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FEDERAL ENERGY REGULATORY COMMISSION

**CONSOLIDATED PAPERS, INC.** 

NIAGARA DIVISION 1101 MILL STREET, NIAGARA, WI 54151-1432

PHONE: (715) 251-3151 FAX: (715) 251-1730

December 23, 1998

The Honorable David P. Boergers, Secretary Federal Energy Regulatory Commission 888 First Street NE-11G-1 Washington, DC 20426

Re:

Little Quinnesec Project - FERC Project No. 2536

Subject:

Compliance with Article 409 of Order Issuing License for Little

**Quinnesec Project** 

Dear Mr. Boergers:

On March 13, 1998, FERC issued an order approving a Purple Loosestrife and Eurasian Milfoil Monitoring plan for Little Quinnesec Project (FERC No. 2536) operated by Niagara Division of Consolidated Papers, Inc.

In August of 1998, White Water Associates conducted a survey for Purple Loosestrife and Eurasian Milfoil in the project area. A report on this survey was completed and was submitted to resource Agencies for review on September 29, 1998. Copies of the cover letters to the resource Agencies are included as part of this submittal. To date we have not received any comments from the Agencies.

Also included in this submittal are eight (8) copies of the report submitted to CPI Niagara by White Water Associates.

Please direct questions or comments to Paul Penkivech (715) 251-8387 or Bill Roberts at (715) 251-8278.

Yours truly,

CONSOLIDATED PAPERS, INC.

William R. Roberts
Power Superintendent

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WRR:sd enclosures

cc:

FERC (Chicago)
MDNR

WDNR

US Fish & Wildlife Craig Paulson (N) Roger Chapman (N) Paul Penkivech (N)
Dave Schmutzler (N)
Mark Anderson (PS)

FERC (File 5000-0200)

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NIAGARA DIVISION 1101 MILL STREET, NIAGARA, WI 54151-1432 PHONE: (715) 251-3151 FAX: (715) 251-1730

FEDERAL LHERGY REGULATORY COMMISSION

September 29, 1998

Jim Fossum US Fish & Wildlife 1015 Challenger Ct. Green Bay, WI 54311

Dear Mr. Fossum:

Enclosed are copies of reports on a Shoreline Erosion Survey and Purple Loosestrife and Eurasian Milfoil Monitoring for the Little Quinnesec Falls Hydroelectric Project, FERC No. 2536 operated by the Niagara Division of Consolidated Papers, Inc.

The Purple Loosestrife and Eurasian Milfoil Monitoring is required by Article 409 of our license and the compliance plan was approved by FERC in an order dated March 13, 1998. The plan required filing the survey report with FERC by October 31.

Soil Erosion Monitoring is required by Article 405 of the license and the compliance plan was approved by FERC on July 22, 1998. The plan requires filing with FERC by December 31 of the survey year.

Both plans require filing with your Agency for comment by September 30.

Please review the information provided and comment as needed. If you have any questions, please contact Bill Roberts (715) 251-8278, Dave Schmutzler (715) 251-8253, or Paul Penkivech (715) 251-8387 at the Niagara Division.

Yours truly,

CONSOLIDATED PAPERS, INC.

William R. Roberts
Power Superintendent

WRR:sd enclosures

cc: MDNR WDNR D. Schmutzler (N)
P. Penkivech (N)

M. Anderson (PS)

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# CONSOLIDATED PAPERS, INC.

NIAGARA DIVISION 1101 MILL STREET, NIAGARA, WI 54151-1432 PHONE: (715) 251-3151 FAX: (715) 251-1730

FEDERAL ENERGY REGULATORY COMMISSION

September 29, 1998

Gary Whelan MDNR P.O. Box 30446 Lansing, MI 48909-7946

Dear Mr. Whelan:

Enclosed are copies of reports on a Shoreline Erosion Survey and Purple Loosestrife and Eurasian Milfoil Monitoring for the Little Quinnesec Falls Hydroelectric Project, FERC No. 2536 operated by the Niagara Division of Consolidated Papers, Inc.

The Purple Loosestrife and Eurasian Milfoil Monitoring is required by Article 409 of our license and the compliance plan was approved by FERC in an order dated March 13, 1998. The plan required filing the survey report with FERC by October 31.

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Both-plans require filing with your Agency for comment by September 30.

Please review the information provided and comment as needed. If you have any questions, please contact Bill Roberts (715) 251-8278, Dave Schmutzler (715) 251-8253, or Paul Penkivech (715) 251-8387 at the Niagara Division.

Yours truly,

CONSOLIDATED PAPERS, INC.

William R. Roberts
Power Superintendent

WRR:sd enclosures

cc: WDNR USF&WL D. Schmutzler (N)

P. Penkivech (N)

M. Anderson (PS)

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NIAGARA DIVISION 1101 MILL STREET, NIAGARA, WI 54151-1432 PHONE: (715) 251-3151 FAX: (715) 251-1730

FEDERAL LHERGY REGULATORY COMMISSION

September 29, 1998

Tom Thuemler **WDNR** P.O. Box 127 - 101 N. Ogden Peshtigo, WI 54157

Dear Mr. Thuemler:

Enclosed are copies of reports on a Shoreline Erosion Survey and Purple Loosestrife and Eurasian Milfoil Monitoring for the Little Quinnesec Falls Hydroelectric Project, FERC No. 2536 operated by the Niagara Division of Consolidated Papers, Inc.

The Purple Loosestrife and Eurasian Milfoil Monitoring is required by Article 409 of our license and the compliance plan was approved by FERC in an order dated March 13, 1998. The plan required filing the survey report with FERC by October 31.

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Both plans require filing with your Agency for comment by September 30.

Please review the information provided and comment as needed. If you have any questions, please contact Bill Roberts (715) 251-8278, Dave Schmutzler (715) 251-8253, or Paul Penkivech (715) 251-8387 at the Niagara Division.

Yours truly,

CONSOLIDATED PAPERS, INC.

William R. Roberts Power Superintendent

WRR:sd enclosures

cc: MDNR USF&WL D. Schmutzler (N) P. Penkivech (N)

M. Anderson (PS)

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FEDERAL ENERGY
REGULATORY COMMISSION

# WHITE WATER ASSOCIATES, INC.

# PURPLE LOOSESTRIFE AND EURASIAN MILFOIL MONITORING

Hydroelectric Project No. 2536, Little Quinnesec Falls

#### Submitted to:

Consolidated Papers, Niagara Division 1101 Mill Street Niagara, WI 54141 Attention: Dave Schmutzler

### Prepared by:

David Tiller, B.S.
Elizabeth Rogers, Ph.D.
White Water Associates, Inc.
429 River Lane, P.O. Box 27
Amasa, Michigan 49903
Phone: (906) 822-7373

Fax: (906) 822-7977 e-mail: whitewtr@up.net

#### Field Data Collection:

David Tiller, B.S. Elizabeth Rogers, Ph.D. Gabriel Tiller

<sup>©</sup> September 1998, White Water Associates, Inc.

#### I. SUMMARY

As part of Article 409, annual monitoring for purple loosestrife (*Lythrum salicaria*) and Eurasian milfoil (*Myriophyllum spicatum*) has been designated as part of the FERC requirements for Consolidated Papers' licensing of Hydroelectric Project Number 2536, Little Quinnesec Falls, on the Menominee River. Two full days in August 1998 were spent on the project area with surveys conducted by boat from Little Quinnesec Dam to Big Quinnesec Dam, and a short distance downstream of the Little Quinnesec Dam on foot. Purple loosestrife was found **only** downstream on the Wisconsin side in the village of Niagara, outside the project boundary. No plants were found that could be identified definitively as Eurasian milfoil.

#### II. INTRODUCTION

Monitoring for purple loosestrife (Lythrum salicaria) and Eurasian milfoil (Myriophyllum spicatum) was conducted in August 1998 as required by Article 409 of the order issuing a license for Hydroelectric Project No. 2536, Little Quinnesec Falls. There were no reports of these invasive species within the project area from surveys during the license application process (1990). Since that time there have been reports of both species within the Menominee River basin. Loosestrife is a prodigious producer of seeds and can establish itself in anything from pure muck to pure gravel, spreading rapidly. Likewise, Eurasian milfoil is an aggressive invader, capable of forming dense beds that shade out other submergents.

#### III. METHODS

On August 4, 1998, Elizabeth Rogers and David Tiller of White Water Associates, Inc. used a small boat and motor to look at most of the shoreline between the two dams, including the numerous backwater wetlands. Oars were used for access in shallow backwaters. Binoculars were used to scan the shore and less accessible backwater areas. Purple loosestrife in flower is a showy and easily identifiable plant during its peak blossoming period that extends from late July through

August at this latitude, depending on the variation of the year. All wetlands and backwaters connected to the reservoir in the project area were visually inspected. A visual survey was opted for rather than any remote techniques since we wished to detect even single plant occurrences. The remaining shore and wetlands were investigated the following day (August 5) in the same manner by David Tiller and Gabriel Tiller.

We surveyed for Eurasian milfoil by taking grab samples from beds of milfoil using hands and a metal garden rake. We then examined the leaves, counting leaflets and taking an average of average leaves. Number of leaflets is the main morphological trait that can be used to separate the native northern water milfoil (Myriophyllum sibiricum, formerly exalbescens) from Eurasian milfoil (Myriophyllum spicatum), although there is considerable variability within each species. Generally, the average number of leaflets for northern water milfoil is 5-11 with a reported maximum of 13. The average number for Eurasian milfoil is 14-17 with a maximum of 20. The presence of winter buds (turions) on northern water milfoil, structures not found on Eurasian milfoil, is a useful identification trait later in the season. Questionable specimens (with 14 leaflets on a few leaves) were placed in plastic bags and refrigerated until they could be sent to botanists.

#### IV. FINDINGS

### **Purple Loosestrife**

No purple loosestrife was found between the two dams. Outside the project area, below the Little Quinnesec Dam on the Wisconsin side of the river, are several patches of purple loosestrife composed of scattered individuals and small groups of 2-5 plants (see map and photos in Appendix).

#### **Eurasian Milfoil**

Eurasian Milfoil (Myriophyllum spicatum) is an exotic submergent aquatic species capable of forming dense canopies of branching, floating plants to the detriment of native species. It is closely related to the native species, northern water milfoil. Its recognition as a separate species is based on

work with pollen analysis and chromatography of flavonoid compounds (Voss, E.G., 1985, *Michigan Flora*, Vol. II, Cranbrook Institute of Science and University of Michigan Herbarium). Definitive identification relies on chromatographic analysis of flavonoids. Morphological traits, such as number of leaflets and presence or absence of wintering buds (turions) are used for field identification.

Most of the milfoil we found fell well within the range of number of leaflets that would identify it as northern water milfoil, with number of leaflets less than 14 (Voss, E.G., 1985, Michigan Flora, Vol. II, Cranbrook Institute of Science and University of Michigan Herbarium). In two instances, however, we found specimens having several leaves with 14 leaflets. We sent fresh specimens of these to a Michigan botanist and a Wisconsin botanist. Milfoils are notoriously difficult to identify, and even the two experts differed in opinions with one leaning strongly toward the native species, northern water milfoil, Myriophyllum sibiricum, and the other botanist suspecting that the specimen could be Eurasian milfoil, Myriophyllum spicatum.

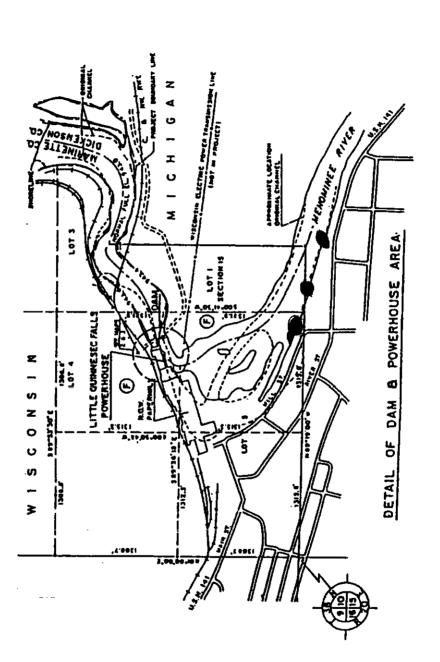
Later during water quality work (Aug. 18, 1998), another batch of specimens was collected which were more mature. Again, some of the leaves of these plants had 14 leaflets, although the average number of leaflets on multiple leaves was less than 14. In addition, many of these specimens appeared to be producing winter buds or turions in response to the lateness of the season. Turions are actually small bundles of leaves and stem that overwinter in bottom sediments and propagate new plants in the spring. Northern water milfoil produces these structures but Eurasian water milfoil does not. Thus, based on the morphological evidence on the specimens we observed, we do not currently believe that Eurasian milfoil is present in the project area.

#### IV. CONCLUSION

There were no confirmed occurrences of purple loosestrife or Eurasian milfoil within the project area. The only purple loosestrife occurrences were downstream of the project area.

## **APPENDIX**

**Map and Photographs** 



Purple loosestrife near Hydroelectric Project No. 2536, Little Quinnesec Falls, August 1998.



These sites with purple loosestrife are all downstream of the Little Quinnesec Dam and within the city of Niagara.



