



Wisconsin Public Service Corporation

700 North Adams Street  
P.O. Box 19001  
Green Bay, WI 54307-9001

www.wisconsinpublicservice.com

December 15, 2017

Ms. Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street NE  
Washington DC 20425

Dear Ms. Bose:

**SUBJECT: Invasive Species Monitoring Plan**

<u>Hydro</u>	<u>FERC Project No.</u>	<u>NATDAM No.</u>	<u>License Article</u>
Wausau	1999	WI00752	408

In accordance with the Federal Energy Regulatory Commission (FERC) Order Amending Purple Loosestrife Monitoring Plan for the Wausau Hydroelectric Project (Project), issued January 20, 2015, Wisconsin Public Service (WPS) is required to file annual *Galerucella* beetle control and purple loosestrife (PL) monitoring results with FERC by December 15 of the corresponding year. After three years of collecting data (2015 – 2017) and consultation with the resource agencies, WPS must file a summary of the data and its recommendation on the schedule for conducting and reporting future PL surveys with FERC.

#### 2017 Purple Loosestrife Survey Results

A survey for PL was completed on July 28, 2017. Twenty-two colonies of PL were identified at the Project. Of the twenty-two colonies, twenty were small or medium colonies and were hand pulled and disposed of offsite. Appendix A includes the 2017 PL survey results and figures.

In 2017, a sum total of approximately 4,000 *Galerucella species* beetles (beetles) were released in two different locations to supplement existing beetle populations. WPS observed beetle feeding on sixteen of the twenty-two identified PL colonies.

WPS created a spreadsheet to summarize the last three years of PL survey and beetle release data, see Appendix A. A review of the data shows that the number of colonies has ranged between eight and twenty-two and currently sits at twenty-two. The percentage of colonies with beetle feeding has ranged from 30% to 73% and currently sits at 73%. Beetle populations are still not present in all areas of the reservoir.

In accordance with the Order, in 2017 WPS is required to file with the Commission a summary of the data with a recommendation on the schedule for conducting and reporting future PL surveys. WPS has not seen a clear decrease in the number of PL colonies resulting from biological control methods.

Ms. Kimberly D. Bose  
December 15, 2017  
Page 2 of 2

A review of the past three years of data shows overall that the beetles have not been effective in reducing the population of PL at the Project. This year, WPS was able to reduce the PL population by manually removing all but two PL colonies. WPS proposes to continue annual surveys; manual control of small PL colonies; and to only use biological control methods as part of an adaptive management program if annual observations warrant supplementing existing beetle populations, see Appendix B. WPS is also proposing to change the submittal date to FERC from December 15 to December 31 of each year that monitoring is conducted.

A copy of this report was submitted to the Wisconsin Department of Natural Resources (WDNR) and US Fish and Wildlife Service (FWS) on October 27, 2017. FWS provided documentation that they had no comments. The WDNR did not provide any comments. Documentation of consultation is located in Appendix C.

Should you have any questions relative to this material, please do not hesitate to contact Jes Roloff at (920) 433-5558 or email at [JRRoloff@integrysgroup.com](mailto:JRRoloff@integrysgroup.com).

Sincerely,



Todd P. Jastremski  
Asset Manager Hydro Operations  
We Energies  
800 Industrial Park Drive  
Iron Mountain, MI 49801

JRR/rjv

Enc: Appendix A – 2017 Purple Loosetrife Figures and Data (5 pages)  
Appendix B – Proposed Amendment to Article 408 (4 pages)  
Appendix C – Documentation for Consultation (13 pages)

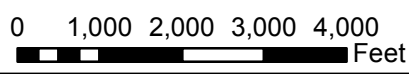
cc: Ms. Cheryl Laatsch, WDNR  
Mr. Nicholas Utrup, USFWS  
Mr. John Zygaj, FERC - CRO

**APPENDIX A**  
**2017 PURPLE LOOSESTRIFE FIGURES AND DATA**



**Wausau  
Hydroelectric Project  
Purple Loosestrife Survey 2017**

- Project Boundary
- Purple Loosestrife Severity**
- Small
- Small; Pulled all plants
- Medium; Pulled all plants
- Large
- No longer able to identify
- Beetle Release Site



Date: 10/24/2017



## 2017 Purple Loosestrife Survey Form

Hydroelectric project: Wausau Hydroelectric Project

Beetle Release Date: June 21, 2017 Inspection date: July 28, 2017

Colony ID #	Colony Size S 0-5 M 6-50 L >50	General Plant Vigor			Total Plant Vigor 10-12 = good 7-9 = fair 4-6 = poor 0-3 = very poor	Notes	GPS Point
		Plant Height 4 = >4ft 3 = 2-4ft 2 = 1-2ft 1 = <1ft	Plant Flowering 4 = 100% of plants 3 = 51-99% of plants 2 = 26-50% of plants 1 = <25% of plants	Beetle Feeding 5 = 0% feeding 4 = 1 - 25% feeding 3 = 26-50% feeding 2 = 51-75% feeding 1 = >76% feeding			
1	M 6-50	3	3	4	10	Pulled 7 plants, unable to reach 2 plants	1077 (old point)
2	No Longer Able To Identify						1078 (old point)
3	M 6-50	4	3	4	11	Pulled all plants.	1079 (old point)
4	S 0-5	4	3	4	11	Pulled all plants.	1080 (old point)
5	S 0-5	3	2	2	7	Released 2,000 beetles. Pulled all plants.	1081 (old point)
6	L >50	4	3	3	10	Healthy PL population but shows significant beetle feeding.	1082 (old point)
7	S 0-5	3	3	4	10	Released 2,000 beetles. Pulled all plants.	1103 & 1083 (old point)
8	No Longer Able To Identify						1084 (old point)
9	No Longer Able To Identify						1085 (old point)
10	S 0-5	4	3	4	11	Pulled all plants.	1086 (old point)
11	S 0-5	3	3	4	10	Pulled all plants.	1087 (old point)
12	M 6-50	3	3	4	10	Pulled all plants.	935 (old point)
13	S 0-5	3	4	5	12	Pulled all plants.	1089 (old point)
14	S 0-5	4	2	1	7	Pulled all plants.	934 (old point)
15	No Longer Able To Identify						933 (old point)

## 2017 Purple Loosestrife Survey Form

Hydroelectric project: Wausau Hydroelectric Project

Beetle Release Date: June 21, 2017 Inspection date: July 28, 2017

Colony ID #	Colony Size S 0-5 M 6-50 L >50	General Plant Vigor			Beetle Feeding 5 = 0% feeding 4 = 1 - 25% feeding 3 = 26-50% feeding 2 = 51-75% feeding 1 = >76% feeding	Total Plant Vigor 10-12 = good 7-9 = fair 4-6 = poor 0-3 = very poor	Notes	GPS Point
		Plant Height 4 = >4ft 3 = 2-4ft 2 = 1-2ft 1 = <1ft	Plant Flowering 4 = 100% of plants 3 = 51-99% of plants 2 = 26-50% of plants 1 = <25% of plants					
16		No Longer Able To Identify						1090 (old point)
17	S 0-5	4	3	4	11	Pulled all plants.	1073	
18		No Longer Able To Identify						1074 (old point)
19		No Longer Able To Identify						1075 (old point)
20		No Longer Able To Identify						1076 (old point)
21	S 0-5	3	4	5	12	NEW. Pulled all plants.	1732	
22	S 0-5	3	3	5	11	NEW. Pulled all plants.	1731	
23	M 6-50	3	2	4	9	NEW. Pulled all plants.	1730	
24	S 0-5	3	3	5	11	NEW. Pulled all plants.	1728	
25	S 0-5	4	4	5	13	NEW. Pulled all plants.	1733	
26	S 0-5	3	3	4	10	NEW. Pulled all plants.	1737	
27	S 0-5	4	4	5	13	NEW. Pulled all plants.	1736	
28	S 0-5	2	3	4	9	NEW. Pulled all plants.	1738	
28	S 0-5	4	3	4	11	NEW. Pulled all plants.	1735	
29	S 0-5	4	4	4	12	NEW. Pulled all plants.	1734	

**Wausau Hydroelectric Project 2015 - 2017 Summary**

Year	Total Number of Colonies	Number of Small Colonies (0-5 Plants)	Number of Medium Colonies (6 - 50 Plants)	Number of Large Colonies (51+ plants)	Number of Colonies With Beetle Feeding	Percentage of Total Colonies With Beetle Feeding	Beetles Released
2015	8	6	2	0	4	50%	4,000
2016	20	15	4	1	6	30%	3,000
2017	22	17	4	1	16	73%	4,000

9 Year Average	16.67	12.67	3.33	0.67	8.67	50.91%	
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**APPENDIX B**  
**PROPOSED AMENDMENT TO ARTICLE 408**



**Wausau Hydroelectric Project**

**FERC License No. 1999**

Amendment to Article 408

Purple Loosestrife Monitoring Plan

Original Issue: 7/14/1997

Revised: 10/27/2017

## Order Amending the Purple Loosestrife Monitoring Plan-Article 408

October 27, 2017

**Article 408** Licensee to file a plan to monitor for purple loosestrife (*Lythrum salicaria*) in project waters. The plan shall be prepared in consultation with the Wisconsin Department of Natural Resources (WDNR) and U.S. Fish & Wildlife Service (FWS). Further if during the term of the license the WDNR and the FWS deem it necessary to control or eliminate purple loosestrife, the licensee shall cooperate in this measure.

**Objective:** To control the spread of purple loosestrife (*Lythrum salicaria*) on the Wausau Hydroelectric Project. Surveys completed previously have indicated that purple loosestrife is present throughout the hydroelectric project. Purple loosestrife is an invasive plant that exhibits aggressive characteristics. Wisconsin Public Service agrees to periodically monitor the species and cooperate with the agencies to implement measures to control/eliminate the plant if the results of the surveys warrant it.

### I. Methods

- a. The monitoring methods will include a shoreline survey utilizing a boat to determine a baseline of existing colonies and then continued monitoring to determine the increase of density and abundance of the species.

### II. Frequency of Monitoring

- a. WPS will conduct annual purple loosestrife surveys in late June through August at the Wausau Hydroelectric Project.
- b. If monitoring determines that there is a decrease in purple loosestrife populations, WPS will consult with the resource agencies to determine whether the monitoring frequency should decrease.

### III. Control of Existing Colonies

- a. Small colonies of 1 to 5 plants will be removed from WPS project property during the annual survey. The removal will consist of pulling the stems by hand.
- b. Based on the observations in a given year, WPS may use other management techniques to control the existing populations. This could include, but not limited to, releasing beetles to supplement the existing beetle population.

### IV. Documentation of Existing Colonies

- a. The results of the survey will be completed as outlined in the order approving the purple loosestrife monitoring plan issued July 14, 1997:
  - i. The results of the survey will be displayed on a map of the total project area
  - ii. The map will indicate relative populations based on the following criteria:
    - a. Small Colonies of 1-5 plants
    - b. Medium Colonies of 6-50 plants
    - c. Dense Colonies of >50 plants

**V. Reporting**

- a. WPSC will provide maps and monitoring results to the WDNR and USFWS no later than October 31<sup>st</sup> of each year that monitoring is conducted. The resource agencies will be provided 30 days to comment to on each report. The survey results, including agency comments shall be filed with the Federal Energy Regulatory Commission (FERC) by December 31<sup>st</sup> each year.

**APPENDIX C**  
**DOCUMENTATION OF CONSULTATION**



Wisconsin Public Service Corporation

700 North Adams Street  
P.O. Box 19001  
Green Bay, WI 54307-9001

www.wisconsinpublicservice.com

October 27, 2017

Ms. Cheryl Laatsch  
Wisconsin Department of Natural Resources  
PO Box 7921  
Madison, WI 53707-7921

Dear Ms. Laatsch:

Invasive Species Monitoring Plan

<u>Hydro</u>	<u>FERC Project No.</u>	<u>NATDAM No.</u>	<u>License Article</u>
<b>Wausau</b>	<b>1999</b>	<b>WI00752</b>	<b>408</b>

In accordance with the Federal Energy Regulatory Commission (FERC) Order Amending Purple Loosestrife Monitoring Plan for the Wausau Hydroelectric Project (Project), issued January 20, 2015, Wisconsin Public Service Corporation (WPS) is required to file annual *Galerucella* beetle control and purple loosestrife (PL) monitoring results with the Wisconsin Department of Natural Resources (WDNR) and U.S. Fish & Wildlife Service (FWS) by October 31 annually, for the years 2015 through 2017. After providing the resource agencies 30 days to comment on each report, WPS must file the annual results, including agency comments, with FERC by December 15 of the corresponding year. After three years of data have been collected (2015 – 2017) and consultation with the resource agencies, WPS must file a summary of the data and its recommendation on the schedule for conducting and reporting future PL surveys with FERC.

2017 Purple Loosestrife Survey Results

A survey for PL was completed on July 28, 2017. Twenty-two colonies of PL were identified at the Project. Of the twenty-two colonies, twenty were small or medium colonies and were completely hand pulled and disposed of offsite. Appendix A includes the 2017 PL survey results and figures.

In 2017, a sum total of approximately 4,000 *Galerucella species* beetles (beetles) were released in two different locations to supplement existing beetle populations. WPS observed beetle feeding on sixteen of the twenty-two identified PL colonies.

WPS created a spreadsheet to summarize the last three years of PL survey and beetle release data, see Appendix A. A review of the data shows that the number of colonies has ranged between eight and twenty-two and currently sits at twenty-two. The percentage of colonies with beetle feeding has ranged from 30% to 73% and currently sits at 73%. Beetle populations are still not present in all areas of the reservoir.

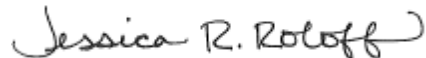
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Ms. Cheryl Laatsch  
October 27, 2017  
Page 2 of 2

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Please provide any comments you may have regarding this report within 30 days. Should you have any questions relative to this material, please do not hesitate to contact me at (920) 433-5558 or [JRRoloff@integrysgroup.com](mailto:JRRoloff@integrysgroup.com).

Sincerely,

A handwritten signature in cursive script that reads "Jessica R. Roloff".

Jes Roloff  
Environmental Consultant

Enclosures

**APPENDICES A & B WERE SPECIFICALLY REMOVED FROM THESE FILINGS IN AN EFFORT TO REDUCE THE OVERALL FILE SIZE. APPENDICES A & B INCLUDED IN THIS FERC FILING ARE IDENTICAL TO THE APPENDICES PROVIDED TO THE RESOURCE AGENCIES**

**NO COMMENTS RECEIVED BY THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES**





Wisconsin Public Service Corporation

700 North Adams Street  
P.O. Box 19001  
Green Bay, WI 54307-9001

www.wisconsinpublicservice.com

October 27, 2017

Mr. Nicholas Utrup  
U.S. Fish & Wildlife Service  
Department of the Interior  
4101 American BLVD E  
Bloomington, MN 55425

Dear Mr. Utrup:

Invasive Species Monitoring Plan

<u>Hydro</u>	<u>FERC Project No.</u>	<u>NATDAM No.</u>	<u>License Article</u>
<b>Wausau</b>	<b>1999</b>	<b>WI00752</b>	<b>408</b>

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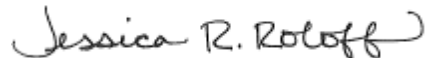
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Mr. Nick Utrup  
October 27, 2017  
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Sincerely,

A handwritten signature in cursive script that reads "Jessica R. Roloff".

Jes Roloff  
Environmental Consultant

Enclosures

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**COMMENTS RECEIVED BY THE US FISH AND WILDLIFE SERVICE**

## **Roloff, Jessica R**

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**From:** Utrup, Nick <nick\_utrup@fws.gov>  
**Sent:** Tuesday, November 28, 2017 6:45 AM  
**To:** Roloff, Jessica R  
**Subject:** Re: Invasive Species Monitoring Reports

WARNING: This email was sent from an external address. Exercise caution when opening links or attachments.  
Thanks Jes, I don't have any comments.

Nick

Nick Utrup  
U.S. Fish and Wildlife Service  
Minnesota/Wisconsin Field Office  
4101 American Boulevard East  
Bloomington, MN 55425

Office: (952) 252-0092 Ext. 204  
FAX: (952) 646-2873  
Email: [Nick\\_Utrup@fws.gov](mailto:Nick_Utrup@fws.gov)

On Mon, Nov 27, 2017 at 3:23 PM, Roloff, Jessica R <[JRRoloff@integrysgroup.com](mailto:JRRoloff@integrysgroup.com)> wrote:

Hi Nick,

I just realized that the due dates I gave for the invasive comments fell on the Holiday weekend. That was not intentional. I was just counting 30 days from when I sent the reports and even though I could obviously see "Thanksgiving" on my calendar; it didn't register!

If you do have comments please feel free to take till the end of the month.

Thanks,

**Jes Roloff**

Environmental Consultant

WEC Energy Group – Business Services

*office* : 920-433-5558

fax : 920-433-1176

email: [JRRoloff@integrysgroup.com](mailto:JRRoloff@integrysgroup.com)

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**From:** Roloff, Jessica R  
**Sent:** Wednesday, November 22, 2017 1:06 PM  
**To:** '[nick\\_utrup@fws.gov](mailto:nick_utrup@fws.gov)'  
**Subject:** Invasive Species Monitoring Reports

Good Afternoon Nick,

I just wanted to send a friendly reminder that comments on the Hydro Electric Project Invasive Species Monitoring Reports for Petenwell and Castle Rock are due by Friday, November 24; Grand Rapids is due by Saturday, November 25; and Wausau is due by Monday, November 27. Please let me know if you have any comments or questions on the reports that were sent last month that you would like included in our final reports to FERC in December.

I appreciate your time.

Thank you

**Jes Roloff**

Environmental Consultant

## WEC Energy Group – Business Services

office : 920-433-5558

fax : 920-433-1176

email: [JRRoloff@integrysgroup.com](mailto:JRRoloff@integrysgroup.com)

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**From:** Roloff, Jessica R  
**Sent:** Tuesday, October 24, 2017 3:12 PM  
**To:** [nick\\_utrup@fws.gov](mailto:nick_utrup@fws.gov)  
**Subject:** WRPCO Invasive Species Monitoring Report

Good Afternoon Mr. Utrup,

In accordance with the Federal Energy Regulatory Commission (FERC) Order Approving the Revised Invasive Species Monitoring Plan for the Petenwell and Castle Rock Hydroelectric Project issued on July 13, 2005 and the Order Amending Purple Loosestrife Control Measures issued July 9, 2009, Wisconsin River Power Company (WRPCO) is to provide monitoring reports of the purple loosestrife (PL) surveys to the Wisconsin Department of Natural Resources (WDNR) and U.S. Fish & Wildlife Service (FWS) by October 31, each year a survey has been completed. Please see attached for the monitoring reports.

Please provide any comments you may have regarding this report within 30 days. Should you have any questions relative to this material, please do not hesitate to contact me.

**Jes Roloff**

Environmental Consultant

WEC Energy Group – Business Services

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