

US EPA ARCHIVE DOCUMENT

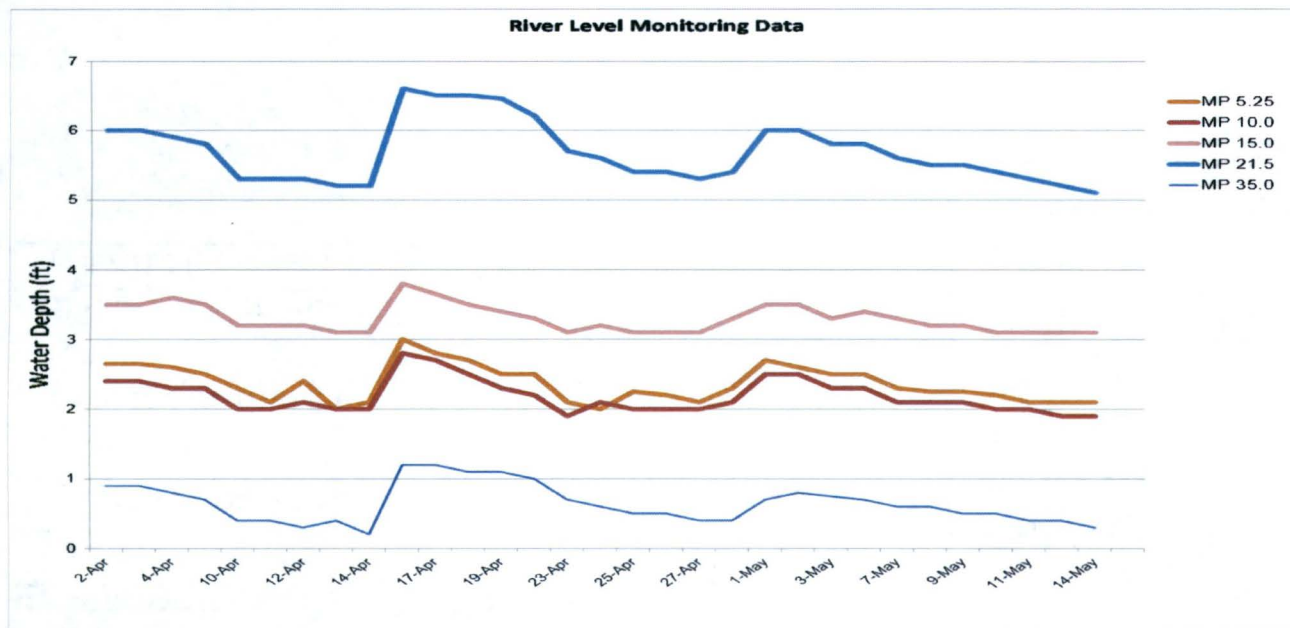
Meeting Ground Rules

- Be courteous and silence/put away your electronic devices.
- Adhere to meeting agenda
- One conversation at a time
- Hold all questions until the speaker has finished with the presentation

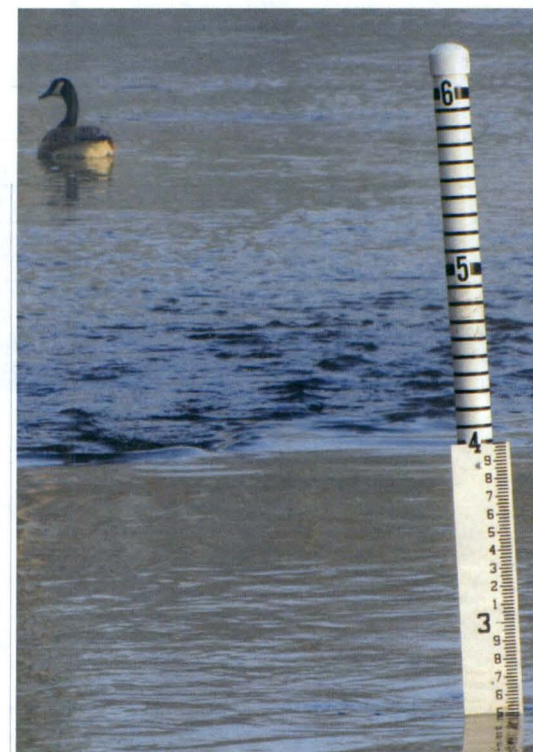
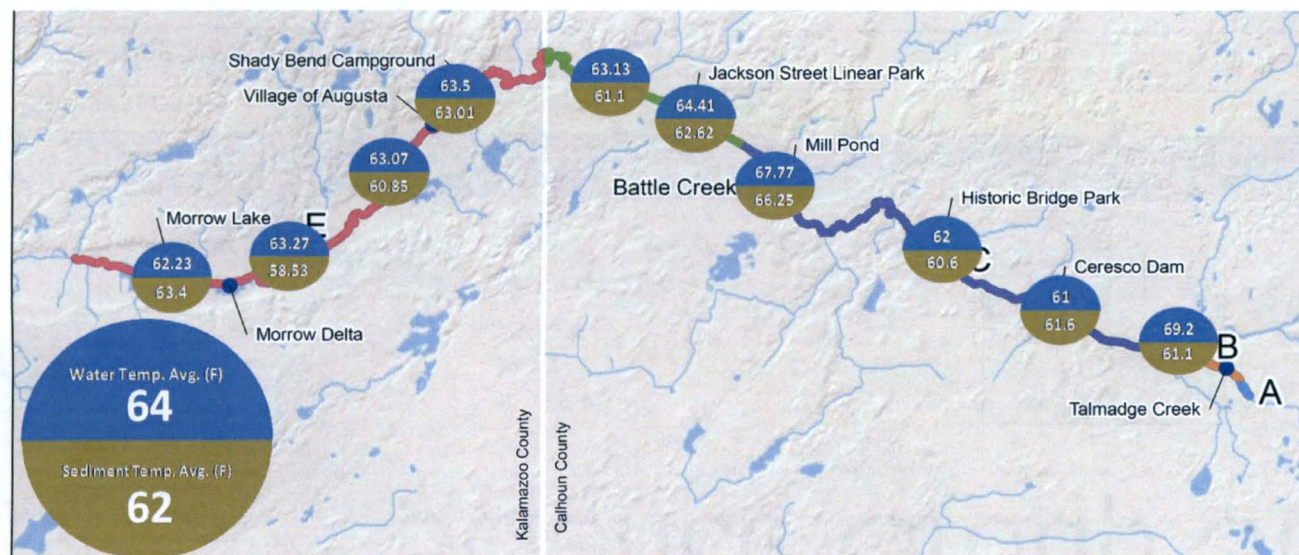
Situation Report

May 16, 2012

Water Conditions



DISCHARGE RATES (cfs)		
	5/15	5/14
Marshall, MI	389	360
<i>Historical Median</i>	392	390
Battle Creek, MI	660	670
<i>Historical Median</i>	820	792



Science Group Status

Data Collection	Data Compilation	Submittal
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Submerged Oil Science Group

Reassessment

Spring 2012 Sub Oil Reassessment	E		Began 5/7
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Hydrodynamic Assessment & Modeling

Sensitivity Testing		4/6	
Run Modified Scenarios		4/6	
Summary Report		4/20	

Submerged Oil Quantification

Fall 2011		E	
Spring 2012 (pre-recovery)	E		
Fall 2012 (post-recovery)	E		

- denotes status updates since the last report



E Enbridge



Complete or N/A



() Denotes Due Date

Science Group Status

Data Collection	Data Compilation	Submittal
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Overbank Science Group

Reassessment

Spring 2012 Shoreline and Overbank Reassessment			
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Containment Science Group

Evaluate placement of containment

Hec-Ras Modeling	12/5	1/9	1/26	
Hydraulic Calculations	1/10	1/23	1/26	
2D Hydrodynamic Model		2/13	E	Further scenarios
Monitoring and Management Plan	1/24	1/25	2/27	

Implementation of passive sediment collection devices

Location selection				
Design review				
Installation			E	
Post-installation review				
Design adjustments				

- denotes status updates since the last report



Enbridge



Complete or N/A



() Denotes Due Date

Remediation Progress

Location	SCIENCE					COMPLIANCE				RECOVERY	MONITORING	Comments
	RI Work Plan	Plan Review	Investigation	Data Compilation	Presentation to OSCAR	Remediation Work Plan	Remed. Plan Review	Permit Application	Permit Review	Execution	Completion Check	
Submerged Oil												
Walling Structure							3/16	3/27	4/14			
Suboil Toolbox							4/20	A				
Containment												
MP 3.25 R1						4/25	A	E				SSD Only
Ceresco Dam						4/25	A	E				SSD Only
MP 10.40 N						4/25	A	E				SSD Only
MP 10.50 L2						4/25	A	E				*
MP 10.75 LDB						4/25	A	4/3	4/26	5/8		Sed Traps + SSD
14.75 RDB						4/25	A	4/3	4/26	5/8		Sed Traps + SSD
19.25 LDB						4/25	A	4/3	4/26	5/8		Sed Traps + SSD
21.50 RDB						4/25	A	4/3	4/26	5/8		SSD Only
MP 26.00 RDB						4/25	A	E				
28.25 RDB						4/25	A	4/3	4/26	5/8		SSD Only
MP 33.00 A						4/25	A	E				*
MP 33.00 B						4/25	A	E				*
Delta A						4/25	A	E				SSD Only
Delta Z						4/25	A	E				SSD Only
36.1 NW						4/25	A	4/3	4/26	5/8		Sed Traps + SSD
37.75 Islands						4/25	A	E				SSD Only
Control Points (3)								3/21	3/23	4/5		
OB 8.48 LDB						5/1	A	E				Structure
SO 11.21						E			↩			
OB 11.79 LDB						5/1	A	E				Structure
SO 26.25						E			↩			

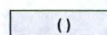
• denotes sites with status updates since the last report



Enbridge / In development



In Agency Review



Denotes Due Date



Complete or N/A



Revisit Previous Phase

* Trap to remain in Permit. Running model with alternative structure placement

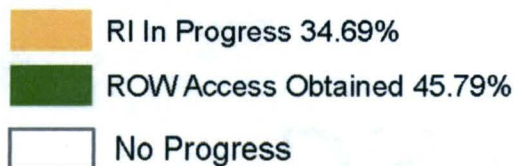
All_Branch_Progress_05-14-2012.xlsx

Remediation Progress

Remedial Investigation



Legend



Updated: May 14, 2012

Daily Progress Tracking

Personnel / Resources Deployed

	5/14/2012	5/13/2012
Kalamazoo River System	39	0
Containment	11	0
Submerged Oil	42	0
Overbank	5	0
River Opening	1	0
Waste Management	18	0
Security & Flaggers	5	5
Operations Center	40	1
Comm. Centers	3	0
EPA	1	0
EPA Contractors	21	0
Other Agencies	0	0
DEQ	6	0
DEQ Contractors	8	0
TOTAL	200	6

	5/14/2012	5/13/2012
Vac & Tanker Trucks	0 0	0 0
Frac Tanks	0 0	0 0
Boats**	32 0	0 0
Yellow Iron***	6 0	0 0
Roll-Off Boxes	4 0	4 0
Boom Locations	14	14
Boom in River (ft)	6,075 0	5,875 0

**Boats - Air Boats, Jon Boats & Pontoon Boats

*** Yellow Iron - Articulating dump trucks, bobcats, bulldozers, excavators, front end loaders, skid steers, gac system, marookas, forklifts, marsh buggies, water trucks

Facility Sites



- 179 CY in cells
- 0 gal water
- 4 Roll offs



FTC 5/15



FTC 5/15



2012/05/14 15:12

Talmadge - Upstream of Source Area 5/14



Source Area 5/15



Talmadge - Source Area to Division 5/15



2012/05/14 14:58

Talmadge - Source Area to Division 5/14



2012/05/14 14:58

Talmadge - Source Area to Division 5/14



2012/05/14 15:02

Talmadge - Source Area to Division 5/14



2012/05/14 14:53

Talmadge – Division to I-69 5/14



Talmadge – Division to I-69 5/15



2012/05/14 14:12

Talmadge - I-69 to Confluence 5/14



2012/05/14 13:53

Talmadge – I-69 to Confluence 5/14



Talmadge – I-69 to Confluence 5/15



2012/05/08 14:22

Talmadge – I-69 to Confluence 5/08



Confluence 5/15



2012/05/15 09:21

Confluence 5/15



2012/05/15 09:21

Confluence 5/15



2012/05/14 13:41

Confluence 5/14



2012/05/15 09:22

Confluence 5/15



Upstream of Confluence 5/15





2012/05/15 10:10

MP 2.5 5/15



MP 2.75 5/15



Island A 5/15



MP 4.75 5/15



MP 5.25; C0.4 5/15



2012/05/14 11:11

MP 5.75 5/14



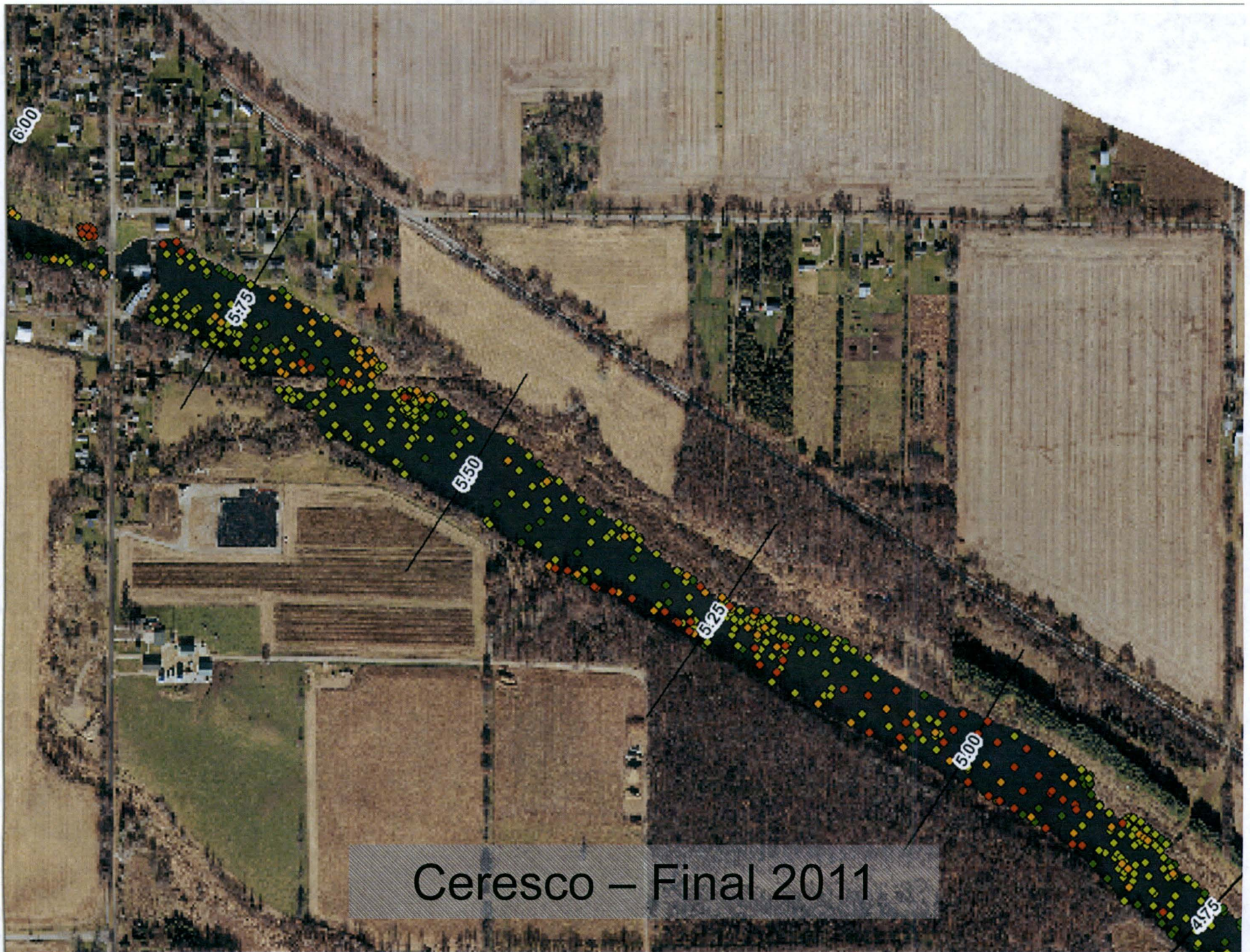
2012/05/15 10:50

MP 5.75 5/15



MP 5.75 5/15

An aerial photograph showing two white motorboats on a dark, calm body of water. The boat on the left is larger and has several people on board, including one in a yellow life vest. A white wake is visible behind it. The boat on the right is smaller and also has people on board. To the left of the boats is a shoreline covered in dense green vegetation and some rocks. In the background, several dark, vertical posts or pilings are visible in the water. A semi-transparent grey box with a diagonal line pattern is at the bottom, containing the text 'MP 5.75 5/15'.



Ceresco – Final 2011



Ceresco – Spring 2012 Reassessment

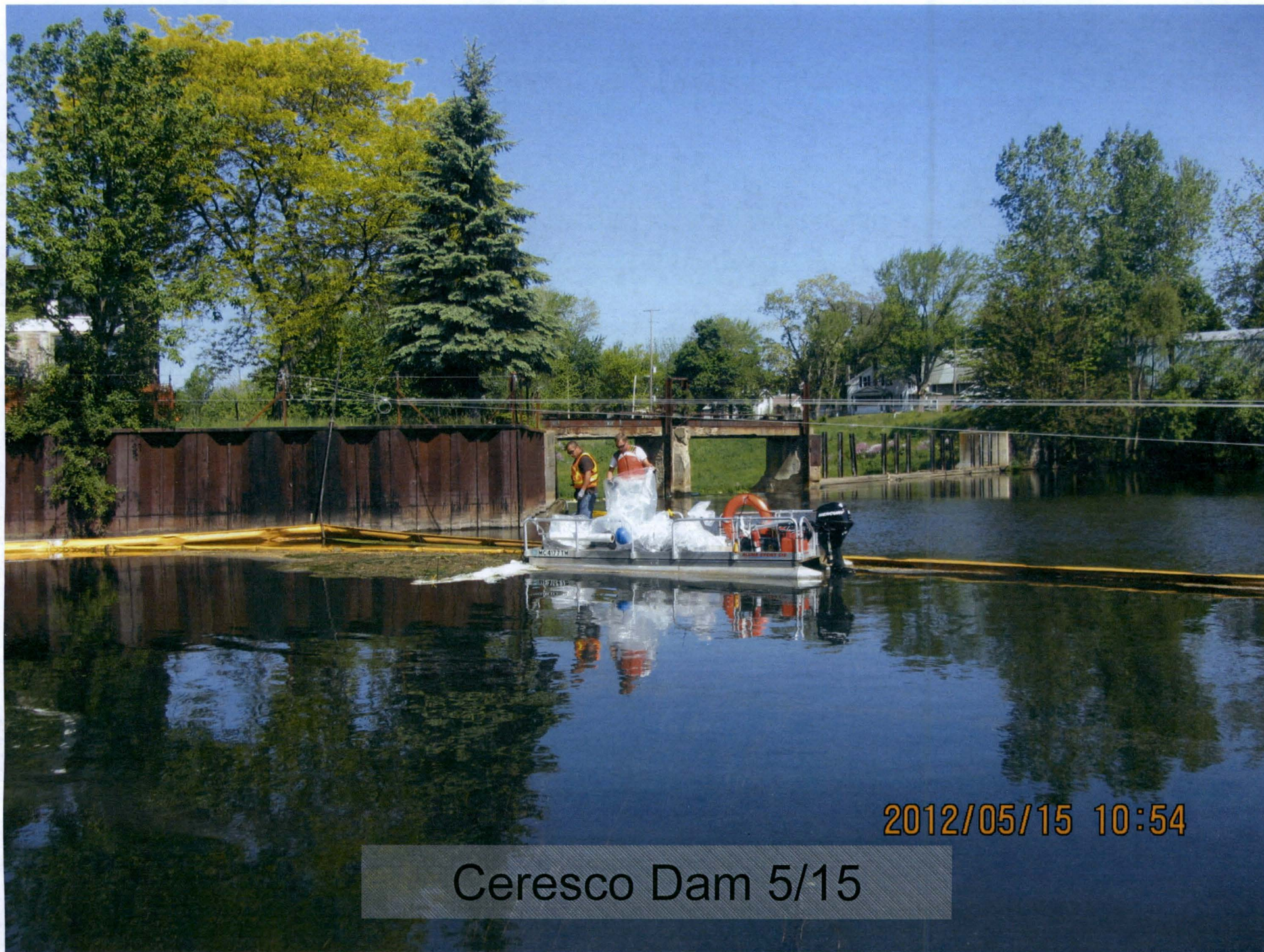


Ceresco Dam 5/15



2012/05/15 10:52

Ceresco Dam 5/15



2012/05/15 10:54

Ceresco Dam 5/15



Ceresco Dam 5/14



Ceresco Dam 5/15



Ceresco Dam 5/15



MP 5.92 RDB 5/15



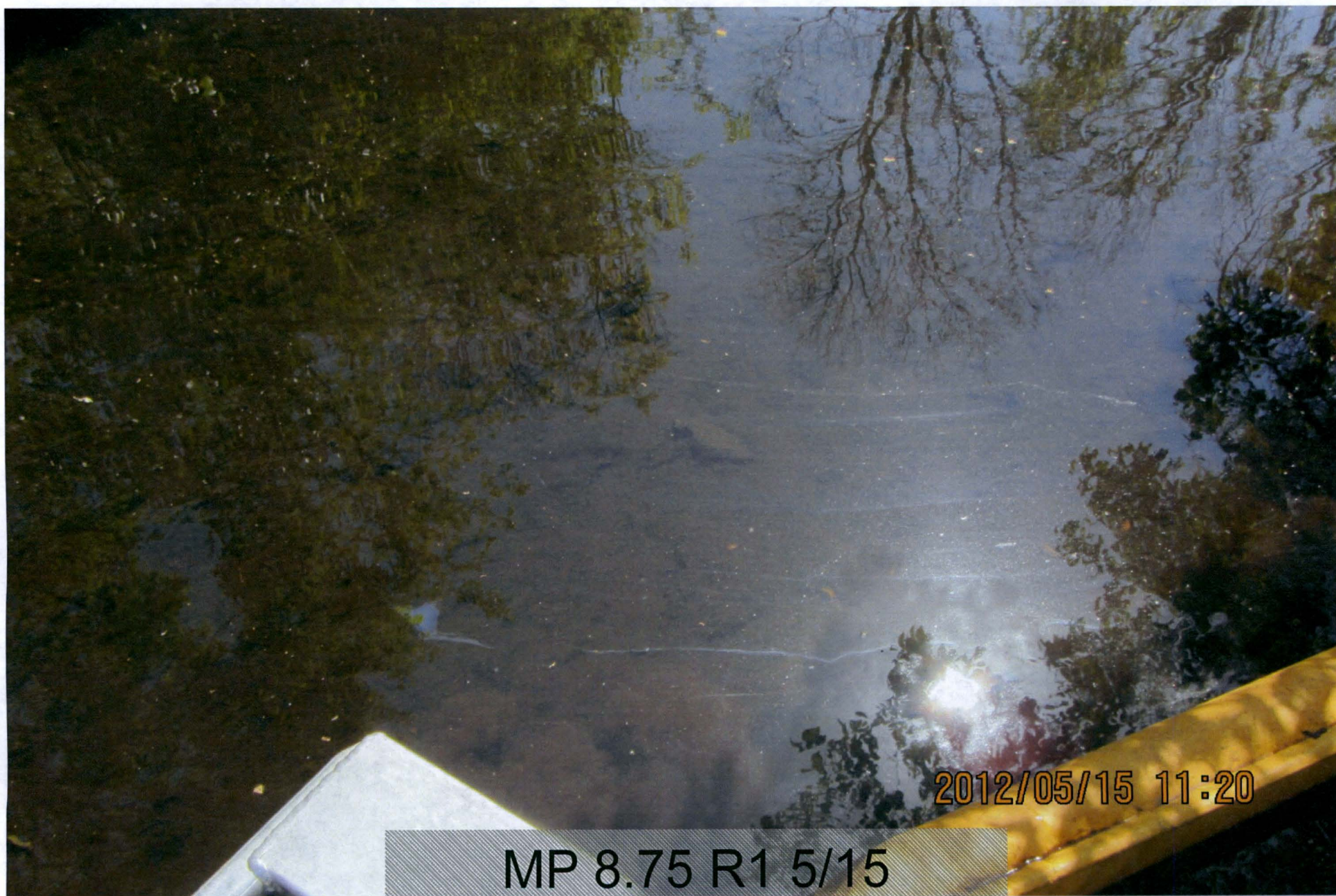
2012/05/15 10:58

MP 8.5 L1 5/15



2012/05/15 11:13

MP 8.5 L3 5/15



2012/05/15 11:20

MP 8.75 R1 5/15



2012/05/14 12:09

MP 9.0 I2 5/14



MP 10.0; C3.2 5/15



MP 10.0; C3.2 5/15



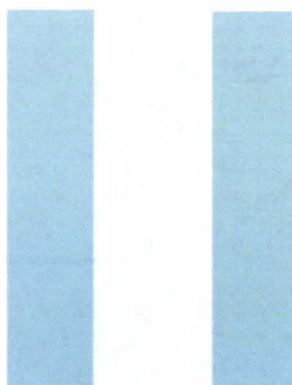
MP 10.75 5/15

Sheen Process

Sheen Observed



Communication



Monitoring

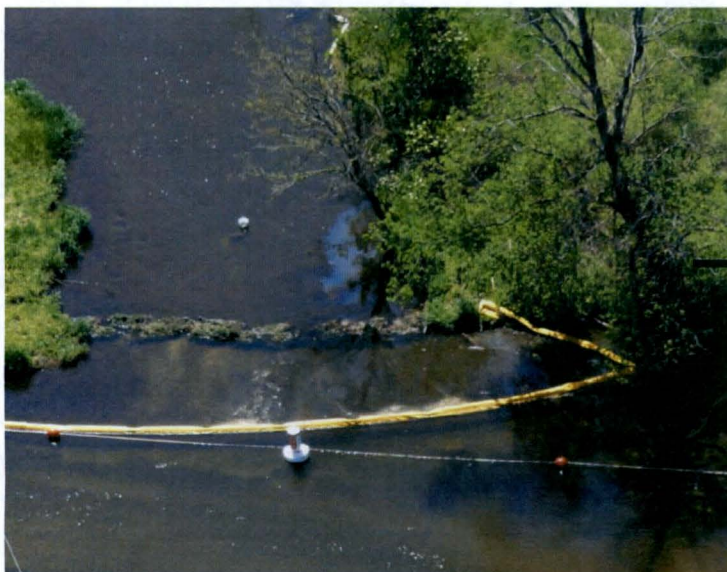
Response



Sheen Process

Photo Log

Tuesday, May 15, 2012



15. MP10.75 sheen at sediment trap location.

Sheen Tracker

A screenshot of a Microsoft Excel spreadsheet titled 'Sheen Tracker'. The spreadsheet contains a large table with columns for 'River Mile', 'Date', 'Sheen Type', 'Project', 'Inspector', 'Number of Sheen', 'Observation', 'Observation', 'Inspection Date', 'Inspection Time', 'Inspection Result', 'Water Temperature', 'Wind Speed', 'Wind Direction', 'Weather', 'Notes', 'Inspector', 'Reviewer', 'Date', 'Time', 'Location', 'Status', 'Comments'. The table is filled with data, and many rows are highlighted in yellow. An arrow points from the photo log image to the 'Number of Sheen' column, and another arrow points from the bottom of the spreadsheet to the 'Ongoing Analysis' section.

- Ongoing Analysis
 - Validity
 - Reliability
 - Correlation

Sheen Process

Sheen Tracking Master Table 051512.xls [Compatibility Mode] - Microsoft Excel																			
F320																			
Table Tools																			
Home Insert Page Layout Formulas Data Review View PDF-XChange 4 Design																			
Clipboard Font Paragraph Styles Cells Editing																			
Normal 2 Normal Bad Good Neutral Calculation Check Cell Explanatory Input Linked Cell																			
Insert Delete Format Fill Clear Sort & Find & Filter Select																			
A B C D E F G H I J K L M N O P Q R S T																			
1 Location Summary Information Observation Information Inspection Information																			
2 River Segment MP Site ID Sheen Test Conduct Sheen Type Response Action Necessary Number of Sheen Observation Date Observation Source Overbank/Channel/Containment Inspection Date Inspection Team Enbridge Rep EPA Rep Water Temperature Sheen Sq. Footage Habitat Type or Setting Test ID Recording Time - J Color of Hexane																			
318	Segment 4	10.50	MP 10.50 L 2	N	OI			3/28/2012	SORT	Overbank	3/28/2012	SORT	Stanton, Joe	Vaher, Marc	56.2	NA		NA	
319	Segment 4	10.50	MP 10.50 RDB 11	N				3/27/2012	SORT	Overbank	3/27/2012	SORT	Stanton, Joe	Vaher, Marc	53.3	0		NA	
320	Segment 4	10.50	MP 10.50 RDB 17	N				3/27/2012	SORT	Overbank	3/27/2012	SORT	Whonka, Hans	Ploss, Brian	53.3	0		NA	
321	Segment 4	10.50	MP 10.50 RDB 500	N				3/27/2012	SORT	Overbank	3/27/2012	SORT	Whonka, Hans	Ploss, Brian	53.3	0		NA	
322	Segment 4	10.75	MP 10.75 L 1A	N				3/28/2012	SORT	Overbank	3/28/2012	SORT	Stanton, Joe	Vaher, Marc	56.2	NA		NA	
323	Segment 4	10.75	MP 10.75 L 1B	N				3/28/2012	SORT	Overbank	3/28/2012	SORT	Stanton, Joe	Vaher, Marc	56.2	NA		NA	
324	Segment 4	10.75	MP 10.75 L 2	N	OI			3/28/2012	SORT	Overbank	3/28/2012	SORT	Stanton, Joe	Vaher, Marc	56.2	NA		NA	
325	Segment 4	10.75	MP 10.75 LDB	N			9	4/2/2012	CBM	Containment	4/2/2012	CBM	Pezzes, Dave	Kendall, Joe	58.0	0		NA	
326	Segment 4	10.75	MP 10.75 LDB	N			9	4/5/2012	CBM	Containment	4/5/2012	CBM	Pezzes, Dave	Kendall, Joe	NA	0		NA	
327	Segment 4	10.75	MP 10.75 LDB	N			9	4/4/2012	CBM	Containment	4/4/2012	CBM	Pezzes, Dave	Kendall, Joe	62.2	0		NA	
328	Segment 4	10.75	MP 10.75 LDB	N			9	4/5/2012	CBM	Containment	4/5/2012	CBM	Pezzes, Dave	Kendall, Joe	57	0		NA	
329	Segment 4	10.75	MP 10.75 LDB	N			9	4/6/2012	CBM	Containment	4/6/2012	CBM	Massey, Dylan	Berez, Karen	NA	0		NA	
330	Segment 4	10.75	MP 10.75 LDB	N			9	4/7/2012	CBM	Containment	4/7/2012	CBM	Pezzes, Dave	Kendall, Joe	NA	0		NA	
331	Segment 4	10.75	MP 10.75 LDB	N			9	4/9/2012	CBM	Containment	4/9/2012	CBM	Pezzes, Dave	Kendall, Joe	NA	0		NA	
332	Segment 4	10.75	MP 10.75 LDB	N	OI		9	4/9/2012	CBM	Containment	4/9/2012	CBM	Pezzes, Dave	Kendall, Joe	50.3	1		NA	
333	Segment 4	10.75	MP 10.75 LDB	N			9	4/9/2012	CBM	Containment	4/9/2012	CBM	Pezzes, Dave	Kendall, Joe	56.4	NA		NA	
334	Segment 4	10.75	MP 10.75 LDB	N	OI		9	4/12/2012	CBM	Containment	4/12/2012	CBM	Pezzes, Dave	Kendall, Joe	48.5	4		NA	
335	Segment 4	10.75	MP 10.75 LDB	N			9	4/13/2012	CBM	Containment	4/13/2012	CBM	Pezzes, Dave	Kendall, Joe	52.4	0		NA	
336	Segment 4	10.75	MP 10.75 LDB	N			9	4/14/2012	CBM	Containment	4/14/2012	CBM	Pezzes, Dave	Kendall, Joe	53.9	0		NA	
337	Segment 4	10.75	MP 10.75 LDB	N			9	4/16/2012	CBM	Containment	4/16/2012	CBM	Pezzes, Dave	Kendall, Joe	58.4	0		NA	
338	Segment 4	10.75	MP 10.75 LDB	N			9	4/17/2012	CBM	Containment	4/17/2012	CBM	Pezzes, Dave	Kendall, Joe	43.0	0		NA	
339	Segment 4	10.75	MP 10.75 LDB	N			9	4/19/2012	CBM	Containment	4/19/2012	CBM	Pezzes, Dave	Kendall, Joe	47.7	0		NA	
340	Segment 4	10.75	MP 10.75 LDB	N			9	4/19/2012	CBM	Containment	4/19/2012	CBM	Pezzes, Dave	Kendall, Joe	51.8	0		NA	
341	Segment 4	10.75	MP 10.75 LDB	N			9	4/20/2012	CBM	Containment	4/20/2012	CBM	Pezzes, Dave	Kendall, Joe	60.5	0		NA	
342	Segment 4	10.75	MP 10.75 LDB	N			9	4/23/2012	CBM	Containment	4/23/2012	CBM	Massey, Dylan	Berez, Karen	53.8	0		NA	
343	Segment 4	10.75	MP 10.75 LDB	N	OI		9	4/24/2012	CBM	Containment	4/24/2012	CBM	Massey, Dylan	Berez, Karen	48.6	1		NA	
344	Segment 4	10.75	MP 10.75 LDB	N			9	4/25/2012	CBM	Containment	4/25/2012	CBM	Massey, Dylan	Berez, Karen	53.7	0		NA	
345	Segment 4	10.75	MP 10.75 LDB	N	OI		9	4/27/2012	CBM	Containment	4/27/2012	CBM	Pezzes, Dave	Kendall, Joe	48.8	0		NA	
346	Segment 4	10.75	MP 10.75 LDB	N			9	4/30/2012	CBM	Containment	4/30/2012	CBM	Pezzes, Dave	Kendall, Joe	53.4	0		NA	
347	Segment 4	10.75	MP 10.75 LDB	N			9	5/9/2012	CBM	Containment	5/9/2012	CBM	Pezzes, Dave	Kendall, Joe	55.8	0		NA	
348	Segment 4	10.75	MP 10.75 LDB	N	OI		9	5/12/2012	CBM	Containment	5/12/2012	CBM	Pezzes, Dave	Kendall, Joe	61.2	30		NA	
349	Segment 4	10.75	MP 10.75 LDB	N			9	5/13/2012	CBM	Containment	5/13/2012	CBM	Pezzes, Dave	Kendall, Joe	60.5	0		NA	
350	Segment 4	10.75	MP 10.75 LDB	N	OI	Y	9	5/14/2012	CBM	Containment	5/14/2012	CBM	Pezzes, Dave	Kendall, Joe	66	300		NA	
351	Segment 4	10.75	MP 10.75 LDB	N	OI		9	5/17/2012	CBM	Containment	5/17/2012	CBM	Pezzes, Dave	Kendall, Joe	61.9	300		NA	
352	Segment 4	10.75	MP 10.75 LDB	N			9	5/19/2012	CBM	Containment	5/19/2012	CBM	Fuller, Mac	Kendall, Joe	62.9	0		NA	
353	Segment 4	10.75	MP 10.75 LDB	N		N	9	5/19/2012	CBM	Containment	5/19/2012	CBM	Fuller, Mac	Kendall, Joe	61.0	0		NA	
354	Segment 4	10.75	MP 10.75 LDB	N		N	9	5/19/2012	CBM	Containment	5/19/2012	CBM	Fuller, Mac	Kendall, Joe	59	0		NA	
355	Segment 4	10.75	MP 10.75 LDB	N			9	5/19/2012	CBM	Containment	5/19/2012	CBM	Fuller, Mac	Kendall, Joe	59.7	0		NA	
356	Segment 4	10.75	MP 10.75 LDB	N	OI		9	5/12/2012	CBM	Containment	5/12/2012	CBM	Pezzes, Dave	Kendall, Joe	62.5	1		NA	
357	Segment 4	10.75	MP 10.75 LDB	N	OI		9	5/14/2012	CBM	Containment	5/14/2012	CBM	Massey, Dylan	Berez, Karen	63.7	96		NA	
358	Segment 4	10.75	MP 10.75 LDB	N	OI	Y	9	5/15/2012	Overflight	Containment	NA	NA	NA	NA	60.6	NA		NA	
359	Segment 4	10.75	MP 10.75 LDB - Ex	Y	Bio			3/29/2012	Situational Awareness	Overbank	3/29/2012	Situational Awareness	Fuller, Mac	Berez, Karen	49.2	NA		STXFR075L06023002H01	
360	Segment 4	10.75	MP 10.75 LDB - Ex	N				5/14/2012	Situational Awareness	Overbank	NA	NA	NA	NA	66	NA		NA	
361	Segment 4	10.75	MP 10.75 LDB 4	N				3/28/2012	SORT	Overbank	3/28/2012	SORT	Stanton, Joe	Vaher, Marc	56.2	NA		NA	
362	Segment 4	11.00	MP 11.00 LDB 2	N				3/28/2012	SORT	Overbank	3/28/2012	SORT	Senn, Derek	Vagner, Greg	56.2	NA		NA	
363	Segment 4	11.00	MP 11.00 LDB 5	N	OI			3/28/2012	SORT	Overbank	3/28/2012	SORT	Senn, Derek	Vagner, Greg	56.2	NA		NA	
364	Segment 4	11.00	MP 11.00 RI	N	OI			3/29/2012	SORT	Overbank	3/29/2012	SORT	Junilla, John	Mucciante, Marcus	54.5	NA		NA	
365	Segment 4	11.00	MP 11.00 RDB 4	N				3/29/2012	SORT	Overbank	3/29/2012	SORT	Junilla, John	Mucciante, Marcus	54.5	NA		NA	
366	Segment 4	11.25	MP 11.25 L C3.7A	N				3/29/2012	SORT	Overbank	3/29/2012	SORT	Senn, Derek	Vagner, Greg	54.5	NA		NA	
367	Segment 4	11.25	MP 11.25 L C3.7B	N				3/29/2012	SORT	Overbank	3/29/2012	SORT	Senn, Derek	Vagner, Greg	54.5	NA		NA	



Sheen Process

Sheen SOP Validation Data Collection Form

Enbridge Line 6B MP 608
Marshall, MI Pipeline Release
Revised May 10, 2012

Date of Test:
Enbridge Representative:
Agency Representative:

SHEEN TEST SHOULD NOT BE CONDUCTED UNLESS THERE IS SUFFICIENT AREA OF SHEEN TO COMPLETE ALL THREE TEST METHODS. A MINIMUM OF ONE SQUARE FOOT AREA IS RECOMMENDED.

Sheen Test Location (Information to be added to hexane vial label as well):					
MP (four digits)	Bank ID (Circle one)	Integer (2 Digits)	Date (6 digits MMDDYY)	X Coordinate	Y Coordinate
	L R I				

Test Type (in Order to Complete)	Photo	Photo ID on Camera	Photo Description	Procedure		Test Results (Circle one or provide requested information)
Pre-Test	01		Area being sampled along with labeled kit in photo	Document river water temperature from a nearby temperature station	Water Temperature	
				Document setting of site (upland wetland, back channel, containment, etc.).	Setting?	
Hexane Test	02		Teflon while dabbing/swirling	Compare test to hexane blank. Note type of discoloration observed. Label and retain hexane test vial.		Yes
	03		Sheen side of Teflon prior to placing into VOA with hexane		Does hexane discolor?	No
	04		VOA with completed hexane test and hexane blank in front of white background		Color of hexane after test	*Inconclusive
Jar Test	05		Jar being filled from same location as sheen	Verify Sheen captured in Jar. Swirl jar with sheen to avoid contact with lid. Observe jar for 2 minutes and document time that sheen re-coalesces		Yes
	06		Sheen in jar (open)		Does sheen disperse or fail to re-coalesce?	No
	07		Jar test results (after two minutes, open)			*Inconclusive
	08		Jar test and hexane test held side by side in front of white background		After how many seconds did sheen re-coalesce?	
Stick Test	09		Stick test area before (stick in photo)		Does sheen disperse or fail to re-coalesce?	Yes
	10		Stick test area after (stick in photo)			No
						*Inconclusive

*Inconclusive should be selected when one or more of the observers do not agree that the results of the test are conclusive

Comments:



2012/05/15 12:31

MP 10.75 5/15



MP 11.0 5/15



MP 11.75 L2 5/15



MP 13.4 LDB 5/15



MP 14.75 5/15



2012/05/14 12:29

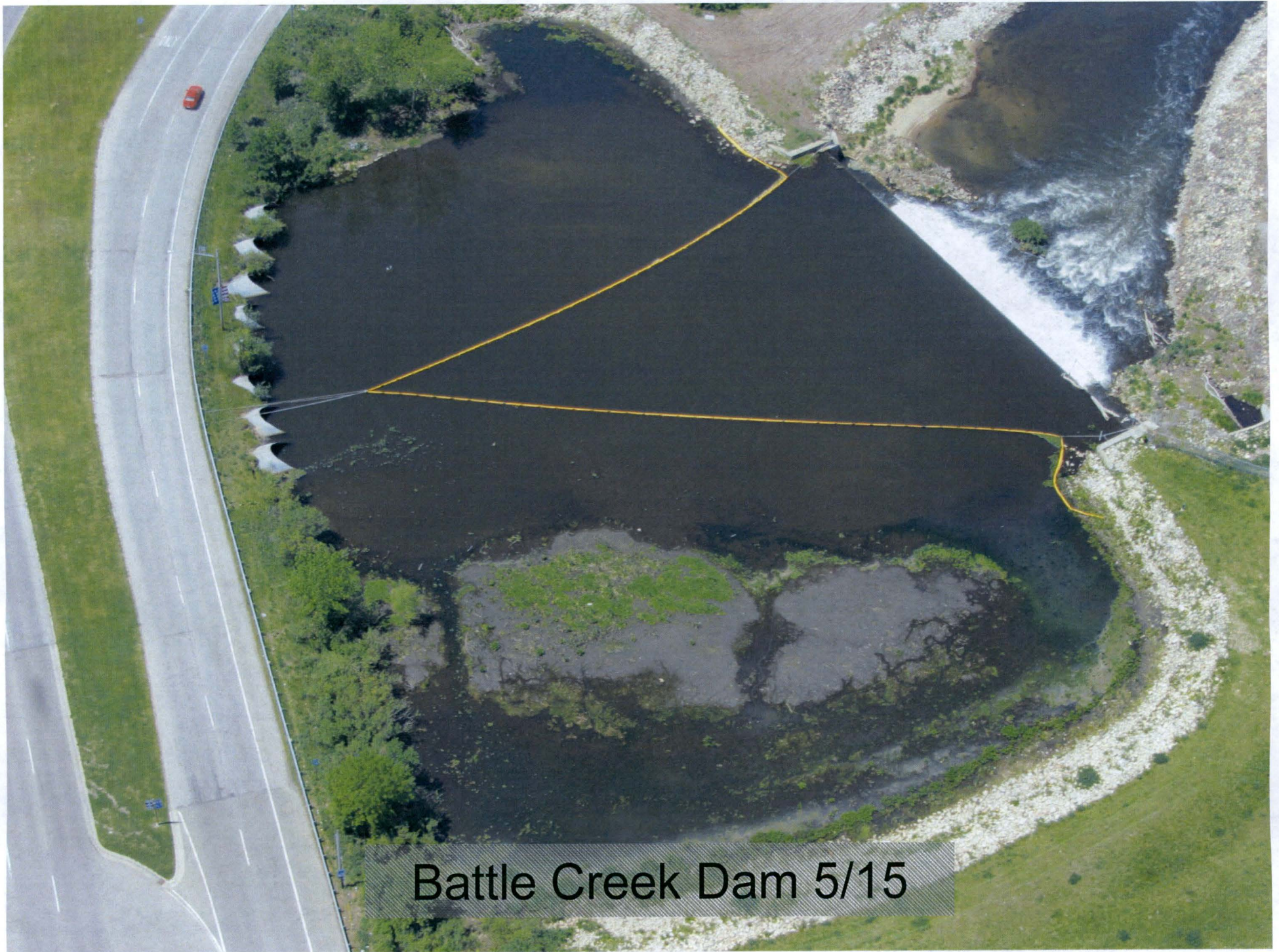
MP 14.98 | 5/14



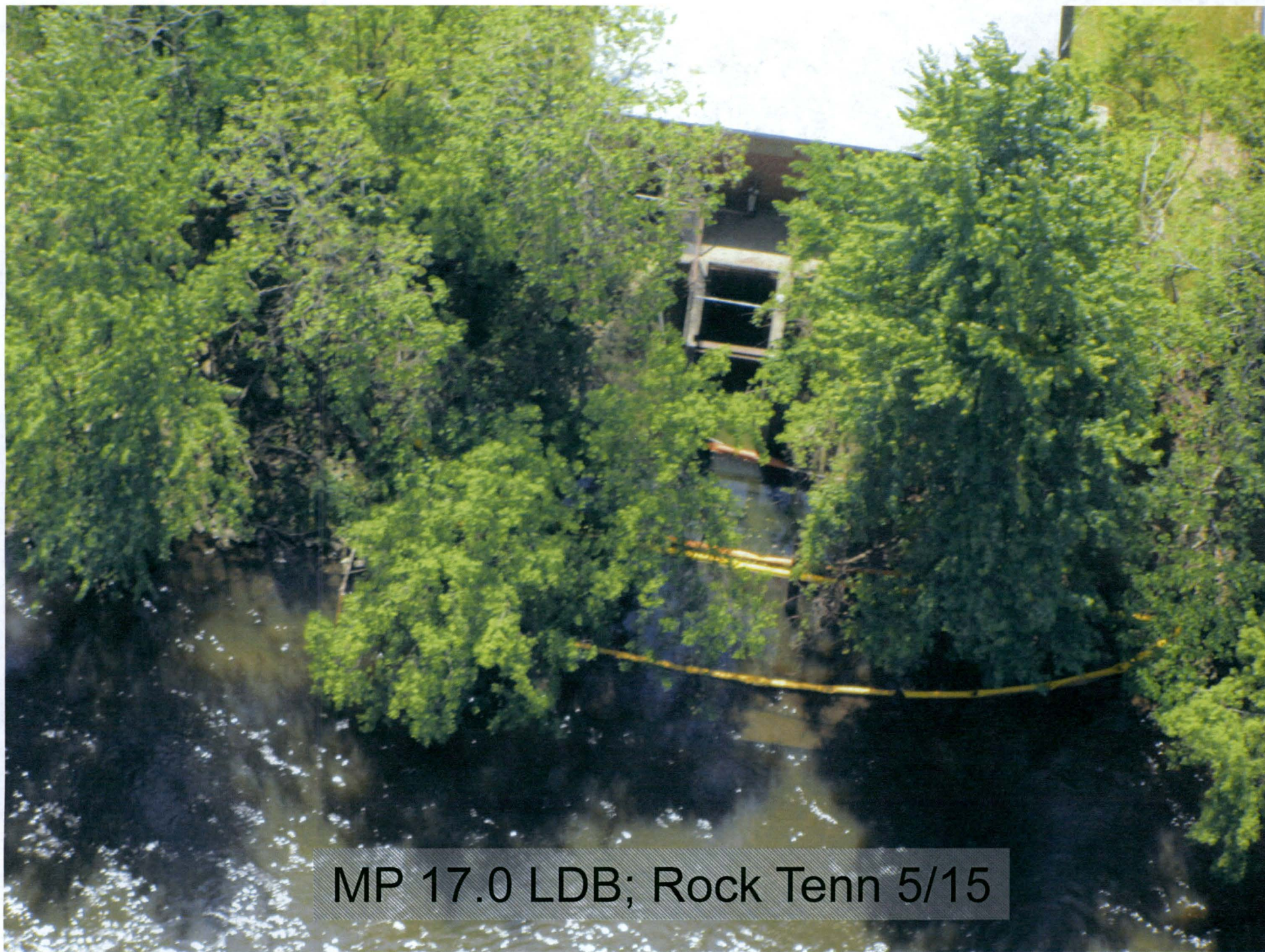
MP 14.98 | 5/15



Mill Ponds 5/15



Battle Creek Dam 5/15



MP 17.0 LDB; Rock Tenn 5/15



MP 19.25 5/15



MP 21.5 5/15



MP 23.5 5/15



MP 30.8 5/15



MP 33.0 5/15

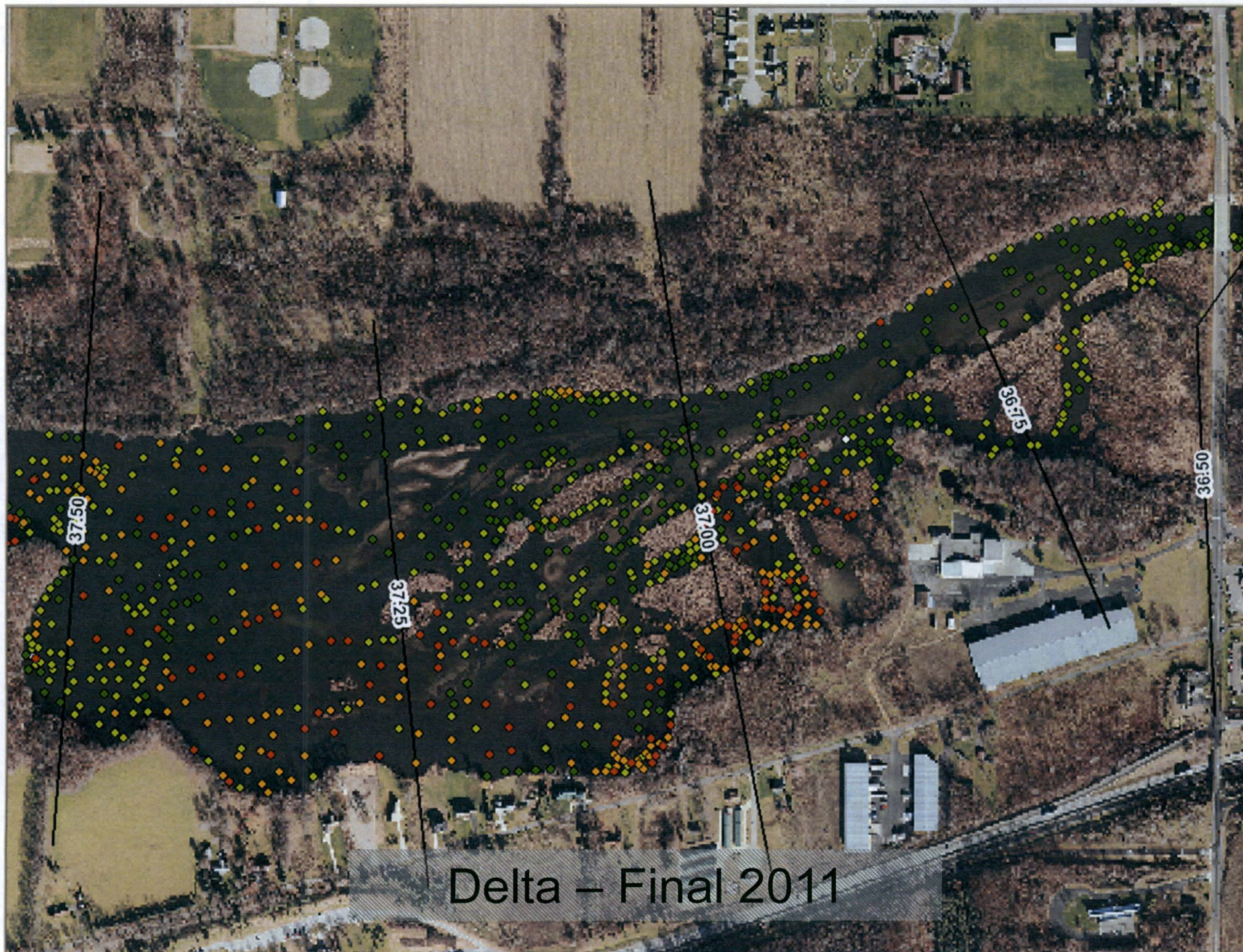


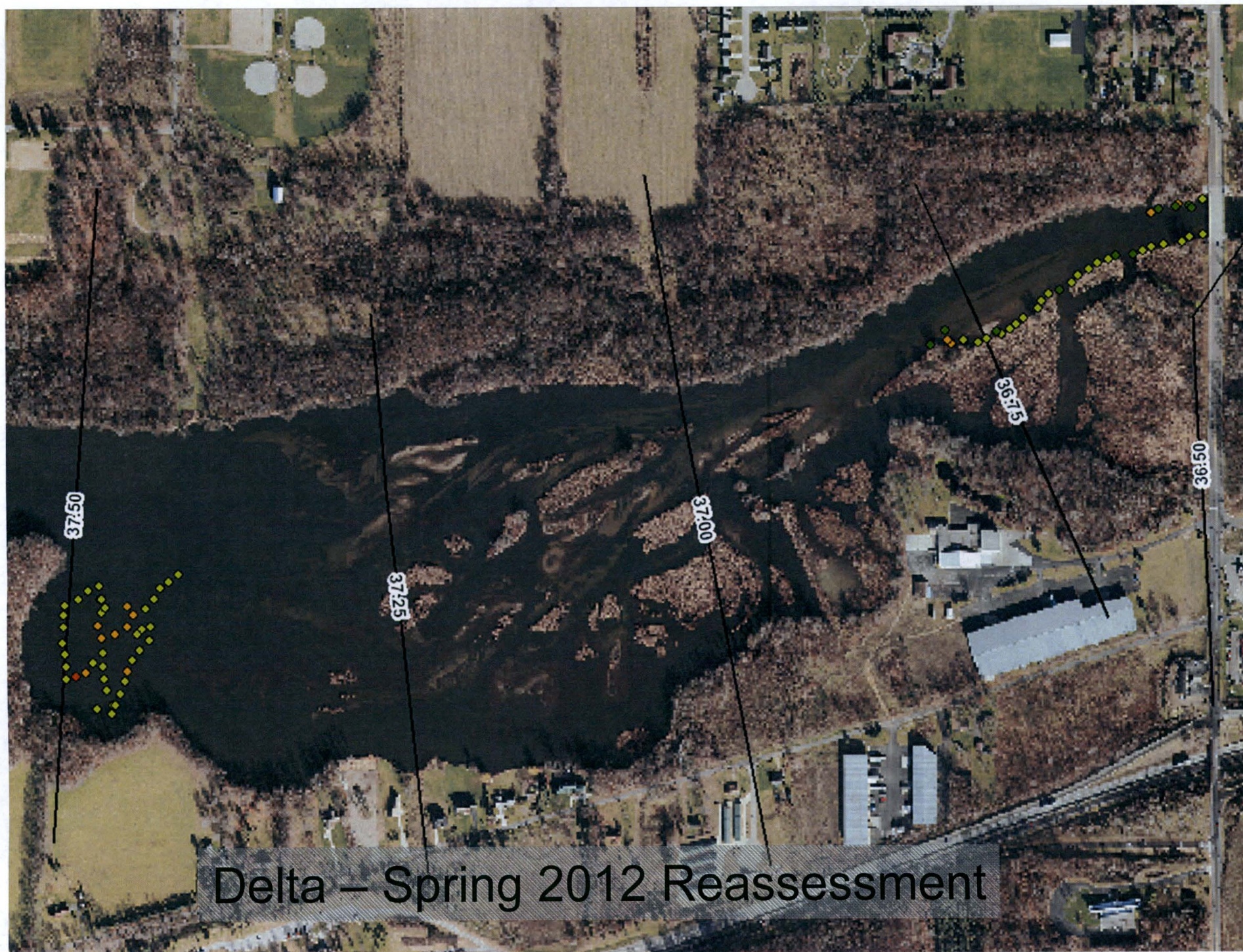
05/14/2012 08:24

MP 36.1 5/14



Morrow Lake Delta 5/15





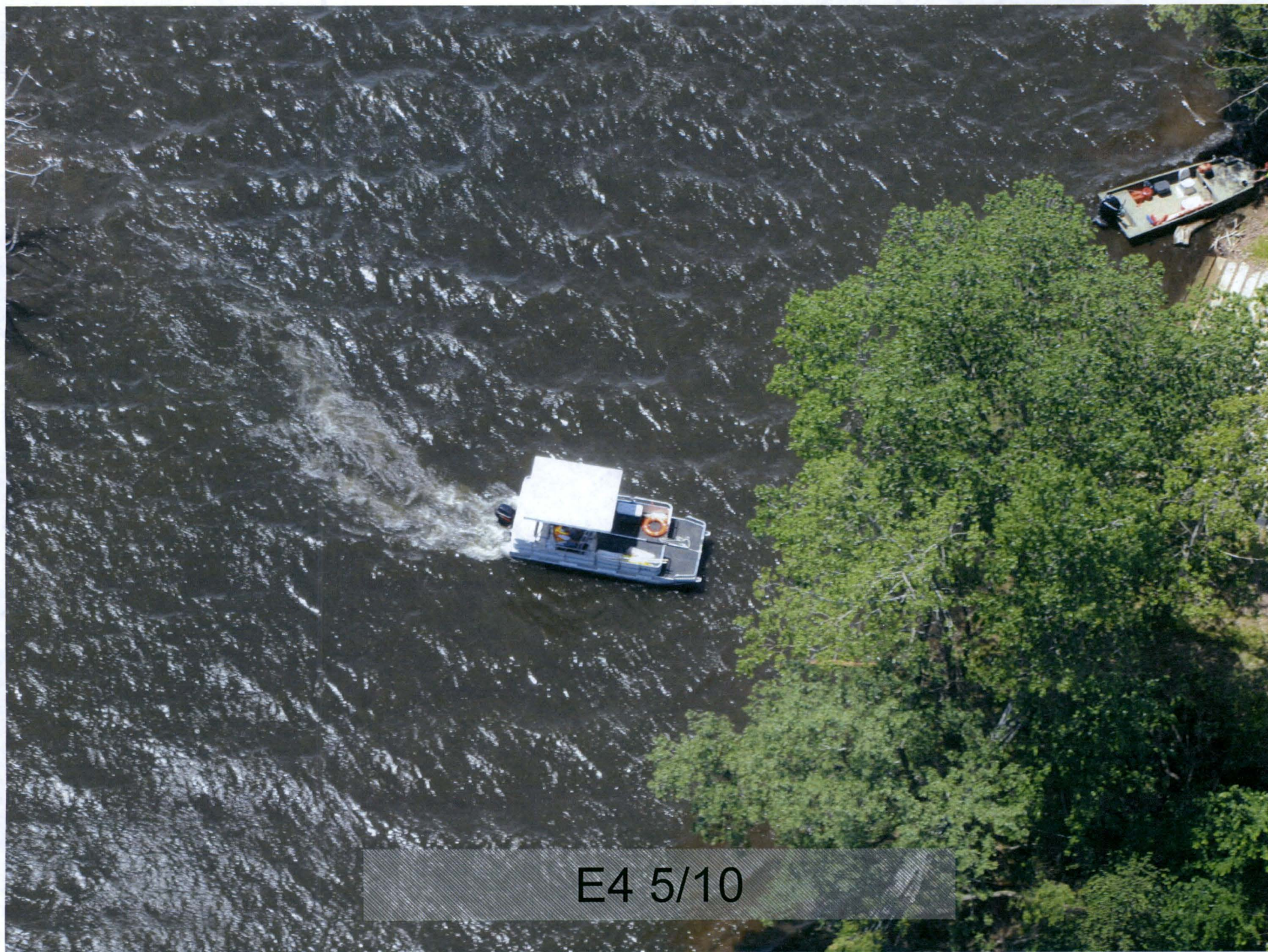
Delta – Spring 2012 Reassessment



E4 5/15



E4 5/15



E4 5/10



2012/05/15 14:15

Morrow Lake 5/15



Morrow Lake 5/15



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Morrow Lake 5/15

River Opening

News Conference

- Reviewed potential location (River Oaks Park)
- Overlooks Kalamazoo River & Morrow Lake
- Ample parking
- Separate parking lot with single entrance/exit
- Security plans underway

River Opening

Media Kit

- Interview Scheduled Recording
 - May 16
 - Linda Dykema, MDCH
 - May 17
 - Ralph Dolhopf, US EPA
 - Jim Rutherford, Calhoun County
 - Linda Vail, Kalamazoo County
 - To be scheduled week of May 21
 - MDEQ (speaker still to be determined)
 - Lisa Williams, US Fish & Wildlife
 - Steve Hamilton, SSCG
- Other video (scheduled week of May 21)
 - Organic vs. petroleum sheen
 - Kayak cleaning at wash station
- Photography
 - Images collected and reviewed May 16-18
- Fact Sheet (EPA producing)
- News Release (Phase 2 announcement – From the Counties?)
- Final production week of May 29
- USB Drives complete week of June

Command & General Staff Updates for UC

- Planning Section
- Logistics Section
- Operations Section
- Safety Officer
- Public Information Officer

Closing Remarks

- Enbridge
- DEQ
- US EPA