1414 West Hamilton Avenue
P.O. Box 8
Eau Claire, WI 54702-0008

March 29, 2010

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

Subject: Invasive Species Management Plan For The Turtle Flambeau Storage Reservoir (Big Falls Hydro - FERC Project No. 2390-01)

Dear Ms. Bose:

With this transmittal we are submitting the above-referenced plan for the Turtle-Flambeau Storage Reservoir (P-2390-02). The Federal Energy Regulatory Commission (Commission) amended the Big Falls Hydro Project's license on October 14, 2008 to include the jurisdictional Turtle-Flambeau Storage Reservoir. License article 416 of the amending order directs Northern States Power Company – Wisconsin (Licensee), to develop an Invasive Species Management Plan (Plan) in cooperation with the resource agencies and other stakeholders.

This transmittal is being filed under an extension of time granted by the Commission on October 20, 2009. Should you have any questions concerning this Plan, you may contact Matthew Miller of this office by telephone at (715) 737-1353 or by electronic mail at matthew.j.miller@xcelenergy.com.

Sincerely,

William Zawacki
Director, Hydro Plants

c: Jeff Scheirer (WDNR)
Nick Utrup (USFWS
Angie Tornes (NPS)
Jerome "Brooks" Big John, President – Lac du Flambeau Band of Lake Superior Indians
Terry Daulton – TFFTLPOA
Miles Falck – Great Lakes Indian Fish & Wildlife Commission
Project Files

H:MLLM40\References\Turtle Flambeau Flowage\Management Plans\Invasive Species Management Plan\Cover Letter to FERC 032910.doc

Invasive Species Management Plan

For The Turtle- Flambeau Storage Reservoir

(Big Falls Hydroelectric Project – FERC Project No. 2390-01)

Northern States Power Company – Wisconsin
(An Xcel Energy Company)

In Cooperation with:

Wisconsin Department of Natural Resources
Iron County Land and Water Conservation Department
Turtle-Flambeau Flowage Trude Lake Property Owner's Association

March 20, 2010

1.0 INTRODUCTION

The Turtle-Flambeau Flowage (Flowage) was constructed in 1926 by the Chippewa and Flambeau Improvement Company (CFIC) to augment streamflow for downstream hydropower production. The CFIC is a partnership among owners of hydroelectric projects and storage reservoirs on the Chippewa and Flambeau Rivers of which Northern States Power Company – Wisconsin (Licensee) is a majority stakeholder. Big Falls Hydro (FERC Project No. 2390-01) is the Licensee's first hydro project downstream of the Flowage and the largest hydroelectric facility on the Flambeau River.

The Flowage has a surface area of approximately 13,545 acres with a shoreline of approximately 320 miles. The CFIC currently operates the Flowage in accordance with a 1990 Memorandum of Understanding (MOU) developed in cooperation with the Wisconsin Department of Natural Resources (WDNR). The MOU provides guidelines on the operation of the Flowage in regards to normal full pond elevation, minimum discharge flow, and seasonal drawdowns. Any changes in project operations that may deviate from the main principles of the MOU must be negotiated between Licensee and the WDNR prior to implementation.

On October 3, 2006 Licensee filed an application with the Federal Energy Regulatory Commission (Commission) to amend its license for the Big Falls Hydroelectric Project to include the Turtle-Flambeau Flowage as a project feature. (*The Big Falls Project is located approximately 85 river miles downstream from the Turtle Flambeau Reservoir*). The Commission issued an order on October 14, 2008 amending the Big Falls license to include the Turtle Flambeau Flowage Project (P-2390-02). The amending order stipulates various conditions or additions to the plans and requirements (Article 416) in the WDNR's Water Quality Certification (WQC). One of the directives is to develop an Invasive Species Management Plan (Plan) in consultation with the resource agencies.

2.0 REQUIREMENTS

Item #36 of the WQC references several current and potential exotic species that threaten the terrestrial and aquatic ecosystems of the Flowage. They include: gypsy moth, mute swan, zebra mussel, purple loosestrife, and eurasian water milfoil. License article 416 of the above-referenced amending order directs Licensee to develop an Invasive Species Management Plan in consultation with the resource agencies in regards to these potentially harmful species.

Licensee is further obligated to work with the WDNR under Condition O of the WDNR's Water Quality Certification (WQC). Condition O states: *"The Licensee shall cooperate with the Department to implement reasonable resource management practices, including but not limited to measures for controlling*

exotic populations, restoring endangered and threatened populations, and protecting or enhancing water quality, fish and wildlife populations, and their habitat."

3.0 CONSULTATION

Licensee met with the WDNR on February 6 and April 8, 2009 for a preliminary discussion on the Invasive Species Management Plan in addition to the other management plans required by the Big Falls license amendment. The meetings provided an opportunity to discuss the various license amendment requirements prior to developing a draft Plan.

A follow-up meeting was conducted on October 27, 2009 to discuss the Plan in more detail and included representatives from the United States Geological Survey (USGS), Iron County Land and Water Department Conservation Department, Turtle-Flambeau Flowage – Trude Lake Property Owners Association (TFFTLPOA), WDNR, and Licensee. The U.S. Fish and Wildlife Service (USFWS) was unable to attend the meeting. The National Park Service (NPS) respectfully declined, deferring to the WDNR and USFWS for the development of the Plan.

On January 26, 2010 Licensee filed a draft Plan with the above-referenced resources agencies and stakeholders allowing 30 days to provide comment. Those agencies that did not respond included the NPS (see paragraph above), the USFWS, and the Lac Du Flambeau Band of Lake Superior Chippewa Indians. The remaining agencies and organizations submitted their comments in late February and are included in Appendix A along with corresponding responses from Licensee. In order to address the comments that were received, a follow-up meeting was held on March 19, 2010. The focus of the meeting was to further define the scope of the Plan, clarify roles and responsibilities, and resolve any outstanding issues.

Given the large size of the Flowage, the stakeholders involved in the development of this Plan agree that a cooperative effort among the Licensee and resources agencies, TFFTLPOA, and the general public is critical for success. Therefore, one of the primary goals of this Plan is to foster a cooperative effort among all stakeholders to ensure effective management strategies. Licensee, the resource agencies and other stakeholders agree that this Plan is not intended to be all-inclusive. It is further understood that additional monitoring and control efforts may occur in addition to those activities proposed below.

Of the six invasive species specifically discussed in this Plan, only the gypsy moth, purple loosestrife and spotted knapweed have been documented on the Flowage. Monitoring, education, and prevention will therefore be a critical component of the Plan.

4.0 INVASIVE SPECIES MANAGEMENT

4.1 Gypsy Moth

Gypsy moth monitoring and management on the Flowage is currently being conducted by the Wisconsin Department of Agriculture, Trade, and Consumer Protection (DATCP) and the WDNR, respectively. The WDNR coordinates a voluntary suppression spray program for landowners and communities in the quarantined counties which includes Iron County (Appendix B). Its objectives are to suppress gypsy moth populations and reduce defoliation at the stand level to biologically acceptable levels in the quarantined counties. No known gypsy moth defoliation events have occurred on the Flowage, and male moth trap catches from 2009 indicate defoliation is not expected for many years (http://da.ento.vt.edu/results3.html). According to WDNR guidance, the Flowage might not be at risk of gypsy moth defoliation until around 2017.

DATCP conducts an annual spraying program on gypsy moth caterpillar populations in non-quarantined counties and in isolated "hot spots" in the far-western part of the state (Appendix C). Its objective is to slow the spread of gypsy moth populations in the non-quarantined counties.

The gypsy moth is expected to have relatively minimal impact on the forest ecosystem of the Flowage (personal communication, WDNR). The percentage of species that are highly preferred by gypsy moth is 46%, with aspen being the largest component of that group by far. Since aspen readily refoliates after defoliation by gypsy moth, and since aspen has evolved to tolerate heavy defoliation by the native forest tent caterpillar, aspen is well suited to tolerate defoliation by gypsy moth.

In the event of gypsy moth defoliation, no management action to mitigate defoliation is the optimal strategy for three reasons: (1) Biological control agents (e.g. virus and fungal pathogens; parasitoids) will eventually reduce gypsy moth populations; (2) spraying insecticides (i.e. Btk) are a solution only in the short-term (i.e. the current year), are not economically viable in most cases, and potentially harm bird and non-pest caterpillar populations; and (3) the grand majority of the preferred species on the Flowage are deciduous trees, which during normal climactic conditions, can tolerate several years of defoliation without significant mortality. Standard forestry management (e.g. thinning) already practiced on the Flowage minimizes potential damage by gypsy moth. Thinning highly preferred stands (e.g. oaks and aspens) should not occur one year prior, during, or one year after gypsy moth defoliation.

Licensee agrees to abide by best forestry management practices on its property to reduce the proliferation of the gypsy moth. Licensee will also

provide access to its property to WDNR personnel for any future monitoring or control activities.

4.2 Mute Swan

Mute swans (Cygnus olor) are native to Europe and Asia and were brought to North America in the 1800s as ornamental birds for estates, parks, and zoos. Many have subsequently been released or escaped captivity since their introduction into the United States. A resident population was established in Wisconsin by the 1970's and continued to grow into the late 1990's until the WDNR enacted a mute swan control policy. The long term goal of the policy is to achieve zero mute swan reproduction in the wild. Adult, juvenile and egg control measures are currently implemented by the WDNR statewide.

The mute swan historically has not been present on the Flowage. According to WDNR wildlife personnel, a breeding population was found near Ashland, WI which wintered on Benson Lake, a small drainage lake along the Manitowish River upstream of the Flowage. This population has subsequently been extirpated and no individuals are currently present.

No formal monitoring for this species is considered necessary due to their very low density. Currently, there are no known breeding populations of mute swans in northern Wisconsin. If a mute swan or swans is/are observed on the Flowage, the public will be instructed to contact the local WDNR office via educational brochures provided at the boat landings. Any nesting sites subsequently identified shall be removed in accordance with the DNR's mute swan policy.

4.3 Zebra Mussel

The zebra mussel (*Dreissena polymorpha*) is a small, bottom-dwelling clam native to Europe and Asia that measures approximately 1/8 inch to 2 inches. The majority of specimens are generally less than 1 inch in length. They were first introduced into the Great Lakes in 1985 or 1986 and continue to spread across the upper Great Lakes and Mississippi River watershed. They were most likely brought to North America as larvae in ballast water of ships that traveled from fresh-water Eurasian ports to the Great Lakes. Zebra mussels look like small clams with a yellowish or brownish D-shaped shell, usually with alternating dark- and light-colored stripes. Zebra mussels usually grow in clusters containing numerous individuals.

Zebra mussels were first found in Wisconsin waters of Lake Michigan in 1990. They are now found in approximately 75 inland waters including the state's major river systems. They routinely cluster around water intakes and structures of power plants, water utilities and fish hatcheries effectively reducing or eliminating adequate flow required for commercial and industrial operations. Various methods of control include mechanical removal, chemical treatment and back-

flushing. Each treatment method has drawbacks and no effective means of controlling zebra mussels in the wild has been developed without having impacts to other aquatic species or the ecosystem in general.

Zebra mussels have not been documented on the Flowage or in Iron County to date. In order to reduce the potential of introducing this species into the Flowage, Licensee shall take preventive steps prior to conducting maintenance or construction. Item K of the WQC requires Licensee to clean all equipment (i.e. barges, boats, construction equipment etc.) prior to conducting any maintenance or construction on project structures that may introduce zebra mussels or other invasive species into project waters. Additionally, Licensee shall provide evidence of effective decontamination of equipment or any other items capable of introducing larval or adult zebra mussels. Options for effective decontamination may include: steam-cleaning, chemical treatment, physical treatment, or other suitable measures (Appendix D).

Licensee further agrees to install several zebra mussel plate samplers similar to the samplers used at its Dells Hydro Project on the lower Chippewa River. The samplers will be installed on those structures of the Turtle-Flambeau Dam most susceptible to zebra mussel infestation. Monitoring of the samplers will be conducted by Licensee's personnel several times per year. If Licensee documents any zebra mussels from its monitoring efforts, it shall promptly contact the WDNR's Turtle-Flambeau Flowage Property Manager.

Licensee will also provide samplers to the WDNR, Iron County or TFFTLPOA for installation at the Flowage's five boat landings and the Trude Lake landing. The samplers would be monitored on a routine basis through funding provided in section 5.0 or possibly through volunteer efforts of the TFFTLPOA.

4.4 Purple Loosestrife

Purple Loosestrife *(Lythrum salicaria)* is an erect, herbaceous perennial of Eurasian origin that became established in the estuaries of northeastern North America by the early 1800's. Since then, this highly invasive species has spread throughout much of the United States, including most of Wisconsin's counties. As purple loosestrife expands its local distribution and becomes more prevalent, it poses a serious threat to native emergent vegetation in shallow-water marshes and shorelines by displacing native food and cover plants in the waterways.

The Flowage is currently being monitored for purple loosestrife by members of the TFFTLPOA. This volunteer effort was begun in 2005 and is coordinated by the Chair of the Invasive Species Committee for the TFFTLPOA. The Flowage is divided into monitoring zones with an emphasis directed on known areas of infestation. If a single specimen or several plants are observed, volunteers cut off the seed portion of the plant and flag the area for WDNR personnel. The

WDNR then follows-up by chemically treating those areas where "pioneering" plants have been identified.

The TFFTLPOA has indicated that a lack of personnel is becoming an issue with meeting their volunteer monitoring efforts due to the sheer size of the Flowage. It is expected that the funding described in section 5.0 will help address this issue.

In order to control larger areas of infestation, Iron County has recently initiated a bio-control effort in cooperation with the WDNR using beetles that specifically target purple loosestrife. Licensee provided funding to Iron County in 2009 for the rearing of beetles to be released on the Manitowish River upstream of the flowage between Murray's Landing and State Highway 47. This is an area of high loosestrife concentration and a likely seed source for future infestation on the Flowage. Licensee will continue to work with Iron County and the WDNR in their efforts to rear and release beetles on the Manitowish River and the Flowage.

Licensee agrees provide access to its property, with respect to safety and security concerns, to WDNR personnel and those working under their direction for the purpose of controlling loosestrife. Licensee further agrees to reasonably cost-share the funding of the chemical used in these control efforts. Currently the WDNR uses approximately 2-3 gallons of pesticide per year at a cost of approximately $100/gallon.

4.5 Eurasian Water Milfoil

Eurasian water milfoil (Myriophyllum spicatum) is an aquatic plant native to Europe, Asia, and northern Africa. This invasive aquatic plant is similar to several native species of milfoil found in Wisconsin, most notably Northern water milfoil (Myriophyllum sibericum). Eurasian milfoil was first documented in Wisconsin in the 1960's. In the 1980's, it slowly began its expansion north from southern Wisconsin and is now found in nearly every county of the state.

Eurasian milfoil has been documented in two Iron County waters, Long Lake, approximately 10 miles north and east of the Flowage and Weber Lake in northern Iron County near Upson, WI. Eurasian water milfoil has not been documented in the waters of the Flowage. However, since this exotic is primarily transferred via boats and trailers, the threat to the Flowage is very real. Monitoring and educating the public, as mentioned below in section 5.0, is paramount to limiting the spread of this invasive species. If this species is documented on the Flowage, the WDNR's rapid response program, as described below, would be implemented (see Appendix E for a specific response plan for Eurasian milfoil).

4.6 Spotted Knapweed

The WDNR indicated that it currently conducts monitoring and control measures for additional (terrestrial) invasive species including spotted knapweed. WDNR noted that the Licensee's dikes are areas of special concern, especially with the current restricted access. Licensee agrees to provide access to its property to WDNR personnel (and those agencies/organizations working under the direction of this Plan) for the purpose of controlling spotted knapweed and other exotics. Licensee and WDNR understand that certain areas of Licensee's property may remain restricted for safety and/or security reasons. Licensee further agrees to reasonably provide cost-sharing for a limited term employment (LTE) position or fund chemical treatment on a short-term basis for management of this species on Licensee owned-land.

Licensee further agrees to clean all equipment that may introduce terrestrial invasive species to Flowage. This is especially important when equipment is brought in to mow the dikes or perform maintenance or construction on the dam structures.

4.7 Other Invasive Species

Licensee and the resource agencies understand that other species not specifically addressed in this Plan pose a potential threat to the Flowage ecosystem. In order to address the potential threat from these species, Licensee, the resource agencies, and other stakeholders agree to cooperatively implement the WDNR's Rapid Response Program (Appendix E) for aquatic invasive species (AIS). If the threat is from a terrestrial invasive, a similar cooperative effort would be undertaken.

Chapter NR 40, *Wisconsin's Invasive Species Identification, Classification and Control Rule*, of the Wisconsin Administrative Code directs the WDNR to develop a statewide program to identify, classify and control invasive species. A summary of Chapter NR 40 of the Wisconsin Administrative Code is included herein as Appendix F. The complete Chapter NR 40, including a list of applicable invasive species, is readily available through the WDNR's website at www.dnr.wi.gov/invasives/classification/ or through the State of Wisconsin's website at www.wisconsin.gov/state/core/government.html).

NR 40 categorizes two types of invasive species: prohibited and restricted. Each category has specific regulations regarding the possession or transportation of certain invasive species aimed at preventing their spread. NR 40 also provides for a quick response to control or eradicate those species that have been documented but not well established.

Licensee, the resource agencies, and other stakeholders involved in the development of this Plan agree to comply with all the regulations of NR 40, specifically those addressing the possession and transfer of invasive species.

5.0 MONITORING, EDUCATION AND CONTROL EFFORTS

In order to monitor, educate and control for the above-mentioned species (and future invasive species), Licensee agrees to annually provide $7,000 to the Iron County Land and Water Conservation Department (Iron County). The funding shall begin in 2010 and will be adjusted annually to the Consumer Price Index (CPI). Licensee's funding would then be used as cost-share dollars to secure additional funding from the State of Wisconsin's Aquatic Invasive Species (AIS) Grant Program. The combined funding would then be used for monitoring, education, controls efforts or supplies as agreed upon by Licensee, the resource agencies and other stakeholders at the annual meeting described in section 7.0 below. If cost share funds are not available in any given year, Licensee's funding will still be made available to Iron County as agreed upon above.

In order to secure funding from Licensee, Iron County's Aquatic Invasive Species Coordinator shall submit a formal request in writing directed to:

Matthew Miller
Hydro Licensing Specialist
Xcel Energy
P.O. Box 8
Eau Claire, WI 54702

In the event of personnel changes or if the above position is vacated, an alternate request for funding may be directed to Xcel Energy's Director of Hydro Plants at the same address.

At a minimum, it is expected that one full-time seasonal position would be available for monitoring, education, or control purposes. However, a second annual position would likely be funded with cost-share funding from the state beginning in 2011. The employee(s) would be hired by Iron County and would tentatively work for 12 weeks during the summer months. The primary job duties would be to inspect watercraft and trailers at the boat landings for invasive species and educate the public in accordance with the WDNR's Clean Boats/Clean Waters Initiative (http://dnr.wi.gov/lakes/CBCW/).

The most popular boat landings, Springstead Landing and Fishermen's Landing, would be the primary focus of the employee's efforts. Other landings on the Flowage would also be monitored as time and personnel allow. Prior to performing any fieldwork, the employee(s) shall be trained in invasive species recognition and how to educate the public. Additional responsibilities would include the distribution of educational brochures to boaters, anglers, campers,

and other outdoor enthusiasts that spend time on the Flowage. Maintaining educational brochures and information found at the kiosks of the landings would be another job responsibility.

The employee(s) would also monitor the near shore areas around the landings where invasive species are most likely to first become established. These monitoring efforts would be developed according the Citizens Self-Help Lake Monitoring Program. Assisting the TFFTLPOA with their purple loosestrife monitoring would also be considered as time and personnel allow. This may include using the seasonal employee(s) to help the TFFTLPOA's volunteer efforts.

The WDNR's park ranger for the Flowage also provides limited education to the public on invasive species through performing his/her daily job duties.

The Great Lakes Indian Fish and Wildlife Commission (GLIFWC) currently maintains a statewide database on invasive species on their website. GLIFWC was provided an opportunity to comment on the draft Plan and will be invited to the annual meeting (section 7.0) to exchange information with Licensee and the resource agencies. This will ensure that their database receives timely updates and prevents redundant monitoring and/or educational efforts.

6.0 LAW ENFORCEMENT

There are numerous state statutes in effect that govern the possession or transportation of aquatic invasive species (AIS) per state statute N.R. 40. WDNR conservation wardens and park rangers have the authority to enforce these laws.

7.0 ANNUAL MEETING

Licensee, the resource agencies, and the stakeholders will hold an annual meeting in early fall to discuss the current year's monitoring, education and control efforts. The meeting will also allow an opportunity to share information that will be included in the annual report as described more specifically below. The meeting will also provide an opportunity to discuss the following year's plan and schedule regarding funding, grant sponsors/applications, monitoring, education, and control efforts. Any new exotic species that were found on or near the Flowage would also be discussed.

8.0 ANNUAL REPORT

Licensee, in cooperation with the resource agencies and other stakeholders, shall develop an annual report summarizing the results of the current year's monitoring and control efforts. The report will also include a status update on primary species mentioned in section 4.0. The report will be distributed to the resources agencies and TFFTLPOA. Other interested stake holders will be

provided the report upon request. In addition to the annual report, further information regarding the current status of invasive species is also available on the WDNR's and GLIFWC's websites.

9.0 CONCLUSION

Invasive species and the threat they pose to the Flowage are constantly changing. What may be the primary species of concern today may no longer be considered a serious threat in the future. Likewise, those invasive species currently not found on Flowage may become the primary focus even more so than the specific species outlined in this Plan. Considering the aforementioned, this Plan was purposely developed to allow enough flexibility to adapt to the ever-changing threats from invasive species. This will allow those entities that implement the Plan the ability to quickly and effectively direct funding and personnel as they see fit.

Appendix A

Agency Correspondence And A Description Of How Licensee Incorporated Comments In The Final Plan

1414 West Hamilton Avenue
P.O. Box 8
Eau Claire, Wisconsin 54702-0008
Telephone (800) 895-4999

January 26, 2010

Mr. Jeff Scheirer
Wisconsin Dept. of Natural Resources
875 S. 4th Avenue
Park Falls, WI 54552

Subject: **Draft Invasive Species Management Plan For The Turtle-Flambeau Flowage (FERC Project No. 2390-02)**

Dear Mr. Scheirer:

Enclosed is the draft Invasive Species Management Plan (Plan) for the Turtle-Flambeau Flowage for your review. The plan has been developed in accordance with article 416 of the Big Falls Hydro Project's license. The Federal Energy Regulatory Commission (Commission) amended the Big Falls license on October 14, 2008 to include the jurisdictional Turtle- Flambeau Storage Reservoir. License article 416 of the amending order directs Northern States Power Company – Wisconsin (Licensee), to develop and file various management plans with the resource agencies for their review and comment prior to submittal to the Commission for approval.

Please provide me with any comments that you might have concerning the above-mentioned Plan by March 1, 2010. If I do not hear from you by then I will assume that you are satisfied with the Plan and will file it accordingly with the Commission for approval. Should you have any questions concerning the Plan, feel free to contact me by telephone at (715) 737-1353 or electronic mail at matthew.j.miller@xcelenergy.com.

Sincerely,

Matthew J. Miller

Matthew J. Miller
Hydro Licensing Specialist

Enclosure: Draft Invasive Species Management Plan

c: Christine Niehaus – WDNR
Mr. Nick Utrup - USFWS
Ms. Angela Tornes - National Park Service
Chippewa Flambeau Improvement Company (CFIC)
Heather Palmquist – Iron County Land & Water Conservation Department
Terry Daulton - TFFPOA
Project Files

Xcel Energy®

1414 West Hamilton Avenue
P.O. Box 8
Eau Claire, Wisconsin 54702-0008
Telephone (800) 895-4999

January 26, 2010

Mr. Nick Utrup
U.S. Fish & Wildlife Service
2661 Scott Tower Drive
New Franken, WI 54229

Subject: **Draft Invasive Species Management Plan For The Turtle-Flambeau Flowage (FERC Project No. 2390-02)**

Dear Mr. Utrup:

Enclosed is the draft Invasive Species Management Plan (Plan) for the Turtle-Flambeau Flowage for your review. The plan has been developed in accordance with article 416 of the Big Falls Hydro Project's license. The Federal Energy Regulatory Commission (Commission) amended the Big Falls license on October 14, 2008 to include the jurisdictional Turtle- Flambeau Storage Reservoir. License article 416 of the amending order directs Northern States Power Company – Wisconsin (Licensee), to develop and file various management plans with the resource agencies for their review and comment prior to submittal to the Commission for approval.

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Sincerely,

Matthew J. Miller

Matthew J. Miller
Hydro Licensing Specialist

Enclosure: Draft Invasive Species Management Plan

c: Christine Niehaus – WDNR
Mr. Jeff Scheirer - WDNR
Ms. Angela Tornes - National Park Service
Chippewa Flambeau Improvement Company (CFIC)
Heather Palmquist – Iron County Land & Water Conservation Department
Terry Daulton - TFFPOA
Project Files

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1414 West Hamilton Avenue
P.O. Box 8
Eau Claire, Wisconsin 54702-0008
Telephone (800) 895-4999

January 26, 2010

Angela Tornes
National Park Service
River & Trails Program
626 E. Wisconsin Ave., Suite 100
Milwaukee, WI 53202

Subject: **Draft Invasive Species Management Plan For The Turtle-Flambeau Flowage (FERC Project No. 2390-02)**

Dear Ms. Tornes:

Enclosed is the draft Invasive Species Management Plan (Plan) for the Turtle-Flambeau Flowage for your review. The plan has been developed in accordance with article 416 of the Big Falls Hydro Project's license. The Federal Energy Regulatory Commission (Commission) amended the Big Falls license on October 14, 2008 to include the jurisdictional Turtle- Flambeau Storage Reservoir. License article 416 of the amending order directs Northern States Power Company – Wisconsin (Licensee), to develop and file various management plans with the resource agencies for their review and comment prior to submittal to the Commission for approval.

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Sincerely,

Matthew J. Miller
Hydro Licensing Specialist

Enclosure: Draft Invasive Species Management Plan

c: Christine Niehaus – WDNR
Jeff Scheirer - WDNR
Nick Utrup - USFWS
Chippewa Flambeau Improvement Company (CFIC)
Heather Palmquist – Iron County Land & Water Conservation Department
Terry Daulton - TFFPOA
Project Files

Xcel Energy®

1414 West Hamilton Avenue
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Eau Claire, Wisconsin 54702-0008
Telephone (800) 895-4999

January 26, 2010

Mr. Carl Edwards, President
Lac du Flambeau Band of Lake Superior Chippewa Indians
P.O. Box 67
Lac du Flambeau, WI 54538

Subject: **Draft Invasive Species Management Plan For The Turtle-Flambeau Flowage (FERC Project No. 2390-02)**

Dear Mr Edwards:

Enclosed is the draft Invasive Species Management Plan (Plan) for the Turtle-Flambeau Flowage for your review. The plan has been developed in accordance with article 416 of the Big Falls Hydro Project's license. The Federal Energy Regulatory Commission (Commission) amended the Big Falls license on October 14, 2008 to include the jurisdictional Turtle-Flambeau Storage Reservoir. License article 416 of the amending order directs Northern States Power Company – Wisconsin (Licensee), to develop and file various management plans with the resource agencies for their review and comment prior to submittal to the Commission for approval.

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Sincerely,

Matthew J. Miller

Matthew J. Miller
Hydro Licensing Specialist

Enclosure: Draft Invasive Species Management Plan

c: Christine Niehaus – WDNR
Jeff Scheirer - WDNR
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Heather Palmquist – Iron County Land & Water Conservation Department
Terry Daulton - TFFPOA
Project Files

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Miller, Matthew J

From:	terry daulton [cen94291@centurytel.net]
Sent:	Saturday, February 20, 2010 10:07 AM
To:	Scheirer, Jeffrey W - DNR; Aartila, Tom P - DNR; Kreitlow, James D - DNR
Cc:	jbohmann@centurytel.net; jongebloed@centurylink.net; tom4815@jrecoop.com; dokrongly@centurytel.net; lakes@ironcountywi.org; ChristineA.Neihaus@wisconsin.gov; Bacon, Bruce R - DNR
Subject:	TFFTL POA comments on Xcel invasives draft
Attachments:	tff invasives.doc

tff invasives.doc

Hello Jeff, Tom and Jim:

Please find attached a copy of the Turtle Flambeau Flowage and Trude Lake Property Owner's Association comments on the Xcel Energy draft Invasive Species Plan. We hope that you will consider our comments and help to strengthen protection for the flowage regarding invasive species. Please feel free to contact us if you have any questions or concerns.

Thank you for your time and efforts on this matter. I will send a hard copy to Jeff for your records.

Sincerely,

Terry Daulton
President
TFFTL POA

Feb 20, 2010

Mr. Jeff Scheirer
Wisconsin Department of Natural Resources
875 S. 4th Ave
Park Falls, WI 54552

Dear Mr. Scheirer:

The Turtle Flambeau and Trude Lake Property Owner's Association (TFFTL POA) recently received a copy of the draft Invasive Species Management Plan from Xcel Energy. We have been working with the DNR on invasive species management for a number of years, and this past December participated in a joint meeting between DNR, the US Geological Survey, Xcel and Iron County Land Conservation Department to discuss potential components of the draft plan. The following are comments and suggestions we hope that the DNR will incorporate into its plan review.

In section 4.3, *Zebra Mussels*, along with the monitoring sites at the dam, placement of monitoring devices at boat landings might provide an early warning system for zebra mussels coming in from landings. These could also be monitored by the summer staff funded under section 4.7.

In section 4.4, *Purple Loosestrife*, Xcel accurately outlined the current management and monitoring for purple loosestrife. The draft plan suggests a continued emphasis on DNR, Iron County, and lake association monitoring with little additional assistance from Xcel. It should be noted that our association volunteer effort is currently stretched to its limit. We estimate about 200 volunteer hours, plus costs for boat gas and supplies. The size and geography of the flowage make this survey time consuming and physically challenging. Many of our members are senior citizens who are not able to survey remote or difficult locations. If we see continued increases in loosestrife (as we have over the past few years), it is likely that we will exhaust our volunteer resources and require additional assistance. In fact, there are currently survey routes that exceed volunteer capabilities. If we are to continue to conduct a high quality prevention program it would be helpful to have additional resources which could be provided through the county, DNR or directly through Xcel. While the association does plan to maintain our current program, we suggest Xcel include statements on assistance or additional funding. This would assist us with current efforts, and would be essential should the work load increase or the association be unable to continue at the current level at some point in the future.

One small note is that the association volunteer effort is coordinated by the Chair of the Invasive Species committee, not the vice-president. (Our current VP happens to be the chair). Also, when they cited providing access to DNR staff for management activities, would that also include volunteers working with the department?

In section 4.6, *Other Invasive Species*, we suggest adding language on prevention of additional invasive species that pose a high risk to the flowage. These would include

spiny waterflea (found in the nearby Gile Flowage), curly pondweed (found 5 miles from the TFF in Wilson Lake), VHS (recently found in Lake Superior), and rusty crayfish (found in Manitowish River). We recognize that Xcel is primarily addressing species listed in Item #36 the Water Quality Certificate (mute swan, gypsy moth, zebra mussel, purple loosestrife, Eurasian water milfoil). However, this invasive species management plan should reflect the most current threats. The existing language in Section 4.7 on Clean Boats/Clean Waters staffing and volunteers would cover prevention actions for these additional species.

Under section 4.7, *Monitoring and Education*, Xcel suggests funding one seasonal employee to conduct clean boats/clean waters and other management functions. At our December meeting, we talked about funding two summer positions, one for Fisherman's Landing and one for Springstead Landing. Iron County LCD offered to hire and supervise these positions. In the draft plan, Xcel states that their funding of one position would be contingent on Iron County, DNR, or the lake association funding an additional position. We are concerned that this would allow them to eliminate funding should grant efforts fail. We suggest that the statement "contingent upon the annual funding of a second seasonal position" be eliminated. In addition, we urge the department to require the funding of two positions. Xcel stated at the outset that monitoring is a critical component of the plan. Providing enough staffing to prevent spread of invasive species is critical to protecting the flowage. Aside from funding for loosestrife chemicals and beetles, and the zebra mussel samplers, this is the only actual investment Xcel is making. The majority of invasive species work would continue to be conducted by the lake association, volunteers, Iron county and the DNR.

In summary, we hope that you will work to strengthen this draft plan. We look forward to a strong partnership with adequate resources which look to future threats as well as present conditions. Thank you for your consideration of our views.

Sincerely,

Terry Daulton
President
Turtle Flambeau Flowage and Trude Lake POA

Miller, Matthew J

From: Houston, Daniel L - DNR [Daniel.Houston@Wisconsin.gov]
Sent: Thursday, February 25, 2010 9:44 AM
To: Miller, Matthew J
Cc: Scheirer, Jeffrey W - DNR
Subject: Comments on draft invasive species management plan for the Turtle-Flambeau Flowage (FERC P-2390-02)
Attachments: NHAL_IPMP(2).doc

Matthew,
This is in response to your January 26, 2010 request to WDNR for comments on the matter above. The comments below are a compilation of those received from WDNR Resource Managers.

To optimize its effectiveness this Plan should have an underlying theme of cooperation among Xcel, lake association, WDNR, and county LCD. The plan should focus on prevention and education, and monitoring.

It appears that most of the target invasives relate to aquatic or semi-aquatic environment, expand this list to include Quagga mussel, Curly leaf pondweed, VHS, Spiny water flea and fish species (round goby). More terrestrials should be added in addition to spotted knapweed. The TFF has numerous acres of upland forest habitat and could or is likely infested with a variety of terrestrial invasives. Consider adding Asian Honeysuckle, Buckthorns, Garlic Mustard, Japanese Knotweed (this is found on the TFF), Japanese Barberry and add more to your control effort for spotted knapweed. Maybe phragmites also----all of these spp can be found near the boat landings and other high rec areas.

It is important to have an effort to inventory both aquatic and terrestrial invasive species. Consider a separate section on inventory or at least say something that as more funding is appropriated -- inventory will take place in the future. Also it would help to reference the Great Lakes Indian Fish & Wildlife Commission's invasive database for more occurrence information for both aquatic and terrestrial invasives. Attached is the invasive species plan for the NHAL State Forest -- this may give you more incite into what areas and what species to add (if you want to add more species)/ I would ignore the first couple pages and review the last couple of this doc.

There should be a statement about the reporting process to DATCP -- technically any herbicide treatment we do on state lands need to be reported to DATCP through the report process.

Two seasonal employees for invasive monitoring are better than one, but as several commenters said in opposition to the conditions attached to Xcel's proposal, one is better than none. On the other hand, Xcel's conditions could serve as incentive for other parties to seriously seek out funding for an all or nothing opportunity. We note that the condition can be satisfied with a trained volunteer. The WDNR may be able to fund a part of the second

position in the future, however, there is no state funding available for at least the 2010 open water season. We encourage you to be flexible on this condition and not drop the position if near-term cooperation fails to produce a fully funded matching position.

Lastly, the annual payment of $5,000 should be adjusted annually by the most recent calendar year Consumer Price Index to account for inflation between now and license expiration in 2037.

I have recently been assigned to coordinate FERC related issues for WDNR on this project. I look forward to working with you. Thank you for the opportunity to comment on this matter.

P *Daniel Houston*
Water Regulation and Zoning Specialist
Northern Region
Park Falls Service Center
Wisconsin Department of Natural Resources
(☎) phone: (715) 762-1342
(☎) fax: (715) 762-4348
(✉) e-mail: daniel.houston@wi.gov

Miller, Matthew J

From: Bacon, Bruce R - DNR [Bruce.Bacon@Wisconsin.gov]
Sent: Monday, February 08, 2010 10:40 AM
To: Scheirer, Jeffrey W - DNR
Subject: FW: inviasive species plan from xcel
Attachments: Draft Invasive Species Management Plan 012610.doc

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From: diane o'krongly [mailto:dokrongly@centurytel.net]
Sent: Saturday, February 06, 2010 4:30 PM
To: Niehaus, Christine A - DNR; Heather Palmquist; Bacon, Bruce R - DNR
Subject: inviasive species plan from xcel

Hello Heather, Bruce and Chris,

I made some comments about Xcel's invasive species plan with-in the draft document in red print? What do you think?

Diane O'Krongly

1.0 INTRODUCTION

The Turtle-Flambeau Flowage (Flowage) was constructed in 1926 by the Chippewa and Flambeau Improvement Company (CFIC) to augment streamflow for downstream hydropower production. The CFIC is a partnership among owners of eight hydroelectric projects on the Chippewa and Flambeau Rivers of which Northern States Power Company – Wisconsin (Licensee) is a majority stakeholder. Big Falls Hydro (FERC Project No. 2390-01) is the Licensee's first hydro project downstream of the Flowage and the largest hydroelectric facility on the Flambeau River.

The Flowage has a drainage area of approximately 660 square miles and a surface area of about 17,800 acres. The CFIC currently operates the Flowage in accordance with a 1990 Memorandum of Understanding (MOU) developed in cooperation with the Wisconsin Department of Natural Resources (WDNR). The MOU provides guidelines on the operation of the Flowage in regards to normal full pond elevation, minimum discharge flow, and seasonal drawdowns. Any changes in project operations that may deviate from the main principles of the MOU must be negotiated between Licensee and the WDNR prior to implementation.

On October 3, 2006 Licensee filed an application with the Federal Energy Regulatory Commission (Commission) to amend its license for the Big Falls Hydroelectric Project to include the Turtle-Flambeau Flowage as a project feature. (*The Big Falls Project is located approximately 85 river miles downstream from the Turtle Flambeau Reservoir*). The Commission issued an order on October 14, 2008 amending the Big Falls license to include the Turtle Flambeau Flowage Project. The amending order stipulates various conditions or additions to the plans and requirements (Article 416) in the WDNR's Water Quality Certification (WQC). One of the directives is to develop an invasive species management plan (plan) in consultation with the resource agencies.

2.0 REQUIREMENTS- what about other potential infestation such as: curly pondweed, spiny water flea (in the Gile), or other invasive aquatic species I've read about?

Item #36 of the WQC references several current and potential exotic species that threaten the terrestrial and aquatic ecosystems of the TFF. They include: gypsy moth, mute swan, zebra mussel, purple loosestrife, and eurasian water milfoil. License article 416 of the above-referenced amending order directs licensee to develop an invasive species management plan in consultation with the resource agencies in regards to these potentially harmful species.

Licensee is further obligated to work with the WDNR under Condition O of the WDNR's Water Quality Certification (WQC). Condition O states: *"The Licensee shall cooperate with the Department to implement reasonable resource*

may include: steam-cleaning, chemical treatment, physical treatment, or other suitable measures (Appendix C).
Where will the monitoring of zebra mussels be done? How many sites will be monitored?
Licensee agrees to provide and install several zebra mussel samplers similar to the samplers used at its Dells Hydro Project on the lower Chippewa River. The samplers will be installed on those structures of the Turtle-Flambeau Dam most susceptible to zebra mussel infestation. Monitoring of the samplers will be conducted by Licensee's personnel several times per year. If Licensee documents any zebra mussels from its monitoring efforts, it shall promptly contact the WDNR's Turtle-Flambeau Flowage Property Manager.

4.4 Purple Loosestrife

Purple Loosestrife *(Lythrum salicaria)* is an erect, herbaceous perennial of Eurasian origin that became established in the estuaries of northeastern North America by the early 1800's. Since then, this highly invasive species has spread throughout much of the United States, including most of Wisconsin's counties. As purple loosestrife expands its local distribution and becomes more prevalent, it poses a serious threat to native emergent vegetation in shallow-water marshes and shorelines by displacing native food and cover plants in the waterways.

The Flowage is currently being monitored for purple loosestrife by members of the TFFPOA. This volunteer effort was begun in 2005 and is coordinated by the vice president of the TFFPOA. The Flowage is divided into monitoring zones with an emphasis directed on known areas of infestation. If a single specimen or several plants are observed, volunteers cut off the seed portion of the plant and flag the area for WDNR personnel. The WDNR then follows-up by chemically treating those areas where "pioneering" plants have been identified.

In order to control larger areas of infestation, Iron County has recently initiated a bio-control effort in cooperation with the WDNR using beetles that specifically target purple loosestrife. Licensee provided funding to Iron County in 2009 for the rearing of beetles to be released on the Manitowish River upstream of the flowage between Murray's Landing and State Highway 47. This is an area of high loosestrife concentration and a likely seed source for future infestation on the Flowage. Licensee will continue to work with Iron County and the WDNR in their efforts to rear and release beetles on the Manitowish River and the Flowage.
Licensee will provide access to its property to WDNR personnel for control of loosestrife? Is it necessary to include any one helping to control loosestrife?
Licensee shall also provide access to its property, with respect to safety and security concerns, to WDNR personnel for the purpose of controlling loosestrife. Licensee further agrees to reasonably cost-share the funding of the chemical used in these control efforts. Currently the WDNR uses approximately 2-3 gallons of pesticide per year at a cost of approximately $100/gallon.

Should Licensee help with funding of?

- Man power of WDNR
- Gas for volunteers doing the survey
- Cost of supplying volunteers with lunch

Our organization is doing much of the required work for the Licensee.

4.5 Eurasian Water Milfoil

Eurasian water milfoil (Myriophyllum spicatum) is an aquatic plant native to Europe, Asia, and northern Africa. This invasive aquatic plant is similar to several native species of milfoil found in Wisconsin, most notably Northern water milfoil (Myriophyllum sibericum). Eurasian milfoil was first documented in Wisconsin in the 1960's. In the 1980's, it slowly began its expansion north from southern Wisconsin and is now found in nearly every county of the state.

Eurasian milfoil has been documented in two Iron County waters, Long Lake, approximately 10 miles north and east of the Flowage and Weber Lake in northern Iron County near Upson, WI. Eurasian water milfoil has not been documented in the waters of the Flowage. However, since this exotic is primarily transferred via boats and trailers, the threat to the Flowage is very real. Monitoring and educating the public, as mentioned below in section 4.7, is paramount to limiting the spread of this invasive species.

4.6 Other Invasive Species

The WDNR indicated that it currently conducts monitoring and control measures for additional (terrestrial) invasive species including spotted knapweed. WDNR noted that the Licensee's dikes are areas of special concern, especially with the current restricted access. Licensee agrees to provide access to its property to WDNR personnel as much as feasible for the purpose of treating spotted knapweed and other exotics. Licensee and WDNR understand that certain areas of Licensee's property may remain restricted for safety and/or security reasons.

4.7 Monitoring & Education

In order to monitor for the above-mentioned species, Licensee agrees to annually fund one seasonal position up to $5000 contingent upon the annual funding of a second seasonal position. The second position shall be funded by either the WDNR via state grant money, filled by volunteer help from the TFFPOA, or a combination of both organizations working together in cooperation with Iron County. Both employees would be hired by Iron County and would tentatively work for 12 weeks during the summer months. The primary job duties of the

employees would be to inspect watercraft and trailers at boat landings for invasive species in accordance with the WDNR's Clean Boats/Clean Waters Initiative (http://dnr.wi.gov/lakes/CBCW/). The employees would also monitor the near shore areas around the landings where invasive species are most likely to first become established.

Only one seasonal position is not enough to cover the entire flowage.
Why is the TFF-TLPOA included as being responsible for monitoring boat launches for the licensee. Our organization is doing much of the required work for the Licensee:

- Loosestrife surveys
- Loosestrife removal
- Plant surveys that identify native and nonnative species present.
- Education included in our biannual newsletter
- Grant writing for a lake planning and eventually lake protection.

I would hope that they would consider these efforts and add the funding for another seasonal position to monitor boat landings.

Prior to performing any fieldwork, the employees shall be trained in invasive species recognition and how to educate the public. The employees will then focus on educating the general public about the various aquatic and terrestrial invasive species that threaten the Flowage ecosystem. Additional responsibilities would include the distribution of educational brochures to boaters, anglers, campers, and other outdoor enthusiasts that spend time on the Flowage. The most popular boat landings, Springstead Landing and Fishermen's Landing, would be the primary focus of the employee's efforts including the maintenance of educational brochures and information found at the kiosks of the landings. Those landings that aren't actively monitored for invasive species would still have educational materials available at existing kiosks (if available).

5.0 Reporting

Iron County, in cooperation with the WDNR and Licensee, shall develop an annual report summarizing the results of the current year's monitoring efforts. The report will include a status update on each species and shall be made available to the stakeholders upon request. Additional information regarding the current status of invasive species is also available on the WDNR's website.

6.0 Law Enforcement

There are numerous state statutes in effect that govern the possession or transportation of aquatic invasive species (AIS). Appendix D provides of summary of the statutes regarding AIS.

Miller, Matthew J

From: Heather Palmquist [lakes@ironcountywi.org]
Sent: Tuesday, February 23, 2010 11:30 AM
To: Kreitlow, James D - DNR; Niehaus, Christine A - DNR; Scheirer, Jeffrey W - DNR; Aartila, Tom P - DNR
Cc: tdaulton@centurytel.net; 'diane o'krongly'; Bacon, Bruce R - DNR
Subject: Comments on Xcel Invasive Plan
Attachments: Excel Plan Comments.doc

Good day,

Attached please find comments I have made in regards to the proposed Invasive Species Plan written by Xcel for the Turtle Flambeau Flowage on behalf of the Iron County Land and Water Conservation Department. I have submitted a hard copy to Jeff Scheirer. Please take some time to review the letter and take these comments along with others sent by the partners in the review process of this plan.

Thank you for your time and consideration,

Heather Palmquist
Aquatic Invasive Species Coordinator
Iron County Land & Water Conservation Dept
607 3rd Avenue North
Hurley, WI 54534
715/561-2234 - phone
715/561-4801 - fax
lakes@ironcountywi.org

"In the end, we conserve only what we love. We will love only what we understand. We will understand only what we are taught."

- **Baba Dioum**, Senegalese poet

Iron County
Land & Water Conservation Department
607 3rd Avenue North
Hurley, WI 54534

Heather Palmquist
Aquatic Invasive Species Coordinator

Email: lakes@ironcountywi.org Phone: (715)561-2234 Fax: (715)561-4801

February 17, 2010

Mr. Jeff Scheirer
Wisconsin Department of Natural Resources
875 S. 4th Avenue
Park Falls, WI 54552

Dear Mr. Scheirer,

The Iron County Land and Water Conservation Department (LWCD) has been working with the DNR and the Turtle Flambeau and Trude Lake Property Owner's Association (TFFTL POA) for the past few years on education and treatment of invasive species. In the past year we have participated in meetings with Xcel Energy, US Geological Survey, TFFTL POA and the DNR in regards to Xcel's Invasive Species Management Plan. After reading through the draft, we have some comments that we would like considered in the plan reviewing process.

In section 4.3 *Zebra mussel*, the Licensee agrees to install several Zebra mussel samplers near the Turtle-Flambeau Dam which is susceptible to infestation. Our department suggests additional samplers being placed at the landings as the infestation would likely be introduced at these locations. The monitoring component of this section would be strengthened significantly with the addition of sampling plates at the landing sites.

Section 4.5 *Eurasian water milfoil*, monitoring is the primary focus of this section in the plan, however, in the case that the Turtle Flambeau Flowage becomes infested with Eurasian water milfoil (EWM) there is no indication that the Licensee will aide in response. The Iron County LWCD recommends that there be a rapid response plan included in this plan in the case that EWM is found in the Turtle Flambeau Flowage. The Iron County LWCD strongly urges the plan outline the role the Licensee will take in rapid response of an EWM infestation.

In section 4.7 *Monitoring and Education*, the Licensee writes, "In order to monitor for the above-mentioned species, Licensee agrees to annually fund one seasonal position up to $5,000 contingent upon the annual funding of a second season position." In the case additional funding is unable to be found to fund the second position the monitoring efforts on the Turtle Flambeau would cease for a year. This would be a giant step backwards in education and prevention, it would be far more beneficial to have one position for the summer providing boater education and monitoring for invasive species.

The Licensee consistently includes monitoring and education efforts throughout their plan. In section 3.0 *Consultation*, the Licensee states, "Monitoring, therefore, will be a critical component of the plan", again in section 4.5 *Eurasian water milfoil*, the Licensee writes, "Monitoring and educating the public, as mentioned below in section 4.7, is paramount to limiting the spread of this invasive species". If monitoring and education is not promoted through the summer positions the

plan would be compromised as invasive species would not be monitored and the thousands of recreationists on the Turtle Flambeau Flowage would not be made aware of prevention steps and environmental impacts invasive species could have on the Flowage. It is for this reason the Iron County LWCD strongly encourages the "contingent upon additional funding of a second position" to be removed from the plan. The department would like to encourage further assistance from the Licensee in funding the monitoring and education efforts on the Turtle Flambeau Flowage. This water body is a very unique and rich in biodiversity, it attracts thousands of visitors to the area who wish to experience the natural beauty the Turtle Flambeau Flowage offers. If the pristine state of the Flowage is compromised by invasive species those visitors may travel to other places creating a huge impact on the local economy.

In addition, the Iron County LWCD recommends the two summer positions to focus most of the boat inspection efforts on the two most popular landings, Springstead Landing and Fishermen's Landing, with the ability to also do some spot checks and inspections from time to time at the other landings on the Flowage as well, offering better coverage of the Turtle Flambeau Flowage.

The Iron County LWCD looks forward to the continued cooperation between the WDNR, Xcel, the TFFTL POA and the LWCD. We hope all entities will consider all the comments made by the various groups affected by this Invasive Species Management Plan and together strengthen the plan to ensure the Turtle Flambeau Flowage is protected and its integrity is kept intact. Thank you for your time and consideration in this matter.

Sincerely,

Heather Palmquist
Aquatic Invasive Species Coordinator
Iron County Land and Water Conservation Dept.

Miller, Matthew J

From: Miller, Matthew J

Sent: Tuesday, March 23, 2010 8:40 PM

To: Scheirer, Jeffrey W - DNR; Aartila, Tom P - DNR; Houston, Daniel L - DNR; 'Bacon, Bruce R - DNR'; Niehaus, Christine A - DNR; Kreitlow, James D - DNR; diane okrongly; Terry Daulton; Heather Palmquist; 'Miles Falck (miles@glifwc.org)'

Cc: Olson, Robert W; Tornes, Angie; Nick_Utrup@fws.gov

Subject: Invasive Species Management Plan - 2nd Draft

Attachments: Invasive Species Plan - 2ND Draft.pdf

Hello Everyone,

I've attached a second draft of the Invasive Species Management Plan for your review and comment. The following are some changes I would like to point out:

1) Spotted knapweed has its own entry (this was based on discussions with Roger Jasinski and Chris Niehaus in 2009 & Dan Houston's recommendation)

2) Note the new appendices added - Appendix A includes the resource agencies comments and Licensee's responses - the final copy will include the actual email responses I received, Appendix E contains the DNR's Rapid Response Program, and Appendix F summarizes Chapter NR 40 (I felt including the entire NR 40 was unnecessary). Please review Appendix A carefully for accuracy.

3) I spoke with Miles Falck of GLIFWC - he will be reviewing the plan as well

4) The issue of including other species under section 4.7 was expanded to include NR 40. I realized that there is no rapid response protocol for terrestrial invasives so I was somewhat general in my comments.

Please provide any comments you may have by the end of the day this Friday (March 26). If your comments are brief or minor, feel free to telephone me. I will accept last minute changes until Monday the 29th if needed. I would also like to thank everyone for their input into this plan and look forward to working with all of you in the future.

Sincerely,

Matthew Miller
Hydro Licensing Specialist
Xcel Energy
1414 W. Hamilton Ave.
P.O. Box 8
Eau Claire, WI 54702
Office: (715) 737-1353
Mobile: (715) 225-8841

Miller, Matthew J

From: Niehaus, Christine A - DNR [ChristineA.Niehaus@Wisconsin.gov]
Sent: Thursday, March 25, 2010 9:25 PM
To: Miller, Matthew J
Subject: RE: Invasive Species Management Plan - 2nd Draft

Matt -
In my quick perusal I think the draft looks good. Sounds like the meeting last week was very productive and worthwhile. I like the changes that have been made.

Chris Niehaus
Property Manager
Turtle-Flambeau Scenic Waters Area
Bureau of Facilities and Lands
Wisconsin Department of Natural Resources
(☎) phone: (715) 476-7648
(☎) fax: (715) 476-7603
(✉) e-mail: christinea.niehaus@wi.gov

From: Miller, Matthew J [mailto:Matthew.J.Miller@xcelenergy.com]
Sent: Tuesday, March 23, 2010 8:40 PM
To: Scheirer, Jeffrey W - DNR; Aartila, Tom P - DNR; Houston, Daniel L - DNR; Bacon, Bruce R - DNR; Niehaus, Christine A - DNR; Kreitlow, James D - DNR; diane okrongly; Terry Daulton; Heather Palmquist; Miles Falck (miles@glifwc.org)
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P.O. Box 8
Eau Claire, WI 54702
Office: (715) 737-1353
Mobile: (715) 225-8841

Miller, Matthew J

From: Bacon, Bruce R - DNR [Bruce.Bacon@Wisconsin.gov]
Sent: Thursday, March 25, 2010 9:08 AM
To: Miller, Matthew J
Subject: RE: Invasive Species Management Plan - 2nd Draft

Matt,
Read thru it twice and nothing jumped out at me.
Bruce

From: Miller, Matthew J [mailto:Matthew.J.Miller@xcelenergy.com]
Sent: Tuesday, March 23, 2010 8:40 PM
To: Scheirer, Jeffrey W - DNR; Aartila, Tom P - DNR; Houston, Daniel L - DNR; Bacon, Bruce R - DNR; Niehaus, Christine A - DNR; Kreitlow, James D - DNR; diane okrongly; Terry Daulton; Heather Palmquist; Miles Falck (miles@glifwc.org)
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Sincerely,

Matthew Miller
Hydro Licensing Specialist
Xcel Energy
1414 W. Hamilton Ave.
P.O. Box 8
Eau Claire, WI 54702
Office: (715) 737-1353
Mobile: (715) 225-8841

Miller, Matthew J

From: Houston, Daniel L - DNR [Daniel.Houston@Wisconsin.gov]
Sent: Friday, March 26, 2010 9:01 AM
To: Miller, Matthew J
Subject: RE: Invasive Species Management Plan - 2nd Draft

Matt,
I will be off today and expect some WDNR comments will come to me later, I will phone you Monday morning.
Thanks.

From: Miller, Matthew J [mailto:Matthew.J.Miller@xcelenergy.com]
Sent: Tuesday, March 23, 2010 8:40 PM
To: Scheirer, Jeffrey W - DNR; Aartila, Tom P - DNR; Houston, Daniel L - DNR; Bacon, Bruce R - DNR; Niehaus, Christine A - DNR; Kreitlow, James D - DNR; diane okrongly; Terry Daulton; Heather Palmquist; Miles Falck (miles@glifwc.org)
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Sincerely,

Matthew Miller
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A draft Plan was submitted to the resources agencies on January 26, 2010 allowing 30 days for review and comment. All comments were received by electronic mail and are included below. In order to sufficiently address the comments received, Licensee held a follow-up meeting with all stakeholders on March 19, 2010. Stakeholders' comments and Licensee's corresponding responses from the meeting are as follows:

1) The TTFTLPOA and Iron County Land and Water Conservation Department both recommended that zebra mussel plate samplers be deployed at all five boat landings and not just Licensee's dam.

Licensee has agreed to provide plate samplers for all five boat landings on the Flowage and the Trude Lake Landing with the understanding that Iron County's seasonal employee(s) or WDNR personnel would deploy and monitor the samplers. Licensee will deploy and monitor the sampler at the Turtle-Flambeau Dam.

2) The TTFTLPOA suggested that Licensee provide additional funding or assistance for purple loosestrife monitoring and control.

Licensee agrees to cooperate with the stakeholders to ensure that loosestrife monitoring and control efforts continue on an annual basis. This may include reasonably cost-sharing boat gas and/or supplies in addition to the provisions stipulated in section 5.0. To address the need for personnel, the seasonal employee would help the TFFTLPOA's monitoring efforts.

3) The TFFTLPOA recommended that language should be included in the Plan to address additional invasive species that may pose a threat in future.

Licensee and the stakeholders agreed to address future invasive species by cooperatively implementing the WDNR's Rapid Response Program consistent with NR 40.

4) The TFFTLPOA requested that the wording "...contingent upon the annual funding of a second position." be removed from section 4.7 (now section 5.0).

Licensee has agreed to remove the above-referenced wording. At a minimum, this would ensure the funding of a least one seasonal position to monitor, educate and control for invasive species.

5) Iron County recommended that zebra mussel samplers be placed at all the boat landings.

This measure has been agreed upon as indicated in Item 1 above.

6) Iron County recommended a rapid response be included in the Plan when/if eurasian water milfoil is detected in the Flowage along with Licensee's role.

The WDNR's Rapid Response Program will be implemented when/if Eurasian water milfoil is detected as indicated in item #3 above. Licensee will provide reasonable cost-sharing to implement the response and/or follow-up monitoring and control measures.

7) Iron County recommends that the contingency wording "...contingent upon the annual funding of a second position." be removed from section 4.7 (now section 5.0).

Licensee has agreed to this request as indicated in item #4 above.

8) Iron County suggested that the boat inspections be conducted at the two most popular landings but should also include the other landings as well.

The primary focus of the seasonal employee(s) will be at Springstead Landing and Fishermen's Landing, however; Licensee agrees that education and monitoring should be performed at the other landings as time and personnel allow.

9) The WDNR suggested a theme of cooperation among Licensee, TFFTLPOA, WDNR and Iron County be included in the plan.

A cooperative effort among the stakeholders is emphasized throughout the plan.

10) The WDNR recommended the plan focus on education and prevention.

Licensee agrees that the primary focus should be on education and prevention as discussed in section 5.0 of the plan.

11) The WDNR would like the plan to include other species including quagga mussel, curly leaf pondweed, VHS, spiny water flea and fish species (round goby).

Monitoring for other species not specifically addressed in the plan will occur as time, funding and personnel allow. It is understood that monitoring for other species will occur to some degree through the monitoring of the primary species mentioned in the Plan and through the seasonal employees' efforts in section 5.0. Licensee agrees to address newly documented exotic species on the Flowage through the implementation of the WDNR's Rapid Response Program in cooperation with the stakeholders.

12) The WDNR recommended that terrestrial invasive species be added to the list.

Licensee will address other terrestrial invasive species as indicated in item #11 above.

13) The WDNR recommended that more control efforts be included for spotted knapweed.

In addition to allowing access to the WDNR on Licensee's lands, Licensee will also provide reasonable cost-sharing for chemical treatment on Licensee-owned lands. Licensee will also clean and inspect any of its equipment or heavy machinery that could potentially transfer the seeds of invasive terrestrials.

14) The WDNR suggested that an inventory of aquatic and terrestrial invasives be considered as funding is appropriated it the future.

Licensee and the stakeholders will share monitoring results with the Great Lakes Indian Fish and Wildlife Commission (GLIFWC) so they may update their statewide database. Licensee will also include GLIFWC personnel in the annual meeting and provide a copy of the annual report as indicated in section 7.0 and 8.0 respectively. A portion of Licensee's annual funding may also be directed toward this effort as deemed appropriate by Licensee and the stakeholders. It is further understood that the annual monitoring would essentially provide an inventory of any new invasive species that may be discovered. Licensee and the stakeholders would also cooperate with the WDNR should a more formal inventory be proposed in the future.

15) WDNR stated that any herbicide treatment on state-owned lands must be reported to the Department of Agriculture, Trade and Consumer Protection (DATCP).

Any herbicide application will be conducted by WDNR personnel or personnel under the direction of the WDNR. Licensee does not foresee any herbicide application performed by its employees.

16) WDNR recommended that Licensee's annual funding of $7,000 be adjusted to the Consumer Price Index (CPI).

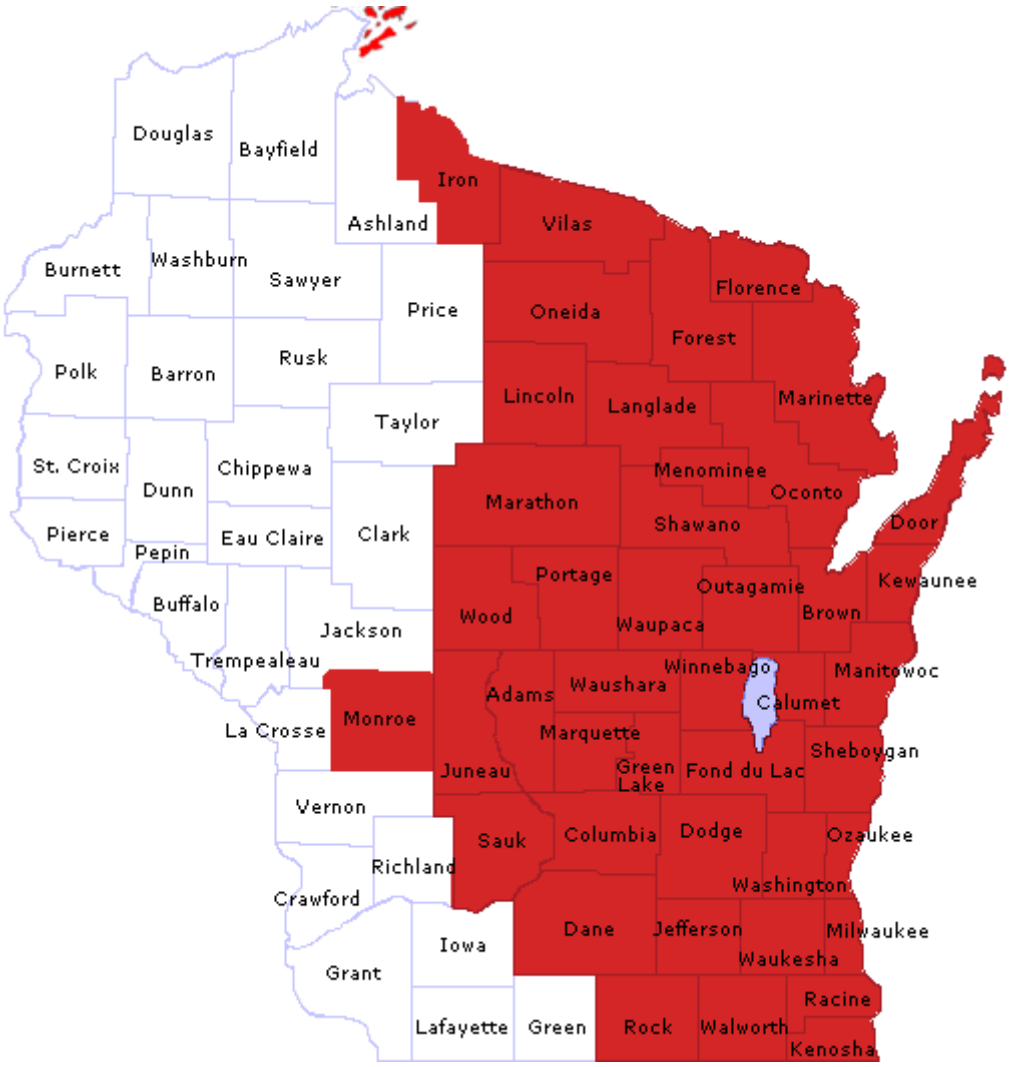
Licensee agrees with this recommendation.

17) Several stakeholders requested that Licensee increase its annual funding of $5,000.

Licensee agreed to increase the annual funding to $7,000 adjusted to the CPI.

Appendix B

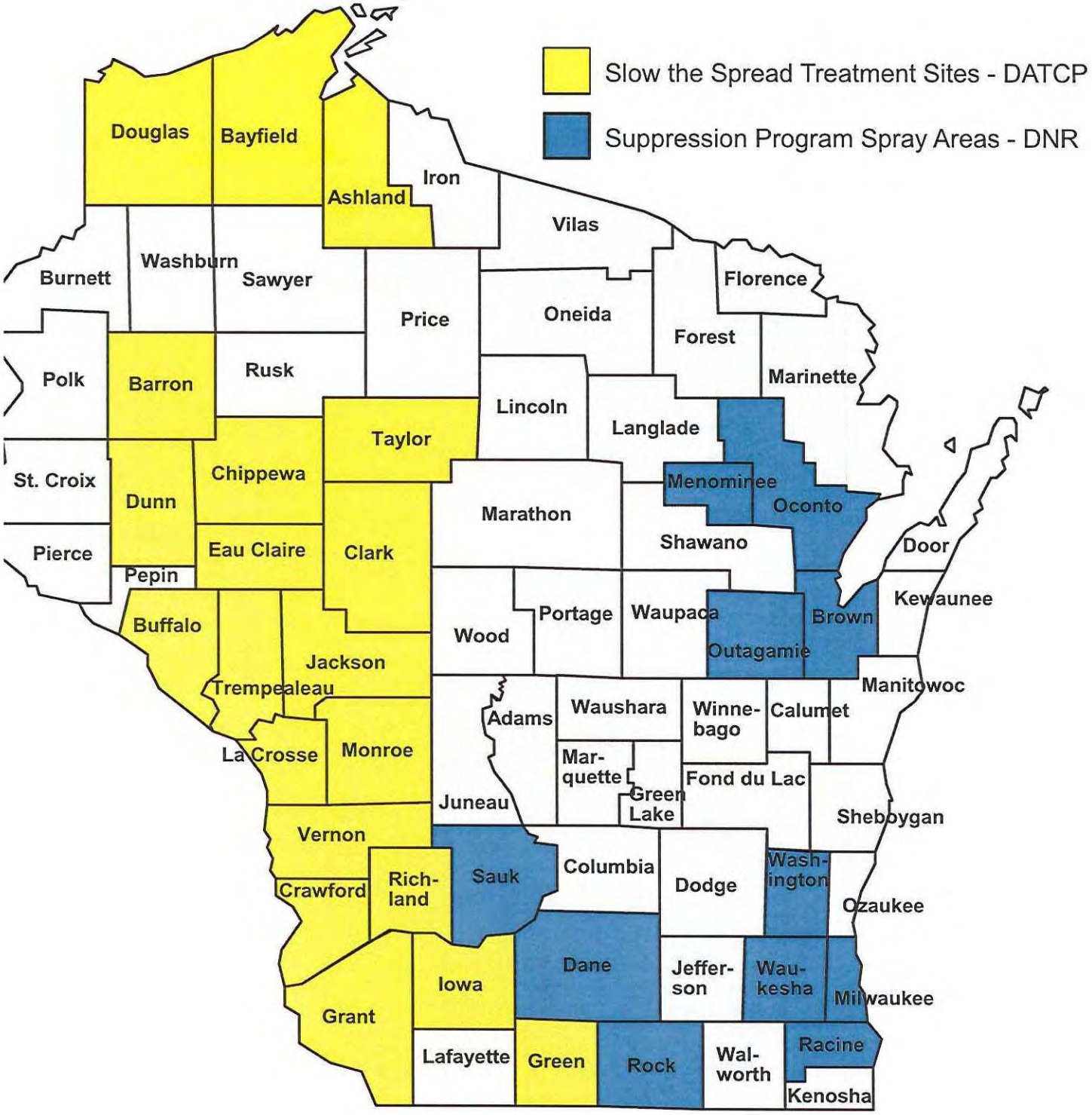
Map of Gypsy Moth Counties Under Quarantine



The gypsy moth quarantine is a system of rules administered by the USDA Animal and Plant Health Inspection Service and the Department of Agriculture, Trade and Consumer Protection. The rules are intended to prevent the spread of gypsy moth from infested areas to non-infested areas. Those counties shaded in red are under the quarantine.

Appendix C

Map of Gypsy Moth Treatment Sites and Spraying for 2010



2010 WI Cooperative Gypsy Moth Program Treatment Areas

Appendix D

Zebra Mussel Decontamination Guidelines

Zebra mussel identification and life cycle

Mature zebra mussels look like small D-shaped clams. Their yellowish-brown shells have alternating light and dark stripes.

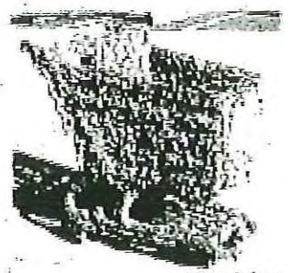
Ohio Sea Grant

Zebra mussels can reach a maximum of 2 inches in length, though most are smaller than an inch. They are typically found attached to solid objects, often growing in large clusters.

Ontario Ministry of Natural Resources

Amy Bellows, WI DNR

Zebra mussels begin as eggs, then develop into free-swimming larvae (called **veligers**), which are microscopic. The veliger photos shown above were taken with the aid of a microscope. Veligers are spread by currents; after about three weeks, they settle out and firmly attach themselves to hard surfaces, where they grow into adults. Their lifespan is typically three to five years. They begin to reproduce after a year or two - females can release up to one million eggs per year!

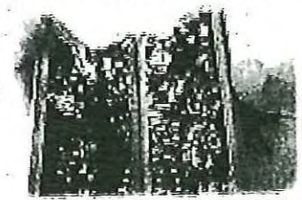


James Lubner, University of Wisconsin Sea Grant

What do zebra mussels do?

Zebra mussels are **filter feeders** that can filter large volumes of water (up to 1 Liter/day). In some cases they can filter the whole volume of a lake in a few months. They remove plankton – tiny plants and animals – from the water. What they eat (and what they don't eat) ultimately ends up on the lake or river bottom. Plankton is an important food source for young fish, native mussels, and other aquatic organisms. Zebra mussels may concentrate this food at the bottom, leaving open water species with **less to eat!**

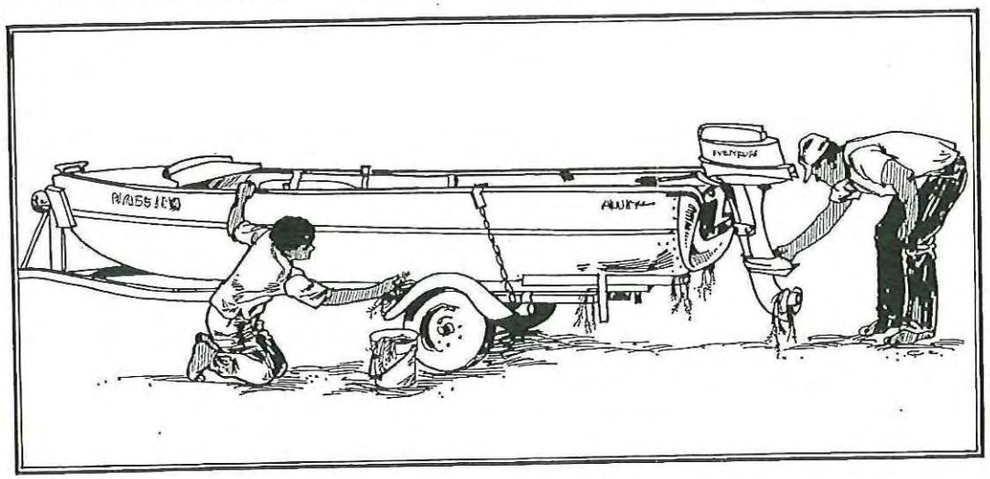
Because they are so good at filtering, zebra mussels often **make water clearer.** This may force **light-sensitive fish,** like salmon and walleye, into deeper water to seek shelter from the sun. Increased light penetration allows aquatic plants to grow in deeper water and spread to a larger area. This may help smaller fish to survive by giving them places to hide, but makes it harder for large, predatory fish to find food. **Thicker plant growth** may also cause problems for boaters and anglers.



Don Schloesser, Great Lakes Science Center, National Biological Services

Zebra mussels cause people additional problems. They **clog water intakes and pipes** – large water users on the Great Lakes spent $120 million from 1989 to 1994 to combat zebra mussels. They also **attach to piers, boatlifts, boats, and motors,** which can cause damage requiring costly repair and maintenance. Even when they die, their **sharp shells** wash up on beaches, creating foul odors and cutting the feet of swimmers.

How can I help prevent the spread of zebra mussels?



Microscopic veligers may be carried in livewells, bait buckets, bilge water – any water that's transported to another waterbody. They can also travel in currents to downstream waters. Adults can attach to boats or boating equipment that are moored in the water. They frequently attach to aquatic plants, which themselves may hitch a ride on boats and equipment. For these reasons, it is important to take the following steps to prevent the spread of zebra mussels and other aquatic invasive species while boating:

Before moving your boat from one water body to another:

- ✓ **Inspect** and **remove** aquatic plants, animals, and mud from your boat, trailer, and equipment,
- ✓ **Drain** all water from your equipment (boat, motor, bilges, transom wells, live wells, etc.),
- ✓ **Dispose** of unwanted bait in the trash, not in the water,
- ✓ **Rinse** your boat and equipment with hot (> 104˚F) and/or high pressure water, particularly if moored for more than one day, OR
- ✓ **Dry** your boat and equipment thoroughly (in the sun) for five days.

Pressure washing note:

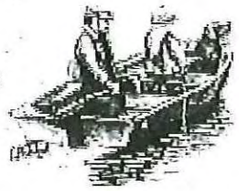
Avoid pressure washing classic and wooden boats, along with canoes and kayaks that are not made of metal. These types of boats should be drained, cleared of all plant and animal materials, and left in the sun to dry completely.

Effective May 2002, Section 30.715, WI Act 16 prohibits launching a boat or placing a boat or trailer in navigable waters if it has aquatic plants or zebra mussels attached.

Protect Your Boat

Zebra mussels attach to a variety of materials, including fiberglass, aluminum, wood, and steel and may damage a boat's finish. Veligers are extremely small and can be drawn into engine passages. Once they settle out in the engine cooling system, they can grow into adults and may block intake screens, internal passages, hoses, seacocks, and strainers. The best ways for boat owners to avoid these types of damage are:

- **Use a boatlift** to completely remove the watercraft from the water when not in use.



- **Run your boat regularly** if it is moored in zebra mussel infested waters. Run the engine at least twice a week at slow speeds (about 4-½ mph) for 10 to 15 minutes. Monitor engine temperatures – if you notice an increase, it may mean that zebra mussels are clogging your cooling system. Immediately inspect the system and remove any zebra mussels. The end of boating season is also a good time to inspect and clean the cooling system.

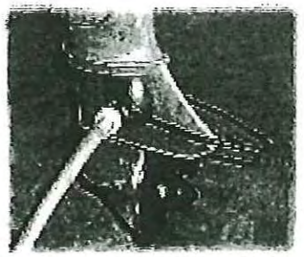
- **Lift the motor out of the water between uses if mooring.** Fully discharge any water that may still remain in the lower portion of the cooling system.

- **Tip down the motor and discharge the water when leaving a waterbody** to reduce the likelihood of transporting veligers (in water) to another waterbody.

- **Clean your boat and equipment.** Physically remove (scrape) adult mussels from your boat, trailer, and equipment by hand. Young zebra mussels and veligers may be too small to see. Wash your boat with high-pressure hot water (use water >104˚F if possible). Use high-pressure cold water if hot water is not available. *(Avoid pressure washing classic wooden boats or others not made of metal.)*

- **Apply anti-fouling paints or coatings to the hull and the engine's cooling system** to prevent zebra mussel attachment. It is best to purchase these from an area boat dealer or your local marina. Anti-fouling paints that are copper based can be used in Wisconsin, and typically need to be reapplied every one to two years. In-line strainers can also be installed in the engine's cooling system.

- **Use motor "muffs", also known as motor flushers, to remove zebra mussels and other materials from your boat engine or personal watercraft.** Clamp the motor flusher onto the lower unit over the cooling inlets on either side of the motor, and screw the nozzle of your garden hose into it. Run the boat engine for approximately 10 minutes or as suggested by the manufacturer.



Amy Bellows, WI DNR

Special note of caution for anglers

Dispose of unwanted bait in the trash - do not transfer bait or water from one waterbody to another. Larval zebra mussels or other invasive species could be present in the water with the bait.

Help prevent aquatic hitchhikers from catching a ride on your boat or equipment:

- ✓ **Inspect** and **remove** aquatic plants and animals,
- ✓ **Drain** water,
- ✓ **Dispose** of unwanted bait in the trash,
- ✓ **Rinse** with hot and/or high-pressure water, OR
- ✓ **Dry** for 5 days.

Clean Boats . . . Clean Waters

For a list of known zebra mussel infested waters, visit:
www.dnr.wi.gov/org/water/wm/GLWSP/exotics/zebra.html

Cover photo: L. Pohlod. Inset: Great Lakes Sea Grant Network
Designed by L. Pohlod, Blue Sky Design, LLC PUB-WT-383 2004

Zebra Mussel Boater's Guide

Looking to the future . . . protect your boat and our waters!

Appendix E

WDNR's Aquatic Invasive Species (AIS) Rapid Response Program

Response for Early Detection of Eurasian Water milfoil
Field Protocol

A. PRETREATMENT

1. Visual concurrence by trained DNR staff that it is Eurasian Water milfoil (EWM). If there is doubt, proceed quickly with Herbarium or DNA verification but authorize project to proceed regardless. Collect voucher specimens and send to the U.W. Stevens Point Herbarium and notify SWIMS data manager in Central Office or enter information into SWIMS for statewide listing of existing populations.

2. Use GPS and rake throws to precisely define the location of the colony or plants following the established infestation sampling protocol.

3. Consider need and ability to quarantine the area - mark beds with buoys - to help prevent spread from boating activity in consultation with area Conservation Warden and Water Management Specialist.

4. Visually survey entire lake littoral zone from a boat. Throw rakes at random points. If possible, deploy underwater survey, either SCUBA or video. This effort is best targeted after surface survey.

5. Contact Bureau of Integrated Science Services and request point/intercept grids for entire lake. Deploy DNR survey crew, or sponsor retains qualified consultant, to survey and map aquatic plants during summer peak growing season (mid June to mid Sept).

6. Sign boat landings, recruit/establish CBCW boat landing inspection program, inform and educate lake residents to recognize EWM and recruit volunteers or retain qualified consultant for ongoing monitoring.

B. TREATMENT

1. Determine if herbicide is the appropriate tool. Scattered plants may be better dealt with through hand pulling. Hand pulling in conjunction with herbicide treatments has proven the most effective way to manage and possibly eliminate pioneer infestations over time. Hand pulling can be done throughout the season and should be integrated into all post-herbicide treatment monitoring efforts. Bottom barriers may be an effective, though

untried, method for control of small isolated beds. A chapter 30 permit is required for bottom barriers.

2. If early season and plant is still actively growing, use pretreatment mapping (A2) to apply for NR 107 permit and conduct treatment using a systemic herbicide such as 2,4-D.

3. If mid to late season and plants are topped out (flowering) and reached mid-season dormancy, map bed following pretreatment protocol (A2) and prepare for spring or, fall and spring, treatment with a systemic herbicide. The decision to delay treatment needs to consider location - isolated vs. near boating traffic - the ability to quarantine and other factors that may enhance or help inhibit spreading.

   3.1 Hand pulling plants with SCUBA or snorkel divers collecting all plant fragments and disposing them inland on the shore is highly recommended at this stage.

   3.2 A contact herbicide can be used to kill apical tips /condemn fragments. This will eliminate/reduce plant biomass. Follow up treatment with systemic herbicide or hand pulling will be required to eliminate regrowth. Careful consideration of formulation and dose is needed to limit impacts to non-target native plants.

   3.3 The effectiveness of herbicide treatments on compact, small beds may be enhanced by deploying a barrier or curtain to help "hold" the chemical on plants. Most appropriate in flowing or large open water especially adjacent to deep water drop offs. (This is not an established procedure at this time - EXPERIMENTAL.)

C. POST TREATMENT

1. Following initial treatment, repeat all steps above as necessary until at least one season year after plant is no longer detected.

2. Maintain monitoring/surveillance, education and CBCW efforts indefinitely.

3. Obtain plant survey results and develop an aquatic plant management plan.

Early Detection and Response Procedures

April 2008 Draft #3

Purpose: Provide procedural guidance for Aquatic Invasive Species (AIS) Control grants awarded under NR 198.30 Early Detection and Response Projects. These projects are intended to control pioneer populations of aquatic invasive species before they become established.
"Pioneer population" means a small population of aquatic invasive species in the early stages of colonization, or re-colonization, in a particular water body or portion thereof. For rooted aquatic plants, a pioneer population is a localized bed that has been present less than 5 years and is less than 5 acres in size or less than 5% of lake area which ever is greater.
"Sponsor" means a grant-eligible organization or local unit of government.

Sponsor

1. Contacts the department after finding suspected AIS in a waterbody.
2. Collects an entire intact adult specimen and submits it to the department within 3 days or otherwise facilitates department verification.
3. Works with department staff to develop a response plan.
4. Applies for permits if required.
5. Conducts or contracts for control of the aquatic invasive species through means authorized by the department in the response plan.
6. Completes grant application requirements for the project and submits it to the department.
7. Pays all costs of the control as defined in response plan, reports to the department the results of the completed project and request s reimbursement for the state's share of the project.

Region Staff

1. Advises the sponsor on how to collect and voucher specimen and makes arrangements for its delivery or conducts onsite visit.
2. Verifies the species is an invasive.
3. Visits site and determines that it is a pioneer population and that an early response is appropriate.
4. Consults with sponsor and appropriate expertise within and outside the department and writes or facilitates development of response plan. Determines appropriate control method including pre- and post-control monitoring, follow-up control and reporting requirements.
5. Determines sponsor eligibility for AIS Early Detection and Response grant.

6. Authorizes project verbally and sends confirmation email to the Bureau of Community Financial Assistance and copies regional Environmental Grant Specialist.
7. Follows up in writing prescribing the control response, specifying the conditions and procedures under which the project may take place, issues any required permits and includes grant application and guidance.
8. Provides on-site supervision/observation of control treatments and provides technical assistance as needed throughout the project.
9. Reviews report and authorizes grant reimbursement.

Appendix F

Chapter NR 40 of the Wisconsin Administrative Code

Wisconsin's Invasive Species Identification, Classification and Control Rule Chapter NR 40

The Rule

Chapter NR 40 [PDF exit DNR]

Invasive Species Identification, Classification and Control

Forest overrun with garlic mustard.

The Legislature directed the Department to establish a statewide program to control invasive species, and to promulgate rules to identify, classify and control invasive species for purposes of the program.

Chapter NR 40, Wisconsin's Invasive Species Identification, Classification and Control Rule helps citizens learn to identify and minimize the spread of plants, animals and diseases that can invade our lands and waters and cause significant damage.

- Invasive species are non-native plants, animals and pathogens whose introduction causes or is likely to cause economic, or environmental harm or harm to human health.
- Invasive species can alter ecological relationships among native species and can affect ecosystem function and structure, economic value of ecosystems, and human health.
- There are many non-native plants that are invasive in forests, grasslands, wetlands, lakes and rivers. They displace native species and disrupt wildlife habitat.
- Invasive species threaten Wisconsin's traditions, environment and economy in every corner of our lands and waters.

Last Revised: Tuesday September 08 2009

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Chapter NR 40 - What Is It?

The Rule

Chapter NR 40 [PDF exit DNR]

Invasive Species Identification, Classification and Control

The emerald ash borer is an exotic insect that is killing ash trees in the Great Lakes region at an alarming rate.

The rules are aimed at preventing new invasive species from getting to Wisconsin, and enabling quick action to control or eradicate those here but not yet established.

The Chapter NR 40 rule creates a comprehensive, science-based system with criteria to classify invasive species into 2 categories: "*Prohibited*" and "*Restricted*". With certain exceptions, the transport, possession, transfer and introduction of Prohibited species is banned. Restricted species are also subject to a ban on transport, transfer and introduction, but possession is allowed, with the exception of fish and crayfish. DNR may issue permits for research or public display of any listed invasive species. For species other than invasive fish and crayfish, permits may also be issued for any other purpose.

Measures to Allow Fast Action

The rules are aimed at preventing new invasive species from getting to Wisconsin, and enabling quick action to control or eradicate those here but not yet established. With landowner permission or a judicial inspection warrant, DNR may inspect for, sample and control Prohibited species only. People found responsible for a Prohibited species' presence on property they own, control or manage may be ordered to carry out approved control measures. If a control order is not followed, and DNR takes control measures, DNR may seek cost-recovery. Control of Restricted species is encouraged, but not required.

Incidental or unknowing transport, possession, transfer or introduction of a listed invasive species without a permit is exempt if DNR determines that it was not due to the person's failure to take reasonable precautions.

Preventive Measures

The rules also include preventive measures that are not species-specific but instead address common pathways that may allow invasives to spread. These measures complement existing statutes and rules such as the VHS rules and include requirements to remove aquatic plants and animals and drain water from vehicles, boats, trailers and equipment upon removal from the water and to remove aquatic plants and animals from any vehicle, boat, trailer or equipment before placing it in any water of the state or transporting it on a highway.

Why the Rule is Needed

Without this rule, different invasive species groups are not treated consistently, making concerted action less likely. Federal and state laws provide regulations and resources for early detection and quarantine for invertebrates and disease-causing organisms. State law limits the release of non-native fish and other vertebrates into the wild. However, there are very few federal or state laws that relate to non-native plants. Local noxious weed ordinances are erratic and often uneven in their implementation. This rule allows the Department to have more consistent authority and actions between the species groups and to provide one clear, state-wide law that is reasonable and feasible.

Last Revised: Friday September 04 2009

Wisconsin Department of Natural Resources

Back

Wisconsin's Invasive Species Identification, Classification and Control Rule Chapter NR 40 Definitions

Prohibited
: invasive species that are not currently found in Wisconsin, with the exception of small pioneer stands of terrestrial plants and aquatic species that are isolated to a specific watershed in the state or the Great Lakes, but which, if introduced into the state, are likely to survive and spread, potentially causing significant environmental or economic harm or harm to human health.

Restricted
: invasive species that are already established in the state and cause or have the potential to cause significant environmental or economic harm or harm to human health and includes established nonnative fish and crayfish, fish in the aquaculture trade, fish in the aquarium trade, and non-viable fish species.

Caution
: species that cannot be placed in other categories such as prohibited, restricted, or non-restricted because they are not currently found in the state, appear to be invasive only regionally, or their potential for invasiveness in Wisconsin is unknown. Not proposed to be regulated at this time.

Non-restricted
: species that may have some beneficial uses as well as negative impacts on the environment but are already integrated into Wisconsin's ecosystems so that control or eradication is not practical or feasible. Not proposed to be regulated at this time.

Pending
: species that we are not assessing for classification at this time, but plan to assess in future rule revisions. Not proposed to be regulated at this time.

SAG
: Species Assessment Group

Council
: Wisconsin Council on Invasive Species

Aquatic Invasive Species Statute Quick Guide as of December 2009

NR40.07(1)- Failure to notify the DNR of the escape of a **restricted** invasive fish species within 24 hours.
Minimum Penalty: $263.50 Maximum Penalty $389.50

NR40.07(2)- Failure to remove all aquatic plants or aquatic animals attached to any vehicle or drain all water from any boat, trailer or other equipment or gear immediately after their removal from the water bank or shore and before leaving a boat launch area or associated parking area.
[see also NR 19.055] **Minimum Penalty: $200.50 Maximum Penalty $389.50**

NR40.07(3)- Transporting over land from another state any vehicle, boat, boat trailer, boating or fishing equipment, or other equipment or gear of any type for use on any water of the state or its bank or shore without first removing all attached aquatic plants and aquatic animals and draining all water before entering the state.
[see also NR 19.055] **Minimum Penalty: $200.50 Maximum Penalty $389.50**

NR40.07(4)(a)- Launching or placing a vehicle, boat, boat trailer, equipment or gear of any type into waters of the state, which has an aquatic plant or aquatic animal attached.
[see also s. 30.07(2)(a)] **Minimum Penalty: $169 Maximum Penalty $389.50**

Note: NR 40.07(4) does not require the person to have "reason to believe" the aquatic plants or animals were attached. This is broader than the previous 30.715(2) statute and also applies to any "animal" not just zebra mussels.

NR40.07(4)(a)- Transporting on a public highway a vehicle, boat, boat trailer, equipment or gear of any type which has an aquatic plant or aquatic animal attached.
Minimum Penalty: $263.50 Maximum Penalty $389.50

NR40.07(6)- Using a live **prohibited** fish invasive species as fishing bait.
Minimum Penalty: $263.50 Maximum Penalty $389.50

NR40.07(6)- Using any live non-native crayfish as bait for fishing on inland or outlying waters, except for rusty crayfish that are dead, or live rusty crayfish on the Mississippi River.
[See also NR 19.27(4)(a)1.] **Minimum Penalty: $263.50 Maximum Penalty $389.50**

NR40.07(7)- Introducing a nonnative aquatic plant, algae or cyanobacteria species in any water of the state, except waters of the state that are artificial, entirely confined and retained upon the property of a person, do not drain to other waters of the state, are not subject to intermittent or periodic flooding, and are not connected to any other water of the state.
[Similar to NR 109.08(2) & s. 23.24(3)(a)1., Stats.] **Minimum Penalty: $ 389.50 Maximum Penalty $389.50**

For all the above NR 40 violations, a 2nd offense within 5 yrs is a crime with a min. fine of $700 & max. of $2,000.

30.07(2)(a)- Illegal to place or operate a vehicle, seaplane, watercraft, or other object of any kind in a navigable water if it has any aquatic plants or aquatic animals attached to the exterior of the vehicle, seaplane, watercraft, or other object.
Minimum Penalty: $295.00 Maximum Penalty: $767.50

30.07(2)(b)- Illegal to take off with a seaplane, or transport or operate a vehicle, watercraft, or other object of any kind on a highway with aquatic plants or aquatic animals attached to the exterior of the vehicle, seaplane, watercraft, or other object.
Minimum Penalty: $232.00 Maximum Penalty: $767.50

NR19.05(3)- Illegally transport live fish or live fish eggs away from any water or its bank or shore.
Minimum Fine: $343.50 Maximum Fine: $2,152.50

NR20.08(6)- Posses or use live fish or fish eggs for use as fish bait if not imported in compliance with DATCP requirements (This means if people are using any minnows purchased in **any** state other than Wisconsin!).
Minimum Fine: $1,147.50 Maximum Penalty: $2,152.50

NR20.08(3)- Release any unused bait into any waters.
Minimum Fine $645 Maximum Penalty: $2,152.50

NR20.08(7)- Illegal possession of dead fish, frogs or crayfish as fishing bait.
Minimum Fine $208.40 Maximum Penalty: $2,138

Note: This is not a complete list of all aquatic invasive species statutes, but is a quick guide to the most commonly used AIS statutes in Wisconsin as of the date listed at the top of the page. NR40 laws should be used as a reference before any other AIS Natural Resource (NR) Administrative Codes.

Dec. 2009 Deputy Conservation Warden Mac Hannon

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