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

December 15, 2009

Ms. Kimberly D. Bose, Secretary
The Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426

Dear Secretary Bose:

Grand Rapids Hydroelectric FERC Project No. 2433 Eurasian Watermilfoil Control Plan Update

As per the Federal Energy Regulatory Commission (FERC) Order Modifying and Approving Eurasian Watermilfoil (EWM) Control Plan issued May 11, 2009 Wisconsin Public Service Corporation (WPS) shall provide a letter detailing the status of the EWM control plan objective to the Michigan Department of Natural Resources (MDNR), U.S. Fish and Wildlife Services (USFWS) and the Wisconsin Department of Natural Resources (WDNR) by October 31 for the next three years beginning in 2009. The four components of the objective are as follows:

(1) Determine if native milfoil weevils are present.
(2) Work with other stakeholders within the Upper Menominee River Basin Watershed to exchange information about EWM presence and control strategies and to obtain information on the genetic characteristics of the EWM populations.
(3) Implement measures to help control the spread of EWM to other water bodies.
(4) Compliance with the FERC Order Modifying and Approving Purple loosestrife and EWM Monitoring Plan issued January 2, 1998.

Additionally, according to the FERC Maintenance and EWM Drawdown and Stranded Aquatic Organism Survey Results Letter dated April 27, 2009 WPS is to provide updates on developments with the MDNR concerning state-listed species recently identified within the project area and how it will affect the Noxious Species Monitoring and Control Measures.

(1) Determine if Native Milfoil Weevils are Present

WPS retained the services of EnviroScience, Inc. (EnviroScience) to complete a study that would evaluate the existing indigenous weevil population, if present, and its distribution throughout the reservoir. If weevils are present, the study would also include counting the number of weevils per plant and determine if a correlation exists between the number of weevils and control of the EWM plants.

Individuals from EnviroScience and WPS completed the survey on July 9, 2009. The plan was to collect approximately 200 samples of EWM plants that were observed scattered throughout 81 acres of the Grand Rapids Reservoir in 2008. However, the EWM observed within the reservoir was very sparse and only a total of 49 stems could be collected. From the stems collected, EnviroScience was able to analyze that a natural population of weevils is present within the reservoir. Additionally, the weevil to EWM plant density was high, at levels that have shown to reduce EWM populations in lacustrine water bodies.

1.36 acres of EWM were observed in 2009. This was the lowest level of plant population observed since the monitoring began in 1998. The EWM populations were scattered throughout the reservoir, and the EWM plants observed were in poor condition. The 2009 Milfoil Weevil Population Study Report is provided in Appendix A.

(2) Work with Other Stakeholders within the Upper Menominee River Basin Watershed to Exchange Information about EWM Presence and Control Strategies and to Obtain Information on the Genetic Characteristics of the EWM Populations

Although WPS conducts periodic conversation with We Energies concerning EWM studies and results from the hydroelectric projects on the Menominee River, the majority of the work and exchange of information with other stakeholders about EWM presence and control is proposed to be implemented in 2010.

(3) Implement Measures to Help Control the Spread of EWM to Other Water Bodies

The 2008 EWM survey results identified EWM within project lands at the state of Michigan boat landing. On May 12, 2009 WPS completed a follow up survey of the Michigan boat landing to determine if EWM was still present. An underwater camera and rake were used during the survey. The aquatic vegetation was too small and could not be retrieved using the rake, however from results of the underwater camera imagines it did appear that small aquatic dicot plants similar to EWM were first emerging.

Based on this observation and the 2008 survey results, WPS contracted a consultant and applied for a Michigan Department of Environmental Quality (MDEQ) permit in order to have the EWM and up to one acre surrounding the Michigan boat landing treated.

WPS again conducted EWM survey activities on July 9, 2009. No EWM was observed at either the Michigan or Wisconsin boat landings. Based on the lack of EWM at and surrounding the boat landing, WPS was under the impression that the Michigan boat landing and surrounding one acre were treated. However upon further inquiry the consultant could not obtain the proper application licenses in time and the area was not treated. The lack of EWM at the boat landing was a coincidence and was consistent with the lack of EWM observed throughout the reservoir.

WPS informed the resource agencies of the situation on July 30, 2009 and indicated that a follow-up survey would be completed in late summer/fall to determine if a fall treatment for EWM would be necessary.

A follow-up survey for EWM at the Michigan boat landing and surrounding one acre was completed on September 9, 2009. No EWM was observed and a fall treatment was not conducted.

During the July 9, 2009 EWM survey activities, a review of the boat landings was completed and determined that invasive species signs were present and up-to-date. Each boat landing provided information on proper cleaning of watercrafts and trailers to avoid spreading invasive species.

Additionally, on September 9, 2009 a zebra mussel informational sticker was added to the invasive species sign at the Wisconsin boat landing. Michigan does not use species specific signage at their boat landings.

(4) Compliance with the FERC Order Modifying and Approving Purple Loosestrife and EWM Monitoring Plan issued January 2, 1998

WPS completed EWM surveys of the transects as approved in the Order Modifying and Approving Purple loosestrife and EWM Monitoring Plan issued January 2, 1998.

The EWM was only observed in 3 of the 15 transects and the EWM observed was extremely sparse and in poor condition. This is significantly less than the EWM population observed during the survey voluntarily completed in 2007 when 12 of the 15 transects contained high densities of EWM.

The 2009 EWM survey also relieved EWM encompassed 1.36 acres, this is far less the 39 acres of EWM observed in 2007 and significantly different than the 81 acres observed in 2008.

The EWM transect survey results including EWM density and EWM survey location figure including stand perimeters are provided in Appendix B.

A purple loosestrife survey of the Grand Rapids Hydroelectric Project was also completed on July 9, 2009. No purple loosestrife was observed within the project boundary.

Monthly inspections of substrate samplers for the presence of zebra mussels were conducted from the months of May through September. Zebra mussels were not found on the substrate samplers during any of the monthly 2009 inspections. However, zebra mussels were observed during maintenance activities at the powerhouse. A summary of the substrate sampler results has been included in Appendix C.

Updates on Developments Concerning State-Listed Species Recently Identified within the Project Area and how it will affect the Noxious Species Monitoring and Control Measures

On July 16, 2009, WPS worked with Lake Superior State University to complete a confirmation survey for rare mussels that were observed during the 2008 drawdown activities. The survey results identified that one State of Michigan listed endangered and one State of Michigan species of special concern mussel species within the Michigan side of the reservoir. The results of the surveys are included in Appendix D.

WPS consulted with the resource agencies concerning the rare mussels identified within the reservoir. The MDNR and WDNR provided comments indicating the importance of evaluating the toxicity of any aquatic herbicide proposed to be applied and possible effects to the rare mussels. WPS concurs and has changed the proposed 2010 EWM surveying and control activities to reflect the comments.

Consultation and Conclusion and 2010 Recommendations

EWM surveys have been completed for 11 years at the Grand Rapids Hydroelectric Project. The 2009 EWM population results were at the lowest density ever observed. Additionally, the EWM plants identified were in poor condition.

The milfoil weevil survey did indicate that weevils are present and at a populations sufficient to control EWM in lacustrine water bodies. However, based on the low EWM population and the condition of the EWM plants, WPS recommends a milfoil weevil population study be completed during “normal” year conditions. Therefore, WPS is proposing to complete a milfoil weevil survey as

outlined in the FERC Order Modifying and Approving EWM Control Plan issued May 11, 2009, during the 2010 field season.

Additionally, WPS is willing to complete surveys of the boat landings and surrounding one acre in the spring of 2010. If EWM is observed, WPS is willing to apply an aquatic herbicide to control the EWM in the boat landing and surrounding one acre. Prior to the application of any aquatic herbicide, WPS will consult with the WDNR, MDNR and USFWS to ensure rare mussel species protected by the State of Michigan are not negatively affected.

And finally, the Upper Menominee River Basin Watershed Project is to be implemented in 2010. The goals of the project are to obtain information of genetic characteristics of EWM throughout the Menominee River.

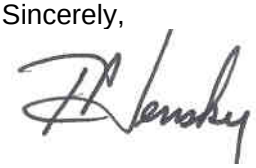
As per the FERC Order Modifying and Approving EWM Control Plan issued May 11, 2009, WPS provides the annual letter detailing the status of the EWM control plan objective to the MDNR, WDNR and USFWS on October 26, 2009. The letter also included a request for the resource agencies to provide comments on the EWM surveying and control activities proposed for 2010 that is required to be provided to the resource agencies and FERC by March 31, 2010.

WPS received comments from the WDNR and MDNR. The MDNR provided comments concurring with the proposed activities for 2010.

The documentation of submittal to the resource agencies, any comments received from the resource agencies and WPS response to those comments are provided in Appendix E.

Should you have any questions relative to this material, please do not hesitate to contact Jamie Nuthals, at (920) 433-1460.

Sincerely,



Terry P. Jensky
Vice President - Energy Supply Operations
Telephone: (920) 433-2900

syx

Enc.

cc: Ms. Carlisa Linton, FERC - D.C.
Mr. Bruce Crocker, WPSC - D2
Mr. Howard Giesler, WPSC - PUL
Mr. Edward Brandt, WPSC - WMAR
Ms. Joan Johanek, WPSC - D2
Mr. Michael Henderson, WPS - CRI

APPENDIX A

2009 MILFOIL WEEVIL POPULATION STUDY REPORT

APPENDIX B

EURASIAN WATER MILFOIL SURVEY RESULTS AND FIGURE

APPENDIX C

ZEBRA MUSSEL SURVEY RESULTS

APPENDIX D

RARE MUSSEL SURVEY RESULTS (NON-PUBLIC FILING)

APPENDIX E

DOCUMENTATION OF CONSULTATION

APPENDIX A

2009 MILFOIL WEEVIL POPULATION STUDY REPORT

2009 Progress Report of Milfoil Weevil Population Study Within the Menominee River

Prepared for:

Wisconsin Public Service

Prepared by:

EnviroScience, Inc.,
3781 Darrow Road, Stow, Ohio 44224
(800) 940-4025 · www.enviroscienceinc.com

September 18, 2009

1.0 Introduction

Wisconsin Public Service Corporation (WPS) contracted EnviroScience to further investigate the milfoil weevil (*Euhrychiopsis lecontei*) and its potential to control Eurasian watermilfoil (*Myriophyllum spicatum*) (EWM) within the Menominee River watershed on the Grand Rapids Hydroelectric Project. The study was to evaluate the existing indigenous weevil population, if present, and its distribution throughout the reservoir.

2.0 Weevil Distribution

Eurasian watermilfoil is prevalent within the reservoir. In 2008, EWM was scattered throughout 81 acres of the reservoir. It was originally proposed to collect a minimum of 180 stems to assess the weevil population however, at the time of the survey on July 9, 2009, the milfoil was very sparse and in bad condition. A total of 49 stems were collected from seven areas. Under normal protocol, the survey was achieved by collecting pairs of plants along a transect line placed perpendicular to shore by swimming through selected beds of EWM. The tops of two randomly selected plants were removed at five evenly spaced intervals, for a total of ten plants along each line. However, in most locations the protocol had to be modified by running transects parallel to shore, or sometimes a zigzag pattern, due to the sparseness of the EWM found during the time of the survey. A GPS point was taken at each transect that stems were collected, named T1, T2, T3 and so on (Figure 1). A point was taken for T5 but no stems were found for collection.

A natural population of weevils was found to be distributed throughout the Grand Rapids Reservoir even with the low density of plants. Transect data revealed weevil life stages on most of the stems collected from the survey with the highest population found in the first transect (Table 2.0A).

Figure 1. Wisconsin Public Service, Grand Rapids Reservoir.

Survey Locations

200 100 0 200 Meters

500 250 0 500 Feet

N

Wisconsin Public Service

Table 2.0A Stem Analysis Data at Each Transect

Transect #1:	Meristems	EGGS	LARVAE	PUPAE	ADULTS
Stem 1	1	2	0	0	1
Stem 2	1	3	0	0	0
Stem 3	1	2	1	0	0
Stem 4	1	1	1	0	0
Stem 5	1	0	1	0	0
Stem 6	2	7	0	0	0
Stem 7	2	0	0	0	0
Stem 8	1	1	2	0	0
Stem 9	1	0	0	0	0
Stem 10	1	0	0	0	1
Total	**12**	**16**	**5**	**0**	**2**

Transect #2:	Meristems	EGGS	LARVAE	PUPAE	ADULTS
Stem 1	2	1	0	0	0
Stem 2	1	0	0	0	0
Stem 3	2	0	0	0	0
Stem 4	1	2	0	0	0
Stem 5	1	0	0	0	0
Stem 6	1	0	1	0	0
Stem 7	1	0	1	0	0
Stem 8	1	2	0	0	0
Stem 9	1	0	0	0	0
Stem 10	1	0	0	0	0
Total	**12**	**5**	**2**	**0**	**0**

Transect #3:	Meristems	EGGS	LARVAE	PUPAE	ADULTS
Stem 1	3	0	0	0	0
Stem 2	2	3	0	0	0
Stem 3	1	0	0	0	0
Stem 4	1	0	0	0	0
Stem 5	1	0	0	0	0
Stem 6	1	0	0	0	0
Stem 7	2	1	0	0	0
Stem 8	1	1	0	0	0
Stem 9	1	0	0	0	0
Stem 10	1	0	1	0	0
Total	**14**	**5**	**1**	**0**	**0**

Transect #4:	Meristems	EGGS	LARVAE	PUPAE	ADULTS
Stem 1	2	0	1	0	0
Stem 2	1	0	1	0	0
Stem 3	1	0	1	0	0
Stem 4	2	7	1	0	0
Stem 5	3	4	0	0	1
Stem 6	2	1	0	0	1
Stem 7	2	1	0	0	0
Stem 8	0	0	0	0	0
Stem 9	0	0	0	0	0
Stem 10	0	0	0	0	0
Total	**13**	**13**	**4**	**0**	**2**

Transect #6:	Meristems	EGGS	LARVAE	PUPAE	ADULTS
Stem 1	1	0	0	0	0
Stem 2	2	1	0	0	0
Stem 3	2	0	0	0	0
Stem 4	1	0	0	0	0
Stem 5	3	0	0	0	0
Stem 6	1	0	0	0	0
Total	**10**	**1**	**0**	**0**	**0**

Transect #7:	Meristems	EGGS	LARVAE	PUPAE	ADULTS
Stem 1	1	0	0	0	0
Stem 2	1	0	0	0	0
Stem 3	1	0	0	0	0
Total	**3**	**0**	**0**	**0**	**0**

Table 2.0B Tansect Analysis

Parameter Measured	**Survey July 9, 2009**
Total weevils	54.00
Total stems	49.00
Total weevils/stem	**1.10**
Ave. meristems/stem	1.31

2.1 Discussion

For unknown reasons, the overall health of the macrophytes (monocots and dicots) within the reservoir was in very poor condition. However, laboratory analysis of stems collected during the survey revealed weevil densities had not only reached, but had exceeded, what the literature may indicate a critical density (≥0.5 weevils/stem) necessary to reduce EWM (Newman et al. 1996). While this may be true for lacustrine water bodies, it is unclear if this statement is accurate for riverine systems.

5.0 Literature Cited

Newman, R.M., K.L. Holmberg, D.D. Biesboer and B.G. Penner. 1996. Effects of a potential biocontrol agent, *Euhrychiopsis lecontei*, on Eurasian watermilfoil in experimental tanks. *Aquat. Bot*. 53:131-150.

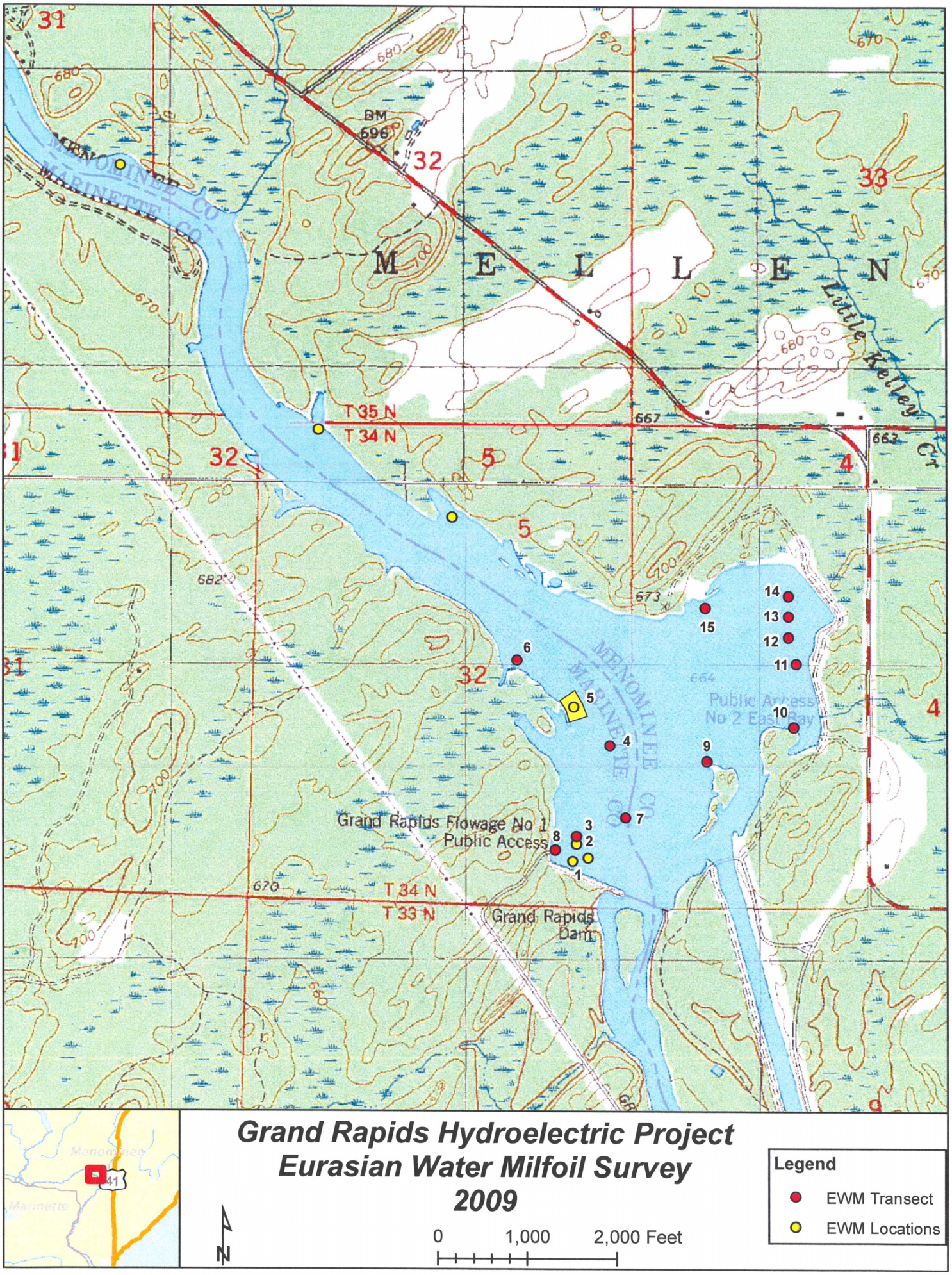
APPENDIX B

EURASIAN WATER MILFOIL SURVEY RESULTS AND FIGURE

Grand Rapids					
Eurasian Milfoil Surveys - 2009					
Transect #	Results at 0.5 feet	Results at 1.5 feet	Results at 3.0 feet	Results at +3.0 feet	Origin
1A	0	0	0	0	45 21.809
1B	0	0	0	**1**	87 39.562
1C	0	0	0	0	
2A	0	0	0	N/A	45 21.841
2B	0	0	0	N/A	87 39.561
2C	0	0	**1**	N/A	
3A	0	0	0	N/A	45 21.855
3B	0	0	0	N/A	87 39.553
3C	0	0	0	N/A	
4A	0	0	N/A	N/A	45 22.022
4B	0	0	N/A	N/A	87 39.467
4C	0	0	N/A	N/A	
5A	**2**	**1**	**1**	N/A	45 22.092
5B	**1**	1	N/A	N/A	87 39.562
5C	0	0	N/A	N/A	
6A	0	0	N/A	N/A	45 22.176
6B	0	0	N/A	N/A	87 39.713
6C	0	0	0	0	
7A	0	0	0	0	45 21.890
7B	0	0	0	0	87 39.425
7C	0	0	0	0	
8A	0	0	N/A	N/A	45 21.830
8B	0	0	N/A	N/A	87 39.608
8C	0	0	N/A	N/A	
9A	0	0	0	0	45 21.995
9B	0	0	0	0	87 39.216
9C	0	0	0	0	
10A	0	0	0	N/A	45 22.059
10B	0	0	N/A	N/A	87 38.990
10C	0	0	N/A	N/A	
11A	0	0	0	0	45 22.174
11B	0	0	0	0	87 38.985
11C	0	0	0	0	
12A	0	0	0	N/A	45 22.223
12B	0	0	0	N/A	87 39.006
12C	0	0	0	N/A	
13A	0	0	0	N/A	45 22.261
13B	0	0	0	N/A	87 39.006
13C	0	0	0	N/A	
14A	0	0	0	N/A	45 22.298
14B	0	0	0	N/A	87 39.006
14C	0	0	0	N/A	
15A	0	0	N/A	N/A	45 22.275
15B	0	0	N/A	N/A	87 39.223
15C	0	0	N/A	N/A	

Abundance Scale: 0-Absent, 1-Present, 2-Presence Less Than Half, 3-Equal Presence Compared to Other Species, 4-Dominant Species Present, 5-Total Infestation

Note: All transects are 40 feet in length and proceed in an easterly direction from their origin.



APPENDIX C

ZEBRA MUSSEL SURVEY RESULTS

2007

ZEBRA MUSSEL INSPECTION RESULTS
PESHTIGO RIVER HYDROELECTRIC PROJECTS

HYDRO NAME:

☐ Caldron Falls ☐ Johnson Falls ☐ Potato Rapids ☒ Grand Rapids

☐ High Falls ☐ Sandstone Rapids ☐ Peshtigo

Date	Inspection Type		No Zebra Muscles Present	Zebra Muscles Present	Operator	Comments
	Monthly	During Drawdown				
5/19	✓		✓		RM	N/A
6/30	✓		✓		RM	N/A
7/21	✓		✓		RM	N/A
8/27	✓		✓		RM	N/A
9/16/09	✓		✓		RM	N/A

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

October 26, 2009

Mr. Dale Simon, Chief Biologist
Wisconsin Department of Natural Resources
101 S. Webster Street WT/4
PO Box 7921
Madison, WI 53703

Dear Mr. Simon:

Eurasian Watermilfoil Control Plan Update

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(3) Implement measures to help control the spread of EWM to other water bodies.

(4) Compliance with the FERC Order Modifying and Approving Purple loosestrife and EWM Monitoring Plan issued January 2, 1998.

(1) Determine if native milfoil weevils are present

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(2) Work with other stakeholders within the Upper Menominee River Basin Watershed to exchange information about EWM presence and control strategies and to obtain information on the genetic characteristics of the EWM populations.

Although WPS conducts periodic conversation with We Energies concerning EWM studies and results from the hydroelectric projects on the Menominee River, the majority of the work and exchange of information with other stakeholders about EWM presence and control is proposed to be implemented in 2010.

(3) Implement measures to help control the spread of EWM to other water bodies.

The 2008 EWM survey results identified EWM at the boat landing located on project lands in the state of Michigan. On May 12, 2009 WPS completed a follow up survey of the Michigan boat landing to determine if EWM were still present. An underwater camera and rake were used during the survey. The aquatic vegetation was too small and could not be retrieved using the rake however from results of the underwater camera imagines it did appear that small aquatic dicot plants similar to EWM were first emerging.

Based on this observation and the 2008 survey results, WPS contracted a consultant and applied for a Michigan Department of Environmental Quality (MDEQ) permit in order to have the EWM and up to one acre surrounding the Michigan boat landing treated.

WPS again conducted EWM survey activities on July 9, 2009. No EWM was observed at either the Michigan or Wisconsin boat landings. Based on the lack of EWM at and surrounding the boat landing, WPS was under the impression that the Michigan boat landing and surrounding one acre were treated. However upon further inquiry the consultant could not obtain the proper application licenses in time and the area was not treated. The lack of EWM at the boat landing was a coincidence and was consistent with the lack of EWM observed throughout the reservoir.

WPS informed the resource agencies of the situation on July 30, 2009 and indicated that a follow up survey would be completed in late summer/fall to determine if a fall treatment for EWM would be necessary.

A follow up survey for EWM at the Michigan boat landing and surrounding one acre was completed on September 9, 2009. No EWM was observed and a fall treatment was not conducted.

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Additionally, on September 9, 2009 a zebra mussel informational sticker was added to the invasive species sign at the Wisconsin boat landing. Michigan does not use species specific signage at their boat landings.

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A purple loosestrife survey of the Grand Rapids Hydroelectric Project was also completed on July 9, 2009. No purple loosestrife was observed within the project boundary.

Monthly inspections of substrate samplers for the presence of zebra mussels were conducted from the months of May through September. Zebra mussels were not found on the substrate samplers during any of the monthly 2009 inspections. However, zebra mussels were observed this October during maintenance activities at the powerhouse. A summary of the substrate sampler results has been included in Appendix C.

Conclusion

EWM surveys have been completed for 11 years at the Grand Rapids Hydroelectric Project. The 2009 EWM population results were at the lowest density ever observed. Additionally, the EWM plants identified were in poor condition.

The milfoil weevil survey did indicate that weevils are present and at a populations sufficient to control EWM in lacustrine water bodies. However based on the low EWM population and the condition of the EWM plants, WPS would recommend a milfoil weevil population study be completed during "normal" year conditions. Therefore WPS is proposing to complete a milfoil weevil survey as outlined in the FERC Order Modifying and Approving EWM Control Plan issued May 11, 2009, during the 2010 field season.

Additionally, WPS is willing to complete surveys of the boat landings and surrounding one acre in the spring of 2010. If EWM is observed, WPS will apply an aquatic herbicide to control the EWM in the boat landing and surrounding one acre. The application of the herbicide should be discussed since rare mussel species protected by the state of Michigan were discovered within the Michigan portion of the reservoir.

And finally, the Upper Menominee River Basin Watershed Project is to be implemented in 2010. The goals of the project are to obtain information of genetic characteristics of EWM throughout the Menominee River.

The determination of what surveys and activities will be conducted in 2010 must be decided upon and provided to the resource agencies and FERC by March 31, 2010.

Please provide comments on the EWM surveys and activities proposed for 2010, within 30 days of receiving this letter. If more time is necessary WPS can organize a conference call to discuss the EWM surveys and activities proposed for 2010.

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 Johanek, WPSC - D2

Appendix A, B & C are identical to Appendix A, B & C being provided to FERC. The Appendices have not been reproduced in this correspondence in an effort to reduce the size of the document.

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

October 26, 2009

Ms. Jessica Mistak
Michigan Department of Natural Resources
488 Cherry Creek Road
Marquette, MI 49855-8999

Dear Ms. Mistak:

Eurasian Watermilfoil Control Plan Update

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(3) Implement measures to help control the spread of EWM to other water bodies.

(4) Compliance with the FERC Order Modifying and Approving Purple loosestrife and EWM Monitoring Plan issued January 2, 1998.

(1) Determine if native milfoil weevils are present

WPS retained the services of EnviroScience, Inc. (EnviroScience) to complete a study that would evaluate the existing indigenous weevil population, if present, and its distribution throughout the reservoir. If weevils are present, the study would also include counting the number of weevils per plant and determine if a correlation exists between the number of weevils and control of the EWM plants.

Individuals from EnviroScience and WPS completed the survey on July 9, 2009. The plan was to collect approximately 200 samples of EWM plants that were observed scattered throughout 81 acres of the Grand Rapids Reservoir in 2008. However, the EWM observed within the reservoir was very sparse and only a total of 49 stems could be collected. From the stems collected, EnviroScience was able to analyze that a natural population of weevils is present within the reservoir. Additionally, the weevil to EWM plant density was high, at levels that have shown to reduce EWM populations in lacustrine water bodies.

1.36 acres of EWM were observed in 2009. This was the lowest level of plant population observed since the monitoring began in 1998. The EWM populations were scattered throughout the reservoir, and the EWM plants observed were in poor condition. The 2009 Milfoil Weevil Population Study Report is provided in Appendix A.

(2) Work with other stakeholders within the Upper Menominee River Basin Watershed to exchange information about EWM presence and control strategies and to obtain information on the genetic characteristics of the EWM populations.

Although WPS conducts periodic conversation with We Energies concerning EWM studies and results from the hydroelectric projects on the Menominee River, the majority of the work and exchange of information with other stakeholders about EWM presence and control is proposed to be implemented in 2010.

(3) Implement measures to help control the spread of EWM to other water bodies.

The 2008 EWM survey results identified EWM at the boat landing located on project lands in the state of Michigan. On May 12, 2009 WPS completed a follow up survey of the Michigan boat landing to determine if EWM were still present. An underwater camera and rake were used during the survey. The aquatic vegetation was too small and could not be retrieved using the rake however from results of the underwater camera imagines it did appear that small aquatic dicot plants similar to EWM were first emerging.

Based on this observation and the 2008 survey results, WPS contracted a consultant and applied for a Michigan Department of Environmental Quality (MDEQ) permit in order to have the EWM and up to one acre surrounding the Michigan boat landing treated.

WPS again conducted EWM survey activities on July 9, 2009. No EWM was observed at either the Michigan or Wisconsin boat landings. Based on the lack of EWM at and surrounding the boat landing, WPS was under the impression that the Michigan boat landing and surrounding one acre were treated. However upon further inquiry the consultant could not obtain the proper application licenses in time and the area was not treated. The lack of EWM at the boat landing was a coincidence and was consistent with the lack of EWM observed throughout the reservoir.

WPS informed the resource agencies of the situation on July 30, 2009 and indicated that a follow up survey would be completed in late summer/fall to determine if a fall treatment for EWM would be necessary.

A follow up survey for EWM at the Michigan boat landing and surrounding one acre was completed on September 9, 2009. No EWM was observed and a fall treatment was not conducted.

During the July 9, 2009 EWM survey activities a review of the boat landings was completed and determine that invasive species signs were present and up to date. Each boat landing provided information on proper cleaning of watercrafts and trailers to avoid spreading invasive species.

Additionally, on September 9, 2009 a zebra mussel informational sticker was added to the invasive species sign at the Wisconsin boat landing. Michigan does not use species specific signage at their boat landings.

(4) Compliance with the FERC Order Modifying and Approving Purple loosestrife and EWM Monitoring Plan issued January 2, 1998.

WPS completed EWM surveys of the transects as approved in the Order Modifying and Approving Purple loosestrife and EWM Monitoring Plan issued January 2, 1998.

The EWM was only observed in 3 of the 15 transects and the EWM observed was extremely sparse and in poor condition. This is significantly less than the EWM population observed during the survey voluntarily completed in 2007 when 12 of the 15 transects contained high densities of EWM.

The 2009 EWM survey also relieved EWM encompassed 1.36 acres, this is far less the 39 acres of EWM observed in 2007 and significantly different than the 81 acres observed in 2008.

The EWM transect survey results including EWM density and EWM survey location figure including stand perimeters are provided in Appendix B.

A purple loosestrife survey of the Grand Rapids Hydroelectric Project was also completed on July 9, 2009. No purple loosestrife was observed within the project boundary.

Monthly inspections of substrate samplers for the presence of zebra mussels were conducted from the months of May through September. Zebra mussels were not found on the substrate samplers during any of the monthly 2009 inspections. However, zebra mussels were observed this October during maintenance activities at the powerhouse. A summary of the substrate sampler results has been included in Appendix C.

Conclusion

EWM surveys have been completed for 11 years at the Grand Rapids Hydroelectric Project. The 2009 EWM population results were at the lowest density ever observed. Additionally, the EWM plants identified were in poor condition.

The milfoil weevil survey did indicate that weevils are present and at a populations sufficient to control EWM in lacustrine water bodies. However based on the low EWM population and the condition of the EWM plants, WPS would recommend a milfoil weevil population study be completed during "normal" year conditions. Therefore WPS is proposing to complete a milfoil weevil survey as outlined in the FERC Order Modifying and Approving EWM Control Plan issued May 11, 2009, during the 2010 field season.

Additionally, WPS is willing to complete surveys of the boat landings and surrounding one acre in the spring of 2010. If EWM is observed, WPS will apply an aquatic herbicide to control the EWM in the boat landing and surrounding one acre. The application of the herbicide should be discussed since rare mussel species protected by the state of Michigan were discovered within the Michigan portion of the reservoir.

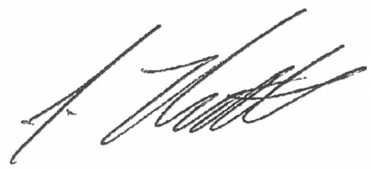
And finally, the Upper Menominee River Basin Watershed Project is to be implemented in 2010. The goals of the project are to obtain information of genetic characteristics of EWM throughout the Menominee River.

The determination of what surveys and activities will be conducted in 2010 must be decided upon and provided to the resource agencies and FERC by March 31, 2010.

Please provide comments on the EWM surveys and activities proposed for 2010, within 30 days of receiving this letter. If more time is necessary WPS can organize a conference call to discuss the EWM surveys and activities proposed for 2010.

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 Johanek, WPSC - D2

Appendix A, B & C are identical to Appendix A, B & C being provided to FERC. The Appendices have not been reproduced in this correspondence in an effort to reduce the size of the document.

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

October 26, 2009

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

Dear Mr. Utrup:

Eurasian Watermilfoil Control Plan Update

As per the Federal Energy Regulatory Commission (FERC) Order Modifying and Approving Eurasian Watermilfoil (EWM) Control Plan issued May 11, 2009 Wisconsin Public Service Corporation (WPS) shall provide a letter detailing the status of the EWM control plan objective to the Michigan Department of Natural Resources (MDNR), U.S. Fish and Wildlife Services (USFWS) and the Wisconsin Department of Natural Resources (WDNR) by October 31st for the next three years beginning in 2009. The four components of the objective are as follows:

(1) Determine if native milfoil weevils are present

(2) Work with other stakeholders within the Upper Menominee River Basin Watershed to exchange information about EWM presence and control strategies and to obtain information on the genetic characteristics of the EWM populations.

(3) Implement measures to help control the spread of EWM to other water bodies.

(4) Compliance with the FERC Order Modifying and Approving Purple loosestrife and EWM Monitoring Plan issued January 2, 1998.

(1) Determine if native milfoil weevils are present

WPS retained the services of EnviroScience, Inc. (EnviroScience) to complete a study that would evaluate the existing indigenous weevil population, if present, and its distribution throughout the reservoir. If weevils are present, the study would also include counting the number of weevils per plant and determine if a correlation exists between the number of weevils and control of the EWM plants.

Individuals from EnviroScience and WPS completed the survey on July 9, 2009. The plan was to collect approximately 200 samples of EWM plants that were observed scattered throughout 81 acres of the Grand Rapids Reservoir in 2008. However, the EWM observed within the reservoir was very sparse and only a total of 49 stems could be collected. From the stems collected, EnviroScience was able to analyze that a natural population of weevils is present within the reservoir. Additionally, the weevil to EWM plant density was high, at levels that have shown to reduce EWM populations in lacustrine water bodies.

1.36 acres of EWM were observed in 2009. This was the lowest level of plant population observed since the monitoring began in 1998. The EWM populations were scattered throughout the reservoir, and the EWM plants observed were in poor condition. The 2009 Milfoil Weevil Population Study Report is provided in Appendix A.

(2) Work with other stakeholders within the Upper Menominee River Basin Watershed to exchange information about EWM presence and control strategies and to obtain information on the genetic characteristics of the EWM populations.

Although WPS conducts periodic conversation with We Energies concerning EWM studies and results from the hydroelectric projects on the Menominee River, the majority of the work and exchange of information with other stakeholders about EWM presence and control is proposed to be implemented in 2010.

(3) Implement measures to help control the spread of EWM to other water bodies.

The 2008 EWM survey results identified EWM at the boat landing located on project lands in the state of Michigan. On May 12, 2009 WPS completed a follow up survey of the Michigan boat landing to determine if EWM were still present. An underwater camera and rake were used during the survey. The aquatic vegetation was too small and could not be retrieved using the rake however from results of the underwater camera imagines it did appear that small aquatic dicot plants similar to EWM were first emerging.

Based on this observation and the 2008 survey results, WPS contracted a consultant and applied for a Michigan Department of Environmental Quality (MDEQ) permit in order to have the EWM and up to one acre surrounding the Michigan boat landing treated.

WPS again conducted EWM survey activities on July 9, 2009. No EWM was observed at either the Michigan or Wisconsin boat landings. Based on the lack of EWM at and surrounding the boat landing, WPS was under the impression that the Michigan boat landing and surrounding one acre were treated. However upon further inquiry the consultant could not obtain the proper application licenses in time and the area was not treated. The lack of EWM at the boat landing was a coincidence and was consistent with the lack of EWM observed throughout the reservoir.

WPS informed the resource agencies of the situation on July 30, 2009 and indicated that a follow up survey would be completed in late summer/fall to determine if a fall treatment for EWM would be necessary.

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Additionally, on September 9, 2009 a zebra mussel informational sticker was added to the invasive species sign at the Wisconsin boat landing. Michigan does not use species specific signage at their boat landings.

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The EWM was only observed in 3 of the 15 transects and the EWM observed was extremely sparse and in poor condition. This is significantly less than the EWM population observed during the survey voluntarily completed in 2007 when 12 of the 15 transects contained high densities of EWM.

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Conclusion

EWM surveys have been completed for 11 years at the Grand Rapids Hydroelectric Project. The 2009 EWM population results were at the lowest density ever observed. Additionally, the EWM plants identified were in poor condition.

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And finally, the Upper Menominee River Basin Watershed Project is to be implemented in 2010. The goals of the project are to obtain information of genetic characteristics of EWM throughout the Menominee River.

The determination of what surveys and activities will be conducted in 2010 must be decided upon and provided to the resource agencies and FERC by March 31, 2010.

Please provide comments on the EWM surveys and activities proposed for 2010, within 30 days of receiving this letter. If more time is necessary WPS can organize a conference call to discuss the EWM surveys and activities proposed for 2010.

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 Johanek, WPSC - D2

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WDNR COMMENTS AND WPS RESPONSE TO COMMENTS

Nuthals, James D

From: Jessica Mistak [mistakj@michigan.gov]
Sent: Thursday, November 05, 2009 2:59 PM
To: Nuthals, James D; Byron D - DNR Simon; Gregory A - DNR Sevener
Cc: Michael C - DNR Donofrio
Subject: RE: 2009 Grand Rapids Hydroelectric Project Invasive SpeciesSurveyResults Letter

Attachments: Grand Rapids Mussel Survey 7-09.doc

Grand Rapids
Mussel Survey 7-0...

I concur that it is important to evaluate the toxicity to freshwater mussels for any proposed chemical treatments, especially since the 2009 qualitative survey identified one species listed as endangered [redacted] and one species classified as special concern [redacted]

>>> "Sevener, Gregory A - DNR" <Gregory.Sevener@wisconsin.gov>
>>> 11/04/2009 10:33 AM >>>
Hello Jamie,

I have a comment on the zebra mussel inspection results sheet. You should include on the sheet what is being inspected whether it is artificial plates, hydro structure or what? This information could be included in the comments column or make a new column for what was inspected Looking at the sheet leaves the impression that zebra mussels were not found in the project boundary. You should include some where on the sheet zebra mussels were found on the powerhouse and date. I have spoken to a biologist in the past and he told me half the times zebra mussels are found on plates first and sometimes they just show up on the power house structure.

Secondly, I wonder if the reduced EWM population is latent impacts from the summer drawdown which occurred. At some point is WPS going to survey the entire flowage again for EWM? I also still need to pitch that Wisconsin DNR still requires point intercept surveys in lakes to produce the better results in a plant survey. I know the license does not require that type of survey.

One would need to look at the toxicity background of the chemical being used on whether mussels could be impacted. We could ask our people from the Corps of Engineers researching EWM treatment whether or not a chemical may impact. Chemical labels are usually written conservatively to minimize biological impacts but it is a good thought to check toxicity information or with chemical company.

From: Nuthals, James D [mailto:JDNuthals@integrysgroup.com]
Sent: Monday, October 26, 2009 2:23 PM
To: Simon, Byron D - DNR
Cc: Donofrio, Michael C - DNR; Sevener, Gregory A - DNR
Subject: FW: 2009 Grand Rapids Hydroelectric Project Invasive Species Survey Results Letter

Hi Dale,

I am providing the 2009 Grand Rapids Hydroelectric Project Invasive Species Results.

If you have any questions, please contact me at your earliest convenience.

Sincerely,

Jamie Nuthals
Environmental Services-
Natural Resource Management
WPS
(920) 433-1460

WDNR COMMENTS

WDNR Comment

I have a comment on the zebra mussel inspection results sheet. You should include on the sheet what is being inspected whether it is artificial plates, hydro structure or what? This information could be included in the comments column or make a new column for what was inspected. Looking at the sheet leaves the impression that zebra mussels were not found in the project boundary. You should include some where on the sheet zebra mussels were found on the powerhouse and date. I have spoken to a biologist in the past and he told me half the times zebra mussels are found on plates first and sometimes they just show up on the power house structure.

WPS Response

WPS surveys for zebra mussels on substrate sampler plates as on all FERC licensed projects were this is a requirement. WPS voluntarily completes these activities annually at the Grand Rapids Hydroelectric Project.

The WDNR has been provided information concerning the discovery of zebra mussels at Grand Rapids in 2008. WPS did not observe the zebra mussels in 2009, until October, which is after the required substrate sampler observations are needed to be recorded, May through September. Additionally, zebra mussels were not observed on the substrate sampler and therefore not recorded on the sheet. Additionally, WPS did provide the observation of the zebra mussels at the powerhouse in the letter provided.

WDNR Comment

Secondly, I wonder if the reduced EWM population is latent form the summer drawdown which occurred. At some point is WPS going to survey the entire flowage again for EWM? I also still need to pitch that Wisconsin DNR still requires point intercept survey in lakes to produce the better results in a plant surveys. I know the license does not require that type of survey.

WPS Response

WPS will follow the EWM surveying requirements as outlined in the FERC Order Modifying and Approving Eurasian Watermilfoil (EWM) Control Plan issued May 11, 2009 and FERC Order Modifying and Approving Purple loosestrife and EWM Monitoring Plan issued January 2, 1998. The plans already require a survey for EWM that includes the entire flowage within our project boundary.

WDNR Comment

One would need to look at the toxicity background of the chemical being used on whether mussels could be impacted. We could ask our people form the Corps of Engineers researching EWM treatment whether or not a chemical may impact. Chemical labels are usually written conservatively to minimize biological impacts but it is a good thought to check toxicity information or with chemical company.

WPS Response

The 2010 EWM proposed control plan has been changed to reflect the comment.

MDNR COMMENTS AND WPS RESPONSE TO COMMENTS

Nuthals, James D

From: Jessica Mistak [mistakj@michigan.gov]
Sent: Tuesday, October 27, 2009 10:42 AM
To: Nuthals, James D
Subject: Re: 2009 Grand Rapids Hydroelectric Project Invasive SpeciesSurvey Results Letter

Hi Jaime,
The Michigan DNR has reviewed the invasive species survey results for 2009 as well as the proposed plan for 2010. We support the plan for 2010 as outlined.
Thanks,
Jessica

Please note change in email address to mistakj@michigan.gov

Jessica Mistak, Senior Fisheries Biologist DNR Marquette Fisheries Station
484 Cherry Creek Rd
Marquette, MI 49855
906-249-1611 ext. 308
FAX 906-249-3190

>>> "Nuthals, James D" <JDNuthals@integrysgroup.com> 10/26/2009 3:21 PM
>>> >>>
Hi Jessica,

I am providing the 2009 Grand Rapids Hydroelectric Project Invasive Species Results.

If you have any questions, please contact me at your earliest convenience.

Sincerely,

Jamie Nuthals

Environmental Services-

Natural Resource Management

WPS

(920) 433-1460

MDNR COMMENTS

MDNR Comment

The Michigan DNR has reviewed invasive species survey results for 2009 as well as the proposed plan for 2010. We support the plan for 2010 as outlined.

WPS Response

Noted.

MDNR Comment

I concur that it is important to evaluate the toxicity to freshwater mussels for any proposed chemical treatments, especially since the 2009 qualitative survey identified one species listed as endangered and one species classified as special concern.

WPS Response

The 2010 EWM proposed control plan has been changed to reflect the comment.

Document Content(s)