



Wisconsin Public Service Corporation  
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October 22, 2021

Electronically Filed

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

Dear Ms. Laatsch:

**SUBJECT: Purple Loosestrife Monitoring Plan - Purple Loosestrife Monitoring Report**

<u>Hydro</u>	<u>FERC Project No.</u>	<u>NATDAM No.</u>	<u>License Article</u>
Jersey	2476	WI00745	407

In accordance with the Federal Energy Regulatory Commission (FERC) Order Amending the Purple Loosestrife Monitoring Plan for the Jersey Hydroelectric Project issued March 15, 2016, Wisconsin Public Service Corporation (WPS) is to provide a purple loosestrife (PL) survey report 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.

2021 Purple Loosestrife Survey Results

A PL survey was completed on July 29, 2021. Twenty-four colonies of PL were identified at the Project; five were small or medium colonies that were completely hand pulled and disposed of offsite and three plants had the flowers removed. Appendix A includes the 2021 PL survey results.

WPS supported the raising of approximately 31,000 *Galerucella species* beetles (beetle) in 2021 which were released by the Friends of Jersey Lake Group between June – July 2021. WPS observed beetle herbivory on eighteen of the twenty-four identified colonies.

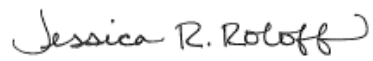
A review of the monitoring data shows that the beetle herbivory as a biocontrol measure at the Project has declined in effectiveness since the last survey in 2018, even though beetles have been released on an annual basis by the Friends of Jersey. When comparing data since 2018; an increase in the number of plants and overall size of PL has been observed. Appendix B includes a PL population comparison table (2009-2014, 2018, 2021).

WPS will continue monitoring for PL every three years as outlined in the Order Amending the Purple Loosestrife Monitoring Plan and working with the Friends of Jersey on biocontrol measures. The next PL survey is schedule for 2024.

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

Ms. Cheryl Laatsch  
October 22, 2021  
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Sincerely,



Jes Roloff  
Environmental Consultant  
Wisconsin Public Service  
2830 S. Ashland Avenue  
Green Bay, WI 54304

JRR / ace

Enc: Appendix A – 2021 Purple Loosestrife Results (4 pages)  
Appendix B – Purple Loosestrife Population Comparison Table (2009 – 2014, 2018, 2021) (2 pages)

cc: Mr. Nicholas Utrup, USFWS

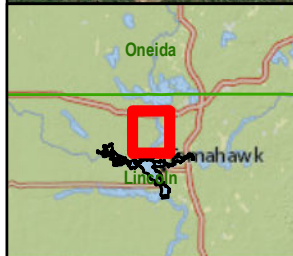
## **APPENDIX A**

### **2021 PURPLE LOOSESTRIFE SURVEY RESULTS**

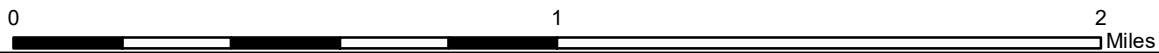




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# WPS--Jersey Hydroelectric Project Purple Loosestrife Survey 2021



Project Boundary

**Purple Loosestrife**

Small

Small; Pulled All Plants

Medium

Large

Beetle Release Site

10/7/2021



## Purple Loosestrife Survey Form

Hydroelectric project: Jersey Hydroelectric Project

Inspection date: July 29, 2021

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
		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	5	11	Pulled all plants.
2	M 6-50	3	2	4	9	
3	L >50	4	3	4	11	Beetle release site.
4	M 6-50	3	1	4	8	Beetle release site.
5	M 6-50	2	3	4	9	
6	M 6-50	4	3	4	11	
7	S 0-5	2	2	4	8	Pulled all plants.
8	S 0-5	3	2	4	9	Pulled all plants.
9	L >50	3	4	5	12	
10	M 6-50	3	2	2	7	
11	S 0-5	3	1	4	8	Pulled all plants.
12	S 0-5	3	3	4	10	Pulled all plants.
13	S 0-5	4	3	4	11	NEW. Deadhead flowers.
14	S 0-5	4	3	4	11	NEW. Out of reach in back wetland area.

15	S 0-5	3	3	4	10	NEW. Out of reach in back wetland area.
16	L >50	3	3	5	11	NEW.
17	S 0-5	3	3	4	10	NEW. Above the OHWM.
18	S 0-5	3	3	4	10	NEW. Deadhead flowers.
19	M 6-50	3	3	4	10	NEW. Above the OHWM.
20	M 6-50	4	4	4	12	NEW. Above the OHWM.
21	M 6-50	3	3	4	10	NEW. Above the OHWM.
22	S 0-5	3	2	5	10	NEW. Above the OHWM.
23	S 0-5	2	3	5	10	NEW. Deadhead flowers.
24	M 6-50	3	2	5	10	NEW.

**APPENDIX B**

**PURPLE LOOSESTRIFE POPULATION COMPARISON TABLE  
(2009-2014, 2018, 2021)**

**Jersey Hydroelectric Project 2009 - 2021 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
2009	28	14	9	5	20	71%	1,000
2010	35	18	10	5	28	80%	2,000
2011	16	7	8	1	15	94%	2,000
2012	21	12	7	2	19	90%	2,000
2013	8	2	5	1	8	100%	3,000
2014	12	4	7	1	10	83%	3,000
2018	12	8	4	0	11	92%	26,000
2021	24	11	10	3	18	75%	

8 Year Average	19.50	9.50	7.50	2.25	16.13	85.71%	
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