



Wisconsin Public Service Corporation

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

[www.wisconsinpublicservice.com](http://www.wisconsinpublicservice.com)

December 6, 2013

FERC Project Nos. 1999 and 2476

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

Dear Secretary Bose:

**Wausau and Jersey Hydroelectric Projects**  
**2013 Noxious Plants Monitoring Reports**

Per the order Amending Purple Loosestrife Monitoring Plan issued October 23, 2008, Wisconsin Public Service Corporation (WPS) is to provide annual updates on the *Galerucella sp.* beetles (beetles) release sites and purple loosestrife populations for a period of six years, beginning in 2009 to the Wisconsin Department of Natural Resources (WDNR) and the U.S. Fish and Wildlife Service (FWS) no later than October 31<sup>st</sup> of each year and to the Federal Energy Regulatory Commission (FERC) with agency comments no later than December 15<sup>th</sup> of each year.

*Jersey Hydroelectric Project*

In 2013, WPS released beetles that were reared on potted purple loosestrife plants. Approximately 3000 beetles were released on July 15, 2013.

A purple loosestrife survey was conducted at the Jersey Hydroelectric Project on July 16, 2013. The results of the survey indicated a total of eight (8) purple loosestrife colonies within the project boundary. Beetle feeding was noted at all eight (8) colonies. Heavy feeding (colonies with 75% to 100% of plants with active beetle feeding) was noted at seven (7) of those colonies. For comparison purposes, 2012 survey results noted a total of twenty-one (21) purple loosestrife colonies. Beetle feeding was noted at nineteen (19) colonies with heavy feeding noted at fourteen (14) colonies. The purple loosestrife figure and data sheet provide the location of the purple loosestrife, location of beetle feeding and the beetle release location. The figure and datasheet are located in Appendix A.

*Wausau Hydroelectric Project*

In 2013, WPS released beetles that were reared on potted purple loosestrife plants. Approximately 3000 beetles were released at the Wausau Hydroelectric Project on July 14, 2013.

WPS completed a purple loosestrife survey on July 16, 2013. The results of the survey indicated a total of twelve (12) purple loosestrife colonies in the project boundary. Beetle feeding was noted at

Kimberly D. Bose  
December 6, 2013  
Page 2 of 2

four (4) colonies. For comparison, the 2012 survey noted a total of fifteen (15) colonies. Beetle feeding was noted at ten (10) colonies.

The purple loosestrife survey figure and datasheet provide the location of the purple loosestrife, location of beetle feeding and beetle release locations. The figure and data sheet are located in Appendix B.

Documentation of submittal of these results to the WDNR and the FWS has been included in Appendix C. WDNR provided comments on the Wausau Hydroelectric Project. FWS did not provide any comments. All comments submitted by the resource agencies and WPS's response are also included in Appendix C.

If you have any questions regarding this report, please do not hesitate to contact Darrin Johnson at (715) 345-7509.

Sincerely,



Terry P. Jensky  
Vice-President – Generation Assets  
For Wisconsin Public Service Corporation

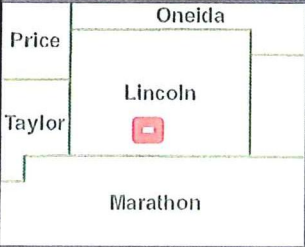
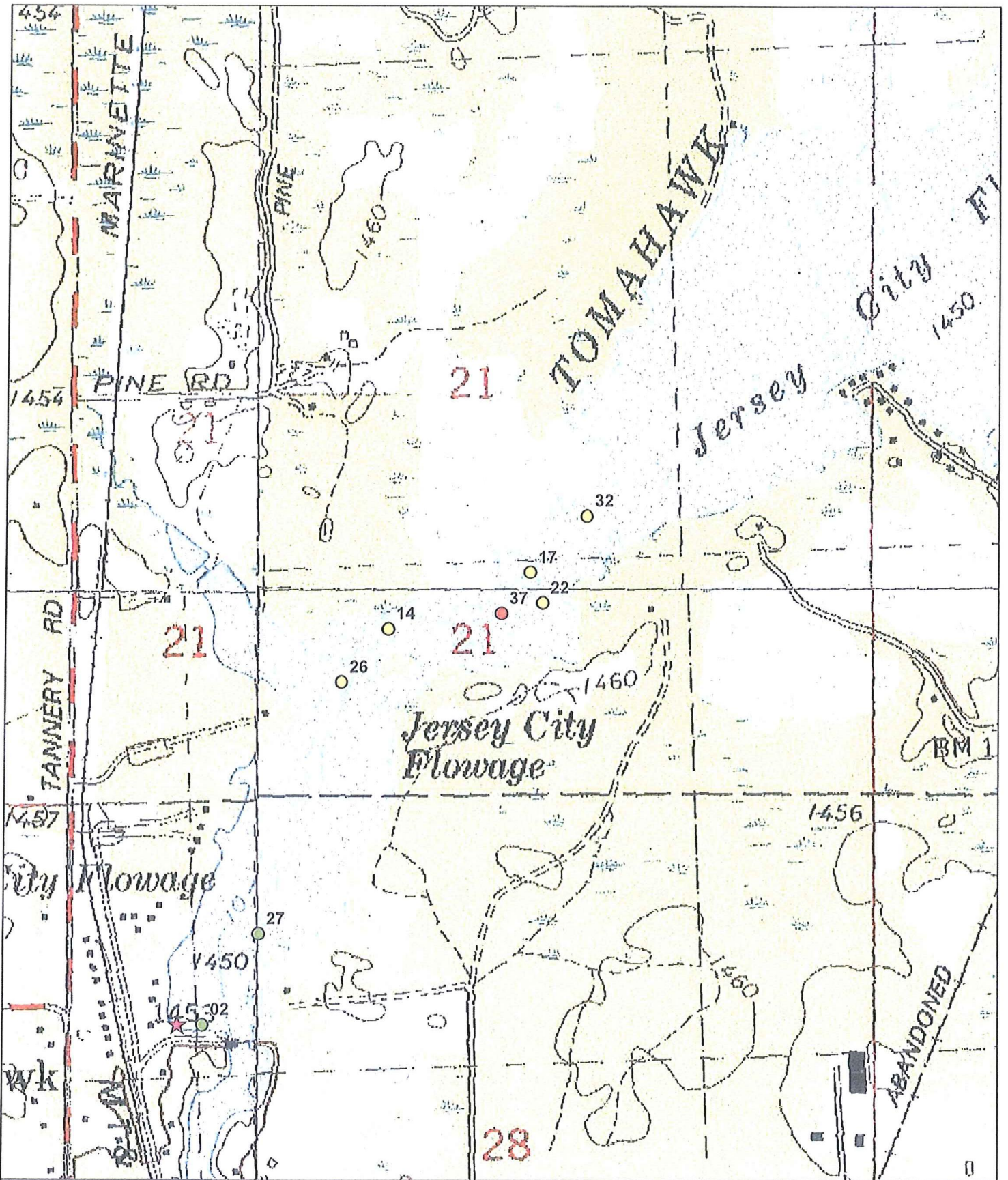
DMJ

Enclosed: Appendix A, Appendix B, Appendix C

CC: Mr. Gil Snyder, WPSC-D2  
Mr. Shawn Puzen, IBS-D2  
Mr. Bill Błoczynski, WPSC-MERH  
Mr. John Zygaj, FERC-CRO

Mr. John Myers, IBS-D2  
Ms. Joan Johaneck, WPSC-D2  
Mr. William Bosacki, WPSC-D2  
Ms. Pat Grant, FERC-CRO

Appendix A  
Jersey Purple Loosestrife Monitoring Results



## 2013 Jersey Flowage Purple Loosestrife Survey



- ★ Beetle Release Site
- Purple Loosestrife
- 0-5 Plants
- 6-50 Plants
- >50 Plants

Date: 10/29/2013

### Purple Loosestrife Survey Form

Hydroelectric Project  
 Inspection Date

7/13/13  
7/13/13

8 sites  
 2 S  
 5 M  
 1 L  
 6 poor vigor  
 2 fair vigor

General Plant Vigor							
Colony Number	Colony Size S 0-5 M 6-50 L >50	Plant Height 4=>4ft 3=2-4ft 2=1-2 ft 1= <1 ft	Plant Flowering 4=100% of plants 3=51-99% of plants 2=26-50% of plants 1= <25% of plants	Beetle Feeding 4=0-25% feeding 3=26-50% feeding 2=51-75% feeding 1=76-100% feeding	Total Plant Vigor 10-12=good 7-9=fair 4-6=poor 0-3=very poor	Notes	GPS Point
1	-	NO	Plants	Noted			
2	S	3	1	1	5	poor	
3	-	NO	Plants	Noted			
4	-	NO	Plants	Noted			
5	-	NO	Plants	Noted			
6	-	NO	Plants	Noted			
7	-	NO	Plants	Noted			
8	-	NO	Plants	Noted			
9	-	NO	Plants	Noted			
10	-	NO	Plants	Noted			
11	-	NO	Plants	Noted			

Purple Loosestrife Survey Form

Hydroelectric Project

Inspection Date

Leisy  
7/16/13

Colony Number	Colony Size S 0-5 M 6-50 L >50	Plant Height 4=>4ft 3=2-4ft 2=1-2 ft 1= <1 ft	General Plant Vigor				Total Plant Vigor 10-12=good 7-9=fair 4-6=poor 0-3=very poor	Notes	GPS Point
			Plant Flowering 4=100% of plants 3=51-99% of plants 2=26-50% of plants 1= <25% of plants	Beetle Feeding 4=0-25% feeding 3=26-50% feeding 2=51-75% feeding 1=76-100% feeding					
12	—	NO	Plants	Noted					
13	—	NO	Plants	Noted					
14	M	3	2	1		6	poor		
15	—	NO	Plants	Noted					
16	—	NO	Plants	Noted					
17	M	2	1	1		4	poor		
18	—	NO	Plants	Noted					
19	<del>P</del>	NO	Plants	Noted					
20	—	NO	Plants	Noted					
21	—	NO	Plants	Noted					
22	M	3	1	1		5	poor		

Purple Loosetrife Survey Form

Hydroelectric Project

Inspection Date

J. E. S. E. G.

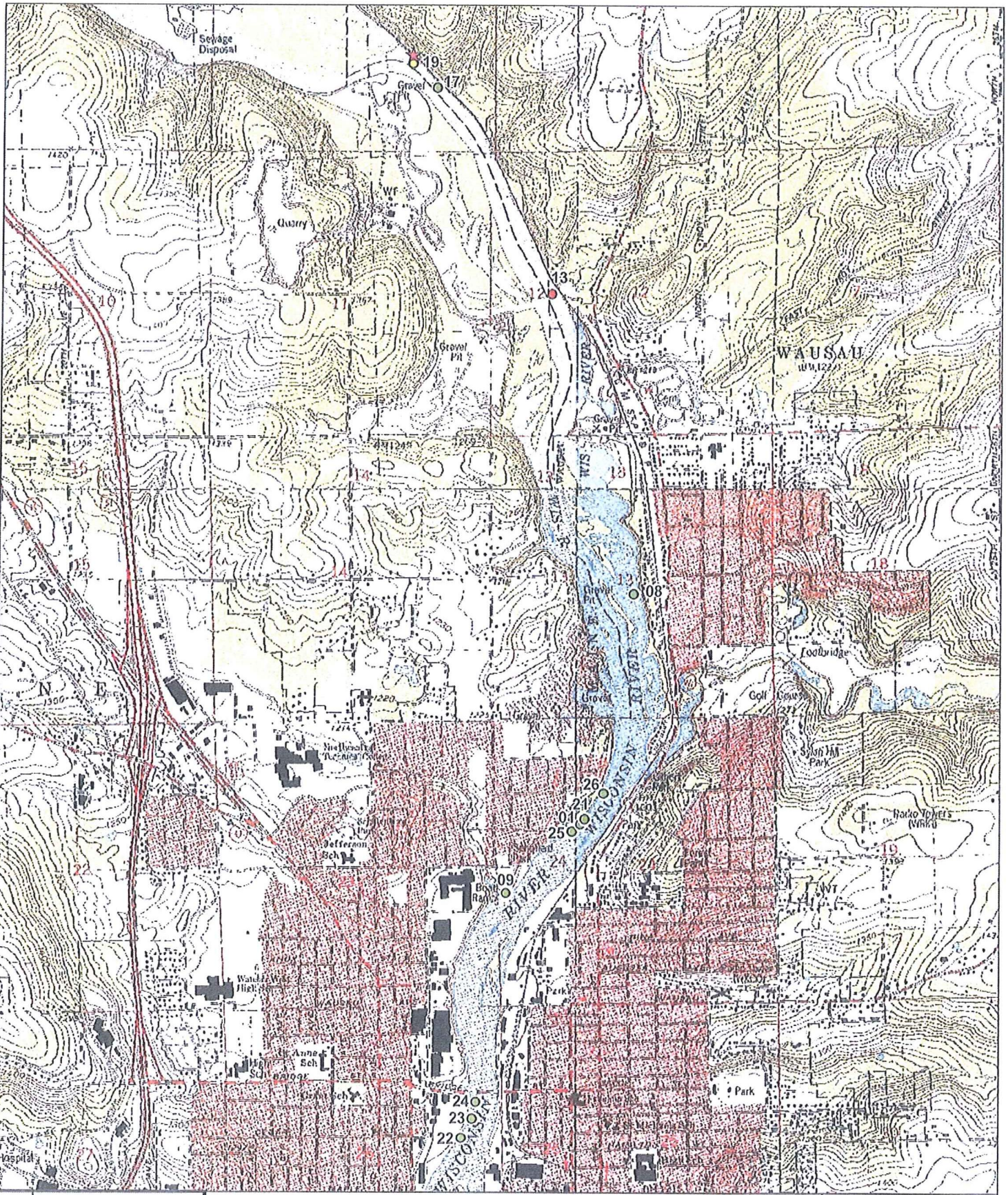
7/16/13

Colony Number	Colony Size S 0-5 M 6-50 L >50	Plant Height 4=>4ft 3=2-4ft 2=1-2 ft 1=<1 ft	General Plant Vigor			Total Plant Vigor 10-12=good 7-9=fair 4-6=poor 0-3=very poor	Notes	GPS Point
			Plant Flowering 4=100% of plants 3=51-99% of plants 2=26-50% of plants 1=<25% of plants	Beetle Feeding 4=0-25% feeding 3=26-50% feeding 2=51-75% feeding 1=76-100% feeding				
23	-	no	Plants	Noted				
24	-	no	Plants	Noted				
25	-	no	Plants	Noted				
26	M	3	1	1	5	poor		
27	S	4	2	1	7	fair		
28	-	no	Plants	Noted	-			
29	-	no	Plants	Noted	-			
30	-	no	Plants	Noted	-			
31	-	no	Plants	Noted	-			
32	M	2	1	1	4	poor		
33	- NO	Plants	Plants	Noted	-			

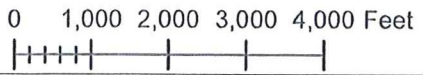




Appendix B  
Wausau Purple Loosestrife Monitoring Results



## 2013 Wausau Purple Loosestrife Survey



Date: 10/29/2013

- ★ Beetle Release Site
- Purple Loosestrife
- 0-5 Plants
- 6-50 Plants
- >50 Plants

**Purple Loosestrife Survey Form**

Hydroelectric Project  
 Inspection Date

*Wiskus 4u*  
*7/16/13*

General Plant Vigor							
Colony Number	Colony Size S 0-5 M 6-50 L >50	Plant Height 4=>4ft 3=2-4ft 2=1-2 ft 1=<1 ft	Plant Flowering 4=100% of plants 3=51-99% of plants 2=26-50% of plants 1=<25% of plants	Beetle Feeding 4=0-25% feeding 3=26-50% feeding 2=51-75% feeding 1=76-100% feeding	Total Plant Vigor 10-12=good 7-9=fair 4-6=poor 0-3=very poor	Notes	GPS Point
1	S	4	4	4	12	NO Feeding	
2	-	NO	Plants	Noted			
3	-	NO	Plants	Noted			
4	-	NO	Plants	Noted			
5	-	NO	Plants	Noted			
6	-	NO	Plants	Noted			
7	-	NO	Plants	Noted			
8	S	3	2	1	6	Fair	
9	S	4	4	4	12	NO Feeding	
10	-	NO	Plants	Noted			
11	-	NO	Plants	Noted			

12 sites

10 S  
 1 M  
 1 L

8 NO feed vigor  
 2 poor vigor  
 2 fair vigor

Purple Loosestrife Survey Form

Hydroelectric Project

Inspection Date

W. Bussler

7/16/13

Colony Number	Colony Size S 0-5 M 6-50 L >50	Plant Height 4=>4ft 3=2-4ft 2=1-2 ft 1= <1 ft	General Plant Vigor			Total Plant Vigor 10-12=good 7-9=fair 4-6=poor 0-3=very poor	Notes	GPS Point
			Plant Flowering 4=100% of plants 3=51-99% of plants 2=26-50% of plants 1= <25% of plants	Beetle Feeding 4=0-25% feeding 3=26-50% feeding 2=51-75% feeding 1=76-100% feeding				
12	-	-	-	-	-			
13	L	2	2	1	5	poor		
14	-	NO	Plants	Noted				
15	-	NO	Plants	Noted				
16	-	NO	Plants Noted					
17	S	3	4	1	8	fair		
18	-	NO	Plants	Noted				
19	M	3	4	1	8	fair		
20	-	NO	Plants	Noted				
21	S	4	4	4	12	NO Feeding		
22	S	4	4	4	12	NO Feeding		



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](http://www.wisconsinpublicservice.com)

October 30, 2013

FERC Project Nos. 1999 and 2476

Cheryl Laatsch	Nick Utrup
WDNR	USFWS
N7725 Hwy 28	4101 American Boulevard E
Horicon, WI 53032	Bloomington, MN 55425

Dear Mr. Utrup and Ms. Laatsch:

**RE: 2013 Noxious Plants Monitoring Reports, Wausau and Jersey Hydroelectric Projects**

Per the order a Amending Purple Loosestrife Monitoring Plan issued October 23, 2008, Wisconsin Public Service Corporation (WPS) is to provide annual updates on the *Galerucella sp.* beetles (beetles) release sites and purple loosestrife populations for a period of six years, beginning in 2009 to the Wisconsin Department of Natural Resources (WDNR) and the U.S. Fish and Wildlife Service (FWS) no later than October 31<sup>st</sup> of each year and to the Federal Energy Regulatory Commission (FERC) with agency comments no later than December 15 of each year.

*Jersey Hydroelectric Project*

In 2013, WPS released beetles that were reared on potted purple loosestrife plants. Approximately 3000 beetles were released on July 15, 2013.

A purple loosestrife survey was conducted at the Jersey Hydroelectric Project on July 16, 2013. The results of the survey indicated a total of eight (8) purple loosestrife colonies within the project boundary. Beetle feeding was noted at all eight (8) colonies. Heavy feeding (colonies with 75% to 100% of plants with active beetle feeding) was noted at seven (7) of those colonies. For comparison purposes, 2012 survey results noted a total of twenty-one (21) purple loosestrife colonies. Beetle feeding was noted at nineteen (19) colonies with heavy feeding noted at fourteen(14) colonies. The purple loosestrife figure and data sheet provide the location of the purple loosestrife, location of beetle feeding and the beetle release location. The figure and datasheet are located in Appendix A.

*Wausau Hydroelectric Project*

In 2013, WPS released beetles that were reared on potted purple loosestrife plants. Approximately 3000 beetles were released at the Wausau Hydroelectric Project on July 14, 2013.

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The purple loosestrife survey figure and datasheet provide the location of the purple loosestrife, location of beetle feeding and beetle release locations. The figure and data sheet are located in Appendix B.

If you have any questions regarding this report, please do not hesitate to contact me at (715) 345-7509.

Sincerely,

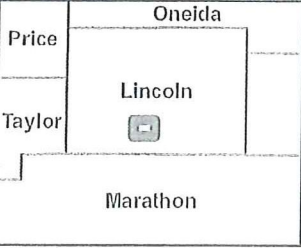
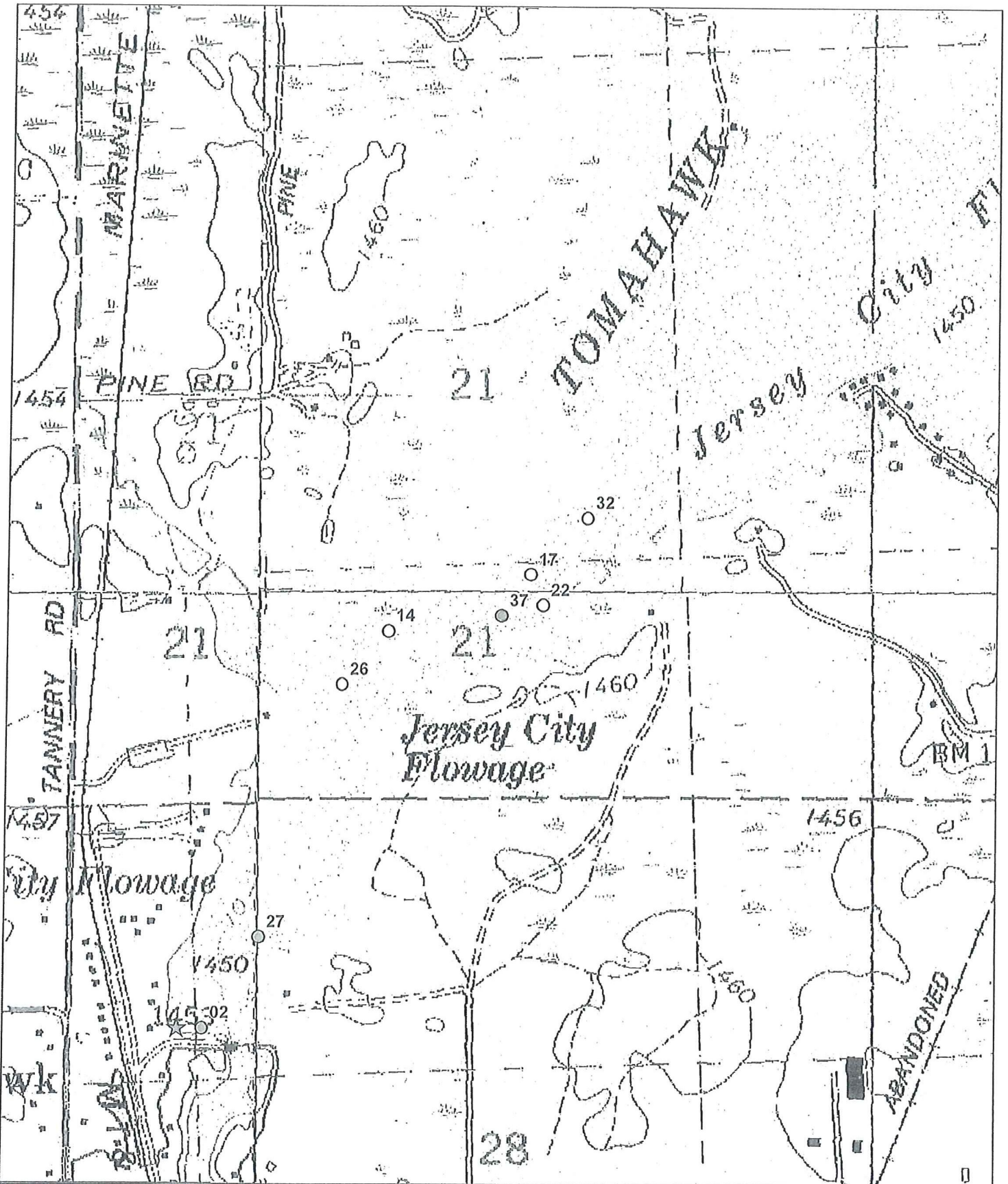
A handwritten signature in black ink, appearing to read "Darrin Johnson", with a long horizontal flourish extending to the right.

Darrin Johnson  
Environmental Consultant

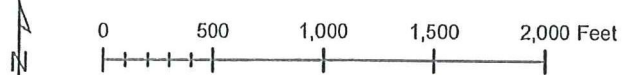
Enc.



Appendix A  
Jersey Purple Loosestrife Monitoring Results



## 2013 Jersey Flowage Purple Loosestrife Survey



Date: 10/29/2013

- ★ Beetle Release Site
- Purple Loosestrife
- 0-5 Plants
- 6-50 Plants
- >50 Plants

Purple Loosestrife Survey Form

Hydroelectric Project

Inspection Date

SEELY  
7/16/13

8 sites  
25  
5M  
1L  
6 poor vigor  
2 fair vigor

General Plant Vigor							
Colony Number	Colony Size S 0-5 M 6-50 L >50	Plant Height 4=>4ft 3=2-4ft 2=1-2 ft 1= <1 ft	Plant Flowering 4=100% of plants 3=51-99% of plants 2=26-50% of plants 1= <25% of plants	Beetle Feeding 4=0-25% feeding 3=26-50% feeding 2=51-75% feeding 1=76-100% feeding	Total Plant Vigor 10-12=good 7-9=fair 4-6=poor 0-3=very poor	Notes	GPS Point
1	-	NO	Plants	Noted			
2	S	3	1	1	5	Poor	
3	-	NO	Plants	Noted			
4	-	NO	Plants	Noted			
5	-	NO	Plants	Noted			
6	-	NO	Plants	Noted			
7	-	NO	Plants	Noted			
8	-	NO	Plants	Noted			
9	-	NO	Plants	Noted			
10	-	NO	Plants	Noted			
11	-	NO	Plants	Noted			

Purple Loosestrife Survey Form

Hydroelectric Project

Inspection Date

Jersey  
7/16/13

Colony Number	Colony Size S 0-5 M 6-50 L >50	Plant Height 4=>4ft 3=2-4ft 2=1-2 ft 1= <1 ft	General Plant Vigor			Total Plant Vigor 10-12=good 7-9=fair 4-6=poor 0-3=very poor	Notes	GPS Point
			Plant Flowering 4=100% of plants 3=51-99% of plants 2=26-50% of plants 1= <25% of plants	Beetle Feeding 4=0-25% feeding 3=26-50% feeding 2=51-75% feeding 1=76-100% feeding	Plant Flowering 4=100% of plants 3=51-99% of plants 2=26-50% of plants 1= <25% of plants			
12	—	NO	Plants	Noted				
13	—	NO	Plants	Noted				
14	M	3	2	1	6	poor		
15	—	NO	Plants	Noted				
16	—	NO	Plants	Noted				
17	M	2	1	1	4	poor		
18	—	NO	Plants	Noted				
19	<del>P</del>	NO	Plants	Noted				
20	—	NO	Plants	Noted				
21	—	NO	Plants	Noted				
22	M	3	1	1	5	poor		

Purple Loosestrife Survey Form

Hydroelectric Project

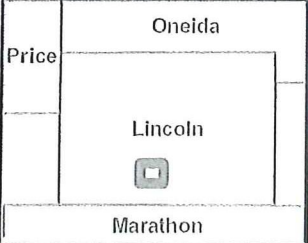
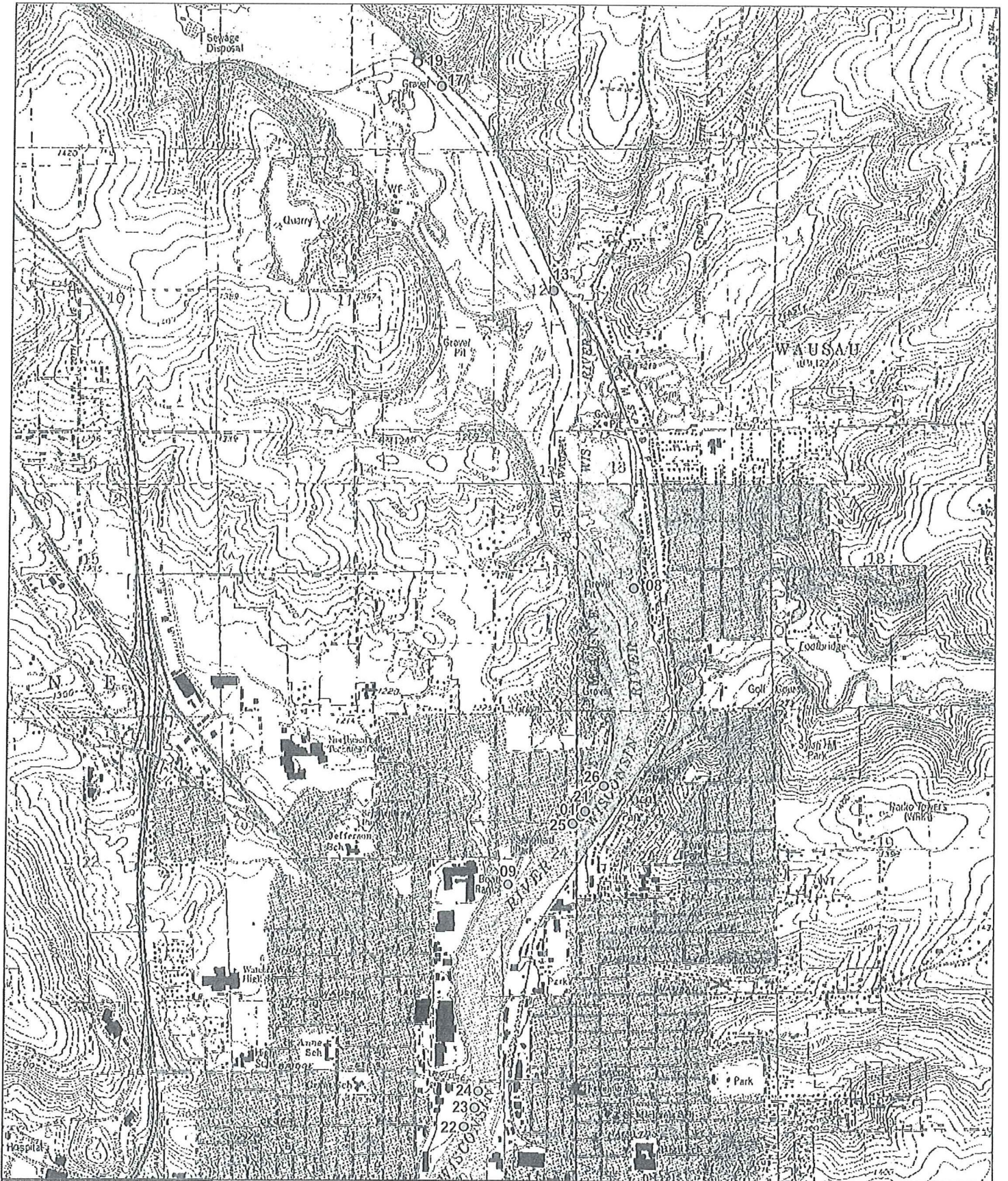
Inspection Date

Jerry  
11/11/13

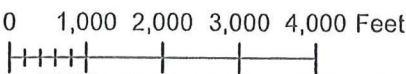
General Plant Vigor							
Colony Number	Colony Size S 0-5 M 6-50 L >50	Plant Height 4=>4ft 3=2-4ft 2=1-2 ft 1= <1 ft	Plant Flowering 4=100% of plants 3=51-99% of plants 2=26-50% of plants 1= <25% of plants	Beetle Feeding 4=0-25% feeding 3=26-50% feeding 2=51-75% feeding 1=76-100% feeding	Total Plant Vigor 10-12=good 7-9=fair 4-6=poor 0-3=very poor	Notes	GPS Point
23	-	no	Plants	Noted			
24	-	no	Plants	Noted			
25	-	no	Plants	Noted			
26	M	3	1	1	5	poor	
27	S	4	2	1	7	fair	
28	-	no	Plants	Noted	-		
29	-	no	Plants	Noted	-		
30	-	no	Plants	Noted	-		
31	-	no	Plants	Noted	-		
32	M	2	1	1	4	poor	
33	- NO	Plants	Plants	Noted	-		



Appendix B  
Wausau Purple Loosestrife Monitoring Results



## 2013 Wausau Purple Loosestrife Survey



Date: 10/29/2013

- ★ Beetle Release Site
- Purple Loosestrife
- 0-5 Plants
- 6-50 Plants
- >50 Plants



Purple Loosestrife Survey Form

Hydroelectric Project  
 Inspection Date

*W. K. A. C.*  
*7/16/13*

General Plant Vigor							
Colony Number	Colony Size S 0-5 M 6-50 L >50	Plant Height 4=>4ft 3=2-4ft 2=1-2 ft 1= <1 ft	Plant Flowering 4=100% of plants 3=51-99% of plants 2=26-50% of plants 1= <25% of plants	Beetle Feeding 4=0-25% feeding 3=26-50% feeding 2=51-75% feeding 1=76-100% feeding	Total Plant Vigor 10-12=good 7-9=fair 4-6=poor 0-3=very poor	Notes	GPS Point
1	S	4	4	4	12	NO Feeding	
2	-	NO	Plants	Noted			
3	-	NO	Plants	Noted			
4	-	NO	Plants	Noted			
5	-	NO	Plants	Noted			
6	-	NO	Plants	Noted			
7	-	NO	Plants	Noted			
8	S	3	2	1	6	Poor	
9	S	4	4	4	12	NO Feeding	
10	-	NO	Plants	Noted			
11	-	NO	Plants	Noted			

12 sites

10 S  
 1 M  
 1 L

8 NO feed vigor  
 2 poor vigor  
 2 fair vigor

Purple Loosestrife Survey Form

Hydroelectric Project

Inspection Date

W. A. S. A. C.

7/16/13

Colony Number	Colony Size S 0-5 M 6-50 L >50	Plant Height 4=>4ft 3=2-4ft 2=1-2 ft 1= <1 ft	General Plant Vigor			Total Plant Vigor 10-12=good 7-9=fair 4-6=poor 0-3=very poor	Notes	GPS Point
			Plant Flowering 4=100% of plants 3=51-99% of plants 2=26-50% of plants 1= <25% of plants	Beetle Feeding 4=0-25% feeding 3=26-50% feeding 2=51-75% feeding 1=76-100% feeding				
12	-	-	-	-	-			
13	L	2	2	1	5	poor		
14	-	NO	Plants	Noted				
15	-	NO	Plants	Noted				
16	-	NO	Plants	Noted				
17	S	3	4	1	8	fair		
18	-	NO	Plants	Noted				
19	M	3	4	1	8	Fair		
20	-	NO	Plants	Noted				
21	S	4	4	4	12	NO Feeding		
22	S	4	4	4	12	NO Feeding		



**WDNR Comments on the Wausau Hydroelectric Project (P-1999)  
Purple Loosestrife Monitoring Report**

## Johnson, Darrin M

---

**From:** Laatsch, Cheryl - DNR <Cheryl.Laatsch@wisconsin.gov>  
**Sent:** Wednesday, November 20, 2013 9:38 AM  
**To:** Johnson, Darrin M  
**Subject:** DNR comments, Wausau Invasive report

FERC No. 1999. Wausau colonies need to be monitored throughout next year as well as beetle populations to determine if supplemental stocking is needed.

This report is also a good example of integration into the SWIMS database for data collection and tracking. I would like to see the facility trained on using the SWIMS data entry forms for AIS and use the SWIMS database as a means to track future monitoring of the populations in the extent of their project areas. I would like to see each population GPS's and tracked yearly with indications of management actions taken in future year's reports and this information also transferred into the SWIMS database. It would also be great if they could provide information on observations of any other non-native invasive species and use already established DNR forms to track all other species observations.

Please let me know if you have any questions. Thanks

Cheryl Laatsch  
Statewide FERC Coordinator  
Wisconsin Dept of Natural Resources  
N7725 Hwy 28  
Horicon WI 53032  
(T) 920-387-7869 (Fax) 920-387-7888  
[Cheryl.laatsch@wisconsin.gov](mailto:Cheryl.laatsch@wisconsin.gov)

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**From:** Johnson, Darrin M [mailto:DMJohnson@integrysgroup.com]  
**Sent:** Wednesday, October 30, 2013 2:03 PM  
**To:** Laatsch, Cheryl - DNR; Nick Utrup (nick\_utrup@fws.gov)  
**Subject:** Wausau and Jersey invasive report

Nick and Cheryl,

Please find attached the purple loosestrife monitoring report for Wausau and Jersey hydroelectric projects. If you have any questions or comments, feel free to contact me.

### Darrin M. Johnson

Environmental Consultant | Environmental Services | Integrys Business Support, LLC

715-345-7509

715-697-3130 *cell*

715-345-7505 *fax*

[dmjohnson@integrysgroup.com](mailto:dmjohnson@integrysgroup.com)

[www.integrysgroup.com](http://www.integrysgroup.com)

## **WPS Response to WDNR Comments on the Wausau Hydroelectric Project (P-1999) Purple Loosestrife Monitoring Report**

**DNR Comment:** Wausau colonies need to be monitored throughout the next year as well as beetle populations to determine if supplemental stocking is needed.

**WPS Response:** WPS will continue to monitor purple loosestrife colonies and conduct beetle releases per the terms Article 408, Purple Loosestrife Monitoring Plan, issued on July 14, 1997 and amended on December 10, 2008. Per the plan, WPS will continue to conduct annual surveys for purple loosestrife in the months of June or July, document colonies on a map, release galerucella beetles annually through 2014, and provide a report of activities to the WDNR, Fish and Wildlife Service (FWS) and the Federal Energy Regulatory Commission (FERC) each year.

**DNR Comment:** This report is also a good example of integration into the SWIMS database for data collection and tracking. I would like to see the facility trained on using the SWIMS data entry forms for AIS and use the SWIMS database as a means to track future monitoring of the populations in the extent of their project areas.

**WPS Response:** WPS will continue to provide the WDNR invasive species plant information as outlined in Article 408, Purple Loosestrife Monitoring Plan, issued on July 14, 1997 and amended on December 10, 2008. The Surface Water Integrated Monitoring System (SWIMS) is a WDNR data system. The WDNR can choose to include this data into the SWIMS database as they see fit.

**WDNR Comment:** I would like to see each population GPS's and tracked yearly with indications of management actions taken in future year's reports and this information also transferred into the SWIMS database.

**WPS Response:** WPS will provide GPS locations of purple loosestrife colonies in future reports. Management actions to be taken are identified in Article 408, Purple Loosestrife Monitoring Plan, issued on July 14, 1997 and amended on December 10, 2008. According to the plan, WPS is to release galerucella beetles from 2009 through 2014. After six years of control data have been collected (2009-2014), WPS is to file a summary of the data and its recommendation, after consulting with the resource agencies on the schedule for conducting and reporting future purple loosestrife surveys with the FERC. FERC will determine the schedule for conducting and filing future purple loosestrife monitoring and control reports. The Surface Water Integrated Monitoring System (SWIMS) is a WDNR data system. The WDNR can choose to include this data into the SWIMS database as they see fit.

**WDNR Comment:** It would also be great if they could provide information on observations of any other non-native invasive species and use already established DNR forms to track all other species observations.

**WPS Response:** WPS will continue to provide invasive species plant information to the WDNR as outlined in Article 408.

**WDNR Comment:** Please let me know if you have any other questions. Thanks.

**WPS Response:** Comment noted.

**No Comments Received From WDNR on the Jersey Hydroelectric Project (P-2476)  
Purple Loosestrife Monitoring Report**

**No Comments Received From FWS on the Wausau (P-1999) or  
Jersey (P-2476) Hydroelectric Project Purple Loosestrife Monitoring Reports**



Document Content(s)

20131206 Wausau-Jersey FERC Invasives Report.PDF.....1-2

20131206 Wausau and Jersey Exotic Report Appendices.PDF.....3-32