Renewable World Energies

February 17, 2017

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426

RE: Winter Hydroelectric Project
FERC Project Number P-2064
Flambeau Hydro LLC
Final Report 2016 Water Quality Monitoring Data

Dear Ms. Bose:

On behalf of Flambeau Hydro LLC, "Flambeau" (Licensee), Renewable World Energies, LLC (RWE) is submitting a copy of the *Final Report 2016 Water Quality Monitoring Data* for the Winter Hydroelectric Project. The Federal Energy Regulatory Commission "FERC" issued a License to Flambeau on August 12, 2005. A revised Water Quality Certification was issued August 19, 2008. This report is submitted as a requirement of that License pursuant to License Article 401 Condition N, Appendix A. 2016 was the tenth year monitoring was conducted since the license was issued, but is the 5th year of submittal by RWE on the behalf of the Licensee.

Monitoring was conducted on March 22, July 18, and August 16, 2016. No issues were encountered during the 2016 monitoring season. All data has been entered into the SWIMS Data Base. The draft report was sent to the agencies by letter dated November 16, 2016 for review and comment. No comments have been received as of the date of this letter. The next scheduled monitoring event will be conducted in 2017.

If you have any questions concerning this submittal, please contact Brian Kreuscher at the Renewable World Energies, LLC offices @ 855-994-9376 Ext 230. He can also be reached by e-mail at bkreuscher@rwehydro.com.

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Sincerely,
Renewable World Energies, LLC
Agent for Licensee

For Mr. Jason Kreuscher
Vice President, Operations

Attachment: Final Report 2016 Water Quality Monitoring Data

Cc: Mr. Paul Strong, USFS
Mr. Dale Higgins, USFS
Ms. Sue Reinecke, USFS
Ms. Cheryl Laatsch, WDNR
Mr. Nick Utrup, USFWS
RWE, Corporate

Final Report

2016 Water Quality Monitoring Data

for the

Winter Hydroelectric Project

FERC Project #2064

Flambeau Hydro, LLC

East Fork of the Chippewa River,
Sawyer County, Wisconsin

Respectfully Submitted by:

Angie Stine

WHITE WATER ASSOCIATES, INC.

429 River Lane, P.O. Box 27
Amasa, Michigan 49903

Phone: 906-822-7889

Summary Winter Hydroelectric Project – FERC #2064

2016 marked the tenth year of water quality sampling under FERC License issued August 12, 2006 Per Article 401, Water Quality Certification Condition N, Appendix A for the Winter Hydroelectric Project – FERC Project # 2064 – Flambeau Hydro LLC. Monitoring was conducted on March 22, July 18, and August 16, 2016. This document contains all of the associated records for the 2016 monitoring along with summary figures and tables in four appendices: (1) Appendix A (Figures 1-4), (2) Appendix B (Tables 1-3), (3) Appendix C (sampling logs by date), and (4) Appendix D (laboratory reports and chains of custody).

A map of the Winter Hydroelectric Project is shown in Figure 1 indicating the water quality sampling location.

Monitoring results for 2016 are shown in Table 1. No unusual Temperature (Figure 2) or Dissolved Oxygen (Figure 3) readings were observed. The Secchi depths are shown in Figure 4.

In general, the weather (temperature and rainfall) during 2016 monitoring season appeared slightly warmer in May, June, and July, & August, with lower than normal precipitation in April and May, and normal to high precipitation in the months of June, July and August (Table 2). Sampling and testing of the samples was coordinated with the sampling done at the Flambeau Projects (Upper, Lower, Pixley, Crowley). These projects are located on the North Fork of the Flambeau River, Price County, Wisconsin. Protocol, procedures, and sampling design followed that of the Flambeau Projects.

Ice-Out occurred on the East Fork of the Chippewa sometime during the week beginning March 14th, 2016. The Ice-Out sampling event occurred on March 22, 2016. River flow, based on the Winter Hydroelectric Project records, was approximately 2366 cubic feet per second. Sampling occurred between 1409 and 1425. Samples were taken without incident. No unusual D.O. or Temperature readings were observed. Samples for laboratory analysis were delivered to White Water Associates, Inc. laboratory in Amasa, MI on March 24, 2016. White Water Associates, Inc. issued a laboratory report on May 9, 2016. No unusual levels of Chlorophyll *a*, True Color, or Total Phosphorus were noted in the laboratory reports.

River flow, based on the Winter Hydroelectric Project records, was approximately 1847 cubic feet per second during the July 18, 2016 sampling event. Sampling occurred between 1345 and 1405. Samples were taken without incident. No unusual D.O. or Temperature readings were observed. Samples for laboratory analysis were delivered to White Water Associates, Inc. laboratory in Amasa, MI on July 21, 2016. White Water Associates, Inc. issued a laboratory report on August 10, 2016. No unusual levels of Chlorophyll *a*, True Color, or Total Phosphorus were noted in the laboratory reports.

River flow, based on the Winter Hydroelectric Project records, was approximately 220 cubic feet per second during the August 16, 2016 sampling event. Sampling occurred between 1306 and 1311. Samples were taken without incident. No unusual D.O. or Temperature readings were observed. Samples for laboratory analysis were delivered to White Water Associates, Inc. laboratory in Amasa, MI on August

18, 2016. White Water Associates, Inc. issued a laboratory report on September 6, 2016. No unusual levels of Chlorophyll *a*, True Color, or Total Phosphorus were noted in the laboratory reports.

A summary of a comparison between the 2011 thru 2016 (Table 3) sampling results are as follows:

1. Water Clarity – Secchi Decreased Ice Out, stayed the same July & Increased August
2. Chlorophyll a – Decreased Ice Out & August & Increased July
3. Color – Decreased Ice Out and August & Increased July
4. Total Phosphorus – Decreased Ice Out, July & August
5. Overall, D.O. – Increased Ice Out & Decreased July & August
6. Water Temperatures – Decreased Ice Out, Increased July & August

The next scheduled Water Quality Monitoring at the Winter Hydroelectric Project is set to take place in 2017 beginning with the Ice-Out sampling event.

Appendix A – Winter Hydroelectric Project Figures

Figure 1. Winter Hydroelectric Project Map showing water quality sample location.

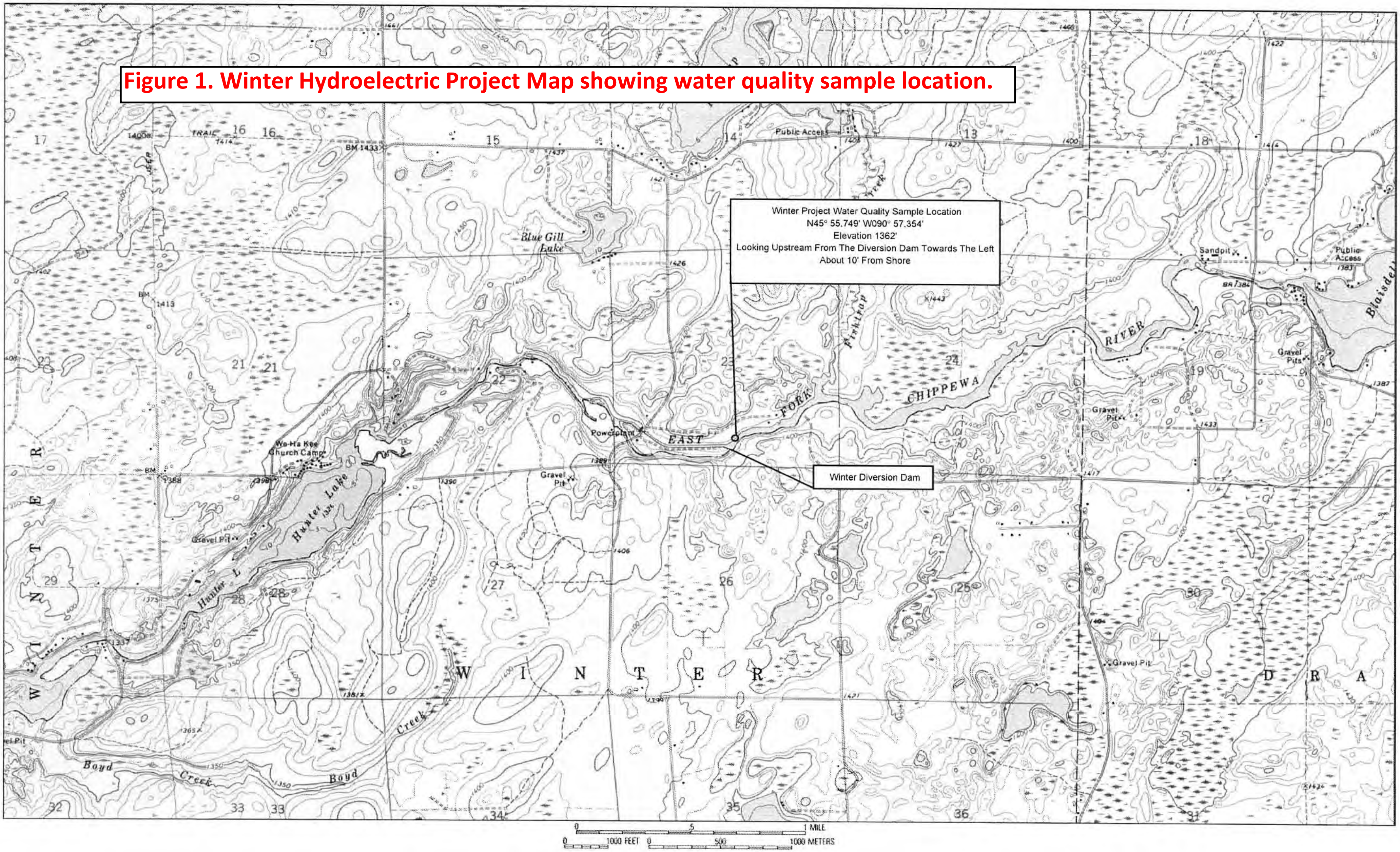


Figure 2. Winter Impoundment - FERC #2064
2016 Temperature Samples

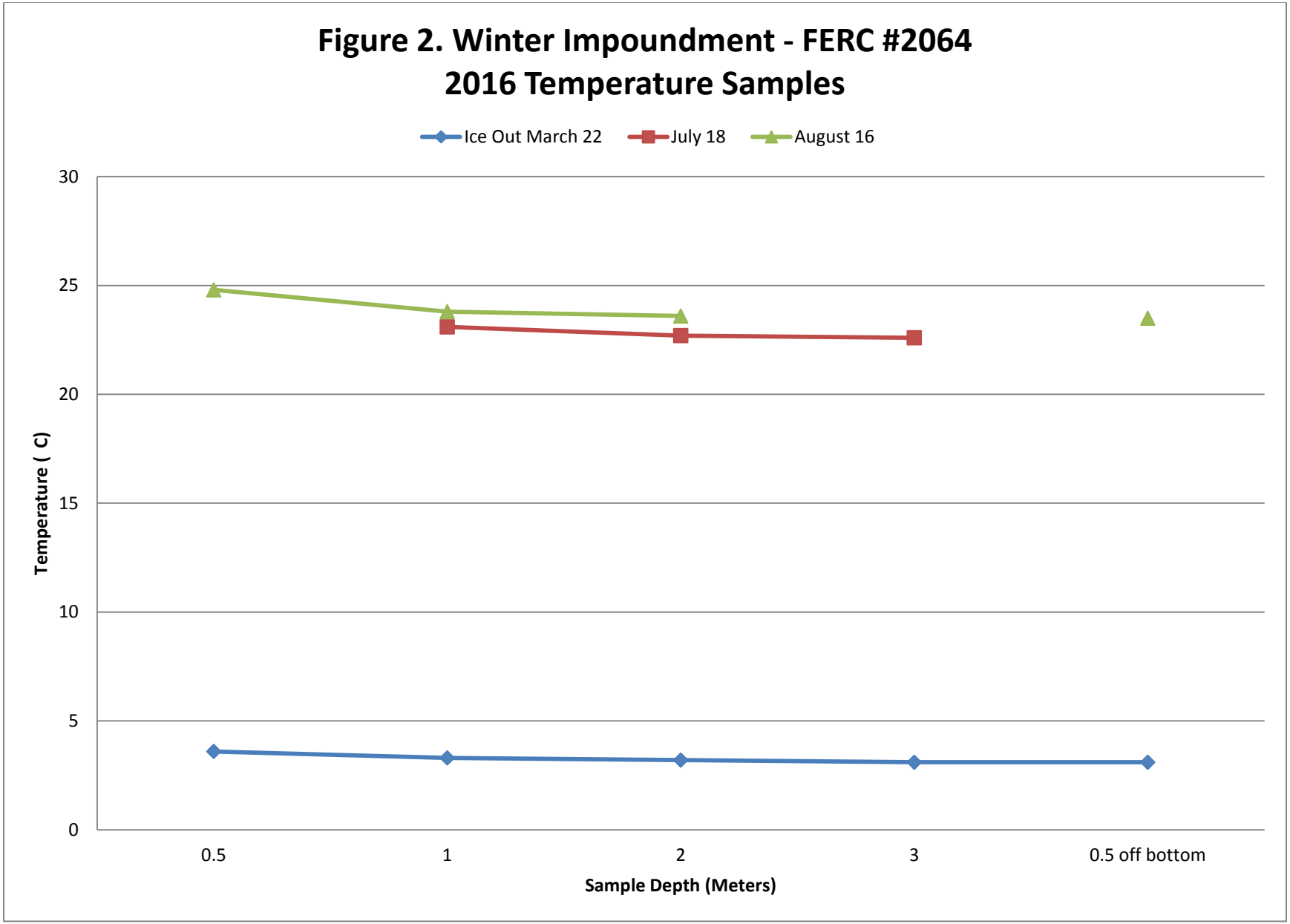
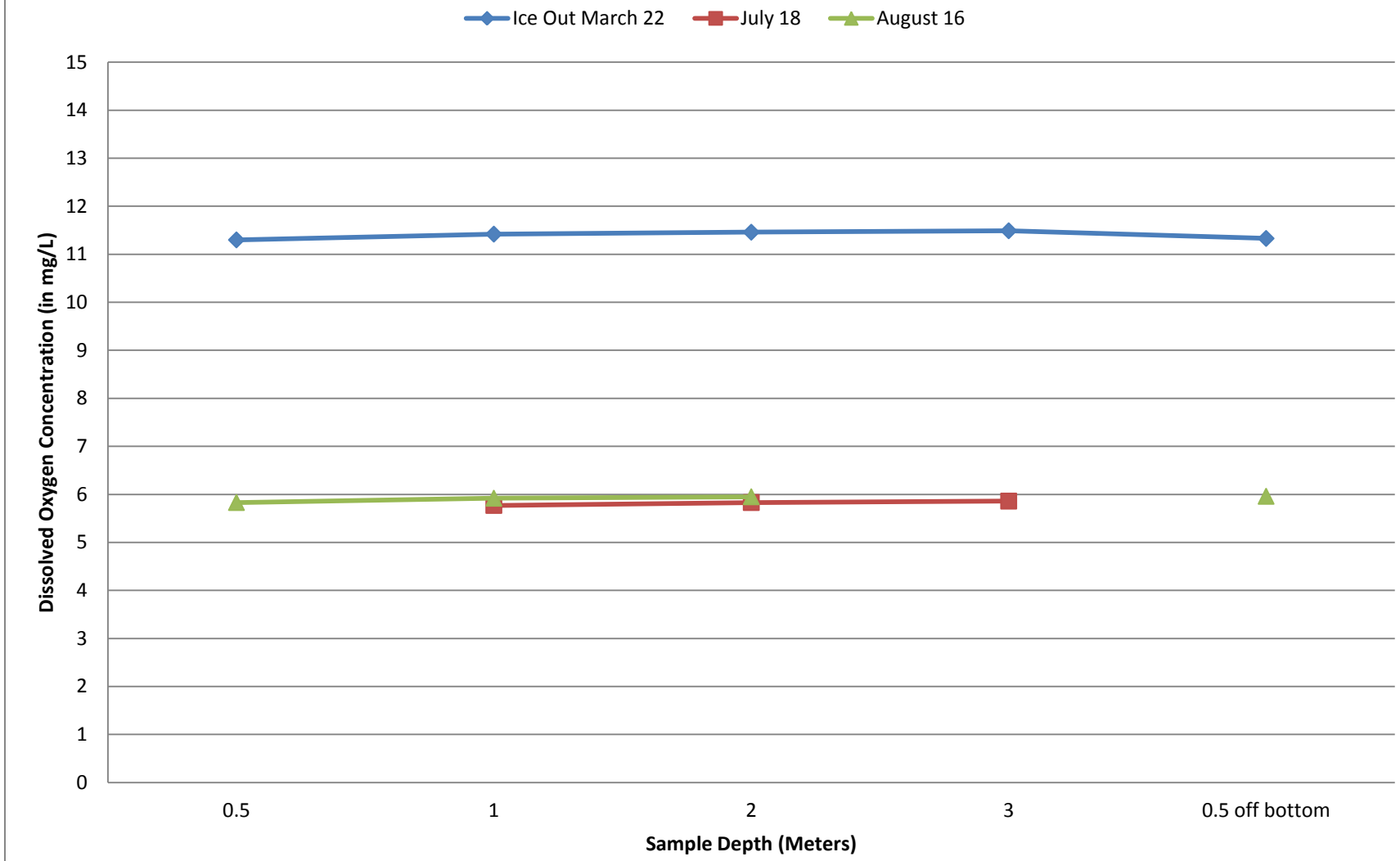


Figure 3. Winter Impoundment- FERC #2064
2016 Dissolved Oxygen Samples



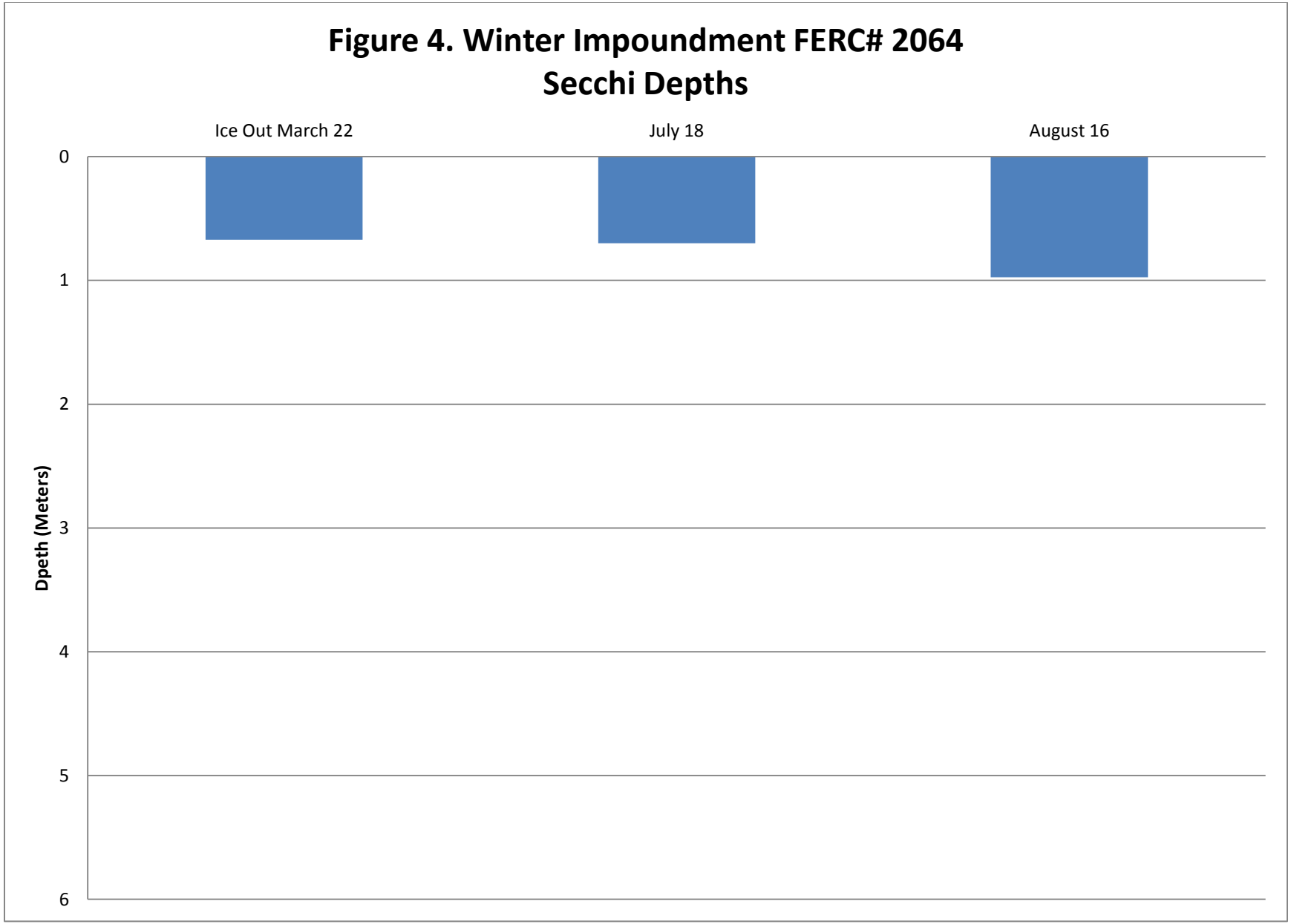


Figure 4. Winter Impoundment FERC# 2064
Secchi Depths
Ice Out March 22
July 18
August 16
0
1
2
3
4
5
6
Dpeth (Meters)

Appendix B – Winter Hydroelectric Project Tables

Table 1. Winter Hydroelectric Project – FERC Project # 2064: 2016 Water Quality Sampling Data

	Ice Out March 22, 2016			July 18, 2016			August 16, 2016		
Project Flow (c.f.s)	2366			1847			220		
Dissolved Oxygen	**Time**	**D.O. (mg/L)**	**Water Temp. (°C)**	**Time**	**D.O. (mg/L)**	**Water Temp. (°C)**	**Time**	**D.O. (mg/L)**	**Water Temp. (°C)**
0.5 meter below surface	14:15:51	11.30	3.6	N/A	N/A	N/A	13:07:39	5.83	24.8
1 meter below surface	14:16:32	11.42	3.3	13:56:15	5.77	23.1	13:08:52	5.92	23.8
2 meter below surface	14:17:18	11.46	3.2	13:57:12	5.83	22.7	13:10:19	5.95	23.6
3 meter below surface	14:17:54	11.49	3.1	13:58:35	5.86	22.6	N/A	N/A	N/A
0.5 meter above bottom	14:18:41	11.33	3.1	13:58:45	5.86	22.6	13:11:34	5.96	23.5
Secchi Disk	**Time**	**Depth (m)**		**Time**	**Depth (m)**		**Time**	**Depth (m)**	
Meters below surface	14:13	0.67		13:50	0.70		13:15	0.98	
Chlorophyll *a*	**Time**	**µg/L**		**Time**	**µg/L**		**Time**	**µg/L**	
1 meter below surface	14:21	0.41		14:00	2.20		13:06	1.50	
Color (True)	**Time**	**C.P.U. Units**	**LOD**	**Time**	**C.P.U. Units**	**LOD**	**Time**	**C.P.U. Units**	**LOD**
1 meter below surface	14:21	40	5*	14:05	85	5*	13:09	60	5*
Total Phosphorus	**Time**	**mg/L**	**LOD**	**Time**	**mg/L**	**LOD**	**Time**	**mg/L**	**LOD**
1 meter below surface	14:25	0.02	0.01*	14:05	0.035	0.008*	13:09	0.038	0.008*
1 meter above bottom	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
* Considered Method Detection Limit N/A = Not Applicable									

Table 2. 2015/16 Water Year Monthly Temperature and Precipitation for Winter, Wisconsin

Month	Highest Temp.	Lowest Temp.	Average Temp.	Departure From Normal	Heating Degree Days	Normal Degree Days	Total Precip.	Total Snowfall	Normal Precip.	% of Normal Precipitation
October - 15	84	24	46.3	3.1	574	678	1.90	Trace	2.85	67
November - 15	64	10	36.7	7.9	844	1088	2.75	4.40	2.09	132
December - 15	43	2	26.4	11.6	1187	1556	3.70	24.60	1.21	306
January – 16	41	-21	12.8	2.6	1611	1699	1.05	13.00	0.96	109
February – 16	52	-17	17.3	2.2	1376	1399	0.83	12.20	0.81	102
March – 16	60	-2	31.6	5.7	1028	1210	3.96	17.30	1.49	266
April – 16	71	2	37.7	-1.9	809	762	2.40	9.80	2.43	99
May – 16	92	28	53.2	1.8	370	426	1.87	0.10	3.23	58
June – 16	89	37	61.5	1.4	142	179	4.46	0.00	4.23	105
July – 16	90	45	67.1	1.3	29	63	4.39	0.00	3.85	114
August – 16	85	50	67.5	3.2	25	86	4.96	0.00	3.70	134
September - 16	80	40	59.9	4.3	162	298	3.52	0.00	4.11	86

Source: NOAA/Duluth, MN

Table 3. Winter Project Sampling Comparison Table: 2011 Thru Current Year									
Year	**Month**	**Secchi Depth**	**Chlorophyll *a***	**Color (True)**	**Total Phosphorus**	**Low D.O.**	**High D.O.**	**Low Water Temp.**	**High Water Temp.**
		meters	**µg/L**	**C.P.U. Units**	**Below Surface mg/L**	**mg/L**	**mg/L**	**° C**	**° C**
2011	April	1.00	0.00	150.00	0.028	11.85	12.10	8.10	8.60
2012	April	0.50	2.30	250.00	0.048	10.55	10.73	9.90	10.60
2013	May	1.20	1.90	250.00	0.036	9.34	9.61	6.90	7.80
2014	June	1.50	2.30	300.00	0.055	6.98	7.07	19.90	20.10
2015	April	0.80	3.70	180.00	0.036	9.57	9.72	10.00	11.60
2016	March	0.67	0.41	40.00	0.020	11.30	11.49	3.10	3.60
Minimum	March/April/June	0.50	0.00	40.00	0.020	6.98	7.07	3.10	3.60
Maximum	March/April/June	1.50	3.70	300.00	0.055	11.85	12.10	19.90	20.10
Average	March/April/June	0.95	1.77	195.00	0.037	9.93	10.12	9.65	10.38
2011	July	0.80	4.30	250.00	0.055	5.84	6.44	26.10	27.70
2012	July	0.60	1.80	400.00	0.082	4.67	4.75	25.50	25.90
2013	July	0.80	1.90	400.00	0.064	5.05	5.21	25.20	26.10
2014	July	0.60	1.50	250.0	0.050	6.31	6.44	19.00	19.40
2015	July	0.70	1.80	25.00	0.044	6.47	6.53	22.30	22.30
2016	July	0.70	2.20	85.00	0.035	5.77	5.86	22.60	23.10
Minimum	July	0.60	1.50	25.00	0.035	4.67	4.75	19.00	19.40
Maximum	July	0.80	4.30	400.00	0.082	6.47	6.53	26.10	27.70
Average	July	0.70	2.25	235.00	0.055	5.69	5.87	23.45	24.08
2011	August	0.70	3.70	250.00	0.055	7.25	7.27	24.70	25.10
2012	August	1.10	3.00	200.00	0.047	7.27	7.55	23.40	25.10
2013	August	0.90	2.00	200.00	0.120	5.49	6.10	20.00	20.10
2014	August	0.90	1.80	150.00	0.040	6.54	6.68	23.70	23.80
2015	August	0.70	3.30	300.00	0.051	5.95	6.10	22.80	23.20
2016	August	0.98	1.50	60.00	0.038	5.83	5.96	23.50	24.80
Minimum	August	0.70	1.50	60.00	0.038	5.49	5.96	20.00	20.10
Maximum	August	1.10	3.70	300.00	0.120	7.27	7.55	24.70	25.10
Average	August	0.88	2.55	193.33	0.059	6.39	6.61	23.02	23.68

Appendix C – Winter Impoundment Project Sampling Logs

IMPOUNDMENT SAMPLING LOG

Water Quality Study Location Winter

Hydroelectric Project – FERC # 2064

Date: 3.22.16

Pre-Sampling Data:

HWL 1370.58 TWL 1047.45 CFS 2366

Sample Location: WSNWQ SP N45.92909 W 090.95618

Performed by: A Shine Plummer

Time: 2:09 (14:09) Barometer: 29.7

Air Temp: 37°F °C Wind Speed: ENE 9mph

Sky Conditions: 60% clouds sunny

Precipitation within Last 24 Hours: 0

D.O. Meter Calibration:

Instrument Model Used: HQ40D

Were the batteries changed? ☐ Yes ☒ No

If yes, when were they changed: _____

Battery Status: 80 % Charge

Calibration Method: Factory

Sampling Depth Profile: Measured depth to bottom of impoundment 3 Meters

Secchi Depth (± 0.1)		
Time 2:13 (14:13)	2.2	Feet

Comments:

Chlorophyll *a* (3 feet below surface horizontal sampler)		
Lab Sample I.D. #:		
Time	Quantity (ml)	Filtered
14:21	1000	In Lab
Preservative	$MgCO_3$	

True Color (3 feet below surface horizontal sampler)
Lab Sample I.D. # :
Time: 14:21

Total Phosphorus (3 feet below surface horizontal sampler)	
Lab Sample I.D. # :	
Time	Preservative
14:25	H_2SO_4

Total Phosphorus (3 feet above bottom horizontal sampler)	
Lab Sample I.D. # :	
Time	Preservative
	H_2SO_4

D.O. and Temperature Profile			
Depth (Meters)	Time	D.O. (mg/L)	Temperature ° C
0.5 below surface	14:15:51	11.31	3.6
1	14:16:32	11:42	3.3
2	14:17:18	11:46	3.2
3	14:19:54	11.49	3.1
4			
5			
6			
7			
8			
0.5 above bottom	14:18:41	11:53	3.1

*If D.O. is below 5.0 mg/L notify agency and measure D.O. at 1.0 foot intervals if <5.0 mg/L.

Flow very high hard to do D.O. at Bottom

WHITE WATER ASSOCIATES, INC.

IMPOUNDMENT SAMPLING LOG

Water Quality Study Location Winter

Hydroelectric Project – FERC # 2064

Date: 7-18-2016

Pre-Sampling Data:

HWL 1370.42 TWL 1347.09 CFS 1847

Sample Location: _____

Performed by:

Angie Stine Steven Haag

Time: 13:45 Barometer: 30.20

Air Temp: 79 °F Wind Speed: W 7mph

Sky Conditions: Clear Sunny

Precipitation within Last 24 Hours: NO

D.O. Meter Calibration:

Instrument Model Used: HQ40D

Were the batteries changed? ☐ Yes ☒ No

If yes, when were they changed: _____

Battery Status: 95 % Charge

Calibration Method: Factory

Sampling Depth Profile: Measured depth to bottom of impoundment: 6 Feet

Secchi Depth (± 0.1)		
Time 13:50	2.3	Feet

Comments:

Chlorophyll *a* (3 feet below surface horizontal sampler)		
Lab Sample I.D. #:		
Time 14:00	Quantity (ml)	Filtered
	1000	In Lab
Preservative	$MgCO_3$	

True Color (3 feet below surface horizontal sampler)
Lab Sample I.D. # :
Time: 14:05

14:20

Total Phosphorus (3 feet below surface horizontal sampler)	
Lab Sample I.D. # :	
Time	Preservative
	H_2SO_4

Total Phosphorus (3 feet above bottom horizontal sampler)	
Lab Sample I.D. # :	
Time 14:05	Preservative
	H_2SO_4

D.O. and Temperature Profile			
Depth (Meters)	Time	D.O. (mg/L)	Temperature °C
0.5 below surface			
1	13:56:15	5.77	23.1
2	13:57:14	5.83	22.7
3	13:58	5.86	22.6
4			
5			
6			
7			
8			
0.5 above bottom			

*If D.O. is below 5.0 mg/L notify agency and measure D.O. at 1.0 foot intervals if <5.0 mg/L.

WHITE WATER ASSOCIATES, INC.

Photo 3520

IMPOUNDMENT SAMPLING LOG

Water Quality Study Location Winter

Hydroelectric Project – FERC # 2064

Date: 8-16-16

Pre-Sampling Data:

HWL 1370.50 TWL 1345.18 CFS 220.0

Sample Location: same

Performed by: Stin Hagg

Time: 13:06 Barometer: 30.10

Air Temp: 77°F Wind Speed: SSW 4mph

Sky Conditions: Cloudy

Precipitation within Last 24 Hours: no

D.O. Meter Calibration:

Instrument Model Used: HQ40D

Were the batteries changed? ☐ Yes ☒ No

If yes, when were they changed: 10

Battery Status: 90 % Charge

Calibration Method: Factory

Sampling Depth Profile: Measured depth to bottom of impoundment: 6.5 Feet

Secchi Depth (± 0.1)		
Time 13:15	3.2	Feet

Comments:

Chlorophyll *a* (3 feet below surface horizontal sampler)		
Lab Sample I.D. #:		
Time 13:04	Quantity (ml)	Filtered
	1000	In Lab
Preservative	$MgCO_3$	

True Color (3 feet below surface horizontal sampler)
Lab Sample I.D. # :
Time: 13:09

Total Phosphorus (3 feet below surface horizontal sampler)	
Lab Sample I.D. # :	
Time 13:09	Preservative
	H_2SO_4

~~Total Phosphorus~~ (3 feet above bottom horizontal sampler)	
Lab Sample I.D. # :	
Time	Preservative
	H_2SO_4

D.O. and Temperature Profile			
Depth ~~(Meters)~~ ft	Time p.m	D.O. (mg/L)	Temperature °C
0.5 below surface	1:07:39	5.83	24.8
1	1:08:09	5.87	24.2
2	1:08:30	5.89	24.0
3	1:08:52	5.92	23.8
4	1:09:19	5.94	23.7
5	1:09:52	5.95	23.6
6	1:10:19	5.95	23.6
X6.5	1:11:34	5.96	23.5
8			
0.5 above bottom	1:11:34	5.96	23.5

*If D.O. is below 5.0 mg/L notify agency and measure D.O. at 1.0 foot intervals if <5.0 mg/L.

WHITE WATER ASSOCIATES, INC.

Appendix D – Winter Hydroelectric Project Lab Reports and Chains of Custody

ANALYTICAL REPORT

WHITE WATER ASSOCIATES, INC.
429 River Lane • PO Box 27 Amasa, MI 49903 • Ph (906) 822-7889 • Fax -7977

Cover Page

Client: RWE **WWA Job #:** 62079

Project: Monitoring

Date Received: 3/24/2016 **Date Reported:** 5/9/2016

Sample Number	Client Sample ID	Date Sampled	Sample Matrix
62079-001	Upper Flambeau Surface	03/22/16	Water
62079-002	Upper Flambeau Bottom	03/22/16	Water
62079-003	Lower Flambeau Surface	03/22/16	Water
62079-004	Lower Flambeau Bottom	03/22/16	Water
62079-005	Pixley Surface	03/22/16	Water
62079-006	Pixley Bottom	03/22/16	Water
62079-007	Crowley Surface	03/22/16	Water
62079-008	Crowley Bottom	03/22/16	Water
62079-009	Winter Surface	03/22/16	Water
62079-010	Clam River Surface	03/23/16	Water
62079-011	Clam River Bottom	03/23/16	Water
62079-012	Danbury Surface	03/23/16	Water
62079-013	Danbury Bottom	03/23/16	Water

WHITE WATER ASSOCIATES, INC.
429 River Lane • PO Box 27 Amasa, MI 49903 • Ph (906) 822-7889 • Fax -7977

Cover Page..continued

Client: RWE **WWA Job #:** 62079

Comments (if any):

Key to Laboratory Flags:

*: RPD exceeds limits.
B: The analyte was found in the associated blank as well as in the sample.
J: The quantitation is an estimated value because the result is less than the sample quantitation limit but greater than the detection limit.
M: A matrix effect was present.
Q: Batch QC data associated with the analysis does not meet the stated objectives
H: Indicates analytical holding time exceedance.
U: The analyte was analyzed for, but not detected.
P: A manual peak selection or manual integration was performed to correct an erroneous software selection.

ND = Not Detected, MDL = Method Detection Limit, MQL = Method Quantitation Limit
ppm = mg/L (liquid) or mg/kg (solid), ppb = ug/L (liquid) or ug/kg (solid)
For coliform, Negative = No coliform bacteria detected, Positive = Coliform bacteria detected

Sample Types:
S = Solids, DW = Drinking water, D = Dissolved, T = Total, TC = TCLP extract, SP = SPLP extract

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without the written approval of this laboratory. The Chain of Custody is attached.

This report satisfies the requirements of your project but has not been prepared to comply with NELAP reporting requirements.

I certify that the data contained in this Final Report has been generated and reviewed in accordance with approved methods and White Water Associates Standard Operating Procedures. Exceptions, if any, are discussed in the accompanying sample narrative. Release of this Final Report is authorized by White Water Associates management, as is verified by the following signature.

Approved By: Robert J. Preuss

WI DNR Lab Certification Number: 999971280
MI DEQ Certification Number: 9306
DoD-ELAP Accreditation Number: 65802
ISO/IEC 17025:2005 Accredited

ANALYTICAL REPORT

WHITE WATER ASSOCIATES, INC.
429 River Lane • PO Box 27 Amasa, MI 49903 • Ph (906) 822-7889 • Fax -7977

Client: RWE **WWA Job #:** 62079

Project: Monitoring

Date Received: 3/24/2016 **Date Reported:** 5/9/2016

Sample Results

Sample No. / ID / Description / Matrix	Result	Flags	Units	Date	Method	MDL	MQL
62079-001 / Upper Flambeau Surface / Water							
General Chemistry Parameters							
chlorophyll a	ND		mg/m3	3/28/2016	10200H	NA	NA
Color	30		CU	3/25/2016	2120B	5	5
Total Phosphorus (t)	0.02	J	mg/L	3/25/2016	365.4	0.01	0.04
62079-002 / Upper Flambeau Bottom / Water							
General Chemistry Parameters							
Total Phosphorus (t)	0.01	J	mg/L	3/25/2016	365.4	0.01	0.04
62079-003 / Lower Flambeau Surface / Water							
General Chemistry Parameters							
chlorophyll a	ND		mg/m3	3/28/2016	10200H	NA	NA
Color	35		CU	3/25/2016	2120B	5	5
Total Phosphorus (t)	0.03	J	mg/L	3/25/2016	365.4	0.01	0.04
62079-004 / Lower Flambeau Bottom / Water							
General Chemistry Parameters							
Total Phosphorus (t)	0.03	J	mg/L	3/25/2016	365.4	0.01	0.04

ND = Not Detected, MDL = Method Detection Limit, MQL = Method Quantitation Limit,
ppm = mg/L (liquid) or mg/kg (solid), ppb = ug/L (liquid) or ug/kg (solid)

WHITE WATER ASSOCIATES, INC.
429 River Lane • PO Box 27 Amasa, MI 49903 • Ph (906) 822-7889 • Fax -7977

Client: RWE **WWA Job #:** 62079

Project: Monitoring

Date Received: 3/24/2016 **Date Reported:** 5/9/2016

Sample Results

Sample No. / ID / Description / Matrix	Result	Flags	Units	Date	Method	MDL	MQL
62079-005 / Pixley Surface / Water							
General Chemistry Parameters							
chlorophyll a	0.40		mg/m3	3/28/2016	10200H	NA	NA
Color	35		CU	3/25/2016	2120B	5	5
Total Phosphorus (t)	0.03	J	mg/L	3/25/2016	365.4	0.01	0.04
62079-006 / Pixley Bottom / Water							
General Chemistry Parameters							
Total Phosphorus (t)	0.03	J	mg/L	3/25/2016	365.4	0.01	0.04
62079-007 / Crowley Surface / Water							
General Chemistry Parameters							
chlorophyll a	0.41		mg/m3	3/28/2016	10200H	NA	NA
Color	40		CU	3/25/2016	2120B	5	5
Total Phosphorus (t)	0.03	J	mg/L	3/25/2016	365.4	0.01	0.04
62079-008 / Crowley Bottom / Water							
General Chemistry Parameters							
Total Phosphorus (t)	0.03	J	mg/L	3/25/2016	365.4	0.01	0.04

ND = Not Detected, MDL = Method Detection Limit, MQL = Method Quantitation Limit,
ppm = mg/L (liquid) or mg/kg (solid), ppb = ug/L (liquid) or ug/kg (solid)

WHITE WATER ASSOCIATES, INC.
429 River Lane • PO Box 27 Amasa, MI 49903 • Ph (906) 822-7889 • Fax -7977

Client: RWE **WWA Job #:** 62079

Project: Monitoring

Date Received: 3/24/2016 **Date Reported:** 5/9/2016

Sample Results

Sample No. / ID / Description / Matrix	Result	Flags	Units	Date	Method	MDL	MQL
62079-009 / Winter Surface / Water							
General Chemistry Parameters							
chlorophyll a	0.41		mg/m3	3/28/2016	10200H	NA	NA
Color	40		CU	3/25/2016	2120B	5	5
Total Phosphorus (t)	0.02	J	mg/L	3/25/2016	365.4	0.01	0.04
62079-010 / Clam River Surface / Water							
General Chemistry Parameters							
chlorophyll a	11		mg/m3	3/28/2016	10200H	NA	NA
Color	15		CU	3/25/2016	2120B	5	5
Total Phosphorus (t)	0.04		mg/L	3/25/2016	365.4	0.01	0.04
62079-011 / Clam River Bottom / Water							
General Chemistry Parameters							
Total Phosphorus (t)	0.04		mg/L	3/25/2016	365.4	0.01	0.04
62079-012 / Danbury Surface / Water							
General Chemistry Parameters							
chlorophyll a	9.5		mg/m3	3/28/2016	10200H	NA	NA
Color	15		CU	3/25/2016	2120B	5	5
Total Phosphorus (t)	0.02	J	mg/L	3/25/2016	365.4	0.01	0.04

ND = Not Detected, MDL = Method Detection Limit, MQL = Method Quantitation Limit,
ppm = mg/L (liquid) or mg/kg (solid), ppb = ug/L (liquid) or ug/kg (solid)

WHITE WATER ASSOCIATES, INC.
429 River Lane • PO Box 27 Amasa, MI 49903 • Ph (906) 822-7889 • Fax -7977

Client: RWE **WWA Job #:** 62079

Project: Monitoring

Date Received: 3/24/2016 **Date Reported:** 5/9/2016

Sample Results

Sample No. / ID / Description / Matrix	Result	Flags	Units	Date	Method	MDL	MQL
62079-013 / Danbury Bottom / Water							
General Chemistry Parameters							
Total Phosphorus (t)	0.02	J	mg/L	3/25/2016	365.4	0.01	0.04

ND = Not Detected, MDL = Method Detection Limit, MQL = Method Quantitation Limit,
ppm = mg/L (liquid) or mg/kg (solid), ppb = ug/L (liquid) or ug/kg (solid)

Job # (WWA office use): 62079

CHAIN-OF-CUSTODY RECORD

WHITE WATER ASSOCIATES, INC.

429 River Lane, P.O. Box 27
Amasa, Michigan 49903

Phone: (906) 822-7889, Fax -7977
Web: white-water-associates.com

CLIENT NAME / BILL TO: RWE

EMAIL ADDRESS:

ADDRESS:

TELEPHONE:

CITY | STATE | ZIP:

CONTRACT / PO / PROJECT NAME / WSSN#: Monitoring

SAMPLER NAME (print first/last name): Angie Stein

COUNTY OF LOCATION:

PAGE 1 OF 2 — Indicate if more than one page of COC records used

SAMPLER'S SIGNATURE:

Check off preservatives for each bottle upon arrival and indicate total number of bottles. WWA database contains bottle preservation details.

ANALYSIS TYPE REQUESTED (Attach list if neeeded)

Instructions to White Water
Send my report by:
____ email
____ mail

Unless otherwise noted, drinking water report copies are sent to MDEQ and Health Dept.

REMARKS (Note any special instructions provided by client or conditions of receipt noted by WWA lab staff. Also note any residual chlorine.)

	SAMPLE ID AND LOCATION (Containers for each sample may be combined on one line.)	DATE	TIME	SAMPLE MATRIX: Drinking water	Aqueous	Sed.	Soil	Other:	CONTAINERS / PRESERVATIVES: None	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Na Thio	Total Number of Containers	Chloro phyll a	TP	Color	T							
1	Upper Flambeau Surface	3-22-16	8:16						X						(1)	3	X	X	X								
2	Upper Flambeau Bottom		"													1		X									
3	lower Flambeau Surf		9:44													3	X	X	X								
4	lower Flambeau Bottom		"													1		X									
5	Pixley Surface		11:07													3	X	X	X								
6	Pixley Bottom		"													1		X									
7	Crowley Surface		12:30													3	X	X	X								
8	Crowley Bottom		"													1		X									
9	Winter Surface	"	14:21												(2)	3	X	X	X								
10	Clam River Surface	3/23	12:44													3	X	X	X								
11	Clam River Bottom	"	"													1		X									

Relinquished by:	Date:	Time:	Received by:	Date:	Time:	Comments / Sample temperature on receipt:
Relinquished by:	Date: 3-24-16	Time: 9:14	Received by: (1)	Date: 3-24-16	Time: 950	1.4

WHITE - RETURN W/ REPORT CANARY - W/ SAMPLES PINK - CUSTOMER

Job # (WWA office use): 62079

CHAIN-OF-CUSTODY RECORD

WHITE WATER ASSOCIATES, INC.

429 River Lane, P.O. Box 27
Amasa, Michigan 49903

Phone: (906) 822-7889, Fax -7977
Web: white-water-associates.com

CLIENT NAME / BILL TO: RWE

EMAIL ADDRESS:

ADDRESS:

TELEPHONE:

CITY | STATE | ZIP:

CONTRACT / PO / PROJECT NAME / WSSN#: Monitoring

SAMPLER NAME (print first/last name): Angie Stone

COUNTY OF LOCATION:

PAGE 2 OF 2 — Indicate if more than one page of COC records used

SAMPLER'S SIGNATURE:

Check off preservatives for each bottle upon arrival and indicate total number of bottles. WWA database contains bottle preservation details.

ANALYSIS TYPE REQUESTED (Attach list if neeeded)

Instructions to White Water
Send my report by:
_____ email
_____ mail

Unless otherwise noted, drinking water report copies are sent to MDEQ and Health Dept.

REMARKS (Note any special instructions provided by client or conditions of receipt noted by WWA lab staff. Also note any residual chlorine.)

SAMPLE ID AND LOCATION (Containers for each sample may be combined on one line.)	DATE	TIME	SAMPLE MATRIX: Drinking water	Aqueous	Sed.	Soil	Other:	CONTAINERS / PRESERVATIVES: None	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Na Thio	Total Number of Containers	Chlorophyll a	TP	Color
12 Danbury Surface	3/23/16	14:45		X				X							3	X	X	X
13 Danbury Bottom	"	"		X				X							1		X	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:	Comments / Sample temperature on receipt:
Relinquished by:	Date: 3-24-16	Time: 9:14	Received by:	Date: 3-24-16	Time: 950	

WHITE - RETURN W/ REPORT CANARY - W/ SAMPLES PINK - CUSTOMER

ANALYTICAL REPORT

WHITE WATER ASSOCIATES, INC.
429 River Lane • PO Box 27 Amasa, MI 49903 • Ph (906) 822-7889 • Fax -7977

Cover Page

Client: RWE **WWA Job #:** 64453

Project: Monitoring

Date Received: 7/21/2016 **Date Reported:** 8/10/2016

Sample Number	Client Sample ID	Date Sampled	Sample Matrix
64453-001	Upper Flambeau	07/19/16	Water
64453-002	Upper Flambeau	07/19/16	Water
64453-003	Lower Flambeau	07/19/16	Water
64453-004	Lower Flambeau	07/19/16	Water
64453-005	Pixley	07/19/16	Water
64453-006	Pixley	07/19/16	Water
64453-007	Crowley	07/19/16	Water
64453-008	Crowley	07/19/16	Water
64453-009	Winter	07/18/16	Water
64453-010	Clam River	07/20/16	Water
64453-011	Clam River	07/20/16	Water
64453-012	Danbury	07/20/16	Water
64453-013	Danbury	07/20/16	Water

WHITE WATER ASSOCIATES, INC.
429 River Lane • PO Box 27 Amasa, MI 49903 • Ph (906) 822-7889 • Fax -7977

Cover Page..continued

Client: RWE **WWA Job #:** 64453

Comments (if any):

Key to Laboratory Flags:

*: RPD exceeds limits.
B: The analyte was found in the associated blank as well as in the sample.
J: The quantitation is an estimated value because the result is less than the sample quantitation limit but greater than the detection limit.
M: A matrix effect was present.
Q: Batch QC data associated with the analysis does not meet the stated objectives
H: Indicates analytical holding time exceedance.
U: The analyte was analyzed for, but not detected.
P: A manual peak selection or manual integration was performed to correct an erroneous software selection.

ND = Not Detected, MDL = Method Detection Limit, MQL = Method Quantitation Limit
ppm = mg/L (liquid) or mg/kg (solid), ppb = ug/L (liquid) or ug/kg (solid)
For coliform, Negative = No coliform bacteria detected, Positive = Coliform bacteria detected

Sample Types:
S = Solids, DW = Drinking water, D = Dissolved, T = Total, TC = TCLP extract, SP = SPLP extract

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without the written approval of this laboratory. The Chain of Custody is attached.

This report satisfies the requirements of your project but has not been prepared to comply with NELAP reporting requirements.

I certify that the data contained in this Final Report has been generated and reviewed in accordance with approved methods and White Water Associates Standard Operating Procedures. Exceptions, if any, are discussed in the accompanying sample narrative. Release of this Final Report is authorized by White Water Associates management, as is verified by the following signature.

Approved By: Betty J. Prewo

WI DNR Lab Certification Number: 999971280
MI DEQ Certification Number: 9306
DoD-ELAP Accreditation Number: 65802
ISO/IEC 17025:2005 Accredited

ANALYTICAL REPORT

WHITE WATER ASSOCIATES, INC.
429 River Lane • PO Box 27 Amasa, MI 49903 • Ph (906) 822-7889 • Fax -7977

Client: RWE **WWA Job #:** 64453

Project: Monitoring

Date Received: 7/21/2016 **Date Reported:** 8/10/2016

Sample Results

Sample No. / ID / Description / Matrix	Result	Flags	Units	Date	Method	MDL	MQL
64453-001 / Upper Flambeau / Surface / Water							
General Chemistry Parameters							
chlorophyll a	6.3		mg/m3	7/21/2016	10200H	NA	NA
Color	40		CU	7/21/2016	2120B	5	5
Total Phosphorus LL (t)	0.022	J	mg/L	8/1/2016	365.4	0.008	0.050
64453-002 / Upper Flambeau / Bottom / Water							
General Chemistry Parameters							
Total Phosphorus LL (t)	0.019	J	mg/L	8/1/2016	365.4	0.008	0.050
64453-003 / Lower Flambeau / Surface / Water							
General Chemistry Parameters							
chlorophyll a	6.7		mg/m3	7/21/2016	10200H	NA	NA
Color	45		CU	7/21/2016	2120B	5	5
Total Phosphorus LL (t)	0.021	J	mg/L	8/1/2016	365.4	0.008	0.050
64453-004 / Lower Flambeau / Bottom / Water							
General Chemistry Parameters							
Total Phosphorus LL (t)	0.026	J	mg/L	8/1/2016	365.4	0.008	0.050

ND = Not Detected, MDL = Method Detection Limit, MQL = Method Quantitation Limit,
ppm = mg/L (liquid) or mg/kg (solid), ppb = ug/L (liquid) or ug/kg (solid)

WHITE WATER ASSOCIATES, INC.
429 River Lane • PO Box 27 Amasa, MI 49903 • Ph (906) 822-7889 • Fax -7977

Client: RWE **WWA Job #:** 64453

Project: Monitoring

Date Received: 7/21/2016 **Date Reported:** 8/10/2016

Sample Results

Sample No. / ID / Description / Matrix	Result	Flags	Units	Date	Method	MDL	MQL
64453-005 / Pixley / Surface / Water							
General Chemistry Parameters							
chlorophyll a	8.1		mg/m3	7/21/2016	10200H	NA	NA
Color	45		CU	7/21/2016	2120B	5	5
Total Phosphorus LL (t)	0.033	J	mg/L	8/1/2016	365.4	0.008	0.050
64453-006 / Pixley / Bottom / Water							
General Chemistry Parameters							
Total Phosphorus LL (t)	0.180		mg/L	8/1/2016	365.4	0.008	0.050
64453-007 / Crowley / Surface / Water							
General Chemistry Parameters							
chlorophyll a	6.5		mg/m3	7/21/2016	10200H	NA	NA
Color	55		CU	7/21/2016	2120B	5	5
Total Phosphorus LL (t)	0.036	J	mg/L	8/1/2016	365.4	0.008	0.050
64453-008 / Crowley / Bottom / Water							
General Chemistry Parameters							
Total Phosphorus LL (t)	0.030	J	mg/L	8/1/2016	365.4	0.008	0.050

ND = Not Detected, MDL = Method Detection Limit, MQL = Method Quantitation Limit,
ppm = mg/L (liquid) or mg/kg (solid), ppb = ug/L (liquid) or ug/kg (solid)

WHITE WATER ASSOCIATES, INC.
429 River Lane • PO Box 27 Amasa, MI 49903 • Ph (906) 822-7889 • Fax -7977

Client: RWE **WWA Job #:** 64453

Project: Monitoring

Date Received: 7/21/2016 **Date Reported:** 8/10/2016

Sample Results

Sample No. / ID / Description / Matrix	Result	Flags	Units	Date	Method	MDL	MQL
64453-009 / Winter / Surface / Water							
General Chemistry Parameters							
chlorophyll a	2.2		mg/m3	7/21/2016	10200H	NA	NA
Color	85		CU	7/21/2016	2120B	5	5
Total Phosphorus LL (t)	0.035	J	mg/L	8/1/2016	365.4	0.008	0.050
64453-010 / Clam River / Surface / Water							
General Chemistry Parameters							
chlorophyll a	44		mg/m3	7/21/2016	10200H	NA	NA
Color	30		CU	7/21/2016	2120B	5	5
Total Phosphorus LL (t)	0.043	J	mg/L	8/1/2016	365.4	0.008	0.050
64453-011 / Clam River / Bottom / Water							
General Chemistry Parameters							
Total Phosphorus LL (t)	0.043	J	mg/L	8/1/2016	365.4	0.008	0.050
64453-012 / Danbury / Surface / Water							
General Chemistry Parameters							
chlorophyll a	10		mg/m3	7/21/2016	10200H	NA	NA
Color	20		CU	7/21/2016	2120B	5	5
Total Phosphorus LL (t)	0.022	J	mg/L	8/1/2016	365.4	0.008	0.050

ND = Not Detected, MDL = Method Detection Limit, MQL = Method Quantitation Limit,
ppm = mg/L (liquid) or mg/kg (solid), ppb = ug/L (liquid) or ug/kg (solid)

WHITE WATER ASSOCIATES, INC.
429 River Lane • PO Box 27 Amasa, MI 49903 • Ph (906) 822-7889 • Fax -7977

Client: RWE **WWA Job #:** 64453

Project: Monitoring

Date Received: 7/21/2016 **Date Reported:** 8/10/2016

Sample Results

Sample No. / ID / Description / Matrix	Result	Flags	Units	Date	Method	MDL	MQL
64453-013 / Danbury / Bottom / Water							
General Chemistry Parameters							
Total Phosphorus LL (t)	0.022	J	mg/L	8/1/2016	365.4	0.008	0.050

ND = Not Detected, MDL = Method Detection Limit, MQL = Method Quantitation Limit,
ppm = mg/L (liquid) or mg/kg (solid), ppb = ug/L (liquid) or ug/kg (solid)

Job # (WWA office use): 64453

CHAIN-OF-CUSTODY RECORD

WHITE WATER ASSOCIATES, INC.

429 River Lane, P.O. Box 27
Amasa, Michigan 49903

Phone: (906) 822-7889, Fax -7977
Web: white-water-associates.com

CLIENT NAME / BILL TO	EMAIL ADDRESS
RWE	
ADDRESS	TELEPHONE
CITY / STATE / ZIP	CONTRACT / PO / PROJECT NAME / WSSN#
	Monitoring
SAMPLER NAME (print first/last name): Steve Haag	COUNTY OF LOCATION / PAGE: 1 OF 1 (Indicate if more than one page of COC records used)
SAMPLER'S SIGNATURE	Check off preservatives for each bottle upon arrival and indicate total number of bottles. WWA database contains bottle preservation details.

ANALYSIS TYPE REQUESTED (Attach list if neeeded)

Instructions to White Water
Send my report by:
____ email
____ mail

Unless otherwise noted, drinking water report copies are sent to MDEQ and Health Dept.

REMARKS (Note any special instructions provided by client or conditions of receipt noted by WWA lab staff. Also note any residual chlorine.)

	SAMPLE ID AND LOCATION (Containers for each sample may be combined on one line.)	DATE	TIME	SAMPLE MATRIX: Drinking water	Aqueous	Sed.	Soil	Other:	CONTAINERS / PRESERVATIVES: None	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Na Thio	Total Number of Containers	Chlorophyll a	Total Phos	Color
1	Upper Flambeau Surface	7-19-16	8:06		X				X	X						3	X	X	X
2	Upper Flambeau Bottom	7-19-16	8:10													1		X	
3	Lower Flambeau Surface	7-19-16	9:04						X							3	X	X	X
4	Lower Flambeau Bottom	7-19-16	9:08													1		X	
5	Pixley Surface	7-19-16	11:26						X							3	X	X	X
6	Pixley Bottom	7-19-16	11:27													1		X	
7	Crowley Surface	7-19-16	13:25						X							3	X	X	X
8	Crowley Bottom	7-19-16	13:27													1		X	
9	Winter Surface	7-18-16	14:00						X							3	X	X	X
10	Clam River Surface	7-18-16	10:15						X							3	X	X	X
11	Clam River Bottom	7-20-16	10:20						X	⊙						1		X	
12	Danbury Surface	7-20-16	1234						X							3	X	X	X
13	Danbury Bottom	7-20-16	1236													1		X	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:	Comments / Sample temperature on receipt:
	7/20/16	18:12				
Relinquished by:	Date:	Time:	Received by: ⊙	Date:	Time:	
				7-21-16	1150	1.3

WHITE - RETURN W/ REPORT CANARY - W/ SAMPLES PINK - CUSTOMER

ANALYTICAL REPORT

WHITE WATER ASSOCIATES, INC.
429 River Lane • PO Box 27 Amasa, MI 49903 • Ph (906) 822-7889 • Fax -7977

Cover Page

Client: RWE **WWA Job #:** 65014

Project: Monitoring

Date Received: 8/19/2016 **Date Reported:** 9/6/2016

Sample Number	Client Sample ID	Date Sampled	Sample Matrix
65014-001	Upper Flambeau	08/18/16	Water
65014-002	Upper Flambeau	08/18/16	Water
65014-003	Lower Flambeau	08/18/16	Water
65014-004	Lower Flambeau	08/18/16	Water
65014-005	Pixley	08/18/16	Water
65014-006	Pixley	08/18/16	Water
65014-007	Crowley	08/18/16	Water
65014-008	Crowley	08/18/16	Water
65014-009	Winter	08/18/16	Water
65014-010	Clam River	08/18/16	Water
65014-011	Clam River	08/18/16	Water
65014-012	Danbury	08/18/16	Water
65014-013	Danbury	08/18/16	Water

WHITE WATER ASSOCIATES, INC.
429 River Lane • PO Box 27 Amasa, MI 49903 • Ph (906) 822-7889 • Fax -7977

Cover Page..continued

Client: RWE **WWA Job #:** 65014

Comments (if any):

Key to Laboratory Flags:

*: RPD exceeds limits.
B: The analyte was found in the associated blank as well as in the sample.
J: The quantitation is an estimated value because the result is less than the sample quantitation limit but greater than the detection limit.
M: A matrix effect was present.
Q: Batch QC data associated with the analysis does not meet the stated objectives
H: Indicates analytical holding time exceedance.
U: The analyte was analyzed for, but not detected.
P: A manual peak selection or manual integration was performed to correct an erroneous software selection.

ND = Not Detected, MDL = Method Detection Limit, MQL = Method Quantitation Limit
ppm = mg/L (liquid) or mg/kg (solid), ppb = ug/L (liquid) or ug/kg (solid)
For coliform, Negative = No coliform bacteria detected, Positive = Coliform bacteria detected

Sample Types:
S = Solids, DW = Drinking water, D = Dissolved, T = Total, TC = TCLP extract, SP = SPLP extract

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without the written approval of this laboratory. The Chain of Custody is attached.

This report satisfies the requirements of your project but has not been prepared to comply with NELAP reporting requirements.

I certify that the data contained in this Final Report has been generated and reviewed in accordance with approved methods and White Water Associates Standard Operating Procedures. Exceptions, if any, are discussed in the accompanying sample narrative. Release of this Final Report is authorized by White Water Associates management, as is verified by the following signature.

Approved By: _____

WI DNR Lab Certification Number: 999971280
MI DEQ Certification Number: 9306
DoD-ELAP Accreditation Number: 65802
ISO/IEC 17025:2005 Accredited

ANALYTICAL REPORT

WHITE WATER ASSOCIATES, INC.
429 River Lane • PO Box 27 Amasa, MI 49903 • Ph (906) 822-7889 • Fax -7977

Client: RWE **WWA Job #:** 65014

Project: Monitoring

Date Received: 8/19/2016 **Date Reported:** 9/6/2016

Sample Results

Sample No. / ID / Description / Matrix	Result	Flags	Units	Date	Method	MDL	MQL
65014-001 / Upper Flambeau / Surface / Water							
General Chemistry Parameters							
chlorophyll a	8.5		mg/m3	8/24/2016	10200H	NA	NA
Color	35		CU	8/19/2016	2120B	5	5
Total Phosphorus LL (t)	0.022	J	mg/L	8/25/2016	365.4	0.008	0.050
65014-002 / Upper Flambeau / Bottom / Water							
General Chemistry Parameters							
Total Phosphorus LL (t)	0.022	J	mg/L	8/25/2016	365.4	0.008	0.050
65014-003 / Lower Flambeau / Surface / Water							
General Chemistry Parameters							
chlorophyll a	7.2		mg/m3	8/24/2016	10200H	NA	NA
Color	30		CU	8/19/2016	2120B	5	5
Total Phosphorus LL (t)	0.026	J	mg/L	8/25/2016	365.4	0.008	0.050
65014-004 / Lower Flambeau / Bottom / Water							
General Chemistry Parameters							
Total Phosphorus LL (t)	0.096		mg/L	8/25/2016	365.4	0.008	0.050

ND = Not Detected, MDL = Method Detection Limit, MQL = Method Quantitation Limit,
ppm = mg/L (liquid) or mg/kg (solid), ppb = ug/L (liquid) or ug/kg (solid)

WHITE WATER ASSOCIATES, INC.
429 River Lane • PO Box 27 Amasa, MI 49903 • Ph (906) 822-7889 • Fax -7977

Client: RWE **WWA Job #:** 65014

Project: Monitoring

Date Received: 8/19/2016 **Date Reported:** 9/6/2016

Sample Results

Sample No. / ID / Description / Matrix	Result	Flags	Units	Date	Method	MDL	MQL
65014-005 / Pixley / Surface / Water							
General Chemistry Parameters							
chlorophyll a	15		mg/m3	8/24/2016	10200H	NA	NA
Color	45		CU	8/19/2016	2120B	5	5
Total Phosphorus LL (t)	0.036	J	mg/L	8/25/2016	365.4	0.008	0.050
65014-006 / Pixley / Bottom / Water							
General Chemistry Parameters							
Total Phosphorus LL (t)	0.048	J	mg/L	8/25/2016	365.4	0.008	0.050
65014-007 / Crowley / Surface / Water							
General Chemistry Parameters							
chlorophyll a	15		mg/m3	8/24/2016	10200H	NA	NA
Color	40		CU	8/19/2016	2120B	5	5
Total Phosphorus LL (t)	0.030	J	mg/L	8/25/2016	365.4	0.008	0.050
65014-008 / Crowley / Bottom / Water							
General Chemistry Parameters							
Total Phosphorus LL (t)	0.030	J	mg/L	8/25/2016	365.4	0.008	0.050

ND = Not Detected, MDL = Method Detection Limit, MQL = Method Quantitation Limit,
ppm = mg/L (liquid) or mg/kg (solid), ppb = ug/L (liquid) or ug/kg (solid)

WHITE WATER ASSOCIATES, INC.
429 River Lane • PO Box 27 Amasa, MI 49903 • Ph (906) 822-7889 • Fax -7977

Client: RWE **WWA Job #:** 65014

Project: Monitoring

Date Received: 8/19/2016 **Date Reported:** 9/6/2016

Sample Results

Sample No. / ID / Description / Matrix	Result	Flags	Units	Date	Method	MDL	MQL
65014-009 / Winter / Surface / Water							
General Chemistry Parameters							
chlorophyll a	1.5		mg/m3	8/24/2016	10200H	NA	NA
Color	60		CU	8/19/2016	2120B	5	5
Total Phosphorus LL (t)	0.038	J	mg/L	8/25/2016	365.4	0.008	0.050
65014-010 / Clam River / Surface / Water							
General Chemistry Parameters							
chlorophyll a	61		mg/m3	8/24/2016	10200H	NA	NA
Color	25		CU	8/19/2016	2120B	5	5
Total Phosphorus LL (t)	0.050		mg/L	8/25/2016	365.4	0.008	0.050
65014-011 / Clam River / Bottom / Water							
General Chemistry Parameters							
Total Phosphorus LL (t)	0.053		mg/L	8/25/2016	365.4	0.008	0.050
65014-012 / Danbury / Surface / Water							
General Chemistry Parameters							
chlorophyll a	5.2		mg/m3	8/24/2016	10200H	NA	NA
Color	20		CU	8/19/2016	2120B	5	5
Total Phosphorus LL (t)	0.037	J	mg/L	8/25/2016	365.4	0.008	0.050

ND = Not Detected, MDL = Method Detection Limit, MQL = Method Quantitation Limit,
ppm = mg/L (liquid) or mg/kg (solid), ppb = ug/L (liquid) or ug/kg (solid)

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Client: RWE **WWA Job #:** 65014

Project: Monitoring

Date Received: 8/19/2016 **Date Reported:** 9/6/2016

Sample Results

Sample No. / ID / Description / Matrix	Result	Flags	Units	Date	Method	MDL	MQL
65014-013 / Danbury / Bottom / Water							
General Chemistry Parameters							
Total Phosphorus LL (t)	0.040	J	mg/L	8/25/2016	365.4	0.008	0.050

ND = Not Detected, MDL = Method Detection Limit, MQL = Method Quantitation Limit,
ppm = mg/L (liquid) or mg/kg (solid), ppb = ug/L (liquid) or ug/kg (solid)

Job # (WWA office use): 65014

CHAIN-OF-CUSTODY RECORD

WHITE WATER ASSOCIATES, INC.
429 River Lane, P.O. Box 27
Amasa, Michigan 49903
Phone: (906) 822-7889, Fax -7977
Web: white-water-associates.com

CLIENT NAME / BILL TO: RWE	EMAIL ADDRESS:
ADDRESS:	TELEPHONE:
CITY: / STATE: / ZIP:	CONTRACT / PO / PROJECT NAME / WSSN#: Monitoring
SAMPLER NAME (print first/last name): Steve Haag	COUNTY OF LOCATION: / PAGE 1 OF 1 (Indicate if more than one page of COC records used)
SAMPLER'S SIGNATURE: [signature]	Check off preservatives for each bottle upon arrival and indicate total number of bottles. WWA database contains bottle preservation details.

ANALYSIS TYPE REQUESTED (Attach list if neeeded)

#	SAMPLE ID AND LOCATION (Containers for each sample may be combined on one line.)	DATE	TIME	Drinking water	Aqueous	Sed.	Soil	Other:	None	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Na Thio	Total Number of Containers	Chlorophyll a (mglos)	Total Phos (H2SO4)	Color
1	Upper Flambeau Surface	8-18-16	7:58						X	X						3	X	X	X
2	Upper Flambeau Bottom	8-18-16	7:59						|	|						1		X	
3	Lower Flambeau Surface	8-18-16	9:44						|	|						3	X	X	X
4	Lower Flambeau Bottom	8-18-16	9:45						|	|						1		X	
5	Pixley Surface	8-18-16	11:10						|	|						3	X	X	X
6	Pixley Bottom	8-18-16	11:12						|	|						1		X	
7	Crowley Surface	8-18-16	12:59						|	|						3	X	X	X
8	Crowley Bottom	8-18-16	13:00						|	|						1		X	
9	Winter Surface	8-16-16	13:07						|	|						3	X	X	X
10	Chippewa River Surface	8-17-16	10:28						|	|						3	X	X	X
11	Chippewa River Bottom	8-17-16	10:29						|	|						1		X	
12	Danbury Surface	8-17-16	13:06						|	|						3	X	X	X
13	Danbury Bottom	8-17-16	13:08						|	|						1		X	

Instructions to White Water
Send my report by:
____ email
____ mail

Unless otherwise noted, drinking water report copies are sent to MDEQ and Health Dept.

REMARKS (Note *any* special instructions provided by client or conditions of receipt noted by WWA lab staff. Also note any residual chlorine.)

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
			[signature]	8-18-16	1615
	8/18/16	1634	Login [signature]	8-19-16	1107

Comments / Sample temperature on receipt: 3.7

WHITE - RETURN W/ REPORT CANARY - W/ SAMPLES PINK - CUSTOMER