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November 26, 2014

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

RE:

Middle Appleton Dam FERC Project P-7264 Neenah Paper Inc. and NEW Hydro, LLC Article 405 – 2014 Invasive Species Monitoring Report 

#### Dear Secretary;

On behalf of Neenah Paper Inc. and NEW Hydro, LLC (Licensee), Eagle Creek Renewable Energy (ECRE) hereby submits the 2014 Invasive Species Monitoring Report in accordance with Article 405 of the Project License. Please find (1) original and (7) copies of the 2014 report including Agencies comments attached.

In an effort to address the agency comments received by email on November 18, 2014 the licensee shall do the following:

- Provide additional details regarding the methodology within future reports. It should be noted
  that the methodology used in 2014 monitoring is consistent with the 2006 Invasive Species
  Monitoring Plan and past monitoring efforts.
- Attempt to select the most favorable conditions to conduct future monitoring work. Please
  note, that during the summer months a naturally occurring algae bloom can affect the water
  clarity and visibility significantly. If favorable conditions do not exist and visibility remains poor
  for a period of time. The licensee shall take the additional measure of raking in locations where
  EWM was previously noted. This will hopefully provide some useful information related to the
  distribution of EWM and Zebra Mussels.
- The Licensee will continue their monitoring program every other year and work with the DNR
  to become familiar with their internal data recording process and as a courtesy we shall report
  the observances of AIS species that may be beyond the scope of the License.

The next monitoring and reporting period will be in 2016. Should you have any questions regarding this submittal, please contact Mr. Jereme Klassy with ECRE at 920-293-4628 ext. 322 or email at <u>Jereme.klassy@eaglecreekre.com</u>.

Sincerely,
Eagle Creek Renewable Energy
Agent for Licensee(s)

Mr. Scott Klabunde Sen. VP of Operations

Attached: Middle Appleton 2014 Invasive Species Monitoring Report

cc: Jon Rom, Neenah Paper Inc. Cheryl Laatsch, WDNR Nick Utrup, US FWS

File: 14-11-26\_LC\_ECRE\_APLT\_Final 2014 Invasive Species Monitoring Rept.

### FINAL Invasive Species

2014 Monitoring Report (Per License Article 405)

For the

### Middle Appleton Dam Hydroelectric Project FERC P-7264 NATDAM ID WI00166

Lower Fox River
Outagamie County, Wisconsin



Submitted by:

Eagle Creek Renewable Energy 116 North State Street - P.O. Box 167 Neshkoro, WI 54960-0167

November 2014

Report Prepared
For
Neenah Paper, Inc. and NEW Hydro, LLC

#### **Table of Contents**

			Page
I.	Project	t Area Description	3
II.	Identif	ication of Invasive Species	4
		Purple Loosestrife	4
	В.	Eurasian Water-Milfoil	4
	C.	Zebra Mussels	4
III.	Survey	Results	5
Figure	e 1:	Survey boundary Map	6
Appe	ndix A:	Agency Correspondence	7

#### I. Project Area Description

The Middle Appleton Dam Hydroelectric Project, Federal Energy Regulatory Commission (FERC) Project #7264 is located on the Lower Fox River in the city of Appleton, Wisconsin within its corporate limits. The city of Appleton is located in east – central Wisconsin and specifically in south – central Outagamie County. The Lower Fox River empties into the southern end of Green Bay approximately 31 miles downstream from the project. Green Bay is a bay located along the northwest part of Lake Michigan.

The Lower Fox River has thirteen (13) dams spanning its shores, of which, the Appleton Dam is one. The impoundment of the project is 35.5 acres in size. It extends south – southwest upstream for approximately one half (.5) miles where the next dam is located between Appleton Lock # 2 and # 3. Downstream, the next dam is located approximately three quarters (.75) of a mile away. In association with the thirteen (13) dams are eighteen (18) lock structures.

The project is located within an urbanized and heavily industrialized area along the Lower Fox River known as the "flats". Plant growth is sparse and confined to only some of the shoreline area along this stretch of river.

The 2012 survey was performed in compliance with article 405. Article 405 of the License requires annual monitoring for Purple Loosestrife, Eurasian Water-Milfoil, and Zebra Mussels thru 2008 and then alternately after 2008. The next required monitoring will be performed in 2016.



#### Identification of Invasive Species

#### **Purple Loosestrife** A.

Purple loosestrife (Lythrum salicaria) is perennial plant in the loosestrife family, with a square, woody stem, opposite or whorled leaves, and grows to heights of 3-9 feet. It has a bright vibrant purple bloom that makes it easily seen and identified in late summer. Purple loosestrife easily adapts to natural and as well as disturbed wetlands and tolerates changes in soil moisture and temperature. It is found in wet or moist areas such as riverbanks, streams, and marshes. Purple Loosestrife is highly invasive and forms dense stands as it establishes itself and expands. It competes and eventually replaces native grasses, sedges, and other flowering plants that provide a higher quality source of nutrition and habitat for wildlife. The seeds can easily be transported by flood waters and invade areas downstream.

#### B. **Eurasian Water-Milfoil**

Eurasian Water-Milfoil (Myriophyllum spicatum) is a highly invasive aquatic plant that outcompetes and replaces native aquatic plants, including native water-milfoils such as Northern Water-Milfoil (Myriophyllum sibericum), one of seven (7) found in Wisconsin. It forms dense mats of vegetation near the surface which impede swimming, entangle themselves on boat propellers, and by eventually replacing other native species threaten the integrity of otherwise diverse aquatic communities. It has long spaghetti like stems, limp, feather-like leaves arranged whorls (3-5), and 12-21 leaflet pairs per leaf. The plant was accidently introduced to North America from Europe and is not found in the majority of inland lakes in Wisconsin. It reproduces by producing shoot fragments and runners rather than by seeds. However, the fragments and runners can be spread and infest other areas by water currents, transported by watercraft, and by residual plant material left attached to boat trailers.

#### **Zebra Mussels** C.

The Zebra Mussel (Dreissena polymorpha) is small and non-native to the North America. It was originally found in Russia. The Zebra Mussel was found to have been transported to North America in 1988 in the ballast water of a transatlantic freighter. Since 1988 and up to the present, Zebra Mussels have spread from Lake St. Clair to all five of the Great Lakes, and into the Mississippi, Tennessee, Hudson, Colorado, St. Lawrence, Cumberland, Missouri, Arkansas, Red, and Ohio River Basins. Zebra Mussels are relatively small, usually about the size of a fingernail. However, adults can range in size from 0.25 to nearly 2 inches in length with a d-shaped shell. They get their name from a striped pattern commonly seen on their shells. However, not all contain the striped pattern and may need closer examination to identify. Many of Wisconsin's inland waters are now infested with Zebra Mussels. It is a prolific invasive that deprives native fish and other aquatic life of food and habitat as well as being a very costly to boaters, the shipping industry, and the maintenance of water intake and water supply structures.



#### III. Survey Results

The Middle Appleton Dam Project, (FERC # 7264) was surveyed on August 16, 2014 for Purple Loosestrife and Eurasian Water Milfoil. River conditions slightly above normal levels. Weather conditions were hazy and warm with a slight wind. The water clarity was "poor" (approximately one foot) due to algae bloom and swift moving water.

At the time of the survey Purple Loosestrife was easily identifiable along local highway medians and EWM was readily apparent in other community lakes.

Most lands and waters within the project boundaries were assessable during the survey. The majority of the survey was conducted by kayak, with some shoreline portions of the survey conducted on foot.

The length of the survey was approximately 3.5 hours. The order of the survey from beginning to end was as follows:

- 1. NEW Power Plant
- 2. The shores upstream to the train trestle and then to the southern-most project boundary at the upper dam
- Traveling north on east shoreline between the old Oneida Bridge and northern-most project boundary
- 4. Traveling south on west shoreline to the old Oneida Bridge
- 5. Power Canal

#### Purple Loosestrife

The heavily developed shore has left little habitat for vegetation to establish itself and grow. No Purple Loosestrife was observed during the survey.

#### **Eurasian Water Milfoil (EWM)**

No mats or individual plants were observed during the survey, however some floating fragments were observed in the upper impoundment while kayaking and some additional fragments were observed while walking the south river edge below the dam.

#### Zebra Mussels

Zebra Mussels have been identified within the project boundary. However, no Zebra Mussels were observed during the 2014 survey.



#### FIGURE 1

**SURVEY BOUNDARY MAP** 





#### **APPENDIX A**

**Agency Correspondence** 



#### Jane Manibusan

From: Jane Manibusan

Sent: Wednesday, October 01, 2014 2:50 PM

To: cheryl.laatsch@wisconsin.gov

Cc: Jereme Klassy

Subject: Emailing: 14-09-25\_ECRE\_OFUP\_Draft 2014 PL&EWI Rept, 14-09-23\_ECRE\_APLT\_Draft

2014 Invasive Species Monitoring Rept

Attachments: 14-09-25\_ECRE\_OFUP\_Draft 2014 PL&EWI Rept.pdf; 14-09-23\_ECRE\_APLT\_Draft 2014

**Invasive Species Monitoring Rept.pdf** 

#### Dear Ms. Laatsch;

On behalf of North East Wisconsin (NEW) Hydro, LLC (Licensee), Eagle Creek Renewable Energy, is hereby submitting to your attention the following 2014 Draft License Article Reports for said projects as follows:

- 14-09-23\_ECRE\_APLT\_Draft 2014 Invasive Species Monitoring Rept
   Appleton Middle Dam FERC P-7264, License Article 405
   Draft Invasive Species 2014 Monitoring Report
- 14-09-25\_ECRE\_OFUP\_Draft 2014 PL&EWI Rept
   Oconto Falls Upper FERC P-2523, License Article 407
   Draft 2014 Purple Loosestrife & Eurasian Watermilfoil Inventory

The report is requirement of the Federal License pursuant to Article 405 and Article 407. If you have any questions please feel free to contact Mr. Jereme Klassy in the Eagle Creek Renewable Energy Midwest office at (920) 293-4628 ext. 322 or by email at Jereme.klassy@eaglecreekre.com.

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

#### Jane Manibusan

From:

Jereme Klassy

Sent:

Friday, November 14, 2014 1:43 PM

To:

'Laatsch, Cheryl - DNR (Cheryl.Laatsch@Wisconsin.gov)'; Nick\_Utrup@fws.gov

Cc:

Jane Manibusan

Subject:

FW: Emailing: 14-09-25\_ECRE\_OFUP\_Draft 2014 PL&EWI Rept, 14-09-23

\_ECRE\_APLT\_Draft 2014 Invasive Species Monitoring Rept

**Attachments:** 

14-09-25\_ECRE\_OFUP\_Draft 2014 PL&EWI Rept.pdf; 14-09-23\_ECRE\_APLT\_Draft 2014

**Invasive Species Monitoring Rept.pdf** 

I am forwarding this email as a reminder that we are awaiting comments regarding the attached Invasive species monitoring reports. My apologies to Nick as I see that his name was omitted by mistake from this original draft submittal by email. If you have any comments related to the attached draft reports please make them as soon as possible so we can prepare the final report and attach your comments. If you have no comments or do not wish to comment a simple email stating "no comments" will be sufficient. Thanks for your help.

Jereme Klassy Compliance Manager

116 State Street
Neshkoro, WI 54960 USA
(920) 293-4628 ext. 322
Jereme.klassy@eaglecreekre.com

----Original Message----From: Jane Manibusan

Sent: Wednesday, October 01, 2014 2:48 PM

To: cheryl.laatsch@wisconsin.gov

Cc: Jereme Klassy

Subject: Emailing: 14-09-25\_ECRE\_OFUP\_Draft 2014 PL&EWI Rept, 14-09-23\_ECRE\_APLT\_Draft 2014 Invasive Species

**Monitoring Rept** 

Dear Ms. Laatsch;

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- 14-09-23\_ECRE\_APLT\_Draft 2014 Invasive Species Monitoring Rept
  Appleton Middle Dam FERC P-7264, License Article 405
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   Oconto Falls Upper FERC P-2523, License Article 407
   Draft 2014 Purple Loosestrife & Eurasian Watermilfoil Inventory

#### Jane Manibusan

From:

Sent:

Utrup, Nick <nick\_utrup@fws.gov> Friday, November 14, 2014 2:02 PM

To:

Jereme Klassy

Cc:

Laatsch, Cheryl - DNR (Cheryl.Laatsch@Wisconsin.gov); Jane Manibusan Re: FW: Emailing: 14-09-25\_ECRE\_OFUP\_Draft 2014 PL&EWI Rept, 14-09-23

Subject:

\_ECRE\_APLT\_Draft 2014 Invasive Species Monitoring Rept

Thanks for providing the draft reports Jereme.

I will add these to my file but will not be providing comments.

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 612-725-3609

FAX: Email:

Nick Utrup@fws.gov

On Fri, Nov 14, 2014 at 1:42 PM, Jereme Klassy < jereme.klassy@eaglecreekre.com > wrote:

I am forwarding this email as a reminder that we are awaiting comments regarding the attached invasive species monitoring reports. My apologies to Nick as I see that his name was omitted by mistake from this original draft submittal by email. If you have any comments related to the attached draft reports please make them as soon as possible so we can prepare the final report and attach your comments. If you have no comments or do not wish to comment a simple email stating "no comments" will be sufficient. Thanks for your help.

Jereme Klassy Compliance Manager

116 State Street Neshkoro, WI 54960 USA (920) 293-4628 ext. 322 Jereme.klassy@eaglecreekre.com

----Original Message----From: Jane Manibusan

Sent: Wednesday, October 01, 2014 2:48 PM

To: cheryl.laatsch@wisconsin.gov

Cc: Jereme Klassy

# Jereme Klassy

From: Laatsch, Cheryl - DNR <Cheryl.Laatsch@wisconsin.gov>

Tuesday, November 18, 2014 10:25 AM

Jereme Klassy

Sent:

10,

Hudak, Andrew J - DNR; McLennan, Robin - DNR

PLT\_Draft 2014 Invasive Species Monitoring Rept FW: Emailing: 14-09-25\_ECRE\_OFUP\_Draft 2014 PL&EWI Rept, 14-09-23\_ECRE\_

DRAFT DNR comments

**Subject:** 

I received. Please let Andy and I know if you have any questions. Hi Jereme - Here are the comments that

# Middle Appleton-

- the report. Please include this information in future reports. We assume it is in compliance with the license The methodology was not provided in requirements.
- During the conditions of the survey there were extremely poor conditions to visually inspect for EWM or Zebra mussels and provide any meaningful report on their density or distribution. Selecting a different day with hopefully better conditions or using a rake along various transects could provide more information about EWM and Zebra mussels' distributions.
- This is a project that could easily use the DNR AIS reporting forms and upload information into SWIMS.
- It would be helpful if the licensee could at minimum "informally" report other significant AIS species and report them into SWIMS even if the report is did not observe.
- For this location, there is no meaningful purpose to report on zebra mussels but it is important that the licensee monitor the mussels collected to watch for other AIS species such as quagga mussels or Asiatic Clams, etc... This should also be true for shore land PLS survey and EWM surveys. If no meaningful data significant AIS that could constitute a new occurrence. (This will help our all of our partners to address the AIS issues that encompass this impoundment.) analysis or management is slated to occur we continue to advocate for monitoring and reporting of AIS that encompass all potential new occurrences of

## Oconto Falls

- 1. The monitoring of EWM and PLS has yielded a good analysis of EWM expansion and growth.
- area as it reports on EWM and PLS. We would like your informal participation with monitoring of Flowering Rush within the Oconto Falls project
- monitoring data and reports into SWIMS. We would like your informal participation with using the AIS observation and tracking sheet and uploading all us on informal reporting of AIS, please let me know. If you are interested in partnering with

We are committed to service excellence.

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

Cheryl Laatsch

**Bureau/Water Division Wisconsin Department of Natural Resources** Statewide FERC Coordinator - Watershed

N7225 Highway 28, Horicon WI 53032

Phone: 920-387-7869

Fax: 920-387-7888

Cheryl.laatsch@wisconsin.gov

dnr.wi.gov

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

----Original Message----

From: Laatsch, Cheryi - DNR

Sent: Monday, November 17, 2014 1:45 PM

To: Hudak, Andrew J - DNR

Subject: FW: Emailing: 14-09-25\_ECRE\_OFUP\_Draft 2014 PL&EWI Rept, 14-09-23\_ECRE\_APLT\_Draft 2014 Invasive Species Monitoring Rept

on Oct 9th. I am not able to locate your comments. Please send me comments you may have ASAP, as the timeline Hi Andy - I sent these reports over to you has expired. thanks

We are committed to service excellence.

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

Cheryl Laatsch

Phone: 920-387-7869