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FEDERAL ENERGY  
REGULATORY COMMISSION

Wisconsin Public Service Corporation  
(a subsidiary of WPS Resources Corporation)  
600 North Adams Street  
P.O. Box 19002  
Green Bay, WI 54307-9002

June 16, 1998

The Secretary  
Federal Energy Regulatory Commission  
Mail Code: DLC, HL-11.2  
888 1st Street N.E  
Washington, DC 20426  
Attention: Director, Office of Hydropower Licensing

N

Dear Secretary:

FERC Project Nos. 2525 - Caldron Falls, 2595 - High Falls, 2522 - Johnson Falls, 2546 - Sandstone Rapids, 2560 - Potato Rapids and 2581- Peshtigo

Enclosed is the original and eight copies of the Comprehensive Land Management and Wildlife Management Plan for the Peshtigo River Hydroelectric Projects (FERC Project Nos. 2525 - Caldron Falls, 2595 - High Falls, 2522 - Johnson Falls, 2546 - Sandstone Rapids, 2560 - Potato Rapids and 2581- Peshtigo) as per Articles 412, 409, 410, 411, 409, and 408 of the Orders Issuing New Licenses dated June 26, 1998.

For your convenience, the following is an explanation of the requirements of Articles 412, 409, 410, 411, 409, 408 and an indication of which portion of the Comprehensive Land and Wildlife Management Plan has been tailored to meet the requirements.

According to the articles, at a minimum, the plan shall include:

- (1) **maps showing a 200-foot, no-timber-harvest zone along the landward side of all riparian areas within the project boundary**

Through consultation with the agencies, it was determined that some vegetation management would be appropriate for the 200 foot zone along the landward side if approved by all parties (licensee, U.S. Fish and Wildlife Service, WDNR, and National Park Service). An explanation of the vegetation management technique in this 200 foot zone is included on page 15 of the plan and maps depicting the 200 foot zone are included in Appendix B which is titled "Project Land Management Category Maps."

- (2) **maps showing all licensee-owned lands in the project area**

Provision (2) is fulfilled Appendix B which is titled "Project Land Management Category Maps."

- (3) **land management goals, objectives, and schedule**

Provision (3) is addressed in the "Management Practices" section, pages 17-31. The schedule is included in the implementation section on page 32.

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- (4) **land management categories and allowable uses and activities within each category, including public recreational use of project lands**

Provision (4) is discussed in the "Land Management Categories" Section, Pages 13-17.

- (5) **a shoreline development policy, including lease policies and other conveyances of land use rights**

Provision (5) is discussed in the "Implementation" Section on Pages 32 and 33.

- (6) **a plan to monitor zebra mussels (*Dreissena polymorpha*) in project waters, including, but not limited to: (a) the method of monitoring; (b) the frequency of monitoring; and (c) documentation of transmission of monitoring data to the Wisconsin Department of Natural Resources (Wisconsin DNR), U.S. Fish and Wildlife Service (FWS), and the University of Wisconsin Sea Grant Institute; and if deemed necessary by the Wisconsin DNR and FWS, cooperate with the agencies to control/eliminate zebra mussels**

Provision (6) is addressed in Appendix F entitled "Invasive Species Monitoring Plans."

- (7) **a plan to monitor purple loosestrife (*Lythrum salicaria*) and Eurasian milfoil (*Myriophyllum spicatum*) in project waters, including, but not limited to: (a) the method of monitoring; (b) the frequency of monitoring; (c) documentation of transmission of monitoring data to Wisconsin DNR and FWS; and if deemed necessary by the Wisconsin DNR and FWS, cooperate with the agencies to control/eliminate purple loosestrife and Eurasian milfoil when an effective eradication method is developed**

Provision (7) is addressed in Appendix F entitled "Invasive Species Monitoring Plans."

- (8) **a final plan to protect the bald eagle (*Haliaeetus leucocephalus*) in the project area, including, but not limited to: (a) measures to protect existing habitat in the project area, including protection of necessary supercanopy trees, (b) plans to control public access to project lands if eagle nesting begins; (c) measures to protect winter roosting or feeding sites identified in the future from adverse human disturbance; (d) measures to limit the use of herbicides and pesticides on project lands; (e) measures to cooperate with the Wisconsin DNR and FWS on any baseline inventory studies; and (f) a schedule for implementing the plan**

Provision (8) is addressed in Appendix D entitled "Bald Eagle Management Plan."

- (9) **provision for consultation with the Wisconsin DNR for input regarding decisions affecting wildlife management, and cooperation with the Wisconsin DNR in conducting wildlife surveys on project lands**

Provision (9) is addressed in the "Consultative Efforts" Section on Page 34.

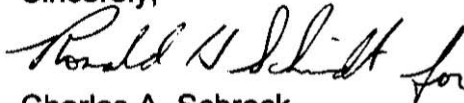
**The plan shall be prepared after consultation with Wisconsin DNR, FWS, and Marinette County Land and Water Conservation Department (Marinette County). The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on site-specific conditions.**

**The Commission reserves the right to require changes to the plan. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.**

Documentation of Agency Consultation with responses to the agency comments are included in Appendix E.

If you have any questions, please call me at (920) 433-5515 or you can contact Mr. William A. Bloczynski, Hydro Operations Coordinator, at (715) 539-4016.

Sincerely,



Charles A. Schrock  
Vice President - Energy Supply

SCP/jfj

cc - R. A. Lesniak, FERC (Chicago)  
W. A. Bloczynski, WPSC (Merrill Hydro)  
B. E. Crocker, WPSC (Crivitz)  
R. H. Schmidt, WPSC (D2)

Enclosure

**Comprehensive Land and Wildlife Management Plan  
Peshtigo River Hydroelectric Projects  
FERC Project Nos. 2525, 2595, 2522, 2546, 2560, and 2581**

June 10, 1998  
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**Prepared by Wisconsin Public Service Corporation in response to the orders issuing licenses for the Caldron Falls, High Falls, Johnson Falls, Sandstone Rapids, Potato Rapids, and Peshtigo Hydroelectric Projects in Marinette County, Wisconsin.**

**Copies Submitted To:**

- Wisconsin Department of Natural Resources**
- United States Fish and Wildlife Service**
- Marinette County Land and Water Conservation Department**

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**JUN 19 1998**

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Appendix B	Project Land Management Category Maps
Appendix C	Private Use Guidelines
Appendix D	Bald Eagle Management Plan
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Appendix F	Invasive Species Monitoring Plans

## **Appendix F**

### **Invasive Species Monitoring Plans**

## **Purple Loosestrife Monitoring Plan**

**Objective:** To monitor the spread of Purple Loosestrife (*Lythrum Salicaria*) on the Peshtigo River hydroelectric project lands. Purple Loosestrife is an invasive plant that exhibits aggressive characteristics. The plant is becoming increasingly common to wetland areas. In consultation with the Wisconsin Department of Natural Resources (WDNR) and the U.S. Fish and Wildlife Service (USFWS), 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 of the impoundments on the Peshtigo River, all water bodies, and all wetlands that occur on WPSC property within the project boundary. The surveys will be conducted by boat and on foot 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 Survey**

- A. The survey will be taken annually in July or August 1999, depending upon the weather, during the time when the plants are in bloom and annually thereafter.

### **III. Documentation existing colonies.**

- A. The results of the survey will be displayed on a map of the total project area. A copy of the completed map will be provided to the WDNR and USFWS no later than October 31, every year. Documentation of submittal of the results to the agencies shall be filed with the Commission.
- B. 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
- C. The need for further action will be discussed with the Wisconsin Department of Natural Resources.

### **IV. Control of existing colonies.**

- A. Small colonies of 1 to 5 plants will be cut by hand and the remaining stems will be hand pulled.

**V. Public Awareness.**

- A. Public awareness about purple loosestrife will be increased by displaying fact sheets supplied by the WDNR at all WPSC owned public access areas in the project boundary.

**VI. Documentation.**

- A. Documentation of submittal of monitoring reports to WDNR, and FWS shall be provided to FERC by October 31 of each year.



## Zebra Mussel Monitoring Plan

**Introduction:** Wisconsin Public Service (WPSC) has instituted a Comprehensive Land and Wildlife Management Plan (CLWMP) for the above projects herein collectively referred to as the Peshtigo River Hydroelectric Projects.

The CLWMP is required to include a plan to monitor zebra mussels in project waters. The zebra mussel is a species nonindigenous to the United States. This species is believed to have been introduced to the Lake St. Clair/Detroit River region of the Great Lakes drainage in 1986 by the discharge of ship ballast water carried from a freshwater port in Europe or western Asia.

The purpose of this section of the CLWMP is to describe the following components of the zebra mussel monitoring plan:

- (a) the method of monitoring,
- (b) the frequency of monitoring,
- (c) documentation of transmission of monitoring data to the Wisconsin Department of Natural Resources (WDNR), U.S. Fish and Wildlife Service (USFWS) and the University of Wisconsin Sea Grant Institute, and if deemed necessary by the WDNR and USFWS,
- (d) actions to be taken in a cooperative effort with the agencies to control/eliminate zebra mussels

**Objective:** To monitor for the presence Zebra Mussels (*Dreissena polymorpha*) in Peshtigo River hydroelectric project waters.

### I. Methods

- A. Through consultation with Cliff Kraft - University of Wisconsin-Sea Grant (920-465-2795), the following monitoring program was developed. Monitoring for the presence of zebra mussels will occur on a routine basis using substrate samplers at each of the project reservoirs listed above. Additionally, inspections of hard surfaces that are normally submerged will be conducted during the drawdown of any reservoir.

### II. Frequency of Survey

- A. Substrate samplers at each of the project reservoirs will be surveyed and documented monthly from May through September each year.
- B. Typically, the Caldron Falls Reservoir is drawn down each spring to increase storage capacity. Inspections of normally submerged hard surfaces will be conducted during these drawdowns.
- C. Drawdowns for maintenance occur at each of the other hydro reservoirs on an intermittent basis. During these periods, inspections for the presence of zebra mussels will be conducted and documented.

- D. If the presence of zebra mussel colonies is confirmed at an individual project, zebra mussel monitoring at the project will be discontinued.

**III. Documentation**

- A. The results of the inspections completed each month and during drawdowns will be documented on inspection forms (Attachment A). A summary copy of the accumulated inspection information will be provided to the WDNR, USFWS, and University of Wisconsin - Sea Grant (Attachment B). Documentation of submittal of the results to the agencies shall be provided to FERC by no later than December 31 each year.

**IV. Control of existing colonies.**

- A. Currently, no methods exist for widespread control of zebra mussels present in the natural environment. If suitable zebra mussel control methods are developed by the agencies, WPSC will cooperate with the agencies to control zebra mussels in the project reservoirs.

**ZEBRA MUSSEL INSPECTION RESULTS  
PESHTIGO RIVER HYDROELECTRIC PROJECTS**

**HYDRO NAME**

- Caldron Falls
- Johnson Falls
- Potato Rapids
- High Falls
- Sandstone Rapids
- Peshtigo

**INSPECTION TYPE:**  MONTHLY INSPECTION       INSPECTION DURING DRAWDOWN  
DATE: \_\_\_\_\_  
COMMENTS/RESULTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**INSPECTION TYPE:**  MONTHLY INSPECTION       INSPECTION DURING DRAWDOWN  
DATE: \_\_\_\_\_  
COMMENTS/RESULTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**INSPECTION TYPE:**  MONTHLY INSPECTION       INSPECTION DURING DRAWDOWN  
DATE: \_\_\_\_\_  
COMMENTS/RESULTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**INSPECTION TYPE:**  MONTHLY INSPECTION       INSPECTION DURING DRAWDOWN  
DATE: \_\_\_\_\_  
COMMENTS/RESULTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**INSPECTION TYPE:**  MONTHLY INSPECTION       INSPECTION DURING DRAWDOWN  
DATE: \_\_\_\_\_  
COMMENTS/RESULTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

<b>INSPECTION TYPE:</b> <input type="checkbox"/> MONTHLY INSPECTION <input type="checkbox"/> INSPECTION DURING DRAWDOWN
DATE: _____
COMMENTS/RESULTS: _____
_____
_____
_____

WISCONSIN PUBLIC SERVICE CORPORATION  
ZEBRA MUSSEL INSPECTION SUMMARY REPORT  
PESHTIGO RIVER HYDROELECTRIC PROJECTS

YEAR: \_\_\_\_\_

**Caldron Falls**  
Monthly Inspection Results: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Drawdown During Calendar Year?  
 Yes    No   Results: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**High Falls**  
Monthly Inspection Results: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Drawdown During Calendar Year?  
 Yes    No   Results: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Johnson Falls**  
Monthly Inspection Results: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Drawdown During Calendar Year?  
 Yes    No   Results: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Sandstone Falls**  
Monthly Inspection Results: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Drawdown During Calendar Year?  
 Yes    No   Results: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Potato Rapids**  
Monthly Inspection Results: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Drawdown During Calendar Year?  
 Yes    No   Results: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Peshtigo**

Monthly Inspection Results: \_\_\_\_\_

\_\_\_\_\_ Drawdown During Calendar Year?

Yes     No    Results: \_\_\_\_\_

Mr. Tom Thuemler  
WDNR  
101 N. Ogden Road  
  
Peshtigo, WI 54157

Mr. Jim Fossum  
US Fish & Wildlife Service  
1015 Challenger Court  
  
Green Bay, WI 54311

Mr. Cliff Kraft  
UW - Green Bay  
UW - Sea Grant  
ES105  
2420 Nicolet Drive  
Green Bay, WI  
54311-7001

## **Eurasian Milfoil Monitoring Plan**

**Objective:** To monitor the presence and abundance Eurasian Milfoil (*Myriophyllum spicatum*) on the Peshtigo River hydroelectric project lands. Eurasian Milfoil is an exotic aquatic macrophyte that exhibits aggressive characteristics. The plant is becoming increasingly common to inland lakes and rivers. In consultation with the Wisconsin Department of Natural Resources (WDNR) and the U.S. Fish and Wildlife Service (USFWS), Wisconsin Public Service (WPSC) will periodically monitor the species. WPSC will allow the native weevil (*eurychiopsis lecontei*) to control the population until the monitoring reports support the need to eliminate the eurasian milfoil population. If the population should require elimination by other means, WPSC will cooperate with the agencies to control it.

### **I. Methods**

- A. Through consultation with Tim Rasman-WDNR (920-492-5903), the following monitoring methods were developed. The monitoring methods will include a routine aquatic macrophyte survey utilizing a boat to take samples at fifteen transects of approximately 40 feet in length in the first study period. The transects will be marked located by use of GPS coordinates. The number of transects in the second monitoring period will be reduced to about ten using a best judgement/random selection process. Transects will be selected based upon location of macrophyte colonies and areas of likely infestation. The transect samples will be analyzed for presence and approximate abundance of Eurasian Milfoil. Each transect will be sampled with a rake in three twelve foot diameter sections. Each section will be sampled in quarters. The first quarter will be sampled at a depth of 0-0.5 meters below the surface, the second 0.5-1.5 meters below the surface, the third 1.5-3.0 meters below the surface and the fourth beyond 3.0 meters below the surface. Each stand identified to contain eurasian milfoil will be analyzed for mat thickness and stand perimeter.

### **II. Frequency of Survey**

- A. The survey will be taken beginning in August or September 1998 and every three years thereafter.

### **III. Documentation existing colonies.**

- A. The results of the survey at each transect will be displayed in table form indicating relative abundance (none, low, medium, and high) of eurasian milfoil in the aquatic macrophyte samples taken. Each stand identified to contain eurasian milfoil will be analyzed for mat thickness and stand perimeter. A copy of the completed table and associated map will be provided to the WDNR and USFWS no later than December 31, every year in which monitoring occurs. Documentation of submittal of the results to the agencies shall also be filed with the Commission.

### **IV. Control of existing colonies.**

- A. If the abundance of eurasian milfoil within the reservoir becomes great, there will exist an excellent habitat for the native weevil (*euhrychiopsis lecontei*). Therefore, WPSC will allow the natural features of the reservoirs to maintain the population of eurasian milfoil. If the population should require elimination by other means, WPSC will cooperate with the agencies to control it.

V. **Public Awareness.**

- A. Public awareness about Eurasian Milfoil will be increased by providing informational notices supplied by the WDNR at WPSC-owned public access areas in the project boundary.