

ORIGINAL

MEAD HUNT

Designing the future

FILED
OFFICE OF THE
SECRETARY
2006 NOV -8 A 9:01
FEDERAL ENERGY
REGULATORY COMMISSION

November 3, 2006

Ms. Magalie R. Salas, Secretary
Federal Energy Regulatory Commission
ATTN: OEP/DHAC
888 First Street, NE
Washington, DC 20426

Subject: Article 405, *Order Issuing Subsequent License –
Minor Project* issued August 31, 2005
Middle Appleton Dam Hydroelectric Project
FERC Project No. 7264 - 020
Lower Fox River; Outagamie County, Wisconsin

Dear Ms. Salas:

On behalf of the Fox River Paper Company and N.E.W. Hydro, Inc., we are hereby filing one original and eight copies of the *Invasive Species Monitoring Report* for the Middle Appleton Dam Hydroelectric Project. The plan is being submitted in accordance with Article 405 of the above-mentioned subsequent license.

Copies have been sent to those entities that were consulted on matters related to this filing. Proof of service is also included.

Thank you for your time and consideration in this matter. If you have any questions, please contact me.

Respectfully submitted,

MEAD & HUNT, Inc.

Arie DeWaal
Project Manager

Enclosures

cc: See attached list

Mead & Hunt Inc 6501 Watts Road Madison Wisconsin 53719-2700
608 273 6380 fax 608 273 6391 www.meadhunt.com

Certificate of Service

I hereby certify that I, on behalf of the Fox River Paper Company and N.E.W. Hydro, Inc., have this day served the foregoing documents upon each person designated on the attached distribution list.

Dated this 3rd day of November, 2006.



Arie DeWaal
MEAD & HUNT, Inc.

Invasive Species Monitoring Report

**Middle Appleton Dam
Hydroelectric Project
FERC Project No. 7264**

**Lower Fox River
Outagamie County, Wisconsin**

Report prepared for

FOX RIVER PAPER

and

N.E.W. Hydro, Inc.

Report prepared by

**MEAD
&
HUNT**

November 2006

Table of Contents

	Page
1. Project Area Description	1
2. Identification of Invasive Species	3
A. Purple loosestrife	3
B. Eurasian watermilfoil	3
3. Survey Results	4
4. Agency Consultation	5

Figure 1 – Survey Area Invasive Species Monitoring	2
---	----------

Appendix – Agency Consultation

Section 1
Project Area Description

1. Project Area Description

The Middle Appleton Dam Hydroelectric Project (FERC Project No. 7264) is located on the Lower Fox River in the city of Appleton in east-central Wisconsin. Approximately 31 miles downstream from the project, the Lower Fox River empties into the south end of Green Bay, a large bay located along the northwest portion of Lake Michigan.

The Middle Appleton Dam Project lies within the corporate limits of the city of Appleton in south-central Outagamie County. The project's 35.5-acre impoundment extends upstream to the south-southwest for approximately .5 miles, where the next dam is located. The dam is located between Appleton Lock Nos. 2 and 3. A project area map is included in Figure 1.

The project's dam is one of 13 dams on the Lower Fox River. Five dams are located upstream from the project and seven are located downstream. The next dam downstream lies about .75 miles away. Associated with these dams are 18 lock structures.

The project is located within a highly urbanized area with the land near the project being predominantly industrial along this stretch of the Lower Fox River. The project is actually located in the heavily industrialized area known as the "flats." Vegetation in the project area is sparse and confined to some of the shoreline areas.

This study was performed in compliance with License Article 405, which dictates annual monitoring for purple loosestrife, Eurasian water-milfoil, and zebra mussels through 2008 and alternate years afterwards. Zebra mussels will be monitored by others. No occurrences of invasive species within the project area have been noted in the past.

LARGE-FORMAT IMAGES

One or more large-format images (over 8 1/2" X 11") go here.
These images are available in FERRIS at:

For Large-Format(s):

Accession No.: 20061109-0251

Security/Availability:

- PUBLIC
- NIP
- CEII
- NON-PUBLIC/PRIVILEGED

File Date: 11/8/06 Docket No.: P-7264

Parent Accession No.: 20061109-0250

Set No.: 1 of 1

Number of page(s) in set: 1

Section 2
Identification of Invasive Species

2. Identification of Invasive Species

A. Purple loosestrife

Purple loosestrife (*Lythrum salicaria*) is a perennial wetland plant found in wet and moist habitats such as marshes, streams, and riverbanks. Its vivid purple bloom makes it readily seen in late summer. It tolerates changes in soil moisture and temperature, and once established, tends to predominate over other plant life. As a result, its presence can significantly reduce diversity of native vegetation and associated wetland species. This plant usually invades wetlands by germinating in riparian mud flats or wet soil areas and can persist in seed banks for many years after invasion. The seeds can be easily transported on flood waters and invade downstream areas.

B. Eurasian watermilfoil

Eurasian watermilfoil (*Myriophyllum spicatum*) is an invasive plant that tends to out-compete native aquatic plants, including native watermilfoils. Accidentally introduced to North America from Europe, it is now found in the majority of inland lakes in Wisconsin. Unlike many other plants, Eurasian watermilfoil reproduces vegetatively by producing shoot fragments and runners, rather than relying on seed for reproduction. Plant fragments and runners, which may remain viable for weeks if kept moist, can be carried downstream by water currents or inadvertently picked up and transported by boaters.

Eurasian watermilfoil can be difficult to differentiate from native watermilfoil species, as both have slender stems with feathery leaves. However, a Eurasian watermilfoil typically has 12 to 21 pairs of leaflets, while the native northern watermilfoil usually has 5 to 9 pairs. Another identifying characteristic of the Eurasian variety is its tendency to form dense mats of vegetation that crowd out other species. These dense stands threaten the integrity of diverse aquatic communities.

Section 3
Survey Results

3. Survey Results

The Middle Appleton Dam Project was inspected for purple loosestrife and Eurasian watermilfoil on July 24, 2006. Small shoreline portions of the flowage around West's Canal and the backwater area around Vulcan Street were examined by pedestrian survey from the shore. Then, a canoe was used to survey the waters and shore both above and below the Middle Appleton Dam. The industrialized nature of the shore has left very little habitat for terrestrial wetland vegetation to take root. No occurrences of purple loosestrife were observed. The waters above and below the Middle Appleton Dam have a strong current compared to other flowages along the Lower Fox River. No occurrences of Eurasian watermilfoil, or any other floating aquatic vegetation were observed within the project waters.



Section 4
Agency Consultation

4. Agency Consultation

The attached Appendix presents correspondence related to agency review. As of the date of this filing, no review comments have been received.

Appendix
Agency Consultation