



January 30, 2018

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

**RE: Flambeau Lower FERC Project Number 2421  
Flambeau Hydro LLC  
Final Report 2017 Purple Loosestrife Inventory Report**

Dear Ms. Bose:

On behalf of Flambeau Hydro LLC, "Flambeau" (Licensee), Renewable World Energies, LLC (RWE) is submitting a copy of the *Final Report 2017 Purple Loosestrife Inventory Report* for the Flambeau Lower Hydroelectric Project. The report is a requirement of Flambeau's Federal license pursuant to article 410. Monitoring was conducted on August 28, 2017. No out of the ordinary issues were encountered. Purple Loosestrife was observed on the Impoundment at 1 site. One multi-stem Purple Loosestrife plant was observed. No treatment was conducted due to accessibility. The draft report was sent to the agencies by an attachment to an e-mail on November 16, 2017 for review and comment. No comments have been received from the WDNR. No comments have been received from the USFWS. The next scheduled monitoring event will be conducted in 2018.

If you have any questions concerning this submittal, please contact Brian Kreuscher at the Renewable World Energies, LLC offices @ 855-994-9376 Ext 230. He can also be reached by e-mail at [bkreuscher@rwehydro.com](mailto:bkreuscher@rwehydro.com).

**Corporate Office**  
P.O. Box 264  
100 S. State Street  
Neshkoro, WI 54960  
Fax: 920-293-4100

Phone: 855-99HYDRO  
(855-994-9376)  
[www.renewableworldenergies.com](http://www.renewableworldenergies.com)

**Administrative Office**  
1001 Stephenson Street  
Norway, MI 49870  
Fax: 906-563-9344



**Corporate Office**  
P.O. Box 264  
100 S. State Street  
Neshkoro, WI 54960  
Phone: 855-99HYDRO  
Fax: 920-293-4100  
[www.renewableworldenergies.com](http://www.renewableworldenergies.com)

Sincerely,  
**Renewable World Energies, LLC**  
**Agent for Licensee**

A handwritten signature in black ink, appearing to read "J. Kreuzscher".

Handwritten initials "JCK" in a box, likely representing Jason Kreuzscher.

Mr. Jason Kreuzscher  
Vice President

Attachment: Flambeau Lower Final Purple Loosestrife Inventory Report

Cc: Ms. Cheryl Laatsch, WDNR  
Mr. Nick Utrup, USFWS  
RWE, Corporate

2017 Purple Loosestrife Inventory  
for  
Flambeau Lower Hydroelectric Project  
FERC Project #2421  
Flambeau Hydro, LLC  
Price County, Wisconsin

Submitted by:



429 River Lane, P.O. Box 27  
Amasa, Michigan 49903  
Phone: 906-822-7889

## Summary of Purple Loosestrife Inventory for Flambeau Lower Hydroelectric Project, FERC #2421

On August 28, 2017, White Water Associates, Inc. performed an inventory of purple loosestrife at the Flambeau Lower Project. The method of inventory approved and modified by a Federal Energy Regulatory Commission (FERC) Order (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 Flambeau Hydro, LLC (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 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.

### 2017 Observations

The Flambeau Lower Project boundary was divided into three different areas; *the impoundment* (HWY 182 bridge in Park Falls to the 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 the HWY 13 bridge).

*The impoundment* was surveyed by boat. One multi-stem purple loosestrife plant was observed. No treatment was conducted due to accessibility.

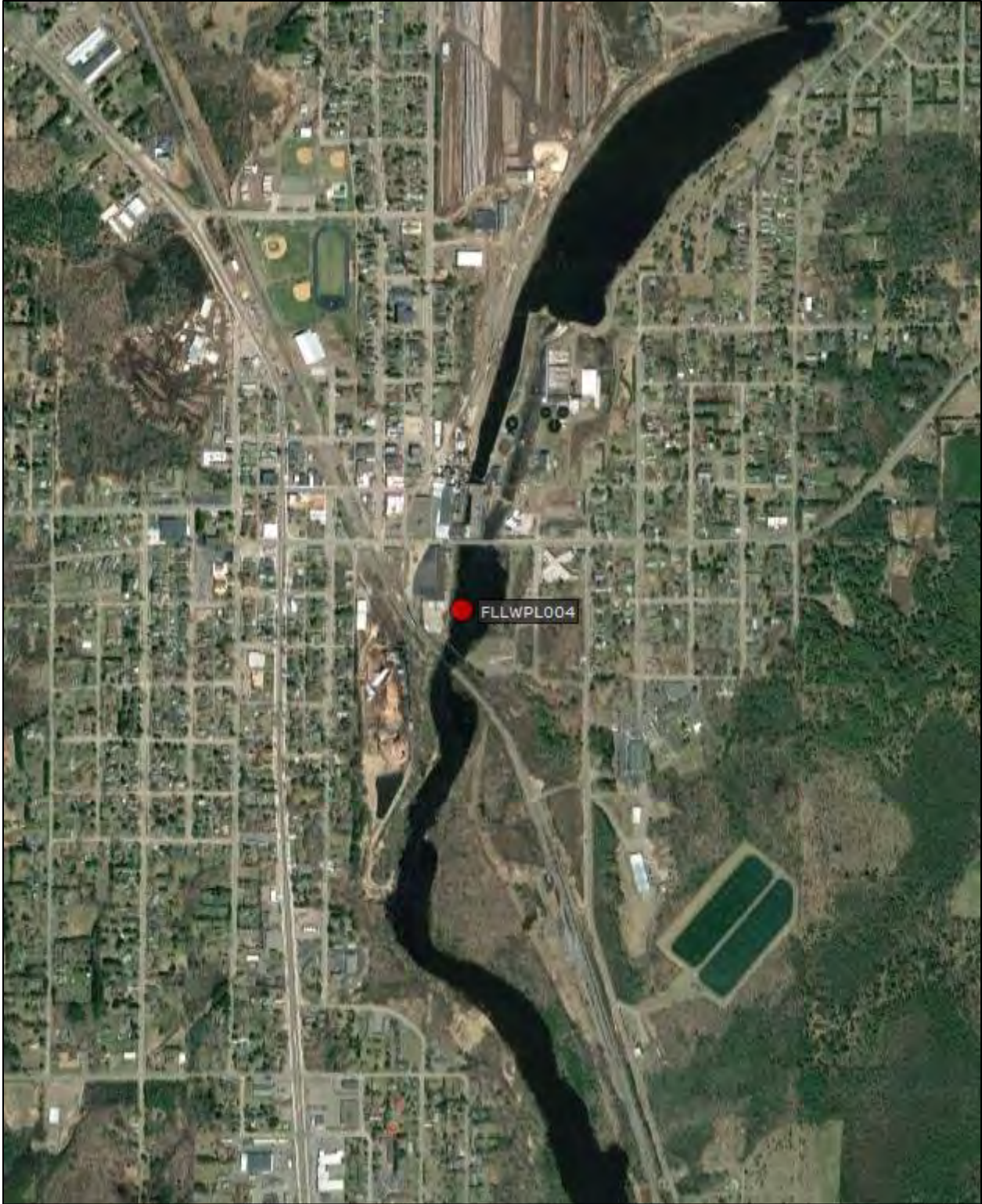
*The FHLLC-owned property within the project boundary* was surveyed on foot and no purple loosestrife plants were observed.

*The tailrace* was surveyed by boat and no purple loosestrife plants were observed.

A map of purple loosestrife locations is available in Appendix A. Appendix B provides tables of historical purple loosestrife data as well as observations made in 2017. Appendix C provides scans of field data sheets. Appendix D provides photos of purple loosestrife found at the project area.

# **Appendix A**

## **Map**



Map 1. Locations of purple loosestrife at Flambeau Lower observed in 2017.

# **Appendix B**

## **Table**

<b>Table 1. GPS points for purple loosestrife inventory at Flambeau Lower, FERC#2421.</b>					
<i>GPS Point</i>	<i>Latitude</i>	<i>Longitude</i>	<i>Plant Height</i>	<i>Stand Area</i>	<i>Comments</i>
FLLWPL004 (FLLW PLB)	45.93290	-90.44688	5'	4'x4'	2016-first observed. 40 plants observed. Flowering heads clipped. 2017- One large multi-stemmed plant. No treatment.



# **Appendix C**

## **Scans of Datasheets**

## Purple Loosestrife Survey

Flambeau Lower Hydroelectric Project - FERC # 2421

Page \_\_\_ of \_\_\_

Date 8-28-17 Conducted By Stim Haug

HWL 1467.10 TWL 1448.60 CFS 558 Equipment Used: Binoscopes, GPS

Air Temp: 71 °F Wind Speed: NE 9 mph Barometer: 30 Sky Conditions: Cloudy

Time Survey Started 3:00 p.m. Time Survey Ended 3:45 p.m. Boat (14ft or Canoe) and/or Foot

Latitude Start Boat Landing Longitude End Boat Landing

Location of Survey Area: Tailrace \_\_\_ Bypass Reach \_\_\_ Impoundment  FHLIC Property \_\_\_

Description of Location  Hwy 182 bridge in Park Falls to the dam

Historic Info: 2016 one PL found FLLWPLB 1 hour 15 min

Purple Loosestrife Found: Yes or No

Information	<u>Same last year</u>			
Site	<u>FLW PL D004</u>			
Time	<u>3:16 p.m.</u>			
Photo ID	<u>4148</u>			
Location	<u>below power plant</u>			
Single or Multi-stem	<u>Multi</u>			
# of Plants	<u>1</u>			
Acreage est.	<u>4' x 4'</u>			
Stand Area Density				
Size Colony S=0-5, M=6-50, L=>50~	<u>S</u>			
Plant Height ~ Ft	<u>5'</u>			
Flowering %	<u>100%</u>			
Beetle Feeding?				
Plant Vigor (Very poor to good)	<u>good</u>			
Plant Removed (explain)	<u>hard to reach</u>			

Information				
Site				
Time				
Photo ID				
Location				
Single or Multi-stem				
# of Plants				
Acreage est.				
Stand Area Density				
Size Colony S=0-5, M=6-50, L=>50~				
Plant Height ~ Ft				
Flowering %				
Beetle Feeding?				
Plant Vigor (Very poor to good)				
Plant Removed (explain)				

Other Species Observed:

---

## Purple Loosestrife Survey

Flambeau Lower Hydroelectric Project – FERC # 2421 Page      of     

Date 8-28-17 Conducted By Shane Haag

HWL 1467.20 TWL 1448.60 CFS 558 Equipment Used:     

Air Temp: 21 °F Wind Speed: NE 1 mph Barometer: 30 Sky Conditions:     

Time Survey Started 3:55: p.m Time Survey Ended 4:10 p.m Boat (14ft or Canoe) and/or Foot

Latitude Start      Longitude End     

Location of Survey Area: Tailrace X Bypass Reach X Impoundment      FHLLC Property X

Description of Location Dam and powerhouse to Hwy 13 bridge, adjacent to dam + powerhouse

Historic Info: 25 mi NO PL 20 mi NO PL

Purple Loosestrife Found: Yes or (No)

Information	NO PL				
Site					
Time					
Photo ID					
Location					
Single or Multi-stem					
# of Plants					
Acreage est.					
Stand Area Density					
Size Colony S=0-5, M=6-50, L=>50~					
Plant Height ~ Ft					
Flowering %					
Beetle Feeding?					
Plant Vigor (Very poor to good)					
Plant Removed (explain)					

Information					
Site					
Time					
Photo ID					
Location					
Single or Multi-stem					
# of Plants					
Acreage est.					
Stand Area Density					
Size Colony S=0-5, M=6-50, L=>50~					
Plant Height ~ Ft					
Flowering %					
Beetle Feeding?					
Plant Vigor (Very poor to good)					
Plant Removed (explain)					

Other Species Observed:

---

# **Appendix D**

## **Photo**



**Photo 1. Purple loosestrife growing in wetland area.**

## Brian Kreuscher

---

**From:** Brian Kreuscher  
**Sent:** Thursday, November 16, 2017 10:45 AM  
**To:** Cheryl Laatsch; Nick Utrup  
**Subject:** Crowley (P-2473) Pixley (P-2395) Upper (P-2640) Lower (P-2421) 2017 Purple Loosestrife Draft Reports  
**Attachments:** Crowley PL Draft Report 2017-Complete.pdf; Lower Flambeau PL Draft Report 2017-Complete.pdf; Pixley PL Draft Report 2017-Complete.pdf; Upper Flambeau PL Draft Report 2017-Complete.pdf; Grantsburg High School Purple Loosestrife Beetle Release on Clam Flowage\_Clam River Delta 7 5 17.pdf

Cheryl and Nick,

Attached are copies of the Purple Loosestrife Draft Reports for the surveys conducted at Flambeau Upper (P-2640), Flambeau Lower (P-2421), Flambeau Pixley (P-2395) and Flambeau Crowley (P-2473). Danbury (P-9184) and Clam River (P-9185) did not require a Survey in Odd years. Clam River did have approximately 6,000 Galerucella Beetles released by the Grantsburg High School. I have attached the report that Science teacher Matt Berg wrote.

Please return any comments on the draft reports to me within 30 days.

Thanks

Brian Kreuscher  
Renewable World Energies  
Regulatory & Compliance  
855-994-9376 x230