

January 9, 2006

ORIGINAL Ms. Magalie Salas, Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Washington, DC 20426



Re: Mosinee Hydroelectric Project, FERC Project No. 2207 - Invasive Species Monitoring Plan

Dear Secretary Salas:

Article 407 of the new license issued for the Mosinee Project issued on April 7, 2005 as amended by the Order on Rehearing issued June 20, 2005, requires the licensee to prepare an Invasive Species Monitoring Plan. The plan should be prepared after consultation with the Wisconsin Department of Natural Resources and U.S. Fish and Wildlife Service.

Mosinee prepared the enclosed Invasive Species Monitoring Plan and submitted it to the Wisconsin Department of Natural Resources and U.S. Fish and Wildlife Service on November 2, 2005. A copy of the transmittal letter is enclosed (Enclosure1). The transmittal letter requested that the agencies provide comments on the plan on or before December 2, 2005. No comments were received from either agency. Accordingly, Spaulding Consultants, on behalf of the Licensee, is submitting the enclosed Invasive Species Monitoring Plan, to fulfill the requirements of Article 407 of the license.

If there are any questions regarding this submittal please contact me at 952-544-8133.

Sincerely,

SPAULDING CONSULTANTS, LLC

Spaulding P.E.

cc: Mr. Jim Pauls, Wausau Paper w/enclosures Ms. Cara Kurtenbach, Mosinee paper w/enclosures

**Enclosure No. 1** 



November 2, 2005

Ms. Janet Smith U.S. Fish and Wildlife Service Green Bay ES Field Office 2661 Scott Tower Drive New Franken, WI 54229

Mr. Robert Martini Wisconsin Department of Natural Resources 107 Sutliff Avenue Rhinelander, WI 54501

Re: Mosinee Hydroelectric Project, FERC Project No. 2207, Invasive Species Plan

Dear Ms. Smith and Mr. Martini:

Article 408 of the FERC license for Project No. 2207 requires that Wausau Paper (Wausau) prepare a plan to monitor invasive species for the Mosinee Hydroelectric Project. This license article also requires that Wausau solicit agency comments and recommendations on the draft plan and allow a 30-day comment period.

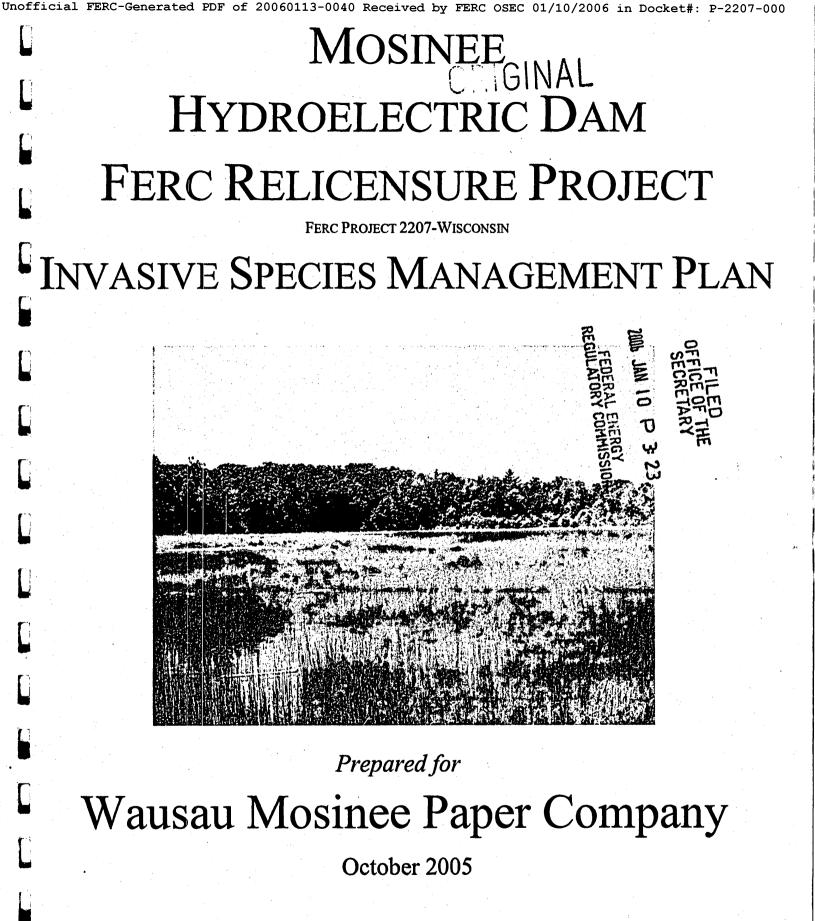
Enclosed is a copy of Wausau's plan. Please review this plan and provide us with your comments and recommendations on or before the close of business on December 2, 2005.

Sincerely,

SPAULDING CONSULTANTS, LLC

Douglas A. Spaulding, P.E., Agent for Wausau Paper

cc: Mr. Jim Pauls w/enclosure Ms. Cara Kurtenbach w/enclosure





Green Bay Office: 4664 Golden Pond Park Ct., Oneida, WI, 54155 Voice: 920-499-5789 Fax: 920-662-9141 www.releeinc.com/NES

Wausau	Paper
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Wausau Paper

**Invasive Species Management Plan** 

### 1.0 PURPOSE

The purpose of this management plan is to develop a strategy for Wausau Paper that will be used to monitor the status of aquatic invasive plants that occur in project waters of the Wisconsin River and its tributaries associated with the FERC hydroelectric project (FERC Project 2207) at the Mosinee Dam, Marathon County, Wisconsin (Figure 1). Species taken under consideration in this plan include purple loosestrife (Lythrum salicaria) and Eurasian water milfoil (Myriophylum spicatum).

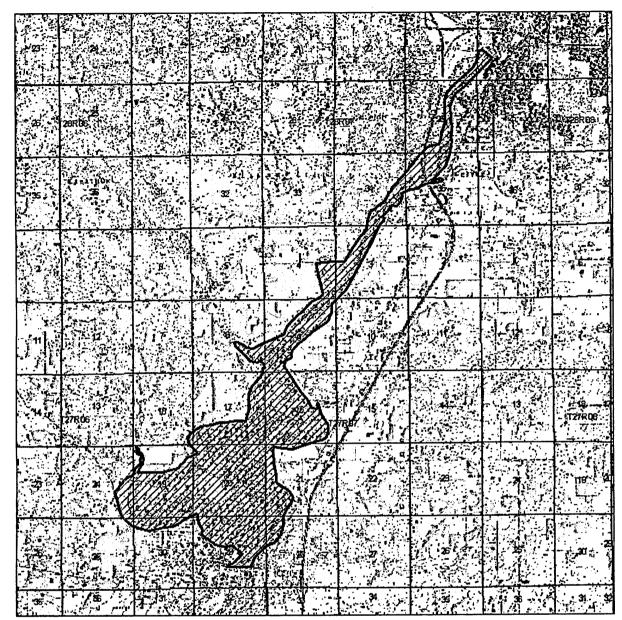
### 2.0 BACKGROUND

#### 2.1 Purple Loosestrife

Purple loosestrife originated in Europe and temperate regions of Asia (Borman et al. 1997) and was first documented in the eastern United States in 1814 (Galatowitsch et al. 1999) and Wisconsin in the early 1930's (WDNR 2005). It is believed that populations of the plant first became established in estuarine mud flats along the Atlantic Ocean, where ship ballasts from Europe that contained purple loosestrife seed was deposited (Galatowitsch et al. 1999). Additional spread of the plant occurred via escaped ornamental populations. Currently, purple loosestrife can be found across the north half of the continental United States and in 70 of Wisconsin's 72 counties (WDNR 2005).
Purple loosestrife often out-competes native emergent wetland vegetation, allowing it to form monotypic stands that reduce the diversity of wetland plants and animals (WDNR 2005).

#### 2.2 Eurasian Water milfoil

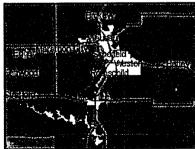
Eurasian water milfoil (EWM) was first introduced to North America in the 1880's (Galatowitsch et al. 1999) and to Wisconsin in the 1960's (WDNR 2005). As of 2004, EWM was present in at least 62 Wisconsin counties (WDNR 2005). As indicated by its name, EWM originated in Europe and Asia (Borman et al. 1997), and spread to North America through the practice of emptying ship ballasts that carried fragments of this invasive macrophyte (Galatowitsch et al. 1999). Once established in a community, EWM often forms dense stands that shade out native aquatic plants and potentially disrupts recreational opportunities such as boating and swimming (WDNR 2005).



Site Location of FERC Project 2207-Wisconsin Located in and along the Wisconsin River and it's tributaries located between the Rothschild and Mosinee Dams, Marathon County, WI.

Project Extents





Approximate project area shown in red

Map Completed September 6, 2005

Wausau Paper

#### 3.0 BASELINE SURVEY

Both of the invasive species mentioned in this report were observed in the project area during a comprehensive aquatic plant survey conducted July 9-12, 2001. Purple loosestrife was present in17 of 27 sample plots, while Eurasian water milfoil was found in 7 out of 27 plots. The sample plots and locations where these species were observed during the 2001 plant survey are shown in the Environmental Report section of Volume 1, submitted as part of the FERC application for this project in 2002. These data can be used to monitor any population changes these species may undergo in the project waters, but a follow up survey is needed prior to determining appropriate control measures to ensure that the areas infested with the invasive species have not changed. This will prevent the unnecessary treatment of areas that may have been infested in 2001, but that currently lack invasive species. Conversely, it will also ensure that new areas of infestation are identified.

Wausau Paper will conduct a baseline survey documenting the presence and location of invasive species within the project waters during the 2006 growing season. This will allow the paper company to identify any changes that have occurred within previously identified populations of exotic species, and to monitor their invasion into previously undisturbed areas.

## 4.0 METHODS

#### 4.1 Eurasian Water Milfoil

Wausau Paper will perform point intercept surveys in late July or early August within the project waters to detect the presence of Eurasian water milfoil using guidelines recommended by the WDNR (WDNR 2004). Once at the survey points, rake tows will be used to search for EWM. If detected, the location of EWM colonies will be mapped and an estimate of its aerial coverage will be assigned. The location of the colony would then be displayed in a GIS format.

## 4.2 Purple Loosestrife

Purple loosestrife will be searched for by scanning the shoreline and shallow areas of the project waters during a meander survey conducted during late July or early August. If any purple loosestrife is detected, its location will be mapped using a GPS unit and an estimate of its aerial coverage at each location will be assigned. The mapped locations would then be displayed in a GIS format.

## 4.3 Schedule of Events

During the 2006 growing season, Wausau Paper will conduct a baseline survey using the methods mentioned above. A report documenting the findings of the survey would be submitted to the appropriate agencies within 6 months of completing the late July/early August survey. This process would be repeated every 5 years in order to track the invasive species that occur in the project waters.

Wausau Paper

Wausau Paper will work with the appropriate agency personnel to monitor the spread of aquatic invasive plant species that may occur in the project area if their presence is such that it threatens the diversity of native plant and animal populations.

## 5.0 PUBLIC EDUCATION

Wausau Paper realizes the importance of controlling the spread of invasive species. To this end, the paper company agrees to create laminated signage describing the history and background of the species listed in this plan. These signs, along with any additional posting requested by the WDNR or USFWS, will be placed and maintained at the five public access points to the project waters during the summer of 2006.

# 6.0 CONCLUSIONS

This plan is designed to develop a strategy that will be used to monitor the status of aquatic invasive plants that occur in waters of the Wisconsin River and its tributaries that are associated with the FERC hydroelectric project at the Mosinee Dam. At this point the plan focuses on monitoring populations of Eurasian water milfoil and purple loosestrife that occur in the project waters; however, if other species are detected, their presence and location will be documented. Wausau Paper

## 7.0 REFERENCES

- Borman, S., R. Korth, and J. Temte. 1999. Through the Looking Glass... A Field Guide to Aquatic Plants. Reindl Printing, Inc., Merrill, WI.
- Galatowitsch, S, N. Anderson, and P. Ascher. Invasiveness in wetland plants in temperate North America. Wetlands 19: 733-755
- WDNR. 2005. Invasive Species. http://dnr.wi.gov/invasives/index.htm. Last accessed 06/24/05.
  - WDNR. 2004. Recommended Baseline Monitoring of Aquatic Macrophytes. WDNR, Madison, WI, USA.