



February 6, 2017

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

**RE: Flambeau Pixley FERC Project Number 2395  
Flambeau Hydro LLC  
Final Report 2016 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 2016 Purple Loosestrife Inventory Report* for the Flambeau Pixley Hydroelectric Project. The report is a requirement of Flambeau's Federal license pursuant to article 410. Monitoring was conducted on August 9, 2016. No out of the ordinary issues were encountered and no Purple Loosestrife was observed. The draft report was sent to the agencies by an attachment to an email sent on January 5, 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 2017.

If you have any questions concerning this submittal, please contact Brian Kreuzscher 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).

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

A handwritten signature in black ink, appearing to read "Birk" or similar, written over a white background.

Handwritten initials "JOK" in black ink, written in a cursive style.

Mr. Jason Kreuzscher  
Vice President

Attachment: Flambeau Pixley Final Purple Loosestrife Inventory Report

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

2016 Purple Loosestrife Inventory  
for  
Flambeau Pixley Hydroelectric Project  
FERC Project #2395  
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 Pixley Hydroelectric Project, FERC #2395

On August 9, 2016, White Water Associates, Inc. performed an inventory of purple loosestrife at the Flambeau Pixley 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.

### 2016 Observations

The Flambeau Lower Project boundary was divided into three different areas; *the impoundment* (from HWY 13 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 approximately 500 feet downstream of the dam).

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

Appendix A provides scans of field data sheets.

# **Appendix A**

## **Scans of Datasheets**

### Purple Loosestrife Survey

Pixley Hydroelectric Project – FERC # 2395 Page \_\_\_ of \_\_\_

Date 8-9-16 Conducted By Steve Haag

HWL 1448.23 TWL 1422.5 CFS 743 Equipment Used: binoculars, GPS

Air Temp: 61 °C Wind Speed: 5-16 mph Barometer: 30.0 Sky Conditions: partly clouds

Time Survey Started 7:00 Time Survey Ended 9:40  Boat (14ft or Canoe) and/or Foot

Latitude Start BL Longitude End BL

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

Description of Location Hwy 13 bridge in Park Falls to the Dam

Purple Loosestrife Found: Yes or No Historic Info: boat 2015 no PL 4 hrs

Site:	Time:	Latitude:	Longitude:
Photo ID:		Description of location:	
Species Name:		Single Plant or Multi-stem	Actual # of Plants:
Acreage of Infestation (circle one) less than 1/2 acre 1/2-1 acre 1-10 acres more than 10 acres			
Location type (circle all that apply): impoundment/pond edge stream edge roadside wooded area ditch field other			
Stand Area Density (feet x feet):		Size Colony (#plants): S = 0-5 M = 6-50 L = >50 ~ _____	
Plant Height: 1 = <1 ft 2 = 1-2 ft 3 = 2-4 ft 4 = >4 ft ~ _____ feet			
Plant Flowering: 1 = <25% of plants 2 = 26-50% of plants 3 = 51-99% of plants 4 = 100% of plants			
Beetle Feeding: 1 = 76-100% feeding 2 = 51-75% feeding 3 = 25-50% feeding 4 = 0-25% feeding			
Total plant vigor: 0-3 = very poor 4-6 = poor 7-9 = fair 10-12 = good			
Plant Removed: Yes No		Description:	

Site:	Time:	Latitude:	Longitude:
Photo ID:		Description of location:	
Species Name:		Single Plant or Multi-stem	Actual # of Plants:
Acreage of Infestation (circle one) less than 1/2 acre 1/2-1 acre 1-10 acres more than 10 acres			
Location type (circle all that apply): impoundment/pond edge stream edge roadside wooded area ditch field other			
Stand Area Density (feet x feet):		Size Colony: S = 0-5 M = 6-50 L = >50 ~ _____	
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Total plant vigor: 0-3 = very poor 4-6 = poor 7-9 = fair 10-12 = good			
Plant Removed: Yes or No		Description:	

9105 3451  
A P. 179 DS



Site:	Time:	Latitude:	Longitude:
Photo ID:		Description of location:	
Species Name:		Single Plant or Multi-stem	Actual # of Plants:
Acreage of Infestation (circle one) less than 1/2 acre 1/2-1 acre 1-10 acres more than 10 acres			
Location type (circle all that apply): impoundment /pond edge stream edge roadside wooded area ditch field other			
Stand Area Density (feet x feet):		Size Colony: S = 0-5 M = 6-50 L = >50 ~ _____	
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Plant Removed: Yes No		Description:	

Site:	Time:	Latitude:	Longitude:
Photo ID:		Description of location:	
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Total plant vigor: 0-3 = very poor 4-6 = poor 7-9 = fair 10-12 = good			
Plant Removed: Yes or No		Description:	

Other Species Observed: 6 painted turtles  
1 blue jay, 1 crow, 406 eels  
40 eels, 9 white perch

Other Pertinent Survey Information: \_\_\_\_\_  
 \_\_\_\_\_

Historic Purple Loosestrife: NO PL

Signature [Signature] Signature \_\_\_\_\_

\* If colonies less than 20 plants are located on lands owned by RWE within the Project Boundary, RWE will take appropriate steps to eliminate plants at time of detection. For stands larger than 20 plants located on lands owned by RWE within the Project boundary, RWE will consult with the WDNR and USFWS to determine control methods.





### Purple Loosestrife Survey

Pixley Hydroelectric Project – FERC # 23915 Page \_\_\_ of \_\_\_

Date 8-9-16 Conducted By Stew Haas

HWL 1418.275 TWL 1427.5 CFS 793 Equipment Used: \_\_\_\_\_

Air Temp: 75 °C Wind Speed: 9.0 mph Barometer: 29.9 Sky Conditions: Cloudy

Time Survey Started 9:45 Time Survey Ended 10:10 Boat (14ft or Canoe) and/or Foot

Latitude Start \_\_\_\_\_ Longitude End \_\_\_\_\_

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

Description of Location property owned adjacent to the dam and powerhouse

Purple Loosestrife Found: Yes or No Historic Info: Foot 2015 NO PL

Site:	Time:	Latitude:	Longitude:
Photo ID:		Description of location:	
Species Name:		Single Plant or Multi-stem	Actual # of Plants:
Acreage of Infestation (circle one) less than 1/2 acre 1/2-1 acre 1-10 acres more than 10 acres			
Location type (circle all that apply): impoundment/pond edge stream edge roadside wooded area ditch field other			
Stand Area Density (feet x feet):		Size Colony (#plants): S = 0-5 M = 6-50 L = >50 ~ _____	
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Total plant vigor: 0-3 = very poor 4-6 = poor 7-9 = fair 10-12 = good			
Plant Removed: Yes No		Description:	

Site:	Time:	Latitude:	Longitude:
Photo ID:		Description of location:	
Species Name:		Single Plant or Multi-stem	Actual # of Plants:
Acreage of Infestation (circle one) less than 1/2 acre 1/2-1 acre 1-10 acres more than 10 acres			
Location type (circle all that apply): impoundment /pond edge stream edge roadside wooded area ditch field other			
Stand Area Density (feet x feet):		Size Colony: S = 0-5 M = 6-50 L = >50 ~ _____	
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Total plant vigor: 0-3 = very poor 4-6 = poor 7-9 = fair 10-12 = good			
Plant Removed: Yes or No		Description:	





Site:	Time:	Latitude:	Longitude:
Photo ID:		Description of location:	
Species Name:		Single Plant or Multi-stem	Actual # of Plants:
Acreage of Infestation (circle one) less than 1/2 acre 1/2-1 acre 1-10 acres more than 10 acres			
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Plant Removed: Yes or No		Description:	

Other Species Observed: \_\_\_\_\_

\_\_\_\_\_

Other Pertinent Survey Information: no PL

Historic Purple Loosestrife: \_\_\_\_\_

Signature *Angie Stone*

Signature \_\_\_\_\_

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### Purple Loosestrife Survey

Pixley Hydroelectric Project – FERC # 23515 Page \_\_\_ of \_\_\_

Date 8-9-16 Conducted By Stine Haag

HWL 1448.273 TWL 1427.5 CFS 743 Equipment Used: \_\_\_\_\_

Air Temp: 61 °F Wind Speed: SSE 9 Barometer: 30.10 Sky Conditions: Partly Cloudy

Time Survey Started 9:15 Time Survey Ended 11:10 Boat (14ft or Canoe) and/or Foot \_\_\_\_\_

Latitude Start \_\_\_\_\_ Longitude End \_\_\_\_\_

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

Description of Location From dam and powerhouse to approx 500 feet downstream of dam

Purple Loosestrife Found: Yes or No \_\_\_\_\_ Historic Info: \_\_\_\_\_

Site:	Time:	Latitude:	Longitude:
Photo ID:		Description of location:	
Species Name:		Single Plant or Multi-stem	Actual # of Plants:
Acreage of Infestation (circle one) less than 1/2 acre 1/2-1 acre 1-10 acres more than 10 acres			
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Total plant vigor: 0-3 = very poor 4-6 = poor 7-9 = fair 10-12 = good			
Plant Removed: Yes No		Description:	

Other Species Observed: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Other Pertinent Survey Information: None

\_\_\_\_\_

Historic Purple Loosestrife: \_\_\_\_\_

Signature Angie Stone

Signature \_\_\_\_\_

\* If colonies less than 20 plants are located on lands owned by RWE within the Project Boundary, RWE will take appropriate steps to eliminate plants at time of detection. For stands larger than 20 plants located on lands owned by RWE within the Project boundary, RWE will consult with the WDNR and USFWS to determine control methods.



Document Content(s)

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