



Upper Peninsula Power Company

(a subsidiary of Integrys Energy Group)

700 North Adams Street

P.O. Box 19001

Green Bay, WI 54307-9001

December 6, 2011

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

Dear Secretary Bose:

2011 Noxious Plants Monitoring Survey Results - Bond Falls Hydroelectric FERC Project #1864

Bond Falls Reservoir, Victoria Falls Reservoir and Lake Gogebic

As per the FERC Order Approving Noxious Plants Monitoring Plan, Upper Peninsula Power Company (UPPCO) is required to submit the results of the Eurasian water milfoil (EWM) and purple loosestrife monitoring surveys for the Bond Falls Hydroelectric Project (FERC Project No. 1864).

Purple loosestrife and EWM surveys were completed on August 1st and 2nd, 2011 for the Bond Falls and Victoria Reservoirs and Lake Gogebic. Purple loosestrife was once again observed at Lake Gogebic.

Four colonies were identified as being located within the Lake Gogebic project boundary. One colony of less than 5 plants, one colony of 6-50 plants, and two colonies of 50+ plants were observed.

In consultation with the Bond Falls Implementation Team (BFIT), UPPCO raised and released approximately 5,000 *Galerucella* beetles (beetles) at Lake Gogebic. On July 13, 2011 beetles were released on the southeast shoreline at Points 3 & 4 (Please reference Appendix A).

UPPCO and the U.S. Department of Agriculture - Forest Service (USDA - FS) completed a follow up survey of the purple loosestrife on August 18th, 2011. Beetling feeding was observed at the release site. The population appeared to be adequately established. No beetle feeding was observed at Point 1. Point 2 was small and was hand pulled and removed from site.

The results of the review indicate that Points 3 & 4 are too large and control of the population by beetles would remain as the best option. However, the review of Point 1 indicates that the population is still at a level where eradication by herbicide application may be possible. Appendix A includes the 2011 purple loosestrife survey results.

UPPCO will consult with the BFIT on the most appropriate treatment option.

EWM transect locations were surveyed and a meander sample for EWM was completed. The surveys did not indicate the presence of EWM. Appendix B includes the 2011 EWM survey results.

Cisco Chain of Lakes

As per the FERC Order Approving Supplement to the Noxious Plants Monitoring Plan for the Cisco Chain of Lakes, UPPCO is required to submit the results of the annual purple loosestrife survey for the Cisco Chain of Lakes.

Secretary Bose
December 6, 2011
Page 2 of 2

The Cisco Chain Riparian Owners Association (CCROA) contracted the services of Northland College to complete purple loosestrife surveys on the Cisco Chain of Lakes from July 5th through July 20th, 2011. No purple loosestrife was observed. The purple loosestrife report is included in Appendix C.

20 plants were observed 2010. These plants were hand pulled. The 2011 survey results indicate the control efforts were successful.

The 2011 EWM and Purple loosestrife Report was provided to the Bond Falls Implementation Team (BFIT) on October 10, 2011. No comments were received from the BFIT. Documentation of consultation is included as Appendix D.

Should you have any questions relative to this material, please do not hesitate to call Jamie Nuthals at (920) 433-1460.

Sincerely,

A handwritten signature in black ink, appearing to read "T. Jensky". The signature is stylized with a large, looped initial "T" and a cursive "Jensky".

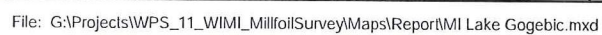
Terry P. Jensky
Vice President - Energy Supply Operations
for Wisconsin Public Service

cc: Mr. Jim Melchiori, UPPCO
Mr. Howard Giesler, WPS

Mr. Virgil Schlorke, UPPCO
Mr. Gil Snyder, WPS

APPENDIX A

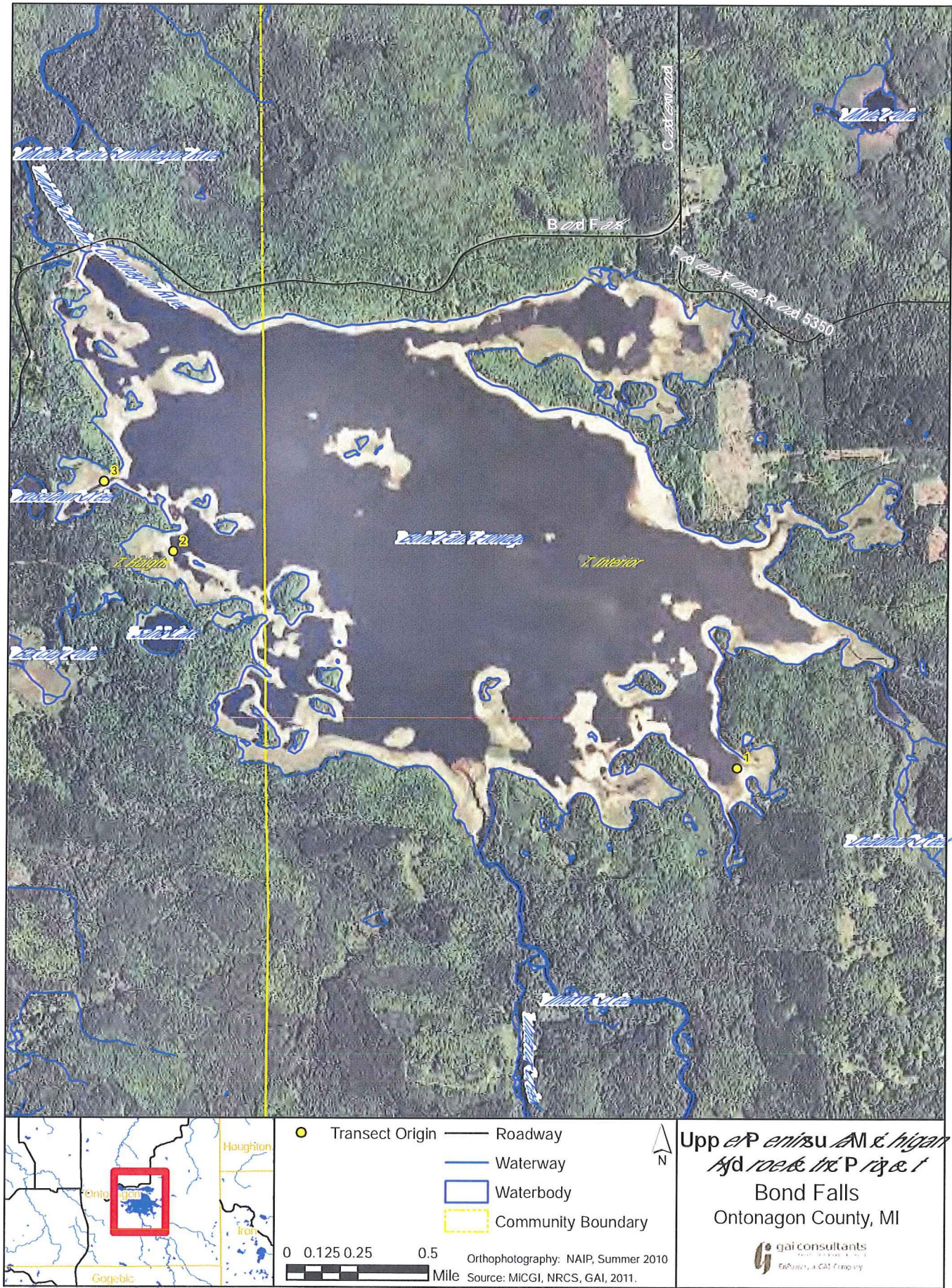
BOND FALLS RESERVOIR, VICTORIA FALLS RESERVOIR AND LAKE GOGEBIC PURPLE LOOSESTRIFE SURVY RESULTS



Purple Loosestrife Survey - 2011		
Lake Gogebic		
Number	Amount	Control
1	6-50 Plants	N/A
2	>5 Plants	Hand Pulled
3	50 +	Gallerucella beetles
4	50 +	Gallerucella beetles

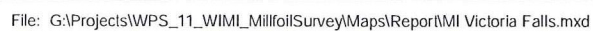
APPENDIX B

BOND FALLS RESERVOIR, VICTORIA FALLS RESERVOIR AND LAKE GOGEBIC EWM SURVY RESULTS



Eurasian Milfoil Survey - August 1, 2011				
Bond Falls, Ontonagon County, Michigan				
Transect #	0 - 0.5 M	0.5 - 1.5 M	1.5 - 3.0 M	> 3.0 M
1A	0	0	NA	NA
1B	0	0	NA	NA
1C	0	0	NA	NA
2A	0	0	NA	NA
2B	0	0	NA	NA
2C	0	0	NA	0
3A	0	0	NA	NA
3B	0	0	NA	NA
3C	0	0	NA	0

Abundance Scale	
0	Absent
1	Present
2	Abundance Less than Half
3	Equal Presence Compared to Other Species
4	Dominant Species
5	Total Infestation



Eurasian Milfoil Survey - August 1, 2011				
Victoria Falls, Ontonagon County, Michigan				
Transect #	0 - 0.5 M	0.5 - 1.5 M	1.5 - 3.0 M	> 3.0 M
1A	0	0	NA	NA
1B	0	0	0	NA
1C	0	0	0	NA
2A	0	0	NA	NA
2B	0	0	NA	NA
2C	0	0	0	NA

Abundance Scale	
0	Absent
1	Present
2	Abundance Less than Half
3	Equal Presence Compared to Other Species
4	Dominant Species
5	Total Infestation



Eurasian Milfoil Survey - August 2, 2011				
Lake Gogebic, Gogebic County, Michigan				
Transect #	0 - 0.5 M	0.5 - 1.5 M	1.5 - 3.0 M	> 3.0 M
1A	0	0	NA	NA
1B	0	0	NA	NA
1C	0	0	NA	NA
2A	0	0	NA	NA
2B	0	0	NA	NA
2C	0	0	0	NA
3A	0	0	NA	NA
3B	0	0	0	NA
3C	0	0	0	NA
4A	0	0	NA	NA
4B	0	0	NA	NA
4C	0	0	NA	NA
5A	0	0	NA	NA
5B	0	0	NA	NA
5C	0	0	NA	NA

Abundance Scale	
0	Absent
1	Present
2	Abundance Less than Half
3	Equal Presence Compared to Other Species
4	Dominant Species
5	Total Infestation

APPENDIX C

CISCO CHAIN OF LAKES PURPLE LOOSESTRIFE SURVY RESULTS REPORT

2011 Cisco Chain of Lakes

Purple Loosestrife Inventory

8/4/2011



NORTHLAND[®]
COLLEGE

2011 Cisco Chain of Lakes

Executive Summary

The field team of the Sigurd Olson Environmental Institute found no occurrences of Purple Loosestrife during the July 2011 inventory of the Cisco Chain of Lakes. The team developed a field guide for identifying Purple Loosestrife and its common look-alikes to assist the inventory and future efforts. The team mapped areas of potential habitat to aid in prioritizing follow up and citizen monitoring efforts. Continued monitoring in these areas, boat launches, marshes, tributary systems and disturbed shorelines is recommended.

Field Team

Lee Hengescht – Team leader

Amanda Strick - Team Leader

Bill Mokry – Cartographer

Erin Blow

Lucas Brogan

Carissa Hudson

Bobbi Joyce

Mary Schaub Schlager

Project Manager – Contact Person

Mike Gardner

Program Director

Sigurd Olson Environmental Institute

Northland College

1411 Ellis Ave,

Ashland, WI 54806

715-682-1481

mgardner@northland.edu

2011 Cisco Chain of Lakes

Introduction

Invasive species present a variety of challenges in various ecosystems due to the plant's life cycles, which usually allow for rapid reproduction, reduced predation pressure (lack of native species to cope with introduced species), and growth characteristics that provide for extensive disruption of native vegetation (ACOE 2002). Native vegetation in various regions have been out-competed by invading non-native species for resources such as nutrients, water, light, space, and pollinators such as bees (Brown, Mitchell, and Graham 2002). Increased competition for necessary resources can lead to extinction or extirpation of native flora; endangered or rare species are of particular conservation concern (Mooney and Cleland 2001).

Aquatic invasive species are a major threat to the ecological and economic health of many lakes and waterways of the Upper Midwest. The Cisco Chain of Lakes is especially susceptible due to its popularity as a recreational destination and its history of disturbance along with added ecological stressors such as changes in water level. The Cisco Chain Riparian Owners Association (CCROA) has been actively working with multiple partners to monitor and control invasive species in order to preserve the overall ecological health and recreational opportunities of the system. In the summer of 2011 on behalf of the CCROA the Sigurd Olson Environmental Institute performed a shoreline survey of the lakes chain for purple loosestrife and its potential habitat.

Site description

The Cisco Chain of Lakes consists of 15 spring-fed lakes with more than 270 miles of shoreline beginning in Vilas County, Wisconsin and crossing into Gogebic County, Michigan. The lakes serve as the headwaters of the Cisco Branch of the Ontonagon River which flows north into Lake Superior. Bordered by the pristine Sylvania Wilderness Area and Ottawa National

2011 Cisco Chain of Lakes

forest, the Cisco Chain of Lakes and the surrounding areas are well-known as a recreational destination for boating, fishing, and general recreational use across the Upper Midwest.

In 2010, there were two reported occurrences of Purple Loosestrife in the Cisco Chain of Lakes on Thousand Island Lake. In total 20 plants were pulled and treated by the Upper Peninsula Power Company during their Invasive Plant Species Survey. Within the region there have been limited documented cases of Purple Loosestrife which includes a patch of 50-100 plants found in a ditch along US Highway 2, north of the Cisco Chain of Lakes by the Great Lakes Indian Fish and Wildlife Commission (GLIFWC) in 2003, 17 plants found within the Ottawa National Forest on Clark Lake, Gogebic County, by the Forest Service in 2004 near a boat ramp north of the Cisco Chain of Lakes (these plants were pulled and dug up to prevent further dispersal), and a small patch on a marshy shore of a large island nearest to the Ontonagon River on Tenderfoot Lake by GLIFWC in 2007 southwest of the lake chain (maps.glifwc.org).

Water levels in the Cisco Chain of Lakes are maintained by dams within the Ontonagon River Watershed. These dams owned by Upper Peninsula Power Company for the purposes of the Bond Falls hydroelectric project. This project yields enough electricity to power about 13,000 residences at full capacity. The Bond Falls reservoir supplies water for the dams to generate electricity and consequentially, maintains a high water level which enables passage between many of the lakes which would not be possible otherwise. The maintained high water levels in certain areas of the lake chain have led to alterations of natural cycles (natural fluctuations of water levels during various seasons). These types of disruptions allow for conditions that an opportunistic species such as Purple Loosestrife would be able to establish and adapt within.

2011 Cisco Chain of Lakes

Survey Methodology

Field work was conducted on the Cisco Chain of Lakes starting July 5, 2011 and ending July 20, 2011. During that time period, the shorelines of East Bay, West Bay, Lindsley, Fishhawk, Indian, Big, Mamie, Cisco, Thousand Island, Big Africa, and Record lakes were surveyed for the invasive species Purple Loosestrife (*Lythrum salicaria*).

The shoreline of each lake, including islands, was circumnavigated in a two passenger canoe. In the larger lakes, Thousand Island, Cisco, and Big Lake, two canoes were used with each canoe circumnavigating in opposite directions. The canoes followed the shoreline as close as possible for optimal observation and identification of plant species. A field guide was created and used to identify Purple Loosestrife and its common look-alikes while the surveys were conducted. Purple Loosestrife look-alikes identified in the field guide include Fireweed (*Epilobium angustifolium*), Swamp Loosestrife (*Decodon verticillatus*), and Pickerel Weed (*Pontederia cordata*), all of which are present in the Cisco Chain of Lakes.

The habitat along the shoreline was also observed and noted. GPS points were made on Trimble GPS devices to indicate potential Purple Loosestrife habitat. Areas with wetlands, swamps, and high abundances of Swamp Loosestrife were recorded. An abundance of Swamp Loosestrife is an indication of habitat where Purple Loosestrife might be most likely to invade. Purple Loosestrife is known to invade different types of wetlands and highly disturbed, low lying areas. The GPS points were imported into ArcGIS version 9.3.1 and overlaid onto an aerial photo of the lake chain. Polygons were then created to indicate the extent of the area where there was potential habitat for Purple Loosestrife. The map created by the Sigurd Olson Environmental Institute may be used in the future as a guide to monitor key areas where Purple Loosestrife is the most likely to invade. *(Although the polygons were created as a guide it

2011 Cisco Chain of Lakes

should be noted that as an aggressive non-native invasive species Purple Loosestrife is capable of adapting to a variety of environments).

Purple Loosestrife and its Potential Habitat

Purple Loosestrife (*Lythrum salicaria*) is a perennial, aquatic emergent plant native to Eurasia and present in North America since the early 19th century. Introduction of Purple Loosestrife occurred throughout the 1800's as a favorite in gardens for its showy flowers and its reputed medicinal properties. Plants were also transported through contaminated ballast water. Though measures have been taken by many states have laws prohibiting the sale or distribution of Purple Loosestrife some gardeners and by bee keepers continue to use the plant for its prolific nectar production and attractive blooms. Purple loosestrife occupies habitats similar to those found in Europe, but in North America, free from natural predators and disease it outcompetes native vegetation and drastically alters the communities it invades.

Mature Purple Loosestrife can be up to 7 feet tall with as many as 50 semi-woody stems. It has simple, opposite, lanceolate leaves with smooth edges. Occasionally the leaves may be bunched or in whorls and are often downy to the touch. Purple loosestrife is easily identifiable when in bloom by its long spikes of tightly clustered flowers. Each individual flower has 5-6 petals and may range in color from pink to purple. The flowering stalk blooms from the bottom to the top starting as early as July and through September.

Purple loosestrife has a highly prolific reproduction capacity and mature plants may produce up to 2 million seeds per year. Seeds are most frequently disbursed over long distances by water animals or by people storing and using seed stocks. The seeds that do not germinate

2011 Cisco Chain of Lakes

immediately can remain viable for years and this quality results in a seed bank that is nearly impossible to eliminate.

As a highly adaptable plant, Purple Loosestrife can thrive in a wide variety of habitats. It will thrive in moist soil to shallow water; however, mature plants can survive in dry soil, on the full spectrum from sand to clay. To reproduce it requires at least 50 percent sun. Purple Loosestrife is well suited to colonize disturbed habitat due to its ability to sprout early in the season, grow quickly and spread by root and stem fragments. A variety of plant adaptations allow Purple Loosestrife to withstand seasonal or permanent changes in water levels. These combined features have enabled Purple Loosestrife to become a dominant plant presence in many wetland communities, with some reports of wetlands having 50 percent of the biomass comprised of Purple Loosestrife.

Purple Loosestrife's optimum habitats are freshwater marshes, open stream margins, and alluvial floodplains, although its adaptability allows it to colonize other locations such as roadside ditches, and agricultural land where it is often found. Its most common associates are; broadleaf cattail, reed canary-grass, bulrush, and sedges.

Once established, Purple Loosestrife has the capacity to outcompete native plants until entire wetlands propagate a monoculture of Purple Loosestrife. The most widely studied effect of this is the impact on waterfowl. As native vegetation becomes scarcer so does the food and nesting materials necessary for waterfowl habitat, the stems of Purple Loosestrife are not suitable building materials for nesting waterfowl and the abundance of Purple Loosestrife reduces the habitat for native plant species which would provide adequate food, cover, and nesting materials for the waterfowl. Purple Loosestrife similarly has a negative effect of furbearer productivity.

2011 Cisco Chain of Lakes

Comments/Conclusions

Purple Loosestrife is generally easily identified due to its unique flowers, size, and monotypic tendencies. The survey conducted by the Sigurd Olson Environmental Institute (SOEI) Interns was completed during a period of time when plants are not typically in bloom which made surveying the shoreline more challenging. Between July 5, 2011 and July 20, 2011 no Purple Loosestrife was found in the Cisco Chain of Lakes. We suggest continued observation of areas such as boat launches, tributary systems, and developed or disturbed shorelines with an emphasis on areas near marshes and other shallow waters. In addition, the SOEI would highly encourage education in identification and reporting aquatic invasive species such as Purple Loosestrife for landowners and recreational users as a preventative measure for protecting the Cisco Chain of Lakes in the future. The included ID manual can provide a foundation for education efforts.

Control

- Prevention and Survey
- Manual removal
- Chemical Control
- Biological Control
- Educate Land Owners

2011 Cisco Chain of Lakes

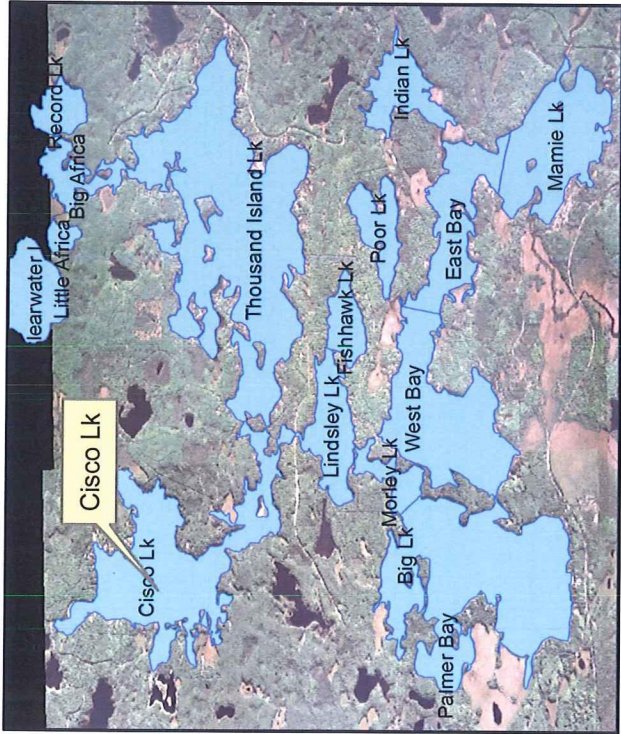
Recommendations

A more comprehensive study of potential habitat could be done by surveying not for purple loosestrife but for its common associates (broadleaf cattail, reed canary-grass, bulrush, and sedges), which would indicate the first places Purple Loosestrife would be likely to establish. According to the Wisconsin Department of Natural Resources (WDNR) 80% of the plants and animals on the state's threatened or endangered list spend part of if not all of their lives in the nearshore habitat which is where Purple Loosestrife is likely to be found on the Cisco Chain of Lakes. The Sigurd Olson Environmental Institute would suggest that the CCROA survey for critical habitat as designated by the WDNR in Ch. NR 107 and Ch. NR 1.06 to identify and protect nearshore habitat as part of an overall comprehensive management approach.

References

- ACOE. 2002. Noxious and Nuisance Plant Management Information System. United States Army, Army Corps of Engineers. <http://www.wes.army.mil/el/pmis/pmishelp.htm>.
- Brown, Beverly J., Mitchell, Randall J., and Graham, Shirley A. Competition for Pollination Between and Invasive Species (Purple Loosestrife) and a Native Congener. *Ecology* 83: 2328-2336. 2002.
- Mooney H.A. and Cleland E.E. The Evolutionary Impact of Invasive Species. *Proceedings of the National Academy of Sciences of the United States of America (PNAS)*. May 8, 2001. Vol 98 no. 10. <http://www.pnas.org/content/98/10/5446.full>.

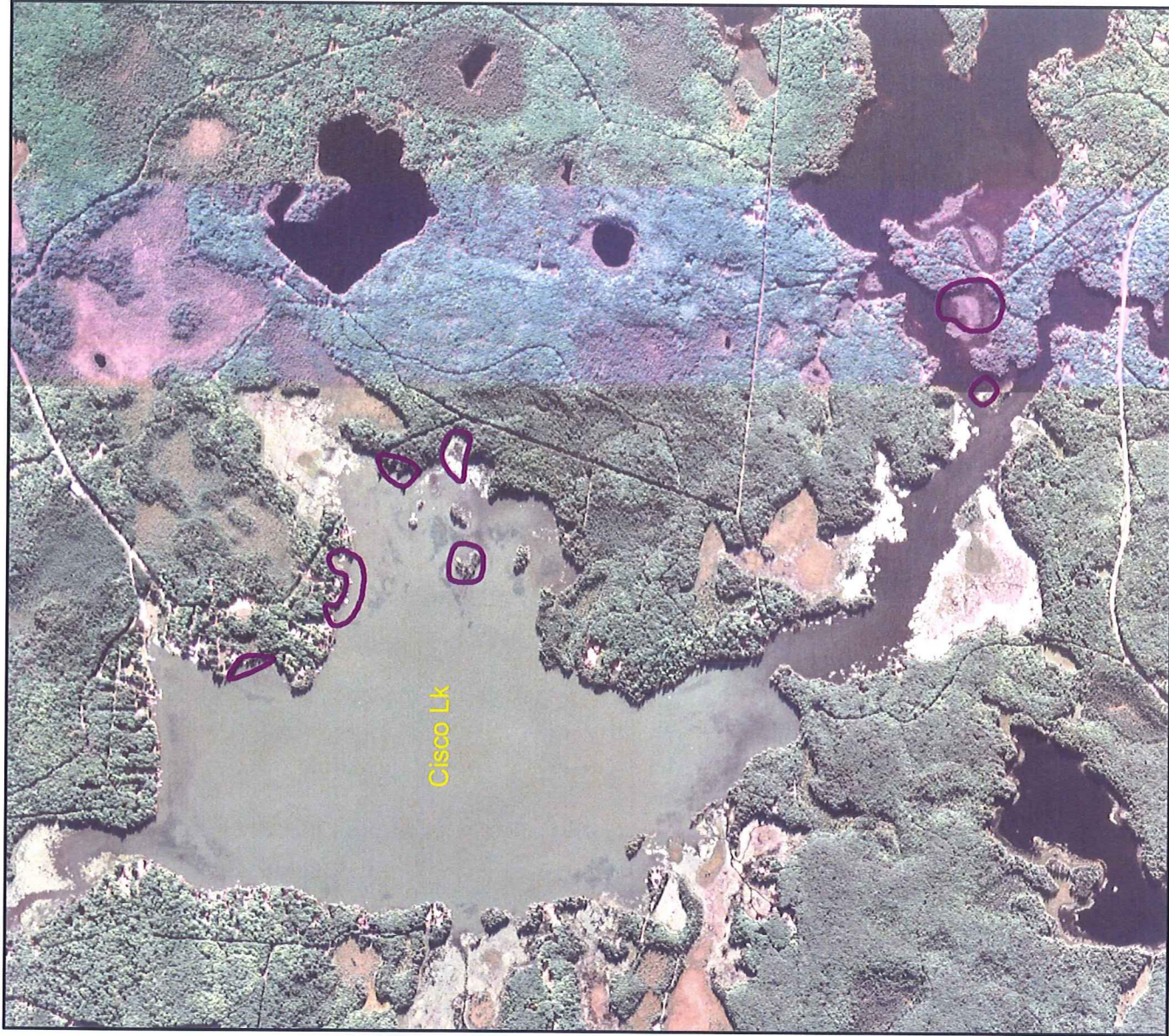
Purple Loosestrife Survey for Cisco Chain of Lakes



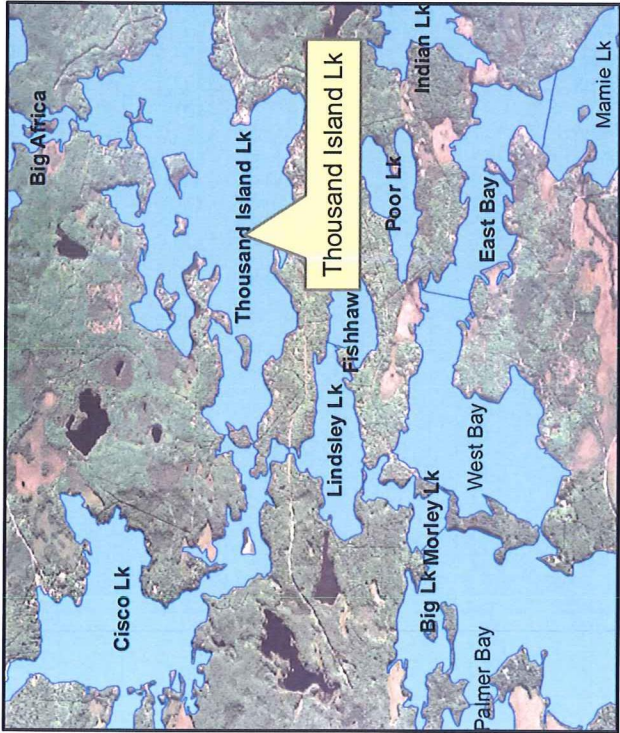
The Sigurd Olson Environmental Institute in the summer of 2011 performed a purple loosestrife survey on the Cisco Chain of Lakes. The team canoed the entire shoreline and logged points to represent potential habitats. The red points represent the locations of purple loosestrife found in the summer of 2010.



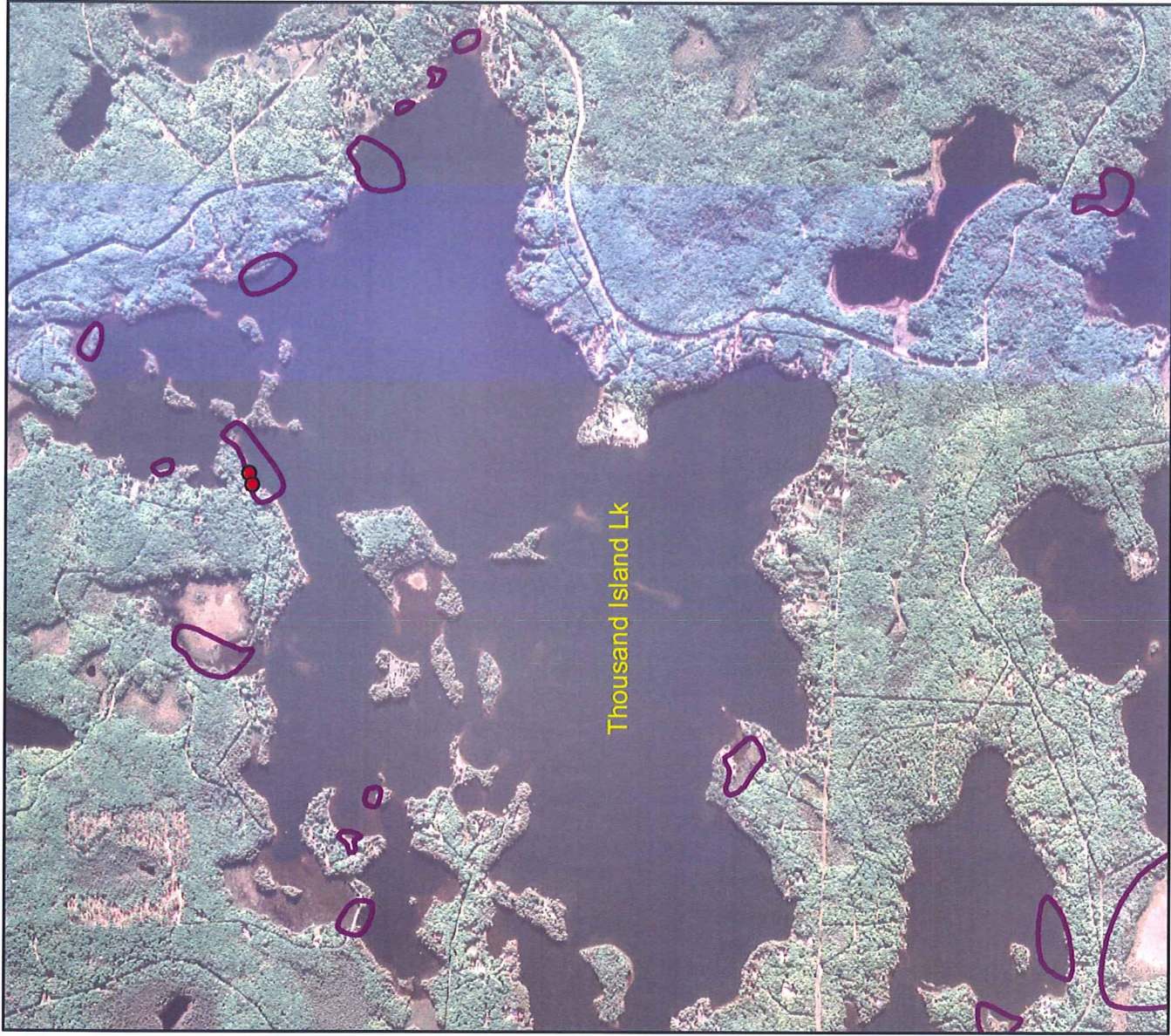
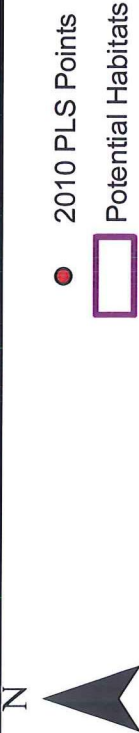
- 2010 PLS Points
- Potential Habitats



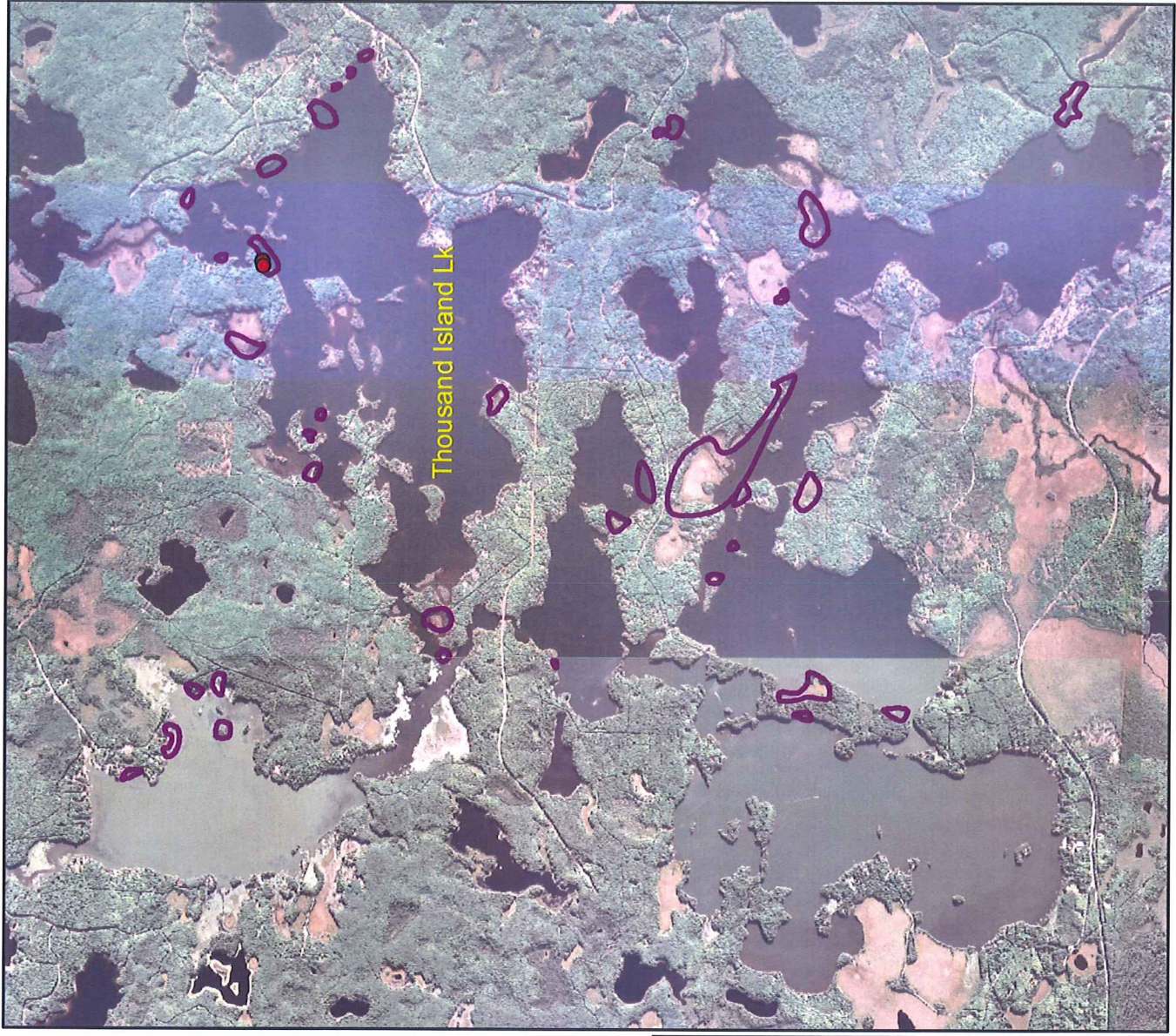
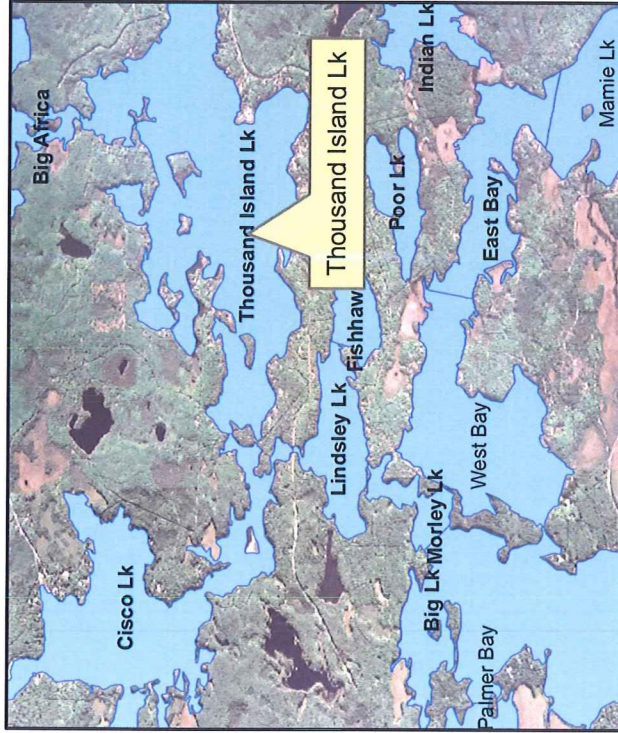
Purple Loosestrife Survey for Cisco Chain of Lakes



The Sigurd Olson Environmental Institute in the summer of 2011 performed a purple loosestrife survey on the Cisco Chain of Lakes. The team canoed the entire shoreline and logged points to represent potential habitats. The red points represent the locations of purple loosestrife found in the summer of 2010.



Purple Loosestrife Survey for Cisco Chain of Lakes



The Sigurd Olson Environmental Institute in the summer of 2011 performed a purple loosestrife survey on the Cisco Chain of Lakes. The team canoed the entire shoreline and logged points to represent potential habitats. The red points represent the locations of purple loosestrife found in the summer of 2010.



- 2010 PLS Points
- Potential Habitats



APPENDIX D

DOCUMENTATION OF CONSULTATION



Upper Peninsula Power Company

(a subsidiary of Integrys Energy Group)

700 North Adams Street

P.O. Box 19001

Green Bay, WI 54307-9001

October 10, 2011

Mr. Gene Mensch
KBIC – Natural Resources Department
HCRO1 Box 120
L'Anse, MI 49946

Dear Mr. Mensch:

2011 Noxious Plants Monitoring Survey Results - Bond Falls Hydroelectric FERC Project # 1864

Bond Falls Reservoir, Victoria Falls Reservoir and Lake Gogebic

As per the FERC Order Approving Noxious Plants Monitoring Plan, Upper Peninsula Power Company (UPPCO) is required to submit the results of the Eurasian water milfoil (EWM) and purple loosestrife monitoring surveys for the Bond Falls Hydroelectric Project (FERC Project No. 1864).

Purple loosestrife and EWM surveys were completed on August 1st and 2nd, 2011 for the Bond Falls and Victoria Reservoirs and Lake Gogebic. Purple loosestrife was once again observed at Lake Gogebic.

Four colonies were identified as being located within the Lake Gogebic project boundary. One colony of less than 5 plants, one colony of 6-50 plants, and two colonies of 50+ plants were observed.

In consultation with the Bond Falls Implementation Team (BFIT), UPPCO raised and released approximately 5,000 *Galerucella* beetles (beetles) at Lake Gogebic. On July 13, 2011 beetles were released on the southeast shoreline at Points 3 & 4 (Please reference Appendix A).

UPPCO and the U.S. Department of Agriculture - Forest Service (USDA - FS) completed a follow up survey of the purple loosestrife on August 18th, 2011. Beetling feeding was observed at the release site. The population appeared to be adequately established. No beetle feeding was observed at Point 1. Point 2 was small and was hand pulled and removed from site.

The results of the review indicate that Points 3 & 4 are too large and control of the population by beetles would remain as the best option. However the review of Point 1 indicates that the population is still at a level where eradication by herbicide application may be possible. Appendix A includes the 2011 purple loosestrife survey results.

UPPCO will consult with the BFIT on the most appropriate treatment option.

EWM transect locations were surveyed and a meander sample for EWM was completed. The surveys did not indicate the presence of EWM. Appendix B includes the 2011 EWM survey results.

Cisco Chain of Lakes

As per the FERC Order Approving Supplement to the Noxious Plants Monitoring Plan for the Cisco Chain of Lakes, UPPCO is required to submit the results of the annual purple loosestrife survey for the Cisco Chain of Lakes.

Mr. Gene Mensch

October 10, 2011

Page 2 of 2

The Cisco Chain Riparian Owners Association (CCROA) contracted the services of Northland College to complete purple loosestrife surveys on the Cisco Chain of Lakes from July 5th through July 20th, 2011. No purple loosestrife was observed. The purple loosestrife report is included in Appendix C.

20 plants were observed 2010. These plants were hand pulled. The 2011 survey results indicate the control efforts were successful.

Should you have any questions relative to this material, please do not hesitate to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Ntuhals", with a stylized, cursive script.

James Ntuhals
Environmental Services-
Natural Resource Management
(920) 433-1460

Enc.



Upper Peninsula Power Company

(a subsidiary of Integrys Energy Group)

700 North Adams Street

P.O. Box 19001

Green Bay, WI 54307-9001

October 10, 2011

Mr. Paul Piszczek
Michigan Department of Natural Resources
6833 Hwy 2, 4, and M-35
Gladstone, MI 49837

Dear Mr. Piszczek:

2011 Noxious Plants Monitoring Survey Results - Bond Falls Hydroelectric FERC Project # 1864

Bond Falls Reservoir, Victoria Falls Reservoir and Lake Gogebic

As per the FERC Order Approving Noxious Plants Monitoring Plan, Upper Peninsula Power Company (UPPCO) is required to submit the results of the Eurasian water milfoil (EWM) and purple loosestrife monitoring surveys for the Bond Falls Hydroelectric Project (FERC Project No. 1864).

Purple loosestrife and EWM surveys were completed on August 1st and 2nd, 2011 for the Bond Falls and Victoria Reservoirs and Lake Gogebic. Purple loosestrife was once again observed at Lake Gogebic.

Four colonies were identified as being located within the Lake Gogebic project boundary. One colony of less than 5 plants, one colony of 6-50 plants, and two colonies of 50+ plants were observed.

In consultation with the Bond Falls Implementation Team (BFIT), UPPCO raised and released approximately 5,000 *Galerucella* beetles (beetles) at Lake Gogebic. On July 13, 2011 beetles were released on the southeast shoreline at Points 3 & 4 (Please reference Appendix A).

UPPCO and the U.S. Department of Agriculture - Forest Service (USDA - FS) completed a follow up survey of the purple loosestrife on August 18th, 2011. Beetling feeding was observed at the release site. The population appeared to be adequately established. No beetle feeding was observed at Point 1. Point 2 was small and was hand pulled and removed from site.

The results of the review indicate that Points 3 & 4 are too large and control of the population by beetles would remain as the best option. However the review of Point 1 indicates that the population is still at a level where eradication by herbicide application may be possible. Appendix A includes the 2011 purple loosestrife survey results.

UPPCO will consult with the BFIT on the most appropriate treatment option.

EWM transect locations were surveyed and a meander sample for EWM was completed. The surveys did not indicate the presence of EWM. Appendix B includes the 2011 EWM survey results.

Cisco Chain of Lakes

As per the FERC Order Approving Supplement to the Noxious Plants Monitoring Plan for the Cisco Chain of Lakes, UPPCO is required to submit the results of the annual purple loosestrife survey for the Cisco Chain of Lakes.



Upper Peninsula Power Company

(a subsidiary of Integrys Energy Group)

700 North Adams Street

P.O. Box 19001

Green Bay, WI 54307-9001

October 10, 2011

Mr. Jim Schramm
Michigan Hydro Relicensing Coalition
1210 East Fifth Avenue
Houghton, MI 49931

Dear Mr. Schramm:

2011 Noxious Plants Monitoring Survey Results - Bond Falls Hydroelectric FERC Project # 1864

Bond Falls Reservoir, Victoria Falls Reservoir and Lake Gogebic

As per the FERC Order Approving Noxious Plants Monitoring Plan, Upper Peninsula Power Company (UPPCO) is required to submit the results of the Eurasian water milfoil (EWM) and purple loosestrife monitoring surveys for the Bond Falls Hydroelectric Project (FERC Project No. 1864).

Purple loosestrife and EWM surveys were completed on August 1st and 2nd, 2011 for the Bond Falls and Victoria Reservoirs and Lake Gogebic. Purple loosestrife was once again observed at Lake Gogebic.

Four colonies were identified as being located within the Lake Gogebic project boundary. One colony of less than 5 plants, one colony of 6-50 plants, and two colonies of 50+ plants were observed.

In consultation with the Bond Falls Implementation Team (BFIT), UPPCO raised and released approximately 5,000 *Galerucella* beetles (beetles) at Lake Gogebic. On July 13, 2011 beetles were released on the southeast shoreline at Points 3 & 4 (Please reference Appendix A).

UPPCO and the U.S. Department of Agriculture - Forest Service (USDA - FS) completed a follow up survey of the purple loosestrife on August 18th, 2011. Beetling feeding was observed at the release site. The population appeared to be adequately established. No beetle feeding was observed at Point 1. Point 2 was small and was hand pulled and removed from site.

The results of the review indicate that Points 3 & 4 are too large and control of the population by beetles would remain as the best option. However the review of Point 1 indicates that the population is still at a level where eradication by herbicide application may be possible. Appendix A includes the 2011 purple loosestrife survey results.

UPPCO will consult with the BFIT on the most appropriate treatment option.

EWM transect locations were surveyed and a meander sample for EWM was completed. The surveys did not indicate the presence of EWM. Appendix B includes the 2011 EWM survey results.

Cisco Chain of Lakes

As per the FERC Order Approving Supplement to the Noxious Plants Monitoring Plan for the Cisco Chain of Lakes, UPPCO is required to submit the results of the annual purple loosestrife survey for the Cisco Chain of Lakes.

Mr. Paul Piszczek
October 10, 2011
Page 2 of 2

The Cisco Chain Riparian Owners Association (CCROA) contracted the services of Northland College to complete purple loosestrife surveys on the Cisco Chain of Lakes from July 5th through July 20th, 2011. No purple loosestrife was observed. The purple loosestrife report is included in Appendix C.

20 plants were observed 2010. These plants were hand pulled. The 2011 survey results indicate the control efforts were successful.

Should you have any questions relative to this material, please do not hesitate to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Ntuhals", with a stylized flourish at the end.

James Ntuhals
Environmental Services-
Natural Resource Management
(920) 433-1460

Enc.

Mr. Jim Schramm
October 10, 2011
Page 2 of 2

The Cisco Chain Riparian Owners Association (CCROA) contracted the services of Northland College to complete purple loosestrife surveys on the Cisco Chain of Lakes from July 5th through July 20th, 2011. No purple loosestrife was observed. The purple loosestrife report is included in Appendix C.

20 plants were observed 2010. These plants were hand pulled. The 2011 survey results indicate the control efforts were successful.

Should you have any questions relative to this material, please do not hesitate to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Ntuhals", written in a cursive style.

James Ntuhals
Environmental Services-
Natural Resource Management
(920) 433-1460

Enc.



Upper Peninsula Power Company

(a subsidiary of Integrys Energy Group)

700 North Adams Street

P.O. Box 19001

Green Bay, WI 54307-9001

October 10, 2011

Mr. Norman Nass
United States Department of Agriculture – Forest Service
Old US Hwy 2 East
Watersmeet, MI 49969

Dear Mr. Nass:

2011 Noxious Plants Monitoring Survey Results - Bond Falls Hydroelectric FERC Project # 1864

Bond Falls Reservoir, Victoria Falls Reservoir and Lake Gogebic

As per the FERC Order Approving Noxious Plants Monitoring Plan, Upper Peninsula Power Company (UPPCO) is required to submit the results of the Eurasian water milfoil (EWM) and purple loosestrife monitoring surveys for the Bond Falls Hydroelectric Project (FERC Project No. 1864).

Purple loosestrife and EWM surveys were completed on August 1st and 2nd, 2011 for the Bond Falls and Victoria Reservoirs and Lake Gogebic. Purple loosestrife was once again observed at Lake Gogebic.

Four colonies were identified as being located within the Lake Gogebic project boundary. One colony of less than 5 plants, one colony of 6-50 plants, and two colonies of 50+ plants were observed.

In consultation with the Bond Falls Implementation Team (BFIT), UPPCO raised and released approximately 5,000 *Galerucella* beetles (beetles) at Lake Gogebic. On July 13, 2011 beetles were released on the southeast shoreline at Points 3 & 4 (Please reference Appendix A).

UPPCO and the U.S. Department of Agriculture - Forest Service (USDA - FS) completed a follow up survey of the purple loosestrife on August 18th, 2011. Beetling feeding was observed at the release site. The population appeared to be adequately established. No beetle feeding was observed at Point 1. Point 2 was small and was hand pulled and removed from site.

The results of the review indicate that Points 3 & 4 are too large and control of the population by beetles would remain as the best option. However the review of Point 1 indicates that the population is still at a level where eradication by herbicide application may be possible. Appendix A includes the 2011 purple loosestrife survey results.

UPPCO will consult with the BFIT on the most appropriate treatment option.

EWM transect locations were surveyed and a meander sample for EWM was completed. The surveys did not indicate the presence of EWM. Appendix B includes the 2011 EWM survey results.

Cisco Chain of Lakes

As per the FERC Order Approving Supplement to the Noxious Plants Monitoring Plan for the Cisco Chain of Lakes, UPPCO is required to submit the results of the annual purple loosestrife survey for the Cisco Chain of Lakes.

Mr. Norm Nass
October 10, 2011
Page 2 of 2

The Cisco Chain Riparian Owners Association (CCROA) contracted the services of Northland College to complete purple loosestrife surveys on the Cisco Chain of Lakes from July 5th through July 20th, 2011. No purple loosestrife was observed. The purple loosestrife report is included in Appendix C.

20 plants were observed 2010. These plants were hand pulled. The 2011 survey results indicate the control efforts were successful.

Should you have any questions relative to this material, please do not hesitate to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Ntuhals", written in a cursive style.

James Ntuhals
Environmental Services-
Natural Resource Management
(920) 433-1460

Enc.



Upper Peninsula Power Company

(a subsidiary of Integrys Energy Group)

700 North Adams Street

P.O. Box 19001

Green Bay, WI 54307-9001

October 10, 2011

Mr. Vince Cavalieri
U.S. Fish & Wildlife Service
2651 Coolidge Rd, Suite 101
East Lansing, MI 48823-6316

Dear Mr. Cavalieri:

2011 Noxious Plants Monitoring Survey Results - Bond Falls Hydroelectric FERC Project # 1864

Bond Falls Reservoir, Victoria Falls Reservoir and Lake Gogebic

As per the FERC Order Approving Noxious Plants Monitoring Plan, Upper Peninsula Power Company (UPPCO) is required to submit the results of the Eurasian water milfoil (EWM) and purple loosestrife monitoring surveys for the Bond Falls Hydroelectric Project (FERC Project No. 1864).

Purple loosestrife and EWM surveys were completed on August 1st and 2nd, 2011 for the Bond Falls and Victoria Reservoirs and Lake Gogebic. Purple loosestrife was once again observed at Lake Gogebic.

Four colonies were identified as being located within the Lake Gogebic project boundary. One colony of less than 5 plants, one colony of 6-50 plants, and two colonies of 50+ plants were observed.

In consultation with the Bond Falls Implementation Team (BFIT), UPPCO raised and released approximately 5,000 *Galerucella* beetles (beetles) at Lake Gogebic. On July 13, 2011 beetles were released on the southeast shoreline at Points 3 & 4 (Please reference Appendix A).

UPPCO and the U.S. Department of Agriculture - Forest Service (USDA - FS) completed a follow up survey of the purple loosestrife on August 18th, 2011. Beetle feeding was observed at the release site. The population appeared to be adequately established. No beetle feeding was observed at Point 1. Point 2 was small and was hand pulled and removed from site.

The results of the review indicate that Points 3 & 4 are too large and control of the population by beetles would remain as the best option. However the review of Point 1 indicates that the population is still at a level where eradication by herbicide application may be possible. Appendix A includes the 2011 purple loosestrife survey results.

UPPCO will consult with the BFIT on the most appropriate treatment option.

EWM transect locations were surveyed and a meander sample for EWM was completed. The surveys did not indicate the presence of EWM. Appendix B includes the 2011 EWM survey results.

Cisco Chain of Lakes

As per the FERC Order Approving Supplement to the Noxious Plants Monitoring Plan for the Cisco Chain of Lakes, UPPCO is required to submit the results of the annual purple loosestrife survey for the Cisco Chain of Lakes.

Mr. Vince Cavalieri

October 10, 2011

Page 2 of 2

The Cisco Chain Riparian Owners Association (CCROA) contracted the services of Northland College to complete purple loosestrife surveys on the Cisco Chain of Lakes from July 5th through July 20th, 2011. No purple loosestrife was observed. The purple loosestrife report is included in Appendix C.

20 plants were observed 2010. These plants were hand pulled. The 2011 survey results indicate the control efforts were successful.

Should you have any questions relative to this material, please do not hesitate to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Ntuhals", written in a cursive style.

James Ntuhals
Environmental Services-
Natural Resource Management
(920) 433-1460

Enc.



Upper Peninsula Power Company

(a subsidiary of Integrys Energy Group)

700 North Adams Street

P.O. Box 19001

Green Bay, WI 54307-9001

October 10, 2011

Mr. Steve Gilbert
Wisconsin Department of Natural Resources
8770 Highway J
Woodruff, WI 54568

Dear Mr. Gilbert:

2011 Noxious Plants Monitoring Survey Results - Bond Falls Hydroelectric FERC Project # 1864

Bond Falls Reservoir, Victoria Falls Reservoir and Lake Gogebic

As per the FERC Order Approving Noxious Plants Monitoring Plan, Upper Peninsula Power Company (UPPCO) is required to submit the results of the Eurasian water milfoil (EWM) and purple loosestrife monitoring surveys for the Bond Falls Hydroelectric Project (FERC Project No. 1864).

Purple loosestrife and EWM surveys were completed on August 1st and 2nd, 2011 for the Bond Falls and Victoria Reservoirs and Lake Gogebic. Purple loosestrife was once again observed at Lake Gogebic.

Four colonies were identified as being located within the Lake Gogebic project boundary. One colony of less than 5 plants, one colony of 6-50 plants, and two colonies of 50+ plants were observed.

In consultation with the Bond Falls Implementation Team (BFIT), UPPCO raised and released approximately 5,000 *Galerucella* beetles (beetles) at Lake Gogebic. On July 13, 2011 beetles were released on the southeast shoreline at Points 3 & 4 (Please reference Appendix A).

UPPCO and the U.S. Department of Agriculture - Forest Service (USDA - FS) completed a follow up survey of the purple loosestrife on August 18th, 2011. Beetling feeding was observed at the release site. The population appeared to be adequately established. No beetle feeding was observed at Point 1. Point 2 was small and was hand pulled and removed from site.

The results of the review indicate that Points 3 & 4 are too large and control of the population by beetles would remain as the best option. However the review of Point 1 indicates that the population is still at a level where eradication by herbicide application may be possible. Appendix A includes the 2011 purple loosestrife survey results.

UPPCO will consult with the BFIT on the most appropriate treatment option.

EWM transect locations were surveyed and a meander sample for EWM was completed. The surveys did not indicate the presence of EWM. Appendix B includes the 2011 EWM survey results.

Cisco Chain of Lakes

As per the FERC Order Approving Supplement to the Noxious Plants Monitoring Plan for the Cisco Chain of Lakes, UPPCO is required to submit the results of the annual purple loosestrife survey for the Cisco Chain of Lakes.

Mr. Steve Gilbert
October 10, 2011
Page 2 of 2

The Cisco Chain Riparian Owners Association (CCROA) contracted the services of Northland College to complete purple loosestrife surveys on the Cisco Chain of Lakes from July 5th through July 20th, 2011. No purple loosestrife was observed. The purple loosestrife report is included in Appendix C.

20 plants were observed 2010. These plants were hand pulled. The 2011 survey results indicate the control efforts were successful.

Should you have any questions relative to this material, please do not hesitate to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Ntuhals", written in a cursive style.

James Ntuhals
Environmental Services-
Natural Resource Management
(920) 433-1460

Enc.

Appendices are not included in the documentation of consultation; however the appendices are the same appendices that are being provided to FERC. The appendices have not been included in a effort to reduce the overall size of the filing.

Document Content(s)

20111206 PLS EWMBF FERC jdn.PDF.....1-2

AppendixA.PDF.....3-5

AppendixB.PDF.....6-12

AppendixC.PDF.....13-25

Appendix D.PDF.....26-39