THILMAN) NICOLET

### ORIGINAL



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NICOLET MILL 200 MAIN AVENUE DE PERE, WI 54115

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October 3, 2007

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

Re: Nuisance Plant Control Plan Update

De Pere Hydroelectric Project FERC Project No. 4914-62ン CELICE OF THE SECRETARY

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#### Dear Secretary Bose:

Article 406 of the license issued for the De Pere Hydroelectric Project on March 10, 2005 required the Licensee to prepare a Nuisance Plant Control Plan. After receiving an extension from the FERC, the Thilmany Nicolet Mill submitted its plan to the FERC and the Agencies on August 29, 2007. I spoke with Ms. Brandy Sanganetta in early August of 2007 to learn the status of our plan. Based upon this discussion, it became clear that the plan included plant species that are not a part of the license requirement and the plan was vague regarding Thilmany's commitment for surveying for invasive species. Given that the FERC has not yet acted on the plan, Ms. Sanganetta informed Thomas Piette that we could submit a revision to clarify the issues. To this end, we are resubmitting the plan (original and 8 copies) for review by the FERC. Thilmany is also sending copies to agencies on the earlier distribution list for their review

Thank you in advance for your consideration in this regard.

Jay Weigelt Power Process Manager

CC:

Ms. Peggy A Harding, FERC

Ms. Louise Clemency, USFWS

Mr. Tyler Yasenak, USFWS

Mr. Robert Elliot, USFWS

Mr. Jim Bonetti, USACE

Mr. Robert Stanick, USACE

Mr. Mike Donofrio, WDNR

Mr. Mike D. Scott, WDNR

Mr. Doug Spaulding, Spaulding Consulting

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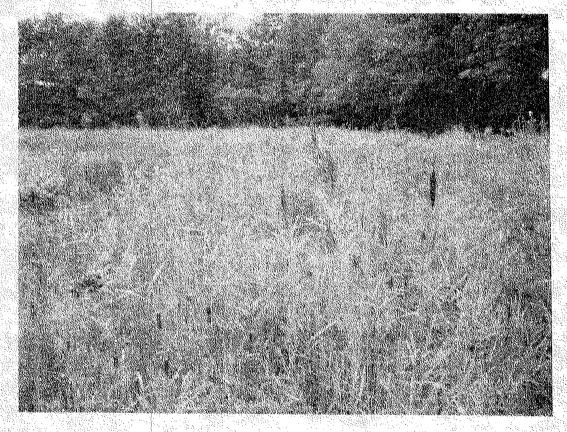
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# NICOLET MILL HYDROELECTRIC DAM FERC RELICENSURE PROJECT

FERC PROJECT 4914-WISCONSIN

## INVASIVE SPECIES MANAGEMENT PLAN



Prepared for

# Thilmany, LLC

September 2007



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Invasive Species Management Plan

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#### **PURPOSE**

The purpose of this management plan is to develop a strategy for Thilmany, LLC that will be used to monitor the status of aquatic invasive plants that occur in the project area associated with the FERC hydroclectric project (FERC Project 4914) at Thilmany's Nicolet Mill, located on the Fox River in the City of DePere, Brown County, Wisconsin (Figure 1). The project area, however, does not include any portion of the Fox River or invasive species that may be associated with it. Since there are no project waters to survey, Thilmany is not responsible for conducting and identifying invasive aquatic plants around the Nicolet Mill. Even though Thilmany would not need to perform an invasive aquatic plant survey, the company is willing to put forth the extra effort and conduct a one-time survey within the assessment area outlined on Figure 1. The survey will provide regulating agencies data regarding invasive species present within the Fox River near the mill.

Guidelines suggested by the Wisconsin Department of Natural Resources (WDNR) and the U.S. Fish and Wildlife Service (USFWS) have been adopted to establish the methods discussed in the plan. Species taken under consideration in this plan include purple loosestrife (*Lythrum salicaria*) and Eurasian water milfoil (*Myriophylum spicatum*).

#### BACKGROUND

#### 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 2006). 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 2006). 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 2006).

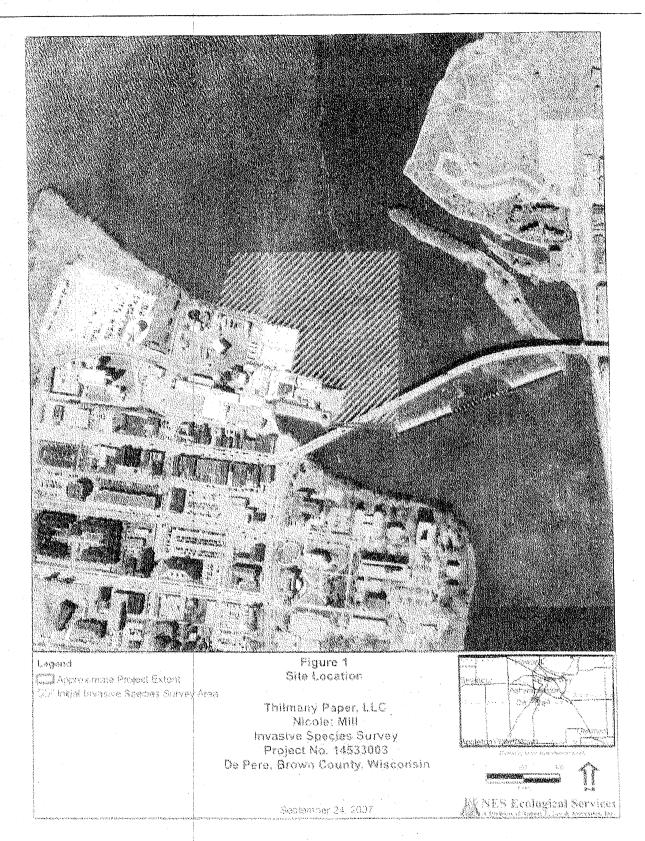
#### **Eurasian Water milfoil**

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 2006). As of 2004, EWM was present in at least 62 Wisconsin counties (WDNR 2006). 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 2006).



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#### **BASELINE SURVEY**

The extent of invasive aquatic species establishment within the assessment area to be surveyed is unknown because a baseline survey that documents their presence or abundance has not yet been conducted within this area. Because of the project's small size and limited scope, it is possible that neither one of the species listed above is present within the project's associated waters. In order to accurately map the extent of purple loosestrife or Eurasian water milfoil that may occur within the assessment area, Thilmany will conduct a one-time baseline survey during the 2008 growing season.

#### **METHODS**

#### **Eurasian Water Milfoil**

Eurasian water milfoil is a submergent aquatic plant that prefers to grow in slow moving waters of ponds, lakes, flowages, and the backwaters of streams and rivers (Voss 1985, Chadde 2002). The waters involved with this FERC relicensing in which Eurasian water milfoil is likely to be found are non-existent because the project is limited to the existing buildings and wing dam as indicated on Figure 1. The assessment area (Figure 1), on the other hand, covers approximately 14 acres of the Fox River located below the 400 feet of dam owned by Thilmany. Eurasian water milfoil may be found within this section of the river, but will likely be restricted because these waters are fast moving and turbulent. These conditions are typically not conducive for Eurasian water milfoil establishment; therefore, it is likely that a large portion of the assessment area will not support this invasive aquatic. Those areas within the assessment area that have slow moving waters are likely to be extremely turbid. This turbidity reduces the depth at which sunlight can penetrate into the water, creating conditions that limit organisms which depend upon photosynthetic processes. Because Eurasian water milfoil depends on these processes, it is unlikely that it will be able to survive the turbid conditions found in these waters.

Although it is most likely not present within the assessment area, Thilmany will conduct a survey in late July or early August of 2008 to determine whether Eurasian water milfoil is found in these waters by using a point intercept method routinely used by the WDNR (WDNR 2004). Once at the survey points, a combination of rake tows and diving 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. It should be noted that portions of the assessment area may be unsafe for conducting the plant survey. These areas would not be included in the baseline survey.

#### **Purple Loosestrife**

Thilmany will determine whether purple loosestrife is present by scanning the limited shoreline and shallow areas of the assessment area waters during a meander survey conducted during late July or early August of 2008. If this species is detected, an estimate of its aerial coverage will be assigned and their locations will be mapped with GPS. The mapped locations would then be displayed in a GIS format.

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#### SCHEDULE OF EVENTS

During the 2008 growing season, Thilmany will conduct a baseline survey within the assessment area 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. Normally, this process would be repeated every 3 to 5 years in order to track invasive species coverage; however, Thilmany's baseline survey within the assessment area is outside of the project area and is only being surveyed because the company is volunteering to do so. Thilmany does not intend on continuing the survey effort within the assessment area and the project area is composed of structures; therefore, no additional surveys for invasive, aquatic species will be required or conducted after the 2008 growing season.

#### **PUBLIC EDUCATION**

Thilmany realizes the importance of controlling the spread of invasive species. To this end, Thilmany agrees to post signage describing the history and background of the species listed in this plan at the public access point located east of the project waters. Additional postings requested by the WDNR or USFWS, will also be considered.

#### CONCLUSIONS

This plan is designed to develop a strategy that will be used to gather data regarding the status of aquatic invasive plants that occur in waters of the Fox River that are downstream, but not associated with the FERC hydroelectric project area at the Nicolet Mill. At this point, the plan focuses on monitoring Eurasian water milfoil and purple loosestrife; however, if other species are detected their presence and location will be documented. Thilmany realizes the importance of monitoring invasive species; therefore, the company is willing to put forth the extra effort to survey the assessment area found downstream of their project area.



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#### REFERENCES

- Borman, S., R. Korth, and J. Temte. 1999. <u>Through the Looking Glass... A Field Guide to Aquatic Plants</u>. Reindl Printing, Inc., Merrill, WI.
- Chadde, S. W. 2002. A Great Lakes Wetland Flora. PocketFlora Press, Laurium, Michigan.
- Galatowitsch, S, N. Anderson, and P. Ascher. Invasiveness in wetland plants in temperate North America. Wetlands 19: 733-755
- Saltonstall, K., P. M. Peterson & R. J. Soreng. 2004. Recognition of *Phragmites australis* (Poaceae: Arundinoideae) in North America: evidence from morphological and genetic analysis. *Sida* 21(2): 683-692.
- University of Wisconsin Department of Botany. 2006. Wisconsin State Herbarium. http://www.botany.wisc.edu/herbarium/. Last accessed 02/21/06.
- Voss, E. G. 1972. Michigan Flora Part 1, Gymnosperms and Monocots. Cranbrook Institute of Science, Bloomfield Hills, Michigan.
- WDNR. 2006. Invasive Species. http://dnr.wi.gov/invasives/index.htm. Last accessed 02/21/06.
- WDNR. 2004. Recommended Baseline Monitoring of Aquatic Macrophytes. WDNR, Madison, WI, USA.
- Wisconsin Wetlands Association. 2006. Emerging Issues Surrounding Invasion and Control of *Phragmites australis* in Wisconsin's Wetlands: A Survey of Wetland Professionals. http://www.wiscwetlands.org/phragmites.htm. Last accessed 02/21/06.