

ORIGINAL



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FEDERAL ENERGY
REGULATORY COMMISSION

Wisconsin River Power Company

Owners of the Peterwell & Castle Rock Hydroelectric Plants:
PO Box 19001
Green Bay, WI 54337-9001

FERC Project 1984 - 118

Ms. Magalie Roman Salas, Secretary
Federal Energy Regulatory Commission
Mail Code: DTCA, HL 21.3
888 First Street, N.E.
Washington, DC 20426

Dear Secretary Salas:

Amendment to the Proposed Invasive Species Management Plan for the Peterwell and Castle Rock Hydroelectric Project

In accordance with Article 409 of the Order Issuing New License for the Peterwell and Castle Rock Hydroelectric Project (FERC Project No. 1984) dated December 7, 2001, Wisconsin River Power Company (WRPCO) prepared the Wildlife Management Plan in consultation with the Wisconsin Department of Natural Resources (WDNR) and the US Fish and Wildlife Service (FWS). Both their comments and recommendations were accommodated by the plan. The WDNR recommended that, "A zebra mussel monitoring and management strategy is needed for both flowages to develop environmental and operational options in response to likely future infestations".

To satisfy the WDNR recommendation, WRPCO is enclosing a revised invasive species monitoring plan. WRPCO intends the enclosed invasive species monitoring plan to supercede the original plan submitted to the Commission on May 28, 2002. WRPCO verbally consulted with the FWS and WDNR on the revised plan. The FWS had no comment and the WDNR suggested that WRPCO work with Mr. Ron Martin with the WDNR Madison office because of his experience with zebra mussel monitoring in the state of Wisconsin. WRPCO has incorporated this recommendation into the new plan.

Should you have any questions regarding this material please do not hesitate to call Rick Moser at (920) 433-2290. Thank you for your time and consideration.

Sincerely,

David W. Harpole
Vice President - Energy Supply
Telephone: (920) 433-1264

Enc.

- cc: Mr. Greg Egtvedt, WPSC - A2
- Mr. Gil Snyder, WPSC - D2
- Mr. Gerry Ganther, WRPCO
- Mr. Dennis Maki, WPSC - WES
- Mr. Richard Hilliker, Land Matters, LLC
- Ms. Joan Johanek, WPSC - D2
- Mr. William Bloczynski, WPSC - MERH
- Mr. Robert Martini, WDNR
- Ms. Janet Smith, FWS

WISCONSIN RIVER POWER COMPANY

**PETENWELL AND CASTLE ROCK
HYDROELECTRIC PROJECT**

(FERC PROJECT NO. 1984)

**INVASIVE SPECIES MONITORING
PLAN**

**ARTICLE 408 OF DECEMBER 7, 2001
ORDER ISSUING NEW LICENSE**

Petenwell-Castle Rock Hydroelectric Project – FERC License No. 1984

Article 408 Within 180 days of the license issuance, the licensee shall, in consultation with the Wisconsin Department of Natural Resources (WDNR) and the U.S. Fish and Wildlife Service (USFWS), develop a plan to monitor purple loosestrife (*Lythrum salicaria*) and Eurasian watermilfoil (*Myriophyllum spicatum*) in project waters. The plan shall include, but is not limited to: (a) the method and frequency of monitoring, (b) a provision to cooperate in the control/elimination of these vegetative species if deemed necessary by the agencies, and (c) documentation of transmission of monitoring data to the agencies.

Purple Loosestrife Monitoring Plan

Objective: To monitor the spread of Purple Loosestrife (*Lythrum salicaria*) on Petenwell-Castle Rock hydroelectric project lands. Purple Loosestrife is an invasive plant that exhibits aggressive characteristics. The plant is becoming increasingly common to wetland areas. Wisconsin River Power Company (WRPCO) agrees to annually 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 Petenwell-Castle Rock impoundments. The surveys will be conducted by boat and/or on foot to determine a baseline of existing colonies and then continued monitoring to determine the increase of density and abundance of the species. The locations of small, isolated colonies will be documented using a Global Positioning System.

II. Frequency of Survey

A. Starting in 2003, the survey will be taken annually in July or August, depending upon when the plants are in bloom and the weather.

III. Documentation of 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 the USFWS no later than October 31st every year.
- 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. Small, isolated purple loosestrife colonies will be documented using a Global Positioning System.

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 or sprayed by an appropriate aquatic herbicide.
- B. The growth and size of the larger populations will be monitored each year and it will be determined at a later date if control measures are necessary. If they are deemed necessary, then WRPCO will consult with the WDNR.

V. Public Awareness

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

VI. Documentation of Submittal

- A. Documentation of submittal of monitoring reports to the WDNR and USFWS will be provided to FERC by December 31st for the first two years. The filing each year will include agency comments, if any.

Eurasian Watermilfoil Monitoring Plan

Objective: Eurasian Watermilfoil (*Myriophyllum spicatum*) is an exotic aquatic macrophyte that exhibits aggressive characteristics. This 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 & Wildlife Service (USFWS), Wisconsin River Power Company (WRPCO) will periodically monitor the presence and abundance of this species.

I. Methods

- a. Monitoring methods will include a routine aquatic macrophyte reconnaissance survey utilizing a boat to take samples at five transects of approximately 36 feet in length. Transects will be selected based upon location of macrophyte colonies and areas of likely infestation. The

location of these transects will be documented using a Global Positioning System. The transect samples will be analyzed for presence and approximate abundance of Eurasian Watermilfoil.

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. Typically all of the samples occur in water less than 3 meters.

II. Frequency of Survey

- a. Starting in 2003, the survey will be taken every third year in July, August, or September.

III. Documentation of 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 Watermilfoil in the aquatic macrophyte samples taken. All appreciable Eurasian watermilfoil beds will be documented on a map of the reservoir. The completed documentation will be provided to the WDNR and USFWS no later than October 31st every year in which the monitoring was completed.

IV. Control of Existing Colonies

- a. A natural eradication process will be used if Eurasian Watermilfoil becomes established. Studies have shown that a native weevil (*Euhrychiopsis lecontel*) can control the population of Eurasian Watermilfoil by feeding on it. This weevil is native to the area so it does not need to be introduced. If the monitoring reports support the need to further control this species, then WRPCO will cooperate with the WDNR in developing site-specific measures.

V. Public Awareness

- a. Public Awareness about Eurasian Watermilfoil will be increased by providing informational notices supplied by the WDNR at all WRPCO owned public access areas in the project boundary.

VI. Documentation of Submittal

- A. Documentation of submittal of monitoring reports to the WDNR and USFWS will be provided to FERC by December 31st for the first two monitoring periods. The filling each year will include agency comments.

Zebra Mussel Monitoring Plan

Objective: The zebra mussel (*Dreissena polymorpha*) is an invasive species non-indigenous to the United States. This species is believed to have been introduced to the Great Lakes drainage in 1986 by the discharge of ship ballast water carried from a freshwater port in Europe or western Asia. Due to its discovery in the Wisconsin River upstream of the Petenwell flowage, WRPCO shall monitor for the presence of zebra mussels. WRPCO shall consult with Ron Martin with the WDNR because of his experience with zebra mussel monitoring throughout the state. Once it is confirmed that zebra mussels are present in a flowage, monitoring will discontinue at that flowage.

I. Methods

- A. Monitoring for the presence of zebra mussels will occur on a routine basis using substrate samplers located at both the Petenwell and Castle Rock dams.
- B. Dam structures and a few (not more than 5) hard surfaces along the shoreline that are normally submerged will be inspected during a drawdown of the flowage.

II. Frequency of Survey

- A. Substrate samplers at each of the project dams will be surveyed and documented monthly from May through September each year.
- B. Typically, Petenwell and Castle Rock are drawn down each winter to increase storage capacity before spring. Inspections will be conducted once a year during this drawdown. Additionally, drawdowns are occasionally needed for maintenance reasons. Inspections will also be conducted during these drawdowns.

III. Documentation

- A. The results of the substrate sampler inspections along with the drawdown inspections will be documented on an inspection form. The summaries of the inspections for both Petenwell and Castle Rock will be provided to the WDNR and USFWS no later than December 31 of each year.

IV. Control of Existing Colonies

- A. If needed, WRPCO will use the adaptive management process to determine when control measures are needed and what control measures will be taken.