



Wisconsin River Power Company  
(owners of the Petenwell & Castle Rock Hydroelectric Plants)  
P.O. Box 19001  
Green Bay, WI 54307-9001

December 27, 2007

Ms. Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
Mail Code: DTCA, HL 21.3  
888 First Street, N.E.  
Washington, DC 20426

FILED  
OFFICE OF THE  
SECRETARY  
2007 DEC 28 P 3 28  
FEDERAL ENERGY REGULATORY COMMISSION

Dear Secretary Bose:

Invasive Species Monitoring for FERC Project No. 1984-078 151

As per the revised order approving the invasive species monitoring plan pursuant to the license Article 408 for the Petenwell and Castle Rock Project (FERC Project No. 1984-078) issued on July 13, 2005, Wisconsin River Power Company (WRPCO) is submitting the purple loosestrife, Eurasian watermilfoil, and zebra mussel survey results.

The Petenwell and Castle Rock Projects were surveyed for purple loosestrife from July 9, 2007 through July 11, 2007. The presence of purple loosestrife was identified on the Petenwell Project, mainly on the north end. Nine colonies were also identified on the southeast end of the project and two colonies were discovered on the southwest end of the project. When small colonies and edge colonies were discovered, WRPCO sprayed and/or cut the identified colonies, where possible. No purple loosestrife colonies were identified on the Castle Rock Project.

WRPCO also reported *Galerucella* Beetle feeding on fourteen colonies of purple loosestrife. On those colonies only the outlying purple loosestrife plants were cut. WRPCO has not introduced *Galerucella* Beetles to the Petenwell or Castle Rock Projects, but is aware of a release conducted in 2006 in the Wisconsin River on the south end of the Wisconsin River, upstream of the Petenwell Project.

The 2007 Petenwell and Castle Rock Project purple loosestrife results and figures, including removal methods, are attached in Appendix A. Also a comparison of the 2006 versus 2007 purple loosestrife amounts and colony size is included in Appendix A.

Eurasian watermilfoil surveys are completed tri-annually with the next survey being scheduled for 2009.

Ms. Kimberly D. Bose, Secretary  
December 27, 2007  
Page 2 of 2

Per the FERC correspondence to WRPCO, dated June 5, 2006, WRPCO is required to conduct monthly inspections for zebra mussels on the Petenwell and Castle Rock Flowages. The inspections are to be conducted once each month from May through September on an annual basis. The surveys are also to be conducted during the winter drawdown period and for any maintenance related drawdown. Zebra mussels were observed in 2006 on a navigational structure on the north end of the Petenwell Project. No zebra mussels were observed during the 2007 sub sampler survey activities. The results of the monthly surveys are attached as Appendix B.

Documentation of submittal of these results to the Agencies can be found in Appendix C.

Should you have any questions or require additional information, please do not hesitate to contact James Nuthals at (920) 433-1460

Sincerely,

Handwritten signature of Terry P. Jensky in cursive, with "(for)" written in parentheses below the signature.

Terry P. Jensky  
Vice President - Energy Supply Operations  
for Wisconsin River Power Company  
Telephone: (715) 355-2047

syx

Enc.

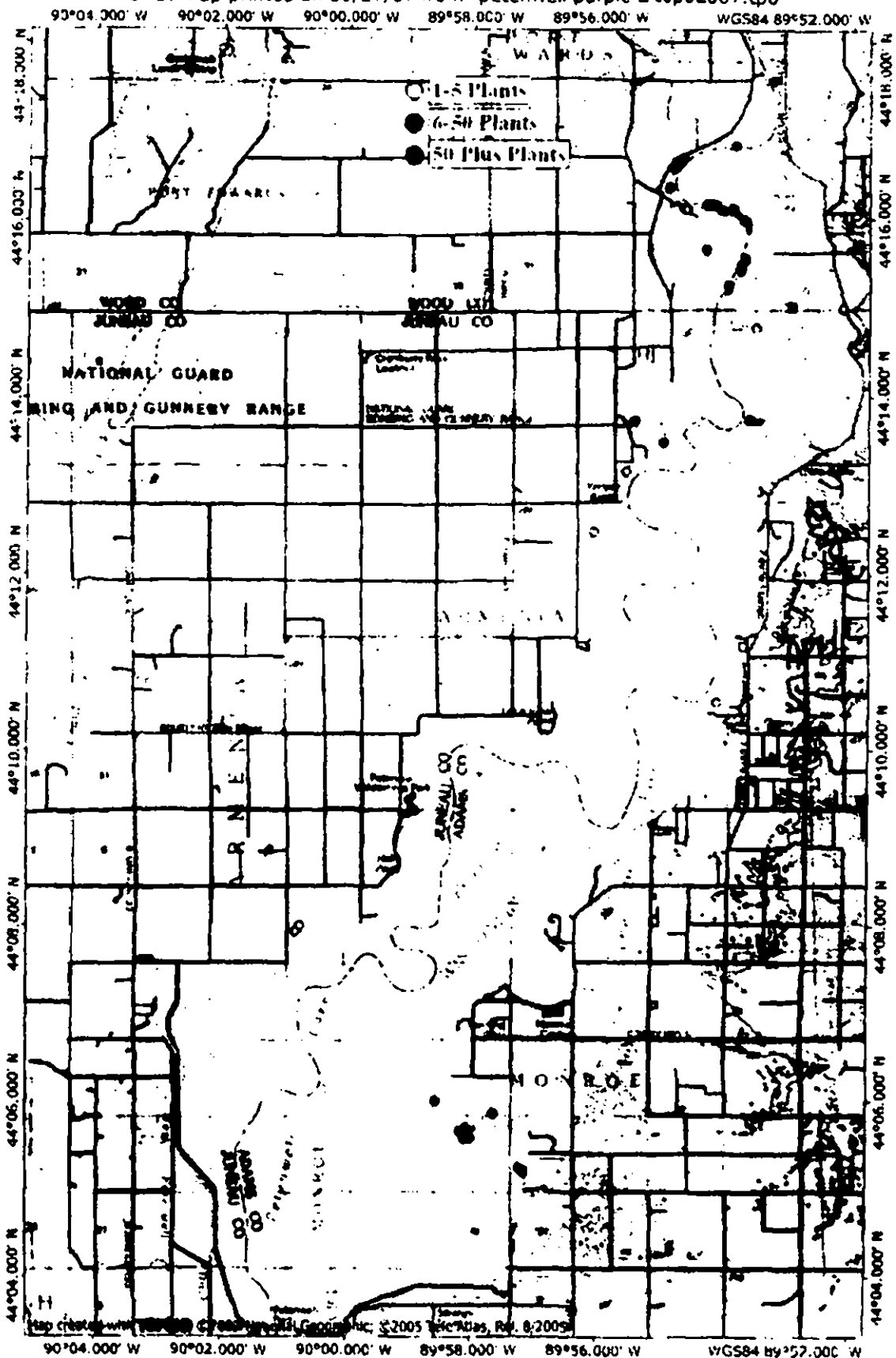
cc: Ms. Joan Johaneck, WPSC - D2  
Mr. Virgil Schlorke, WRPCO  
Mr. Bruce Crocker, WPSC - D2

Mr. Howard Giesler, WPSC - PUL  
Mr. Gil Snyder, WPSC - D2  
Ms. Carlisa Linton, FERC - DC

## **APPENDIX A**

### **PURPLE LOOSESTRIFE SURVEY - 2007**

TOPOI map printed on 09/27/07 from "petenwell purple L topo2007.tpo"



Map created with [www.topographic.com](http://www.topographic.com) © 2005 Topographic, Inc. S2005 TopoAtlas, Rev. 8/2005

NATIONAL GEOGRAPHIC

0	1	2	3	4	5
0	1	2	3	4	5

100'

## Purple Loosestrife Survey 2007

Number	Latitude	Longitude	Amount	Control Method/Notes	Beetle Feeding
1	N 44 16.714	W 89 54.602	1 to 5	cut/spray	
2	N 44 16.533	W 89 54.696	6 to 50	cut/spray	
3 start	N 44 16.651	W 89 54.703	50+	cut/spray ends of channel	cella feeding
3 end	N 44 16.640	W 89 54.716	50+	cut/spray ends of channel	
4	N 44 16.623	W 89 54.734	6 to 50	cut/spray	
5 start	N 44 16.580	W 89 54.779	6 to 50	cut/spray	cella feeding
5 end	N 44 16.550	W 89 54.794	6 to 50	cut/spray	
6 start	N 44 16.365	W 89 54.871	50+	cut/spray outliers	
6 end	N 44 16.334	W 89 55.651	50+	cut/spray outliers	
7	N 44 16.119	W 89 54.639	1 to 5	cut/ spray	
8	N 44 16.110	W 89 54.590	1 to 5	cut/ spray	
9	N 44 16.152	W 89 54.286	1 to 5	cut/ spray	
10	N 44 16.157	W 89 54.245	50+	none	
11	N 44 16.154	W 89 54.195	1 to 5	cut/spray	
12	N 44 16.157	W 89 54.175	50+	around island	cella feeding
13	N 44 16.085	W 89 54.018	50+	none	cella feeding
14 start	N 44 16.038	W 89 53.904	50+	around island	
14 end	N 44 16.132	W 89 53.985	50+	around island	
15 start	N 44 15.919	W 89 53.627	50+	none	
15 end	N 44 15.823	W 89 53.621	50+	none	
16	N 44 15.657	W 89 54.291	50+	cut/spray	cella feeding
17 start	N 44 15.185	W 89 53.984	50+	none	
17 end	N 44 15.232	W 89 53.951	50+	none	
18 start	N 44 15.386	W 89 53.254	50+	none	cella feeding
18 end	N 44 15.428	W 89 53.746	50+	none	cella feeding
19 start	N 44 15.455	W 89 53.759	50+	none	cella feeding
19 end	N 44 15.560	W 89 53.661	50+	none	cella feeding
20 start	N 44 16.831	W 89 53.680	50+	entire island	70% damaged by cella
20 end	N 44 16.836	W 89 53.703	50+	entire island	70% damaged by cella
21	N 44 17.557	W 89 53.214	6 to 50	cut/spray	
22	N 44 14.766	W 89 53.482	1 to 5	cut/spray	
23	N 44 14.995	W 89 52.922	50+	none	some cella feeding
24	N 44 14.973	W 89 52.113	1 to 5	cut/spray	
25 start	N 44 13.705	W 89 53.385	50+	cut/ spray outliers	some cella feeding
25 end	N 44 13.729	W 89 53.604	50+	cut/ spray outliers	some cella feeding
26	N 44 13.727	W 89 55.417	6 to 50	cut/spray	
27	N 44 13.467	W 89 54.923	50+	cut/spray	
28	N 44 13.146	W 89 55.562	1 to 5	cut/spray	
29	N 44 12.470	W 89 56.062	1 to 5	cut/spray	
30	N 44 10.546	W 89 54.088	1 to 5	cut/spray	
31	N 44 07.907	W 90 00.779	1 to 5	cut/spray	
32	N 44 07.962	W 90 00.708	1 to 5	cut/spray	
33 start	N 44 05.574	W 89 58.113	50+	cut/ spray outliers	
33 end	N 44 05.560	W 89 58.087	50+	cut/ spray outliers	
34 start	N 44 05.680	W 89 58.064	50+	cut/ spray outliers	
34 end	N 44 05.690	W 89 57.991	50+	cut/ spray outliers	
35	N 44 05.220	W 89 57.215	6 to 50	cut/ spray	
36	N 44 05.177	W 89 57.143	6 to 50	cut/ spray	
37 start	N 44 05.165	W 89 57.141	50+	cut/spray outliers	
37 end	N 44 05.153	W 89 57.136	50+	cut/spray outliers	
38	N 44 05.847	W 89 57.615	50+	cut/spray outliers	
39	N 44 05.988	W 89 58.547	50+	cut/spray outliers	
40	N 44 05.636	W 89 58.160	50+	cut/spray outliers	

**Castle Rock Purple Loosestrife Survey 2007**

<b>Size</b>	<b>Locations identified in 2006</b>	<b>Locations identified in 2007</b>
1 to 5	0	0
6 to 50	2	0
50+	1	0
<b>Total</b>	<b>3</b>	<b>0</b>

**Peterwell Purple Loosestrife Survey 2007**

<b>Size</b>	<b>Locations identified in 2006</b>	<b>Locations identified in 2007</b>
1 to 5	4	12
6 to 50	10	8
50+	28	20
<b>Total</b>	<b>42</b>	<b>40</b>

## **APPENDIX B**

### **ZEBRA MUSSEL SURVEYS - 2007**

**ZEBRA MUSSEL INSPECTION RESULTS  
WRPCO HYDROELECTRIC PROJECTS**

**HYDRO NAME**

- Petawell Flowage
- Castle Rock Flowage

INSPECTION TYPE:  MONTHLY INSPECTION       INSPECTION DURING DRAWDOWN  
DATE: 5/29/07  
COMMENTS/RESULTS: No Mussels at this time

INSPECTION TYPE:  MONTHLY INSPECTION       INSPECTION DURING DRAWDOWN  
DATE: 6/15/07  
COMMENTS/RESULTS: No Mussels at this time

INSPECTION TYPE:  MONTHLY INSPECTION       INSPECTION DURING DRAWDOWN  
DATE: 7/17/07  
COMMENTS/RESULTS: NO MUSSELS AT THIS TIME

INSPECTION TYPE:  MONTHLY INSPECTION       INSPECTION DURING DRAWDOWN  
DATE: 8/16/07  
COMMENTS/RESULTS: NO MUSSEL AT THIS TIME

INSPECTION TYPE:  MONTHLY INSPECTION       INSPECTION DURING DRAWDOWN  
DATE: 9/17/07  
COMMENTS/RESULTS: NO MUSSEL AT THIS TIME

INSPECTION TYPE:  MONTHLY INSPECTION       INSPECTION DURING DRAWDOWN  
DATE:  
COMMENTS/RESULTS:



**ZEBRA MUSSEL INSPECTION RESULTS  
WRPCO HYDROELECTRIC PROJECTS**

**HYDRO NAME**

- Peterwell Flowage
- Castle Rock Flowage

INSPECTION TYPE:  MONTHLY INSPECTION       INSPECTION DURING DRAWDOWN  
 DATE: 5/29/07  
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 DATE: 6/15/07  
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INSPECTION TYPE:  MONTHLY INSPECTION       INSPECTION DURING DRAWDOWN  
 DATE: 7/13/07  
 COMMENTS/RESULTS: No Mussels at this time

INSPECTION TYPE:  MONTHLY INSPECTION       INSPECTION DURING DRAWDOWN  
 DATE: 8/14/07  
 COMMENTS/RESULTS: No Mussels at this time

INSPECTION TYPE:  MONTHLY INSPECTION       INSPECTION DURING DRAWDOWN  
 DATE: 9-17-07  
 COMMENTS/RESULTS: No Mussels at this time

INSPECTION TYPE:  MONTHLY INSPECTION       INSPECTION DURING DRAWDOWN  
 DATE:  
 COMMENTS/RESULTS:

**APPENDIX C**

**DOCUMENTATION OF SUBMITTAL - 2007**



Wisconsin River Power Company  
(owners of the Petenwell & Castle Rock Hydroelectric Plants)  
P.O. Box 19001  
Green Bay, WI 54307-9001

September 28, 2007

Mr. Tyler Yasenak  
U.S. Fish & Wildlife Service  
Department of the Interior  
2661 Scott Tower Drive  
New Franken, WI 54229-9565

Dear Mr. Yasenak:

**Exotic Species Monitoring for FERC Project No. 1984-078**

As per the Federal Energy Regulatory Commission (FERC) order approving purple loosestrife and Eurasian Water Milfoil Monitoring Plan for the Petenwell-Castle Rock Project (FERC Project No. 1984-078) issued on January 22, 2003. Wisconsin River Power Company (WRPCO) is submitting the survey results for purple loosestrife and zebra mussels.

The Petenwell and Castle Rock Projects were surveyed for purple loosestrife from July 9, 2007 through July 11, 2007. The presence of purple loosestrife was identified on the Petenwell Project, mainly on the north end. Nine colonies were also identified on the southeast end of the project and two colonies were discovered on the southwest end of the project. When small colonies and edge colonies were discovered, WRPCO sprayed and/or cut the identified colonies, where possible. No purple loosestrife colonies were identified on the Castle Rock Project.

WRPCO also reported *Galerucella* Beetle feeding on fourteen colonies of purple loosestrife. On those colonies only the outlying purple loosestrife plants were cut. WRPCO has not introduced *Galerucella* Beetles to the Petenwell or Castle Rock Projects, but is aware of a release conducted in 2006 in the Wisconsin River on the south end of the Wisconsin River, upstream of the Petenwell Project.

The Petenwell and Castle Rock Project 2007 purple loosestrife results and figures, including removal methods are attached in Appendix A. Also a comparison of the 2006 vs. 2007, purple loosestrife amounts and colony size is included in Appendix A.

Eurasian watermilfoil surveys are completed tri-annual with the next survey being scheduled for 2009.

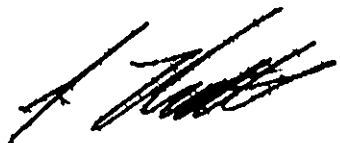
Per the FERC correspondence to WRPCO, dated June 5, 2006, WRPCO is required to conducted monthly inspections for zebra mussels on the Petenwell and Castle Rock

Mr. Tyler Yasenak  
September 28, 2007  
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Flowages. The inspections are to be conducted once each month from May to September on an annual basis. The surveys are also to be conducted during the winter drawdown period and for any maintenance related drawdown. Zebra mussels were observed in 2006 on a navigational structure on the north end of the Petenwell Project. No zebra mussels were observed during the 2007 sub sampler survey activities. The results of the monthly surveys are attached as Appendix B.

Should you have any questions or require additional information, please do not hesitate to contact me at your earliest convenience.

Sincerely,



James D. Nuthals  
Environmental Consultant  
Telephone: (920) 433-1460

syx

Enc.

cc: Ms. Joan Johaneck, WPSC - D2  
Mr. Virgil Schlorke, WRPCO



September 28, 2007

Wisconsin River Power Company  
(owners of the Peterwell & Castle Rock Hydroelectric Plants)  
P.O. Box 18001  
Green Bay, WI 54307-9001

Mr. Scott Watson  
Wisconsin Department of Natural Resources  
Division of Water  
5301 Rib Mountain  
Wausau, WI 54401

Dear Mr. Watson:

Exotic Species Monitoring for FERC Project No. 1984-078

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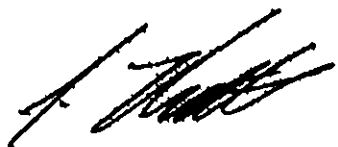
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Mr. Scott Watson  
September 28, 2007  
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