



# Bayfield County Aquatic Invasive Species Project



## **AIS Control Grant #AEPP-294-11**

June 1, 2011 – December 31, 2013

### **Final Report**

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Prepared by:

Jeremy Bates –Aquatic Invasive Species Project Coordinator  
Bayfield County Land & Water Conservation Department

**Project Title:** Bayfield County Aquatic Invasive Species Project 2011-2012 (extended to 2013)

**Housed under the:**

**Bayfield County Land & Water Conservation Department (BCLWCD)**

County Conservationist- Ben Dufford

Land Conservation Assistant / Clerk- Jennifer Schierman

Land Use Technician- Travis Tulowitzky

**Aquatic Invasive Species Committee**

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Vice Chair - John Kudlas- George Lake Resident and Potawatomi Lakes POA member

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William D. Bussey

Neil Schultz

Rebekah Anderson, FSA Rep.

Peter Tetzner, Citizen Member

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Jane Swenson- Bayfield County AIS Volunteer

Carrie Sanda- Douglas County AIS Coordinator

Scott Caven- Ashland County AIS Coordinator

Heather Palmquist- Iron County Conservationist

## **Summary**

The Bayfield County AIS project has continued to educate both Bayfield County residents and visitors on how to control and prevent invasive species. There is a great amount of awareness of invasive species, but many do not understand the specific impacts of certain species or how to identify and control them. Efforts have been made to educate land owners and conservation groups on how to monitor and control invasives like Phragmites, Purple Loosestrife, Japanese Knotweed, Curly-Leaf Pondweed, and Eurasian Water-milfoil. All of which have been found in inland water resources in Bayfield County.

The majority of the activities carried out under this grant have been educational in nature. Education lays the ground work for accomplishing monitoring and control of aquatic invasive species. It has proven a much better use of the Bayfield County AIS Project Coordinators time to arrange workshops and presentations to organize volunteer and organizational involvement, rather than fly solo and try to monitor all the priority waterways in the county. The coordinator has also served as an in-house expert and advisor to the county Land and Water Conservation Department. Another educational strong point of this project is providing materials for conservation and educational staff. Though the educational effort has been accomplished, most of the objectives of the educational goal are considered in progress, as this is an activity that needs to continue at the same level into the future.

There has also been a large amount of work to prevent AIS from leaving Lake Superior. Coordination with local colleges, Sea Grant, and the local weed cooperative has resulted in substantial outreach at Lake Superior landings. Monitoring and outreach to control of Purple loosestrife and Phragmites on Chequamegon Bay on Lake Superior has also been a priority and continued successful work has been done by partnering with Great Lakes Indian Fish and Wildlife Commission to keep these species in check.

Monitoring Bayfield County priority waterways has also expanded the past 3 years through this project. Most of these waterways have been surveyed. Volunteers have been educated to monitor for new AIS locations in the towns of Iron River, Barnes, Cable, Delta, and Drummond which are all very "lake rich" townships.

These volunteers have also led control work such as purple loosestrife bio control and herbicide control. Similarly they have organized Curly Leaf Pondweed and Eurasian Water-milfoil hand pulling. Aquatic plant management plans have been and are continuing to be developed to implement best practices to deal with invasives as well as plants that may reach nuisance levels. These plans have included education and volunteer involvement in Clean Boats Clean Waters and Citizen Lakes Monitoring Network Programs.

Finally we are protecting these resources for future generations. And in that effort we have worked to educate youth in Bayfield County to guide them in appreciation and stewardship of our lakes, rivers, and wetlands. This education consists of presentations, hands-on work in classrooms, and activities at field trips. Local boy scouts have also assisted in AIS control work.

This project has proven its importance in Bayfield County and continues to have lasting impacts on it resources. There is great public and political support to prevent aquatic invasive species. Bayfield County is very grateful for the financial and technical support the Wisconsin Department of Natural Resources has provided to make this program a success.

## **Project Background**

The Bayfield County AIS project was started in 2006 by grassroots efforts led by lake associations and other conservation advocates. This effort motivated and encouraged the county government to take action in dealing with AIS.

Before the county AIS project began, grassroots efforts led by lake associations and passionate individuals were on the ground for at least two years, and as much as four for one group, Namakagon Lake Association, Inc. In May 2004, the Educator of the Ashland, Bayfield, Douglas, and Iron County Land Conservation Department (ABDI-LCD, the precursor organization to the Bayfield Land & Water Conservation Department) was awarded a Lake Planning Grant to host a regional AIS Educational Conference in spring of 2005. However, in late summer of 2004, Eurasian water-milfoil (EWM) was found in two areas of the county in the Towns of Barnes and Iron River. At that point, the local grassroots efforts exploded and energized to ‘take care of the problem!’ One of their efforts was to strongly encourage ABDI-LCD to submit a WDNR AIS Control Grant for a Bayfield County AIS Project/Coordinator. This effort came from the desire to garner support from the county administration as prevention and management schemes work best on a regional scale. Since invasive species know no boundaries, a coordinator at the county-level could network with all entities and levels of government to address the present and potential populations of AIS in the county. ABDI-LCD received the grant award and the Bayfield County AIS Project began.

Since this beginning, the project has adapted to a changing structure. The ABDI-LCD was dissolved into separate county entities. The Bayfield County AIS Project/Coordinator is now housed in Washburn, WI under the Bayfield County Land and Water Conservation Department. The project continued with support from the newly formed (2007) staff of this department. What had not changed is the commitment of Bayfield County (board and administration) to work with the grass root efforts to prevent AIS. This support was demonstrated by the formation of a County AIS Committee in 2007, which still meets on a regular basis to provide oversight and direction to the program. This committee embodies this grass roots/county partnership as the members range from county board to town supervisors to lake organization representatives.

One of the most influential accomplishments of this project has been the “Illegal to Transport Ordinance” [http://www.bayfieldcounty.org/conservation/AIS\\_Transport\\_Ordinance.pdf](http://www.bayfieldcounty.org/conservation/AIS_Transport_Ordinance.pdf). This was a product of the AIS Committee working alongside partners like the Bayfield County Lakes Forum, Bayfield County Sherriff’s Department, and County Administration. In 2007, this ordinance was one of the first in the state, and was achieved through the AIS project coordinator facilitating communication between these groups.

The AIS committee was also instrumental in development of the Bayfield County AIS Strategic Plan. In April 2008, the county board resolved to approve the plan and the plan has guided the program ever since. The strategic plan is an evolving document as the County AIS Committee meets annually to evaluate and further develop it. This plan has laid out the overall goals and objectives of the county AIS project. It has allowed for continuity of the project regardless of changes to staff and organization.

## **Project Execution**

The following is a description of the activities carried out during this project. These activities were in support of the goals and objectives outlined in both the county AIS strategic plan and the most recent project application.

### **Goal A: Coordinate and assist in the management of wetland and riparian invasive plants, focusing on the building of local capacity.**

Objective 1: Work closely with partners to create aquatic invasive plant control/management plans.

Objective 2: Work cooperatively with municipalities to implement plans and follow up periodically.

Objective 3: Work cooperatively with landowners to control aquatic invasive plants and follow up periodically.

Objective 4: Assist with the availability of chemicals and equipment to facilitate invasive species management.

### **Significant Accomplishments**

**Preventing the spread of knotweed** has occurred all three years of this project. Japanese and Giant Knotweed have both been vouchered in Bayfield County. Starting in the town and city of Bayfield, work has expanded to monitor for, record the sites, and control knotweed in areas of Iron River, Clover, Bell, Barnes, and Washburn. Though there are numerous knotweed sites, they are isolated stands. Meetings with local officials and road crews have occurred in municipalities with knotweed. In these meetings the local representatives were taught to identify and monitor for the plant. This was to great success as they knew of stands not previously known to Bayfield County or DNR staff which were subsequently controlled and the town continues to monitor the sites. Thanks to this identification and tracking of knotweed sites, control has been easily implemented and effective by partnering with the Northwoods Cooperative Weed Management Area (NCWMA) who provided Milestone© herbicide. Control work on culturally important areas in Bayfield has also been supported by working together with the Bayfield Regional Conservancy. The county highway department has assisted in identifying sites, not mowing knotweed stands, and granting the NCWMA permission to control knotweed in any county right of ways. Known knotweed sites in Bayfield County are recorded with GIS data and available on CD media provided to DNR and upon request.

**Phragmites Identification and planning** has become a priority in the Cities of Washburn, Bayfield, and town of Red Cliff. Nonnative Phragmites has been identified in each of these municipalities. Stands of nonnative Phragmites are found in the open near the wastewater treatment plants in each municipality. They are believed to have escaped from the sludge ponds in which it is used to perform phytoremediation. These nonnative Phragmites stands are along the shore or Chequamegon Bay and the Apostle Islands of Lake Superior. They pose a threat to the entire bay. The city and town officials that manage these sites are very supportive of finding a solution to the problem. There have been several meetings between Bayfield County AIS project, local officials, NCWMA coordinator, DNR staff, and Great lakes Indian Fish and Wildlife Commission (GLIFWC) partners to discuss management options. In late summer/early fall 2013 the Bayfield County AIS coordinator and GLIFWC worked together to locate and control these escaped sites. GIS data is available on CD media provided to DNR and upon request.

**Purple Loosestrife work** has been done in the form of bio-control projects and chemical control. The Bayfield County AIS coordinator has demonstrated to local residents how to control purple loosestrife by removing the flowering heads and applying herbicide directly to the cut end of the stems. In 2011 and 2012 Bayfield County worked with GLIFWC and NCWMA to rear beetles on 200 purple loosestrife plants each year. These beetles were released into the Fish Creek Sloughs along Lake Superior. This area is the largest purple loosestrife population in the county. Education and outreach work was also conducted in regards to purple loosestrife. In 2012 and 2013 we worked with the Drummond Area Boy Scouts to pull some root stock and chemically control plants on Cable Lake. This root stock was then used to create a bio control

interpretive display at Cable Natural History Museum to offer an education tool for the staff there and to drum up interest in the project for the area.

**Northwoods Cooperative Weed Management Area partnership** has proven critical in managing many of these riparian species. This partnership has put boots on the ground including professionals and volunteers alike. They have worked together and identified new locations, educated local officials and property owners, and controlled many riparian species to keep them at a manageable level. Jane Swenson, a volunteer for the Bayfield County AIS project, is a regular attendee at the meetings and has been instrumental in educating many residents in the area about Japanese Knotweed and Purple Loosestrife. The Bayfield County AIS project was a vital partner in developing the NCWMA's Strategic Plan in 2013. Another example of this strong partnership came during the absence of a NCWMA coordinator in 2012. The Bayfield County AIS coordinator provided management to the organization by organizing meetings and implementing a portable hot water (decontamination) boat wash at landings along Lake Superior in Douglas, Bayfield, Ashland, and Iron Counties. The boat wash schedule is available on the CD. Bayfield County hired and trained the staff in CBCW protocols to conduct inspections and boat decontaminations.

### **Areas to Develop**

**Project RED workshops** were unsuccessful in Bayfield County. Outreach was done at local TU meetings and the Iron River Fish Hatchery to recruit participants (see Project RED recruitment survey). At these initial presentations some individuals were interested, but they were not able to attend planned workshops. In 2013 there was success in educating individuals about riparian invasives during the Paddle the Pearls events in Iron River and on the Namakagon River. Riparian invasives were also discussed at a Namakagon River Partnership meeting in Fall of 2013.

**Formal local plans** for dealing with riparian invasives need to be developed for continuity of the effort. As of now annual contact is made with returning volunteers and officials. This is necessary as persistence is the only way to keep these invasives in check. However, a formal plan is necessary to allow for continuity of the effort in the event there is volunteer burnout or staff turnover. This will also encourage greater participation of local residents.

**Goal B: Assess the AIS presence/absence in the larger high-priority water bodies.**

Objective 1: Survey target lakes.

Objective 2: Survey target water ways

Objective 3: Survey target marinas/mouths of large rivers emptying into Lake Superior

**Significant Accomplishments**

**Lake surveys** have been done on 27 lakes from 2011-2013. The following table lists the lakes and types of surveys conducted on each one. These surveys have been conducted partnering with WI DNR, lake consultants, and volunteer residents on the lakes. Types of surveys included Early Detection Monitoring (EDM), meandering littoral (ML), point intercept (PI), and Purple Loosestrife perimeter (PL).

WBIC	Lakes Surveyed	Year	Type of Survey	AIS Detected
2734000	Atkins Lake*	2011	EDM	Yellow Iris (not aquatic)**
2756200	Bladder Lake	2012, 2013	ML, EDM	None
2903800	Buskey Bay*	2011	EDM, ML	Chinese Mystery Snail**, Eurasian Water-Milfoil, (known to have purple loosestrife, rusty crayfish)
2729700	Cable Lake*	2012, 2013	EDM, EDM, PL	None (known to have purple loosestrife)
2431300	Chippewa Lake*	2012	EDM	None
2899200	Cisco Lake	2012	EDM	None (known to contain Rainbow Smelt)
2897300	Crystal Lake*	2013	EDM	Chinese Mystery Snail**
2465700	George Lake	2011, 2012, 2013	ML, PI, PI	Eurasian Water-Milfoil**, ***
2762700	Half Moon Lake*	2011	EDM, PI	None
2470800	Island Lake	2012	ML	None (nuisance levels of floating leaf vegetation)
2901700	Lake Delta*	2012, 2013	EDM, EDM	Chinese Mystery Snail**
2900200	Lake Owen*	2011	EDM	Chinese Mystery Snail
2473500	Lake Takhoda*	2011	EDM	Banded Mystery Snail**
2767100	Long Lake*	2011, 2012, 2013	EDM, ML, ML	None (known to have purple loosestrife, rusty crawfish)
2741600	Lower Eau Claire*	2012	ML	None (known to have Purple loosestrife, Rusty Crawfish)
2742100	Middle Eau Claire*	2012, 2013	PI, ML	Curly Leaf Pondweed** (known to have Rusty Crawfish, Chinese Mystery Snail)
2732600	Namekagon Lake*	2012, 2013	EDM, EDM	Chinese Mystery Snail**
2770700	Perch Lake	2011	EDM	None
2730800	Perry Lake	2013	EDM	None
2489200	Pickereel Lake	2013	EDM	None
2743300	Robinson Lake*	2011	EDM	Banded Mystery Snail**
2494900	Sand Bar Lake	2011, 2012, 2013	ML and PI each year	Eurasian Water-Milfoil
2882300	Siskiwit Lake*	2013	EDM	None
2501700	Tomahawk Lake	2011, 2012, 2013	EDM, PI, ML	Eurasian Water-Milfoil, Banded Mystery Snail**
2903100	Twin Bear Lake*	2013	EDM, PL, ML	Eurasian Water-Milfoil, Chinese Mystery Snail**
2742700	Upper Eau Claire*	2012, 2013	PI, ML	Curly Leaf Pondweed** (known to have Rusty Crawfish, Chinese Mystery Snail)
2761000	Twin Lakes	2011	EDM	Banded Mystery Snail**
<b>TOTAL:</b>	<b>27 LAKES</b>	<b>41 Surveys</b>	<b>24 EDM, 11 ML, 6 PI</b>	<b>13 NEW AIS</b>

\*Priority Water body as designated by Bayfield County AIS Strategic Plan

\*\*New Discovery

\*\*\*No Eurasian Water-Milfoil was found on George Lake in 2013 post 2012 treatment

**Rivers/Waterway surveys** have been mostly limited to shoreline inventories. Phragmites and purple loosestrife checks have been done on sections of Pikes Creek, Thompsons Creek, Cranberry River, White River, and the Namakagon River. Priority waterways in Bayfield County have been identified and future efforts will include Project RED training for groups concerned with these waterways. The Fish Creek Sloughs have been a target of purple loosestrife bio-control efforts. During the release work a meandering littoral survey was conducted and no other AIS were found.

#### Bayfield County Priority Waterways List

- Flag River
- Lost Creek
- Pikes Creek
- Iron River
- White River
- Namakagon River
- Eau Claire River
- Upper reaches of North Fish Creek
- Raspberry River

**AIS locations** were tracked and maps provided on CD media provided to DNR and upon request.

**Boat wash/decontamination** at Lake Superior landings and marinas has been very successful. Through the NCWMA and US Forest Service, the Bayfield County LWCD was able to hire 2 interns to operate a portable high temperature boat wash unit. Boat decontamination was conducted at Washburn Marina, Port Wing Marina, Bayfield City Boat Launch, Red Cliff Marina, Little Sand Bay, and other boat launches on Lake Superior. The interns also conducted CBCW interviews and education/outreach. This outreach extended to marina staff who informed the interns of any suspected AIS. Curly leaf pondweed (CLP) was found during these inspections at the Red Cliff Marina and work is planned there to determine the extent of CLP infestation in that area.

#### Areas to improve

**Priority lakes and waterways surveys** are still needed on 8 lakes identified in the Bayfield County as identified in the strategic plan. Also many of the rivers are in need of AIS monitoring through Project Red trained volunteers. Requesting assistance from property/boat owners in these

**Coastal area/Marina surveys** were lacking in this time period. This was due to availability of equipment. The department did pursue boating equipment capable of these surveys, but was unable to leverage funds and has been unable to identify a volunteer or group to assist in these surveys. However, some work was conducted in the Chequamegon Bay of Lake Superior to survey for Phragmites with assistance from fellow Bayfield County LWCD staff. Control work was then done through partnership with GLIFWC. Marina staff and town staff has been educated to look for the plant in these areas and we will increase efforts both to detect AIS in the coastal areas, as well as some of the more wetland associated invasive species.

**New AIS Signs** are installed at some of the boat landings on Lake Superior in Bayfield County. The rest will be completed spring 2014. The data for these signs installations still needs to be entered into SWIMS. Further efforts will include more engaging interpretive displays at the landings or boat cleaning stations pending available funding for such projects.



**Goal C: Increase the number of Aquatic Plant Management Plans in the county.**

Objective 1: Encourage lake groups to address lake management planning.

Objective 2: Facilitate and assist in the writing of WDNR Lake Management Planning Grants.

**Significant Accomplishments**

**Aquatic plant management (APM) plans** are in the progress of being developed for Upper, Middle, and Lower Eau Claire Lakes, and George Lake. The current APM plans on Tomahawk and Sand Bar Lakes are also being updated by the County AIS Project Coordinator. The county AIS program has taken a role in technical lead in development of these plans. However there was a learning curve involved in these plans and the goal of one APM per year was not attained. Half Moon Lake has completed their Aquatic Plant Management Plan and will be executing other CLMN projects as part of it during 2014. These CLMN trainings are being coordinated by the County AIS Coordinator. The county AIS project will continue involvement in the implementation of this plan.

**Data** has been collected through point intercept surveys on George Lake, Middle Eau Claire, and Upper Eau Claire lakes. These surveys were conducted with early detection/rapid response funding. This data is being used to develop the above mentioned plans by working with the Town of Barnes AIS Committee and area lake associations.

**Planned control** of Eurasian Water-Milfoil (EWM) for George Lake was facilitated by the county AIS coordinator. In 2011 EWM was found by a youth that resided on George Lake. The residents of the lake and Town of Barnes quickly worked together to implement the Town of Barnes Rapid Response plan. The history and control effort for George Lake can be found on the CD provided to DNR as part of this final report and is available upon request. Control work is also being implemented on the Eau Claire Chain to prevent the spread of Curly Leaf Pondweed (CLP). The Bayfield county AIS coordinator has worked with lake residents to pull CLP and monitor for new sites.

**Areas to improve**

**Number of APM plans** that need to be completed on lakes with AIS plant species is dwindling. However review and updating of these plans is the next step in measuring their outcomes. There are still other high use lakes in Bayfield County that would benefit from APM. It would be good to get an assessment of what the current plant community consists of in a lake before the AIS enters in order to determine the impacts if AIS was introduced.

<b>Lake Name</b>	<b>AIS Present</b>	<b>Plan</b>
Buskey Bay	Eurasian Water-Milfoil	Lake Management Plan 2008
Eagle Lake (Pike Chain)	Eurasian Water-Milfoil	Lake Management Plan 2008
Fish Creek Sloughs	Eurasian Water-Milfoil	None
George Lake	Eurasian Water-Milfoil	Aquatic Plant Management Plan in Development
Hart Lake	Eurasian Water-Milfoil	Lake Management Plan 2008
Lake Millicent	Eurasian Water-Milfoil	Lake Management Plan 2008
Middle Eau Claire Lake	Curly-Leaf Pondweed	Aquatic Plant Management Plan in Development
Sand Bar Lake	Eurasian Water-Milfoil	Aquatic Plant Management Plan needs updating
Tomahawk Lake	Eurasian Water-Milfoil	Aquatic Plant Management Plan needs updating
Twin Bear Lake	Eurasian Water-Milfoil	Lake Management Plan 2008
Upper Eau Claire Lake	Curly-Leaf Pondweed	Aquatic Plant Management Plan in Development

Washburn Harbor, Lk Superior	Eurasian Water-Milfoil	None
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**Goal D: Support AIS education in the schools.**

Objective 1: Make available equipment and pre-made presentations to interested individuals to present to 4-12<sup>th</sup> grade classrooms.

Objective 2: Attend schools in-service to encourage teachers to use established AIS Lesson plans in their curriculums.

**Significant Accomplishments**

**Invasive species youth education** has been increasing through this project. Bayfield County LWCD continues to be a partner with the Eau Claire Lakes POA in the Lake Ecology Education Project (LEEP) at the Drummond middle school. The AIS coordinator, NCWMA Coordinator, and Conservation Technician all work to help develop and present the modules. The curriculum includes both a macro invertebrate and aquatic plant module which include education on invasive species. Over the past 2 years there has been a great effort to share this curriculum with other educators. A presentation was made at the AIS education summit in 2013 and the curriculum is available online at <http://leepeducation.wordpress.com/> There have also been annual presentations given to 3<sup>rd</sup> grade and 4<sup>th</sup> grade classes at Drummond School, Washburn, Bayfield, Iron River, and 2<sup>nd</sup> grade at Port Wing. Continual outreach is done to teachers to offer education in class and on field trips. Copies of the presentations given are included on the CD provided to DNR as part of this final report and are available upon request.

**Areas to improve**

**Communication** with teachers to this point has been via email. We are beginning to get more requests for presentations in schools; however we have not attended any in-services or have made any large presentations directly to teachers and administrators about AIS curriculum available. The AIS presentations have been mostly from the AIS coordinator and there has not been enough work done to encourage teachers to cover AIS materials in their own classes.

**Other accomplishments**

Clean Boats Clean Waters Data has been entered from many different sources in the county. The Bayfield County AIS coordinator trains CBCW inspectors and regularly follows up with them. Bayfield County AIS Coordinator also assists in scheduling “Landing Blitz” and “Drain Campaign” events, such as the “Legislature at the Landing” visit by Representative Janet Bewley. There is a summary of the county CBCW data on the CD provided to DNR as part of this final report and is available upon request. It is also available through the DNR website at <http://dnr.wi.gov/lakes/invasives/WatercraftSummary.aspx?location=4>. Funding from this project also supported CBCW inspections at county boat landings. In 2013 the county AIS coordinator worked with a volunteer camper to conduct boat inspections for in-kind match as part of reimbursement for this project in 2013.

The reports prepared for the Bayfield County AIS Committee and Land Conservation Committee have been included on the CD provided to DNR as part of this final report and is available upon request. These reports list other activities the AIS project has done in support of the current grant and the Bayfield County AIS Strategic Plan.

## **Explanation of Project Deliverables**

1. A project report/assessment of Plan implementation activities and data collected, including the information in 2-9.
  - a. This report along with digital files provided fulfils this requirement.
2. Examples of any educational/outreach materials developed, including newsletters, media articles, marketing tools, school curricula, etc.
  - a. Developed materials are provided to DNR digitally on CD media. All materials are available to public upon request from Bayfield County Land and Water Conservation Department.
3. Clean Boats Clean Waters data collection summary. Data collected should include those data required as part of the CBCW program and must be entered in the statewide database to be eligible for grant reimbursement.
  - a. CBCW data has been entered into SWIMS and spreadsheets tracking CBCW activities in Bayfield County are available on the CD provided to DNR as part of this final report and available upon request.
4. Coordination with and training of citizens, conservation groups, and local municipalities to monitor, plan for, and control AIS.
  - a. CLMN AIS monitoring or shoreline monitoring workshops were held annually in 2012 and 2013 at the Barnes town hall. A CLMN AIS monitoring workshop was also held in the Town of Drummond in 2011.
  - b. Coordination with the DNR has been done to train Half Moon Lake residents in CLMN water quality monitoring in 2014.
5. AIS inventory (species, GPS locations, estimated infestation size), maps, and survey results for Lake Superior marinas and rivers mouths and high priority inland lakes and rivers (est. 10-15 surveys).
  - a. Shoreline checks done along Lake Superior due to limited availability of equipment. Fish Creek Sloughs in Chequamegon bay was canoed and Purple Loosestrife monitoring was conducted there as well as a visual check of submerged aquatic vegetation. Also 24 early detection monitoring surveys were done on inland lakes with assistance from Bayfield County AIS Coordinator. Finally there were meandering littoral surveys done on 11 inland lakes.
6. APM Plan and grant assistance, including completion of one Plan annually provided feasible and in the public's interest.
  - a. The Bayfield County AIS coordinator has assisted in development of plans on Half Moon Lake (Completed), Pike Chain of Lakes (ongoing planning), George Lake (in progress), Middle and Upper Eau Claire Lakes (In Progress), and Tomahawk and Sandbar Lakes (updating).
7. Continued development and support of AIS curricula for 4-12<sup>th</sup> graders (at least 1 presentation/school district annually).
  - a. Presentations made at most schools, but LEEP curricula needs expansion and other AIS focused curricula availability still needs improvement.
8. Updated AIS signs posted at all public boat landings and data entered into SWIMS.
  - a. Signs were installed at approximately 20 landings. Data entered for this is difficult to track and view in SWIMS.
9. Updated county-wide resource list, including lake contacts, monitors, volunteers, presentations, etc.
  - a. Contact list is provided on CD media provided to the DNR.