

Tittabawassee River, Saginaw River & Bay Site

High Use Properties: Informal CAG Feedback – Bases and Options

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CAG Meeting September 20, 2010



Outline

- Review objectives for exposure controls at high use properties
- Current status of property assessments
- Informal feedback from CAG on options being developed
 - Proposed criteria that initiate an exposure control
 - Potential types of exposure controls

REVIEW OBJECTIVES

High Use Properties Key Objectives

- Develop options to address potential acute or near-term exposure risks
 - Focus on areas of potential high human use with potential for high surface contamination
 - Focus on exposure control
- Additional actions considered as part of segment-specific evaluations
- Ongoing flood response and other RCRA interim response actions will continue

Potential Environmental Risk

- In general terms, potential risk depends on the following factors:
 - How much of a chemical is present in an environmental medium (e.g., soil, sediment),
 - How much contact (exposure) a person or ecological receptor has with the contaminated environmental medium, and
 - How harmful (toxic) is the chemical.

Why is Exposure Control Important?

- EPA considers risk to be the chance of harmful effects resulting from exposure to an environmental stressor
- Controlling exposure → controls potential risk

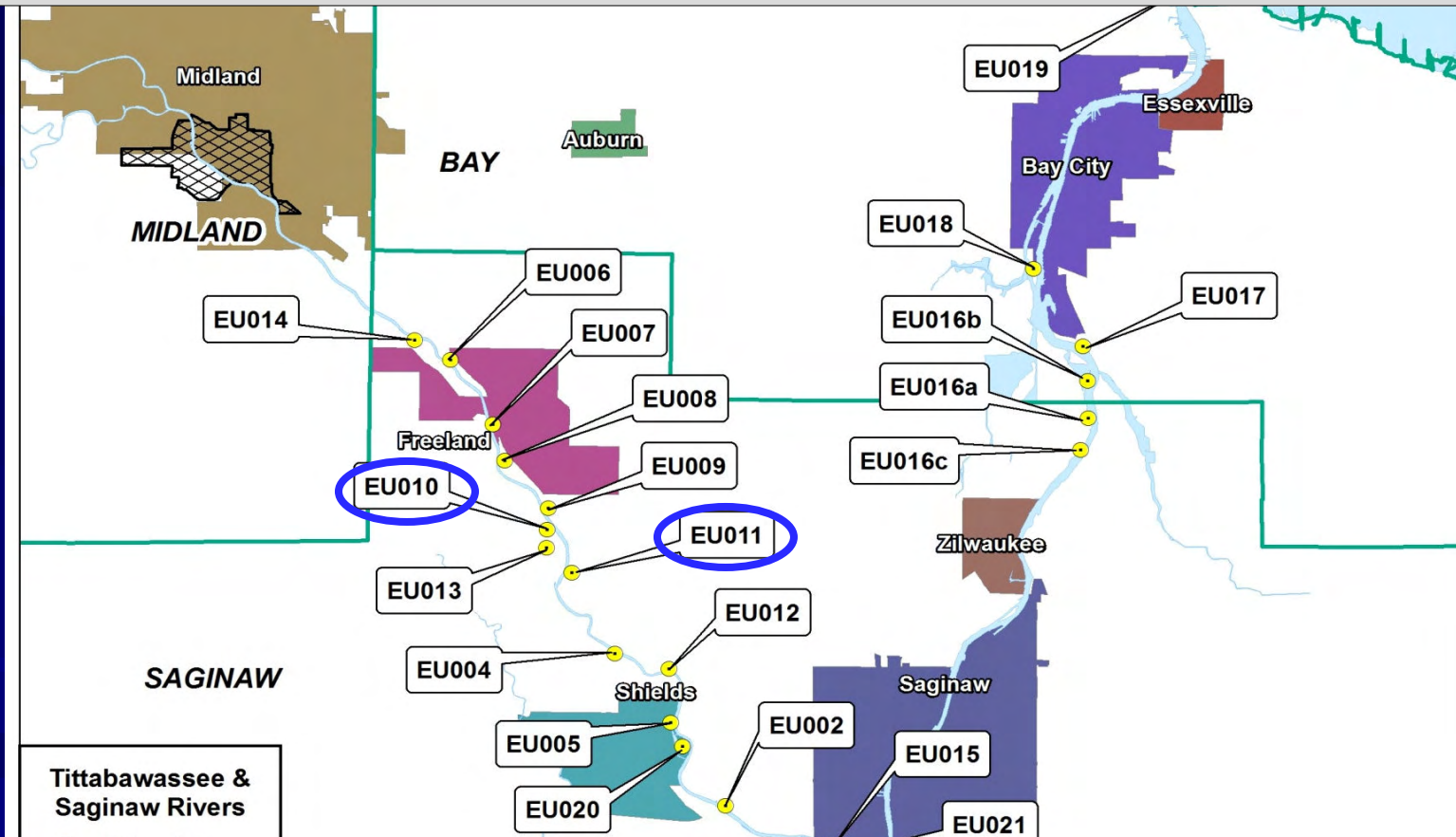
CURRENT STATUS

Exposure Units (EUs)

- EPA and MDEQ identified areas called “Exposure Units” or EUs in 2008
- 18 EUs (comprised of approximately 260 property parcels) will be assessed
- New areas can be identified, as needed

Current Status

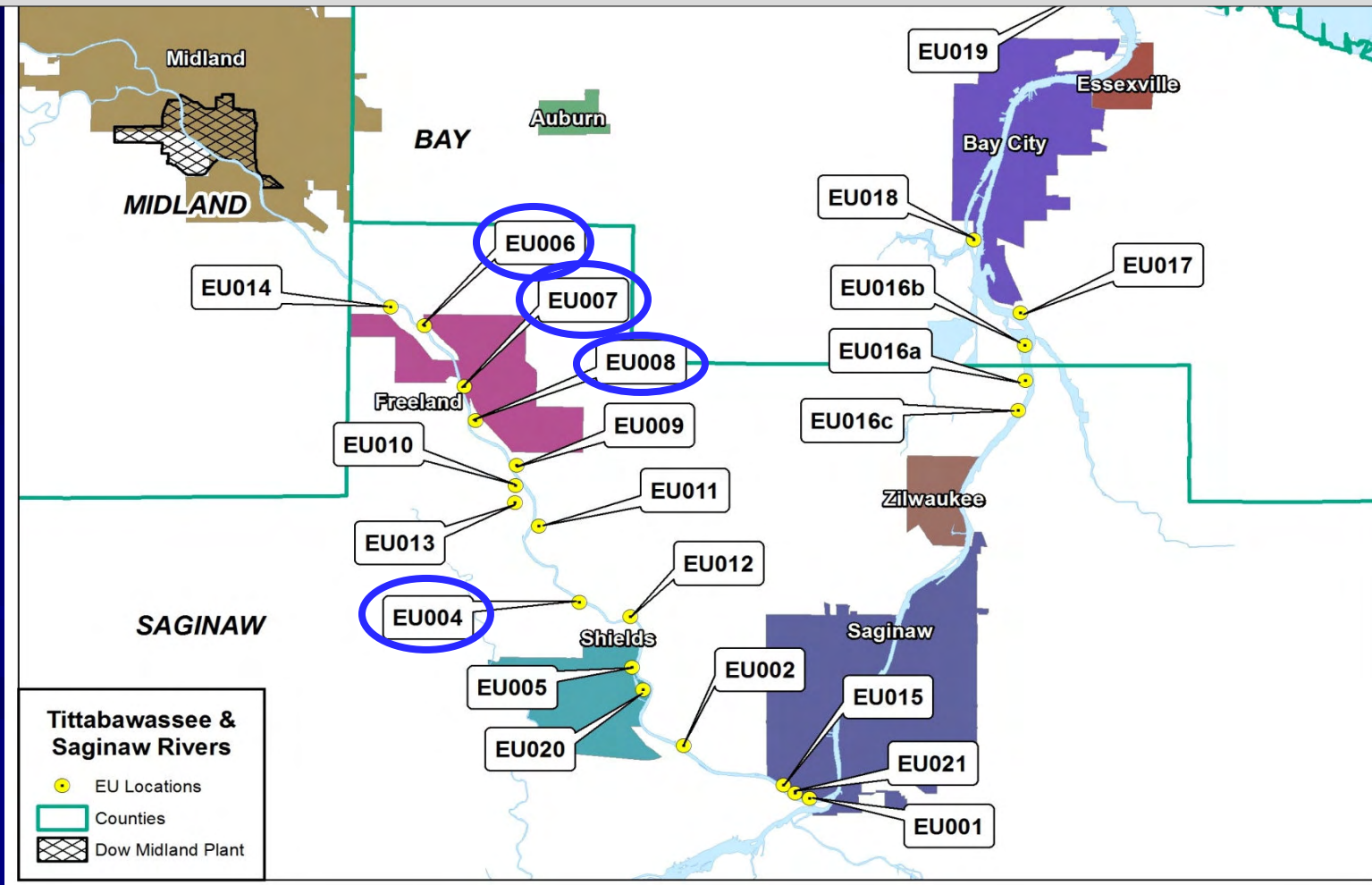
EU's divided into 4 phases



Phase 1: Property assessments nearing completion

Current Status (cont.)

Phase 2: Property assessments ongoing



Current Status (cont.)

As of 9/20/10

■ Phase 1: EU 010 & EU 011

– 44 parcels total

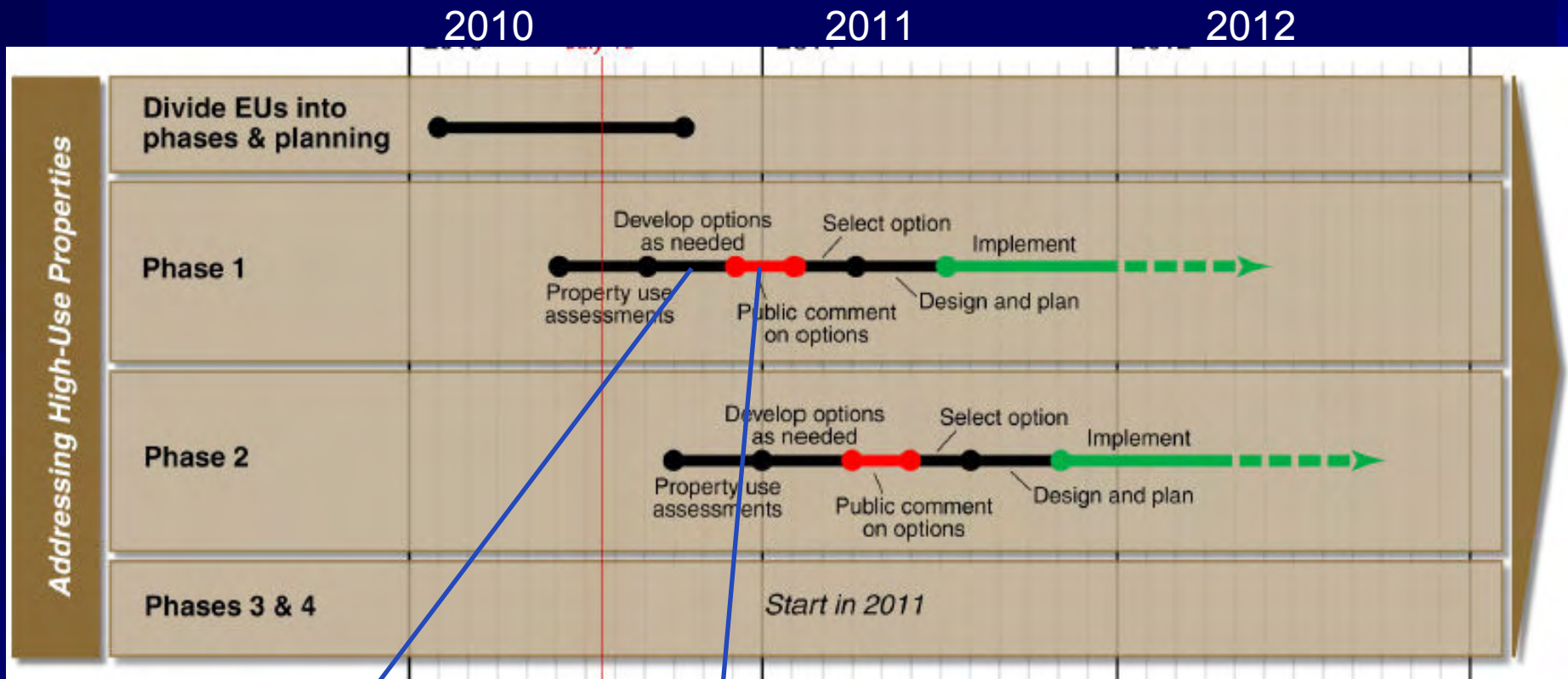
- 29 parcels – property visit complete, evaluating
- 6 no response (3 owners)
- 9 refused participation (~ 20%)

■ Phase 2: EU 004, 006, 007 & 008

– 64 parcels total

- 40 parcels – property visit complete or scheduled
- 15 no response
- 9 refused participation (~ 14%)

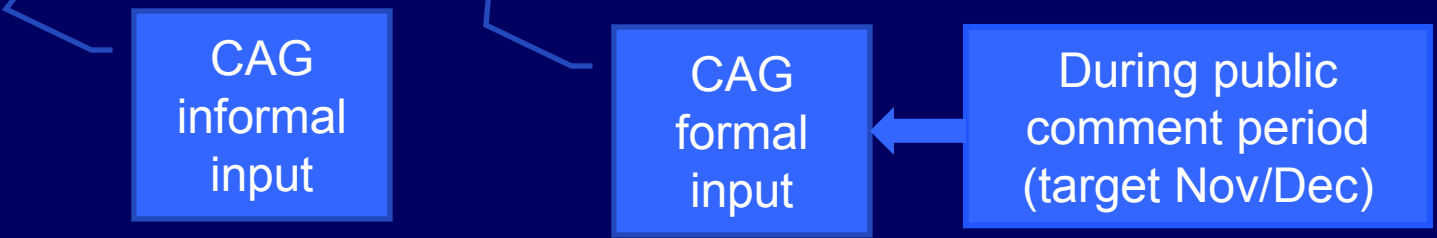
CAG FEEDBACK



CAG informal input

CAG formal input

During public comment period (target Nov/Dec)



Proposed Criteria that Initiate Development of Exposure Controls

- Within frequently flooded areas, and
- Active use, and
 - Determined through property assessment questionnaire
- Presence of bare soil.
 - Identified during property assessment on-site survey

Important Points

- Exposure controls to be evaluated for properties that meet all three criteria
- These criteria would apply to residential properties for the Tittabawassee River EUs
 - May need other criteria for different property use or the Saginaw River EUs
- Properties that don't meet the criteria will be re-evaluated periodically

Important Points (cont.)

- The criteria are intended to be broad, conservative, and presumptive
- No conclusions about concentration levels or actual or potential exposures can be drawn for any individual property from application of these criteria
- Exposure controls will build upon previous work conducted under the RCRA License

Option Considerations

- EPA usually evaluates “No Action” as a baseline
- EPA must consider:
 - Effectiveness: Will option help limit human exposure to potentially contaminated soil until comprehensive cleanup is complete?
 - Implementability: Can option be put in place easily? Are materials and services readily available? Will residents accept the options?
 - Cost: What are the costs of each option?

Potential Exposure Control Options

- Barrier controls, and/or
- Movement of land-use features, and/or
- Ongoing maintenance

Barrier Controls



Place barrier over bare soil areas – trails, bare lawn spots, and recreational areas.



Could include:
Gravel/stone,
wood chips,
revegetated
soil, etc.

Movement of Land-Use Features

For example:

- Move play equipment, fire pits, etc. out of the floodplain
- Raise gardens or features above the floodplain



Ongoing Maintenance

- Mechanisms will be in place to:
 - Monitor property changes
 - Ensure integrity of exposure controls, and
 - Allow owners to report any issues
- Repairs will be made, as needed

CAG Feedback

- CAG break out session
- What will come from feedback:
 - EPA, DNRE, and Dow will consider feedback
 - New concepts may be incorporated into the ongoing work
 - We will report back next meeting