

Tittabawassee River, Saginaw
River & Bay Site

**TITTABAWASSEE RIVER FLOODPLAIN
SOILS
OUTREACH STRATEGY**

Diane Russell – U.S. EPA

CAG Meeting
March 18, 2013

Goals for This Presentation

- Provide information to CAG on upcoming outreach efforts
- CAG input on 3 primary outreach goals
- CAG input on how to maximize outreach effectiveness

Approach to Tittabawassee River Floodplain Cleanup

- For Segments 2 – 7, cleanup options for in-channel sediment and river banks will continue to be developed, selected, and implemented in an upstream-to-downstream fashion, segment-by-segment.
- Cleanup options for TR floodplain soil will be developed and selected for the entire floodplain at one time.
 - implement the cleanup along with the adjacent river segment work

For more information on this topic, refer to CAG presentation from March 19, 2012, "Tittabawassee River Floodplain Presentation"



Opportunity for Early Stakeholder Input

- Before EPA starts developing the Tittabawassee River floodplain cleanup plan, we want to meet with people who may be affected by our cleanup decisions so we can understand what is important to them.
- The information we get will help shape EPA's cleanup proposal (expected 2014).

Goals

- The specific goals of our outreach are to:
 - Understand community values about the current state of the floodplain and desires for future conditions and uses.
 - Obtain feedback on the possible trade-offs that come with the cleanup options.
 - Identify what other information may be needed by the community.



TITTABAWASSEE RIVER FLOODPLAIN OUTREACH METHODS AND SUPPORT MATERIALS

Outreach Methods

- Addendum to Community Involvement Plan
 - Outlines EPA's outreach strategy



OVERVIEW

The Tittabawassee River, Saginaw River and Bay Site includes areas in and along a 24-mile stretch of the Tittabawassee River south of the confluence of the Chippewa River, the 22-mile Saginaw River and portions of the 1,143 square mile Saginaw Bay. The rivers and floodplains include residential, commercial, industrial, recreational and agricultural areas of Midland, Saginaw and Bay Counties in Michigan. The Saginaw Bay watershed is one of Michigan's most diverse areas – its rich resources support agriculture, tourism, manufacturing, outdoor recreation and a vast variety of wildlife. In the Tittabawassee River, dioxins and furans are the primary contaminants in sediment, riverbanks and floodplain soil. These contaminants came from historical releases from The Dow Chemical Company's Midland Plant.

EPA, in coordination with the Michigan Department of Environmental Quality, is requiring Dow to evaluate cleanup options at the Site under a legal agreement that was signed in 2010 between EPA, DEQ and Dow. Activities to be carried out under the agreement fall into three critical categories:

- Limiting contact with bare floodplain soil in areas frequently used by people
- Controlling movement of highly contaminated soil and sediment through early actions
- Developing comprehensive long-term cleanup options for the rivers and bay

The current focus is on the Tittabawassee River because upstream cleanup is needed before EPA can move ahead with the Saginaw River and Bay. EPA's initial strategy for comprehensive long-term cleanup was to divide the Tittabawassee River into segments for development of upstream-to-downstream cleanup options. The cleanup decisions for each segment would have addressed contaminated sediment, river banks and floodplain soils concurrently.

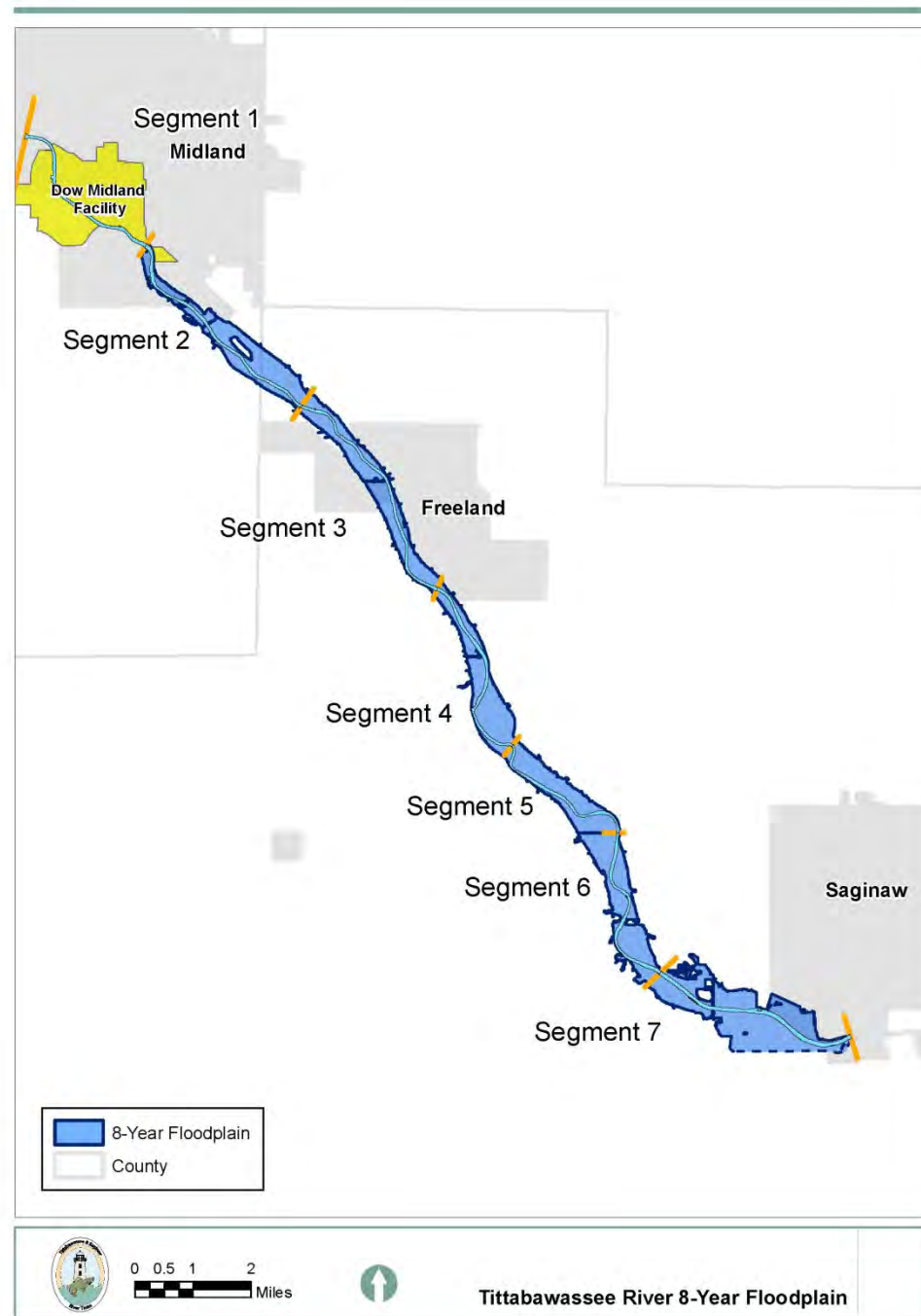
As the cleanup has moved forward, EPA recognized that cleanup decisions for an upstream segment that represents a small fraction of the Tittabawassee River floodplain could establish precedents for downstream floodplain properties. Therefore, EPA has developed a refined approach that will allow the entire floodplain population to be engaged and participate in the decision-making process at the same time. The intention is to maximize input before the cleanups are proposed or selected. EPA believes that up-front community engagement will increase participation in selected cleanups while providing property owners with certainty about what cleanup will be offered, even if implementation is staggered over several years. Comprehensive decision-making for the floodplain soil at this time is likely to result in overall faster cleanup and risk reduction for the floodplain.

EPA's revised strategy for comprehensive cleanup includes the following elements:

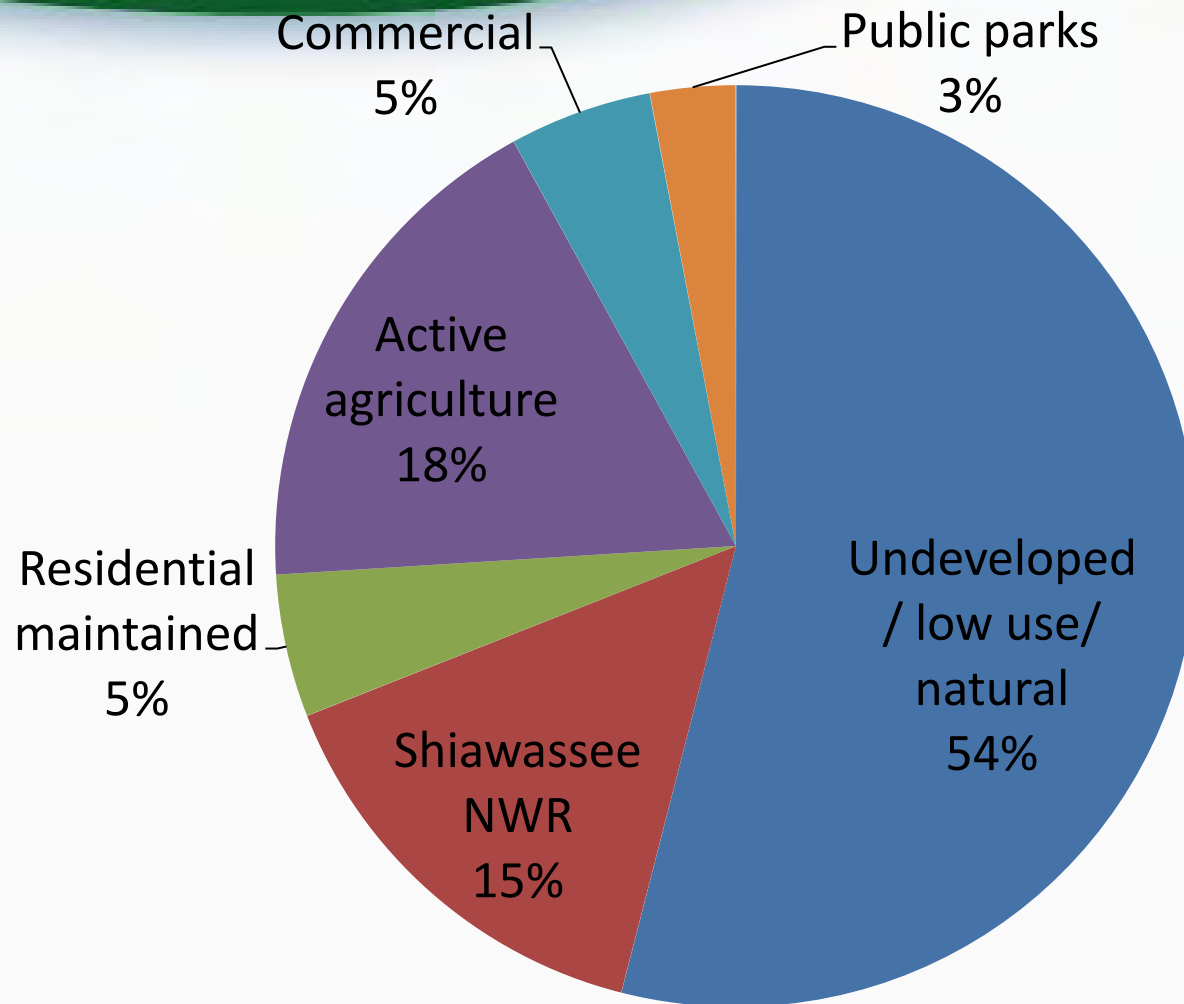
- Continued selection and implementation of upstream-to-downstream cleanup for in-channel sediment and river banks for Segments 2 – 7 of the Tittabawassee River. (Segment 1 cleanup was selected in 2011, is under way and is expected to be complete in 2013.)

Tittabawasse River 8-year Floodplain

- Frequently flooded (8-year floodplain) area along the TR is generally shown in the blue
- About 4,500 acres in the frequently flooded areas



Current Land Use in 8-Year Floodplain



Outreach “Tier” Groups

The “Tier” indicates the outreach commitment for EPA based on how critical the group’s input is.

| Priority Group | Description |
|----------------------|---|
| 1 st Tier | The individuals and groups that will be most directly affected by EPA’s Tittabawassee floodplain cleanup decision |
| 2 nd Tier | Groups that are important because of the nature of their impact on the community and concerns regarding EPA’s cleanup decisions |
| 3 rd Tier | Groups that are important in the community but may not be directly affected by EPA’s Tittabawassee floodplain cleanup decision |

NOTE: Input from other groups or individuals will be welcome at any time

Identified Outreach Groups

| 1 st Tier | 2 nd Tier | 3 rd Tier |
|--|---|--------------------------------|
| Tittabawassee River Floodplain Homeowners | Elected Officials/Local Government Bodies | Sportsman Organizations |
| Tittabawassee River Floodplain Farmers/ Agricultural Groups | Tribe | Civic Organizations |
| Tittabawassee River Floodplain Businesses | Tittabawassee-Saginaw Rivers Community Advisory Group | Non-governmental Organizations |
| Park and Recreation Departments managing parks along Tittabawassee River | Environmental Groups | Real Estate Agents |
| U.S. Fish and Wildlife Service/Shiawassee NWR | Chamber of Commerce/ Better Business Bureau | Student Groups |
| | | Unions |
| | | Environmental Justice Groups |

Outreach Delivery Methods

Methods outlined in CIP Addendum to interact with these tier groups include:

- Organize a series of small group guided discussions with floodplain landowners at convenient times and places
- Selectively invite identified tier groups or individuals to meet informally
- Contact organizations that hold regular meetings and schedule discussion during meeting
- Informal comments can be offered or taken at any time

Outreach Materials

Materials supporting outreach efforts:

EPA
U.S. Environmental Protection Agency

TITTABAWASSEE RIVER FLOODPLAIN SOILS OUTREACH STRATEGY
ADDENDUM 21 TO THE COMMUNITY DEVELOPMENT PLAN FOR THE
TITTABAWASSEE RIVER, SAGINAW RIVER AND BAY SITE
FEBRUARY 2013

OVERVIEW

The Tittabawassee River, Saginaw River and Bay Site includes areas in and along a 24-mile stretch of the Tittabawassee River south of the confluence of the Chippewa River, the 22-mile Saginaw River and portions of the 1,140 square mile Saginaw Bay. The rivers and floodplains include residential, commercial, industrial, recreational and agricultural areas of Midland, Saginaw and Bay Counties in Michigan. The Saginaw Bay watershed is one of Michigan's most diverse areas – its rich resources support agriculture, tourism, manufacturing, scientific research and a vast variety of wildlife. In the Tittabawassee River, citizens and farms are the primary contaminants in sediment, riversbanks and floodplains. These contaminants come from historical releases from The Dow Chemical Company's Midland Plant.

EPA, in coordination with the Michigan Department of Environmental Quality, is requiring Dow to evaluate cleanup options at the site under a legal agreement that was signed in 2010 between EPA, DEQ and Dow. Activities to be carried out under the agreement fall into three critical categories:

- Limiting contact with land floodplains used in areas frequently used by people
- Controlling movement of highly contaminated soil and sediment through early actions
- Developing comprehensive long-term cleanup options for the river and bay.

The current focus is on the Tittabawassee River because upstream cleanup is needed before EPA can move ahead with the Saginaw River and Bay. EPA's initial strategy for contamination long-term cleanup was to divide the Tittabawassee River into seven segments for development of upstream-to-downstream cleanup options. The cleanup decisions for each segment would have addressed contaminated sediments, river banks and floodplain soils separately.

As the cleanup has moved forward, EPA recognized that cleanup decisions for an upstream segment that represents a small fraction of the Tittabawassee River floodplain could establish precedents for downstream floodplain segments. Therefore, EPA has developed a refined approach that will allow the entire floodplain population to be engaged and participate in the decision-making process at the same time. The intention is to maximize input before the cleanup is proposed or selected. EPA believes that upstream community engagement will increase participation in selected cleanup while providing property owners with certainty about what cleanup will be offered, even if implementation is staggered over several years. Comprehensive decision-making for the floodplains at one time is likely to result in overall faster cleanup and risk reduction for the floodplains.

EPA's revised strategy for comprehensive cleanup includes the following elements:

- Continued selection and implementation of upstream-to-downstream cleanup for residential sediments and riverbanks for Segments 2 – 7 of the Tittabawassee River. Segment 3 cleanup was selected in 2011, is under way and is expected to be complete in 2013.

[CIP Addendum](#)

TITTABAWASSEE RIVER FLOODPLAIN SOIL
ALTERNATIVES ARRAY



PREPARED BY:
TITTABAWASSEE & SAGINAW RIVER TEAM

PREPARED FOR AND SUBMITTED BY:
THE DOW CHEMICAL COMPANY

JANUARY 18, 2013
DOW SUBMITTAL NUMBER: 2013.003

[Alternatives Array](#)

EPA
U.S. Environmental Protection Agency

Floodplain Cleanup is Planned;
EPA Wants Your Input
Midland, Saginaw and Bay City, Michigan February 2013

Contact Information
You can contact EPA staff involved with community outreach and the cleanup process:
EPA Community Information Office
EPA's Midland Bay Area Office
989.401.5300
Diane Russell
Project Manager
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Mary Brodeur
Community Relations
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EPA Chicago office contacts
You can call the Chicago EPA office toll-free, 800.431.4671, 9:30 a.m. – 2:00 p.m., weekdays.
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The U.S. Environmental Protection Agency, in concert with the Michigan Department of Environmental Quality, is in the early stages of developing cleanup options for contaminated soil in the frequently flooded areas along the Tittabawassee River downstream from Midland. Many properties used by residents, farmers, businesses, parks and the Chippewa National Wildlife Refuge in the Tittabawassee River floodplains will be affected by EPA's cleanup decisions.

EPA wants to hear from you!
People living, working and playing in the Tittabawassee River floodplain will have a say in how the cleanup is carried out. EPA expects to formally propose a cleanup plan for the Tittabawassee River floodplain for public comment in 2014. Before then, EPA wants to:

- Understand the community's values about the current state of the floodplain and desires for future conditions and uses.
- Obtain feedback on the tradeoffs that may come with the cleanup options.
- Identify what other information is needed by the community.

EPA will give residents and other interested people an opportunity to meet and discuss concerns they may have about a long-term cleanup. These community input sessions will help cleanup to be proposed and selected for the Tittabawassee River floodplain.

EPA will schedule several interactive small group sessions throughout the spring and summer starting in March. To give people convenient times and places to participate, EPA will hold daytime, evening and weekend sessions in different locations near the Tittabawassee River. Invitations will be sent to all of the floodplain landowners. Early sign-up for the sessions is encouraged. We want to hear from you. To call our Saginaw office at 989-401-5300 to meet individually with an EPA representative or to learn more about the meetings:

The entire floodplain is not equally contaminated and some areas may not require cleanup. EPA and MDCE are currently evaluating which floodplain areas may need most cleanup. Cleanup of the Tittabawassee River watershed and its floodplains is required at various points in Segment 1, which runs through Dow's Midland plant (see map on Page 2). This segment near work will continue upstream to downstream. Cleanup of the floodplain areas will occur during or shortly after the adjacent treatment.

There are about 4,500 acres in the frequently flooded areas along the Tittabawassee River. Land use on the floodplains is varied. Residents, farmers and businesses are affected along with the Chippewa National Wildlife Refuge and public parks. Large areas in the floodplains are undeveloped and support natural ecosystems. EPA wants to hear community input about current and future land uses and environmental conditions.

[Factsheet](#)



Region 5 Cleanup Sites

Serving Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin and 35 Tribes

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Tittabawassee River Floodplain

EPA, working with the Michigan Department of Environmental Quality, is developing cleanup options for contaminated soil in frequently flooded areas along the Tittabawassee River downstream from Midland. Many properties in the Tittabawassee River floodplain will be affected by EPA's cleanup decision. The Tittabawassee River floodplain starts in Midland below the Dow Chemical Co. plant and extends through Midland and Saginaw counties.

Before formally proposing the cleanup options EPA wants to give property owners and other interested people an opportunity to discuss what concerns they may have about a long-term cleanup. EPA is planning to hold a number of interactive small group sessions in different locations near the Tittabawassee River. Starting in March, EPA will send invitations to property owners asking them to attend one of the sessions to share their thoughts. EPA will take their comments and concerns into consideration in developing its proposed cleanup plan.

- [Floodplain Cleanup is Planned EPA Wants You Input \(PDF\)](#) (4pp, 600K) **New!**
- [Tittabawassee River Floodplain Soils Outreach Strategy, Addendum #1 to the Community Involvement Plan \(PDF\)](#) (11pp, 440K)
- [Tittabawassee River Floodplain Soil Alternatives Array \(PDF\)](#) (14pp, 416K)
- [Printable Map \(PDF\)](#) (1p, 76K)

www.epa.gov/region5/cleanup/dowchemical/floodplain

Outreach Materials (con't)

Other materials supporting outreach efforts:

- Figure(s) of floodplain
- Posters
- Meeting handouts

Expected Outcomes

- Maximize input by landowners
- Increase acceptance of selected remedy
- Increase participation in cleanups
- Provide owners certainty, even if cleanups are staggered over several years
- Overall faster cleanup and risk reduction

Goals for This Presentation

- Provide information to CAG on upcoming outreach efforts
- CAG input on 3 primary outreach goals
- CAG input on how to maximize outreach effectiveness



END

Discussion: CAG Informal Feedback