Status of Ansul Clean-Up and Alternative River Proposal Submitted to EPA Dec, 2010

CAC Meeting
April 27, 2011

By
Gary Cygan
EPA, Region 5, Chicago
&
With assistance from WDNR

Where Clean-Up Is Today

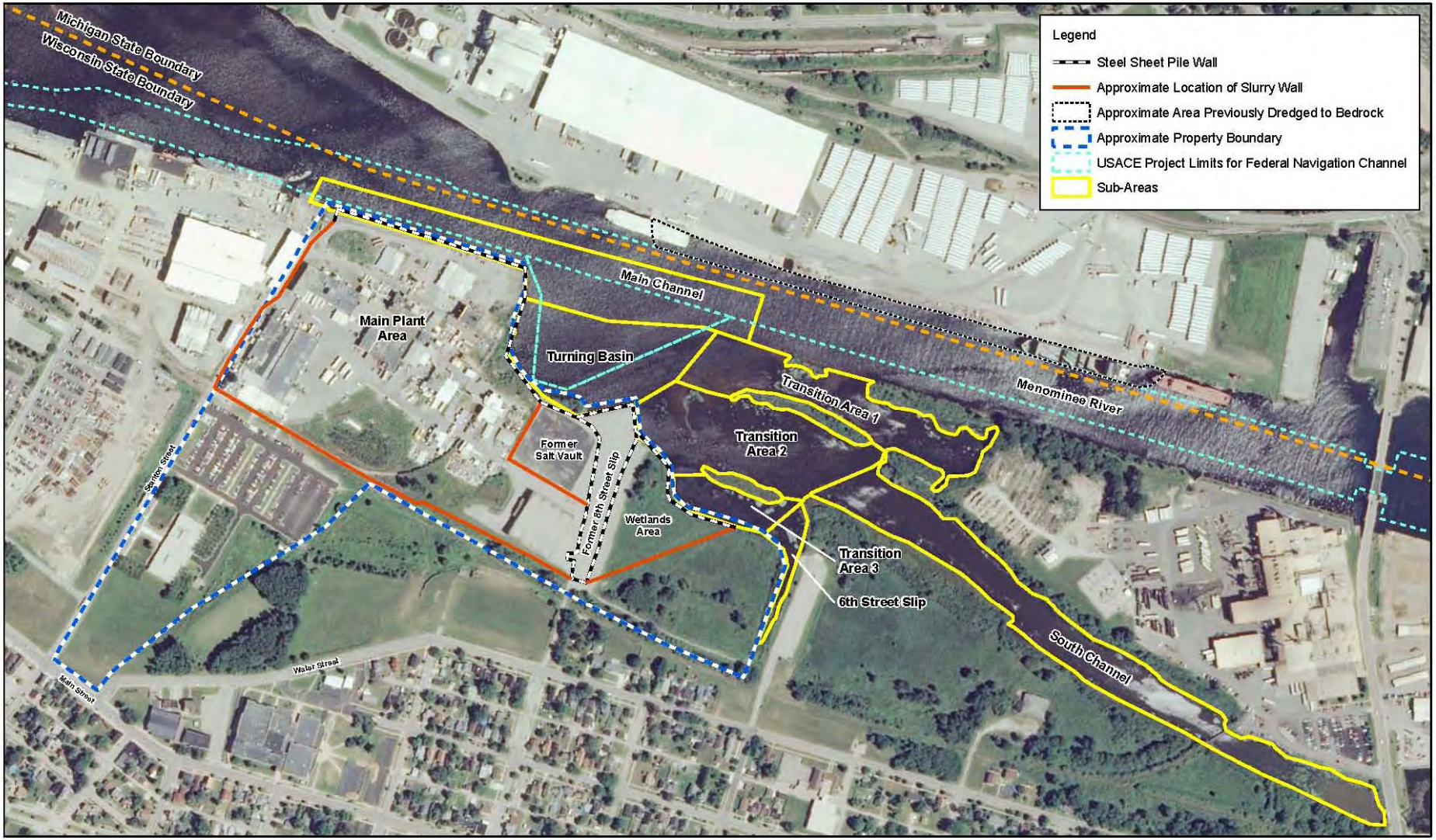
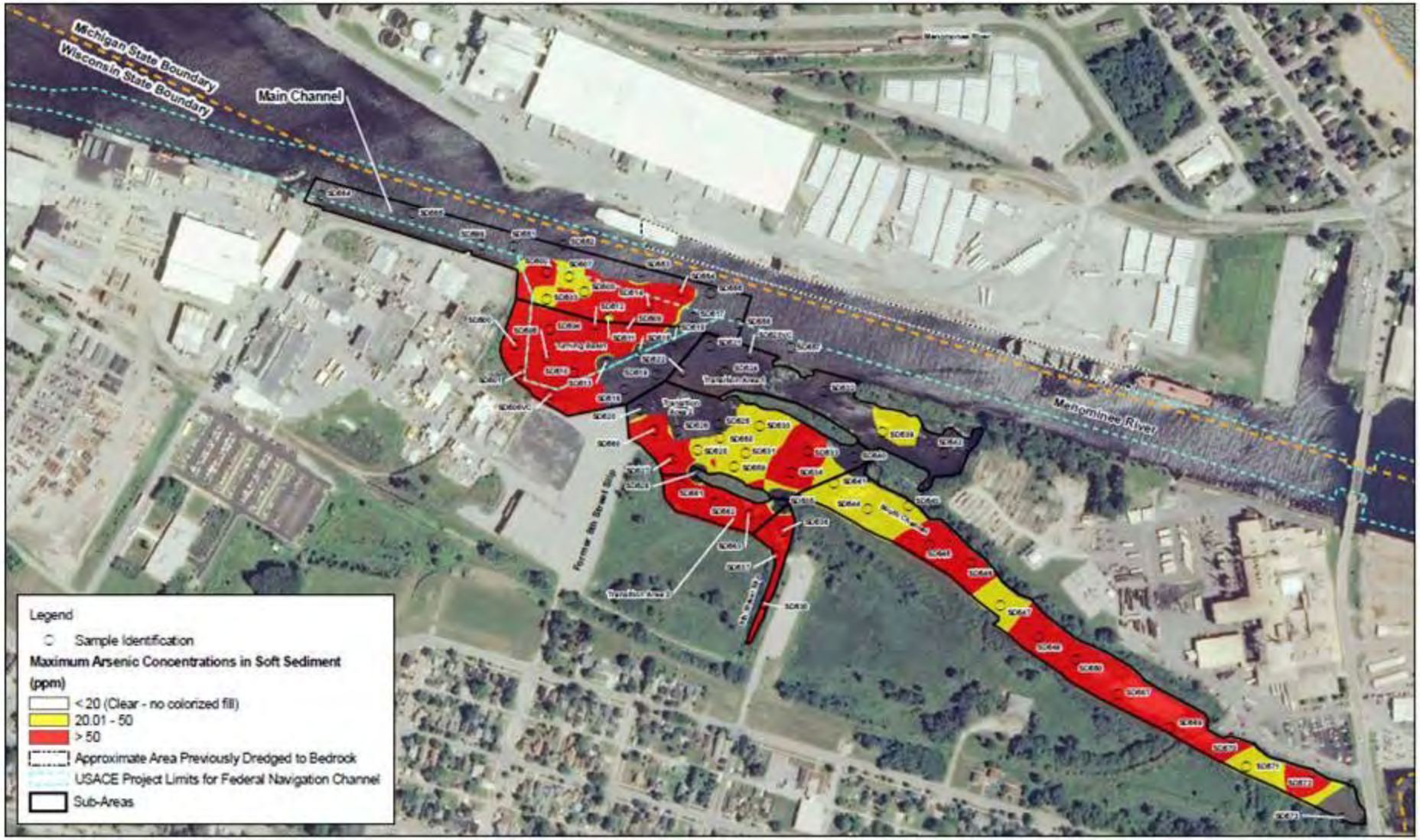


Figure 1
Site Map
Tyco Fire Products LP Facility
Marinette, WI

Maximum Arsenic in Soft Sediment



0 200 400 800
Feet

Figure 2
Maximum Arsenic Concentration in Soft Sediment
Tyco Fire Products LP Facility
Marinette, WI

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Maximum Arsenic in Semi-Consolidated Sands and Silts

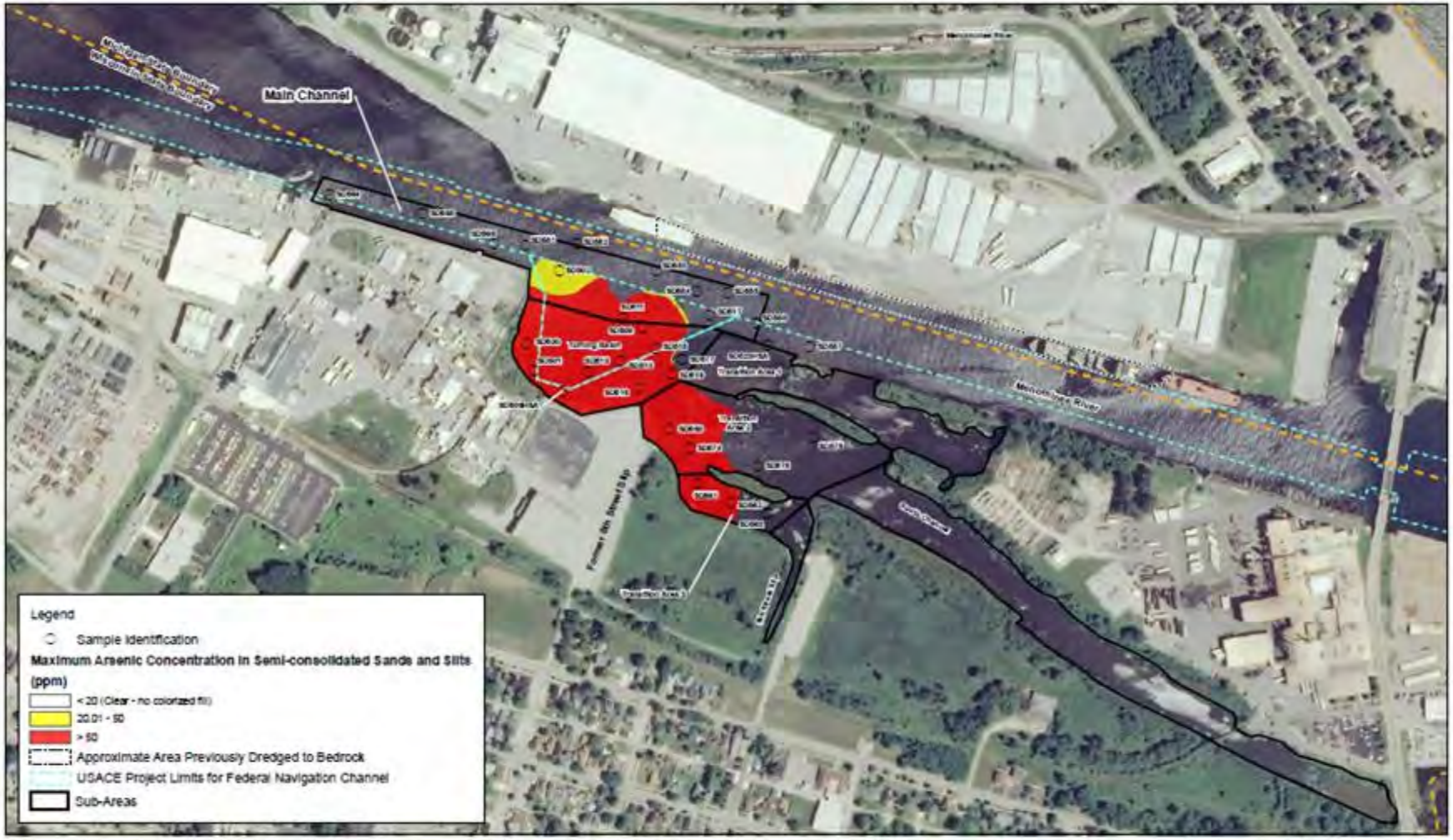

Figure 8
Maximum Arsenic Concentration in Semi-consolidated Sands and Silts
Tyco Fire Products LP Facility
Marinette, WI

Soft Sediment Thickness

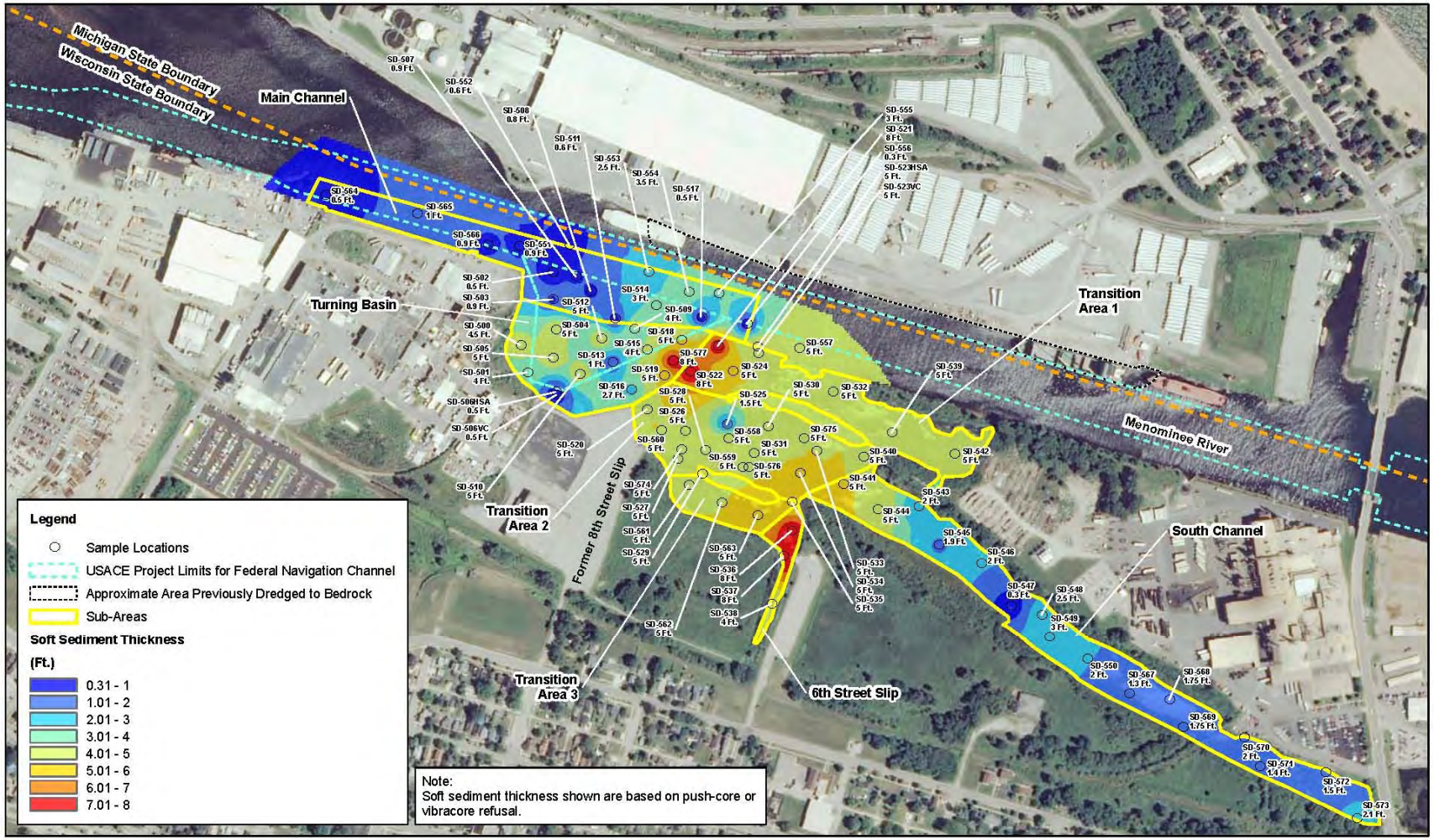

Figure 4
Thickness of Soft Sediment
Tyco Fire Products LP Facility
Marinette, WI

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Semi-Consolidated Sediment Thickness

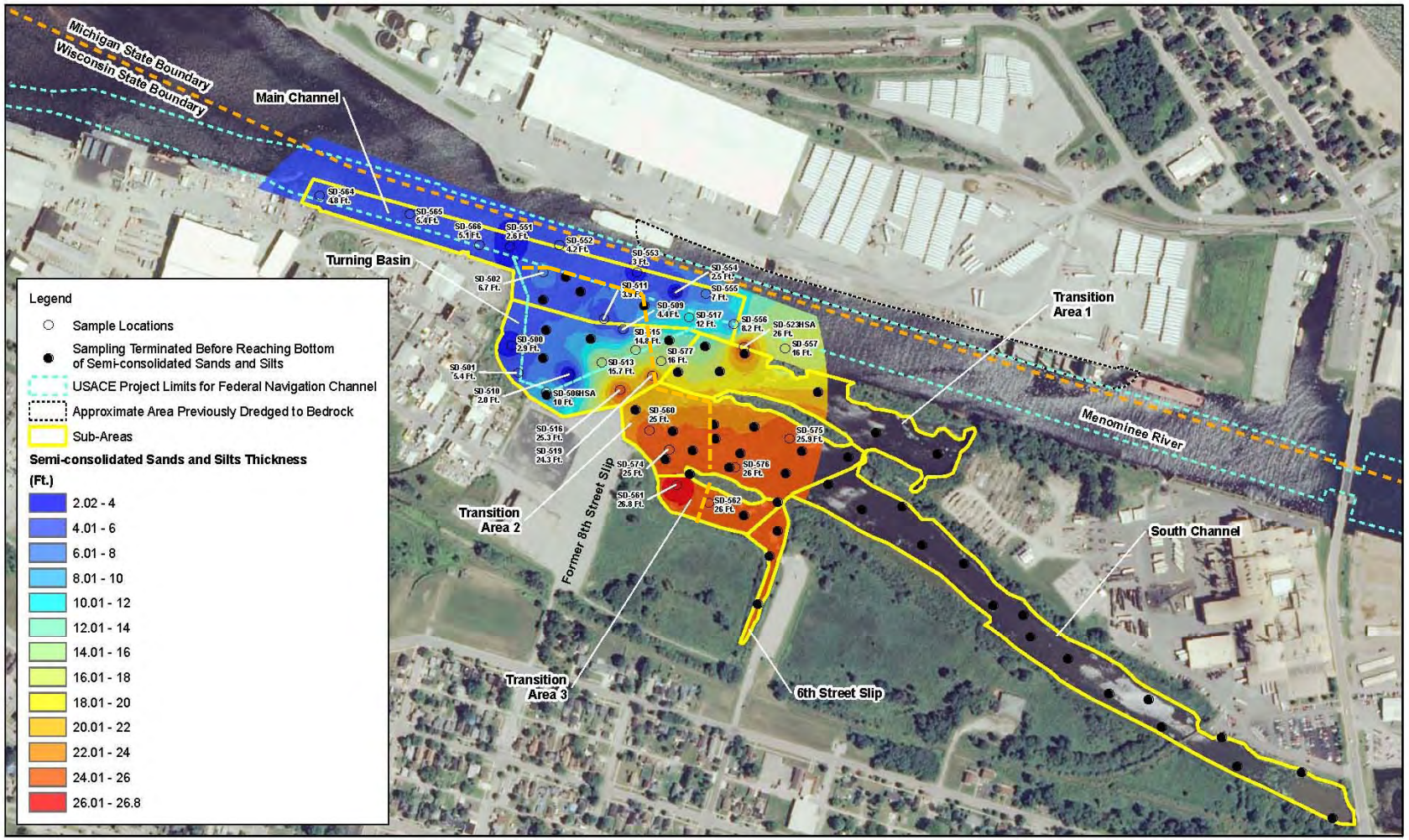

Figure 5
Thickness of Semi-consolidated Sands and Silts
Tyco Fire Products LP Facility
Marinette, WI

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Total Sediment Thickness to be Removed Per Order

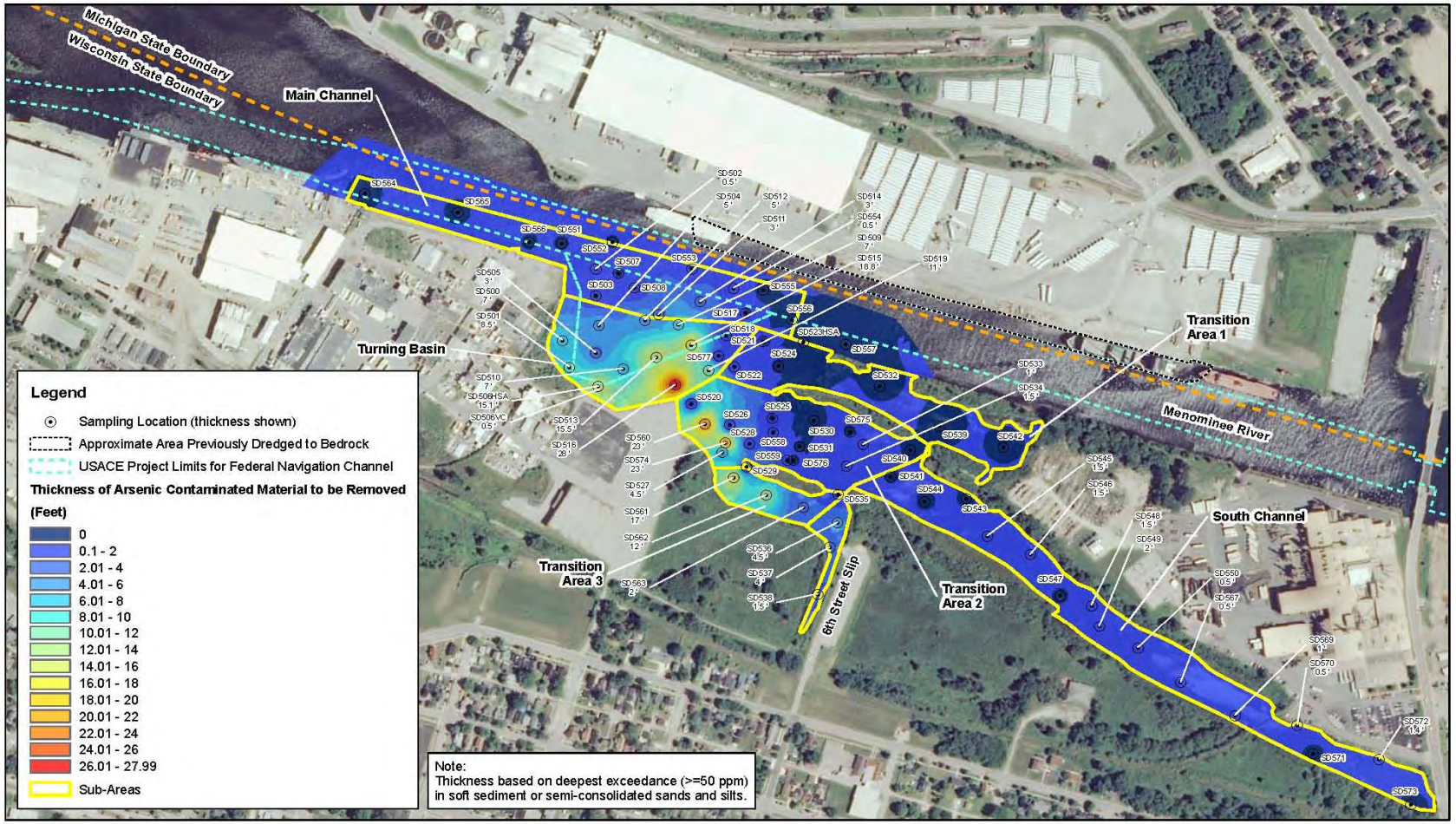

Figure 18
Total Thickness of Arsenic Contaminated Material to be Removed
Tyco Fire Products LP Facility
Marinette, WI

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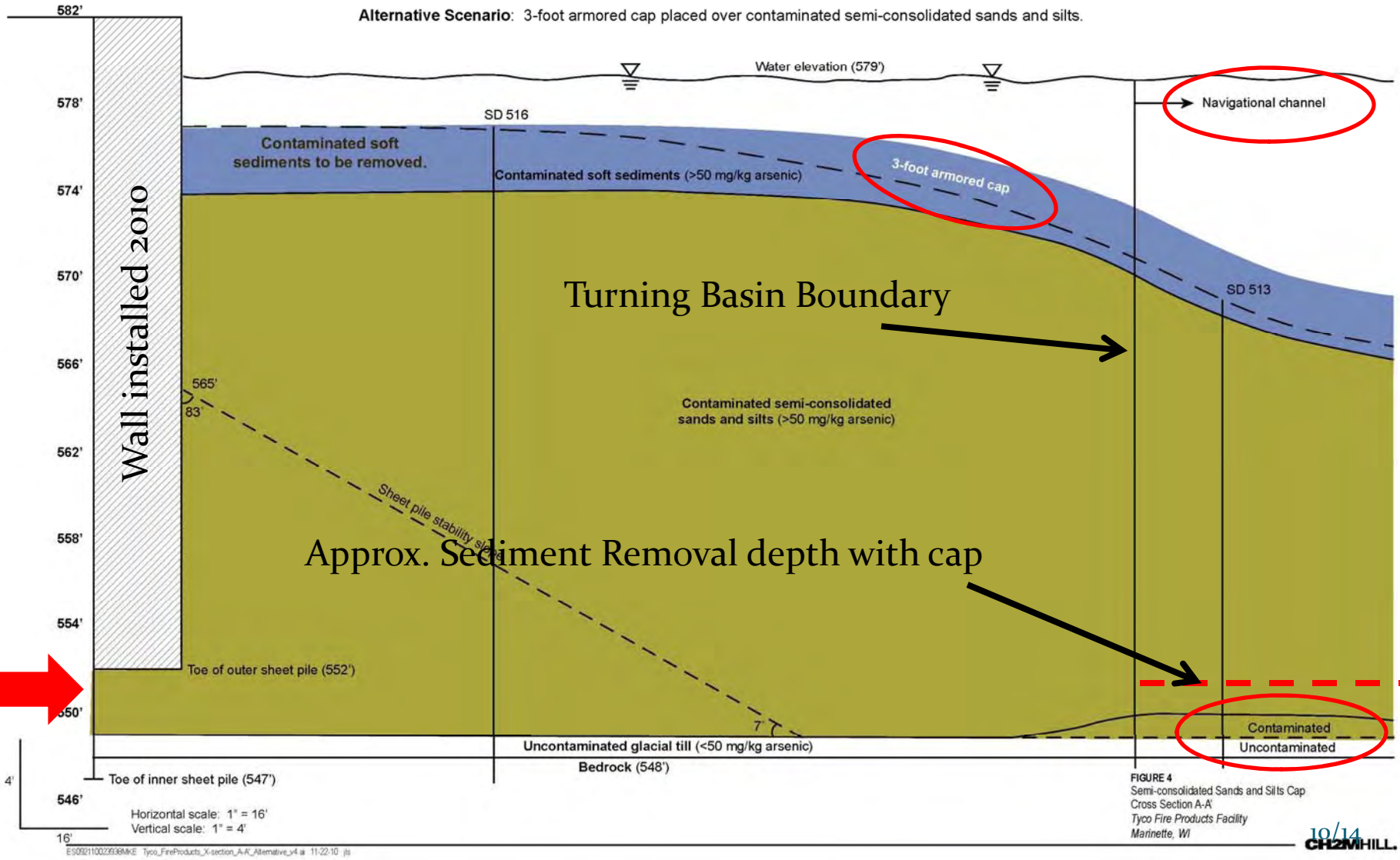
Facts

- There are 225,000 cubic yards of contaminated sediment with more than 50 ppm arsenic in the river (≈ 100 tons) that are required to be removed per EPAs Final Decision (May, 2008).
- Some form of sediment removal will start in 2012; EPAs Order (Feb, 2009) requires all river work to be completed by November, 2013.
- The turning basin is part of the Federal navigation channel mandated by Congress to be 21 feet deep.
- EPA is trying to balance short vs. long-term impacts to the river while keeping present and future uses in mind(navigation, recreation, environmental health, and drinking water protection).
- Partial restricted user access to turning basin and river during 2012-13 work.

Alternative Work Plan Proposes…

- To remove only upper 1/3 of sediments (≈75,000 cyds)
- Put a 1 foot thick sand "cap" over remaining 2/3 of contaminated sediment (≈150,000 cyds)
- Put a 3 foot thick sand "cap" over contaminated sediment in Turning Basin
- To maintain anchoring restrictions forever
- To monitor & maintain "cap" integrity forever
- Will not remove contaminated sediment near wall (≈5,000 cyds)

Cross-Section of Proposed Turning Basin Depths



Depth to top of Cap over Semi-Consolidated Sediment

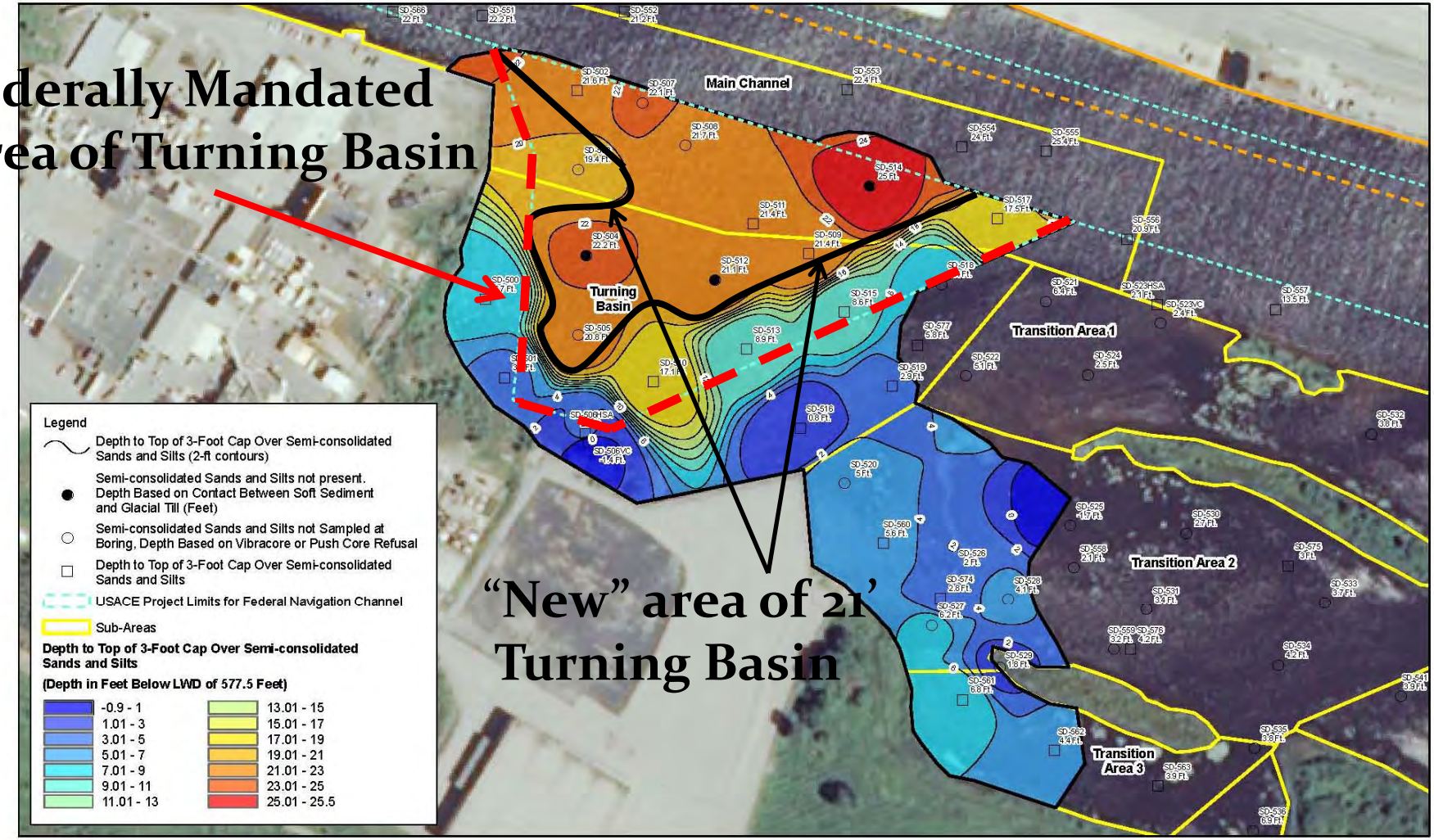


Figure 4
Depth to Top of 3-Foot Cap Over Semi-consolidated Sands and Silts
2010 Investigation Area
Tyco Fire Products LP Facility
Marinette, WI

Some Potential Impacts to the Community From the Alternative Work Plan

- Permanent reduction of navigation depths in Turning Basin
- Long-term release of arsenic to environment
- Permanent anchoring and dredging restrictions in Turning Basin and river
- Elimination of ecology on the river bottom
- Long-term Surface water/Drinking Water impacts to Lake Michigan

What's To Come…

- Currently EPA is continuing to gather facts by consulting with the community, experts and other government agencies

- EPA will issue a response to Tyco by end of **May**

Questions?

or

Alternatively, you may contact me with any additional clarifying questions or concerns……

I may be contacted at:

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