



Upper Peninsula Power Company
1002 Harbor Hills Drive
Marquette, MI 49855
www.UPPCO.com

December 15, 2015

FERC Project No. 01864
NATDAM No. MI00153,
MI00203, MI00028, MI00064

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

Dear Secretary Bose:

Bond Falls Hydroelectric Project – Bond Falls, Victoria, Bergland and Cisco Developments
Article 411 – Annual Nuisance Plant Surveys and Control Report

Per the Order issued February 24, 2005, approving Upper Peninsula Power Company's (UPPCO's) Nuisance Plant Control Plan pursuant to Article 411 of the License issued August 20, 2003, and amended May 22, 2014, UPPCO is submitting the results of its annual purple loosestrife (*Lythrum salicaria*) and triannual Eurasian watermilfoil (*Myriophyllum spicatum*) monitoring surveys and control measures at each of the Developments within the Bond Falls Hydroelectric Project. Surveys were conducted in accordance with the approved methods outlined in the Article 411 Nuisance Plant Control Plan. Please consider this submission fulfillment of the reporting requirements of Article 411.

These survey results and control measures, along with the corresponding figures were provided to members of the Bond Falls Implementation Team (BFIT) on October 28, 2015. Member agencies on the BFIT include the following:

- The Keweenaw Bay Indian Community (KBIC)
- The United States Forest Service (USFS)
- The United States Fish and Wildlife Service (USFWS)
- The Michigan Department of Natural Resources (MDNR)
- The Michigan Department of Environmental Quality (MDEQ)
- The Michigan Hydro Re-Licensing Coalition (MHRC)
- The Wisconsin Department of Natural Resources (WDNR)

UPPCO did not receive any comments from members of the BFIT. A documentation of agency consultation is included as an enclosure to this report, in addition to the survey data and figures for each Development.

Purple Loosestrife (*Lythrum salicaria*) Monitoring and Control Surveys:

Several parties were involved in the 2015 surveys for purple loosestrife (*Lythrum salicaria*). UPPCO awarded the competitive monitoring contract to GAI Consultants of Mayville, WI for monitoring on Bond Falls Basin, Victoria Basin, and Bergland (Lake Gogebic). Control measures at Lake Gogebic were performed by both GAI Consultants, and the Lake Gogebic Improvement Association (LGIA).

Per the Nuisance Plant Control Plan, the monitoring and control of purple loosestrife (*Lythrum salicaria*) at the Cisco Development was performed by the Cisco Chain Riparian Owners Association (CCROA).

Ms. Kimberly D. Bose
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Monitoring and control measures for purple loosestrife (*Lythrum salicaria*) took place on the following dates at each Development:

- Bond Falls Basin - August 28, 2015
- Victoria Basin - August 27, 2015
- Lake Gogebic - August 27, 2015
- Cisco Chain of Lakes - August 13, 2015

Purple Loosestrife (*Lythrum salicaria*) Monitoring and Control Results:

The results of the monitoring surveys at each Development are provided below, in addition to the control measures implemented by each party (if applicable).

Bond Falls

No purple loosestrife (*Lythrum salicaria*) was found in surveys conducted by GAI Consultants.

Victoria

No purple loosestrife (*Lythrum salicaria*) was found in surveys conducted by GAI Consultants.

Lake Gogebic

Four colonies of purple loosestrife (*Lythrum salicaria*) were found near the South end of the lake. Two of the colonies contained less than five plants and were removed by hand. The other two colonies contained 10-15 plants and were left for continuing observation and a determination of proper control measures (if necessary) by the BFIT, in accordance with the Nuisance Plant Control Plan. In addition to results furnished by GAI Consultants, the LGIA provided observations and control measures on seven additional purple loosestrife colony locations. Five of these locations were eradicated; one location was indicated to be 90% eradicated. Finally, biological control using garicella beetle (*Galerucella californiensis*) buckets was applied on a very large colony.

Cisco

Four colonies were discovered at Cisco Chain of Lakes in surveys conducted by the CCROA. Three of the colonies were small and contained only one to five plants. The other colony was medium and contained 6-50 plants. All colonies were hand-pulled by CCROA volunteers.

Eurasian watermilfoil (*Myriophyllum spicatum*) Monitoring and Control:

In addition to monitoring and control efforts for purple loosestrife (*Lythrum salicaria*), UPPCO worked with several parties to complete surveys for Eurasian watermilfoil (*Myriophyllum spicatum*) at each of the Bond Falls Hydroelectric Project Developments. UPPCO awarded the competitive monitoring contract to GAI Consultants of Mayville, WI for monitoring on Bond Falls Basin, Victoria Basin, and Bergland (Lake Gogebic).

Per the Nuisance Plant Control Plan, monitoring efforts for Eurasian watermilfoil (*Myriophyllum spicatum*) at the Cisco Development was performed by the Cisco Chain Riparian Owners Association (CCROA). Monitoring for Eurasian watermilfoil (*Myriophyllum spicatum*) took place on the following dates at each Development:

Ms. Kimberly D. Bose
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- Bond Falls Basin - August 28, 2015
- Victoria Basin - August 27, 2015
- Lake Gogebic - August 27, 2015
- Cisco Chain of Lakes – August 15, 2015 and August 19, 2015

Eurasian watermilfoil (*Myriophyllum spicatum*) Monitoring Results:

The results of the monitoring surveys at each Development are provided below.

Bond Falls

No Eurasian watermilfoil (*Myriophyllum spicatum*) was found in surveys conducted by GAI Consultants.

Victoria

No Eurasian watermilfoil (*Myriophyllum spicatum*) was found in surveys conducted by GAI Consultants.

Lake Gogebic

No Eurasian watermilfoil (*Myriophyllum spicatum*) was found in surveys conducted by GAI Consultants.

Cisco

Eurasian watermilfoil (*Myriophyllum spicatum*) was identified in three areas within the Cisco Chain of Lakes. Two of these colonies were observed within the Thousand Island area, and one colony in the Big area. Notes from the Thousand Island colonies indicate that one colony consists of five to eight plants and the other colony consists of just one plant, which was observed near the sample transect. The colony in the Big area was described as substantial in size and has dominant density adjacent to transects.

Should you have any questions related to the 2015 surveys, please do not hesitate to contact Jarrod Nelson at (906)232-1433.

Sincerely,



Virgil Schlorke
Director - Energy Supply & Resource Planning
Upper Peninsula Power Company

JFN/wmp

Enc. 2015 Nuisance Species Survey Data, Documentation of Agency Consultation

Mr. Bill Deephouse, MHRC
Mr. Burr Fisher, USFWS
Mr. Mark Fedora, USFS
Mr. Kyle Kruger, MDNR
Mr. George Madison, MDNR
Mr. James Melchiori, UPPCO
Mr. Gene Mensch, KBIC

Mr. Keith Moyle, UPPCO
Mr. Mitch Koetje, MDEQ
Mr. Norman Nass, USFS
Mr. Jarrod Nelson, UPPCO
Mr. James Schramm, MHRC
Mr. Stephen Gilbert, WDNR
Mr. Kenneth Carruthers, UPPCO

UPPCO Bond Falls Hydro Electric Project

2015 Nuisance Plant Report – Survey Results and Figures

Purple Loosestrife Monitoring Reports



October 26, 2015

Mr. Jamie Nuthals
Integrus Business Support, LLC
700 North Adams Street
P.O. Box 19001
Green Bay, WI 54307-9001

**Victoria and Bond Falls
2015 Purple Loosestrife Monitoring Report**

Dear Mr. Nuthals:

Thank you for choosing GAI Consultants, Inc. (GAI) to complete this vegetation survey at Victoria and Bond Falls in Ontonagon County, Michigan. The following is a summary of our efforts and findings.

Victoria Falls:

On August 27, 2015 GAI completed a survey of the shoreline and adjacent wetlands of Victoria Falls flowage in Ontonagon County, MI for *Lythrum salicaria* (Purple Loosestrife). The flowage was surveyed using a motorized boat to inspect the shoreline at slow speed. In areas of emergent shoreline vegetation, periodic landings were made to verify visual observations.

Field investigations were conducted within the purple loosestrife flowering season. Field conditions during the survey included fair skies, temperatures of 71 degrees Fahrenheit, and moderate breezes. Water levels at Victoria Falls appeared to be near the OHWM. No colonies of purple loosestrife were observed.

Bond Falls:

On August 28, 2015 GAI completed a survey of the shoreline and adjacent wetlands of Victoria Falls flowage in Ontonagon County, MI for *Lythrum salicaria* (Purple Loosestrife). The flowage was surveyed using a motorized boat to inspect the shoreline at slow speed. In areas of emergent shoreline vegetation, periodic landings were made to verify visual observations.

Field investigations were conducted within the purple loosestrife flowering season. Field conditions during the survey included fair skies, temperatures of 74 degrees Fahrenheit, and moderate breezes. Water levels at Bond Falls were approximately eight feet below the OHWM. Extensive sandy shoreline was exposed. No colonies of purple loosestrife were observed.

Thank you again for the opportunity to be of assistance. Please let me know if you have any questions about this report.

Sincerely,
GAI Consultants, Inc.

A handwritten signature in blue ink that reads 'Andy Nelson'. The signature is fluid and cursive, with a long horizontal line extending from the end of the name.

Andy Nelson
Senior Director

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October 26, 2015

Mr. Jamie Nuthals
Integrus Business Support, LLC
700 North Adams Street
P.O. Box 19001
Green Bay, WI 54307-9001

Lake Gogebic 2015 Purple Loosestrife Monitoring Report

Dear Mr. Nuthals:

Thank you for choosing GAI Consultants, Inc. (GAI) to complete this vegetation survey at Lake Gogebic in Ontonagon County, Michigan. The following is a summary of our efforts and findings.

On August 27, 2015 GAI completed a survey of the shoreline and adjacent wetlands of Lake Gogebic for *Lythrum salicaria* (Purple Loosestrife). The flowage was surveyed using a motorized boat to inspect the shoreline at slow speed. In areas of emergent shoreline vegetation, periodic landings were made to verify visual observations.

Field investigations were conducted within the purple loosestrife flowering season. Field conditions during the survey included fair skies, temperatures of 71 degrees Fahrenheit, and moderate breezes. Water levels at Lake Gogebic appeared to be at or near the OHWM. Four small colonies of purple loosestrife were observed. Of these, two colonies involved fewer than 5 plants, which were removed by hand. The remaining colonies were recorded for future observation.

The location of PL colonies was recorded via hand-held GPS. These locations are noted in Figure 1. GPS coordinates for these sites are noted in Table 1.

Table 1

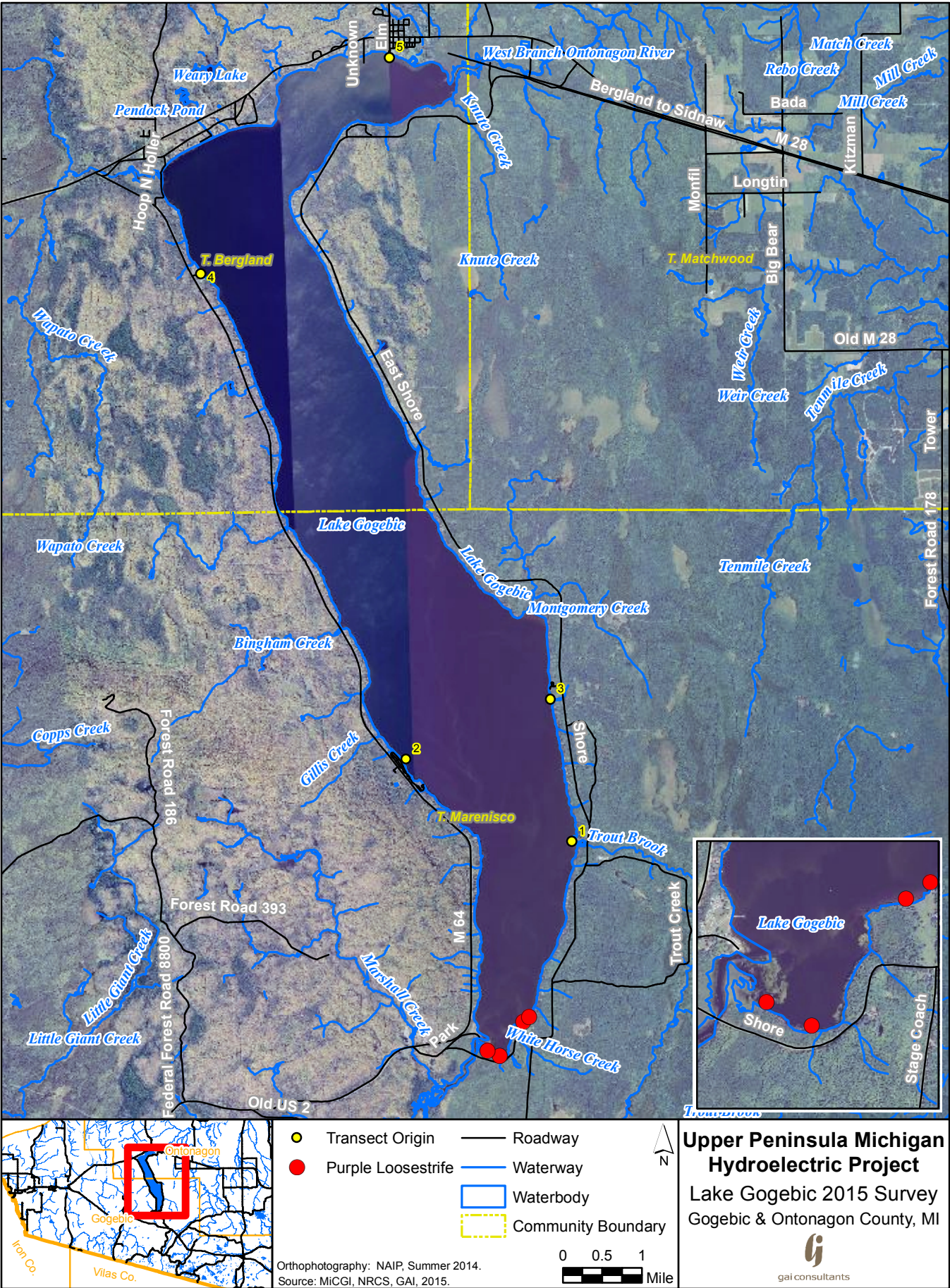
Comment	GPS DATE	LATITUDE (UTM15N)	LONGITUDE (UTM15N)
PL 10 PLANTS	8/27/2015	5144973.23051116	-89.5456767369535
PL 10 TO 15 PLANTS	8/27/2015	5145062.79765646	-89.5490683727153
PL 5 PLANTS	8/27/2015	5145691.9286825	-89.5394639680501
PL SINGLE PULLED	8/27/2015	5145803.31716818	-89.5376971976109

Thank you again for the opportunity to be of assistance. Please let me know if you have any questions about this report.

Sincerely,
GAI Consultants, Inc.

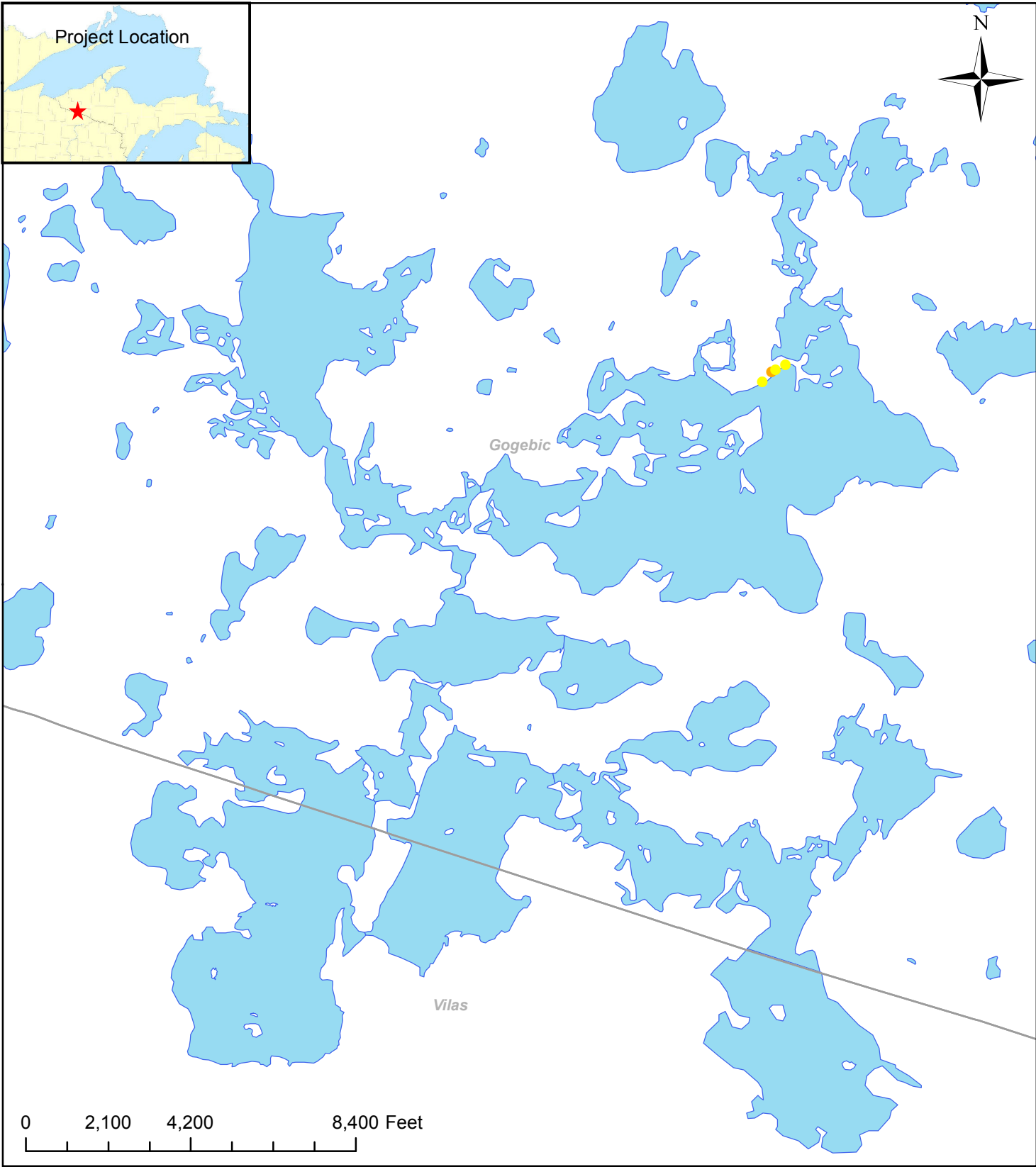
Andy Nelson
Senior Director

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Cisco Chain of Lakes

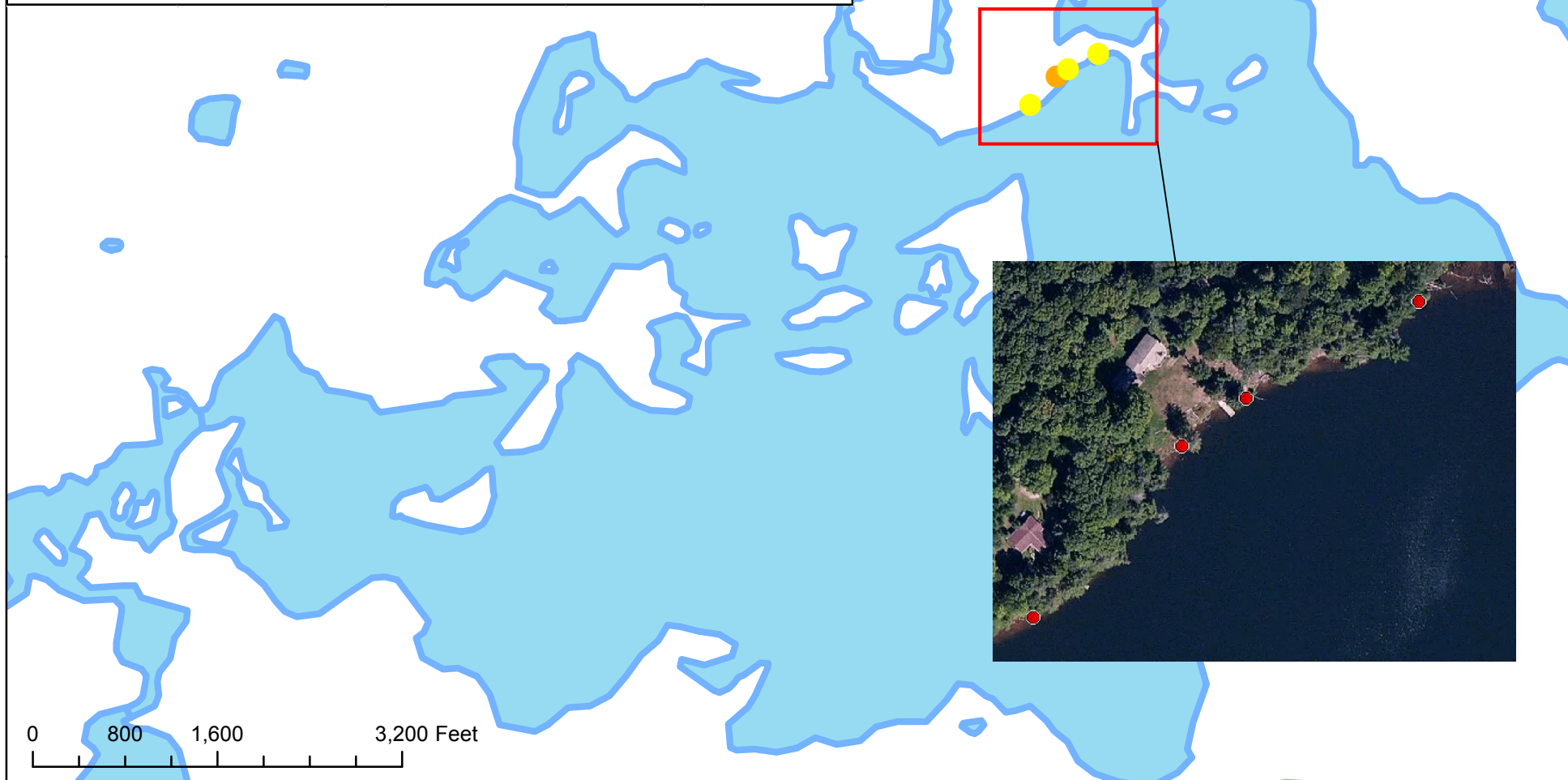
Purple Loosestrife Locations - Overview



- A - Small Colony
- B - Medium Plant Colony

Figure 1
Cisco Chain
Purple Loosetrife Locations

2015 Purple Loosestrife Survey Results - Cisco Chain of Lakes				
Lake	Colony Description	Colony Size	Spatial Identification Latitude/Longitude (NAD 83)	
Thousand Island	Small Colony (A)	1-5 plants	43 1	83 33
Thousand Island	Small Colony (A)	1-5 plants	238	83 380
Thousand Island	Small Colony (A)	1-5 plants	238053	83 83 8
Thousand Island	Medium Colony ()	~50 plants	23 8 0	83 8



- A - Small Colony
- B - Medium Plant Colony

Figure 2
Thousand Island Lake
Purple Loosestrife Locations

Eurasian Watermilfoil Monitoring Reports



October 26, 2015

Mr. Jamie Nuthals
Integrus Business Support, LLC
700 North Adams St., P.O. Box 19001
Green Bay, WI 54307-9001

**Bond Falls and Victoria Falls
2015 Eurasian Water Milfoil Monitoring Report**

Dear Mr. Nuthals:

Thank you for choosing GAI Consultants, Inc. (GAI) to complete these vegetation surveys at Bond Falls and Victoria Falls in Ontonagon County, Michigan. The following is a summary of our efforts and findings.

Field conditions during the survey included fair skies, temperatures of 71-74 degrees Fahrenheit, and moderate breezes. Water levels at Bond Falls appeared to be approximately ten feet below the ordinary high water mark (OHWM), while Victoria Falls' level appeared to be near the OHWM.

Methods:

On August 27 and 28, 2015 GAI completed surveys of Victoria Falls and Bond Falls reservoirs in Ontonagon County, MI for Eurasian Water Milfoil (EWM). The reservoirs were surveyed using a motorized boat to access established transect locations as well as conduct meandering survey of each reservoir in search of EWM.

GAI surveyed five predetermined transects, approximately 36 feet in length for EWM including three at Bond Falls and two at Victoria Falls. These transects were sampled with rake in three twelve-foot diameter sections. Each section was sampled in quarters. The first quarter was sampled at a depth of 0 to 0.5 meters below the surface, the second 0.5 to 1.5 meters, the third 1.5 to 3.0 meters, and the fourth beyond 3.0 meters. If EWM was found, the relative abundance of EWM was documented as follows:

1. Absence
2. Presence of less than half
3. Equal compared to other species
4. Dominant
5. Total infestation

Additionally, a meandering boat survey was completed on each reservoir. In areas of observed floating leaf and submerged vegetation, periodic stops were made to conduct rake throws and make visual observations of aquatic vegetation. If EWM was found, the extent of the stand perimeter was documented via GPS coordinates.

Boat landings will also be inspected for proper invasive species signage, where applicable.

Results:

The following tables summarize the findings of the field surveys:

Table 1
Bond Falls – Hydroelectric Project Eurasian Water Milfoil Survey – August 28, 2015

Transect #	0-0.5m	0.5-1.5m	1.5-3.0m	>3.0m	Origin	Notes
1A	0	0	NA	NA	N 46 22,917	Water low, exposed beach
1B	0	0	NA	NA	W 89 04.757	
1C	0	0	0	NA		
2A	0	0	NA	NA	N 46 23.553	Water low, exposed beach
2B	0	0	NA	NA	W 89 07.503	
2C	0	0	NA	NA		
3A	0	0	NA	NA	N 46 23.827	Water low, exposed beach
3B	0	NA	NA	NA	W 89 07.631	
3C	0	0	0	NA		

Table 2
Victoria Falls – Hydroelectric Project Eurasian Water Milfoil Survey – August 27, 2015

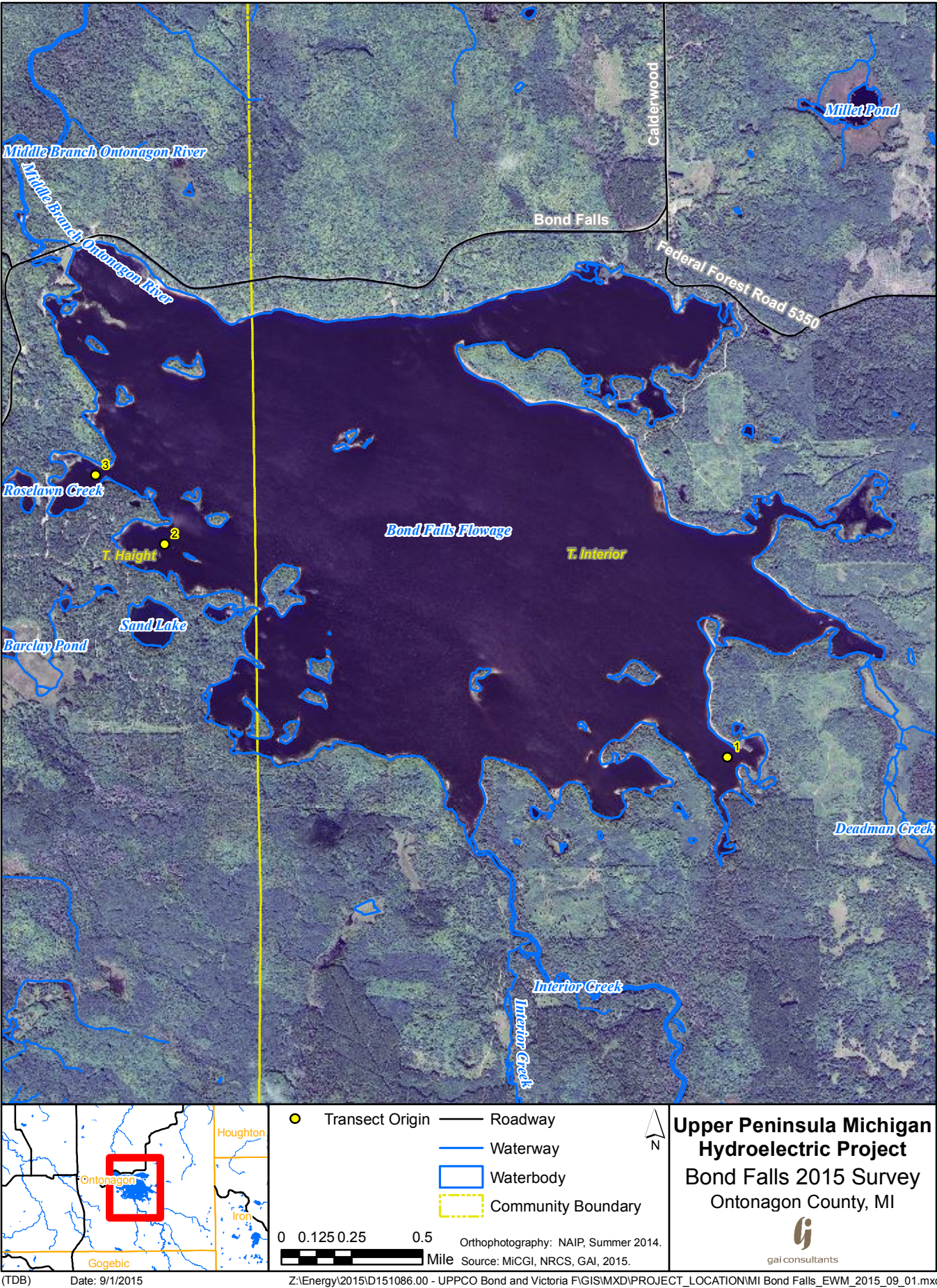
Transect #	0-0.5m	0.5-1.5m	1.5-3.0m	>3.0m	Origin	Notes
1A	0	0	NA	NA	N46 40.259	Potamogeton present
1B	0	0	NA	NA	W 89 15.038	
1C	0	0	NA	NA		
2A	0	0	NA	NA	N 46 41.266	Potamogeton, Elodea present
2B	0	0	0	NA	W 89 13.837	
2C	0	0	0	NA		

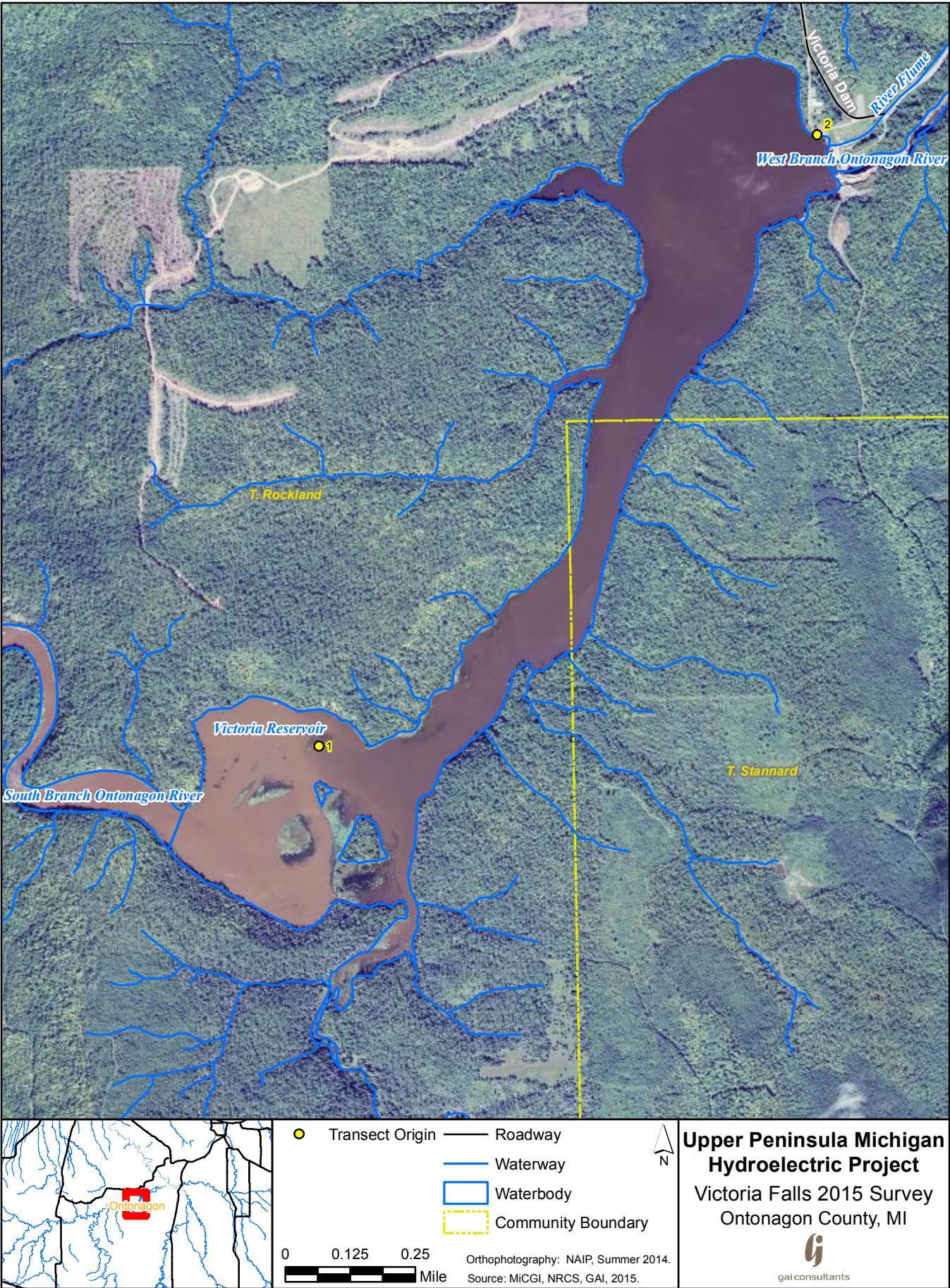
Thank you again for the opportunity to be of assistance. Please let me know if you have any questions about this report.

Sincerely,
GAI Consultants



Andy Nelson
Senior Director







October 26, 2015

Mr. Jamie Nuthals
Integrus Business Support, LLC
700 North Adams Street
P.O. Box 19001
Green Bay, WI 54307-9001

**Lake Gogebic
2015 Eurasian Water Milfoil Monitoring Report**

Dear Mr. Nuthals:

Thank you for choosing GAI Consultants, Inc. (GAI) to complete this vegetation survey at Lake Gogebic in Ontonagon County, Michigan. The following is a summary of our efforts and findings.

Field conditions during the survey included fair skies, temperatures of 71 degrees Fahrenheit, and moderate breezes. Water levels at Lake Gogebic appeared to be at or near the OHWM.

Methods:

On August 27, 2015 GAI completed a survey of Lake Gogebic for Eurasian Water Milfoil (EWM). The reservoir was surveyed using a motorized boat to access established transect locations as well as conduct meandering survey of each reservoir in search of EWM.

GAI surveyed five (5) predetermined transects, approximately 36 feet in length, for EWM. These transects were sampled with rake in three twelve-foot diameter sections. Each section was sampled in quarters. The first quarter was sampled at a depth of 0 to 0.5 meters below the surface, the second 0.5 to 1.5 meters, the third 1.5 to 3.0 meters, and the fourth beyond 3.0 meters. If EWM was found, the relative abundance of EWM was documented as follows:

1. Absence
2. Presence of less than half
3. Equal compared to other species
4. Dominant
5. Total infestation

Additionally, a meandering boat survey was completed on each reservoir. In areas of observed floating leaf and submerged vegetation, periodic stops were made to conduct rake throws and make visual observations of aquatic vegetation. If EWM was found, the extent of the stand perimeter was documented via GPS coordinates.

Boat landings were also be inspected for proper invasive species signage, where applicable.

Results:

The following table summarizes the findings of the field survey.

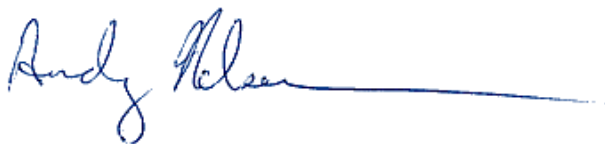
Table 1
Lake Gogebic Project Eurasian Water Milfoil Survey – August 27, 2015

Transect #	0-0.5m	0.5-1.5m	1.5-3.0m	>3.0m	Origin	Notes
1A	0	0	NA	NA	N 46 26.642	
1B	0	0	NA	NA	W 89 31.587	
1C	0	0	0	NA		
2A	0	0	NA	NA	N 46 27.653	
2B	0	0	NA	NA	W 89 34.259	
2C	0	0	0	NA		
3A	0	0	NA	NA	N 46 28.294	
3B	0	0	0	NA	W 89 07.631	
3C	0	0	0	NA		
4A	0	0	NA	NA	N 46 32.964	
4B	0	0	NA	NA	W 89 37.401	
4C	0	0	NA	NA		
5A	0	0	NA	NA	N 46 35.338	
5B	0	0	NA	NA	W 89 34.391	
5C	0	0	NA	NA		

All boat landings were observed from the water and land. Each landing had well-maintained signage warning visitors about invasive species and proper prevention and control methods.

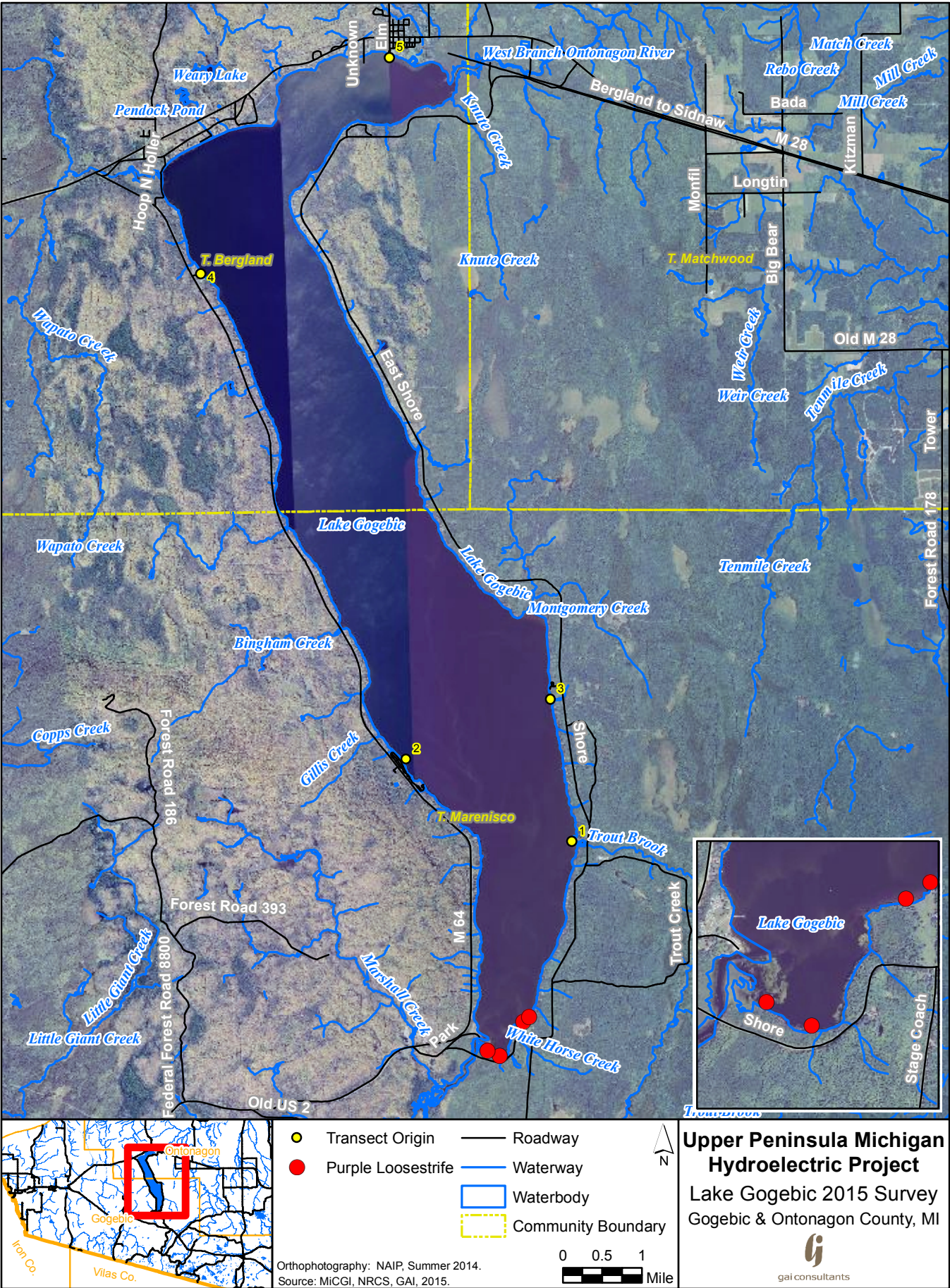
Thank you again for the opportunity to be of assistance. Please let me know if you have any questions about this report.

Sincerely,
GAI Consultants, Inc.



Andy Nelson
 Senior Director

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Cisco Chain of Lakes

Eurasian Watermilfoil Transect Survey Locations



● EWM Location



Figure 3
Cisco Chain
Eurasian Watermilfoil
Survey Locations

2015 Cisco Chain EWM Transect Survey Results					
Lake Name	Depth Quarter (m)	Transect ID			Field Notes
		1A	1B	1C	
Clearwater	0-0.5	0	0	0	
	0.5-1.5	0	0	0	
	1.5-3.0	0	0	0	
	>3.0	0	0	0	
		2A	2B	2C	
Clearwater	0-0.5	0	0	0	
	0.5-1.5	0	0	0	
	1.5-3.0	0	0	0	
	>3.0	0	0	0	
		3A	3B	3C	
Big Africa	0-0.5	0	0	0	
	0.5-1.5	0	0	0	
	1.5-3.0	0	0	0	
	>3.0	0	0	0	
		4A	4B	4C	
Thousand Island	0-0.5	0	0	0	
	0.5-1.5	0	0	0	
	1.5-3.0	0	0	0	
	>3.0	0	0	0	
		5A	5B	5C	5-8 EWM plants in a 10' radius located near transect
Thousand Island	0-0.5	0	0	0	
	0.5-1.5	0	0	0	
	1.5-3.0	0	0	0	
	>3.0	0	0	0	
		6A	6B	6C	One EWM plant observed near transect
Thousand Island	0-0.5	0	0	0	
	0.5-1.5	0	0	0	
	1.5-3.0	0	0	0	
	>3.0	0	0	0	
		7A	7B	7C	
Thousand Island	0-0.5	0	0	0	
	0.5-1.5	0	0	0	
	1.5-3.0	0	0	0	
	>3.0	0	0	0	

2014 Cisco Chain EWM Transect Survey Results					
Lake Name	Depth Quarter (m)	Transect ID			Field Notes
East Bay	0-0.5	0	0	0	
	0.5-1.5	0	0	0	
	1.5-3.0	0	0	0	
	>3.0	depth did not exceed 3m			
		9A	9B	9C	
Fishhawk	0-0.5	0	0	0	
	0.5-1.5	0	0	0	
	1.5-3.0	0	0	0	
	>3.0	0	0	0	
		10A	10B	10C	
Cisco	0-0.5	0	0	0	
	0.5-1.5	0	0	0	
	1.5-3.0	0	0	0	
	>3.0	depth did not exceed 3m			
		11A	11B	11C	
Thousand Island	0-0.5	0	0	0	
	0.5-1.5	0	0	0	
	1.5-3.0	0	0	0	
	>3.0	depth did not exceed 3m			
		12A	12B	12C	
Mamie	0-0.5	0	0	0	
	0.5-1.5	0	0	0	
	1.5-3.0	0	0	0	
	>3.0	0	0	0	
		13A	13B	13C	
Big	0-0.5	0	0	0	
	0.5-1.5	0	0	0	
	1.5-3.0	0	0	0	
	>3.0	0	0	0	
		14A	14B	14C	Substantial EWM bed of dominant density adjacent to transect sites
Big	0-0.5	0	0	0	
	0.5-1.5	1	0	0	
	1.5-3.0	0	1	1	
	>3.0	0	0	0	

2014 Cisco Chain EWM Transect Survey Results					
Lake Name	Depth Quarter (m)	Transect ID			Field Notes
		15A	15B	15C	
Big	0-0.5	0	0	0	
	0.5-1.5	0	0	0	
	1.5-3.0	0	0	0	
	>3.0	0	0	0	
		16A	16B	16C	
Cisco	0-0.5	0	0	0	
	0.5-1.5	0	0	0	
	1.5-3.0	0	0	0	
	>3.0	0	0	0	
		17A	17B	17C	
Mamie	0-0.5	0	0	0	
	0.5-1.5	0	0	0	
	1.5-3.0	0	0	0	
	>3.0	0	0	0	
		18A	18B	18C	
Thousand Island	0-0.5	0	0	0	
	0.5-1.5	0	0	0	
	1.5-3.0	0	0	0	
	>3.0	0	0	0	

Key	
Ranking	Description
0	EWM absent
1	EWM present on less than half
2	EWM equal compared to other species
3	EWM dominant
4	EWM total infestation

UPPCO Bond Falls Hydro Electric Project

2015 Nuisance Plant Report – Documentation of Agency Consultation

The MDNR Did Not Respond With Any Comments

The MDEQ Did Not Respond With Any Comments

The USFWS Did Not Respond With Any Comments

The KBIC Did Not Respond With Any Comments

The USFS Did Not Respond With Any Comments

The WDNR Did Not Respond With Any Comments

The MHRC Did Not Respond With Any Comments

Nelson, Jarrod F

From: Nelson, Jarrod F
Sent: Wednesday, October 28, 2015 5:44 PM
To: 'Burr Fisher '; 'stephen.gilbert@wisconsin.gov'; 'Kruger, Kyle'; GMensch@kbic-nsn.gov; 'nnass@fs.fed.us'; 'jdschramm@oceana.net'
Cc: 'troutpr@up.net'; Melchiori, James R; Moyle, Keith E; Schlorke, Virgil E; 'MADISONG@michigan.gov'; Koetje, Mitch (DEQ) (KOETJEM@michigan.gov)
Subject: UPPCO Bond Falls Hydroelectric Project Nuisance Plant Monitoring Report
Attachments: 20151028 Bond Falls PL_EWM Reports.pdf; 20151028 Bond Falls PL_EWM Results.pdf

All,

Attached is the report, which explains the nuisance plant monitoring and control requirements under Article 411 of the Bond Falls Hydroelectric License. UPPCO worked with several consulting groups to gather information and to establish control measures pursuant to the Article 411 Nuisance Control Plan. Additionally, the monitoring and control results are also provided as an attachment to this E-mail. Please feel free to contact me if you have any questions about the surveys or this report, my contact information can be found below.

Thank you,
-Jarrod Nelson

Jarrod Nelson, Certified Associate Ecologist (ESA)
Environmental Consultant | Upper Peninsula Power Company
Cell: (989)600-5665
Direct: (906)232-1433
Email: jfnelson@upppo.com

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Upper Peninsula Power Company

1002 Harbor Hills Drive

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October 28, 2015

FERC Project No. 01864
Nat Dam No. MI00153,
MI00203, MI00028, MI0006

Mr. Burr Fisher, USFWS
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Mr. Gene Mensch, KBIC
Mr. Norman Nass, USFS
Mr. Jim Schramm, MHRC

Bond Falls Implementation Team (BFIT) Members:

Bond Falls Hydroelectric Project – Bond Falls, Victoria, Bergland and Cisco Developments
Article 411 – Annual Nuisance Plant Surveys and Control:

Per the Order issued February 24, 2005, approving UPPCO's Nuisance Plant Control Plan pursuant to Article 411 of the License issued August 20, 2003 and amended May 22, 2014, UPPCO is submitting the results of its annual purple loosestrife (*Lythrum salicaria*) and triannual Eurasian watermilfoil (*Myriophyllum spicatum*) monitoring surveys and control measures at each of the Developments within the Bond Falls Hydroelectric Project to the BFIT for review and comment. Surveys were conducted in accordance with the approved methods outlined in the Nuisance Plant Control Plan.

Purple Loosestrife (*Lythrum salicaria*) Monitoring and Control Surveys:

Several parties were involved in the 2015 surveys for purple loosestrife (*Lythrum salicaria*). UPPCO awarded the competitive monitoring contract to GAI Consultants of Mayville, WI for monitoring on Bond Falls Basin, Victoria Basin, and Bergland (Lake Gogebic). Control measures at Lake Gogebic were performed by both GAI Consultants, and the Lake Gogebic Improvement Association (LGIA).

Per the Nuisance Plant Control Plan, the monitoring and control of purple loosestrife (*Lythrum salicaria*) at the Cisco Development was performed by the Cisco Chain Riparian Owners Association (CCROA).

Monitoring and control measures for purple loosestrife (*Lythrum salicaria*) took place on the following dates at each Development:

- Bond Falls Basin - August 28, 2015
- Victoria Basin - August 27, 2015
- Lake Gogebic - August 27, 2015
- Cisco Chain of Lakes - August 13, 2015

Purple Loosestrife (*Lythrum salicaria*) Monitoring and Control Results:

The results of the monitoring surveys at each Development are provided below, in addition to the control measures implemented by each party (if applicable).

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Bond Falls

No purple loosestrife (*Lythrum salicaria*) was found in surveys conducted by GAI Consultants.

Victoria

No purple loosestrife (*Lythrum salicaria*) was found in surveys conducted by GAI Consultants.

Lake Gogebic

Four colonies of purple loosestrife (*Lythrum salicaria*) were found near the South end of the lake. Two of the colonies contained less than five plants and were removed by hand. The other two colonies contained 10-15 plants and were left for continuing observation and a determination of proper control measures (if necessary) by the BFIT, in accordance with the Nuisance Plant Control Plan. In addition to results furnished by GAI Consultants, the LGIA provided observations and control measures on seven additional purple loosestrife colony locations. Five of these locations were eradicated, one location was indicated to be 90% eradicated. Finally, biological control using garicella beetle (*Galerucella californiensis*) buckets was applied on a very large colony.

Cisco

Four colonies were discovered at Cisco Chain of Lakes in surveys conducted by the CCROA. Three of the colonies were small and contained only one to five plants. The other colony was medium and contained 6-50 plants. All colonies were hand-pulled by CCROA volunteers.

Eurasian watermilfoil (*Myriophyllum spicatum*) Monitoring and Control:

In addition to monitoring and control efforts for purple loosestrife (*Lythrum salicaria*), UPPCO worked with several parties to complete surveys for Eurasian watermilfoil (*Myriophyllum spicatum*) at each of the Bond Falls Hydroelectric Project Developments. UPPCO awarded the competitive monitoring contract to GAI Consultants of Mayville, WI for monitoring on Bond Falls Basin, Victoria Basin, and Bergland (Lake Gogebic).

Per the Nuisance Plant Control Plan, monitoring efforts for Eurasian watermilfoil (*Myriophyllum spicatum*) at the Cisco Development was performed by the Cisco Chain Riparian Owners Association (CCROA).

Monitoring for Eurasian watermilfoil (*Myriophyllum spicatum*) took place on the following dates at each Development:

- Bond Falls Basin - August 28, 2015
- Victoria Basin - August 27, 2015
- Lake Gogebic - August 27, 2015
- Cisco Chain of Lakes - August 15 and 19, 2015

Eurasian watermilfoil (*Myriophyllum spicatum*) Monitoring Results:

The results of the monitoring surveys at each Development are provided below.

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Bond Falls

No Eurasian watermilfoil (*Myriophyllum spicatum*) was found in surveys conducted by GAI Consultants.

Victoria

No Eurasian watermilfoil (*Myriophyllum spicatum*) was found in surveys conducted by GAI Consultants.

Lake Gogebic

No Eurasian watermilfoil (*Myriophyllum spicatum*) was found in surveys conducted by GAI Consultants.

Cisco

Eurasian watermilfoil (*Myriophyllum spicatum*) was identified in three areas within the Cisco Chain of Lakes. Two of these colonies were observed within the Thousand Island area, and one colony in the Big area. Notes from the Thousand Island colonies indicate that one colony consists of five to eight plants and the other colony consists of just one plant, which was observed near the sample transect. The colony in the Big area was described as substantial in size and has dominant density adjacent to transects.

UPPCO asks that you please provide comment on your review of this material within 30-days of the letter date so that responses can be provided to you in a timely manner prior to submittal of this report to the Federal Energy Regulatory Commission (FERC).

Should you have any questions related to the 2015 surveys, please do not hesitate to contact Mr. Jarrod Nelson at (906)232-1433.

Sincerely,



Jarrod Nelson
Environmental Consultant
Upper Peninsula Power Company

cc: Mr. Bill Deephouse, MHRC	Mr. James Melchiori, UPPCO
Mr. Mark Fedora, USFS	Mr. Keith Moyle, UPPCO
Mr. Mitch Koetje, MDEQ	Mr. Virgil Schlorke, UPPCO
Mr. George Madison, MDNR	

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