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February 25, 2008

The Secretary  
Federal Energy Regulatory Commission  
888 First Street, NE  
Washington, DC 20426

**Re: *Flambeau Crowley, Project No. 2473, Flambeau Hydro LLC  
Article 410, Purple Loosestrife Inventory***

Dear Secretary:

On behalf of Flambeau Hydro, LLC, and in accordance with the Purple Loosestrife Monitoring Plan per license article named above, North American Hydro Holdings, Inc. submits the annual Purple Loosestrife Inventory for 2007 for the above named project. Copies of the inventory have been sent to the Wisconsin Department of Natural Resources and the US Fish & Wildlife Service.

If you have any questions regarding this submission, please contact Mr. Richard Loeffler at 920-293-4628.

Sincerely,  
***NORTH AMERICAN HYDRO HOLDINGS, INC.***

FOR

Charles Alsberg  
Executive Vice President

Cc: FERC – CRO

08-02-13 RAL FLCR 2007 loosestrife survey to FERC.doc

**Flambeau Crowley Project Purple Loosestrife Inventory**  
**August 8, 2007**  
**FERC Project #2473 Article 410**

**Flambeau Hydro, LLC**  
**116 State St.**  
**Neshkoro, WI 54960**

*Purple Loosestrife*

On August 8, 2007, Flambeau Hydro, LLC (FHLLC) performed an inventory of purple loosestrife plants at the Flambeau Crowley Project in Price County, Wisconsin. The method of inventory as approved and modified by Federal Energy Regulatory Commission (FERC) Order of June 18, 2003 was defined as follows:

While Purple Loosestrife is blooming in mid July to early August, the inventory should be conducted using a boat to survey the impoundment above the dam within the Project Boundary and on foot or by boat below the dam within the Project Boundary. County wetland maps may be used to determine other areas where Purple Loosestrife could be found on lands owned by FHLLC within the Project Boundary. Lands owned by FHLLC within the Project Boundary will be surveyed on foot. A pair of binoculars should be used to search for the purple flowered spikes of the plant. When plants are located, the person(s) inventorying should get close enough to make a positive identification without disturbing the plants or the immediate area around the plants as this could cause them to spread. A GPS receiver will be used to establish a GPS coordinate for the location of the plants. If it is not possible to get close enough to establish an accurate location, an approximate location will be established with reference to an established GPS coordinate. The plants should be inventoried by marking and numbering the location on a Project map along with notes approximating size of plants, stand area, percent cover, stem density, plant density, and location with reference to established GPS coordinates. Photos and/or videotape will be taken of the largest occurrences.

Example:

#1 6' tall plants; 4' X 20'; 30% cover; 4 – 5 stems per plant; 4 plants; on shoreline N45° 56.183' W90° 26.748'; no photo

#2 5' - 7' tall plants; 10' X 10'; 25% cover; 4 – 5 stems per plant; 10 plants; in marsh ~50 feet bearing 25° from N45° 56.256' W90° 26.710'; photo No. 1

The area to be inventoried shall be the shoreline of the impoundment to elevation 1428 feet NGVD and lands owned by FHLLC within the Project

Boundary as indicated on the Project Map 1, dated November 1991, included in Exhibit G of Flambeau Paper Corp. Application For A Subsequent License for the Crowley Hydroelectric Project FERC Project #2473.

#### General Observations:

The Flambeau Crowley Project Boundary was divided into three different areas; *the impoundment* (from approximately 500 feet downstream of the Pixley dam to the Crowley dam), *FHLLC owned property within the project boundary* (FHLLC owned property adjacent to the dam and powerhouse), and *the tailrace* (from the dam and powerhouse to approximately 500 feet downstream of the dam).

*The tailrace* was surveyed on foot and no purple loosestrife plants were observed.

*The FHLLC owned property within the project boundary* was surveyed on foot and no purple loosestrife plants were observed.

*The impoundment* was surveyed by boat and no new occurrences were found. A single plant that had been found on a bog in a stump field in the river east of the 6-mile boat landing during the 2002 survey was not found in 2003, 2004, 2005, 2006, or 2007. This plant had the seed heads removed in 2002.

Purple loosestrife plants that had been found on the HWY 70 causeway just east of the 6-mile boat landing in 2002 still existed in 2003. In 2003, the plants were treated with an herbicide. In 2004, the amount of plants inventoried at this location was considerably reduced. Spraying permits had been acquired from the Wisconsin Department of Natural Resources and the Wisconsin Department of Transportation and these plants were sprayed with a 1% Aqua Neat (glyphosate)/1% surfactant solution during the survey. The causeway occurrence was revisited two days later and a few of the purple loosestrife plants showed visible signs of stress (leaves were turning brown). In 2005, it appeared that the purple loosestrife plants at this location had been chemically spot treated by other unknown person(s) before the licensee survey crew arrived. All purple loosestrife plants were brown and dead while surrounding vegetation was green and living. Only two immature single stem purple loosestrife plants were found to be untreated. These two plants were pulled and burned. No chemical treatment was performed by the survey crew in 2005. In 2006, the number of plants seemed to be about the same as in 2005, but more spread out. Spraying permits were acquired and all plants were sprayed with a slightly stronger solution of 2% Aqua Neat (glyphosate)/1% surfactant during the survey. The causeway occurrence was revisited two days later and a few of the purple loosestrife plants showed visible signs of stress (leaves were turning brown). In 2007, the number of plants were greatly reduced from 2006 with only 11 plants found on the south side of the highway and none found on the north side. Spraying permits were acquired and all plants were sprayed with a solution of 2% Aqua Neat (glyphosate)/1% surfactant during the survey.

These purple loosestrife plants were inventoried and have been noted on the survey sheet(s) and map(s) at the end of this report. No other occurrences of purple loosestrife were observed.

During the inventory, a digital camera was used to document occurrences of purple loosestrife as noted in the survey comments at the end of this report.

**Purple Loosestrife Survey**

**Project:** Flambeau Crowley #2473  
**Date:** 8/8/2007  
**Crew:** RAL & CTM

**Datum:** WGS 84  
**Page:** 1 of 1

Sighting #	GPS point	Latitude	Longitude	Plant Height	Stand Area	Comments
1	209 - 215 FLCRPL001 - FLCRPL002	N45°51.816' - N45°51.850'	W90°32.859' - W90°32.786'	1' - 4'	~375' x 25'	Located between GPS points 209 and 215 on the south side of the causeway formed by HWY 70 just east of the 6-mile boat landing. There are 11 plants spread out over a 375 foot long area. The largest concentration is 4 plants and the rest are between 1 and 2 plants. Most plants appear to have 1-2 stems per plant. All seed heads at this occurrence were harvested in August 2002 to prevent propagation. This occurrence recorded on digital photos and video tape in 2002. All plants were treated with herbicide in 2003. This occurrence recorded on videotape in 2003. All plants were treated with herbicide in 2004. This occurrence recorded on digital photos in 2004. One immature single stem plant was pulled and the rest appeared to have been spot treated with an herbicide by other person(s) before the licensee survey crew arrived in 2005. This occurrence recorded on digital photos in 2005. All plants were treated with herbicide in 2006. This occurrence recorded on digital photos in 2006. All plants were treated with herbicide in 2007. This occurrence not recorded on digital photos in 2007.
2	216 - 217 FLCRPL003 - FLCRPL004	N45°51.857' - N45°51.853'	W90°32.806' - W90°32.814'	N/A	N/A	Located between GPS points 216 and 217 on the north side of the causeway formed by HWY 70 just east of the 6-mile boat landing. No plants found in 2007. All seed heads at this occurrence were harvested in August 2002 to prevent propagation. This occurrence recorded on digital photos in 2002. All plants were treated with herbicide in 2003. This occurrence recorded on videotape in 2003. No purple loosestrife plants were observed at this location in 2004. The only plant found in 2005 was pulled. This occurrence recorded on digital photo in 2005. All plants were treated with herbicide in 2006. This occurrence recorded on digital photos in 2006.

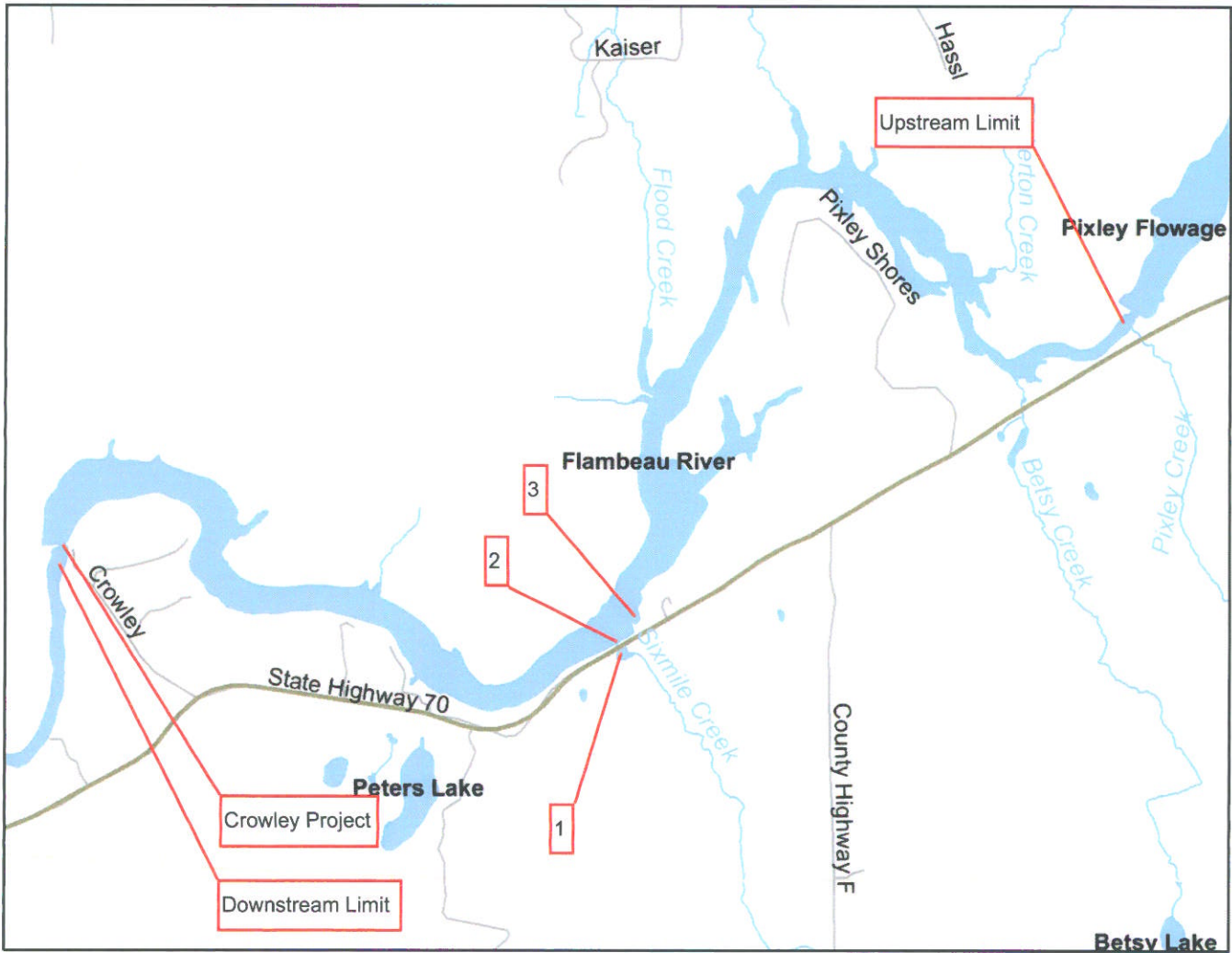
**Purple Loosestrife Survey**

**Project:** Flambeau Crowley #2473  
**Date:** 8/8/2007  
**Crew:** RAL & CTM

**Datum:** WGS 84  
**Page:** 1 of 1

Sighting #	GPS point	Latitude	Longitude	Plant Height	Stand Area	Comments
3	208 FLCRPL005	N45°51.926'	W90°32.788'	N/A	N/A	Located on a bog in a stump field in the river east of the 6-mile boat landing. All seed heads were harvested in August 2002 to prevent propagation. This occurrence recorded on digital photos in 2002. This occurrence was not found in 2003, 2004, 2005, 2006, and 2007.

# Crowley #2473 Purple Loosestrife Survey 2007



**Legend**

- County Boundaries
- ✂ Railroads
- Major Highways
  - Interstate
  - US Highway
  - State Highway
  - Local Roads
- Civil Towns
- Civil Town
- 24K Open Water
- 24K Rivers and Shorelines
- Cities and Villages
  - Village
  - City

Scale: 1:35,080



This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.

Submission Contents

Flambeau Crowley Hydroelectric Project P-2473 Article 410 Annual Purple Loosestrife Report 080225CRLYRPT2007.pdf.....	1-7
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