

Wisconsin Public Service Corporation

700 North Adams Street P.O. Box 19001 Green Bay, WI 54307-9001

www.wisconsinpublicservice.com

FERC Project Nos. 2595, 2522, 2546, 2560, & 2581

September 4, 2015

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

Dear Secretary Bose:

High Falls, Johnson Falls, Sandstone Rapids, Potato Rapids, and Peshtigo Hydroelectric Projects Re: Proposed Amendment to Approved Water Quality Monitoring Plans

Pursuant to the Order Amending Water Quality Monitoring Plans dated April 30, 2002, Wisconsin Public Service (WPS) is conducting water quality monitoring for dissolved oxygen, temperature, and pH upstream and downstream of the High Falls (FERC #2595), Johnson Falls (FERC #2522), Sandstone Rapids (FERC #2546), Potato Rapids (FERC #2560), and Peshtigo (FERC #2581) Hydroelectric Projects. As described in the monitoring plans, water quality monitoring data is collected at one-hour intervals continuously for the months of June, July, August, and September using Hydrolab Datasonde equipment, or equivalent. Per the monitoring plans, the water quality instrumentation is cleaned, downloaded, and calibrated according to manufacturer instructions every seven to ten calendar days during the monitoring period. Water quality monitoring is conducted downstream of the High Falls Hydroelectric Project on an annual basis. Monitoring at the other facilities is scheduled to occur in 2016, and every five years afterwards for the term of the License.

On April 23, 2012, WPS received approval to modify the water quality monitoring plan at the Caldron Falls Hydroelectric Project. The plan amendment for that facility included a modification of the frequency of monitoring equipment maintenance and modification of the upstream monitoring requirement from continuous on an hourly basis during the monitoring season to conducting vertical profiles on a bi-weekly basis in conjunction with equipment maintenance activities. In order to harmonize the monitoring plans for the projects along the Peshtigo River, WPS is proposing the following amendments to the water quality monitoring plan and respective Articles¹ of the license:

^{1 -} Article 406 of the High Falls Project, Potato Rapids Project, and Peshtigo Project; Article 407 of the Johnson Falls Project; Article 408 of the Sandstone Rapids Project.

Ms. Kimbery D. Bose, Secretary September 4, 2015 Page 2 of 2

- Modify the frequency of monitoring equipment maintenance at the High Falls, Johnson Falls, Sandstone Rapids, Potato Rapids, and Peshtigo Hydroelectric Projects from once every seven to ten days to once every 14 days.
- Modify the monitoring plans to reflect the use of equipment manufactured by YSI, Inc. rather than Hydrolab brand equipment.
- At the Potato Rapids Hydroelectric Project, modify monitoring at the upstream monitoring location from continuously during the monitoring season to conducting bi-monthly dissolved oxygen, pH, and temperature profiles near the powerhouse intake.

Attached for your review and approval are amended water quality monitoring plans for each of the respective projects. WPSC consulted with the Wisconsin Department of Natural Resources (WDNR) and the U.S. Fish and Wildlife Service (FWS) regarding the proposed plan amendments. WPSC incorporated suggested changes to the monitoring plans. The water quality monitoring plans, documentation of agency consultation, and a response to agency comments are attached. Should you have any questions or concerns regarding this submittal, please contact Mr. Mark Metcalf at (920) 433-1833.

Sincerely,

Gil Snyder Manager - Regional Generation

MWM/rjf

Enc: Water Quality Monitoring Plans for Peshtigo River Hydroelectric Projects

cc: Mr. John Myers - D2 Mr. James Nuthals - D2 Ms. Joan Johanek, WPS - D2 Mr. William Bosacki, WPS - D2 Ms. Katie Bartelt, WPS - D2 Mr. Edward Brandt, WPS - CRI Mr. John Zygaj, FERC - CRO

High Falls Hydroelectric Project (FERC No. 2595)

Water Quality Monitoring Plan

Proposed Amendment

September 2015

High Falls Hydroelectric Project - FERC License No. 2595

Article 406 The licensee shall file with the Commission, for approval, a plan to monitor dissolved oxygen (DO), water temperature, and pH of the Peshtigo River upstream and downstream of the High Falls dam.

Water Quality Monitoring Plan

Requirement:

Ensure flow releases from the project, as measured immediately downstream from the dam, maintain the following standards, except when natural conditions prohibit attainment of the standards: (1) DO concentrations shall not be less than 5.0 milligrams per liter (mg/L) (minus the precision of the monitoring instrument - 0.1 mg/L for YSI Brand Equipment) for more than 24 hours per year; (2) water temperature shall not exceed 89 degrees Fahrenheit; and (3) the pH shall be within the range of 6.0 to 9.0, with no change greater than 0.5 units outside the estimated natural seasonal maximum and minimum. Natural conditions include inflows to the project less than the 95 percent exceedance flow.

I. Methods

A. The monitoring parameters include pH, dissolved oxygen, and temperature. At the downstream monitoring location, the data is collected at one-hour intervals continuously for the months of June, July, August, and September using YSI brand water quality monitoring equipment or equivalent. Instrumentation shall be cleaned, downloaded, and calibrated according to manufacturer specification at least every 14 calendar days during the monitoring period. Calibration and maintenance information is recorded in a log for each piece of equipment. A post deployment calibration of the monitor will be conducted to determine the calibration drift. Raw dissolved oxygen data will be corrected for calibration of the equipment.

II. Location and Frequency of Monitoring

- A. Upstream monitoring occurs on a five-year basis and is conducted with the same equipment utilized for the downstream monitoring of the Caldron Falls project (approximately 770' downstream of the powerhouse in a location that is unaffected by changes in water elevation due to fluctuations in release flow volumes (NW ¼ of NE ¼, T33N, R18E, Section 10, approximately at 88° 13' 39.9"N, 45° 21' 25.7"W). The upstream (or downstream of Caldron Falls) monitoring is scheduled to occur in 2016 and every five years thereafter for the term of the license.
- B. The downstream monitoring equipment shall be located on the High Falls Road Bridge near the middle of the river. Monitoring will be conducted annually. The need for future monitoring will be discussed annually in consultation with the Wisconsin Department of Natural Resources (WDNR) and the U.S. Fish and Wildlife Service (FWS). Should the annual

High Falls – WQM Plan Page 2 of 2

monitoring be unnecessary because the discharges meet the required standards, the monitoring schedule will be modified to follow a five-year protocol, which will be synchronized with the five-year monitoring schedule for the rest of the river system.

III. Data Submittal and Review

- A. When the Energy Supply and Control Desk identify a period of non-compliance with state standards and the calibration of the instrument is verified, the WDNR will be notified within five working days.
- B. The results of the monitoring will be supplied to the Wisconsin Department of Natural Resources (WDNR) and the U. S. Fish and Wildlife Service (USFWS) in a tabular format in an excel spreadsheet or equivalent. Agencies will be given 30 days for review of the results of the study. The monitoring results, agency comments and responses to agency comments will be provided to the Federal Energy Commission (FERC) by February 28th of the year following the year in which monitoring occurred.

IV. Correction of Potential Problems

- A. Through monitoring conducted in 1999, 2000, and 2001, it was determined that diurnal fluctuations of dissolved oxygen occur during certain periods of the summer. A drawdown was initiated in November of 2001 to attempt to minimize the effects of the eurasian water milfoil colonies upon dissolved oxygen.
- B. In the summer of 2001, a real-time dissolved oxygen device was installed at the bridge below the tailrace to allow for constant monitoring of the dissolved oxygen levels in the tailrace. The output of the device is monitored by the energy supply and control desk on a 24-hour basis throughout the summer for compliance. If levels below standards are identified, corrective actions to include passing water through a spillway gate are initiated.

Johnson Falls Hydroelectric Project (FERC No. 2522)

Water Quality Monitoring Plan

Proposed Amendment

September 2015

Johnson Falls Hydroelectric Project - FERC License No. 2522

Article 407The licensee shall file with the Commission, for approval, a plan to monitor dissolved oxygen
(DO), water temperature, and pH of the Peshtigo River upstream and downstream of the
Johnson Falls dam.

Water Quality Monitoring Plan

Requirement:

Ensure flow releases from the project, as measured immediately downstream from the dam, maintain the following standards, except when natural conditions prohibit attainment of the standards: (1) DO concentrations shall not be less than 6.0 milligrams per liter (mg/L) at any time or 7.0 mg/L during the spawning season (minus the precision of the monitoring instrument - 0.1 mg/L for YSI Brand Equipment) for more than 24 hours per year; (2) water temperature shall not be altered from natural background to the extent that trout populations are adversely affected, and (3) the pH shall be within the range of 6.0 to 9.0, with no change greater than 0.5 units outside the estimated natural seasonal maximum and minimum. Natural conditions include inflows to the project less than the 95 percent exceedance flow.

I. Methods

A. The monitoring parameters include pH, dissolved oxygen, and temperature. At the downstream monitoring location, the data is collected at one-hour intervals continuously for the months of June, July, August, and September using YSI brand water quality monitoring equipment or equivalent. Instrumentation shall be cleaned, downloaded, and calibrated according to manufacturer specification at least every 14 calendar days during the monitoring period. Calibration and maintenance information is recorded in a log for each piece of equipment. A post deployment calibration of the monitor will be conducted to determine the calibration drift. Raw dissolved oxygen data will be corrected for calibration of the equipment.

II. Location and Frequency of Monitoring

A. Upstream and downstream monitoring occurs on a five-year basis. The upstream monitoring is conducted with the same equipment as the downstream monitor at High Falls. The downstream monitor at Johnson Falls is located in the tailrace. The monitoring is scheduled to occur in 2016 and every five years thereafter for the term of the license.

Johnson Falls – WQM Plan Page 2 of 2

III. Data Submittal and Review

- A. When data is downloaded from the equipment, it will be screened for periods of noncompliance with the standards. If periods of non-compliance are identified, the WDNR will be notified within five working days.
- B. The results of the monitoring will be supplied to the Wisconsin Department of Natural Resources (WDNR) and the U. S. Fish and Wildlife Service (USFWS) in a tabular format in an excel spreadsheet or equivalent. Agencies will be given 30 days for review of the results of the study. The monitoring results, agency comments and responses to agency comments will be provided to the Federal Energy Commission (FERC) by February 28th of the year following the year in which monitoring occurred.

IV. Correction of Potential Problems

A. Correction of problems will be handled on a case-by-case basis through consultation with the WDNR and the FWS.

Sandstone Rapids Hydroelectric Project (FERC No. 2546)

Water Quality Monitoring Plan

Proposed Amendment

September 2015

Sandstone Rapids Hydroelectric Project - FERC License No. 2546

Article 408The licensee shall file with the Commission, for approval, a plan to monitor dissolved oxygen
(DO), water temperature, and pH of the Peshtigo River upstream and downstream of the
Sandstone Rapids dam.

Water Quality Monitoring Plan

Requirement:

Ensure flow releases from the project, as measured immediately downstream from the dam, maintain the following standards, except when natural conditions prohibit attainment of the standards: (1) DO concentrations shall not be less than 5.0 milligrams per liter (mg/L) (minus the precision of the monitoring instrument - 0.1 mg/L for YSI Brand equipment) for more than 24 hours per year; (2) water temperature shall not exceed 89 degrees Fahrenheit; and (3) the pH shall be within the range of 6.0 to 9.0, with no change greater than 0.5 units outside the estimated natural seasonal maximum and minimum. Natural conditions include inflows to the project less than the 95 percent exceedance flow.

I. Methods

A. The monitoring parameters include pH, dissolved oxygen, and temperature. At the downstream monitoring location, the data is collected at one-hour intervals continuously for the months of June, July, August, and September using YSI brand water quality monitoring equipment or equivalent. Instrumentation shall be cleaned, downloaded, and calibrated according to manufacturer specification at least every 14 calendar days during the monitoring period. Calibration and maintenance information is recorded in a log for each piece of equipment. A post deployment calibration of the monitor will be conducted to determine the calibration drift. Raw dissolved oxygen data will be corrected for calibration of the equipment.

II. Location and Frequency of Monitoring

A. Upstream and downstream monitoring occurs on a five-year basis. The upstream monitoring is conducted with the same equipment as the downstream monitor at Johnson Falls. The downstream monitor at Sandstone Rapids is located in the tailrace. Monitoring is scheduled to occur in 2016 and every five years thereafter for the term of the license.

Sandstone – WQM Plan Page 2 of 2

III. Data Submittal and Review

- A. When data is downloaded from the equipment, it will be screened for periods of noncompliance with the standards. If periods of non-compliance are identified, the WDNR will be notified within five working days.
- B. The results of the monitoring will be supplied to the Wisconsin Department of Natural Resources (WDNR) and the U. S. Fish and Wildlife Service (USFWS) in a tabular format in an excel spreadsheet or equivalent. Agencies will be given 30 days for review of the results of the study. The monitoring results, agency comments and responses to agency comments will be provided to the Federal Energy Commission (FERC) by February 28th of the year following the year in which monitoring occurred.

IV. Correction of Potential Problems

A. Correction of problems will be handled on a case-by-case basis through consultation with the WDNR and the FWS.

Potato Rapids Hydroelectric Project (FERC No. 2560)

Water Quality Monitoring Plan

Proposed Amendment

September 2015

Potato Rapids Hydroelectric Project - FERC License No. 2560

Article 406 The licensee shall file with the Commission, for approval, a plan to monitor dissolved oxygen (DO), water temperature, and pH of the Peshtigo River upstream and downstream of the Potato Rapids dam.

Water Quality Monitoring Plan

Requirement:

Ensure flow releases from the project, as measured immediately downstream from the dam, maintain the following standards, except when natural conditions prohibit attainment of the standards: (1) DO concentrations shall not be less than 5.0 milligrams per liter (mg/L) (minus the precision of the monitoring instrument - 0.1 mg/L for YSI Brand Equipment) for more than 24 hours per year; (2) water temperature shall not exceed 89 degrees Fahrenheit; and (3) the pH shall be within the range of 6.0 to 9.0, with no change greater than 0.5 units outside the estimated natural seasonal maximum and minimum. Natural conditions include inflows to the project less than the 95 percent exceedance flow.

I. Methods

A. The monitoring parameters include pH, dissolved oxygen, and temperature. At the downstream monitoring location, the data is collected at one-hour intervals continuously for the months of June, July, August, and September using YSI brand water quality monitoring equipment or equivalent. Instrumentation shall be cleaned, downloaded, and calibrated according to manufacturer specification at least every 14 calendar days during the monitoring period. Calibration and maintenance information is recorded in a log for each piece of equipment. A post deployment calibration of the monitor will be conducted to determine the calibration drift. Raw dissolved oxygen data will be corrected for calibration of the equipment.

II. Location and Frequency of Monitoring

A. Upstream and downstream monitoring occurs on a five-year basis. Upstream monitoring shall consist of bi-monthly dissolved oxygen, temperature, and pH profiles of the Potato Rapids Reservoir. Readings will be taken at half (0.5) meter intervals just above the dam near the powerhouse intake. The downstream monitor is located in the tailrace below the dam. The monitoring is scheduled to occur in 2016 and every five years thereafter for the term of the license.

Potato Rapids – WQM Plan Page 2 of 2

III. Data Submittal and Review

- A. When data is downloaded from the equipment, it will be screened for periods of noncompliance with the standards. If periods of non-compliance are identified, the WDNR will be notified within five working days.
- B. The results of the monitoring will be supplied to the Wisconsin Department of Natural Resources (WDNR) and the U. S. Fish and Wildlife Service (USFWS) in a tabular format in an excel spreadsheet or equivalent. Agencies will be given 30 days for review of the results of the study. The monitoring results, agency comments and responses to agency comments will be provided to the Federal Energy Commission (FERC) by February 28th of the year following the year in which monitoring occurred.

IV. Correction of Potential Problems

A. Correction of problems will be handled on a case-by-case basis through consultation with the WDNR and the FWS.

Peshtigo Hydroelectric Project (FERC No. 2581)

Water Quality Monitoring Plan

Proposed Amendment

September 2015

Peshtigo Hydroelectric Project - FERC License No. 2581

Article 405 The licensee shall file with the Commission, for approval, a plan to monitor dissolved oxygen (DO), water temperature, and pH of the Peshtigo River upstream and downstream of the Peshtigo dam.

Water Quality Monitoring Plan

Requirement:

Ensure flow releases from the project, as measured immediately downstream from the dam, maintain the following standards, except when natural conditions prohibit attainment of the standards: (1) DO concentrations shall not be less than 5.0 milligrams per liter (mg/L) (minus the precision of the monitoring instrument - 0.1 mg/L for YSI Brand equipment) for more than 24 hours per year; (2) water temperature shall not exceed 89 degrees Fahrenheit; and (3) the pH shall be within the range of 6.0 to 9.0, with no change greater than 0.5 units outside the estimated natural seasonal maximum and minimum. Natural conditions include inflows to the project less than the 95 percent exceedance flow.

I. Methods

A. The monitoring parameters include pH, dissolved oxygen, and temperature. At the downstream monitoring location, the data is collected at one-hour intervals continuously for the months of June, July, August, and September using YSI brand water quality monitoring equipment or equivalent. Instrumentation shall be cleaned, downloaded, and calibrated according to manufacturer specification at least every 14 calendar days during the monitoring period. Calibration and maintenance information is recorded in a log for each piece of equipment. A post deployment calibration of the monitor will be conducted to determine the calibration drift. Raw dissolved oxygen data will be corrected for calibration of the equipment.

II. Location and Frequency of Monitoring

A. Upstream and downstream monitoring occurs on a five-year basis. The upstream monitoring is conducted with the same equipment as the downstream monitor at Potato Rapids. The downstream monitor at Peshtigo Rapids is located in the tailrace. The monitoring is scheduled to occur in 2016 and every five years thereafter for the term of the license.

Peshtigo Hydro - WQM Plan Page 2

III. Data Submittal and Review

- A. When data is downloaded from the equipment, it will be screened for periods of noncompliance with the standards. If periods of non-compliance are identified, the WDNR will be notified within five working days.
- B. The results of the monitoring will be supplied to the Wisconsin Department of Natural Resources (WDNR) and the U. S. Fish and Wildlife Service (USFWS) in a tabular format in an excel spreadsheet or equivalent. Agencies will be given 30 days for review of the results of the study. The monitoring results, agency comments and responses to agency comments will be provided to the Federal Energy Commission (FERC) by February 28th of the year following the year in which monitoring occurred.

IV. Correction of Potential Problems

A. Correction of problems will be handled on a case-by-case basis through consultation with the WDNR and the FWS.

Documentation of Agency Consultation



Wisconsin Public Service Corporation

700 North Adams Street P.O. Box 19001 Green Bay, WI 54307-9001 www.wisconsinpublicservice.com

July 21, 2015

FERC Project Nos. 2595, 2522, 2546, 2560, & 2581

Mr. Nick Utrup U.S. Fish & Wildlife Service WI/MN Ecological Field Services Field Office 4101 American Boulevard East Bloomington, MN 55425

Dear Mr. Utrup:

Re: Proposed Amendment to Approved Water Quality Monitoring Plans

Pursuant to the Order Amending Water Quality Monitoring Plans dated April 30, 2002, Wisconsin Public Service Corporation (WPS) is conducting water quality monitoring for dissolved oxygen, temperature, and pH upstream and downstream of the High Falls (FERC #2595), Johnson Falls (FERC #2522), Sandstone Rapids (FERC #2546), Potato Rapids (FERC #2560), and Peshtigo (FERC #2581) Hydroelectric Projects. As described in the monitoring plans, water quality monitoring data is collected at one-hour intervals continuously for the months of June, July, August, and September using Hydrolab Datasonde equipment, or equivalent. Per the monitoring plans, the water quality instrumentation is cleaned, downloaded, and calibrated according to manufacturer instructions every 7 to 10 calendar days during the monitoring period. Water quality monitoring is conducted downstream of the High Falls Hydroelectric Project on an annual basis. Monitoring at the other facilities is scheduled to occur in 2016, and every five years thereafter for the term of the License.

On April 23, 2012, WPS received approval to modify the water quality monitoring plan at the Caldron Falls Hydroelectric Project. The plan amendment for that facility included a modification of the frequency of monitoring equipment maintenance and modification of the upstream monitoring requirement from continuous on an hourly basis during the monitoring season to conducting vertical profiles on a bi-weekly basis in conjunction with equipment maintenance activities. In order to harmonize the monitoring plans for the projects along the Peshtigo River, WPS is proposing the following amendments to the water quality monitoring plan and respective Articles¹ of the license:

1 - Article 406 of the High Falls Project, Potato Rapids Project, and Peshtigo Project; Article 407 of the Johnson Falls Project; Article 408 of the Sandstone Rapids Project.

July 21, 2015 Mr. Nick Utrup Page 2 of 3

- Modify the frequency of monitoring equipment maintenance at the High Falls, Johnson Falls, Sandstone Rapids and Peshtigo Hydroelectric Projects from once every 7 to 10 days to once every 14 days.
- Modify the monitoring plans to reflect the use of equipment manufactured by YSI, Inc. rather than Hydrolab Datasondes.
- At the Potato Rapids Hydroelectric Project, modify monitoring at the upstream monitoring location from continuously during the monitoring season to conducting bi-monthly dissolved oxygen, pH, and temperature profiles near the powerhouse intake.

Monitoring Equipment Maintenance

WPS proposes to change the frequency at which the monitoring equipment is retrieved for data download, cleaning, and calibration from once every 7 to 10 days to once every 14 days. When the water quality monitoring plans were approved in 2002, WPS utilized water quality monitoring equipment that measured dissolved oxygen based upon membrane diffusion technology. Dissolved oxygen diffuses through the membrane, reacts with the electrodes, and generates an electrical current proportional to the oxygen concentration. Dissolved oxygen sensors using membrane technology are subject to a loss of calibration due to bio-fouling of the membrane, which consequently does not allow for oxygen to diffuse through the membrane properly. To address this issue, the monitoring plan called for equipment was retrieved every 7 to 10 calendar days to ensure the dissolved oxygen sensor worked properly.

During previous monitoring seasons, WPS has been using Hydrolab[™] water quality monitors, manufactured by Hach Environmental. In 2013, significant performance issues with the Hach equipment were observed which necessitated a switch to a new equipment manufacturer. Prior to the 2014 monitoring season, WPS switched to YSI brand monitoring equipment. The YSI equipment utilizes optical dissolved oxygen technology (ODO). ODO technology uses a light emitting diode and determines oxygen concentration in water using a photodiode rather than diffusion across a membrane. Consequently, passive fouling does not affect the ODO sensor. As a result, the monitoring equipment is more stable and less susceptible to calibration loss due to bio-fouling, allowing the equipment to be deployed for longer periods of time without impacting data quality.

Potato Rapids – Upstream monitoring location

At the upstream monitoring location, deviations from the DO water quality standard have been observed since water quality monitoring was initiated at the facility in 1999. The upstream monitoring is located on the upstream face near the powerhouse, approximately 1 meter off the bottom of the impoundment. At this location, the low dissolved oxygen levels observed are likely due to a natural

July 21, 2015 Mr. Nick Utrup Page 3 of 3

stratification of the impoundment. No deviations from the water quality standard have been observed downstream in the tailrace of the dam over the previous three monitoring seasons. As the upstream water quality monitoring location is no longer providing useful information relative to downstream water quality, WPS is proposing the following change to the upstream water quality monitoring program at the Caldron Falls upstream monitoring location:

 Modify monitoring at the upstream monitoring location from continuously during the monitoring season at a location approximately 1 meter from the bottom of the reservoir to conducting bi-monthly dissolved oxygen, pH, and temperature profiles near the powerhouse intake. Readings will be taken at one (1) meter intervals.

Attached for your review and comment are modified water quality monitoring plans for each of the respective projects. Please review the enclosed plan and make any comments you may have by August 21, 2015. Should you have any questions or concerns, please do not hesitate to call me at (920) 433-1833.

Sincerely,

Mark Metcalf

Mark Metcalf Environmental Consultant – Air & Water

Enc.

Cc: Mr. Ed Brandt – WPS Mr. Bill Bosacki – WPS

Metcalf, Mark W

From:	Utrup, Nick <nick_utrup@fws.gov></nick_utrup@fws.gov>
Sent:	Tuesday, July 21, 2015 8:17 AM
То:	Metcalf, Mark W
Cc:	Brandt, Edward S; Bosacki, William K
Subject:	Re: Water quality monitoring plan amendments - WPSC Peshtigo River Hydros

Hi Mark,

Thanks for providing your proposed water quality amendments. I have no comments and will defer to the Wisconsin DNR on water quality monitoring requirements.

Thanks,

Nick

Nick Utrup U.S. Fish and Wildlife Service Twin Cities Field Office 4101 American Boulevard East Bloomington, MN 55425

 Office:
 612-725-3548
 Ext. 2204

 Cell:
 952-567-9616

 FAX:
 612-725-3609

 Email:
 Nick_Utrup@fws.gov

On Tue, Jul 21, 2015 at 8:11 AM, Metcalf, Mark W <<u>MWMetcalf@integrysgroup.com</u>> wrote:

Good morning Nick,

Attached please find a request from Wisconsin Public Service Corporation to amend the water quality monitoring plans for hydroelectric generating facilities located along the Peshtigo River. The proposed amendments were discussed during the annual agency consultation meeting this spring. Please review and provide any comments you may have on the proposed amendments.

Thank you,

Mark

Mark Metcalf

Response to Comments from the U.S. Fish & Wildlife Service

<u>Comment</u>: Thanks for providing your proposed water quality amendments. I have no comments and will defer to the Wisconsin DNR on water quality monitoring requirements.

<u>Response</u>: Comment Noted.



Wisconsin Public Service Corporation

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July 21, 2015

FERC Project Nos. 2595, 2522, 2546, 2560, & 2581

Ms. Cheryl Laatsch Water Management Specialist WDNR, Office of Energy 101 S. Webster St. Madison, WI 53703

Dear Ms. Laatsch:

Re: Proposed Amendment to Approved Water Quality Monitoring Plans

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July 21, 2015 Ms. Cheryl Laatsch Page 2 of 3

- Modify the frequency of monitoring equipment maintenance at the High Falls, Johnson Falls, Sandstone Rapids and Peshtigo Hydroelectric Projects from once every 7 to 10 days to once every 14 days.
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Monitoring Equipment Maintenance

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Potato Rapids – Upstream monitoring location

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July 21, 2015 Ms. Cheryl Laatsch Page 3 of 3

stratification of the impoundment. No deviations from the water quality standard have been observed downstream in the tailrace of the dam over the previous three monitoring seasons. As the upstream water quality monitoring location is no longer providing useful information relative to downstream water quality, WPS is proposing the following change to the upstream water quality monitoring program at the Caldron Falls upstream monitoring location:

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Attached for your review and comment are modified water quality monitoring plans for each of the respective projects. Please review the enclosed plan and make any comments you may have by August 21, 2015. Should you have any questions or concerns, please do not hesitate to call me at (920) 433-1833.

Sincerely,

Marke Metcalf

Mark Metcalf Environmental Consultant – Air & Water

Enc.

Cc: Mr. Andy Hudak – WDNR Mr. Ed Brandt – WPS Mr. Bill Bosacki – WPS

Metcalf, Mark W

From: Sent:	Hudak, Andrew J - DNR <andrew.hudak@wisconsin.gov></andrew.hudak@wisconsin.gov>
To:	Metcalf, Mark W; Laatsch, Cheryl - DNR
Cc:	Brandt, Edward S; Bosacki, William K
Subject:	RE: Water quality monitoring plan amendments - WPSC Peshtigo River Hydros

Mark-

I have only one slight change to your request for the plan amendment. I would suggest that we alter the upstream monitoring profile at Potato Rapids to sample every 0.5 m instead of 1m. This will provide a more detailed assessment of change over time in a sampling year and from a year to year perspective.

We are committed to service excellence.

Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Andrew Hudak Phone: (920) 662-5117 Andrew.hudak@wisconsin.gov

From: Metcalf, Mark W [mailto:MWMetcalf@integrysgroup.com]
Sent: Tuesday, July 21, 2015 8:10 AM
To: Laatsch, Cheryl - DNR
Cc: Hudak, Andrew J - DNR; Brandt, Edward S; Bosacki, William K
Subject: Water quality monitoring plan amendments - WPSC Peshtigo River Hydros

Good morning Cheryl,

Attached please find a request from Wisconsin Public Service Corporation to amend the water quality monitoring plans for hydroelectric generating facilities located along the Peshtigo River. The proposed amendments were discussed during the annual agency consultation meeting this spring. Please review and provide any comments the Department may have on the proposed amendments.

Thank you, Mark

Mark Metcalf

Environmental Consultant – Air & Water office: 920-433-1833 mobile: 920-606-8432

Response to Comments from the Wisconsin Department of Natural Resources

<u>Comment</u>: I have only one slight change to your request for the plan amendment. I would suggest that we alter the upstream monitoring profile at Potato Rapids to sample every 0.5 m instead of 1m. This will provide a more detailed assessment of change over time in a sampling year and from a year to year perspective.

<u>Response</u>: The water quality monitoring plan for the Potato Rapids Hydroelectric Project has been amended accordingly.

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