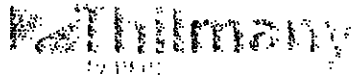


ORIGINAL



great minds on paper

FILED  
SECRETARY OF THE  
COMMISSION

2010 DEC 16 A 10: 52

FEDERAL ENERGY  
REGULATORY COMMISSION

200 Main Avenue  
De Pere, WI 54115

Jay Weigelt  
Process Manager Power  
P 920-337-1294  
F 920-337-1228  
thilmany.com

December 15, 2010

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

RE: Thilmany LLC - Nicolet Mill (Invasive Species Survey)  
FERC I.D.#: P-4914

Dear Ms. Bose:

I've enclosed seven (7) copies of the Thilmany, LLC – Nicolet Mill Hydroelectric Dam FERC Relicensure Project Invasive Species Survey as per Article 406 which requires us to file a Nuisance Plant Control Plan to monitor purple loosestrife and Eurasian water milfoil in project waters. I've also included documentation of comments from USFWS regarding the report.

If you have any questions or comments, please reach me at the number listed above.

Sincerely,

A handwritten signature in black ink that reads "Jay Weigelt".

Jay Weigelt  
Process Manager Power

**Weigelt, Jay**

---

**From:** Nick\_Utrup@fws.gov  
**Sent:** Tuesday, December 14, 2010 4:25 PM  
**To:** Weigelt, Jay  
**Cc:** Michael.Donofrio@dnr.state.wi.us; Robert\_Elliott@fws.gov; Louise\_Clemency@fws.gov  
**Subject:** Re: Invasive Species Management Plan

**Attachments:** pic00041.gif



pic00041.gif (1 KB)

Hi Jay,

The U.S. Fish and Wildlife Service (USFWS) has reviewed your 2008 Invasive Species Monitoring Report and have no comments. The USFWS has reviewed and concur with your Invasive Species Management Plan.

Sincerely,

Nicholas J. Utrup  
Hydropower Coordinator  
U.S. Fish and Wildlife Service  
Green Bay Ecological Services Field Office  
2661 Scott Tower Drive  
New Franken, WI 54229

Office: (920) 866-1736  
Mobile: (920) 530-9937  
FAX: (920) 866-1710  
Email: Nick\_Utrup@fws.gov

"Weigelt, Jay"  
<Jay.Weigelt@thilmany.com>

12/14/2010 02:31 PM

To  
<Nick\_Utrup@fws.gov>,  
<Michael.Donofrio@dnr.state.wi.us>  
cc  
<Robert\_Elliott@fws.gov>  
Subject

All

Here is a copy of the Invasive species survey. I am looking for some assistance for your support of the survey. I think we did this in some fashion in the past, but it has seemed to have gotten misplaced.

I appreciate your support. I have also attached a copy of the original plan.

Jay Weigelt  
Process Manager Power

THILMANY PAPERS  
200 Main Avenue  
De Pere, WI 54115  
P 920-337-1294 • C 920-570-2085  
www.thilmany.com  
(Embedded image moved to file: pic00041.gif)

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This message contains confidential information and is intended only for the individual named. If you are not the named addressee you should not disseminate, distribute or copy this e-mail. [attachment "Thilmany 2008 Invasive Survey Report.pdf" deleted by Nick Utrup/R3/FWS/DOI] [attachment "Invasive Species Plan.pdf" deleted by Nick Utrup/R3/FWS/DOI]

**NICOLET MILL  
HYDROELECTRIC DAM  
FERC RELICENSURE PROJECT**  
FERC PROJECT 4914-WISCONSIN  
**INVASIVE SPECIES SURVEY**



Robert Berman wisplants.wesg.edu

*Prepared for*

**Thilmany, LLC.**

**October 2008**

 **NES Ecological Services**  
A Division of Robert E. Lee & Associates, Inc.

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**Appendices**

- Appendix A Map of FERC project area and invasive species assessment area
- Appendix B Map of point-intercept survey

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## PURPOSE

The purpose of this survey is to provide a baseline assessment of aquatic invasive plants that occur in the project area associated with the FERC hydroelectric project (FERC Project 4914) at Thilmany's Nicolet Mill, located on the Fox River in the City of DePere, Brown County, Wisconsin (Appendix A). As stated in the Invasive Species Management Plan (NES, 2007), the project area of FERC Project 4914 does not include the Fox River; therefore, Thilmany is not responsible for surveying these waters, but has elected to conduct a one-time assessment to provide invasive species data to the local regulating agencies.

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 survey include purple loosestrife (*Lythrum salicaria*) and Eurasian water milfoil (*Myriophyllum spicatum*).

## BACKGROUND

### 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).

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 in Appendix A. The assessment area (Appendix A), 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.

### 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).

## BASELINE SURVEY

NES Ecological Services (NES) conducted a baseline survey on August 7, 2008 to document the presence and abundance of invasive species within the survey area. The extent of invasive aquatic species establishment within the assessment area to be surveyed was unknown, and 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.

## METHODS

### Eurasian Water Milfoil

NES conducted a point-intercept method routinely used by the WDNR (WDNR 2004). Once at the survey points, rake tows were used to search for EWM and the point was marked as *visited*. If detected, the location of EWM colonies were mapped and an estimate of its aerial coverage was assigned. The location of the colony was then displayed in an ArcGIS map. Survey points greater than 12 feet in depth were marked as *too deep*. Portions of the assessment area that were unsafe for conducting the plant survey or were inaccessible are marked as *not visited* (Appendix B).

### Purple Loosestrife

NES determined whether purple loosestrife is present by scanning the limited shoreline and shallow areas of the assessment area waters during the point-intercept survey. If the species was detected, an estimate of its aerial coverage was assigned and their locations were mapped with GPS. The mapped locations are then displayed on a map created in ArcGIS (Appendix B).

## RESULTS

The point-intercept survey conducted by NES to assess the presence and abundance of invasive aquatic vegetation resulted in the identification of zero colonies of EWM and one colony of purple loosestrife (Appendix B). It should be noted that a single piece of EWM plant material was found floating in the river within the project area. Also, the colony of purple loosestrife located during the survey was not found within the survey area but in very close proximity. Colonies of purple loosestrife and *Phragmites*, another invasive plant, were observed both up and down-river from the survey area.

## **CONCLUSION**

In conclusion, no invasive species were found within the survey area. Normally, this survey 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 FERC project area. Thilmany does not intend on continuing the survey effort within the assessment area since 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.



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## REFERENCES

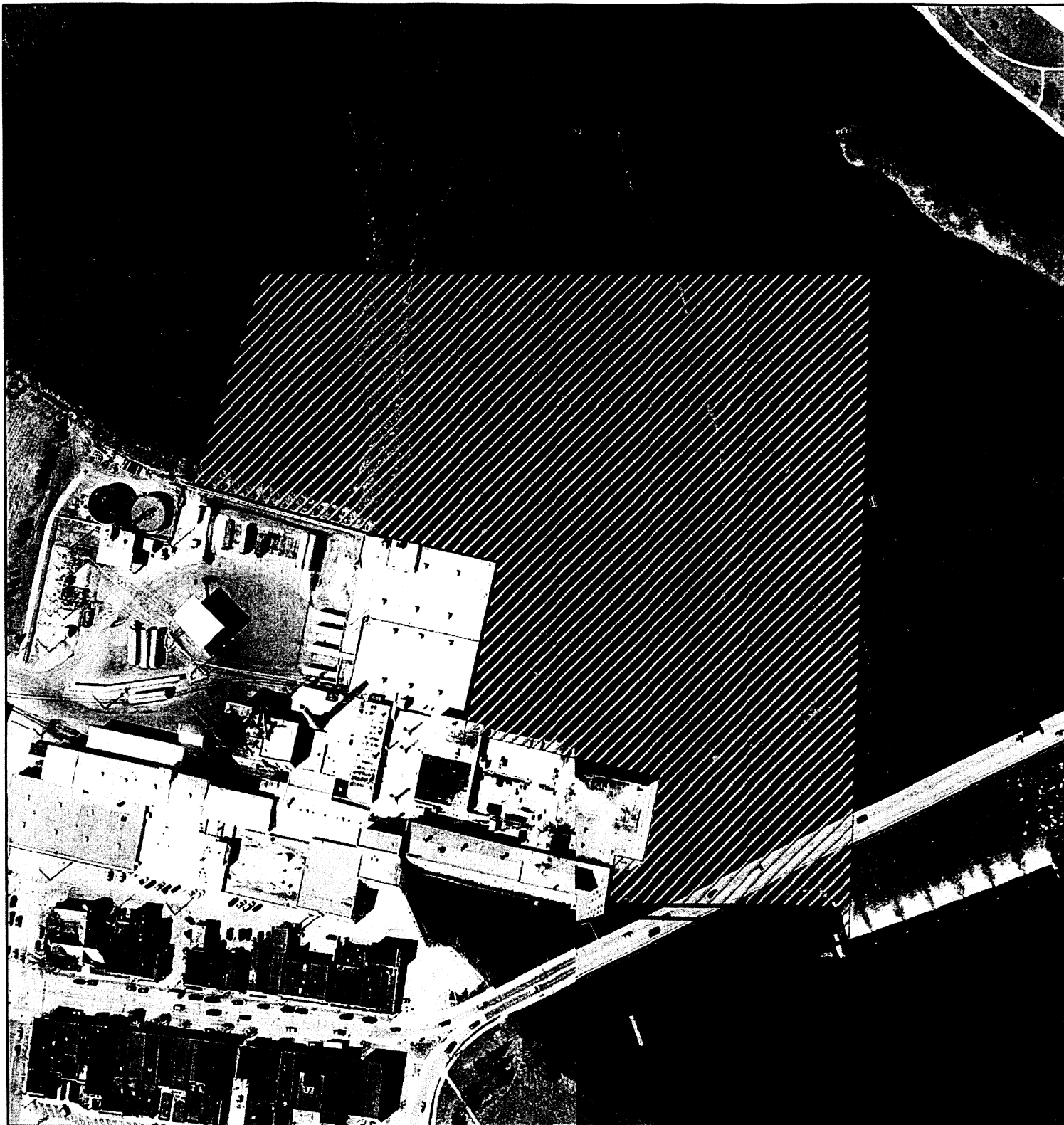
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# A



## Appendix A

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**FERC Project 4914 Project Area and Invasive Species Survey Area**

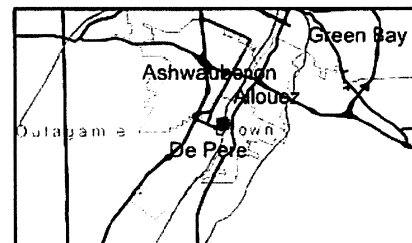


**Legend**

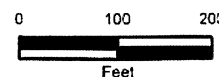
-  FERC Project Extent
-  Invasive Species Survey Area

**Appendix A**  
**FERC Project Area and**  
**Invasive Species Survey Area**

**Thilmany Paper, LLC**  
**Nicolet Mill**  
**Invasive Species Survey**  
**Project No. 14533003**  
**De Pere, Brown County, Wisconsin**



*Extent of large view shown in red.*



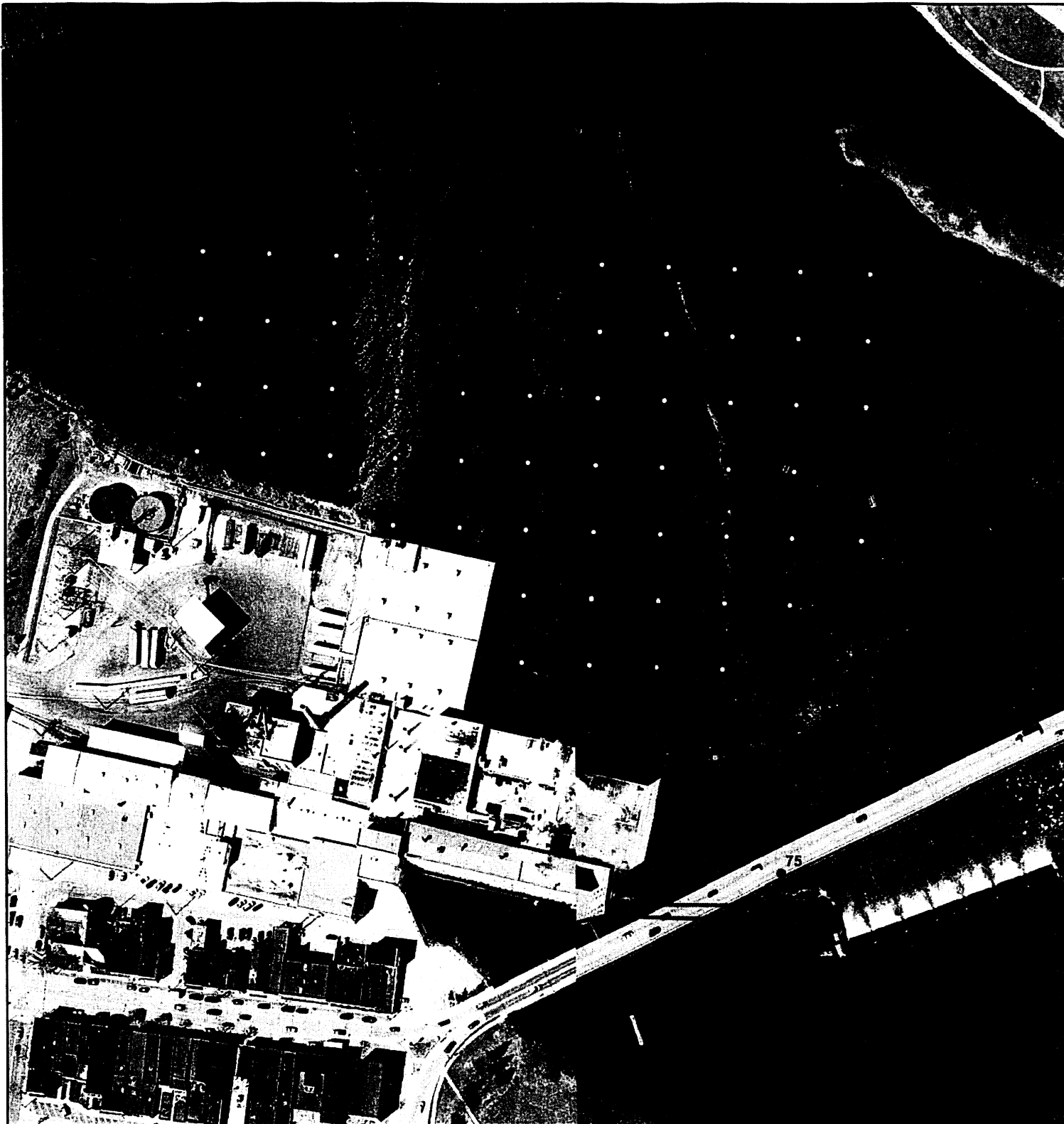
September 5, 2008

# B






## Appendix B

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### Point-Intercept Survey

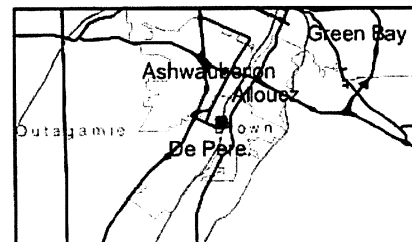


**Legend**

-  FERC Project Extent
-  Visited
-  Not Visited
-  Too Deep
-  Purple Loosestrife Colony

**Appendix B  
Point-Intercept Survey**

**Thilmany Paper, LLC  
Nicolet Mill  
Invasive Species Survey  
Project No. 14533003  
De Pere, Brown County, Wisconsin**



*Extent of large view shown in red.*

