

Wisconsin Valley Improvement Company

Aquatic Invasive Species Plan of Action

Introduction

In Wisconsin Valley Improvement Company's (WVIC) 2006 *Fish and Wildlife Management Plan Update Report* (Section 4.4.6 Aquatic Invasive Species-AIS) WVIC reported the Wisconsin DNR (WDNR) emphasized the growing AIS problem and summarized programs it was developing and implementing to address this issue. Many lake associations and some counties in the project area had also become actively involved in the WDNR AIS programs which, in large part, are supported by WDNR grants.

WDNR requested that WVIC meet with its AIS Team to discuss what additional assistance WVIC may provide in addressing the AIS issue as it relates to Project reservoirs. WDNR suggested that WVIC develop a plan of action for activities WVIC would agree to implement. To develop such a plan, WVIC asked the WDNR to define the scope of the AIS program. This would provide WVIC some direction for developing a plan in which it could provide a reasonable and meaningful contribution to the AIS problem. WDNR subsequently contacted WVIC in 2010 to attend a meeting with the AIS Team to begin development of an AIS Plan of Action. The development of this AIS Plan is the result of WVIC/WDNR consultations.

Wisconsin AIS Rulemaking

Wisconsin has been proactive over the past several years in addressing the statewide AIS issue. The Wisconsin State Legislature directed the WDNR 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.

WDNR promulgated a new administrative rule Ch. NR 40, "Invasive Species Identification, Classification and Control" to classify and regulate AIS. The rule was developed over a five year period by a team of WDNR staff specialists and the Wisconsin Council on Invasive Species working with an advisory group. NR 40 became effective September 2009. The rule classifies AIS into two categories - prohibited and restricted, requires several preventive measures to limit the spread of AIS, and includes permit and enforcement provisions. Importantly, the rule helps citizens learn to identify and minimize the spread of plants, animals and diseases that can invade the lands and waters and cause significant damage.

Along with this new AIS rule, the state legislature recently passed a bill called Act 55 that helps to fill in the gaps in existing invasive species laws that the WDNR did not have authority to cover. Act 55 also expanded existing laws and NR 40 regarding transportation of aquatic plants and animals. Together, Act 55 and NR 40 set preventive measures in place making it illegal to transport or launch vehicles, watercraft or any other equipment (except weed harvesters) that have aquatic plants or animals attached. Conservation wardens and other law enforcement officials can order the removal of aquatic plants and/or animals and can issue citations for violations. Keeping AIS contained and minimizing their spread is a major goal of the rule. Another critical part of NR 40 and Act 55 is providing educational information and training for the public to identify AIS and therefore enable it to help with early detection (report sightings) and control.

In 2009, the WDNR also revised Ch. NR 198 "Aquatic Invasive Species Prevention and Control Grants" in response to increased legislative funding for the AIS statewide program. This rule establishes procedures for awarding cost-sharing grants to public and private entities including local governmental units for the control of AIS. Grants made under this program assist local governments and other interests to prevent and control the spread of AIS in waters of the state, provide information and education on AIS

topics, and assist in planning and conducting projects that will prevent the introduction of AIS into waters where they currently are not present, controlling and reducing the risk of spread from waters where they are present, and restoring native aquatic communities.

The revised rule increased the cost share rate to up to 75% of the cost for eligible projects (maximum varies from \$20,000 to \$200,000 annually depending on the specific project), expanded the eligible recipients of AIS grants, allowed applicants proposing chemical treatments to control invasive species to receive higher priority if their projects achieved another environmental protection goal, e.g., restoring habitat or helping control pollution. Another revision allowed communities that are successfully following state rules and managing existing populations of AIS to recover the aquatic plant management permit fees.

The Wisconsin State legislature has responded to the need for aggressively addressing the statewide AIS issues. Over the last several years it has gradually increased AIS grant funding and has established a permanent annual appropriation of \$3.75 million. These funds are administered by the WDNR in compliance with Ch. NR 198. Eligible projects funded by these grants include AIS education, watercraft inspection activities at boat landings, pioneer AIS population control, established AIS populations control and restoration of native aquatic plants.

In addition, \$2.2 million is appropriated by the State for Lake Protection and Planning Grants, which can be applied, for example, toward implementation of Lake Management Plans, which are a pre-requirement for AIS population control projects.

Wisconsin AIS Funding

Since Ch. NR 198 "Aquatic Invasive Species Prevention and Control Grants" was originally enacted in 2005 and following its revision in 2009 the State has awarded over \$1.8 million in State share dollars for combating AIS on WVIC Project related reservoirs through various sponsorships. This represents approximately 75 percent of the funds actually spent since State grants require a 25% sponsor match, that can be cash, volunteer match time (at \$12/hour), or a combination of the two. Therefore the total amount of money spent on AIS projects is higher than the \$1.8 million State contribution. The recipients of these grants in WVIC's Project area have been Vilas, Oneida and Lincoln Counties, various Towns within these counties and Lake Associations and Lake Districts including:

- Lac Vieux Desert Lake Association (Lac Vieux Desert Reservoir)
- North and South Twin Lakes Riparian Association and Town of Phelps (Twin Reservoir)
- Long Lake of Phelps Lake District, Long Lake Association of Vilas County, and Big Sand Lake Property Owners Association (Long-on-Deerskin Reservoir)
- Town of Washington (Lower Nine Mile Reservoir)
- Three Lakes Waterfront Association and Town of Three Lakes (Burnt Rollways Reservoir)
- Little St. Germain Lake Protection and Rehabilitation District and Town of St. Germain (Little St. Germain Reservoir)
- Town of St. Germain (Big St. Germain Reservoir)
- Town of Schoepke (South Pelican)
- Minocqua/Kawaguesaga Lake Protection District, Tomahawk Lake Association, Mid Lake Management and Protection District and Town of Lake Tomahawk (Minocqua Reservoir)
- Lake Nokomis Concerned Citizens and Deer Lake District (Rice Reservoir)

The majority of AIS projects these agencies and lake organizations are sponsoring are directed at Eurasian water-milfoil and/or curly-leaf pondweed containment, control or prevention, two of the most pervasive AIS. All of the WVIC natural-lake reservoirs that currently have populations of Eurasian water-milfoil and/or curly-leaf pondweed are being sponsored. In addition one man-made reservoir (Rice) has also received sponsorship as listed above. The scope of work encompassed by these AIS projects includes developing lake management plans and AIS education, prevention, planning, monitoring, management activities, public involvement and recreation user surveys. Other AIS that occur throughout Wisconsin and WVIC Project Reservoirs (Table 1), include Rusty crayfish, Chinese mystery snail, Banded mystery snail, freshwater jellyfish and rainbow smelt. These species are being

monitored and controlled to the extent possible by the WDNR and sponsors on a more limited basis. WDNR and WVIC have also been actively engaged in monitoring and controlling purple loosestrife within the Project area.

WVIC “AIS Plan of Action”

WVIC is sensitive to the magnitude of AIS related problems and the potential impacts to the native aquatic flora and fauna within the Project area. The 21 reservoirs WVIC operates total 61,265 surface acres. Since 1993, or for the past 18 years, WVIC has been actively engaged in addressing various AIS issues within its Project boundary and has been voluntarily participating in WDNR AIS monitoring and education/public information programs. These voluntary actions have been in addition to the requirements of Article 414 of WVIC’s 1996 FERC License as discussed in Section 4.4.5 of the *Fish and Wildlife Management Plan (FWL Plan)*. Section 4.4.5 addresses WVIC’s Purple Loosestrife Monitoring and Control Plan.

Following consultation with the WDNR in 2010, WVIC agreed to formalize its voluntary AIS programs and offered to also provide monetary assistance to WDNR as outlined below. These actions would be in addition to continuing the Purple Loosestrife Monitoring and Control Plan already included in WVIC’s 1997 *FWL Plan (updated in 2001 and 2006)*.

WVIC Proposed AIS Programs

- 1) **Purple Loosestrife:** WVIC, with approval from the WDNR, implemented a purple loosestrife monitoring and control program in 1996. The program involved chemical control of loosestrife at WVIC’s man-made reservoirs. In compliance with WVIC’s 1996 FERC license, the purple loosestrife control plan became a part of WVIC’s FERC approved 1997 *FWL Plan*. The chemical control program continued through 2008 when WVIC, with WDNR and U.S. Fish and Wildlife Service (US FWS) approval, filed a request with FERC to amend its *FWL Plan* with a Modified Purple Loosestrife Control Plan. The Modified Plan included terminating the chemical control aspect of the Plan and implementing biological control. FERC approved this amendment request June 16, 2009 (“Order Amending Purple Loosestrife Control Plan”). WVIC will continue purple loosestrife monitoring and biological control as outlined in the FERC Order and Modified Plan. WVIC has also purchased purple loosestrife brochures from the WDNR and distributed them through mailings and personally to riparians with purple loosestrife bordering their property. The brochure explains the undesirable characteristics of purple loosestrife and measures to control it. WVIC has posted purple loosestrife public information bulletins on its boat landing bulletin boards and cooperated with the WDNR in posting purple loosestrife information “Warning Signs” at its public boat landings.
- 2) **Zebra Mussels:** WVIC will continue to conduct zebra mussel monitoring at three of WVIC’s man-made reservoirs following WDNR sampling protocol. This will involve monthly monitoring (May – October) and filing annual reports with the WDNR. WVIC has been conducting zebra mussel monitoring since 1993. Zebra mussels do not currently exist in any WVIC Project reservoirs.

As recommended by the WDNR, WVIC will collect a water sample for calcium analysis from each of the monitoring lakes listed in WVIC’s Water Quality TSI Monitoring Program. Calcium concentrations are one indicator used to determine the suitability of a water body for successful zebra mussel habitation. The calcium analyses will include 32 water bodies within the 16 natural-lake reservoirs and the five man-made reservoirs (11 sampling sites) for a total of 43 sites. The water sample will be collected one time during the next 5-year *FWL Plan* period (2012-2016) and tested for calcium, an important mineral for zebra mussels. The data will be submitted to the WDNR, Michigan DNR (MDNR—regarding Lac Vieux Desert Reservoir), U.S. Fish and Wildlife Service (USFWS) and the U.S. Forest Service (USFS) at the end of the monitoring year.

- 3) **Eurasian Water-Milfoil:** WVIC will continue inspecting watercraft for Eurasian water-milfoil at its Burnt Rollways Boat Hoist in cooperation with the WDNR sponsored “Clean Boats, Clean Waters” Program. WVIC has been inspecting watercraft since 2004. This effort involves inspecting all

watercraft (1,700 to 1,900 annually) being transported between the WVIC Burnt Rollways Reservoir (chain of 20 lakes) and the Eagle River Chain-of-Lakes and removing any aquatic plants from watercraft and properly disposing of such. These efforts support the WDNR containment initiative to prevent transport of AIS between water bodies. WVIC cooperates with the WDNR in the placement of public information posters and “Warning Signs” at the boat hoist and at the adjoining WVIC boat landing. “Clean Boats, Clean Waters Program” volunteers also provide support at the hoist by assisting in boat inspections, talking to the public about AIS prevention and containment and disseminating AIS brochures.

- 4) **Other AIS:** WVIC will continue to document and report any new AIS observations during routine field studies such as, water quality monitoring, erosion monitoring, shoreline stabilization projects, and recreational use surveys to WDNR and USFWS. The information is used by the WDNR to update the AIS “Warning Signs” at the public boat landings for containment purposes and toward the prevention of spreading AIS to other water bodies.

WVIC will also continue to document and report any observed exotics such as rusty crayfish and Rainbow smelt during routine fishery surveys to the WDNR and USFWS.

- 5) **AIS Signage:** WVIC will continue to cooperate in posting WDNR public information signs, e.g., “AIS Warning” posters at WVIC public boat landings and “AIS Warning” boat bumpers at WVIC docks/piers.

In addition to the above monitoring programs, WVIC will provide monetary assistance (\$60,000) to WDNR to help further combat AIS issues associated with WVIC’s Project Reservoirs as described below. The funds would be allocated annually (\$12,000/year) to WDNR over a 5-year period beginning in 2012 and continuing through 2016.

WVIC believes this Plan would provide a reasonable and meaningful contribution to further assist WDNR in mitigating the negative effects of AIS, particularly Eurasian water-milfoil (EWM). EWM has become one of the more prominent and pervasive AIS negatively affecting aquatic resources and recreation throughout the State of Wisconsin, including WVIC’s project area. Other AIS could also be considered in addition to EWM.

Proposed Funding Activities

Funds contributed by WVIC could be allocated to one or more of the following activities with the priorities agreed upon between WVIC and WDNR:

- 1) WDNR Limited Term Employees (LTE’s) to conduct boat inspections for AIS and distribute educational information at selected WVIC public boat landings. This will aid in helping contain AIS and control the spread of AIS into unaffected water bodies as well as from affected water bodies;
- 2) WDNR LTE’s to conduct surveys for zebra mussel veligers and/or spiny water fleas on WVIC operated project reservoirs (none are currently present);
- 3) Clean Boats, Clean Waters Program - Volunteer Watercraft Inspection Program sponsored by WDNR and UW-Extension and Wisconsin Association of Lakes;
- 4) Citizen Lake Monitoring Network – Volunteer monitoring of lake water quality, as well as monitoring for AIS, such as EWM near boat landings and zebra mussels;
- 5) Development and printing of public educational/informational AIS brochures;
- 6) Detection surveys focusing on boat landings that could include herbicide treatments for containment purposes and to prevent transfer to other water bodies with post-treatment monitoring/evaluation;
- 7) AIS signage at WVIC public boat landings;
- 8) Assist with developing AIS monitoring protocol for use at boat landings;
- 9) Public Service Announcements; and
- 10) Other AIS considerations.

Protocol for Determining Activities and Annual Funding Allocation

WVIC and WDNR will meet in early spring each year beginning in 2012. The purpose of this meeting will be to identify the priorities (activities) to implement for that year where WVIC funding would be allocated. WVIC and WDNR will develop selection criteria for determining the AIS to be addressed and the WVIC reservoirs where activities would be implemented. For example, should man-made reservoirs, with limited riparian representation such as Rainbow and Willow, receive priority for some activities?

Because of the dynamic nature of AIS and associated negative impacts on various natural resources and recreation, priorities (activities) may vary from year to year as well as the reservoirs where the activities would be implemented. WDNR's experience in addressing the specific areas of concern will be valuable to help guide effective implementation of priority projects.

WVIC and WDNR will develop methods to measure the success of activities/projects implemented. For example, the number of boats inspected for EWM at boat landings would be counted, and the number of boats and trailers with and without aquatic plants attached entering and departing from the boat landing would be counted. This information would be compared to data from previous statewide monitoring efforts. Success is measured by an increase in the number of boats and trailers without attached aquatic macrophytes (an indicator of heightened public awareness of AIS issues). AIS education/information brochures would be provided to recreationists.

WVIC and WDNR will meet again in late-fall each year to determine the success of the activities/projects implemented and draft a report describing the results. The report will be submitted to FERC by December 31 each year.

The WVIC-WDNR AIS team will meet at the end of the five-year period in 2016. The purpose of this meeting will be to evaluate the effectiveness/success of WVIC's financial contribution and for consideration of WVIC's continued financial assistance in the next five-year update (period) of WVIC's *FWL Plan*. A final report will be drafted by the WVIC-WDNR AIS team and submitted to the agencies for review and comment and then filed with FERC.