## MEAD & HUNT

Engineers - Architects Scientists - Planners

January 13, 1997

Ms. Lois D. Cashell, Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Washington, DC 20426

Subject:

Article 407 - Purple Loosestrife Monitoring Plan

Rothschild Hydroelectric Project; FERC Project No. 2212

or ORIGINAL

Weyerhaeuser Company, Owner

Dear Ms. Cashell:

On behalf of Weyerhaeuser Company, we are hereby filing an original and eight copies of the above-referenced Purple Loosestrife Monitoring Plan. The plan is being submitted in accordance with Article 407 of the above-mentioned project license. Copies of the Purple Loosestrife Monitoring Plan have been provided to each party on the official service list, which includes entities that Article 407 specifies should be consulted on matters related to this filing. Certification of such service is attached.

The Purple Loosestrife Monitoring Plan was developed in consultation with the U.S. Fish & Wildlife Service (USFWS) and the Wisconsin Department of Natural Resources (WDNR) who provided comments and recommendations based on review of a draft plan. The agencies asked Weyerhaeuser Company to increase its proposed monitoring schedule from once every 4 years to once a year, with biannual reporting. Weyerhaeuser Company revised its draft plan to provide for monitoring according to the agencies' recommended schedule. The agencies made three additional recommendations:

- 1. That monitoring procedures include removal of small colonies of plants (i.e.; one to five plants).
- 2. That an agency-prepared informational pamphlet be made available at high use public access areas.
- That a public task force be developed to help monitor purple loosestrife.

Weyerhaeuser Company believes that the latter three recommendations go beyond the scope of the monitoring plan described in License Article 407 and, as such, should not be a part of its *Purple Loosestrife Monitoring Plan*. However, Weyerhaeuser Company is willing to remove isolated small colonies identified during monitoring procedures as opportunity permits. The

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Ms. Lois D. Cashell January 13, 1997 Page 2

company is also willing to provide informational pamphlets to local agencies with jurisdiction over public access points, and will make such pamphlets available at area public access points owned and operated by Weyerhaeuser Company, except where such efforts are thwarted by vandalism. In light of its willingness to accept responsibility for monitoring requirements, the company does not wish to lead a community group effort to monitor purple loosestrife. However, should a group with such an interest be identified by the WDNR or other parties, Weyerhaeuser Company is willing to help to coordinate dissemination of information and/or occurrence reporting efforts.

Weyerhaeuser's response to agency comments were discussed with Mr. Jim Fossum of the USFWS and Mr. Bob Martini of the WDNR on January 6, 1997. Documentation of consultation is included as Appendix C of the plan.

Thank you for your consideration in this matter. If you have any questions, please contact me at (608) 273-6380.

Sincerely,

MEAD & HUNT, Inc.

Linda D. Mitchell Licensing Consultant

Linda D. Mitchell

Attachments

cc: See attached list

#### Certificate of Service

hereby certify that I, on behalf of	f Weyerhaeuser Company,	, have this day serve	d the foregoing
documents upon each person de	signated on the attached	distribution list.	

Dated this 10 H day of January, 1997.

Linda D. Mitchell MEAD & HUNT, Inc.

# Rothschild Hydroelectric Project FERC Project No. 2212

#### Article 407 - Purple Loosestrife Monitoring Plan

Ms. Lois D. Cashell, Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Washington, DC 20426

Mr. Robert Martini Wisconsin Department of Natural Resources P.O. Box 818 Rhinelander, WI 54501

Mr. George E. Meyer, Secretary Wisconsin Department of Natural Resources 101 South Webster Street P.O. Box 7921 Madison, WI 53707

Mr. Frank Petras, Chairman Sierra Club – John Muir Chapter FERC Relicensing Subcommittee 808 Gross Avenue Green Bay, WI 54304 Ms. Janet Smith Department of the Interior U.S. Fish & Wildlife Service 1015 Challenger Court Green Bay, WI 54311

Ms. Marcia M. Kimball, Esq.
Office of the Field Solicitor
U.S. Department of the Interior
Bishop Henry Whipple Federal Building
1 Federal Drive, Room 686
Fort Snelling, MN 55111-4007

Mr. William V. Dohr Process Engineer Weyerhaeuser Paper Company 200 Grand Avenue Rothschild, WI 54474

### Purple Loosestrife Monitoring Plan Rothschild Hydroelectric Project FERC Project No. 2212

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Wisconsin River
Marathon County, Wisconsin

Prepared for:

Weyerhaeuser Company 200 Grand Avenue Rothschild, Wisconsin 54474

Prepared by:

MEAD & HUNT, Inc.

Engineers - Architects Scientists - Planners

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#### Purple Loosestrife Monitoring Plan Rothschild Hydroelectric Project FERC Project No. 2212

#### I. Requirement for Purple Loosestrife Monitoring Plan

The Rothschild Hydroelectric Project is located on the Wisconsin River in Marathon County, Wisconsin. On July 18, 1996, Weyerhaeuser Company was granted a license to continue operation of the project for a period of 30 years. Article 407 of this license requires Weyerhaeuser to develop, in consultation with the U.S. Fish & Wildlife Service (USFWS) and the Wisconsin Department of Natural Resources (WDNR), a plan to monitor purple loosestrife (*Lythrum salicaria*) in project waters. The plan shall include, but is not limited to: (a) the method of monitoring; (b) the frequency of monitoring; and (c) documentation of transmission of monitoring data to the USFWS, and to the WDNR. The text of License Article 407 appears in its entirety as Appendix A of this document.

#### II. Description of Project Area

The Rothschild Dam, which impounds Lake Wausau, was constructed during the period 1909 to 1911. The project is operated in a run-of-river mode such that the sum of inflows is approximately equal to outflow and a near constant headwater elevation is maintained. Normal water surface elevation is 1160.7 feet National Geodetic Vertical Datum (NGVD). The project impoundment comprises approximately 1,920 acres, representing a variety of aquatic habitat and shoreline types. A map of the project area is included as Appendix B.

Varying in depth from less than 3 feet to approximately 30 feet, Lake Wausau is characterized by large expanses of open water, as well as peninsulas and islands, the most significant of which occur in the lake's lower portion. Areas of open water extend north to the confluence with the Rib River, which enters the Wisconsin River from the west. This area includes a complex of islands and channels with intermittent sloughs, backwater areas, wetlands, and marshes. The impoundment exterior shoreline, parts of which are highly irregular, is approximately 30 miles long. The shoreline of the islands included within the project boundary is estimated at approximately 45 miles, much of which lies within the Rib River.

# III. Baseline Information on Purple Loosestrife Occurrence and Distribution

In 1990, Weyerhaeuser Company contracted with qualified ecological consultants to conduct an assessment of the project area. A report of these investigations (*Ecological Assessment and Cumulative Impact Evaluation of the Continued Weyerhaeuser Hydroelectric Facility Operations* 

at Wausau, Wisconsin, Jim H. Zimmerman and Ken N. Kailing, October 1990) identified seven areas within the project boundary where purple loosestrife was observed. These areas are shown on the map that appears as Appendix B of this document. They include:

- 1. The area between the Highway 51 bypass bridge and the Snake (Highway N) bridge.
- 2. The north shore of Upper Lake Wausau, including bays.
- 3. The bay south of the Snake (Highway N) bridge, where loosestrife was observed perched atop scattered stumps.
- 4. Bluegill Bay Park, especially on internal wetland and pond edges (minimal occurrence was noted on lake outer shores).
- 5. The north islands off the peninsula traversed by Country Club Road.
- 6. The south shores and bays of the peninsula (described as abundant, but only on edges of strands, peninsulas, and stump swamps).
- Some shores near Rothschild Park.

The report further notes that at the time of the survey (July 1990), the plant was "confined to a narrow band of shoreline, usually only one or two plants wide, of both wooded and open banks and wetlands, including islands and stump swamps but not aquatic beds." During the 1990 survey, no purple loosestrife was observed on the Rib River upstream from the Highway 51 bypass bridge.

The 1990 ecological assessment noted that purple loosestrife, while relatively widespread in the project area, showed no evidence of recent spread or change. The lack of change was attributed as likely being due to the stable water levels provided by the project, which limits the amount of wet shoreline exposed on an annual basis that would offer a suitable substrate for germination.

#### IV. Monitoring Plan

#### A. Timing of Monitoring

Monitoring will be conducted each year beginning in 1997. Monitoring will be conducted between the third full week of July and the end of the first full week of August when the plant is in full flower (unless weather conditions require otherwise).

#### **B.** Survey Method

Monitoring will consist of low-speed visual shoreline surveys using a shallow-draft motorboat. For surveys conducted during odd-numbered years, the survey will be conducted as follows:

The survey team will include a qualified biologist familiar with the ecology and anatomy
of the species.

- The area to be surveyed will include the entire Lake Wausau exterior shoreline that is accessible by shallow-draft motorboat, portions of the islands located near the Rib River confluence, and representative areas of islands located within Lake Wausau proper.
- The first part of the survey will include an overview of shoreline areas, and the balance will focus on obtaining more detailed information on boundaries of previously identified areas of occurrence.
- Occurrences of purple loosestrife will be marked in the field on copies of the 1990 Marathon County digital aerial photographs.

During even-numbered years, the survey will be conducted by Weyerhaeuser Company plant personnel, and will focus on Lake Wausau exterior shoreline that is accessible by motorboat and representative areas of islands located within Lake Wausau proper. Purple loosestrife occurrences will be marked in the field on suitable maps or aerial photographs.

#### C. Method for Future Surveys

Based on research of available monitoring methods, Weyerhaeuser Company believes that boating survey is the most practical method available at this time. However, it is possible that at some point in the future, alternative methods (which may be based on aerial or other photographic methods, photogrammetry, or remote sensing) will be proposed. Selection of alternative methods will be conducted in consultation with the WDNR and the USFWS.

#### D. Cooperation With Agencles and Agency Control/Eradication Measures

Weyerhaeuser Company will cooperate with purple loosestrife control or eradication measures that are implemented by the WDNR or the USFWS at any time during the period of the license.

In addition, Weyerhaeuser Company will notify the WDNR and the USFWS if, in the course of conducting normal project operations, areas of purple loosestrife that had not previously been identified are observed.

#### V. Documentation and Reporting

A written report summarizing methods and findings of each survey will be submitted to the WDNR and the USFWS by November 30 of each odd-numbered year. Each report will include:

- Summary of methods, field observations, and observed changes in occurrence (if applicable).
- Purple loosestrife occurrence map. It is anticipated that digitized aerial photographs, prepared at sufficient scale to provide adequate resolution, will be used as base maps. However, an alternative method may be selected, if appropriate, to facilitate identification of changes in observed purple loosestrife populations relative to previous survey periods.

Weyerhaeuser Company will submit to the Federal Energy Regulatory Commission a letter documenting that reports of monitoring results have been sent to the above agencies.

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MEAD & HUNT, Inc.

# Appendix A. License Article 407

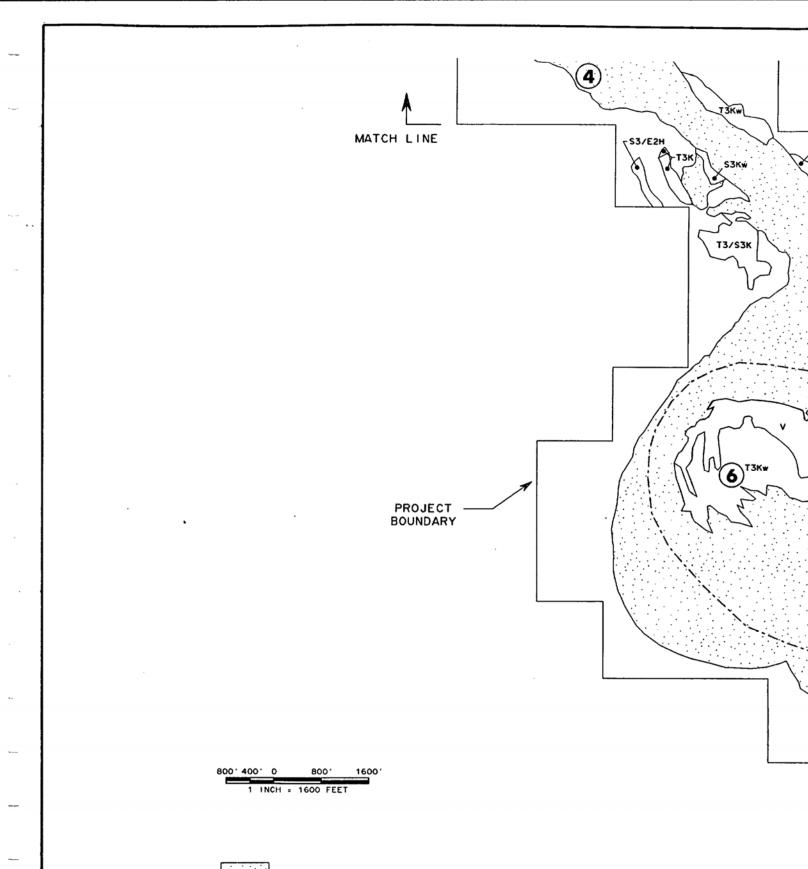
#### **LICENSE ARTICLE 407**

Within 180 days after the date of issuance of this license, the Licensee shall, in consultation with the U.S. Fish and Wildlife Service, and the Wisconsin Department of Natural Resources, develop a plan to monitor purple loosestrife (*Lythrum salicaria*) in project waters. The plan shall include, but is not limited to: (a) the method of monitoring, (b) the frequency of monitoring, and (c) documentation of transmission of monitoring data to the U.S. Fish and Wildlife Service, and to the Wisconsin Department of Natural Resources. The plan shall be filed with the Commission for approval. If at any time during the period of the license, the U.S. Fish and Wildlife Service and the Wisconsin Department of Natural Resources deem it necessary to control or eliminate purple loosestrife, the Licensee shall cooperate in this measure. The Commission reserves the right to require changes in the plan.

The Licensee shall include documentation of consultation within the U.S. Fish and Wildlife Service and the Wisconsin Department of Natural Resources before preparing the plan, copies of the agencies' 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 were accommodated by the plan. The Licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations prior to filing the plan with the Commission. If the Licensee does not adopt a recommendation, the filing shall include the Licensee's reasons, based on project-specific information.

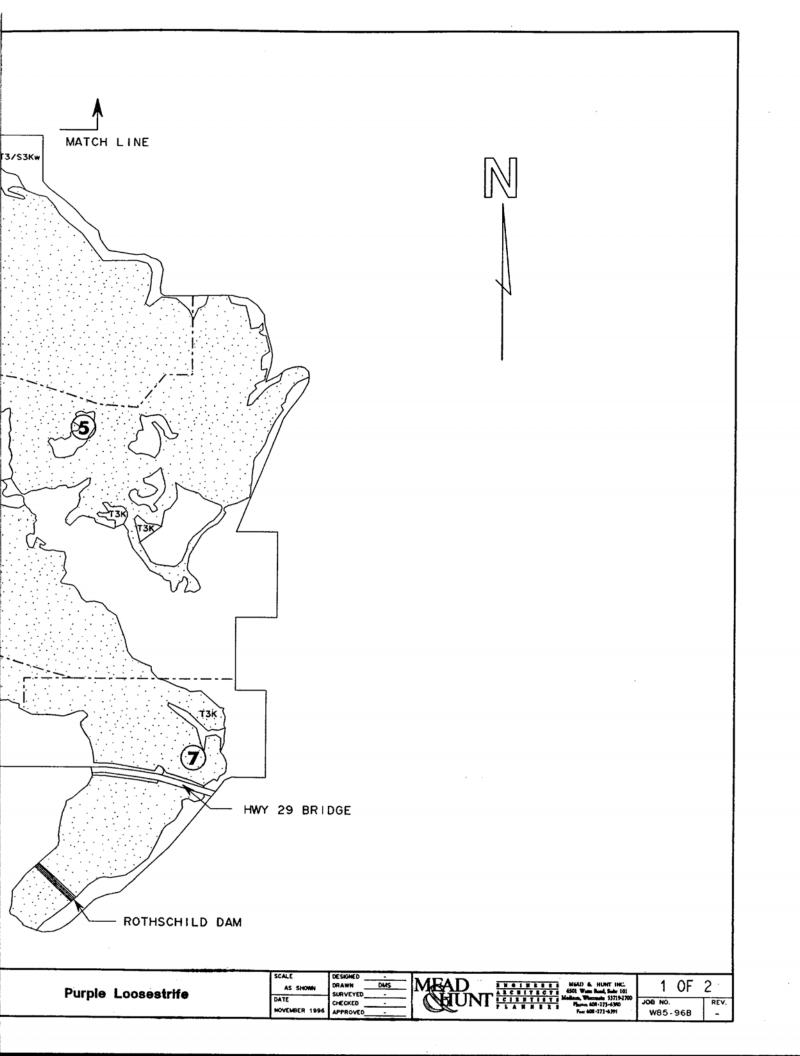
The Commission reserves the right to require changes to the plan. Upon Commission approval, the Licensee shall implement the plan including any changes required by the Commission.

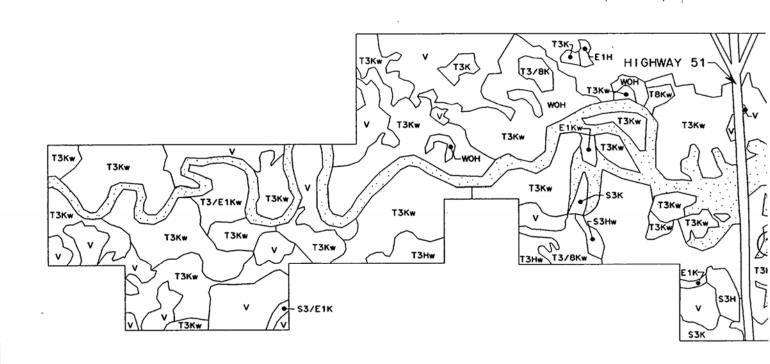
# Appendix B. Baseline Distribution Map

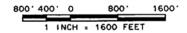


PROJECT IMPOUNDMENT

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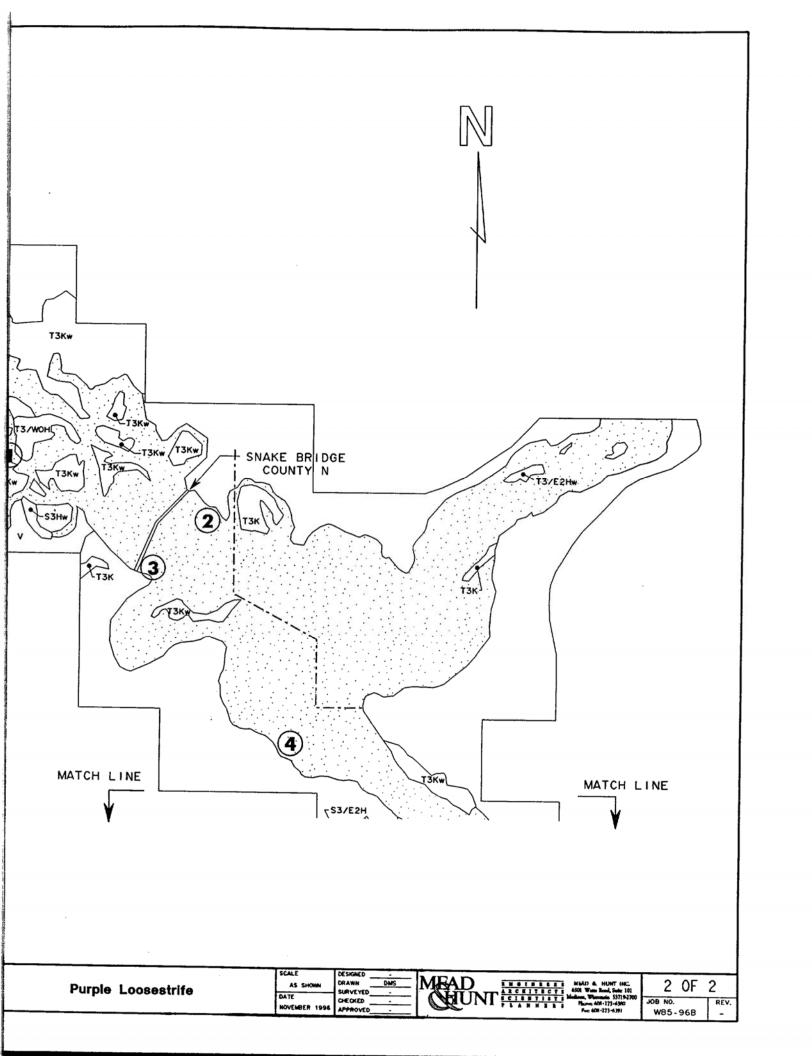




PROJECT IMPOUNDMENT

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# Appendix C. Documentation of Consultation

## MEAD & HUNT

Engineers - Architects
Scientists - Planners

November 26, 1996

AUTHOR'S FILE COPY

Ms. Janet Smith Department of the Interior U.S. Fish & Wildlife Service 1015 Challenger Court Green Bay, WI 54311

Mr. Robert Martini Wisconsin Department of Natural Resources P.O. Box 818 Rhinelander, WI 54501

Subject:

Order Issuing License

Rothschild Hydroelectric Project; FERC Project No. 2212 Request for Comment – License Article 407 Compliance

Dear Ms. Smith and Mr. Martini:

By order dated July 18, 1996, the Federal Energy Regulatory Commission issued a license to Weyerhaeuser Company to continue operation of its existing hydroelectric project at Rothschild, Wisconsin. License Article 407 requires Weyerhaeuser Company to develop, in consultation with the U.S. Fish & Wildlife Service and the Wisconsin Department of Natural Resources, a plan to monitor purple loosestrife in project waters.

Enclosed is a copy of the draft *Purple Loosestrife Monitoring Plan* for your review and comment. Please provide any comments you may have to me in writing no later than January 2, 1997. Your attention to this matter is very much appreciated.

Very truly yours,

MEAD & HUNT, Inc.

Linda D. Mitchell

Linda D. Mitchell Licensing Consultant

**Enclosure** 

MEAD & HUNT, Inc. Telephone (608) 273-6380

6501 Watts Road, Suite 101

Madison, Wisconsin 53719-2700 Facsimile (608) 273-6391



## United States Department of the Interior

#### FISH AND WILDLIFE SERVICE

Green Bay ES Field Office 1015 Challenger Court Green Bay, Wisconsin 54311-8331 December 18, 1996

Ms. Linda D. Mitchell, Licensing Consultant Mead & Hunt, Inc. 6501 Watts Road, Suite 101 Madison, Wisconsin 53719-2700

> re: Purple Loosestrife Monitoring Plan Compliance with License Article 407 Rothschild Hydroelectric Project (FERC No. 2212) Wisconsin River

Dear Ms. Mitchell:

Your letter of November 26, 1996, requested U.S. Fish and Wildlife Service (FWS) review of the Weyerhaeuser Company's purple loosestrife monitoring plan for the referenced hydroelectric project. We concur with your plan, but recommend the following additional measures.

- Since purple loosestrife is very prolific, monitoring should be conducted <u>annually</u>; however, biennial reporting is acceptable to the FWS.
- 2. To help control the spread of this plant species, the small colonies (i.e., 1 to 5 plants) should be dug out of the riverbed such that as much of the root system is removed as possible. This could be done during the annual surveys.
- A purple loosestrife pamphlet should be available at "high use" public access areas to increase public awareness of this problem. We suggest using Wisconsin DNR pamphlet "PUBL-WM-250-95," which contains information on purple loosestrife identification and the prevention of further spread of this species (reference enclosure).
- 4. We concur with the Wisconsin Department of Natural Resources' recommendation relative to obtaining help from the public in monitoring purple loosestrife by developing a Lake Wausau Task Force.

We hope these comments are helpful for final preparation of your compliance monitoring plan. If you need to discuss this further, please contact Jim Fossum of my staff at 414-465-7421.

Sincerely,

Janet M. Smith Field Supervisor

Enclosure

cc: Bob Martini, Wisconsin DNR, Rhinelander, WI Tom Meier, Wisconsin DNR, Wausau, WI



### State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Tommy G. Thompson, Governor George E. Meyer, Secretary Dale T. Urso, District Director

North Central District Headquarters PO Box 818, 107 Sutliff Ave. Rhinelander, WI 54501-0818 TELEPHONE 715-365-8900 FAX 715-365-8932 TDD 715-365-8957

December 9, 1996

Ms. Linda D. Mitchell, Licensing Consultant Mead & Hunt, Inc. 6501 Witts Road, Suite 101 Madison, Wisconsin 53719-2700

Dear Ms. Mitchell:

This letter is in response to your letter of November 26, 1996, requesting our comments on your client's proposed purple loosestrife monitoring plan for the Rothschild Hydroelectric Project (FERC #2212).

In general, we concur with your approach provided the following modifications are made:

We recommend annual monitoring with biannual reporting. 1.

While monitoring, small stands (1-5 plants) should be removed by digging 2. out as much of the root system as possible. We recommend developing a Lake Wausau Task Force (possibly the Lake Association) to help you monitor and remove purple loosestrife. With the proper training, community partnerships might be the most efficient way to approach the purple loosestrife problem on Lake Wausau. We would be glad to help with the technical assistance or training if necessary.

These features will make your approach at Lake Wausau consistent with purple loosestrife monitoring at all the other FERC licensed sites on the Wisconsin River.

Thank you for the opportunity to comment.

Sincerely.

Bob Martini, Project Manager

Wisconsin River Project

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BM:da

cc: Jim Fossum, USFWS, Green Bay

Tom Meier, Wausau



#### **TELEPHONE MEMORANDUM**

Call to:

Jim Fossum, U.S. Fish and Wildlife Service, Green Bay

414-465-7421

Call from:

Linda Mitchell, Mead & Hunt, Inc.

Date:

January 6, 1997

Re:

Rothschild Purple Loosestrife Monitoring Plan

Summarized below is my discussion with Jim Fossum concerning comments detailed in the U.S. Fish & Wildlife Service's December 18, 1996 letter regarding Weyerhaeuser Company's draft *Purple Loosestrife Monitoring Plan*.

- 1. Weyerhaeuser is willing to conduct annual monitoring provided that on alternate years, monitoring is done by plant personnel, rather than a professional biologist. Reporting will be done every two years as requested. Jim agreed with this approach.
- 2. Weyerhaeuser is willing to attempt to remove small colonies (1 to 5 plants) as opportunity permits. However, Weyerhaeuser believes this request goes beyond monitoring, and will not include plant removal as part of its monitoring plan. Further discussion focussed on the advantages of removing small colonies which are isolated.
- 3. Regarding the USFWS request that purple loosestrife pamphlets be made available at reservoir public access areas, we discussed the fact most reservoir access areas are owned and operated by others (usually city-county parks personnel). Weyerhaeuser maintains a canoe portage and a downstream boat launch. The company is willing to make pamphlets available to the city-county parks department, and will look into providing them at the canoe portage and boat launch (although vandalism hampered distribution of materials at the canoe portage in the past). Jim agreed with this approach.
- Weyerhaeuser is willing to work with any group that has an interest in monitoring purple loosestife. But in light of the fact that they are willing to accept the responsibility for monitoring, the company does not want to play a leadership role in a community monitoring effort. Jim said that the USFWS also would not be involved in such an efforts, and suggested that I talk to Bob Martini of the Wisconsin DNR to see if such a group has been identified.

#### **TELEPHONE MEMORANDUM**

Call to:

Bob Martini, Wisconsin Department of Natural Resources

715-365-8969

Call from:

Linda Mitchell, Mead & Hunt, Inc.

Date:

January 6, 1997

Re:

Rothschild Purple Loosestrife Monitoring Plan

Summarized below is my discussion with Bob Martini concerning comments detailed in the Wisconsin Department of Natural Resources December 9, 1996 letter regarding Weyerhaeuser Company's draft *Purple Loosestrife Monitoring Plan*.

- Weyerhaeuser is willing to conduct annual monitoring provided that on alternate years, monitoring is done by plant personnel, rather than a professional biologist. Reporting will be done every two years as requested. Bob agreed with this approach.
- Weyerhaeuser is willing to attempt to remove small colonies (1 to 5 plants) as opportunity permits. However, Weyerhaeuser believes this request goes beyond monitoring, and will not include plant removal as part of its monitoring plan. Bob indicated that the FERC retains the right to modify the plan submitted by Weyerhaeuser; Weyerhaeuser can submit the plan as proposed and FERC can modify it if they see fit to do so. Further discussion focussed on the advantages of removing small colonies which are isolated.
- 3. Regarding the USFWS request that purple loosestrife pamphlets be made available at reservoir public access areas, we discussed the fact most reservoir access areas are owned and operated by others (usually city-county parks personnel). Weyerhaeuser maintains a canoe portage and a downstream boat launch. The company is willing to make pamphlets available to the city-county parks department, and will look into providing them at the canoe portage and boat launch (although vandalism hampered distribution of materials at the canoe portage in the past). Bob agreed with this approach.
- Weyerhaeuser is willing to work with any group that has an interest in monitoring purple loosestife. But in light of the fact that they are willing to accept the responsibility for monitoring, the company prefers not to play a leadership role in a community monitoring effort. Bob indicated that if Weyerhaeuser is willing to monitor, this is acceptable. Further discussion indicated that Tom Meier, DNR wildlife manager, has expressed interest in working with shoreline property (home) owners to monitor and control purple loosestrife, believing this approach could assist Weyerhaeuser. I indicated that if such a group is identified, Weyerhaeuser would be willing to provide information or serve as clearinghouse for information collected by property owners.