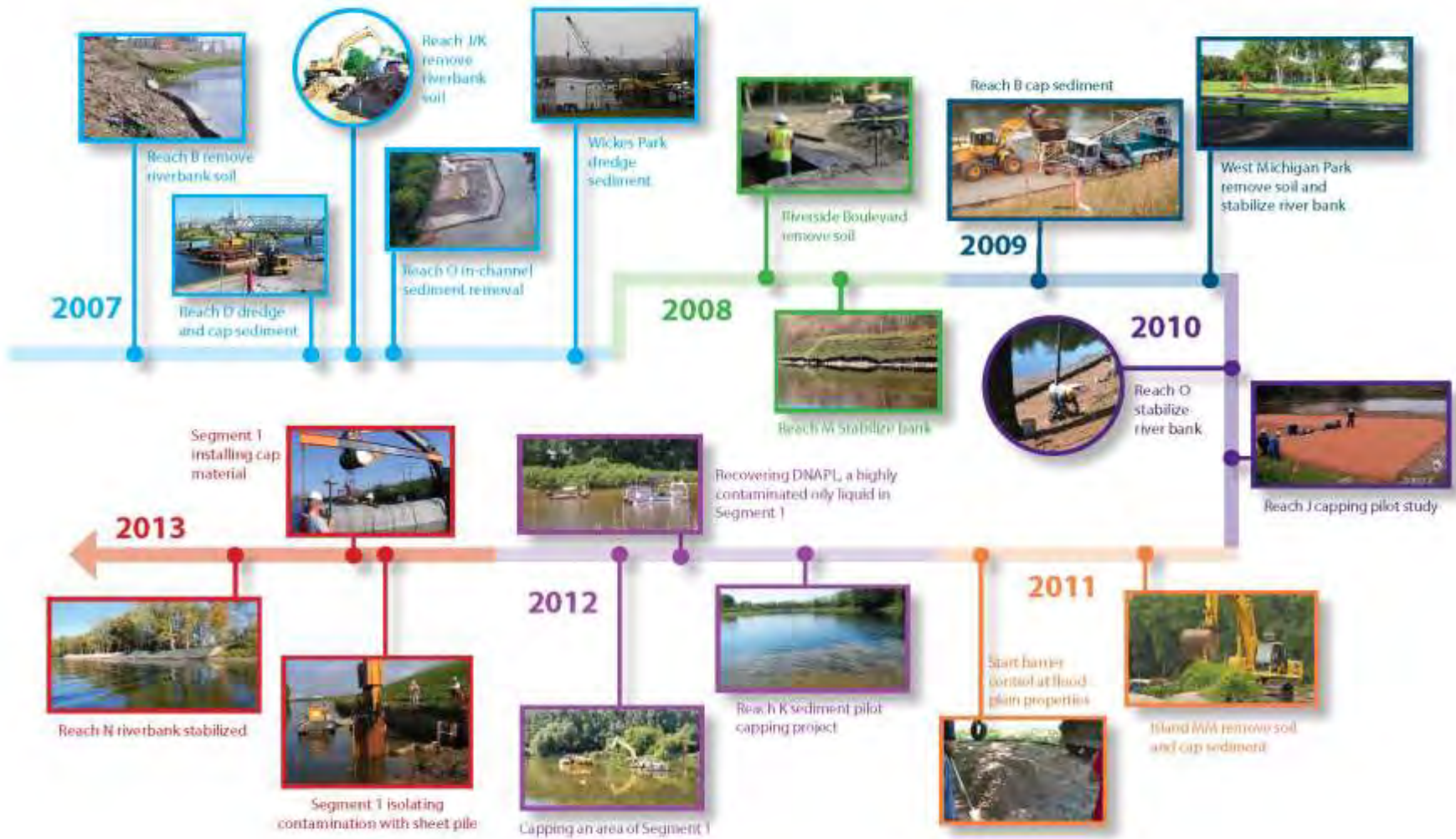


- Review of overall site progress
- 2014 accomplishments
 - Segment 2, Phase I construction
 - Tittabawassee River Floodplain proposal
- Expected 2015 actions
 - Begin Floodplain cleanup
 - Propose Segment 3 plan
- CAG potential involvement on 2015 projects



Site Operable Units - OUs

EPA Tittabawassee River, Saginaw River and Bay Cleanup Progress



Segment-by-Segment Progress

Segment 1

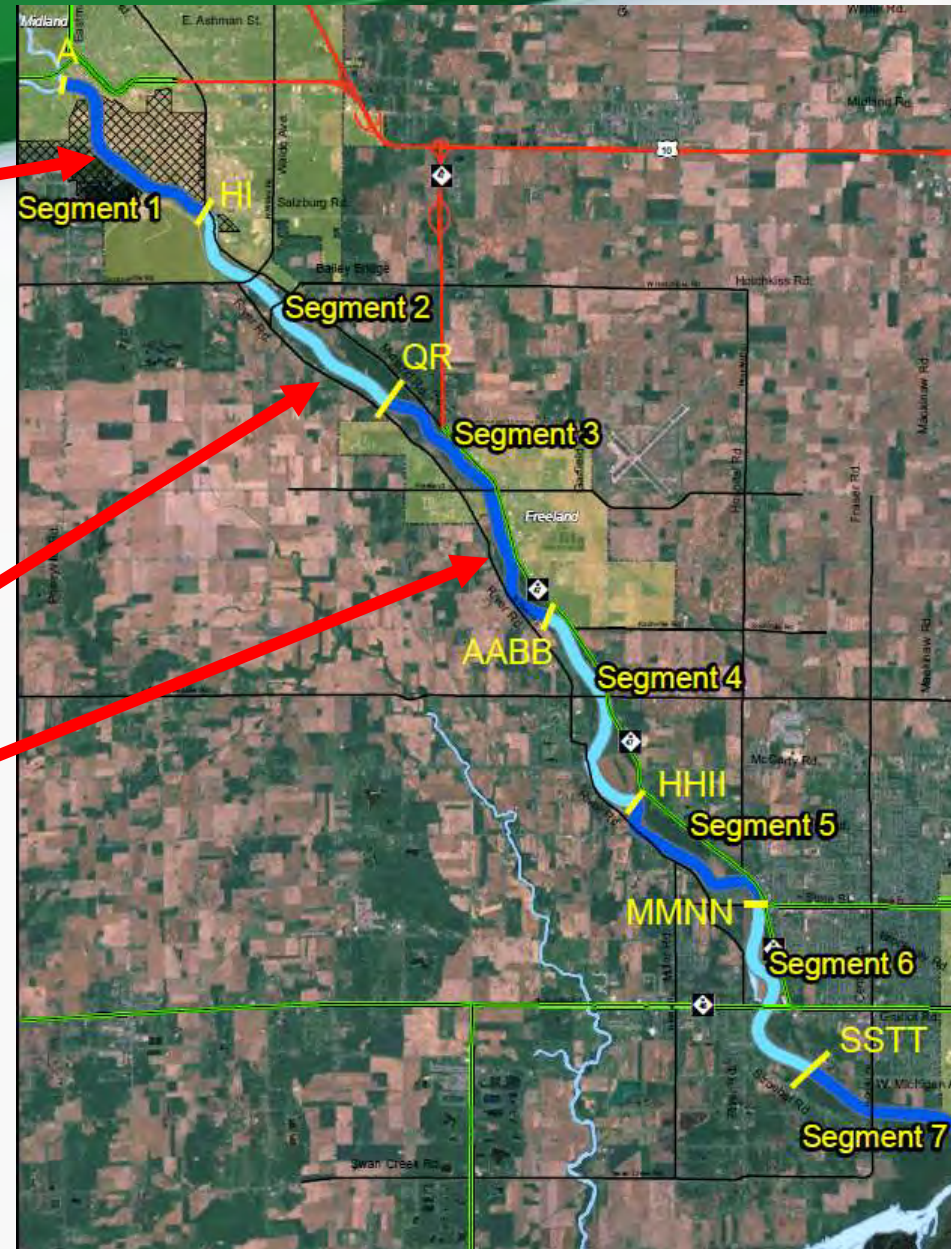
- 2011 – Cleanup proposed and selected
- 2012-2013 – Cleanup
 - SMAs capped/isolated
 - ~ 4,200 gallons of DNAPL recovered
 - 2014 – continue to recover DNAPL from a shore-based well

Segment 2

- 2013 – Cleanup proposed and selected
- 2014-2015 – Cleanup

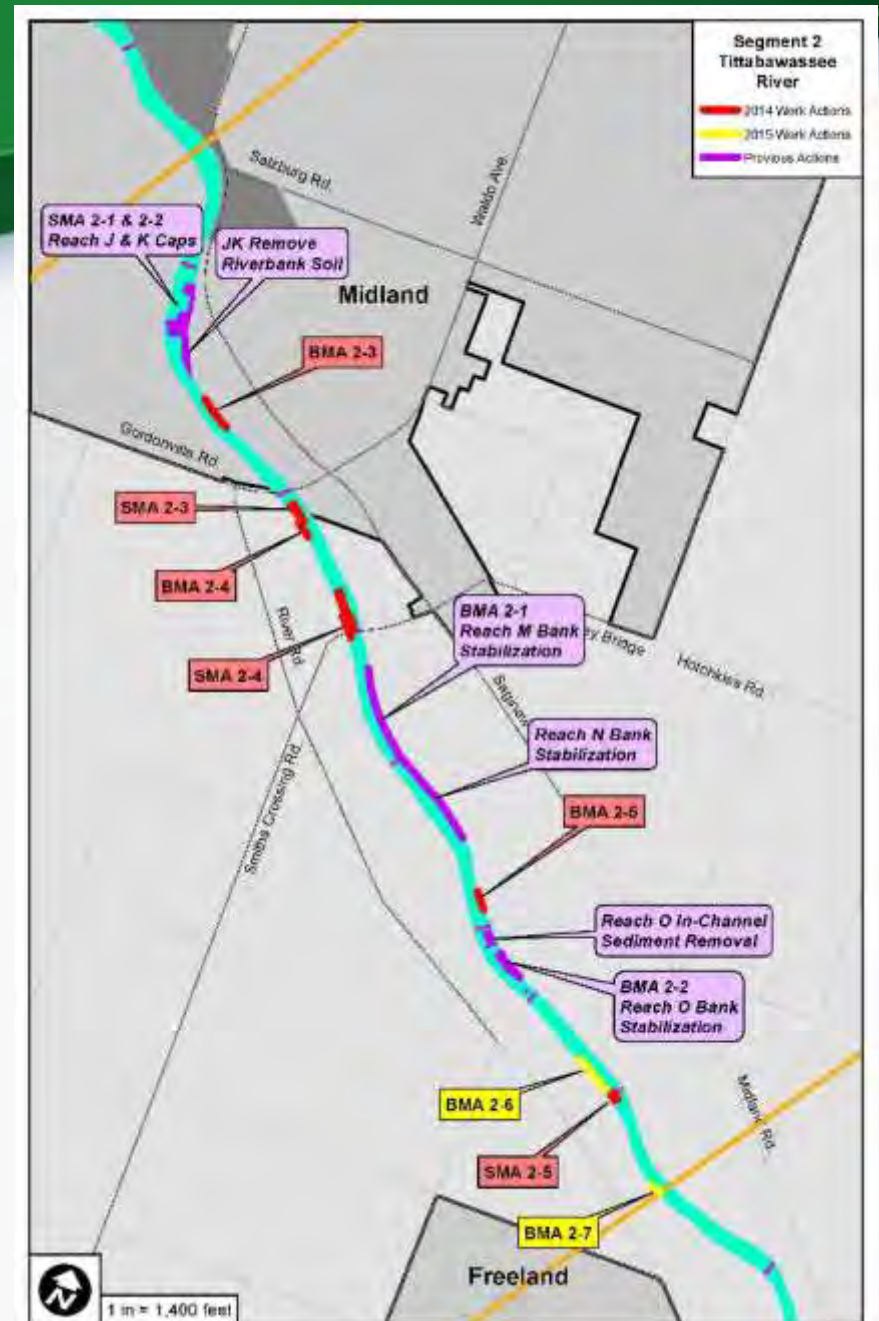
Segment 3

- 2015 – Cleanup proposal expected
- 2016 – Cleanup expected to start



Segment 2 – 2014 and Beyond

- Previous work areas – monitoring continues
- 2014 – Work completed:
 - SMAs 2-3, 2-4 & 2-5
 - BMAs 2-3, 2-4 & 2-5
- BMAs 2-6 and 2-7 still to be completed



Tittabawasse River Floodplain

EPA proposed a cleanup plan for Tittabawasse River Floodplain (August 2014) that focuses on:

- Frequently flooded area along the lower 21 miles
- About 4,500 acres in the 8-year floodplain
- Dioxins, primarily furans are the contaminants of concern
- Not all areas will need cleanup

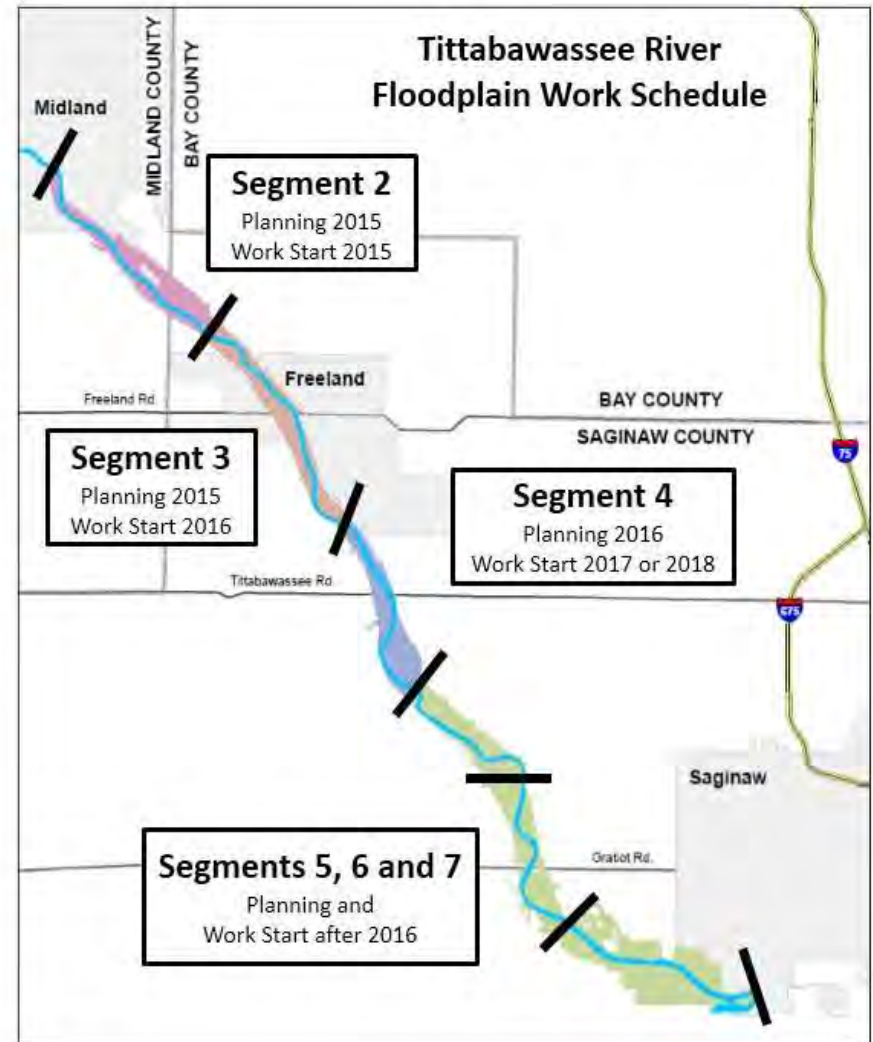


Tittabawasse River Floodplain

- EPA's proposed cleanup plan includes:
 - **Maintained Residential Areas**: If dioxin levels are greater than 250 ppt, soil will be dug up and hauled away. Soil will be replaced and grasses and plants restored.
 - **Other Land Use Areas**: If dioxin levels are greater than 2,000 ppt, soil will either be dug up and hauled away or covered with clean materials. EPA will work with each property owner on the right approach.
- EPA currently evaluating comments

Tittabawasse River Floodplain

- The scope of EPA's proposed cleanup includes:
 - > 700 property parcels to be evaluated
 - Large parcels may be subdivided for the assessment
 - > 500 parcels with dwellings
 - > 600 owners to work with
- Anticipate work to begin in Segment 2 floodplain areas in 2015
- Each floodplain segment cleanup expected to take 1-2 years



Segment 3 Going Forward in 2015



- Segment 3
 - Begins about 7.2 miles downstream of the Tridge
 - Includes ~ 4.2 miles
 - Dioxins (primarily furans) expected to be the cleanup driver
 - Currently identifying Sediment Management Areas (SMAs) and Bank Management Areas (BMAs)
- Segment 3 expected schedule
 - Anticipate proposal to public summer 2015
 - Anticipate cleanup start in 2016

Hwy 47

Festival Park

Freeland RD

Segment 3
Tittabawassee River
— Reach

Notes:
Aerial Imagery - Microsoft 2010



About 4.2 miles
Reaches R - AA

What's Next?

Project Area	2013	2014	2015	2016
Segment 1	Finish field work			
Segment 2	Propose cleanup plan to public Finalize cleanup plan	First season of field work (anticipate two field seasons)	Finish field work	
Tittabawassee River Floodplain	Engage floodplain stakeholders Develop cleanup plan	Propose cleanup plan to public Finalize cleanup plan	First season of field work (Segment 2 FP)	Second season of field work (Segment 3 FP?)
Segment 3		Develop cleanup plan	Propose cleanup plan to public Finalize cleanup plan	First season of field work

Potential CAG Involvement in 2015



- Segment 3 proposed cleanup plan
 - Informal feedback on options
 - Formal comments during comment period
- Tittabawassee River Floodplain
 - Informal feedback
- Are there other site-related issues for CAG involvement?



QUESTIONS/COMMENTS