



Wisconsin Public Service Corporation

700 North Adams Street

P.O. Box 19001

Green Bay, WI 54307-9001

December 15, 2011

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

Dear Secretary Bose:

Peshtigo River Hydroelectric Projects – Six-Year Update FERC Approved Comprehensive Land & Wildlife Management Plan, Project No. 2525, No. 2595, No. 2522, No. 2546, No. 2560 and No. 2581

As per the Federal Energy Regulatory Commission (FERC) Order Approving Updated Comprehensive Land and Wildlife Management Plan (CLWMP) for the Caldron Falls Project (FERC Project No. 2525), High Falls Project (FERC Project 2595), Johnson Falls Project (FERC Project 2522), Sandstone Rapids Project (FERC Project No. 2546) and Potato Rapids Project (FERC Project No. 2560), collectively named the (Peshtigo River Hydroelectric Projects) issued March 29, 2006, Wisconsin Public Service Corporation (WPS) is to update the CLWMP every six years, with the next update submittal due to the FERC by March 29, 2012.

WPS is to provide a draft updated CLWMP to the Wisconsin Department of Natural Resources (WDNR), U.S. Fish & Wildlife Service (FWS) and Marinette County Land and Water Conversation Department (MCLWCD) and is to provide thirty (30) days for comment.

The draft CLWMP is similar to the approved CLWMP dated March 29, 2006 with a few changes. WPS has updated the Fire Control to remove WPS involvement from fire control activities. WPS has included forest management type and activities in the project facilities land category for overall forest health and timber stand improvement. WPS has also updated the CLWMP to include the completed WDNR Peshtigo State Forest Master Plan and changes to the purple loosestrife survey protocol. The draft CLWMP is provided in Appendix 1.

As per the FERC approved CLWMP, WPS is to survey and report purple loosestrife survey information on an annual basis. Additionally, as per the Order Approving Supplement to Comprehensive Land and Wildlife Management Plan for the Peshtigo Hydroelectric Project (FERC Project No. 2581) issued on July 30, 2009, WPS is to control purple loosestrife by releasing *Gallerucella sp.* Beetles (beetles) for a period of five years or until each purple loosestrife colony has established beetle populations. If after five years the population is controlled, or the population is reduced, WPS would reduce the frequency of surveying to once every three years, in conjunction with the Eurasian water milfoil survey.

WPS has surveyed the Peshtigo River Hydroelectric Projects for purple loosestrife since 1999. During the first survey at the Peshtigo project, purple loosestrife populations were well established and totaled 58 colonies. The approved method of control since 1999 had been to cut and hand pull small colonies (1 to 5 plants) of purple loosestrife. This method of control had shown varying success from year to year. A comparison of annual surveys since 2006 showed either an increase in overall purple loosestrife colonies or in colony size. For instance, the total number of colonies had shown a reduction from the 2007 to 2008 survey results (54 colonies in 2007 to 43 colonies in 2008), however the relative population of those colonies has increased (8 colonies of 6-50 plants in 2007, compared to 19 colonies of 6-50 plants in 2008). Also, since 2006, the number of colonies and relative population of those colonies had shown an increase (34 colonies of which 3 colonies containing 6-50 plants in 2006 to 43 colonies of which 19 containing 6-50 plants in 2008).

Because of this, WPS had provided a plan to control the purple loosestrife by releasing beetles. The resource agencies agreed with this approach and FERC approved the Supplement to Comprehensive Land and Wildlife Management Plan for the Peshtigo Hydroelectric Project issued on July 30, 2009.

Secretary Bose  
December 15, 2011  
Page 2 of 2

Since 2009, WPS has been controlling the purple loosestrife colonies by releasing beetles. WPS has released approximately 10,000 beetles a year, for a total of approximately 30,000 beetles over a three-year period.

The purple loosestrife survey results indicated that purple loosestrife has been reduced from 25 colonies in 2010 to 20 colonies in 2011. In addition, 6 of the 20 colonies were hand pulled leaving a total of 14 colonies remaining at the project. Also, an increase in beetle feeding was observed from 2010 to 2011. In 2010, feeding was observed at only 8 of the 25 sites. In 2011, feeding was observed at all 14 colonies. The success of the beetle feeding is even more significant when compared to the first year of beetle release in 2009, results from the 2009 survey indicated beetle feeding on only one site. In addition, the overall plant vigor average for the purple loosestrife colonies was reduced from 10.6 in 2010 to 7.3 in 2011.

Since the beginning of the surveying activities in 1999, WPS has reduced the purple loosestrife populations from 58 to 14 colonies, with beetle feeding observed on every colony. WPS does not foresee the need to continue to release beetles and anticipates a continuing trend in the reduction of purple loosestrife colonies, colony size and overall plant vigor at the Peshtigo Hydroelectric Project.

Since the first purple loosestrife survey completed in 1999, purple loosestrife has only been observed at two other hydroelectric projects. One single plant was pulled and removed off-site at the Sandstone Rapids Project in 2004, and one small colony was pulled and removed off-site at the Potato Rapids Project in 2011.

The Sandstone Rapids Project has been surveyed annually for purple loosestrife since 2004. Purple loosestrife has not been observed during any of those surveys.

To ensure that the purple loosestrife population has been controlled at the Potato Rapids Project, WPS recommends continuing monitoring and if necessary control purple loosestrife at the Potato Rapids Project for the next three years.

Based on the survey results since 1999, WPS recommends reducing the monitoring of purple loosestrife from an annual commitment to once every three years to coincide with the Eurasian water milfoil surveys for all but the Potato Rapids Project.

A copy of the CLWMP was provided to the Resource Agencies on October 7, 2011. The WDNR provided comments November 4, 2011. The documentation of submittal, the WDNR comment letter and WPS responses to the comments are included 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  
for Wisconsin Public Service Corporation

Enc.

cc: Mr. Ed Brandt, WPS  
Mr. Bruce Crocker, WPS

Mr. Howard Giesler, WPS  
Mr. Gil Snyder, WPS

# **APPENDIX 1**

## **PESHTIGO RIVER HYDROELECTRIC PROJECTS**

### **COMPREHENSIVE LAND AND WILDLIFE MANAGEMENT PLAN**

***WISCONSIN PUBLIC SERVICE CORPORATION***

**PESHTIGO RIVER  
HYDROELECTRIC PROJECTS**

**COMPREHENSIVE LAND & WILDLIFE  
MANAGEMENT PLAN**

**(FERC PROJECT NOS. 2525, 2595, 2522, 2546, 2560, and 2581)**



**PESHTIGO RIVER HYDROELECTRIC PROJECTS COMPREHENSIVE  
LAND & WILDLIFE MANAGEMENT PLAN**

**TABLE OF CONTENTS**

**Introduction .....1**

**Article Description .....1**

**Objective .....2**

**WDNR Peshtigo River State Forest Master Plan .....3**

**Description of Properties.....3**

**Geology and Soils .....4**

**Water .....4**

**Timber .....4**

**Project Facility Timber .....5**

**Wildlife .....6**

**Endangered Resources .....7**

**Roads and Trails .....7**

**Recreation .....8**

**Historical/Archaeological .....8**

    Land Management Categories..... 8

        A. Scenic Areas ..... 8

        B. Recreational Development ..... 9

        C. Project Facilities..... 9

        D. Archaeological and Historical Areas ..... 9

        E. Endangered Resource Zones ..... 10

        F. Natural Shoreline Area..... 10

    Management Practices..... 10

        A. Recreational Management..... 10

        B. Fish Management ..... 10

        C. Wildlife Management ..... 10

        D. Waterfowl Management..... 11

        E. Threatened and Endangered Species Management..... 11

        F. Forest Management ..... 11

        G. Forest Insect and Disease Program ..... 11

        H. Fire Control..... 12

        I. Wetland Management..... 12

        J. Invasive Species Monitoring..... 12

**Implementation.....12**

**Consultative Efforts .....13**

**PESHTIGO RIVER HYDROELECTRIC PROJECTS COMPREHENSIVE  
LAND & WILDLIFE MANAGEMENT PLAN**

**Appendix A**

WDNR Peshtigo River State Forest Master Plan .....

**Appendix B**

Exhibit G Figures.....

**Appendix C**

Bald Eagle Management Plan .....

**Appendix D**

Invasive Species Monitory Plans .....

**Appendix E**

Documentation of Consultation.....

**PESHTIGO RIVER HYDROELECTRIC PROJECTS COMPREHENSIVE  
LAND & WILDLIFE MANAGEMENT PLAN**

**Appendix D**

**Invasive Species Monitoring Plans**

## **PESHTIGO RIVER HYDROELECTRIC PROJECTS COMPREHENSIVE LAND & WILDLIFE MANAGEMENT PLAN**

### **PURPLE LOOSESTRIFE MONITORING PLAN**

#### **Objective**

The objective is 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 prefers wetland habitat and once established can become the dominant vegetation type. In consultation with the Wisconsin Department of Natural Resources (WDNR) and the U.S. Fish and Wildlife Service (FWS), Wisconsin Public Service Corporation (WPS) 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.

#### **Methods**

The monitoring methods will include a shoreline survey of the impoundments on the Peshtigo River, all water bodies, and all wetlands that occur on WPS property within the project boundary. The surveys will be conducted by boat and on foot to determine purple loosestrife populations. The relative density and abundance of the species will also be recorded.

#### **Frequency of Survey**

The survey will be completed every third year beginning in 2014, in conjunction with the Eurasian water milfoil survey. The surveys will either be completed in July or August, depending upon when the plants are in bloom.

#### **Documentation of Existing Colonies**

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 FWS no later than September 30<sup>th</sup>, every year a survey is completed. Documentation of submittal of the results to the agencies shall be filed with the FERC.

The map will indicate relative populations based on the following criteria:

## PESHTIGO RIVER HYDROELECTRIC PROJECTS COMPREHENSIVE LAND & WILDLIFE MANAGEMENT PLAN

1. Small Colonies of 1-5 plants
2. Medium Colonies of 6-50 plants
3. Dense Colonies of >50 plants

### Control of Existing Colonies

#### **A. Small Colonies**

Small colonies of 1 to 5 plants will either be cut by hand, sprayed with an approved herbicide or hand pulled and disposed of offsite.

#### **B. Large Colonies**

Currently, only the Peshtigo Hydroelectric Project has any purple loosestrife colonies located within the project boundary. WPS has successfully controlled the spread and significantly reduced the population of purple loosestrife at the Peshtigo Hydroelectric Project through the release of *Gallerucella* beetles (*Gallerucella* sp). WPS has not observed large colonies at any of the remaining Peshtigo River Hydroelectric Projects. In the unlikely event that large colonies of purple loosestrife would become established, WPS will survey the colonies for signs of beetle feeding on the large colonies. If signs of feeding are not observed, WPS will consult with the WDNR and FWS to determine if a *Gallerucella* beetle release or other types of control may be warranted.

### **Potato Rapids Hydroelectric Project**

WPS has been surveying for purple loosestrife on an annual since 1999. Since that time, WPS has not observed purple loosestrife on the Potato Rapids Hydroelectric Project until the most recent survey completed in 2011. One small single purple loosestrife colony was observed that was hand pulled and disposed of offsite.

WPS proposes to monitor this site annually on a separate schedule through 2014. Any purple loosestrife observed will be controlled using the protocols outlined in the purple loosestrife control plan. If purple loosestrife is no longer observed during the 2014 surveying activities, WPS will survey the Potato Rapids Hydroelectric Project every three years in conjunction with the Eurasian water milfoil survey.

## **PESHTIGO RIVER HYDROELECTRIC PROJECTS COMPREHENSIVE LAND & WILDLIFE MANAGEMENT PLAN**

### **Public Awareness**

Public awareness about purple loosestrife will be increased by displaying invasive species signage supplied by the WDNR at public access areas in the project boundary.

### **Documentation**

Documentation of submittal of monitoring reports to WDNR, and FWS every year a survey has been completed by September 30<sup>th</sup> and shall be provided to FERC by December 31<sup>st</sup> each year a survey has been completed.

## **PESHTIGO RIVER HYDROELECTRIC PROJECTS COMPREHENSIVE LAND & WILDLIFE MANAGEMENT PLAN**

### **ZEBRA MUSSEL MONITORING PLAN**

#### **Introduction**

Wisconsin Public Service (WPS) 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 non-indigenous 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.

Since, 1999, Zebra mussel surveys have been completed at the Peshtigo River Hydroelectric Projects. Zebra mussels have been confirmed at the Potato Rapids and Peshtigo Hydroelectric Projects. Since zebra mussels are already present at the Potato Rapids and Peshtigo Hydroelectric Projects, WPS will complete zebra mussels surveys at the remain four projects were zebra mussels have not been observed. This includes the Caldron Falls, High Falls, Johnson Falls and Sandstone Rapids Hydroelectric Projects.

#### **Purposes**

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

1. the method of monitoring,
2. the frequency of monitoring,
3. documentation of transmission of monitoring data to the Wisconsin Department of Natural

Resources (WDNR), U.S. Fish and Wildlife Service (FWS) and the University of Wisconsin Sea Grant Institute, and if deemed necessary by the WDNR and FWS,

## **PESHTIGO RIVER HYDROELECTRIC PROJECTS COMPREHENSIVE LAND & WILDLIFE MANAGEMENT PLAN**

4. actions to be taken in a cooperative effort with the agencies to control/eliminate zebra mussels

### **Objective**

To monitor for the presence of Zebra Mussels (*Dreissena polymorpha*) in Peshtigo River Hydroelectric Project waters.

### **Methods**

The survey monitoring program was developed in consultation with the University of Wisconsin-Sea Grant. Monitoring for the presence of zebra mussels will occur on a routine basis using substrate samplers at the Caldron Falls, High Falls, Johnson Falls and Sandstone Rapids Hydroelectric Projects. Additionally, inspections of hard surfaces that are normally submerged will be conducted during the drawdown of these reservoirs.

### **Frequency of Survey**

Substrate samplers at the Caldron Falls, High Falls, Johnson Falls and Sandstone Rapids Hydroelectric Projects will be surveyed and documented monthly from May through September each year.

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.

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

### **Documentation**

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, FWS, and University of Wisconsin - Sea Grant (Attachment B) by September 30th, every third year beginning in 2014, in conjunction with the purple loosestrife and Eurasian water milfoil survey reporting. Documentation of submittal of the results to the agencies shall be provided to FERC by no later than December 31st every third year.

If zebra mussels are observed at a project in a non report submittal year, WPS will inform the WDNR,



**PESHTIGO RIVER HYDROELECTRIC PROJECTS COMPREHENSIVE  
LAND & WILDLIFE MANAGEMENT PLAN**

FWS and University of Wisconsin - Sea Grant by September 30<sup>th</sup> of that year.

**Control of Existing Colonies**

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, WPS will cooperate with the agencies to control zebra mussels in the project reservoirs.

**PESHTIGO RIVER HYDROELECTRIC PROJECTS COMPREHENSIVE  
LAND & WILDLIFE MANAGEMENT PLAN**

**ATTACHMENT A**

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

**HYDRO NAME**

Caldron Falls       Johnson Falls       High Falls       Sandstone Rapids

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

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

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

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

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

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

**PESHTIGO RIVER HYDROELECTRIC PROJECTS COMPREHENSIVE  
LAND & WILDLIFE MANAGEMENT PLAN**

**ATTACHMENT B**

**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:

## **PESHTIGO RIVER HYDROELECTRIC PROJECTS COMPREHENSIVE LAND & WILDLIFE MANAGEMENT PLAN**

### **EURASIAN WATER MILFOIL MONITORING PLAN**

#### **Objective**

To monitor the presence and abundance of Eurasian water milfoil (*Myriophyllum spicatum*) on the Peshtigo River hydroelectric project lands. Eurasian water milfoil (EWM) is an exotic aquatic macrophyte that exhibits aggressive characteristics. The plant is becoming increasingly common to inland lakes and rivers. Wisconsin Public Service (WPS) will periodically monitor the Peshtigo Hydroelectric Projects for this aquatic plant species.

#### **Methods**

As utilized since 1999, the monitoring methods include a routine EWM survey via boat to take samples at ten transects approximately 36 feet in length. The transects have been located by use of GPS coordinates and have been selected based upon locations of likely EWM infestation. During each surveying activity, the transect samples will be analyzed for presence and approximate abundance of EWM. 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.

#### **Frequency of Survey**

The survey will be taken beginning in August or September 2014 and every three years thereafter.

#### **Documentation of Existing Colonies**

The results of the survey at each transect will be displayed in table form indicating relative abundance (none, low, medium and high) of EWM compared to the surrounding aquatic vegetation. Each stand identified to contain EWM 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 FWS no later than September 30<sup>th</sup> every year in which monitoring occurs. Documentation of submittal of the results to the agencies will be filed to FERC by December 31<sup>st</sup>, every year monitoring occurs.

## **PESHTIGO RIVER HYDROELECTRIC PROJECTS COMPREHENSIVE LAND & WILDLIFE MANAGEMENT PLAN**

### **Control of Existing Colonies**

If deemed necessary by the WDNR and FWS, WPS will cooperate with the agencies to control/eliminate EWM when an effective eradication method is developed.

### **Public Awareness**

Public awareness about purple loosestrife will be increased by displaying invasive species signage supplied by the WDNR at public access areas in the project boundary.

**Appendix E**  
**Documentation of Consultation**

# **Wisconsin Department of Natural Resource Consultation**



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

October 7, 2011

Mr. Michael Donofrio  
 Wisconsin Department of Natural Resources  
 101 N Ogden Road  
 Peshtigo WI 54157

Dear Mr. Donofrio:

Peshtigo River Hydroelectric Projects – Six Year Update FERC Approved Comprehensive Land & Wildlife Management Plan, Project No. 2525, No. 2595, No. 2522, No. 2546, No. 2560, and No. 2581

As per the Federal Energy Regulatory Commission (FERC) Order Approving Updated Comprehensive Land and Wildlife Management Plan (CLWMP) for the Caldron Falls Project (FERC Project No. 2525), High Falls Project (FERC Project 2595), Johnson Falls Project (FERC Project 2522), Sandstone Rapids Project (FERC Project No. 2546) and Potato Rapids Project (FERC Project No. 2560), collectively named the (Peshtigo River Hydroelectric Projects) issued March 29, 2006, Wisconsin Public Service Corporation (WPS) is to update the CLWMP every six years, with the next update submittal due to the FERC by March 29, 2012.

WPS is to provide a draft updated CLWMP to the Wisconsin Department of Natural Resources (WDNR), U.S. Fish & Wildlife Service (FWS) and Marinette County Land and Water Conversation Department (MCLWCD) and is to provide thirty (30) days for comment.

The draft CLWMP is attached. The draft CLWMP is similar to the approved CLWMP dated March 29, 2006 with a few changes. WPS has updated the Fire Control to remove WPS involvement from fire control activities. WPS has included forest management activities in the project facilities land category for overall forest health and timber stand improvement. WPS has also updated the CLWMP to include the completed WDNR Peshtigo State Forest Master Plan and changes to the purple loosestrife survey protocol.

As per the FERC approved CLWMP, WPS is to survey and report purple loosestrife survey information on an annual basis. Additionally, as per the Order Approving Supplement to Comprehensive Land and Wildlife Management Plan for the Peshtigo Hydroelectric Project (FERC Project No. 2581) issued on July 30, 2009, WPS is to control purple loosestrife by releasing *Gallerucella sp.* Beetles (beetles) for a period of five years or until each purple loosestrife colony has established beetle populations. If after five years the population is controlled, or the population is reduced, WPS would reduce the frequency of surveying to once every three years, in conjunction with the Eurasian water milfoil survey.

WPS has surveyed the Peshtigo River Hydroelectric Projects for purple loosestrife since 1999. During the first survey at the Peshtigo project, purple loosestrife populations were well established and totaled 58 colonies. The approved method of control since 1999 had been to cut and hand pull small colonies (1 to 5 plants) of purple loosestrife. This method of control had shown varying success from year to year. A comparison of annual surveys since 2006 showed either an increase in overall purple loosestrife colonies or in colony size. For instance, the total number of colonies had shown a reduction from the 2007 to 2008 survey results (54 colonies in 2007 to 43 colonies in 2008), however the relative population of those colonies has increased (8 colonies of 6-50 plants in 2007, compared to 19 colonies of 6-50 plants in 2008). Also, since 2006, the number of colonies and relative population of those colonies had shown an increase (34 colonies of which 3 colonies containing 6-50 plants in 2006 to 43 colonies of which 19 containing 6-50 plants in 2008).

Because of this, WPS had provided a plan to control the purple loosestrife by releasing beetles. The resource agencies agreed with this approach and FERC approved the Supplement to Comprehensive Land and Wildlife Management Plan for the Peshtigo Hydroelectric Project issued on July 30, 2009.



Mr. Donofrio

Page 2 of 2

Since 2009, WPS has been controlling the purple loosestrife colonies by releasing beetles. WPS has released approximately 10,000 beetles a year, for a total of approximately 30,000 beetles over a three year period.

The purple loosestrife survey results indicated that purple loosestrife has been reduced from 25 colonies in 2010 to 20 colonies in 2011. In addition 6 of the 20 colonies were hand pulled leaving a total of 14 colonies remaining at the project. Also, an increase in beetle feeding was observed from 2010 to 2011. In 2010, feeding was observed at only 8 of the 25 sites. In 2011, feeding was observed at all 14 colonies. The success of the beetling feeding is even more significant when compared to the first year of beetle release in 2009, results from the 2009 survey indicated beetle feeding on only one site. In addition, the overall plant vigor average for the purple loosestrife colonies was reduced from 10.6 in 2010 to 7.3 in 2011.

Since the beginning of the surveying activities in 1999, WPS has reduced the purple loosestrife populations from 58 to 14 colonies, with beetle feeding observed on every colony. WPS does not foresee the need to continue to release beetles and anticipates a continuing trend in the reduction of purple loosestrife colonies, colony size and overall plant vigor at the Peshtigo Hydroelectric Project.

Since the first purple loosestrife survey completed in 1999, purple loosestrife has only been observed at two other hydroelectric projects. One single plant was pulled and removed off-site at the Sandstone Rapids Project in 2004, and one small colony was pulled and removed off-site at the Potato Rapids Project in 2011.

The Sandstone Rapids Project has been surveyed annually for purple loosestrife since 2004. Purple loosestrife has not been observed during any of those surveys.

To ensure that the purple loosestrife population has been controlled at the Potato Rapids Project, WPS recommends continuing monitoring and if necessary control purple loosestrife at the Potato Rapids Project for the next three years.

Based on the survey results since 1999, WPS recommends reducing the monitoring of purple loosestrife from an annual commitment to once every three years to coincide with the Eurasian water milfoil surveys for all but the Potato Rapids Project.

Please provide comments within thirty (30) days upon receiving this information. If you have any questions or seek clarification, please contact me at your earliest convenience.

Sincerely,



James Nuthals  
Environmental Services-  
Natural Resource Management

Enc.

cc: Mr. Dan Mertz - WDNR

## **WDNR COMMENTS AND WPS RESPONSES**

State of Wisconsin  
DEPARTMENT OF NATURAL RESOURCES  
101 North Ogden Road  
Peshtigo WI 54157

Scott Walker, Governor  
Cathy Stepp, Secretary  
Telephone 608-266-2621  
Toll Free 1-888-936-7463  
TTY Access via relay - 711



4 November 2011

James Nuthals  
Environmental Services  
Wisconsin Public Service  
PO Box 19001  
Green Bay, WI 54307

Dear Mr Nuthals:

Wisconsin DNR has reviewed the 6 year update FERC Approved Comprehensive Land and Wildlife Management Plan (CLWMP) and offers the following comments:

- 1) Even though WPS transferred 12,000 acres to the WDNR in 2004, WDNR has to manage that land according to the FERC CLWMP for the Peshtigo River Hydroelectric Projects. That requirement shall not be a problem since our Peshtigo River State Forest Plan is part of the CLWMP. We suggest that WPS include a statement in the CLWMP how the Peshtigo River State Forest Plan is in agreement with the objectives and intent of the CLWMP.
- 2) We agree with the 6 WPS objectives of this plan: a) manage forest practices in an integrated resource management program, b) manage for and make available the wildlife resource for consumptive and non-consumptive use by providing for wildlife diversity, c) provide compatible outdoor recreational opportunities as needed to satisfy pressure demand, d) protect archaeological and historical sites on project lands, e) protect and manage for endangered resources, and f) implement WDNR best management practices for water quality for all ground disturbing activities.  
In addition, WDNR now has BMP's for invasive species. They are voluntary BMP's and intended for use during forest stewardship activities but we advise WPS to follow these BMP's for invasive species during any stewardship activities.
- 3) Fisheries- We stock brook, brown and rainbow trout into the 5 miles of river between Johnson Falls dam and Sandstone flowage, but the plan only mentions brook and brown trout.
- 4) Timber- The Timber section is very general but it's alright since the specific elements are contained in the WDNR Peshtigo River State Forest Master Plan. On page 6 of the Plan, WPS presents a very broad perspective on the timber stands including definitions of each stand type. We suggest more specific information should be contained within such as the number of acres of each cover type for project facility lands.
- 5) Wildlife- We agree with the statement that WPS states they have no plans for intensive wildlife management improvements. Regarding the forest habitat, actually most of the project lands are over mature scrub oak- aspen stands not early successional stages of forests.  
Edit the plan to include the underlined, delete the struck sections and add the italic sentences in the draft text, "Intensive wildlife management improvement activities, independent of timber harvesting, are not planned for project lands. However, land management activities such as timber harvesting will incorporate wildlife management techniques to enhance wildlife populations. *As there is currently a good interspersion of habitats on project lands, habitat manipulations would not improve game populations significantly. It is planned that a significant acreage of timber will be clearcut during the life of this plan, which will benefit wildlife species that rely on young, early successional forests.*
- 6) Endangered Resources- Wisconsin DNR has a list in Appendix A of our State Forest Master Plan.
- 7) Roads and Trails- General statements in the CLWMP are fine.
- 8) Recreation- WPS maintains the sites still owned by them and WDNR maintains the sites in our ownership. Edit text as "Through a land use agreements, a segment of the MCLWCD snowmobile system passes through the projects snowmobile clubs are allowed to operate a trail system on project lands."



- 9) Historical/ Archaeological- No comments.
- 10) Land Management Categories- No comments.
- 11) Scenic Areas- We agree that any variances in the 200 foot no-cut zone will be handled at the annual meetings with the agencies.
- 12) Recreation Development- No comments as WPS maintains the sites still owned by them and WDNR maintains the sites in our ownership.
- 13) Project Facilities- WPS will consult with WDNR on any proposed forest management activities on project facility lands and WDNR will consult with WPS on WDNR lands.
- 14) Cultural- No comments.
- 15) Endangered resources zones- WDNR agrees that these zones should be protected and not identified to the public.
- 16) Natural shoreline area- WDNR concurs that all activities within this area need written approval from WPS.
- 17) Management Practices- WPS will cooperate with WDNR on recreational management, fish management, wildlife management, waterfowl management, endangered species management, forest management, fire control, wetland management, and invasive species monitoring. At a minimum, WPS will attempt to consult with WDNR on an annual basis.

Forest Management is not listed under management practices and can be briefly addressed as following: Forest management shall be consistent with the State Forest Plan and discussed through annual agency consultation.

Under forest insect and disease program, unusual tree damage or insect outbreaks should not be reported to the WDNR Entomologist but rather the WDNR Forest Health Specialist.

Finally the fire control section should be edited to read "WDNR, in cooperation with local fire departments, is responsible for fire detection and suppression activities on unincorporated lands in Wisconsin. On an annual basis, WPS will consult with WDNR on fire prevention, detection, and suppression for company owned land."

WPS documented increased feeding by *Gallerucella sp.* beetles however, the 2009 supplement says "WPS is to control purple loosestrife by releasing *Gallerucella sp.* beetles for a period of 5 years or until each purple loosestrife colony has established beetle populations". "Increased feeding" does not equate to "established beetle populations". *Gallerucella sp.* beetles should be released for 2 more years for evaluation during their annual surveys through 2014. Otherwise, WPS has requested a deviation on invasive species monitoring and while the proposed schedule, for the most part is acceptable, we are concerned about the spread of phragmites spp. along the Peshtigo river and therefore request that when WPS is monitoring for purple loosestrife that they also record the location of any incident of phragmites spp. We suggest that WPS involve WDNR Water Regulation and Zoning Specialist, Robert Rosenberger (715-582-5041) early in the planning process of any projects that may require a permit or authorization from the WDNR for projects that would impact any waterways or wetlands. Thank you for the opportunity to review this version of the CLWMP.

Sincerely,



Michael Donofrio  
Fisheries Supervisor

C: Cheryl Laatsch, WDNR  
Nick Utrup, USFWS  
Dan Mertz, WDNR

## WDNR COMMENTS

**1) WDNR COMMENT:** Even though WPS transferred 12,000 acres to the WDNR in 2004, WDNR has to manage that land according to the FERC CLWMP for the Peshtigo River Hydroelectric Projects. That requirement shall not be a problem since our Peshtigo River State Forest Plan is part of the CLWMP. We suggest that WPS include a statement in the CLWMP on how the Peshtigo River State forest Plan is in agreement with the objectives and intent of the CLWMP.

**WPS RESPONSE:** The CLWMP has been updated to include the WDNR comment.

**2) WDNR COMMENT:** We agree with the 6 WPS objectives of this plan: a) manage forest practices in integrated resource management program, b) manage for and make available the wildlife resource for consumptive and non-consumptive use by providing for wildlife diversity, c) provide compatible outdoor recreational opportunities as needed to satisfy pressure demand, d) protect archaeological and historical sites on project lands, e) protect and manage for endangered resources, and f) implement WDNR best management practices for water quality for all ground disturbing activities.

In addition, WDNR now has BMP's for invasive species. They are voluntary BMPs and intended for use during forest stewardship activities but we advise WPS to follow these BMP's for invasive species during any stewardship activities.

**WPS RESPONSE:** WPS has internally developed BMPs for invasive plant species and is currently following these internal BMPs during stewardship activities in order to comply with the WDNR Chapter NR 40 Invasive Species Identification, Classification and Control Rule. WPS proposes to continue to follow the internally developed BMPs and not the WDNR BMPs for invasive species during any stewardship activities.

**3) WDNR COMMENT:** Fisheries – We stock brook, brown and rainbow trout into the 5 miles between Johnson Falls dam and Sandstone flowage, but the plan only mentions brook and brown trout.

**WPS RESPONSE:** The CLWMP has been updated to include the WDNR comment.

**4) WDNR COMMENT:** Timber- The timber section is very general but it's alright since the specific elements are contained in the WDNR Peshtigo River State Forest Master Plan. On page 6 of the plan, WPS presents a very board perspective on the timber stands including definitions of each stand type. We suggest more specific information should be contained within such as the number of acres of each cover type for project facility lands.

**WPS RESPONSE:** The CLWMP has been updated to include the WDNR comment.

**5) WDNR COMMENT:** Wildlife- We agree with the statement that WPS states they have no plans for intensive wildlife management improvements. Regarding the forest habitat, actually most of the project lands are over mature scrub oak- aspen stands not early successional stages of forests.

Edit the plan to include the underlined, delete the striked sections and add the italic sentences in the draft text, "Intensive wildlife management improvement activities, independent of timber harvesting, are not planned for project lands. However, land management activities such as timber harvesting will incorporate wildlife management techniques to enhance wildlife populations. ~~As there is currently a good interspersion of habitats on project lands, habitat manipulations would not be improve game populations significantly.~~ *It is planned that a significant acreage of timber will be clearcut during the life of the plan, which will benefit wildlife species that rely on young, early successional forests.*

**WPS RESPONSE:** The CLWMP has been updated to include the WDNR comment.

**6) WDNR COMMENT:** Endangered Resources - Wisconsin DNR has a list in Appendix A of our State Forest Master Plan.

**WPS RESPONSE:** Comment Noted.

**7) WDNR COMMENT:** Roads and Trails – General statements in the CLWMP are fine.

**WPS RESPONSE:** Comment Noted.

**8) WDNR COMMENT:** Recreation –WPS maintains the sites still owned by them and WDNR maintains the sites in our ownership. Edit text as "Through a land use agreements, ~~a segment of the MCLWCD snowmobile system passes through the projects~~ snowmobile clubs are allowed to operate a trail system on project lands."

**WPS RESPONSE:** The CLWMP has been updated to include the WDNR comment.

**9) WDNR COMMENT:** Historical /Archaeological – No comments.

**WPS RESPONSE:** Comment Noted.

**10) WDNR COMMENT:** Land Management Categories – No comments.

**WPS RESPONSE:** Comment Noted.

**11) WDNR COMMENT:** Scenic Areas – We agree that any variances in the 200 foot no-cut zone will be handled at the annual meetings with the agencies.

**WPS RESPONSE:** Comment Noted.



**12) WDNR COMMENT:** Recreation Development: No comment as WPS maintains the sites still owned by them and WDNR maintains the sites in our ownership.

**WPS RESPONSE:** Comment Noted.

**13) WDNR COMMENT:** Project facilities-WPS will consult with WDNR on any proposed forest management activities on project facility lands and WDNR will consult with WPS on WDNR lands.

**WPS RESPONSE:** Comment Noted.

**14) WDNR COMMENT:** Cultural – No comments.

**WPS RESPONSE:** Comment Noted.

**15) WDNR COMMENT:** Endangered resource zones – WDNR agrees that these zones should be protected and not identified to the public.

**WPS RESPONSE:** Comment Noted.

**16) WDNR COMMENT:** Natural shoreline area – WDNR concurs that all activities within this area need written approval from WPS.

**WPS RESPONSE:** Comment Noted.

**17) WDNR COMMENT:** Management Practices – WPS will cooperate with WDNR on recreational management, fish management, wildlife management, waterfowl management, endangered species management, forest management, fire control, wetland management, and invasive species monitoring. At a minimum, WPS will attempt to consult with WDNR on an annual basis.

**WPS RESPONSE:** Comment Noted.

**17) WDNR COMMENT:** Forest Management is not listed under management practices and can be briefly addressed as following: Forest Management shall be consistent with the State Forest Plan and discussed through annual agency consultation.

**WPS RESPONSE:** WPS agrees that forest management can be discussed through annual agency consultation and will update the CLWMP to include a category for Forest Management and incorporate the WDNR comment. However, WPS lands are not part of the Peshtigo State Forest. To remain consistent with the forest management practices being conducted on other WPS project lands, WPS will practice forest management under the guidance of the WDNR Public Forest Lands Handbook 2416.5 and not necessarily the State Forest Plan.

**17) WDNR COMMENT:** Under forest and disease program, unusual tree damage or insect outbreak should not be reported to the WDNR Entomologist but rather the WDNR Forest Health Specialist.

**WPS RESPONSE:** The CLWMP has been updated to include the WDNR comment.

**17) WDNR COMMENT:** Finally the fire control section should be edited to read “WDNR, in cooperation with local fire departments is responsible for fire detection and suppression activities on unincorporated lands in Wisconsin. On an annual basis, WPS will consult with the WDNR on fire prevention, detection, and suppression for company owned land.”

**WPS RESPONSE:** The CLWMP has been updated to include the WDNR comment.

**WDNR COMMENT:** WPS documented increased feeding by *Gallerucella sp.* beetles however, the 2009 supplement says “WPS is to control purple loosestrife by releasing *Gallerucella sp.* beetles for a period of 5 years or until each purple loosestrife colony has established beetle populations”. “Increased feeding” does not equate to “established beetle populations”. *Gallerucella sp.* beetles should be released for 2 more years for evaluation during their annual surveys through 2014.

**WPS RESPONSE:** WPS completed a purple loosestrife survey at the Peshtigo Hydroelectric Project on August 4, 2011. During the survey, WPS also reviewed and documented signs of *Gallerucella sp.* beetle feeding at each purple loosestrife colony. The survey results indicated that each remaining purple loosestrife colony had *Gallerucella sp.* beetle feeding. Of the fourteen colonies remaining, only four of those colonies had feeding at fifty percent or less. All other colonies indicated greater than fifty percent feeding. A survey report for the Peshtigo River Hydroelectric Project was provided to the resource agencies on September 15, 2011 and to FERC on October 21, 2011.

Since 2009, WPS has released approximately 30,000 *Gallerucella sp.* beetles at the Peshtigo Hydroelectric Project. The beetle’s entire life cycle is tied directly to the loosestrife plant, including reproduction. The beetle population has shown to fluctuate with the amount of purple loosestrife available and maintains the purple loosestrife population to a point where it is generally sparse to very sparse relative to the surrounding vegetation. However, with any biological control that is affected by carrying capacity, the population of the controlling entity (beetle) can either exceed or lag behind the population of the species being controlled (purple loosestrife).

It is in WPS’s opinion that each purple loosestrife colony at the project has an established beetle population and that fluctuations may be observed at any particular colony from year to year. The beetles however, should continue to maintain the purple loosestrife plants to a sparse or very sparse population relative to the surrounding vegetation at the Peshtigo Hydroelectric Project.

WPS has established beetle populations at every purple loosestrife colony. WPS would not propose to release any additional *Gallerucella sp.* beetles at this time, and would allow the population to naturally reproduce and fluctuate as has been observed at other hydroelectric projects. Therefore, WPS feels purple loosestrife surveys should be completed every third year at the Peshtigo Hydroelectric Project with the next survey scheduled for 2014, and not annually until 2014, as proposed by the WDNR.



**WDNR COMMENT:** Otherwise, WPS has requested a deviation on invasive species monitoring and while the proposed schedule, for the most part is acceptable, we are concerned about the spread of phragmites ssp. along the Peshtigo river and therefore request that when WPS is monitoring for purple loosestrife that they also record the location of any incident of phragmites ssp.

**WPS RESPONSE:** According to the FERC Order Issuing New License dated June 26, 1997 for the Peshtigo River Hydroelectric Projects, WPS is to develop a plan to monitor for purple loosestrife and Eurasian water milfoil in project waters. WPS has voluntarily reviewed the reservoirs for phragmites ssp. and has provided that information to the WDNR. However, WPS believes that WDNR's request to have WPS survey for phragmites ssp. is beyond the scope of the FERC Order Issuing New License dated June 26, 1997. WPS will voluntarily continue to work with the WDNR on phragmites ssp. identification, as has been past practices, as the WDNR has continued to work with WPS on phragmites ssp. identification. However, it is in WPS's opinion that this should be completed outside of a FERC mandate.

**WDNR COMMENT:** We suggest that WPS involve the WDNR Water Regulation and Zoning Specialist, Robert Rosenberger (715- 582-5041) early in planning process of any projects that may require a permit or authorization from the WDNR for project that would impact any waterways or wetlands.

**WPS RESPONSE:** WPS will discuss upcoming construction projects at the annual agency meeting.

# **Marinette County Land and Water Conservation Department Consultation**



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

October 7, 2011

Mr. Greg Cleereman  
 Marinette County Land & Water Conversation Department  
 1926 Hall Avenue  
 Marinette WI 54143-1717

Dear Mr. Cleereman:

Peshtigo River Hydroelectric Projects – Six Year Update FERC Approved Comprehensive Land & Wildlife Management Plan, Project No. 2525, No. 2595, No. 2522, No. 2546, No. 2560, and No. 2581

As per the Federal Energy Regulatory Commission (FERC) Order Approving Updated Comprehensive Land and Wildlife Management Plan (CLWMP) for the Caldron Falls Project (FERC Project No. 2525), High Falls Project (FERC Project 2595), Johnson Falls Project (FERC Project 2522), Sandstone Rapids Project (FERC Project No. 2546) and Potato Rapids Project (FERC Project No. 2560), collectively named the (Peshtigo River Hydroelectric Projects) issued March 29, 2006, Wisconsin Public Service Corporation (WPS) is to update the CLWMP every six years, with the next update submittal due to the FERC by March 29, 2012.

WPS is to provide a draft updated CLWMP to the Wisconsin Department of Natural Resources (WDNR), U.S. Fish & Wildlife Service (FWS) and Marinette County Land and Water Conversation Department (MCLWCD) and is to provide thirty (30) days for comment.

The draft CLWMP is attached. The draft CLWMP is similar to the approved CLWMP dated March 29, 2006 with a few changes. WPS has updated the Fire Control to remove WPS involvement from fire control activities. WPS has included forest management activities in the project facilities land category for overall forest health and timber stand improvement. WPS has also updated the CLWMP to include the completed WDNR Peshtigo State Forest Master Plan and changes to the purple loosestrife survey protocol.

As per the FERC approved CLWMP, WPS is to survey and report purple loosestrife survey information on an annual basis. Additionally, as per the Order Approving Supplement to Comprehensive Land and Wildlife Management Plan for the Peshtigo Hydroelectric Project (FERC Project No. 2581) issued on July 30, 2009, WPS is to control purple loosestrife by releasing *Gallerucella sp.* Beetles (beetles) for a period of five years or until each purple loosestrife colony has established beetle populations. If after five years the population is controlled, or the population is reduced, WPS would reduce the frequency of surveying to once every three years, in conjunction with the Eurasian water milfoil survey.

WPS has surveyed the Peshtigo River Hydroelectric Projects for purple loosestrife since 1999. During the first survey at the Peshtigo project, purple loosestrife populations were well established and totaled 58 colonies. The approved method of control since 1999 had been to cut and hand pull small colonies (1 to 5 plants) of purple loosestrife. This method of control had shown varying success from year to year. A comparison of annual surveys since 2006 showed either an increase in overall purple loosestrife colonies or in colony size. For instance, the total number of colonies had shown a reduction from the 2007 to 2008 survey results (54 colonies in 2007 to 43 colonies in 2008), however the relative population of those colonies has increased (8 colonies of 6-50 plants in 2007, compared to 19 colonies of 6-50 plants in 2008). Also, since 2006, the number of colonies and relative population of those colonies had shown an increase (34 colonies of which 3 colonies containing 6-50 plants in 2006 to 43 colonies of which 19 containing 6-50 plants in 2008).

Because of this, WPS had provided a plan to control the purple loosestrife by releasing beetles. The resource agencies agreed with this approach and FERC approved the Supplement to Comprehensive Land and Wildlife Management Plan for the Peshtigo Hydroelectric Project issued on July 30, 2009.

Mr. Cleereman

Page 2 of 2

Since 2009, WPS has been controlling the purple loosestrife colonies by releasing beetles. WPS has released approximately 10,000 beetles a year, for a total of approximately 30,000 beetles over a three year period.

The purple loosestrife survey results indicated that purple loosestrife has been reduced from 25 colonies in 2010 to 20 colonies in 2011. In addition 6 of the 20 colonies were hand pulled leaving a total of 14 colonies remaining at the project. Also, an increase in beetle feeding was observed from 2010 to 2011. In 2010, feeding was observed at only 8 of the 25 sites. In 2011, feeding was observed at all 14 colonies. The success of the beetling feeding is even more significant when compared to the first year of beetle release in 2009, results from the 2009 survey indicated beetle feeding on only one site. In addition, the overall plant vigor average for the purple loosestrife colonies was reduced from 10.6 in 2010 to 7.3 in 2011.

Since the beginning of the surveying activities in 1999, WPS has reduced the purple loosestrife populations from 58 to 14 colonies, with beetle feeding observed on every colony. WPS does not foresee the need to continue to release beetles and anticipates a continuing trend in the reduction of purple loosestrife colonies, colony size and overall plant vigor at the Peshtigo Hydroelectric Project.

Since the first purple loosestrife survey completed in 1999, purple loosestrife has only been observed at two other hydroelectric projects. One single plant was pulled and removed off-site at the Sandstone Rapids Project in 2004, and one small colony was pulled and removed off-site at the Potato Rapids Project in 2011.

The Sandstone Rapids Project has been surveyed annually for purple loosestrife since 2004. Purple loosestrife has not been observed during any of those surveys.

To ensure that the purple loosestrife population has been controlled at the Potato Rapids Project, WPS recommends continuing monitoring and if necessary control purple loosestrife at the Potato Rapids Project for the next three years.

Based on the survey results since 1999, WPS recommends reducing the monitoring of purple loosestrife from an annual commitment to once every three years to coincide with the Eurasian water milfoil surveys for all but the Potato Rapids Project.

Please provide comments within thirty (30) days upon receiving this information. If you have any questions or seek clarification, please contact me at your earliest convenience.

Sincerely,



James Nuthals  
Environmental Services-  
Natural Resource Management

Enc.

## **U.S. FISH & WILDLIFE SERVICE CONSULTATION**





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

October 7, 2011

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

Dear Mr. Utrup:

Peshtigo River Hydroelectric Projects – Six Year Update FERC Approved Comprehensive Land & Wildlife Management Plan, Project No. 2525, No. 2595, No. 2522, No. 2546, No. 2560, and No. 2581

As per the Federal Energy Regulatory Commission (FERC) Order Approving Updated Comprehensive Land and Wildlife Management Plan (CLWMP) for the Caldron Falls Project (FERC Project No. 2525), High Falls Project (FERC Project 2595), Johnson Falls Project (FERC Project 2522), Sandstone Rapids Project (FERC Project No. 2546) and Potato Rapids Project (FERC Project No. 2560), collectively named the (Peshtigo River Hydroelectric Projects) issued March 29, 2006, Wisconsin Public Service Corporation (WPS) is to update the CLWMP every six years, with the next update submittal due to the FERC by March 29, 2012.

WPS is to provide a draft updated CLWMP to the Wisconsin Department of Natural Resources (WDNR), U.S. Fish & Wildlife Service (FWS) and Marinette County Land and Water Conversation Department (MCLWCD) and is to provide thirty (30) days for comment.

The draft CLWMP is attached. The draft CLWMP is similar to the approved CLWMP dated March 29, 2006 with a few changes. WPS has updated the Fire Control to remove WPS involvement from fire control activities. WPS has included forest management activities in the project facilities land category for overall forest health and timber stand improvement. WPS has also updated the CLWMP to include the completed WDNR Peshtigo State Forest Master Plan and changes to the purple loosestrife survey protocol.

As per the FERC approved CLWMP, WPS is to survey and report purple loosestrife survey information on an annual basis. Additionally, as per the Order Approving Supplement to Comprehensive Land and Wildlife Management Plan for the Peshtigo Hydroelectric Project (FERC Project No. 2581) issued on July 30, 2009, WPS is to control purple loosestrife by releasing *Gallerucella sp.* Beetles (beetles) for a period of five years or until each purple loosestrife colony has established beetle populations. If after five years the population is controlled, or the population is reduced, WPS would reduce the frequency of surveying to once every three years, in conjunction with the Eurasian water milfoil survey.

WPS has surveyed the Peshtigo River Hydroelectric Projects for purple loosestrife since 1999. During the first survey at the Peshtigo project, purple loosestrife populations were well established and totaled 58 colonies. The approved method of control since 1999 had been to cut and hand pull small colonies (1 to 5 plants) of purple loosestrife. This method of control had shown varying success from year to year. A comparison of annual surveys since 2006 showed either an increase in overall purple loosestrife colonies or in colony size. For instance, the total number of colonies had shown a reduction from the 2007 to 2008 survey results (54 colonies in 2007 to 43 colonies in 2008), however the relative population of those colonies has increased (8 colonies of 6-50 plants in 2007, compared to 19 colonies of 6-50 plants in 2008). Also, since 2006, the number of colonies and relative population of those colonies had shown an increase (34 colonies of which 3 colonies containing 6-50 plants in 2006 to 43 colonies of which 19 containing 6-50 plants in 2008).

Mr. Utrup  
Page 2 of 2

Because of this, WPS had provided a plan to control the purple loosestrife by releasing beetles. The resource agencies agreed with this approach and FERC approved the Supplement to Comprehensive Land and Wildlife Management Plan for the Peshtigo Hydroelectric Project issued on July 30, 2009.

Since 2009, WPS has been controlling the purple loosestrife colonies by releasing beetles. WPS has released approximately 10,000 beetles a year, for a total of approximately 30,000 beetles over a three year period.

The purple loosestrife survey results indicated that purple loosestrife has been reduced from 25 colonies in 2010 to 20 colonies in 2011. In addition 6 of the 20 colonies were hand pulled leaving a total of 14 colonies remaining at the project. Also, an increase in beetle feeding was observed from 2010 to 2011. In 2010, feeding was observed at only 8 of the 25 sites. In 2011, feeding was observed at all 14 colonies. The success of the beetle feeding is even more significant when compared to the first year of beetle release in 2009, results from the 2009 survey indicated beetle feeding on only one site. In addition, the overall plant vigor average for the purple loosestrife colonies was reduced from 10.6 in 2010 to 7.3 in 2011.

Since the beginning of the surveying activities in 1999, WPS has reduced the purple loosestrife populations from 58 to 14 colonies, with beetle feeding observed on every colony. WPS does not foresee the need to continue to release beetles and anticipates a continuing trend in the reduction of purple loosestrife colonies, colony size and overall plant vigor at the Peshtigo Hydroelectric Project.

Since the first purple loosestrife survey completed in 1999, purple loosestrife has only been observed at two other hydroelectric projects. One single plant was pulled and removed off-site at the Sandstone Rapids Project in 2004, and one small colony was pulled and removed off-site at the Potato Rapids Project in 2011.

The Sandstone Rapids Project has been surveyed annually for purple loosestrife since 2004. Purple loosestrife has not been observed during any of those surveys.

To ensure that the purple loosestrife population has been controlled at the Potato Rapids Project, WPS recommends continuing monitoring and if necessary control purple loosestrife at the Potato Rapids Project for the next three years.

Based on the survey results since 1999, WPS recommends reducing the monitoring of purple loosestrife from an annual commitment to once every three years to coincide with the Eurasian water milfoil surveys for all but the Potato Rapids Project.

Please provide comments within thirty (30) days upon receiving this information. If you have any questions or seek clarification, please contact me at your earliest convenience.

Sincerely,



James Nuthals  
Environmental Services-  
Natural Resource Management

Enc.

**APPENDICES PROVIDED TO THE RESOURCE  
AGENCIES ARE THE SAME THAT HAS BEEN  
PROVIDED TO FERC. THE APPENDICES HAVE NOT  
BEEN INCLUDED TO REDUCE THE OVERALL SIZE OF  
THE DOCUMENT**



Document Content(s)

20111215 CLWMPCoverLetterFERC.PDF.....1-2

20111215 Peshtigo CLWMP.PDF.....3-211