Renewable World Energies

February 26, 2020

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

RE: Clam River Hydroelectric Project
FERC Project Number 9185
Flambeau Hydro LLC
Final Report 2019 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 2019 Water Quality Monitoring Data* for the Clam River Hydroelectric Project. The Federal Energy Regulatory Commission "FERC" issued a License to Flambeau on July 24, 2006. This report is submitted as a requirement of that License pursuant to License Article 401 WQC, Condition K. 2019 was the 12th year monitoring was conducted since the license was issued, but is the 8th year of submittal by RWE on the behalf of the Licensee.

Monitoring was conducted on April 30, July 23, and August 13, 2019. No issues were encountered during the 2019 monitoring season. All data has been given to the DNR to be entered into the SWIMS Data Base. The draft report was sent to the agencies by an attachment to an email on November 26, 2019 for review and comment. Cheryl Laatsch of the DNR did send a reply of "thank you" after the data was sent. The next scheduled monitoring event will be conducted in 2020.

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.

Corporate Office
P.O. Box 264
100 S. State Street
Neshkoro, WI 54960
Fax: 920-293-4100

Phone: 855-99HYDRO
(855-994-9376)
www.renewableworldenergies.com

Administrative Office
1001 Stephenson Street
Norway, MI 49870
Fax: 906-563-9344

Renewable World Energies

Sincerely,
Renewable World Energies, LLC
Agent for Licensee

Mr. Jason Kreuscher
Vice President, Operations

Attachment: Final Report 2019 Water Quality Monitoring Data
Correspondence

Cc: Ms. Cheryl Laatsch, WDNR
Mr. Nick Utrup, USFWS

Report

2019 Water Quality Monitoring Data
(Per License Article 401 WQC, Condition K)

for the

Clam River Hydroelectric Project

FERC Project #9185

Flambeau Hydro, LLC

Clam River,
Burnett 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 Clam River Hydroelectric Project – FERC #9185

2019 marked the twelfth year of water quality sampling under FERC License issued on July 24, 2006 to Flambeau Hydro, LLC for the Clam River Hydroelectric Project – FERC Project # 9185 and specifically Appendix A Section 401 K. Monitoring was conducted on April 30, July 23, and August 13, 2019. This document contains all of the associated records for the 2019 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 Clam River Hydroelectric Project is shown in Figure 1 indicating the water quality sampling location.

Monitoring results for 2019 are shown in Table 1. No unusual Temperature (Figure 2) or Dissolved Oxygen (Figure 3) readings were observed in April but in July the D.O. was below 5.0 mg/L at 21 feet and in August the D.O. was below 5.0 mg/L at 11 feet. The Secchi depths are shown in Figure 4.

In general, the weather (temperature and rainfall) during 2019 monitoring season appeared slightly warmer in May, June, and July, & August, with lower than normal precipitation in January, March, April, June, July and August, and normal to high precipitation in the months of October, December, February, May, and September (Table 2).

Ice-Out occurred on the Clam River sometime during the week beginning April 22, 2019. The Ice-Out sampling event occurred on April 30, 2019. River flow, based on the Clam River Hydroelectric Project records, was approximately 663 cubic feet per second. Sampling occurred between 0953 and 1003 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 April 30, 2019. White Water Associates, Inc. issued a laboratory report on May 21, 2019. No unusual levels of Chlorophyll *a*, True Color, or Total Phosphorus were noted in the laboratory reports.

River flow, based on the Clam River Hydroelectric Project records, was approximately 399 cubic feet per second during the July 23, 2019 sampling event. Sampling occurred between 1035 and 1052. Samples were taken without incident. No unusual Temperature readings were observed. The D.O. went below 5.00 mg/L at 21.0 feet (4.77 mg/L). The 0.5 ft above bottom D.O. was 3.21 mg/L. Samples for laboratory analysis were delivered to White Water Associates, Inc. laboratory in Amasa, MI on July 25, 2019. White Water Associates, Inc. issued a laboratory report on August 27, 2019. No unusual levels of Chlorophyll *a*, True Color, or Total Phosphorus were noted in the laboratory reports.

River flow, based on the Clam River Hydroelectric Project records, was approximately 143 cubic feet per second during the August 13, 2019 sampling event. Sampling occurred between 1100 and 1118. Samples were taken without incident. No unusual Temperature readings were observed. The D.O. went below 5.00 mg/L at 11 feet (4.57 mg/L). The 0.5 ft above bottom D.O. was 0.04 mg/L. Samples for laboratory analysis were delivered to White Water Associates, Inc. laboratory in Amasa, MI on August 15, 2019.

White Water Associates, Inc. issued a laboratory report on September 13, 2019. No unusual levels of Chlorophyll *a*, True Color, or Total Phosphorus were noted in the laboratory reports.

A summary of a comparison between the 2012 thru 2019 (Table 3) sampling results are as follows:

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

The next scheduled Water Quality Monitoring at the Clam River Hydroelectric Project is set to take place in 2020 beginning with the Ice-Out sampling event.

Appendix A – Clam River Hydroelectric Project Figures

Figure 1. Clam River Hydroelectric Project Map

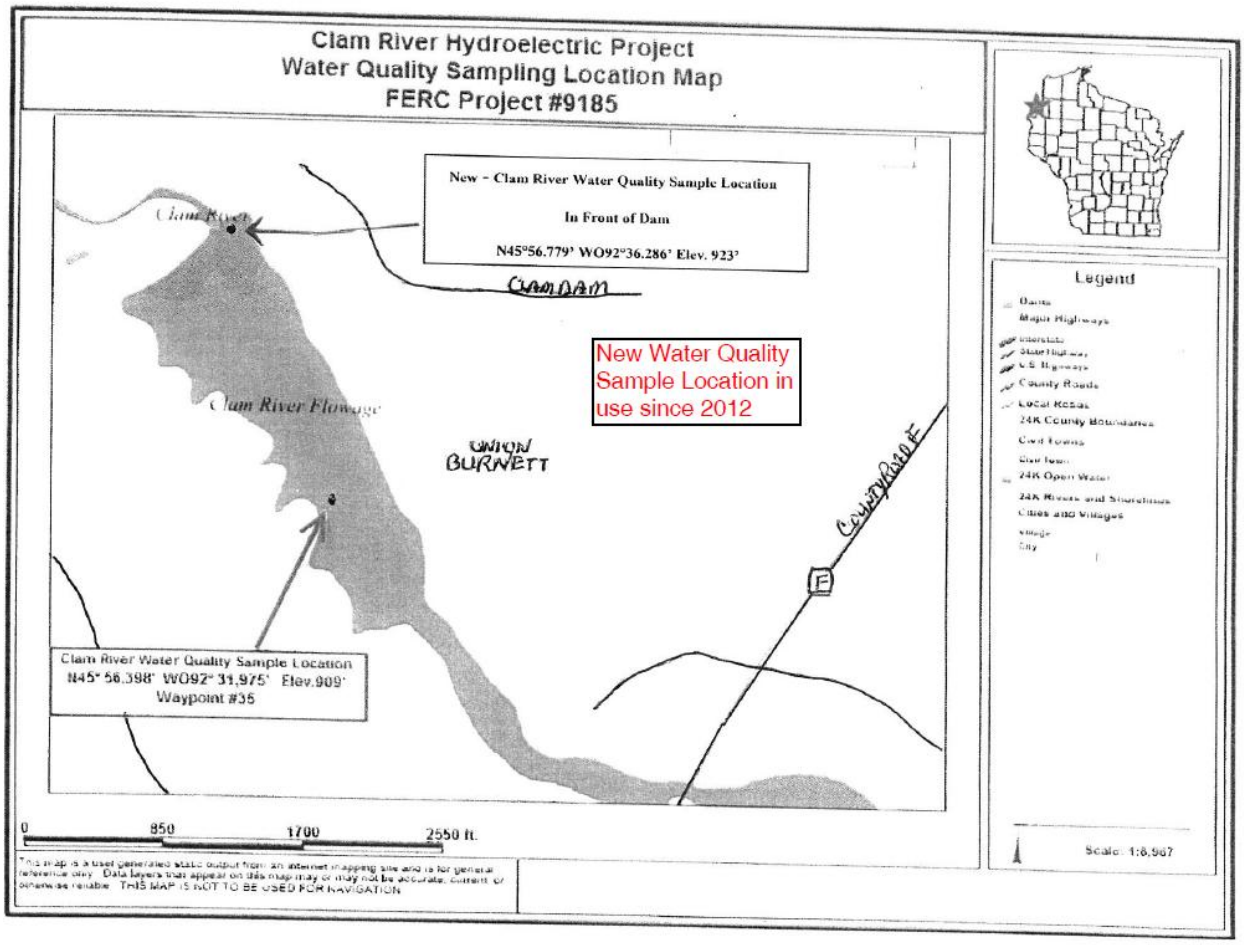


Figure 2. Clam River Impoundment - FERC #9185
2019 Temperature Profiles

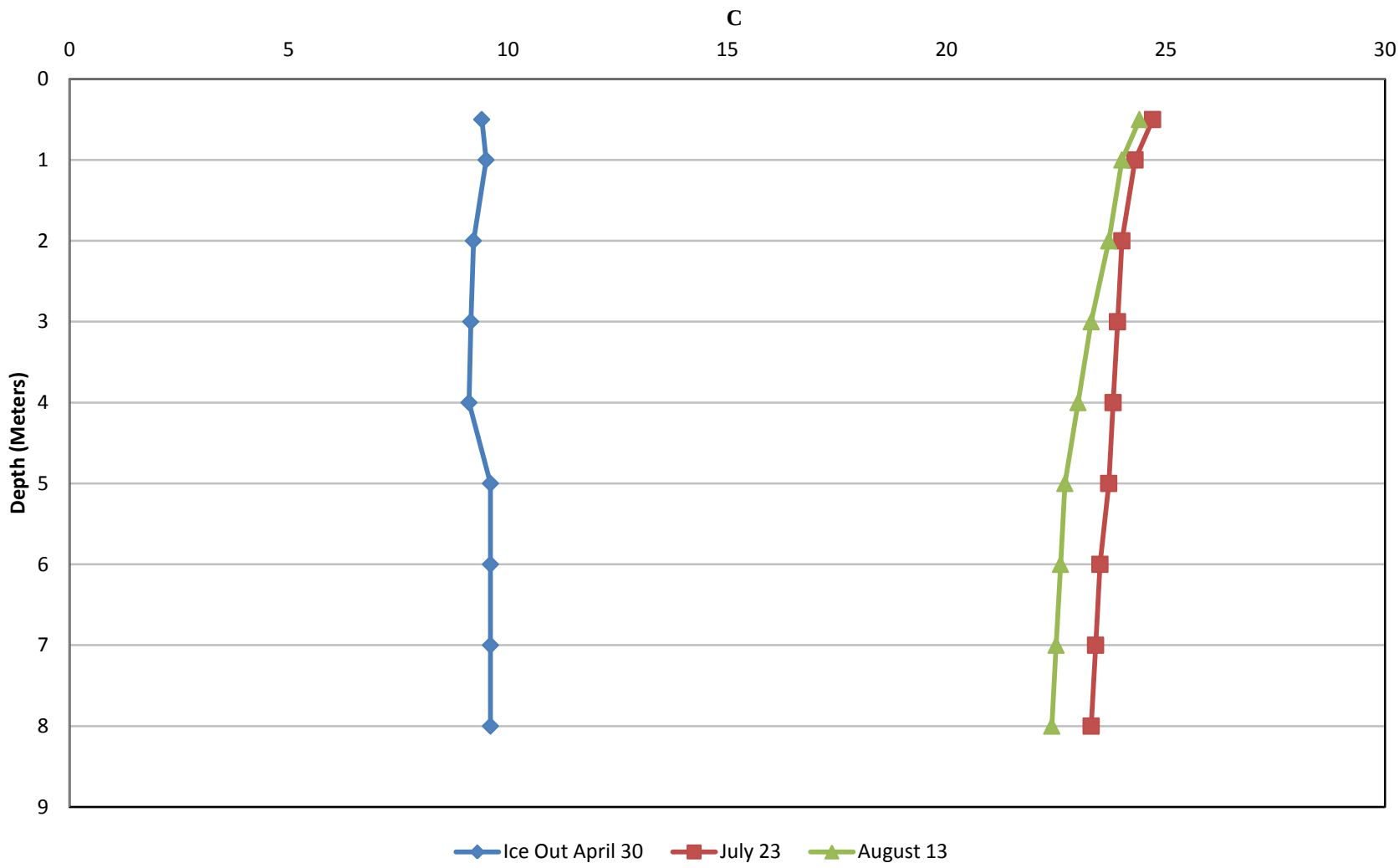


Figure 3. Clam River Impoundment - FERC #9185
2019 Dissolved Oxygen Profiles

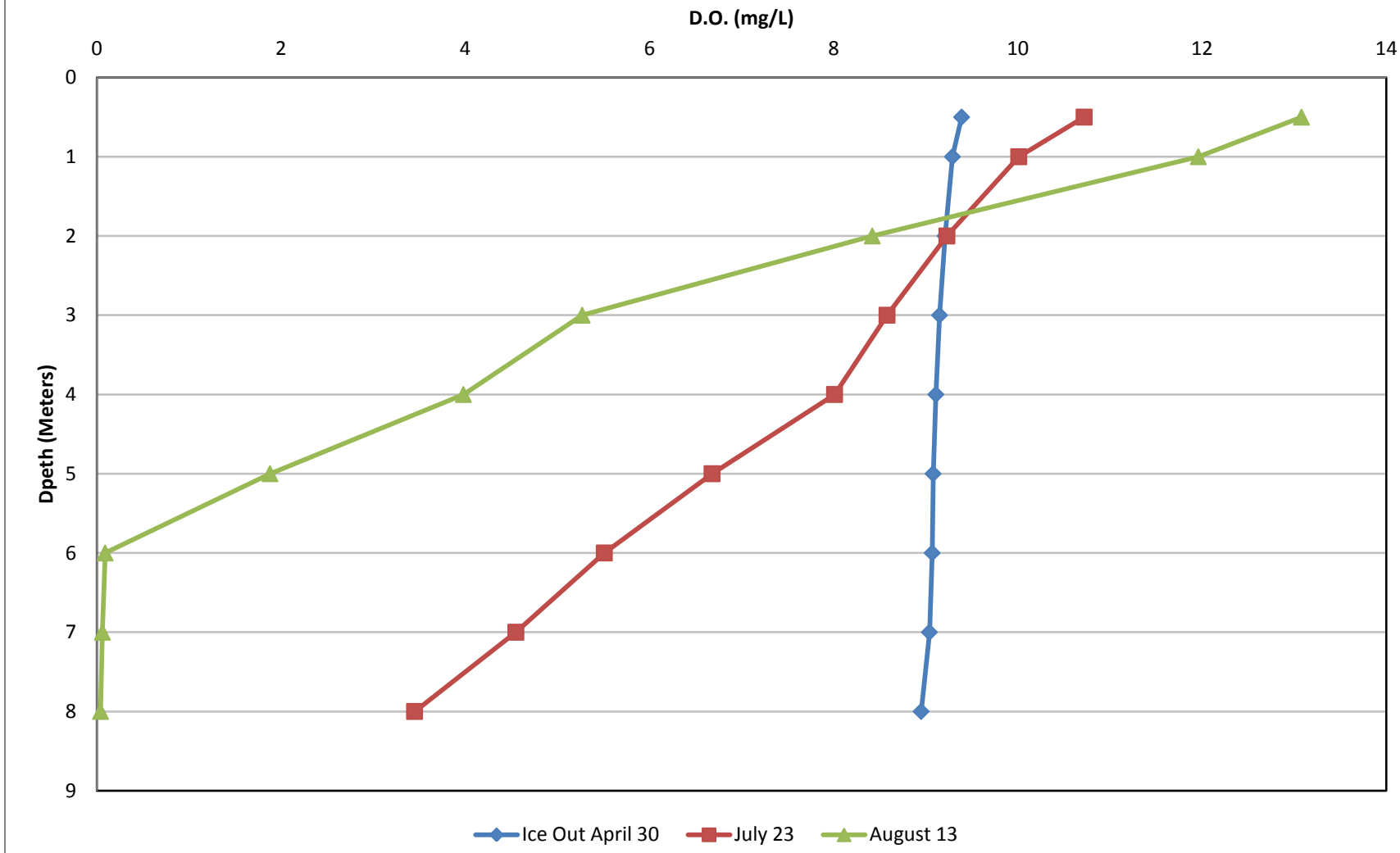
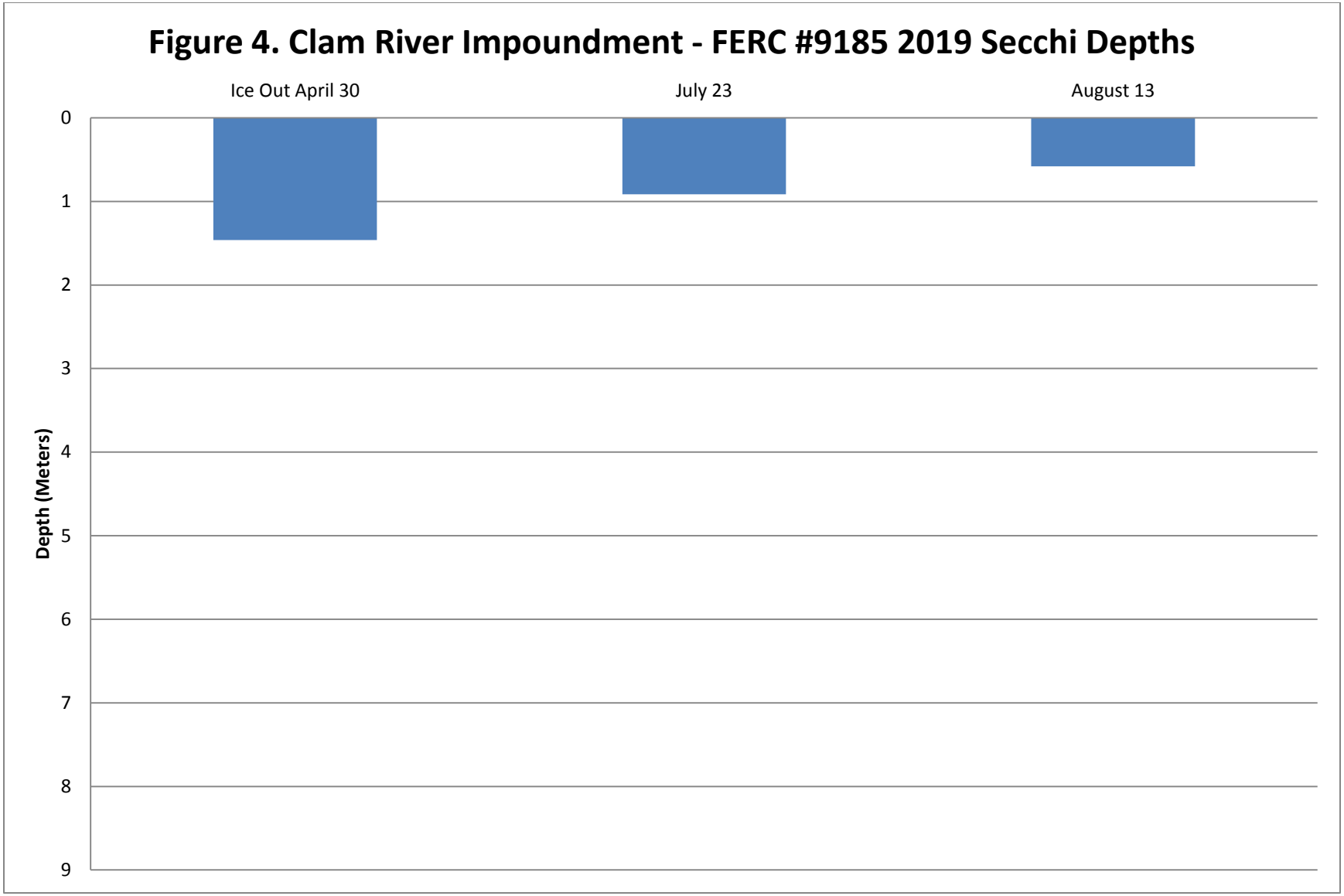


Figure 4. Clam River Impoundment - FERC #9185 2019 Secchi Depths



Appendix B – Clam River Hydroelectric Project Tables

Table 1. Clam River Hydroelectric Project – FERC Project # 9185: 2019 Water Quality Sampling Data

	Ice Out April 30, 2019			July 23, 2019			August 13, 2019		
Project Flow (c.f.s)	663			399			143		
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	9:57:43	9.39	9.40	10:36:49	10.74	24.2	11:15:10	13.08	24.4
1 meter below surface	9:58:17	9.29	9.50	10:37:41	9.77	24.2	11:16:02	11.96	24.0
2 meter below surface	9:58:53	9.21	9.21	10:38:28	9.54	24.1	11:17:05	7.93	23.8
3 meter below surface	9:59:27	9.15	9.15	10:39:25	8.89	23.9	11:18:50	5.92	23.4
4 meter below surface	10:00:24	9.11	9.11	10:40:32	8.10	23.8	11:20:15	4.06	23.1
5 meter below surface	10:00:24	9.08	9.6	10:41:45	7.10	23.7	11:22:50	3.10	22.8
6 meter below surface	10:00:52	9.07	9.6	10:42:49	5.70	23.6	11:24:8	1.46	22.7
7 meter below surface	10:01:24	9.04	9.6	10:43:01	4.83	23.5	11:25:44	0.09	22.5
8 meter below surface	10:02:36	8.95	9.6				11:27:14	0.05	22.4
0.5 meter above bottom	10:03:00	8.94	9.6	10:45:09	4.35	23.4	11:28:41	0.04	22.4
Secchi Disk	**Time**	**Depth (m)**		**Time**	**Depth (m)**		**Time**	**Depth (m)**	
Meters below surface	10:03	1.46		10:52	0.9144		11:02	0.58	
Chlorophyll *a*	**Time**	**µg/L**		**Time**	**µg/L**		**Time**	**µg/L**	
1 meter below surface	10:03	5.20		10:40	36.00		11:07	92.00	
Color (True)	**Time**	**C.P.U. Units**	**LOD**	**Time**	**C.P.U. Units**	**LOD**	**Time**	**C.P.U. Units**	**LOD**
1 meter below surface	10:03	40.00	5*	10:40	25.00	5*	11:07	45.00	5*
Total Phosphorus	**Time**	**mg/L**	**LOD**	**Time**	**mg/L**	**LOD**	**Time**	**mg/L**	**LOD**
1 meter below surface	10:03	0.032	0.008*	10:40	0.057	0.008*	11:07	0.090	0.008*
1 meter above bottom	9:59	0.047	0.008*	10:48	0.058	0.008*	11:18	0.065	0.008*
*Considered Method Detection Limit N/A = Not Applicable									

Table 2. 2018/19 Water Year Monthly Temperature and Precipitation for Clam River, 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 - 18	66	26	41.0	-2.2	738	678	4.67	1.5	2.85	72
November - 18	44	-7	23.2	-5.6	1247	1088	1.67	12.2	2.09	75
December - 18	44	-9	21.6	6.8	1338	1556	1.77	19.8	1.21	78
January – 19	40	-31	7.6	-2.6	1772	1699	0.80	10.4	0.96	70
February – 19	31	-19	10.6	-4.5	1515	1399	1.88	36.4	0.81	73
March – 19	58	-19	24.9	-1.0	1237	1210	1.19	6.7	1.49	64
April – 19	74	16	40.2	0.06	737	762	2.19	6.5	2.43	65
May – 19	82	28	49.3	-2.1	478	426	3.87	13.3	3.23	65
June – 19	87	40	61.7	1.6	126	179	4.10	0.00	4.23	64
July – 19	89	49	71.1	5.3	4	63	2.63	0.00	3.85	66
August – 19	87	46	66.1	1.8	44	86	2.51	0.00	3.70	66
September - 19	83	37	59.6	4.0	172	298	5.76	0.00	4.11	74

Source: NOAA/Duluth, MN

Table 3. Clam River Project Sampling Comparison Table: 2012 Thru Current Year										
Year	**Month**	**Secchi Depth**	**Chlorophyll *a***	**Color (True)**	**Total Phosphorus**	**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**	**Above Bottom mg/L**	**mg/L**	**mg/L**	**° C**	**° C**
2012	April	0.80	13.00	55.00	0.031	*	11.72	15.68	9.60	10.90
2013	May	1.00	17.00	70.00	0.069	0.069	10.91	12.16	10.10	14.20
2014	June	1.10	8.60	70.00	0.041	0.042	9.14	9.40	11.50	12.70
2015	April	1.50	13.00	25.00	0.049	0.039	8.45	11.93	9.90	14.40
2016	March	1.19	11.00	15.00	0.040	0.040	10.91	12.09	3.90	4.80
2017	April	1.30	15.00	10.00	0.024	0.025	9.91	11.03	9.70	10.80
2018	May	0.44	22.00	25.00	0.053	0.055	8.71	9.28	17.50	18.10
2019	April	1.46	5.20	40.00	0.032	0.047	8.94	9.39	9.11	9.60
Minimum	March-June	0.44	5.20	10.00	0.024	0.025	8.45	9.28	3.90	4.80
Maximum	March-June	1.50	22.00	70.00	0.069	0.069	11.72	15.68	17.50	18.10
Average	March-June	1.10	13.10	38.75	0.042	0.045	9.84	11.37	10.16	11.94
2012	July	1.10	13.00	50.00	0.042	0.050	0.04	12.33	24.80	28.70
2013	July	1.20	23.00	70.00	0.064	0.067	0.97	7.22	23.70	24.10
2014	July	0.80	18.00	50.00	0.056	0.055	7.06	12.44	20.40	22.50
2015	July	1.10	12.00	35.00	0.061	0.043	7.48	9.77	22.00	23.10
2016	July	0.88	44.00	30.00	0.043	0.043	0.70	11.31	24.40	26.60
2017	July	1.00	15.00	25.00	0.033	0.075	5.83	9.47	23.50	23.90
2018	July	0.46	26.00	30.00	0.090	0.093	0.07	8.47	24.90	26.10
2019	July	0.91	36.00	25.00	0.057	0.058	3.21	10.72	23.30	24.70
Minimum	July	0.46	12.00	25.00	0.033	0.043	0.04	7.22	20.40	22.50
Maximum	July	1.20	44.00	70.00	0.090	0.093	7.48	12.44	24.90	28.70
Average	July	0.93	23.38	39.38	0.056	0.061	3.17	10.22	23.38	24.96
2012	August	0.70	43.00	70.00	0.067	0.066	5.01	12.77	21.20	22.40
2013	August	0.50	48.00	100.00	0.110	0.098	3.78	12.47	20.40	21.90
2014	August	0.60	34.00	50.00	0.081	0.075	4.91	10.13	22.70	24.20
2015	August	0.50	120.00	40.00	0.076	0.043	5.50	16.91	22.60	24.70
2016	August	0.70	61.00	25.00	0.050	0.053	0.16	14.89	22.80	25.30
2017	August	1.00	11.00	20.00	0.034	0.034	3.30	9.84	20.70	21.40
2018	August	0.58	20.00	30.00	0.067	0.074	0.07	10.85	23.10	25.50
2019	August	0.58	92.00	45.00	0.090	0.065	0.04	13.08	22.40	24.40
Minimum	August	0.50	11.00	20.00	0.034	0.034	0.04	9.84	20.40	21.40
Maximum	August	1.00	120.00	100.00	0.110	0.098	5.50	16.91	23.10	25.50
Average	August	0.65	53.63	47.50	0.072	0.064	2.85	12.62	21.99	23.73

*no sample taken

Appendix C – Clam River Impoundment Project Sampling Logs

IMPOUNDMENT SAMPLING LOG

Water Quality Study Location Clam River

Hydroelectric Project – FERC # 9185

Date: 4-30-19

Pre-Sampling Data:

HWL 818.64 TWL 815.80 CFS 663

Sample Location: N45° 56.799
W092° 36.284

Performed by:
Steve Gilmore

Time: 9:55 Barometer: 30.29

Air Temp: 41 °F 5°C Wind Speed: E 5mpH

Sky Conditions: 100 Clouds

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: 7.5 Meters

Secchi Depth (± 0.1)			
Time 16:03	4.8	Feet	~~Meters~~

Comments:

Chlorophyll *a* (1 Meter below surface horizontal sampler)		
Time	Quantity (ml)	Filtered
10:03	1000	In Lab
Preservative	~~$MgCO_3$~~	

True Color (1 Meter below surface horizontal sampler)
Time 16:03

Total Phosphorus (1 Meter below surface horizontal sampler)	
Time 10:03	Preservative
	H_2SO_4

Total Phosphorus (1 Meter above bottom horizontal sampler)	
Time 9:59	Preservative
	H_2SO_4

D.O. and Temperature Profile			
Depth (Meters)	Time	D.O. (mg/L)	Temperature °C
0.5 below surface	9:57:43	9:39	9.4
1	9:58:17	9.29	9.5
2	9:58:53	9.21	9.21
3	9:59:27	9.15	9.15
4	9:59:56	9.11	9.11
5	10:00:24	9.08	9.6
6	10:00:52	9.07	9.6
7	10:01:24	9.04	9.6
8.75	10:02:32	8.95	9.6
0.5 above bottom	10:03.	8.94	9.6

*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.

IMPOUNDMENT SAMPLING LOG

Water Quality Study Location Clam River

Hydroelectric Project – FERC # 9185

Date: 7-23-2019

Pre-Sampling Data:

HWL 898.75 TWL 864.40 CFS 399

Sample Location: N45° 4.779 W092 36.286

Performed by:
Angie Stine Ryan Wemlund

Time: 10:35 Barometer: 30.15

Air Temp: 80 °F Wind Speed: WNW 7 mph

Sky Conditions: Partly 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: _____

Battery Status: 90 % Charge

Calibration Method: Factory

Sampling Depth Profile: Measured depth to bottom of impoundment: 7.5 Meters 25 feet

Secchi Depth (± 0.1)		
Time 10:52	3 Feet	Meters
		0.9144

Comments:

Chlorophyll *a* (1 Meter below surface horizontal sampler)		
Time 10:40	Quantity (ml)	Filtered
	1000	In Lab
Preservative	$MgCO_3$	

True Color (1 Meter below surface horizontal sampler)
Time 10:40

Total Phosphorus (1 Meter below surface horizontal sampler)	
Time 10:40	Preservative
	H_2SO_4

Total Phosphorus (1 Meter above bottom horizontal sampler)	
Time 10:48	Preservative
	H_2SO_4

D.O. and Temperature Profile			
Depth (Meters)	Time	D.O. (mg/L)	Temperature °C
0.5 below surface	10:36:19	10.74	24.2
1	10:37:41	9.77	24.2
2	10:38:28	9.54	24.1
3	10:39:25	8.89	23.9
4	10:40:32	8.10	23.8
5	10:41:45	7.10	23.7
6	10:42:49	5.70	23.6
7	10:43:01	4.83	23.5
8			
0.5 above bottom	10:45:09	4.35	23.4

*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.

-7

WHITE WATER ASSOCIATES, INC.

Clam River 7-23-2019

*D.O. and Temperature Profile			
Depth (Feet)	Time	D.O. (mg/L)	Temperature ° C
0.5 below surface	10:47:00	10.72	24.7
1	10:47:41	10:33	24.3
2	10:48:20	10.37	24.3
3	10:49:58	10.01	24.3
4	10:51:04	9.43	24.1
5	10:52:02	9.30	24.1
6	10:52:58	9.26	24.1
7	10:53:35	9.23	24.0
8	10:54:16	9.16	24.0
9	10:54:45	8.95	24.0
10	10:55:12	8.58	23.9
11	10:56:11	8.27	23.9
12	10:56:41	8.17	23.8
13	10:57:24	8.01	23.8
14	10:57:52	8.06	23.8
15	10:58:41	7.43	23.7
16	10:59:51	6.91	23.7
17	11:00:21	6.68	23.7
18	11:00:59	6.48	23.6
19	11:01:45	6.03	23.6
20	11:02:47	5.51	23.5
21	11:04:09	4.77	23.5
22	11:04:37	4.74	23.4
23	11:05:13	4.55	23.4
24	11:05:45	4.24	23.4
25 24.5	11:06:19	3.45	23.3
0.5 above bottom	11:06:39	3.21	23.3

emailed Dean and Brian K.

WHITE WATER ASSOCIATES, INC.

IMPOUNDMENT SAMPLING LOG

Water Quality Study Location Clam River

Hydroelectric Project – FERC # 9185

Date: 8-13-2019

Pre-Sampling Data:

HWL 898.6 TWL 863.05 CFS 143

Sample Location: N45° 26.779
W092° 36.284

Performed by: Angie Shine Emma

Time: 11:00 Barometer: 30.0

Air Temp: 76 °F Wind Speed: NW 5

Sky Conditions: 50% Clouds

Precipitation within Last 24 Hours: Yes

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: 25 Meters ft

Secchi Depth (± 0.1)			
Time 11:15	1.9	(Feet)	0.58 Meters

Chlorophyll *a* (1 Meter below surface horizontal sampler)		
Time 11:07	Quantity (ml)	Filtered
	1000	In Lab
Preservative	$MgCO_3$	

True Color (1 Meter below surface horizontal sampler)
Time 11:07

Total Phosphorus (1 Meter below surface horizontal sampler)	
Time 11:07	Preservative
	H_2SO_4

Total Phosphorus (1 Meter above bottom horizontal sampler)	
Time 11:18	Preservative
	H_2SO_4

D.O. and Temperature Profile			
Depth (Meters)	Time D.O.	D.O. (mg/L) Temp	Temperature °C Saturation
0.5 below surface	12.49	24.5	154.5
1	11.83	24.1	145.3
2	8.27	23.9	101.1
3	5.80	23.4	70.3
4	4.21	23.1	50.8
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.

Comments:

2 trumpeter swans
many painted turtles

WHITE WATER ASSOCIATES, INC.

Clam River

8-13-2019

Time	Depth (Feet)	~~Time~~ DO	~~D.O.~~ Temp (mg/L)	Temperature °C % Sat
	0.5 below surface	13.08	24.4	161.5
11:15:15	1	13.63	24.2	160.5
11:15:49	2	12.78	24.2	157.3
11:16:02	3	11.96	24.0	146.7
11:16:10	4	10.40	23.9	127.3
11:16:45	5	9.68	23.9	118.4
11:17:05	6	7.93	23.8	96.9
11:17:48	7	8.42	23.7	102.7
11:18:15	8	5.87	23.6	71.4
11:18:50	9	5.92	23.4	71.8
11:19:10	10	5.27	23.3	63.8
11:20:40	11	4.57	23.2	55.2
11:20:45	12	4.06	23.1	49.0
11:21:45	13	3.98	23.0	47.9
11:22:20	14	3.70	22.9	44.5
11:22:50	15	3.10	22.8	37.2
11:23:10	16	2.31	22.7	27.7
11:23:[illegible]	17	1.88	22.7	22.5
11:24:18	18	1.46	22.7	17.5
11:24:29	19	0.98	22.6	11.7
11.25.11	20	0.[illegible]	22.6	1.8
11.25.44	21	0.09	22.5	1.1
11.26.25	22	0.07	22.5	0.8
11.26.52	23	0.06	22.5	0.7
11.27.14	24	0.05	22.4	0.6
11.28.11	25	0.05	22.4	0.6
11.28.41	0.5 above bottom	0.04	22.4	1.5

WHITE WATER ASSOCIATES, INC.

Appendix D – Clam River Hydroelectric Project Lab Reports and Chains of Custody

Cover Page

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 #:** 82237

Project: Monitoring

Date Received: 4/30/2019 **Date Reported:** 5/21/2019

Sample Number	Client Sample ID	Date Sampled	Sample Matrix
82237-001	Clam River Surface	04/30/19	Water
82237-002	Clam River Bottom	04/30/19	Water
82237-003	Danbury Surface	04/29/19	Water
82237-004	Danbury Bottom	04/29/19	Water

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 #:** 82237

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: Laura Haag

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 #:** 82237

Project: Monitoring

Date Received: 4/30/2019 **Date Reported:** 5/21/2019

Sample Results

Sample No. / ID / Description / Matrix	Result	Flags	Units	Date/Time	Method	MDL	MQL	Analyst
82237-001 / Clam River Surface / Water								
General Chemistry Parameters								
Chlorophyll a	5.2		mg/m3	5/1/2019 14:50	10200H	NA	NA	CA
Color	40		CU	5/1/2019 11:40	2120B	5	5	AH
Total Phosphorus LL (t)	0.032	J	mg/L	5/15/2019 12:36	365.4	0.008	0.050	NK
82237-002 / Clam River Bottom / Water								
General Chemistry Parameters								
Total Phosphorus LL (t)	0.047	J	mg/L	5/15/2019 12:36	365.4	0.008	0.050	NK
82237-003 / Danbury Surface / Water								
General Chemistry Parameters								
Chlorophyll a	9.7		mg/m3	5/1/2019 14:50	10200H	NA	NA	CA
Color	25		CU	5/1/2019 11:40	2120B	5	5	AH
Total Phosphorus LL (t)	0.021	J	mg/L	5/15/2019 12:38	365.4	0.008	0.050	NK
82237-004 / Danbury Bottom / Water								
General Chemistry Parameters								
Total Phosphorus LL (t)	0.028	J	mg/L	5/15/2019 12:38	365.4	0.008	0.050	NK

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)

Login Checklist

WHITE WATER ASSOCIATES, INC.

Project No.:	82237	**Date logged in.:**	4/30/2019	**Login person's initials:**	ER
Client:	RWE			**Number of coolers:**	1
Project name:	Monitoring			**Courier/shipper:**	WWA

- ☑ **1. Custody seals/original packing tape were intact (if applicable).**
- ☑ **2. Samples are in good condition, i.e. not broken or leaking.**
- ☑ **3. Samples were received within holding times.**
- ☑ **4. Samples were received on ice (ice in direct contact with the samples).**
- ☐ **5. Temperature of the samples was between 0-6°C. Temp.:** -1

  NOTE: Samples not between 0-6°C that are received at the laboratory on the day of sample collections do not require client notification.
- ☑ **6. Samples matched the Chain of Custody (COC).**
- ☑ **7. Proper containers were used.**
- ☑ **8. Samples were collected in White Water lab containers.**
- ☑ **9. There is adequate sample volume for requested analyses and QC.**
- ☐ **10. For water VOC samples, headspace is less than the size of a pea.**
- ☑ **11. Samples are preserved to the proper pH. Sample bottles and preservation are noted in LIMS Sample Container Section.**
- ☑ **12. The COC is signed. (either Sampler or Relinquished by)**
- ☐ **13. Sub-sampling (SS) is required. Bottles created are noted in sample containers section of log-in form.**
- ☑ **14. For Dissolved Analysis (when applicable), samples were filtered in the lab.**
- ☐ **15. For soil VOCs, methanol preserved samples were received.**
- ☐ **16. For Soil VOCs, samples were preserved with methanol in the lab.**
- ☐ **17. Client contact is necessary. Provide documentation below.**

COMMENTS/CORRECTIVE ACTION

CLIENT RESPONSE

Note: If hold time, volume, and received on ice or temperature criteria are not met when required by the method, results may not be able to be used for regulatory purposes. Check with your reporting agency for more information.

JCut 5/2/19

Version 160504

Job # (WWA office use): 82237

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 Stim	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	Chl a (mg CO3)	T Phos	Color							
1	Clam River Surface	4-30-19	10:03		X				X	X						3	X	X	X							
2	Clam River Bottom	4-30-19	9:59		X					X						1		X								
3	Danbury Surface	4-29-19	13:32		X				X	X						3	X	X	X							
4	Danbury Bottom	4-29-19	13:27		X					X						1		X								

(SAMPLE MATRIX: Drinking water, Aqueous, Sed., Soil, Other; CONTAINERS / PRESERVATIVES: None, H2SO4, HNO3, HCl, NaOH, ZnAc/NaOH, Na Thio)

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]	4-30-19	4:44 p.m.			
Relinquished by:	Date:	Time:	Received by: [signature]	4-30-19	4:44 pm

Comments/Sample temp. on receipt: -1

Packing: Ice ✓ Cooler ✓

UPS☐ FedEx☐ USPS☐ Client☐ Other WWA

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

Cover Page

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 #:** 84251

Project: Monitoring

Date Received: 7/25/2019 **Date Reported:** 8/27/2019

Sample Number	Client Sample ID	Date Sampled	Sample Matrix
84251-001	Clam River Surface	07/23/19	Water
84251-002	Clam River Bottom	07/23/19	Water
84251-003	Danbury Surface	07/23/19	Water
84251-004	Danbury Bottom	07/23/19	Water

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 #:** 84251

Comments (if any):

Key to Laboratory Flags:

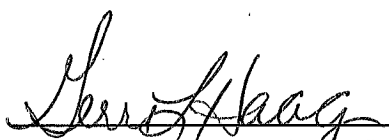
*: RPD/RSD exceeds limits.
B: The analyte was found in the associated blank as well as in the sample.
J: The quantitation is an estimated value because the result is less than the sample quantitation limit but greater than the detection limit.
M: A matrix effect was present.
Q: Batch QC data associated with the analysis does not meet the stated objectives
H: Indicates analytical holding time exceedance.
P: A manual peak selection or manual integration was performed to correct an erroneous software selection.
N: For reporting results that are non-target analytes, when requested by client for Mass Spec reporting.
T: Tentatively Identified Compound.
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 EGLE 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 #:** 84251

Project: Monitoring

Date Received: 7/25/2019 **Date Reported:** 8/27/2019

Sample Results

Sample No. / ID / Description / Matrix	Result	Flags	Units	Date/Time	Method	MDL	MQL	Analyst
84251-001 / Clam River Surface / Water								
General Chemistry Parameters								
Chlorophyll a	36		mg/m3	7/25/2019 15:20	10200H	NA	NA	CA
Color	25		CU	7/25/2019 13:00	2120B	5	5	GG
Total Phosphorus LL (t)	0.057		mg/L	8/20/2019 12:36	365.4	0.008	0.050	NK
84251-002 / Clam River Bottom / Water								
General Chemistry Parameters								
Total Phosphorus LL (t)	0.058		mg/L	8/20/2019 12:38	365.4	0.008	0.050	NK
84251-003 / Danbury Surface / Water								
General Chemistry Parameters								
Chlorophyll a	3.5		mg/m3	7/25/2019 15:20	10200H	NA	NA	CA
Color	15		CU	7/25/2019 13:00	2120B	5	5	GG
Total Phosphorus LL (t)	0.045	J	mg/L	8/20/2019 12:39	365.4	0.008	0.050	NK
84251-004 / Danbury Bottom / Water								
General Chemistry Parameters								
Total Phosphorus LL (t)	0.044	J	mg/L	8/20/2019 12:40	365.4	0.008	0.050	NK

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)

Login Checklist

WHITE WATER ASSOCIATES, INC.

Project No.:	84251	**Date logged in.:**	7/25/2019	**Login person's initials:**	ER
Client:	RWE			**Number of coolers:**	1
Project name:	Monitoring			**Courier/shipper:**	WWA

- ☑ **1. Custody seals/original packing tape were intact (if applicable).**
- ☑ **2. Samples are in good condition, i.e. not broken or leaking.**
- ☑ **3. Samples were received within holding times.**
- ☑ **4. Samples were received on ice (in direct contact with the samples).**
- ☑ **5. Temperature of the samples was between 0-6°C. Temp.:** 0

NOTES on #4:

NOTE: Samples not between 0-6°C that are received at the laboratory on the day of sample collections do not require client notification.

- ☑ **6. Samples matched the Chain of Custody (COC).**
- ☑ **7. Proper containers were used.**
- ☑ **8. Samples were collected in White Water lab containers.**
- ☑ **9. There is adequate sample volume for requested analyses and QC.**
- ☐ **10. For water VOC samples, headspace is less than the size of a pea.**
- ☑ **11. Samples are preserved to the proper pH. Sample bottles and preservation are noted in LIMS Sample Container Section.**
- ☑ **12. The COC is signed. (either Sampler or Relinquished by)**
- ☐ **13. Sub-sampling (SS) is required. Bottles created are noted in sample containers section of log-in form.**
- ☑ **14. For Dissolved Analysis (when applicable), samples were filtered in the lab.**
- ☐ **15. For soil VOCs, methanol preserved samples were received.**
- ☐ **16. For Soil VOCs, samples were preserved with methanol in the lab.**
- ☐ **17. Client contact is necessary. Provide documentation below.**

COMMENTS/CORRECTIVE ACTION

CLIENT RESPONSE

Note: If hold time, volume, and received on ice or temperature criteria are not met when required by the method, results may not be able to be used for regulatory purposes. Check with your reporting agency for more information.

VGH 7/29/19

Version 160504

Job # (WWA office use): 84251

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): Ryan Wabol	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	Chlg (mg/L Cl2)	Tphos	Color
1	Clam River Surface	7-23-19	10:40		X				X	X						3	X	X	X
2	Clam River Bottom	"	10:48		X					X						1		X	
3	Danbury Surface	"	13:53		X				X	X						3	X	X	X
4	Danbury Bottom	"	13:58		X					X						1		X	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	7/29/19	17:30			
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
				7-25-19	830

Comments/Sample temp. on receipt: 0

Packing: Ice ✓
Cooler

UPS☐ FedEx☐ USPS☐ Client☐ Other WWA

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

20200227-5122 FERC PDF (Unofficial) 2/27/2020 10:27:36 AM

Cover Page

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 #:** 84706

Project: Monitoring

Date Received: 8/15/2019 **Date Reported:** 9/13/2019

Sample Number	Client Sample ID	Date Sampled	Sample Matrix
84706-001	Clam River Surface	08/13/19	Water
84706-002	Clam River Bottom	08/13/19	Water
84706-003	Danbury Surface	08/13/19	Water
84706-004	Danbury Bottom	08/13/19	Water

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 #:** 84706

Comments (if any):

Key to Laboratory Flags:

*: RPD/RSD 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.
P: A manual peak selection or manual integration was performed to correct an erroneous software selection.
N: For reporting results that are non-target analytes, when requested by client for Mass Spec reporting.
T: Tentatively Identified Compound.
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: Gerri L. Haag

WI DNR Lab Certification Number: 999971280
MI EGLE 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 #:** 84706

Project: Monitoring

Date Received: 8/15/2019 **Date Reported:** 9/13/2019

Sample Results

Sample No. / ID / Description / Matrix	Result	Flags	Units	Date/Time	Method	MDL	MQL	Analyst
84706-001 / Clam River Surface / Water								
General Chemistry Parameters								
Chlorophyll a	92		mg/m3	8/22/2019 15:10	10200H	NA	NA	AH
Color	45		CU	8/15/2019 13:45	2120B	5	5	AH
Total Phosphorus LL (t)	0.090		mg/L	8/20/2019 13:20	365.4	0.008	0.050	NK
84706-002 / Clam River Bottom / Water								
General Chemistry Parameters								
Total Phosphorus LL (t)	0.065	M	mg/L	8/20/2019 13:22	365.4	0.008	0.050	NK
84706-003 / Danbury Surface / Water								
General Chemistry Parameters								
Chlorophyll a	4.5		mg/m3	8/22/2019 15:10	10200H	NA	NA	AH
Color	25		CU	8/15/2019 13:45	2120B	5	5	AH
Total Phosphorus LL (t)	0.045	J	mg/L	8/20/2019 13:23	365.4	0.008	0.050	NK
84706-004 / Danbury Bottom / Water								
General Chemistry Parameters								
Total Phosphorus LL (t)	0.046	J	mg/L	8/20/2019 13:26	365.4	0.008	0.050	NK

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)

Login Checklist

WHITE WATER ASSOCIATES, INC.

Project No.:	84706	**Date logged in.:**	8/15/2019	**Login person's initials:**	ER
Client:	RWE			**Number of coolers:**	1
Project name:	Monitoring			**Courier/shipper:**	WWA

- ☑ **1. Custody seals/original packing tape were intact (if applicable).**
- ☑ **2. Samples are in good condition, i.e. not broken or leaking.**
- ☐ **3. Samples were received within holding times.**
- ☑ **4. Samples were received on ice (in direct contact with the samples).**
- ☑ **5. Temperature of the samples was between 0-6°C. Temp.:** 1

NOTES on #4:

NOTE: Samples not between 0-6°C that are received at the laboratory on the day of sample collections do not require client notification.

- ☑ **6. Samples matched the Chain of Custody (COC).**
- ☑ **7. Proper containers were used.**
- ☑ **8. Samples were collected in White Water lab containers.**
- ☑ **9. There is adequate sample volume for requested analyses and QC.**
- ☐ **10. For water VOC samples, headspace is less than the size of a pea.**
- ☑ **11. Samples are preserved to the proper pH. Sample bottles and preservation are noted in LIMS Sample Container Section.**
- ☑ **12. The COC is signed. (either Sampler or Relinquished by)**
- ☐ **13. Sub-sampling (SS) is required. Bottles created are noted in sample containers section of log-in form.**
- ☑ **14. For Dissolved Analysis (when applicable), samples were filtered in the lab.**
- ☐ **15. For soil VOCs, methanol preserved samples were received.**
- ☐ **16. For Soil VOCs, samples were preserved with methanol in the lab.**
- ☐ **17. Client contact is necessary. Provide documentation below.**

COMMENTS/CORRECTIVE ACTION

#3. 190815 8:50ER color received past hold time

CLIENT RESPONSE

Note: If hold time, volume, and received on ice or temperature criteria are not met when required by the method, results may not be able to be used for regulatory purposes. Check with your reporting agency for more information.

JGW 8/10/19

Version 160504

Job # (WWA office use): 84706

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): Brett Shaw

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	Chl a (mg/m3)	TPhos	Color
1	Clam River Surface	8-13-19	11:07		X				X	X						3	X	X	X
2	Clam River Bottom	"	11:18		X					X						1		X	
3	Danbury Surface	"	14:53		X				X	X						3	X	X	X
4	Danbury Bottom	"	15:03		X					X						1		X	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date: 8/14/19	Time: 7:51 pm	Received by:	Date: 8-15-19	Time: 850

Comments/Sample temp. on receipt: 1.

Packing: Ice ✓ Cooler

UPS☐ FedEx☐ USPS☐ Client☐ Other WWA

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

RE: Danbury (P-9184) Clam River (P-9185) Flambeau Upper (P-2640) Flambeau Lower (P-2421) Pixley (P-2395) Crowley (P-2473) Winter (P-2064) Water Quality data spreadsheet

Laatsch, Cheryl - DNR <Cheryl.Laatsch@wisconsin.gov>
Mon 12/2/2019 9:45 AM
To: Brian Kreuscher <bkreuscher@rwehydro.com>

Thank you

We are committed to service excellence.
Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Cheryl Laatsch
Statewide FERC Coordinator
Bureau of Environmental Analysis and Sustainability
Wisconsin Dept of Natural Resources
N7725 Hwy 28
Horicon WI 53032
(T) 920-387-7869 (Fax) 920-387-7888
Cheryl.laatsch@wisconsin.gov


dnr.wi.gov


From: Brian Kreuscher <bkreuscher@rwehydro.com>
Sent: Monday, December 02, 2019 9:35 AM
To: Laatsch, Cheryl - DNR <Cheryl.Laatsch@wisconsin.gov>; Nick Utrup <nick_utrup@fws.gov>
Subject: Danbury (P-9184) Clam River (P-9185) Flambeau Upper (P-2640) Flambeau Lower (P-2421) Pixley (P-2395) Crowley (P-2473) Winter (P-2064) Water Quality data spreadsheet

All,

In years past I had been asked for this Excel spreadsheet with water quality monitoring data. The attached spreadsheet has data for the following projects each in their own tab: Upper, Lower, Pixley, Crowley, Winter, Danbury and Clam River.

Thanks

Brian Kreuscher

Renewable World Energies

Regulatory & Compliance

855-994-9376 x230

Danbury (P-9184) Clam River (P-9185) Draft Water Quality Reports

Brian Kreuscher <bkreuscher@rwehydro.com>

Tue 11/26/2019 6:59 PM

To: Cheryl Laatsch <cheryl.laatsch@wisconsin.gov>; Nick Utrup <nick_utrup@fws.gov>

2 attachments (3 MB)

Danbury Water Quality Report 2019_COMPLETE.pdf; Clam River Water Quality Report 2019_COMPLETE.pdf;

Cheryl and Nick,
Attached are the Draft Water Quality Reports for Danbury and Clam River. Please review and provide any comments you may have to me within 60 days for FERC submittal.

Thanks
Brian Kreuscher
Renewable World Energies
Regulatory & Compliance
855-994-9376 x230

Document Content(s)