FLORENCE COUNTY INVASIVE SPECIES MANAGEMENT PROGRAM 2010 PROGRESS REPORT

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ABSTRACT:

The Florence County Invasive Species Management Program Aquatic Invasive Species (AIS) grant project was designed to develop and implement AIS educational outreach and collect baseline surface water data, including aquatic invasive species distribution within Florence County. All project activities were accomplished by local volunteers and Florence County Land Conservation Department staff.

Educational outreach was accomplished through several workshops and presentations, articles, flyer distribution, and an electronic mailing list. Project staff developed a grassroots door-to-door CBCW recruitment campaign that provided an additional outlet for educational outreach. Interagency cooperation provided an outlet for a hands-on purple loosestrife biological control project and a multi agency display at the Florence County Fair.

Surface water data was collected on nearly all publicly accessible and some private waters in Florence County. In 2009, monitoring identified seven new populations of AIS. In 2010, monitoring identified three new AIS populations.

This is a progress report for project activities accomplished in 2010. The project will be expanded upon over the next one to two years.

BACKGROUND:

Florence County recognizes preventing the spread of invasive species as a priority. The objectives of the second goal in the 2006 Florence County Land and Water Resource Management Plan are:

- 1. Slow the spread of invasive species and lessen their impacts to local land and water resources.
- 2. Support seeking grant funding and sharing information in cooperation with the state's efforts to control the spread of invasive species.

To support these objectives, Florence County applied for and was awarded DNR grant Project Number AEPP-151-06 in 2006. Project activities included coordinating Clean Boats, Clean Waters watercraft inspections, lake monitoring, and educational outreach.

In 2008, Florence County applied for and was awarded DNR grant Project Number AEPP-131-08, *Florence Countywide AIS Programming*, in May 2008. Project activities included hiring an Invasive Species Program Manger, coordinating Clean Boats, Clean Waters watercraft inspections, lake monitoring, educational outreach, and developing and distributing a healthy shoreland living packet.

To continue building upon previous efforts, the county applied for and received DNR Project Number AEPP-176-09 Florence County Invasive Species Management Program. Project activities include AIS educational outreach, prevention, and planning. This is a progress report for Grant Project AEPP-176-09 activities accomplished in 2010. The 2009 progress report may be found in Appendix A.

PROJECT GOALS:

The cumulative goal for this project is to expand upon the current county-wide invasive species program that will provide further education to the public, prevent additional AIS introduction and spread, and plan for long term lake and river management.

Comprehensive Educational Strategy

Objectives:

Coordinate and support Clean Boats/Clean Waters watercraft inspection program Publish informational news articles through multi-media Provide and attend public workshops and training seminars Develop public access signage Provide presentations

Prevent the Spread of AIS

Objectives:

Educate the public
Initiate supporting ordinances
Monitor lakes and rivers
Implement *Galerucella* propagation program
Participate in Cooperative Weed Management Area (CWMA) workgroups

Plan for Long Term Lake and River Management

Objectives:

Promote lake and river organizations
Assist in developing lake management planning activities/grants
Implement CWMA for Florence County
Research long term funding strategies
Link riparian landowners to federal, state, and local water protection resources

PROJECT ACCOMPLISHMENTS:

1.) Conduct Monthly CBCW workshops/trainings, recruit volunteers, implement CBCW & AIS monitoring programs

Invasive Species Program Manager, Maureen Ferry, and Watercraft Inspection Coordinator, Mari Dallapiazza, trained and organized volunteers and entered their watercraft inspection data into the Surface Water Integrated Monitoring System (SWIMS) database.

Four Clean Boats, Clean Waters (CBCW) trainings were conducted throughout the county from May through August. Two other workshops had been cancelled due to lack of interest/attendance. Workshop flyers can be found in Appendix B. A total of thirty eight volunteers and two paid inspectors were trained; the paid inspectors were Florence County Land Conservation Department (LCD) employees. Information about trainings is summarized in Table 1.

Two workshops were requested by lake associations (Lake Association of Long Lake and Lake Ellwood Association) as they have WDNR grants that are associated with CBCW activities. The other two were for the public, but received very low attendance. Due to low workshop attendance, Maureen has amended the project activities to require an annual CBCW workshop rather than monthly; however, additional workshops would still be provided for associations upon request.

Table 1. Florence County Clean Boats, Clean Waters trainings.

Date	Location	Attendance
5/01/2010	Resource center	cancelled
5/18/2010	Florence County Courthouse	2
5/29/2010	Long Lake Fire Hall	13
6/22/2010	Florence Town Hall	6
7/10/2010	Hillcrest School	cancelled
8/07/2010	Lake Ellwood	19

Volunteers donated a total of 539.16 hours organizing and conducting watercraft inspections in 2009/2010

- . Watercraft inspections were performed at the following boat landings:
 - Brule River Flowage
 - Fay Lake
 - Keyes Lake

- North Lake (Spread Eagle Chain)
- Patten Lake
- Twin Falls Flowage

Maureen was not able to send thank you letters to volunteers that were involved with the CBCW program. This could be done in winter or early spring and serve as an opportunity to reinforce the need for watercraft inspections.

Since Florence County receives boaters from Michigan, LCD staff developed a spreadsheet to easily reference AIS distribution in Michigan's Upper Peninsula (Appendix B). This may be used by watercraft inspectors while educating boaters on preventing the spread of invasive species.

To relieve pressure from existing volunteers and encourage the "culture of containment," Mari encouraged volunteers from Lake Ellwood and Frog Lake, two waterbodies with Eurasian water milfoil, to begin a door-to-door CBCW recruitment campaign. The intent was to recruit

new watercraft inspectors into the CBCW program. Mari built up on the packet that had been developed in 2009. The packet has been submitted as a deliverable and packet contents are listed in Table 2.

The Wild Rivers Invasive Species Coalition was awarded a grant from Title II (Secure Rural Schools and Community Self-Determination Act of 2000 Public Law 110-343) to fund a portable boat wash and two limited term employees in 2011 which will be shared between Florence and Forest Counties (see proposal in Appendix H). This project can be utilized to enhance the CBCW program by performing watercraft inspections and completing report forms in addition to washing boats. To maximize watercraft inspections, the employees could be separated and paired with volunteers at different landings with the boat wash stationed at landings with AIS or high traffic landings that are suitable for zebra mussels. Priority for the boat wash should not necessarily be Eurasian water milfoil landings as studies have determined that hand removal is equally, if not more, effective at preventing invasive plants than washing. However, boat washes are an effective tool for preventing the spread of zebra mussels.

In the future, a proposal could be submitted for the We Energies Mitigation and Enhancement Fund (Appendix B) to support watercraft inspection staff and educational outreach at the Brule River Flowage and Twin Falls Flowage.

Table 2. CBCW door-to-door recruitment campaign packet contents.

Florence County lakes with AIS
Florence County Lakes (fishery information)
Help Stop Aquatic Hitchhikers brochure WT-801
The Facts On Eurasian Water-Milfoil WT-781
EWM/native milfoil card WT-394
Purple Loosestrife brochure WT-799
Minnows as Bait brochure FH-240
Regulated Aquatic Inv Plants in WI WT-925-2010
General Prevention Procedures handout
DO NOT RELEASE (Sea Grant)
Florence County AIS Program brochure
Florence County Lakes and Rivers Association brochure
What is a lake association? handout
The Water's EdgeFH-428
Florence County map
CBCW brochure WT-782
2010 CBCW Workshop flyer

2.) Hire an Invasive Species Program Manager and a CBCW Program Coordinator.

The Watercraft Inspection Program Coordinator position was advertised in the Florence Mining News on March 17, 2010. Paul Tikusis, a recent M.S. graduate of Southern Illinois University-Carbondale accepted the position and began employment on May, 17 2010. While he was funded through the AIS grant funds for the Watercraft Inspection Coordinator, his main duties were conducting the lake monitoring activities described in Project Activity 4. The limited term employment agreement is available in Appendix C.

To supplement this grant program, the Florence County Board of Supervisors also approved the motion to hire an intern with funds from the Conservation On the Land Internship Program (COLIP), a federally funded program. This position was advertised in the Florence Mining News on March 17, 2010. Mari Dallapiazza, a natural resource student at the University Wisconsin-Madison and former EnviroScience employee, accepted the position and began employment on May 18, 2010. Mari's main duties were those of the Watercraft Inspection Coordinator. The limited term employment agreement is available in Appendix C. A log of Mari's daily accomplishments and the position description is available in Appendix C.

3.) Entry of Forms 3200-120 (inspection) & 3200-124 and/or 3200-130 (monitoring) onto Department website.

Mari and Maureen entered *Watercraft Inspection Report Forms 3200-130* data into the DNR Surface Water Integrated Monitoring System (SWIMS) website database. Paul and Maureen entered *Aquatic Invasives Presence/Absence Forms 3200-124* data in the DNR SWIMS website database. Paul entered secchi, temperature, dissolved oxygen, conductivity and pH data on this database.

4.) Collect Water Quality samples & conduct AIS monitoring on 50 lakes/year.

In addition to water quality/AIS monitoring, staff also conducted other AIS-related monitoring, conducted invasive plant inventory along highway right-of-way, performed point-intercept aquatic plant surveys, and assisted residual 2,4-D sampling.

Chemistry and AIS Monitoring

In 2010, Paul conducted clarity, chemistry and AIS monitoring on 48 waterbodies. In 2009 52 waterbodies were monitored. Table 3 contains a list of all monitoring stations. The following lakes that were monitored in 2009 were not monitored in 2010 either because volunteer availability or lack of necessity: Kingsford Flowage, Little Boot Lake, Menominee River (at Pine River and Cowboy Lake), Price Lake, and Robago Lake.

Clarity monitoring was conducted following UW-Extension/Wisconsin DNR Citizen Lake Monitoring Network protocols.

Chemistry monitoring included collecting dissolved oxygen, pH, conductivity, and temperature data at 3 feet intervals using a Hach HQ40D multi-parameter meter. All data was entered in the SWIMS database.

AIS monitoring was conducted following Aquatic Invasive Species Monitoring Procedures of the UW Extension Citizen Lake Monitoring Network for the following species: Chinese mystery snails (Bellamya chinensis), Hydrilla (Hydrilla verticillata), Purple loosestrife (Lythrum salicaria), Eurasian water milfoil (Myriophyllum spicatum), Curly-leaf pondweed (Potamogeton crispus), and Banded mystery snails (Viviparus georgianus).

Since LCD staff typically visit a lake only once per year, rusty crayfish (*Orconectes rusticus*) were not actively monitored, but would have been recorded if incidentally observed during the lake survey. Likewise, zebra mussel (*Dreissena polymorpha*) and quagga mussel (*Dreissena rostiformis bugensis*) monitoring was limited to checking docks and boat hulls; substrate samplers were not used.

LCD will continue to recruit and train volunteers to monitor for aquatic invasive species in the coming years, especially for zebra mussels as zebra mussels were discovered recently by a recreational diver in Keyes Lake.

Each survey was conducted with the assistance of a volunteer and the volunteer's watercraft (see photos in Appendix D). In most cases, the volunteer and watercraft were from the

waterbody being studied. The volunteer served as a local guide on the waterbody, and using their watercraft minimized the risk of spreading AIS. It also provided for an educational outreach opportunity at a more personal level.

The monitoring surveys identified three new sites of AIS (see Table 3). Specimens and *Aquatic Invasive Animal Incident Report Forms 3200-126* were submitted to the WDNR Rhinelander office. All monitoring data was entered in the SWIMS database.

Maureen has amended the project activities to sample 15 lakes per year as sampling a lake every three years is sufficient to identify trends. This will allow more time for other monitoring or educational efforts. Kevin Gauthier (DNR Lakes Management Coordinator) has offered to assist in prioritizing sampling and should be contacted to determine 2011 monitoring priorities.

Maureen was not able to send thank you letters and lake data to volunteers that were involved with the monitoring program. This could be done in the winter or early spring with an explanation of the reduction in number of lakes LCD staff will monitor annually. In addition, this is an opportunity to encourage volunteers to conduct AIS and clarity monitoring independent of LCD staff.

Table 3. New AIS populations documented in 2010.

Lake	AIS
Lake Ellwood	Banded mystery snail
Siedel Lake	Eurasian water milfoil
Keyes Lake	Zebra mussels

Other Monitoring

In 2006, UW Madison Center for Limnology documented spiny water fleas in reservoirs along the Michigamee River in Michigan. The nearest spiny water flea documentation to Wisconsin is in the Peavey Pond, which is approximately one tenth of a mile upstream from the Menominee River at Camels Clearing. Although a dam separates the Menominee and Michigamee Rivers, spiny water fleas are likely present in the Menominee River though expected in low densities. In 2009, plankton tows were conducted with a homemade plankton net to monitor for spiny water fleas on the Menominee River downstream from Peavey. In 2010, Mari assisted DNR limited term employees (LTEs) while conducting zebra mussel veliger tows and spiny water flea plankton tows periodically throughout the summer. Neither veligers nor spiny water fleas were detected.

In addition, Mari assisted DNR LTEs while conducting tows on other lakes with public access in the county. No zebra mussel veligers or spiny water fleas were detected on any of the sampled lakes.

Through networking with We Energies in 2009, Maureen learned that a suspected population of Eurasian water milfoil (*Myriophyllum spicatum*) had been discovered in the Pine River Flowage in 2006. We Energies Ecologist, Mike Grisar, indicated that a very small patch (approximately 40 stems) had been documented on the north side of the point where the Pine River becomes the reservoir. Following the discovery, heavy rains washed sediments downstream, covering the population. We Energies biologists monitor this area annually and have not observed Eurasian water milfoil since the heavy rain incident.

In early summer 2010, milfoil was collected at this site and identified as the native northern water milfoil (*Myrioplyllum sibiricum*). Upon revisiting the site for verification, a different vegetation community was observed (*Valisneria americanum*) and approximately 3 feet of sediments had buried the northern water milfoil population. This appears to be a common

occurrence as alluvial deposits accumulate at this location burying existing sediments and vegetation. It may be likely that the suspected Eurasian water milfoil has been buried and may not reappear; however, this site will be closely monitored by both WE Energies and the LCD, and reported to the WDNR when it reappears.

This led to a perceived spread and an increase in "new" populations. These populations were likely not new, but the flowers had not been noticeable due to small size or lack of flowering in the past. New records of purple loosestrife may be found in Table 5. The observation on Mud Lake (Klahn's Pond) was made by Maureen while off-duty and was not properly inventoried. This population will need to be revisited to be accurately verified and inventoried. The observations on Long Lake were inventoried by Maureen and Jim Wallen (Lake Association of Long Lake Vice President) on August 28, 2010. The observations on highways were made by Paul Tikusis in September. These populations will need to be revisited to be accurately verified (i.e. vouchered) and inventoried. All populations other than those on the shore of Long Lake have not yet been reported with Purple Loosestrife Volunteer Watch Report (Form 3200-119) and should be revisited to verify identification (i.e. voucher), location (i.e. exact GPS coordinates), and population density and extent.

Table 4. New records of purple loosestrife inventoried in 2010.

Latitude	Longitude	Area (acres)	Comments	Observer
45.741146	-88.45737	0.004	Mud Lake (aka Klahn's Pond)	M. Ferry
45.849031	-88.67645	0.0001	NW shore Long Lake	M. Ferry, J. Wallen
45.84956	-88.67165	0.0001	N shore Long Lake	M. Ferry, J. Wallen
45.847778	-88.66718	0.0001	NE shore Long Lake	M. Ferry, J. Wallen
45.81465	-88.3863	0.0002	Both sides of Hwy 101	P. Tikusis
45.72683	-88.1986	0.0002	East side of Cty N	P. Tikusis
45.73912	-88.1984	0.0001	East side of Cty N	P. Tikusis
45.82685	-88.2273	0.0001	Cty N. Hand pulled stem	P. Tikusis
45.87640	-88.2404	0.0001	Cty N.	P. Tikusis
45.90413	-88.1798	0.0001	US 2	P. Tikusis

Maureen received reports of abundant aquatic vegetation on Fay Lake that was suspected to be an invasive species. Maureen met landowners on August 28, 2010 to identify the vegetation. It was *Vallisneria americana* that was reaching nuisance levels. A meeting with the lake association, Kevin Gauthier, and Maureen was arranged to discuss aquatic plant management and lake management planning.

As previously mentioned, zebra mussels were discovered in Keyes Lake. The discovery was made by a recreational diver on August 31, 2010. The initial discovery included three adult specimens. Maureen and Kevin Gauthier began monitoring the shoreline and conducting an aquatic plant point-intercept survey with the intent to confirm the discovery. The diver also agreed to revisit the lake to collect a specimen for verification. The diver found one adult and Maureen and Kevin also found one young-of-year during the plant survey attached to a plant. The specimens were confirmed on September 21, 2010.

A regional response planning effort ensued following the confirmation and is detailed under Project Accomplishment 5, disseminate AIS information at landings, public areas and events, resorts, businesses, school districts.

In addition to the response planning effort, Maureen recruited SCUBA divers to explore the lake bed and assess the zebra mussel distribution on October 10 and 11. This effort demonstrated the usefulness of SCUBA divers in determining zebra mussel distribution. SCUBA divers may also be a useful means of early detection of zebra mussels which may be explored in the regional response planning project.

Highway Right-of-Way Monitoring

In August/September, the Florence County Highway Department partnered with the LCD to extend Paul's position and implement an invasive species mapping project along state and county highways. This project was initiated to map species identified in Wisconsin's Noxious Weed Law: Canada thistle (*Cirsium arvense*), leafy spurge (*Euphorbia esula*), and field bindweed (*Convulvus arvensis*). To expand the project scope, it was recommended that species identified in the new invasive species ruling, NR 40, be inventoried as well. NR 40 lists a number of species so in order to reduce the workload, priority species were selected (i.e. buckthorn, European swamp thistle, etc.).

Paul was directed to collect GPS coordinates either at the center or start and stop of populations and to estimate gross and infested acreage. Due to the number of species present along highways and difficulty in identifying population boundaries, Paul developed a different inventory method. While the methods Paul utilized were not standard inventory protocols, the results provide baseline presence/absence data and to some extent abundance. Voucher specimens were not a priority for the Highway Department, thus had not been collected. This could be implemented in the future in order to monitor the distribution and density of these populations; however, this project could be implemented in June/July to capture the plants during recognizable phenological stages and prior to roadside mowing. In addition, standard inventory protocols, data reporting methods (i.e. Global Invasive Species Information Network protocols), and voucher submittal could be followed.

Point-intercept Aquatic Plant Monitoring

Maureen, Mari, and Paul were sent to a DNR aquatic plant identification training on June 24 at the Kemp Natural Resources Station (see agenda in Appendix D). In 2010, four aquatic plant point-intercept surveys were completed: Siedel Lake, Frog Lake, Patten Lake, and Keyes Lake.

In response to the discovery of Eurasian water milfoil in Siedel Lake, Maureen and Mari conducted a plant survey with Kevin Gauthier on August 5. The purpose of the survey was to collect baseline data on the vegetation community and determine the abundance and distribution of Eurasian water milfoil in the lake. There was one dense population of milfoil near the northwest end of the lake. Milfoil was found throughout the littoral zone, though not dominant.

In 2009, Maureen conducted point-intercept aquatic plant surveys for Frog and Bass Lakes in order to offset the costs of obtaining a lake management plan and encourage the Frog and Bass Lake Association to begin the planning process. Following these efforts, the lake association began working with Onterra LLC, a lake planning consultant, to finalize the rapid response project and develop a planning grant project. The association used the remaining rapid response funds to fund a treatment and requested Maureen's continued support of plant surveys to offset project costs. Maureen and Mari performed a post-treatment aquatic plant point-intercept survey with the assistance of landowners Larry Yarck and Nick Baumgart on August 13, 2010.

A minor blue-green algae bloom occurred on Patten Lake in August 2009 and 2010. To mollify growing concerns and encourage the lake association to pursue a lake management plan, Maureen performed an aquatic plant survey with Kevin Gauthier on August 23 and 24, 2010. They then met with the local lake association members to answer questions and provide guidance.

In response to the discovery of zebra mussels in Keyes Lake, Maureen conducted a plant survey with Kevin Gauthier on September 2 and 8, 2010. The purpose of the survey was to collect baseline data on the vegetation community and to confirm presence of zebra mussels in Keyes Lake. The zebra mussels were first confirmed when the diver located a specimen to show Kevin and Maureen, but had been found attached to vegetation later that day. This demonstrated the potential dual purpose of plant surveys: aquatic plant assessments and AIS monitoring.

Voucher specimens of all plants encountered on all point-intercept surveys were submitted to the Rhinelander DNR office and verified by the University of Wisconsin – Stevens Point Freckmann Herbarium. All point-intercept data were submitted to DNR Science Services.

Residual 2,4-D Monitoring

The U. S. Army Corps of Engineers and WDNR began a 2,4-D residual monitoring study across the region. Florence County LCD and landowners assisted in this study by collecting samples on Frog Lake following a whole-lake liquid 2,4-D treatment. Maureen was trained with other county AIS coordinators in late April and then trained Frog Lake resident Nick Baumgart and Larry Yarck in early May (Appendix D). All samples were successfully submitted and results are being analyzed.

5.) Disseminate AIS information at landings, public areas and events, resorts, businesses, school districts.

AIS information was distributed during 42 events reaching more than 4,000 contacts (Table 6). Events included 3 fishing derbies, 5 FCLARA board meetings, 3 informational booths, 17 presentations, 8 workshops (including CBCW, CLMN, Project RED, Smart Prevention, weevilrama, etc.), distributing posters to restaurants/bars throughout the county (see photo in Appendix E), and performing watercraft inspections during the Spread Eagle Chain of Lakes' fireworks and boat parade. All materials associated with these activities may be found in the appendices. AIS publications were also made available at the Florence County Courthouse, the Florence Natural Resources and Wild Rivers Interpretive Center, Florence Sport and Bait, The Store in Long Lake, and the new kiosks at the Emily Lake, Keyes Lake, Long Lake, Lake Ellwood, Patten Lake, West Bass Lake, (East) Bass Lake, Scout Lake and Sand Lake boat landings.

Unique events in 2010 included: distributing 500 spray bottles with information on disinfecting boats, constructing an AIS website, placing new AIS signs at boat landings, hosting a Smart Prevention workshop, initiating a zebra mussel response planning effort, and communicating with the local fire department.

Since the majority of Florence County lakes are suitable for zebra mussels and boat disinfection is a primary prevention method, the LCD initiated a campaign to educate boaters on the disinfection protocols. The LCD purchased 500 chemical resistant spray bottles and labeled them with instruction on disinfection protocols (see picture Appendix E). Volunteers from the following lakes distributed the bottles to boaters during the Fourth of July weekend: Twin Falls Flowage, Spread Eagle Chain of Lakes, Lake Ellwood, Keyes Lake, Patten Lake, Fay Lake, and Long Lake. Remaining bottles were distributed by the Nine Lakes Sport and Marina in Spread Eagle. This project was overall considered a success by the LCD, volunteers, and boaters.

Maureen attended website training through Northeast Wisconsin Technical College in April and began developing an aquatic invasive species page on the Florence County website (www.florencewisconsin.com/LandConservation/ais.htm). The site contains information on AIS, the county program, volunteer programs, informational links, and current news releases.

The DNR produced new AIS signs to replace existing signs at boat landings throughout the state and requested assistance from county partners to facilitate sign placement. Florence

County agreed to post the new AIS signs at Florence County boat landings for the DNR. This involved obtaining permission from the boat landing owner, contacting Diggers Hotline, collecting the old signs, completing a boat landing inventory form, and posting the new signs (Appendix E). Table 5 summarizes the status of sign posting. Permission has not been requested from the U.S. Forest Service to place signs at Halsey, Lost, or Morgan Lakes and should be done in 2011. Completed boat landing survey forms are to be entered into SWIMS. Due to lack of time, forms completed in 2010 were sent to UW-Cooperative Extension to enter into SWIMS.

Table 5. AIS boat landing sign posting status in Florence County.

Lake Name	Township	Permission	Sign Posted
Anna Lake	Spread Eagle	Y	Y
Brule River Flowage	Florence	Y	Y
Bush Lake	Homestead	Y	-
Cosgrove Lake	Spread Eagle	Y	Y
Edith Lake	Florence	Y	Y
(East) Bass Lake	Homestead	Y	-
Ellwood Lake	Spread Eagle	Y	Y
Emily Lake	Florence	Y	Y
Fay Lake	Long Lake	Y	Y
Fischer Lake	Aurora	Y	Y
Fisher Lake	Florence	Y	Y
Frog Lake	Spread Eagle	Y	Y
Halls Creek Flowage	Homestead	Y	Y
Halsey Lake	Long Lake	-	-
Keyes Lake	Florence	Y	Y
Lake of Dreams	Tipler	Y	Y
Loon Lake	Florence	Y	-
Lost Lake	Long Lake	-	-
Menominee River @ Camels Clearing	Spread Eagle	Y	Y
Menominee River @ Sportsman Lane	Aurora	Y	Y
Menominee River @ Woods Rd.	Spread Eagle	Y	Y
Mirror Lake	Homestead	Y	-
Montgomery Lake	Spread Eagle	Y	Y
Morgan Lake	Fence	-	-
North Lake	Spread Eagle	Y	Y
Patten Lake	Florence	Y	Y
Pine River at Landing Rd.	Spread Eagle	Y	Y
Pine River Flowage (North)	Commonwealth	Y	Y
Pine River Flowage (South)	Commonwealth	Y	Y
Price Lake	Fern	Y	Y
Sand Lake	Homestead	Y	-
Sand Lake	Spread Eagle	Y	Y
Scout Lake	Homestead	Y	-
Sea Lion Lake	Florence	Y	Y
Siedel Lake	Florence	Y	Y
Twin Falls Flowage	Spread Eagle	Y	Y
West Bass Lake	Homestead	Y	Y

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Maureen hosted a Smart Prevention workshop in July 2010 using the Center for Limnology workshop design and scenario (see article Appendix K). Although there were only 7 in attendance, the workshop was considered a success as attendees prioritized resources in a manner that emphasized containment versus shielding uninfected lakes. Feedback from attendees encouraged the LCD to implement the workshop with high school students.

Zebra mussels were discovered in Keyes Lake by a recreational diver near Labor Day weekend. Following the discovery, Maureen and Kevin met with Keyes Lake residents to discuss zebra mussel biology and impacts, as well as encourage the lake association to pursue lake management planning. Following the meeting, the Keyes Lake Improvement Association selected White Water Associates, Inc. as a planning consultant (see article in Appendix K and letter in Appendix E).

Since zebra mussels have potential to impact more than one lake, a zebra mussel response committee was formed to develop a regional plan. The committee is comprised of Florence County lake residents, representatives from We Energies, and local and state governments from Michigan and Wisconsin. Due to the presence of zebra mussels in a number of lakes, the committee chose the Menominee River Watershed as the project area and developed priorities for a zebra mussel response plan. The plan includes regional education, the Keyes Lake Management Plan, and a graduate research project. In addition, White Water Associates, Inc agreed to draft an overall project proposal for the response plan. The meeting minutes and project prospectus may be found in Appendix E.

As recommended, Maureen implemented a Smart Prevention workshop with high school students in the fall where the educational activity involved the real scenario that was taking place with the stakeholders in the Menominee River watershed in response to the discovery of zebra mussels in Keyes Lake. Students were provided with a general background on zebra mussels, roles to play, and a list of options that were being discussed in developing the zebra mussel response plan and asked to prioritize the options in order to develop a response plan. The students were also informed that the stakeholder group was meeting the following day to prioritize similar options and that their decision may be integrated into the actual plan. The students were engaged because their input was requested on a current issue that was a concern in the community. This project was a tremendous success and teachers have requested similar programs take place when new AIS are found in a lake. All workshop materials may be found in Appendix E. If implemented again, a consideration should be to not assign roles to participants, but to make decisions on the individual's knowledge of the situation and community.

The Town of Commonwealth and the volunteer fire department recently received a permit to place a dry hydrant on Keyes Lake. They had expressed concerns about the function of the dry hydrant being compromised due to the zebra mussels. Maureen sent a letter indicating her intent to explore this issue and included the prevention steps that the fire departments should follow when using dry hydrants (Appendix E). Maureen then contacted fire departments in Waukesha County, where zebra mussels are established in many lakes, to determine zebra mussel impacts on dry hydrants. Few dry hydrants are present in the county; however, the Okauchee Fire Department maintains a dry hydrant on a lake with zebra mussels, Okauchee Lake. The Okauchee Fire Department replaced the metal pipe with a PVC pipe as they observed that zebra mussels are less likely to attach to PVC. In addition, as long as zebra mussels are physically removed annually, there is no impact on dry hydrant function. While this is fortunate for Okauchee Lake, it is difficult to draw conclusion since this is only one lake. While the impacts are uncertain, Maureen remained supportive of placing a dry hydrant on Keyes Lake under the stipulation that the fire department adhere to the disinfection protocols.

Table 6. AIS information distribution events.

Event	No. attn	Date	Supporting Material
Fisher Lake ice fishing derby	100	1/23/2010	11
Flatlanders Ice Fishing Derby	50	2/6/2010	
Keyes Lake Fishing derby	200	2/13/2010	
Boundary Waters Musky Club (VHS presentation)	50	2/20/2010	Article (Appendix K)
FCLARA Board meeting	20	4/13/2010	· • • • • • • • • • • • • • • • • • • •
Fox Valley Technical College students career day	50	4/16/2010	Agenda (Appendix E)
, ,			Invitation/registration, pictures
North Star Garden Conference	200	4/24/2010	(Appendix E)
Florence Natural Resources and Wild Rivers Interpretive			
Center 10 year anniversary celebration	200	5/8/2010	
N. ID. DI C	50	7/12/2010	Journal questions (Appendix
Natural Resource Education program	50	5/12/2010	E) Agenda and notes-2 pgs
FCLARA spring membership meeting	50	5/15/2010	(Appendix E)
Posters to bars/resteraunts	500	5/17/2010	Picture (Appendix E)
1 Osters to Dars/resteraunts	300	3/11/2010	Brochure (Appendix J), article
Water Protection Workshop	50	5/22/2010	(Appendix K)
Lake Association of Long Lake annual meeting	20	5/29/2010	Agenda (Appendix E)
Zane Hooderman of Zong Zane annual mooting		0,23,2010	Flyer (Appendix B), article
Clean Boats, Clean Waters workshop	13	5/29/2010	(Appendix K)
•			Flyer (Appendix B), article
Citizen Lake Monitoring Network workshop	2	6/5/2010	(Appendix K)
FCLARA board meeting	20	6/8/2010	Agenda & notes (Appendix E)
Clean Boats, Clean Waters workshop	6	6/22/2010	Article (Appendix K)
Smart Prevention workshop	7	6/26/2010	Article (Appendix K)
SECOLA fireworks	200	7/3/2010	
SECOLA July 4th boat parade	200	7/4/2010	Picture (Appendix B)
July Fourth Ski-ters show	500	7/4/2010	Picture (Appendix E)
Fourth of July disinfection bottle distribution	500	7/4/2010	Picture (Appendix E)
Project RED	8	7/8/2010	Flyer (Appendix J)
FCLARA board meeting	20	7/13/2010	Agenda, notes (Appendix E)
SECOLA annual meeting	75	7/17/2010	Agenda, letter (Appendix E)
Children's reading program	20	7/21/2010	Brochure (Appendix E)
WRISC spotted knapweed removal day	25	7/29/2010	Pictures (Appendix H)
Weevilrama	6	8/4/2010	Agenda, pictures (Appendix J)
Clean Boats, Clean Waters workshop	19	8/7/2010	
FCLARA board meeting	20	8/10/2010	Agenda (Appendix E)
Florence County Fair	200	8/28/2010	Article (Appendix K)
Patten Lake Association	20	9/4/2010	
FCLARA 10 Year Anniversary Celebration	200	9/4/2010	
Stewardship Program - zebra mussels	21	9/16/2010	Pictures (Appendix E), Article (Appendix K)
Natural Resource Education program	10	9/22/2010	Journal question (Appendix E)
Keyes Lake Improvement Association zebra mussel mtg	15	10/6/2010	Tournal question (Appendix E)
Wild Rivers Advisory Committee meeting	20	10/8/2010	Agenda (Appendix E)
Fay Lake Forest Association/Fay Lake Association	10	10/9/2010	Question (Appendix E)
We Energies	22	10/3/2010	Minutes (Appendix E)
Natural Resource Education program - field trip	40	10/12/2010	Photos (Appendix E)
Zebra Mussel response meeting	20	10/18/2010	Minutes (Appendix E)
Natural Resources Education program (Smart	40		
ivaturai kesources Education program (Smart	40	11/10/2010	Workshop documents

Prevention)			(Appendix E)
Zebra Mussel response meeting	11	11/11/2010	Minutes (Appendix E)
High School Smart Prevention follow-up	25	12/9/2010	

In 2009, Maureen sent letters to landowners with Japanese knotweed and *Phragmites* encouraging removal of the invasive populations. These landowners were not contacted in 2010, but should be sent a reminder in 2011.

6.) Create electronic AIS mailing list

Maureen has been collecting email addresses since spring 2009 to create an informational AIS electronic mailing list. A test email was sent on April 9, 2009 with the first informational email on April 10, 2009. During the summer months, emails were distributed weekly or bi-weekly. Email messages were sporadic the remainder of the year. The list had increased from 113 in 2009 to 155 recipients in 2010 (Appendix F).

7.) Map AIS populations & make available on county GIS website with informational links.

Maureen has collected GIS data from the U.S. Forest Service, the Great Lake Indian Fish and Wildlife Commission, Wisconsin Department of Natural Resources, Florence County Zoning Department, WE Energies, Onterra LLC, and Coleman Engineering.

Maureen met with Florence County Forestry and Parks Department staff in early January 2010 for refresher training on how to build a GIS shapefile. Plans are to merge U.S. Forest Service, consultants and new data into one shapefile. The shapefile will eventually be added to the Florence County GIS website via the website host mPower Innovations.

Maureen inventoried populations of purple loosestrife in the Long Lake watershed in September. A PDF map (Appendix G) and GIS shapefile of these populations was shared with the Lake Association of Long Lake's consultant, White Water Associates, Inc, for integration into their management plan.

Concerns have been expressed regarding potential impacts on property values and marketability when information on AIS population distribution within a waterbody is made available. It is possible that displaying a population of Eurasian water milfoil in front of a property that is for sale may impact its sale. This could be a legitimate concern.

While it is possible to create a shapefile for the entire infected lake, this is already available on the DNR Surface Water Data Viewer and not necessary to recreate; a link to the Surface Water Data Viewer on the county's GIS website would suffice. It is also possible to create a shapefile for terrestrial/wetland invasive species on public lands, but this data is available on the Great Lakes Indian Fish and Wildlife Commission GIS website and also not necessary to recreate.

If a shapefile of the individual populations of AIS within a lake is not an option, then it should be requested to remove this activity as a requirement.

8.) Develop/distribute a healthy shoreland living packet.

The CBCW packet could serve as the healthy shoreland living packet if updated to include waterfront management publications.

9.) Form a Cooperative Weed Management Area (CWMA).

Since March 2008, the LCD has been a member of the Wild Rivers Invasive Species Coalition (WRISC) Steering Committee. WRISC is a CWMA which includes Florence, Forest,

and Marinette Counties in Wisconsin, and Dickinson and Menominee Counties in Michigan. The coalition was chaired by Maureen in 2010.

Maureen and two other representatives attended a CWMA Symposium in Park Falls January 27, 2010 to network with other CWMAs in northern Wisconsin, share projects ideas and accomplishments, and learn strategies on effective decision making and meeting facilitation.

On March 17, the WRISC Steering Committee hosted an invitational meeting. Topics covered included discussing the CWMA concept, the history and future of WRISC, invasive species introduction, MOU, and the next steps. There were 39 attendees representing federal, state and local governments, private companies, and landowners. The March 17 meeting minutes may be found in Appendix H. Following the meeting, the Memorandum of Understanding was finalized and distributed for signatory, completing the formation of WRISC.

On behalf of WRISC, Maureen applied for and was awarded a grant from Lumberjack Resource Conservation & Development (RC&D), Inc. to fund educational outreach and promote WRISC. Project activates included hiring a coordinator, developing WRISC promotional items, hosting workshops, etc. Project accomplishments may be found in the final report to Lumberjack RC&D (Appendix H). The following is a list of products that were produced under the Lumberjack RC&D project:

- WRISC Magnet
- Newspaper Articles (2)
- Photos of WRISC kick-off meeting
- Full Color Placemats (Qty 4500, distributed to 5 counties)
- WRISC /Invasive Species Educational Display for Display Board (displayed at 4 county fairs and two other events)
- WRISC T-Shirts (100, distributed via steering committee to volunteers or sold where applicable)
- WRISC Pens (800, distributed at County Fairs)
- Posters 11 x 17 (40, distributed to 5 counties)
- WRISC Brochures (1500 Printed and distributed)
- Website (www.wrisc.org)
- Portable Billboard Partnership and Design (Fabrication will be completed for 2011 season)

An established population of Japanese knotweed was reported near Lake Ellwood. In response to this report, Maureen coordinated a workday to manually remove the plant on July 19, 2010. The work crew included Maureen, Mari, and Patrick (Wisconsin Conservation Corps volunteer). Following manual removal, the WDNR Forestry Team Leader coordinated chemical treatment.

WRISC applied for and was awarded a project proposal for a boat wash and two limited term employees to be used in Florence and Forest Counties in 2010. The project proposal may be found in Appendix H. The utilization of the equipment and personnel in Florence County may be used as in-kind for this grant.

In 2010, WRISC submitted several articles to local newspapers, newsletters, and the Invasive Plant Association of Wisconsin newsletter Plants out of Place and (Appendix K).

The following Florence County AIS projects were directly supported by WRISC: the purple loosestrife biological control project, an informational 20' x 30' tent at the Florence County Fair, Japanese knotweed workday, and an awarded boat wash project proposal.

10.) Raise Galerucella beetles for Purple Loosestrife control.

An insectory for purple loosestrife biological control agents was constructed at the Florence Natural Resources and Wild Rivers Interpretive Center by the LCD and WRISC in 2008. The biological control program continued implementation though 2010.

With assistance from members of the Wild Rivers Invasive Species Coalition (USFS and DNR employees), Maureen dug purple loosestrife rootstock from a site on County Hwy C in late April. Beetles were added to the potted plants in mid-June. Adult beetles were distributed to the following sites in July: Fay Lake Road (near Lake of Dreams), Montgomery Lake shoreline, Long Lake (lakeshore and wetland).

Spring beetle censuses were conducted at Montgomery Lake and the Long Lake (shoreline and roadside wetland) of the 2009 release sites in June. (The spring beetle census was not performed at the Fay Lake Road release site.) Some eggs and few adults were observed at the Montgomery and Long Lake wetland sites. Nothing was observed at the Long Lake shoreline site. The LCD plans to continue to raise, release, monitor, and document beetle activity in successive years.

All material associated with the beetle rearing project, including census forms, release forms, instructional handouts, and photographs can be found in Appendix I.

Potential 2011 purple loosestrife rootstock source locations include the population on County Hwy C or the newly reported site on Mud Lake (Klahn's Pond) in Fence.

11.) Host water protection, annual CLMN, & grant workshops & annual public input forums.

In 2010, LCD staff hosted a water protection workshop, a CLMN AIS workshop, a CLMN weevil monitoring pilot workshop, a Project RED workshop, and presented at lake association meetings.

The LCD worked with FCLARA to plan and host the 2010 annual Water Protection Workshop on May 22, 2010 (see article Appendix D and flyer Appendix J). Presenters included Maureen, Eric Engbretson (Engbretson Underwater Photography), Patrick Goggins (UW-Cooperative Extension), and Michael Meyers (WDNR Science Services). Maureen gave a brief presentation that included announcing the 2010 workshop opportunities, highlighted the new Smart Prevention prediction model and workshop, provided updates on the Wild Rivers Invasive Species Coalition, and introduced the new summer employees, Mari and Paul. Eric shared underwater fish photography which included invasive plants and animals. Patrick discussed some of the physical, chemical, and biological characteristics of lakes, and Michael discussed a developing methodology on shoreline management impacts on wildlife.

Maureen attended a Train the Trainer Training in Phillips on April 14 to learn how to conduct Citizen Lake Monitoring Network (CLMN) and Clean Boats, Clean Waters workshops (see agenda Appendix J). Maureen, Mari and Paul hosted a CLMN training at the Lost Lake cabins in the national forest in June (see agenda Appendix J). Only two volunteers attended this training. In order to accommodate more volunteers, the location should be more accessible and the concept of volunteer, rather than LCD staff, monitoring should be promoted.

Maureen and Mari attended a training for the pilot protocols for weevil monitoring in Stevens Point (Weevilpalooza) on June 29, 2010 which was hosted by Golden Sands Resource Conservation and Development, Inc and UW-Cooperative Extension. During this training, they learned the identification and ecology of the *Eurychiopsis lecontei* and *Phytobius sp.* weevils, as well as the weevil monitoring protocol (see agenda Appendix J). Due to Mari's extensive experience monitoring for weevils with EnviroScience, she and Maureen hosted a weevil

monitoring workshop (Weevilrama) for a small group of volunteers in Florence on August 4, 2010 (see agenda & handout Appendix J). The background portion of the workshop was held at the Florence Natural Resource Center and the field portion was at Twin Falls Flowage, where EnviroScience had released weevils in the past. Unfortunately, few weevils were observed, making it frustrating for attendees; however this demonstrated the realities of weevil monitoring. This workshop could be implemented again in the future with defining expectations of low weevil observation and emphasizing monitoring for weevil damage rather than actual insects. It is likely that most volunteers will be capable of presence/absence monitoring and few will be interested in collecting quantitative data.

In addition to CLMN workshops, Laura MacFarland of the River Alliance of Wisconsin was invited to host a Project RED workshop. In order to accommodate interested volunteers from Iron Mountain and Norway, the workshop was held at the Hillcrest School in Aurora. Advertising focused on paddlers and silent sports group. A new set of volunteers had attended this workshop. Materials associated with Project RED may be found in Appendix J.

Maureen did not host a grant workshop in 2010, but focused many presentations on the importance of lake management planning and the DNR grant programs.

A public input forum was not held in 2010. A potential outlet for a forum is during the water protection workshop. This could include a summary of the AIS program accomplishments and requesting input on the success/challenges. Input could be gathered via flip charts, questionnaires, etc. This public input forum could also be used as stakeholder input for the developing Invasive Species strategic plan and the update of the county's Land and Water Resource Management plan.

12.) Publish AIS articles.

In 2010, there were a total of 56 articles published in local newspapers that related to this grant project. A list of articles may be found in Table 7 and copies of the articles are available in Appendix K.

Table 7. List of 2010 publications

Title	Publication	Date
The Wild Rivers Invasive Species Cooperative	Plants out of Place	February '10
Invasive Species Cooperative meeting slated for March 17	Florence Mining News	2/17/2010
Boundary Waters Musky Club to hold first annual Musky Fishing Expo Feb 20	Iron Mountain Daily News	2/17/2010
FCLARA earns statewide recognition	Florence Mining News	3/10/2010
Water Protection Workshop to be held May 22 in Florence	Florence Mining News	4/21/2010
Florence County volunteers receive statewide recognition	Florence County Connections	Spring 2010
2010 Aquatic Invasive Species Workshops	Florence County Connections	Spring 2010
FCLARA receives Wisconsin Lakes Stewardship Award	Wild Rivers Guide	Spring 2010
Water Protection Workshop to be held May 22 in Florence	Wild Rivers Guide	Spring 2010
State continues battle against invasive species	Wild Rivers Guide	Spring 2010
Water Quality Workshop to offer wide range of information	Florence Mining News	5/12/2010
Clean Boats, Clean Waters workshop opportunity set for May 29 at Long Lake Town Hall	Florence Mining News	5/19/2010
Florence County Land Conservation Department Summer 2010 Workshop Schedule	FCLARA Newsletter	Spring 2010
LCD Lunches AIS Website	FCLARA Newsletter	Spring 2010
WRISC urges recreational boaters, trail riders to help in fight against invasive species	Florence Mining News	6/3/2010

Invasive species educational event to be offered June 17	Florence Mining News	6/9/2010
Lakes workshop at Nicolet College set for June 19	Florence Mining News	6/16/2010

Table 7. List of 2010 publications (continued)

AIS Battle Acquires New Tool The Norway Current 6/16/201 Volunteers across Wisconsin working to prevent spread of aquatic invasives Florence Mining News 6/16/201 Aquatic invasive species battle acquires new tool Florence Mining News 6/23/201
aquatic invasives Florence Mining News 6/16/201
•
Aquatic invasive species battle acquires new tool Florence Mining News 6/23/201
Aduate invasive species battle acquires new tool 1 foreign thining news 0/25/201
AIS Smart Prevention workshop Saturday Iron Mountain Daily News 6/23/201
Boat inspectors to be at Florence County boat landings over 4th of July weekend Florence Mining News 6/23/201
FCLARA Water Protection workshop a success! FCLARA Newsletter Summer 201
Introducing the Florence County Land Conservation Department
Summer Interns FCLARA Newsletter Summer 201
Florence County Lake Suitable for Zebra Mussels FCLARA Newsletter Summer 201
Beetles Attack-Again FCLARA Newsletter Summer 201
Update on the Wild Rivers Invasive Species Coalition (WRISC) Plants out of Place July '10
Florence County Library announces summer activities Florence Mining News 7/7/201
Learning to keep lakes clean Florence Mining News 7/30/201
Precautions critical to halting encroachment of zebra mussels into Florence County lakes Florence Mining News 8/4/201
DNR to turn from education to enforcement in fight against aquatic invasives Florence Mining News 8/4/201
Letter to the Editor from Margie Yadro Florence Mining News 8/25/201
Welcome to the Florence County Fair Florence Mining News 8/25/201
Milfoil found in Seidel Lake Iron Mountain Daily News 8/25/201
Eurasian milfoil found in Seidel Lake in Florence County Florence Mining News 8/25/201
Zebra mussels found in Keyes Lake Florence Mining News 9/9/201
Preventing the spread of zebra mussels Florence Mining News 9/9/201
Zebra mussels in Keyes Lake Iron Mountain Daily News 9/9/201
FCLARA expects to stay at forefront in efforts to protect waters Florence Mining News 9/9/201
Stewardship program to feature discussion in zebra mussels Florence Mining News 9/15/201
Presentation on zebra mussels in Keyes Lake draws big crowd at Resource Center Florence Mining News 9/22/201
Keyes Lake Improvement Association takes action against invasive zebra mussels Florence Mining News 10/13/201
Groups work together to address zebra mussels at Keyes Lake The Lakeland Times 10/15/201
Inspect docks for zebra mussels Iron Mountain Daily News 10/20/201
Too bad the zebras on Keyes Lake do not have tails! FCLARA Newsletter Fall 2010
Zebra mussel response planning FCLARA Newsletter Fall 2010
"WRISC" FCLARA Newsletter Fall 2010
What is it you say? FCLARA Newsletter Fall 2010
Plan emerges for containing mussels Florence Mining News 10/27/201
WRISC summarizes cooperative weed management accomplishments Florence Mining News 11/10/201
Fall is a great time to identify invasive plants Iron Mountain Daily News 11/15/201
Amasa company hired to help with zebra mussel plan Florence Mining News 11/17/201
Invasive Species Coalition meets in Florence Iron Mountain Daily News 11/20/201
The Wild River Invasive Species Coalition (WRISC) Plants out of Place November '1
Zebra mussels discovered in Florence County Florence County Connections Fall 2010

13.) Construct 2 AIS informational kiosks/year at public landings.

To accommodate requests made by members of the Florence County Lakes and Rivers Association, a design similar to the kiosk at Long Lake was used.

Maureen coordinated construction for kiosks at Lake Ellwood, the Spread Eagle Chain of Lakes, Patten Lake, Frog Lake, and Siedel Lake. A landowner has volunteered to construct a kiosk on Fay Lake in 2011.

The kiosks for Lake Ellwood, the Spread Eagle Chain and Frog Lake were constructed by a private contractor who was paid by the lake association. A private landowner donated time and expertise to construct the kiosk on Patten Lake. On Siedel Lake, this grant covered contractor expenses as there is no lake association and Eurasian water milfoil was discovered in Siedel Lake this summer. Pictures of these kiosks may be found in Appendix L.

The LCD also obtained an Urban Forestry grant that funded placement of additional kiosks at West Bass Lake, East Bass Lake, Sand Lake, and Scout in 2010, Emily Lake in 2009, and Keyes Lake in 2008.

LCD staff compiled posters to be included in these kiosks. A list of these posters is available in Table 8. These posters promote invasive species prevention messages (i.e. CBCW, "don't move firewood", etc.). Since many Florence County lakes are suitable for zebra mussels and they had been found in Keyes Lake this summer, Maureen worked with UW-Cooperative Extension staff to design posters to promote boater awareness of zebra mussel impacts and prevention steps (Appendix L). Maureen also developed a simple poster to alert boaters of a lake's suitability to zebra mussels (Appendix L). There had been consideration of including a poster with the countywide AIS distribution, but this was reconsidered as they may likely need to be updated regularly, creating additional workload for the LCD. In addition to the items identified in Table 8, other signage present at the landing and other relevant lake information could be included in the kiosk to reduce clutter.

Table 8. Posters recommended for kiosks.

VHS Alert (FR-247)
Clean Boats, Clean Waters (panel)
You Can Make a Difference (panel)
AIS Prevention Steps (panel)
Zebra mussel impacts and prevention (panel)
Zebra mussel suitability (custom poster)
EWM laminates (CLMN handout)
Native/invasive milfoil ID cards (WT-394)
Burn It Where You Buy It (internet image)
Firewood (FR-414 or FR-356s)
Firewood Law (NR 45.04)

In 2011, funds from this grant may be used to construct kiosks at the Brule River Flowage, Twin Falls Flowage, the Pine River Flowage, the Menominee River at Sportsman Lane in Aurora, the Menominee River at Woods Road. We Energies Mitigation Enhancement Funds (Appendix B) may also be explored as a funding source.

14.)Initiate AIS Ordinance

No attempts have been made to initiate an AIS ordinance. Chapter NR 40 was passed in September 2009 and the LCD is exploring potential ordinances that could provide additional support for this regulation at the county or town level (i.e. adopting illegal to transport for the county/town roads or prohibiting specific species not present in Florence County such as *Phragmite australis* or *Polygonum cuspidatum*).

15.) Send 3 staff/year to WAL Lakes Convention.

In March 2010, Maureen Ferry (Invasive Species Program Manager), Cary Anderson (Florence County Lakes and Rivers Association President), and Mick Mlinar (Florence County Lakes and Rivers Association Vice-President) attended the WAL Lakes Convention. Copies of on-line registration forms are in Appendix M.

16.) Develop AIS strategic plan.

In September 2010, Maureen, Cary (FCLARA President), and Mick (FCLARA Vice President) attended the Vilas County AIS Partnership meeting to learn about the partnerships and plan development the has occurred in Vilas County.

In addition, Maureen attended a strategic planning meeting in December 2010 with DNR staff and other AIS Coordinators in the region to discuss the planning process and how counties' could proceed (see agenda Appendix N). Meeting attendees discussed utilizing the *Strategic Planning Manual* developed by The Center of Public Skills Training as a guide for implementing county strategic AIS plans. The manual identifies the following steps in strategic plan development:

- 1. Information gathering (stakeholder survey)
- 2. Identify critical issues (identified following analysis of survey results)
- 3. Develop vision statement (future direction- includes a short description of critical issues)
- 4. Develop a mission statement (general purpose summarizes critical issues identified in vision statement)
- 5. Develop goals (each goal is a summary of solving a critical issue)
- 6. Formulate strategies/objectives (1. who will 2. do what 3. by when and 4. an evaluation measure for each goal)
- 7. Annual objectives/activities (1. tasks to accomplish objectives, 2. the due date, and 3. by whom)

While the strategic plan can be drafted without completing step one, it is imperative to complete in order to gather input and achieve buy-in from the volunteers who are a significant contributor to the implementation of the plan.

Kevin will be contacting UW-Cooperative Extension and UW-Madison sociologists to develop a questionnaire appropriate for county strategic AIS planning. The county (or the adjacent county's) UW-Extension community development agent may be able to facilitate this process and the DNR lakes coordinator and basin AIS specialist could also be involved. This could be implemented in Florence County as early as fall 2011 and is named as a priority deliverable for the grant.

Maureen resigned her position with Florence County on December 31, 2010 to become a state regional AIS coordinator. After posting the vacant position, six applications were received.

Paul Tikusis was selected as the new Invasive Species Program Manager for Florence County and is scheduled to begin on March $21,\,2011.$