Polk County WDNR Aquatic Invasive Species Countywide Education, Prevention, and Planning Control Grant Final Report, AEPP-429-14, 2014-2015

Balsam Lake, 2014

Polk County Land and Water Resources Department
100 Polk County Plaza, Ste 120
Balsam Lake, WI 54810

In April 2014, the Polk County Land and Water Resources Department received a two year Aquatic Invasive Species Education, Prevention, and Planning Control Grant from the Wisconsin Department of Natural Resources to implement a countywide AIS program. The following report details the tasks completed from April 2014 through December 2015.

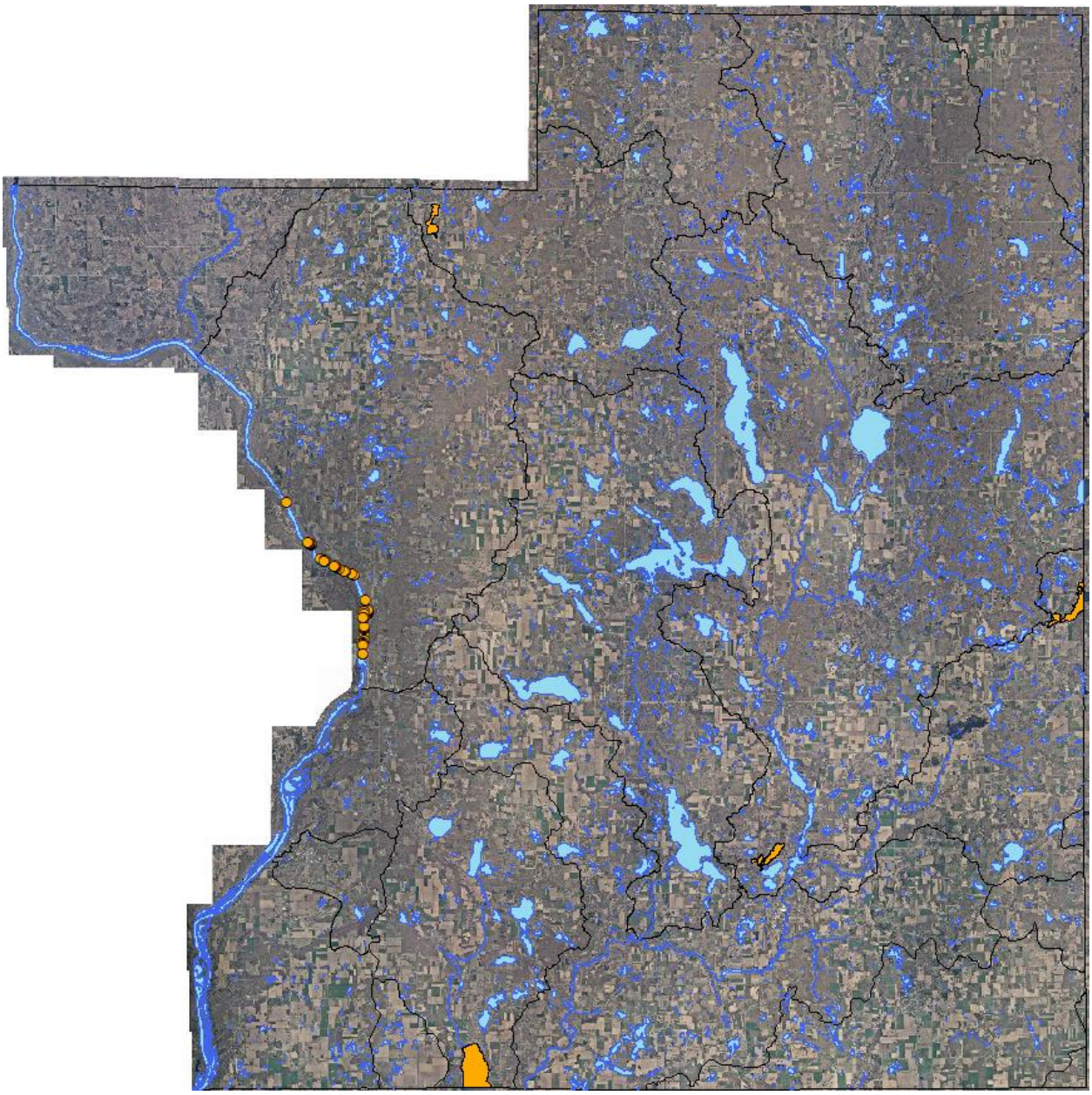
Largon Lake, 2014

Eurasian Water Milfoil

Eurasian water milfoil is a submerged aquatic invasive plant with delicate, feather-like leaves arranged in a whorl around the stem of the plant. Eurasian water milfoil can be distinguished from native milfoils by the numerous (usually 12-21) leaflets that make up each leaf. Additionally, whereas the leaves of most native milfoils remain erect when out of water, the leaves of Eurasian water milfoil are usually limp when out of water. Eurasian water milfoil is highly invasive and is capable of forming large, thick mats which interfere with swimming, boating, fishing, and waterfowl hunting. Additionally, Eurasian water milfoil can have devastating effects on native ecosystems, displacing native aquatic plants and impacting fish and wildlife populations.

Eurasian water milfoil was first discovered in North America in the 1940's. Since this time Eurasian water milfoil has invaded nearly every state in the United States. Eurasian water milfoil spreads when small fragments of the plant break off and float on water currents or are transported by boater traffic. Eurasian water milfoil is able to reproduce from small fragments, which sprout roots and are able to colonize new areas.

Establishment of Eurasian water milfoil populations in Polk County has occurred relatively recently. Eurasian water milfoil was first found in Polk County in Long Trade Lake in 1995. Long Trade Lake is part of the Trade River System, which includes Little Trade Lake, Big Trade Lake, and Round Lake in Burnett County. Eurasian water milfoil was discovered in Round Lake in 2003 and in Little Trade Lake in 2009. In addition to the Trade River System, Eurasian water milfoil was found in Horseshoe Lake in 2006, in Pike Lake in 2010, in the St. Croix River between Spanglers Landing and Lions Park Landing in 2013, and in Cedar Lake in 2015.



Eurasian water milfoil has been documented on 5 Polk County waterbodies as of December, 2015: Cedar Lake, Horseshoe Lake, Long Trade Lake, Pike Lake, and the St. Croix River

St. Croix River Eurasian Water Milfoil Monitoring

In 2013, the Polk County Land and Water Resources Department discovered Eurasian water milfoil in the St. Croix River between Spanglers Landing and the hydroelectric dam in St. Croix Falls. In partnership with the National Park Service and St. Croix River Association, the Land and Water Resources Department initiated efforts to address this species in 2014 and 2015.

In both 2014 and 2015, water levels on the St. Croix River were lowered for dam maintenance. As a result, most sites with Eurasian water milfoil were above the water with the exception of a few large bays with tributaries flowing to the St. Croix River.

St. Croix River Eurasian water milfoil, 2014

In 2014, volunteer opportunities to hand pull Eurasian water milfoil were organized to take advantage of the fact that most plants were above the water line and more easily accessible.

On June 25th, 2014 six National Park Service staff and Polk County Land and Water Resources Department staff meandered the littoral area of the river in search of Eurasian watermilfoil between Spanglers Landing and Lions Park Landing. This opportunity allowed for staff to learn background information on Eurasian water milfoil, how to identify the species, and the history of the species in the St. Croix River.

On June 26th, 2014 four young adults with the St. Croix Tribal Youth Program and two volunteers assisted Land and Water Resources Department, National Park Service, and St. Croix River Association staff in an effort to hand pull Eurasian water milfoil. This opportunity also included an educational component as volunteers received information on how to identify Eurasian water milfoil, the history of the species on the river, and general background information on aquatic invasive species.

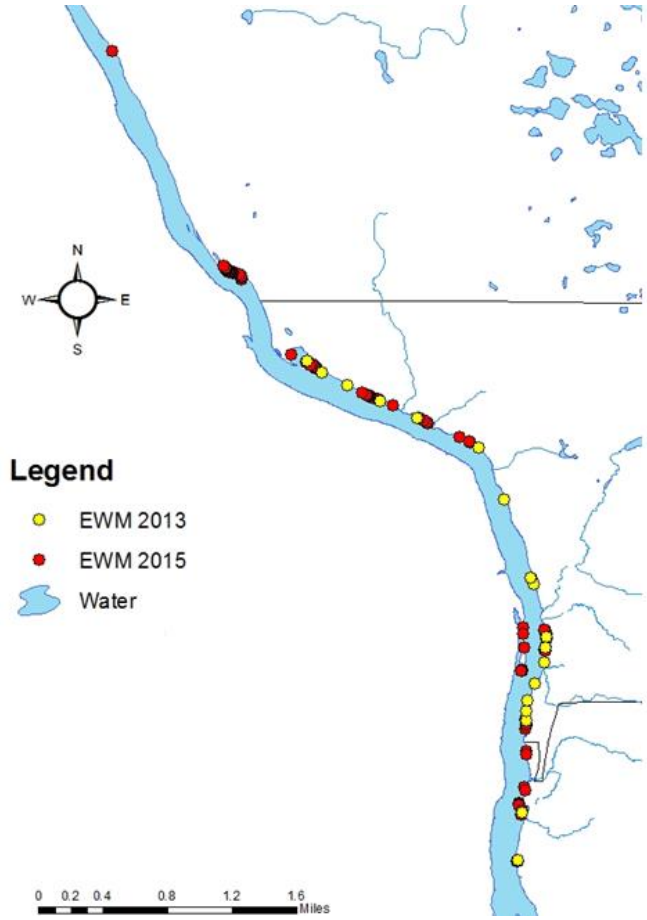
Additionally, on the afternoon of June 26th, nine members of the St. Croix Basin Team surveyed the littoral area of the river from Nevers Dam Landing to Spanglers Landing for Eurasian water milfoil. Fortunately, milfoil was not found in this section of the river.

St. Croix River, June 26th, 2014 Eurasian water milfoil hand pulling event

In an effort to reassess the efforts from 2014 and to determine if the Eurasian water milfoil had spread within the St. Croix River, Land and Water Resources Department in partnership with National Park Service surveyed the littoral zone of the entire river in 2015. Fortunately, Eurasian water milfoil was not found outside the area between Spanglers Landing and the hydroelectric dam.

With low water levels in 2014 and 2015, the existing populations of Eurasian water milfoil were substantially reduced. In the map (right), the 2013 sites represent beds of plants; whereas, the 2015 sites represent individual plants.

In collaboration with the National Park Service, it was determined that with the 2015 drawdown scheduled to last through December, it was not a good use of resources to hand pull Eurasian water milfoil in 2015.



St. Croix River Eurasian water milfoil locations, 2013 and 2015

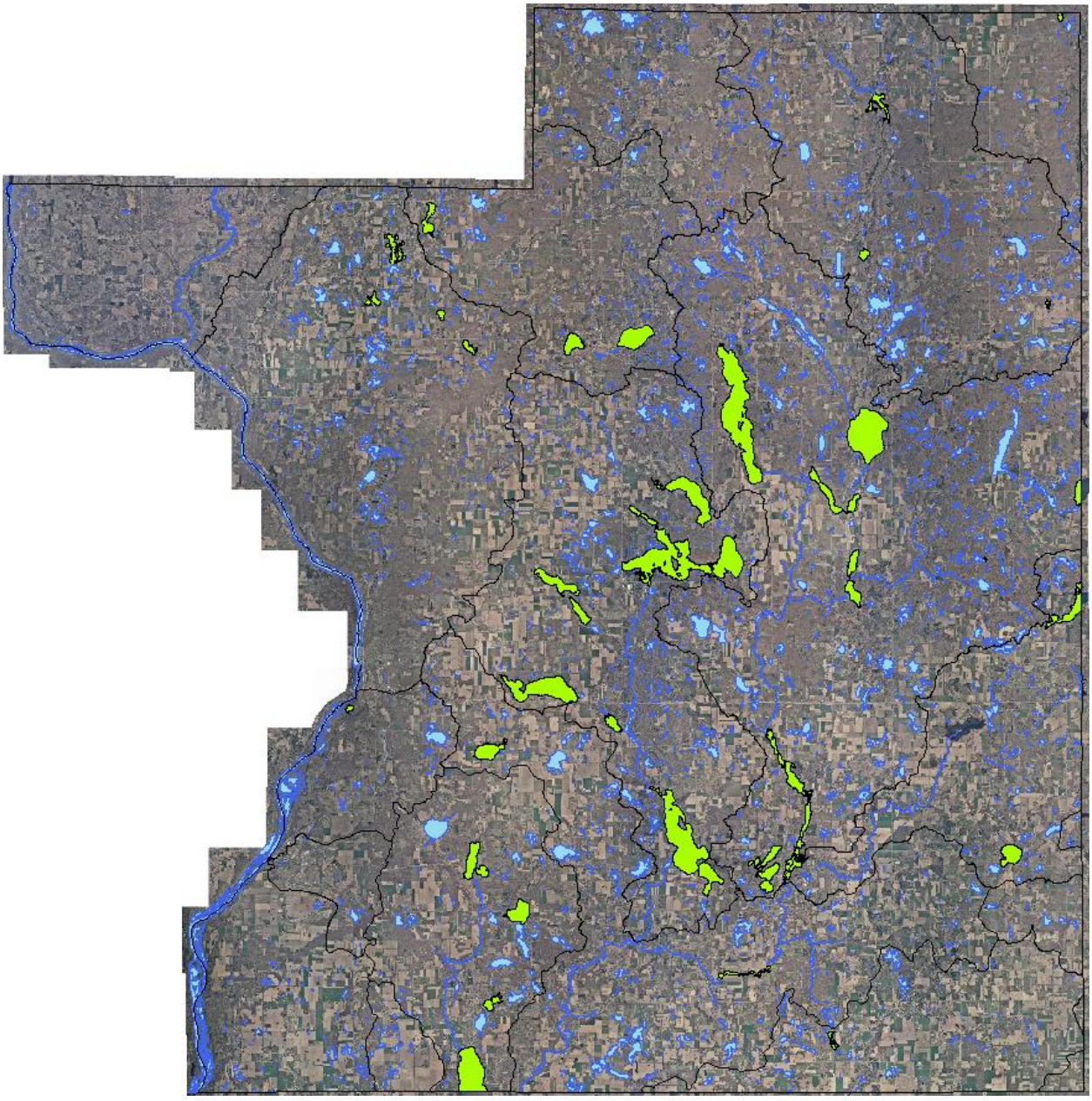
Curly Leaf Pondweed

Curly leaf pondweed is a submerged aquatic invasive plant. The leaves of curly leaf pondweed are easily distinguished by their rounded tip, prominent mid-vein, and finely toothed edges. In certain growing conditions, the leaves appear wavy or crimped.

Curly leaf pondweed is found in a wide variety of habitats, although it prefers alkaline and high nutrient waterbodies and typically grows in less than 3 meters of water.

This invasive species is able to outcompete native aquatic plants because it exhibits rapid growth in the early spring, sometimes growing beneath ice cover. Curly leaf pondweed forms large, dense mats on the surface of waterbodies inhibiting the light necessary for native plant growth and interfering with navigation and recreational activities such as fishing, boating, and swimming.

Curly leaf pondweed was first discovered in Polk County in the Apple River Flowage in 1977. As of December 2013, curly leaf pondweed was documented in 38 waterbodies in Polk County. The Polk County Land and Water Resources Department documented the species in four additional waterbodies in 2014-2015: McKenzie Lake, Little Blake Lake, Long Lake, and South Twin Lake.



Curly leaf pondweed has been documented on 42 Polk County waterbodies as of December, 2015 including: Alabama Lake, Apple River, Apple River Flowage, Balsam Lake, Bear Trap Lake, Big Blake Lake, Big Butternut Lake, Big Lake, Big Round Lake, Black Brook Flowage, Bone Lake (2454500), Bone Lake (2628100), Bridget Lake, Cedar Lake, Clam Falls Flowage, Deer Lake (2619400), Deer Lake (2460500), Dwight Lake, Half Moon Lake, Herby Lake, Horse Lake, Horseshoe Lake, Lake O' the Dalles, Little Blake Lake, Little Butternut Lake, Little Mirror Lake, Long Lake, Long Trade Lake, Loveless Lake, Magnor Lake, McKenzie Lake, North Twin Lake, North White Ash Lake, Pike Lake, Pine Lake (2490400), Sand Lake, Sandhill Lake, South Twin Lake, Staples Lake, Unnamed (2658800), Wapogasset Lake, and White Ash Lake

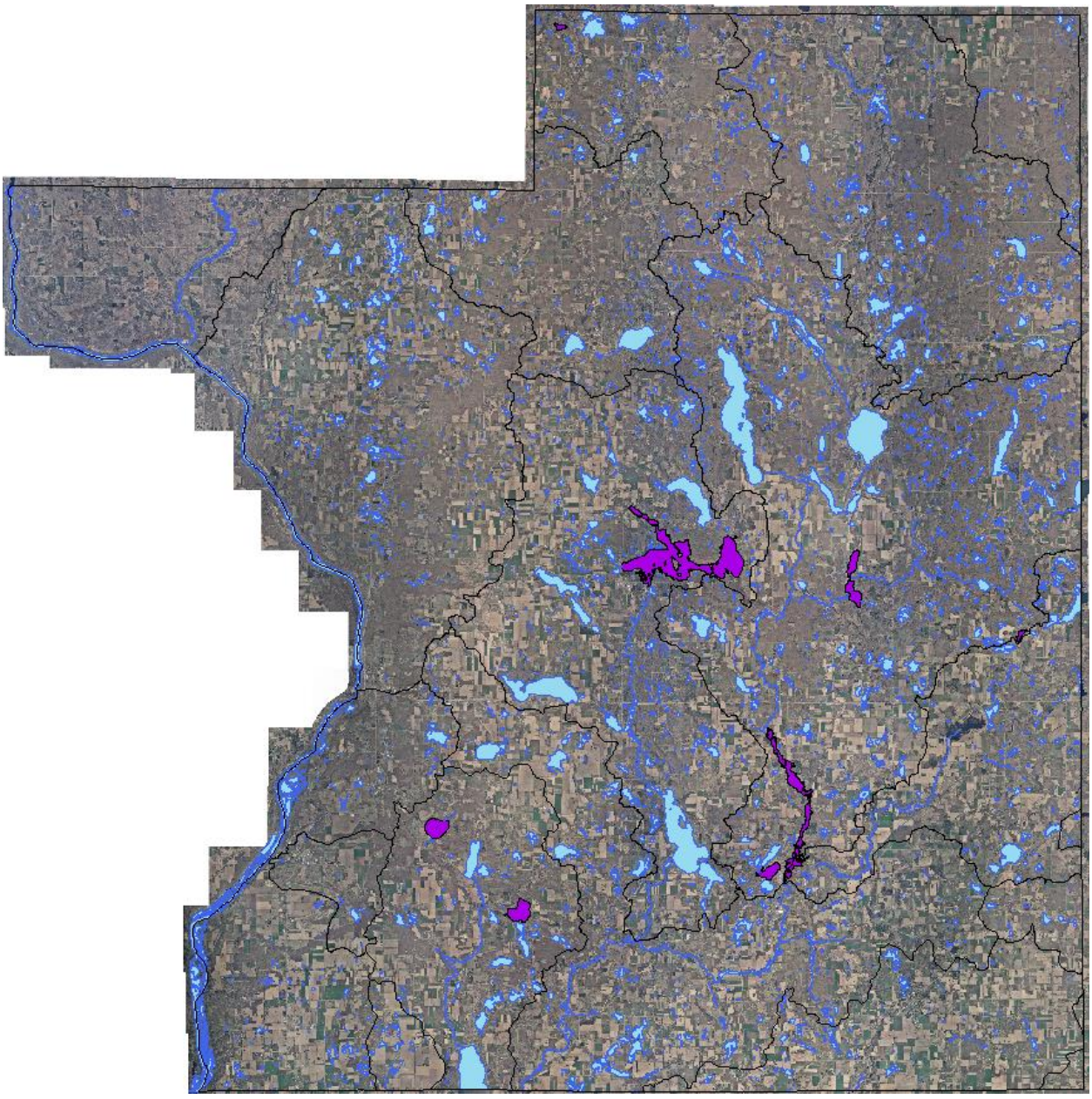
Purple Loosestrife

Purple loosestrife is an aquatic invasive perennial plant that grows 3-7 feet tall and develops a spike of small purple flowers in late summer. The leaves of the plant are oblong and arranged oppositely along a square shaped stem. Purple loosestrife spreads rapidly and colonizes wetlands, shorelines, and roadside ditches. Thick stands of purple loosestrife crowd out native vegetation and reduce food, shelter, and nesting sites for a variety of wildlife including birds, turtles, and frogs.

This plant, native to Europe and Asia, was introduced in North America in the 1800's for beekeeping and as a garden ornamental. Purple loosestrife has been present in Polk County for many years. An elaborate inventory was conducted in 2000 by Polk County LWRD to identify the extent of purple loosestrife in the county and to reduce its spread.

In 2014 and 2015 the Polk County Land and Water Resource Department assisted volunteers in raising and releasing *Galerucella* beetles. In both years, the beetles were released on Balsam Lake. In the future, Polk County Land and Water Resources Department will be working with the Lotus Lake Association to raise and release beetles due to an expanding population of loosestrife along the shoreline.

As of December, 2013 purple loosestrife was documented on 8 Polk County waterbodies. The Polk County Land and Water Resources Department documented the species in one additional waterbody in 2014-2015: the Apple River Flowage.



Purple loosestrife has been documented on 9 Polk County waterbodies as of December, 2015 including: the Apple River Flowage, Balsam Lake, Big Lake, Grimhs Lake, Lotus Lake, North Twin Lake, North White Ash Lake, Silver Lake, and White Ash Lake

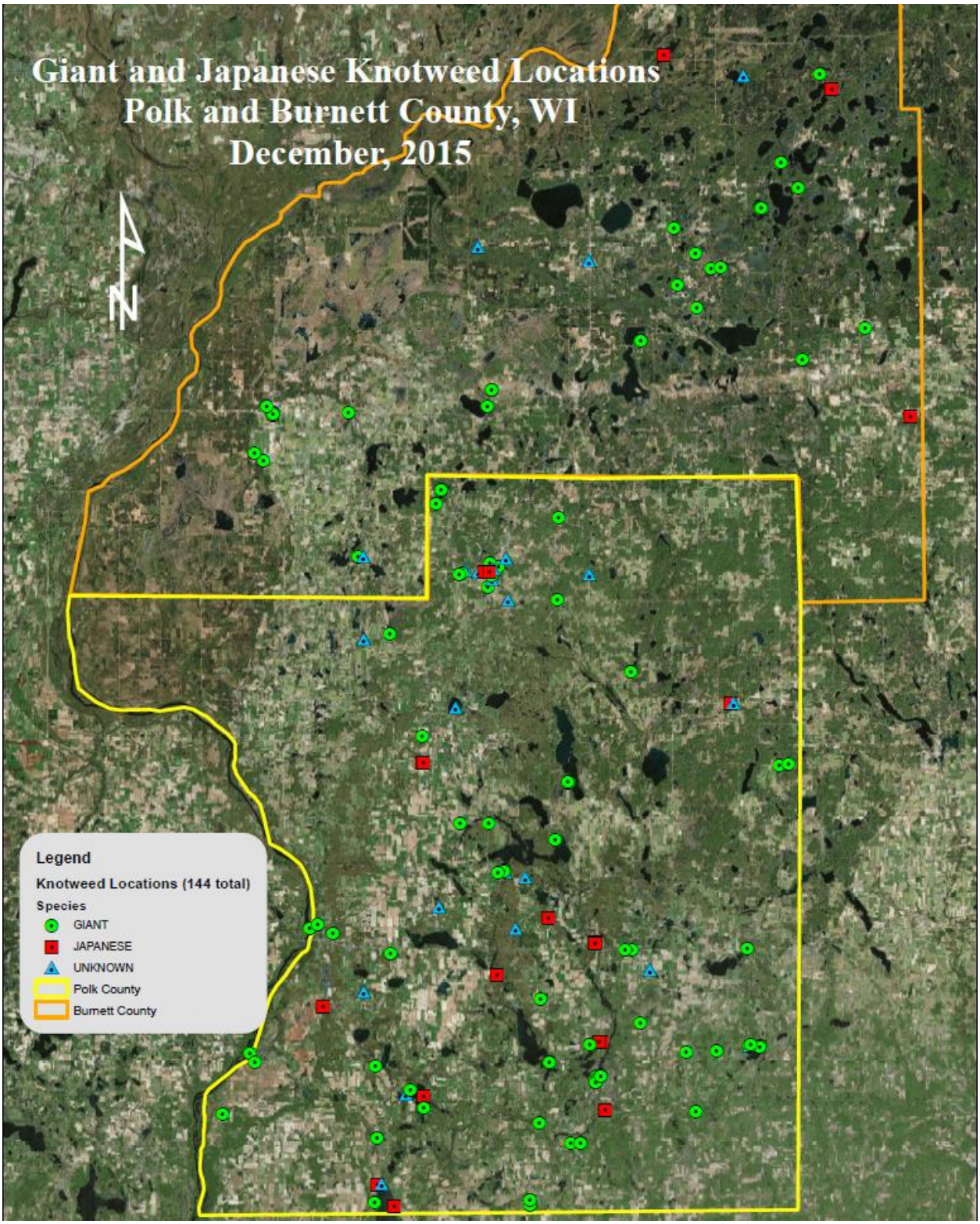
Japanese and Giant Knotweed

Japanese and giant knotweed are native to Asia and were imported to the United States in the mid 1900's as ornamental plants, although they are becoming more prevelant in the wild. The plant can reach up to fifteen feet and is easily distinguished by hollow bamboo-like stalks.

Knotweed is a perennial, meaning that each spring it re-grows from an extensive root system. Both species grow extremely fast and form a dense canopy of foliage which blocks sunlight from reaching the ground. As a result, native vegetation is unable to grow beneath a knotweed stand. When knotweed establishes on stream banks, the lack of understory can promote intense erosion causing soil and knotweed roots to move downstream.

Knotweed was first discovered in Polk County in 2009. In 2012 and 2013 knotweed control measures were conducted by Polk County LWRD under an early detection and response grant. As of December 2013, knotweed was documented at 93 sites in Polk County and on 7 waterbodies. The Polk County Land and Water Resources Department documented knotweed at seven additional sites in 2014-2015.

In both 2014 and 2015, Polk County LWRD provided control guidance to numerous landowners on Cedar Lake. Additionally, six sites were treated during the 2015 season for follow up control. LWRD attempted to contact the Mark Renz Lab to complete knotweed seed viability tests; however, the lab never responded.

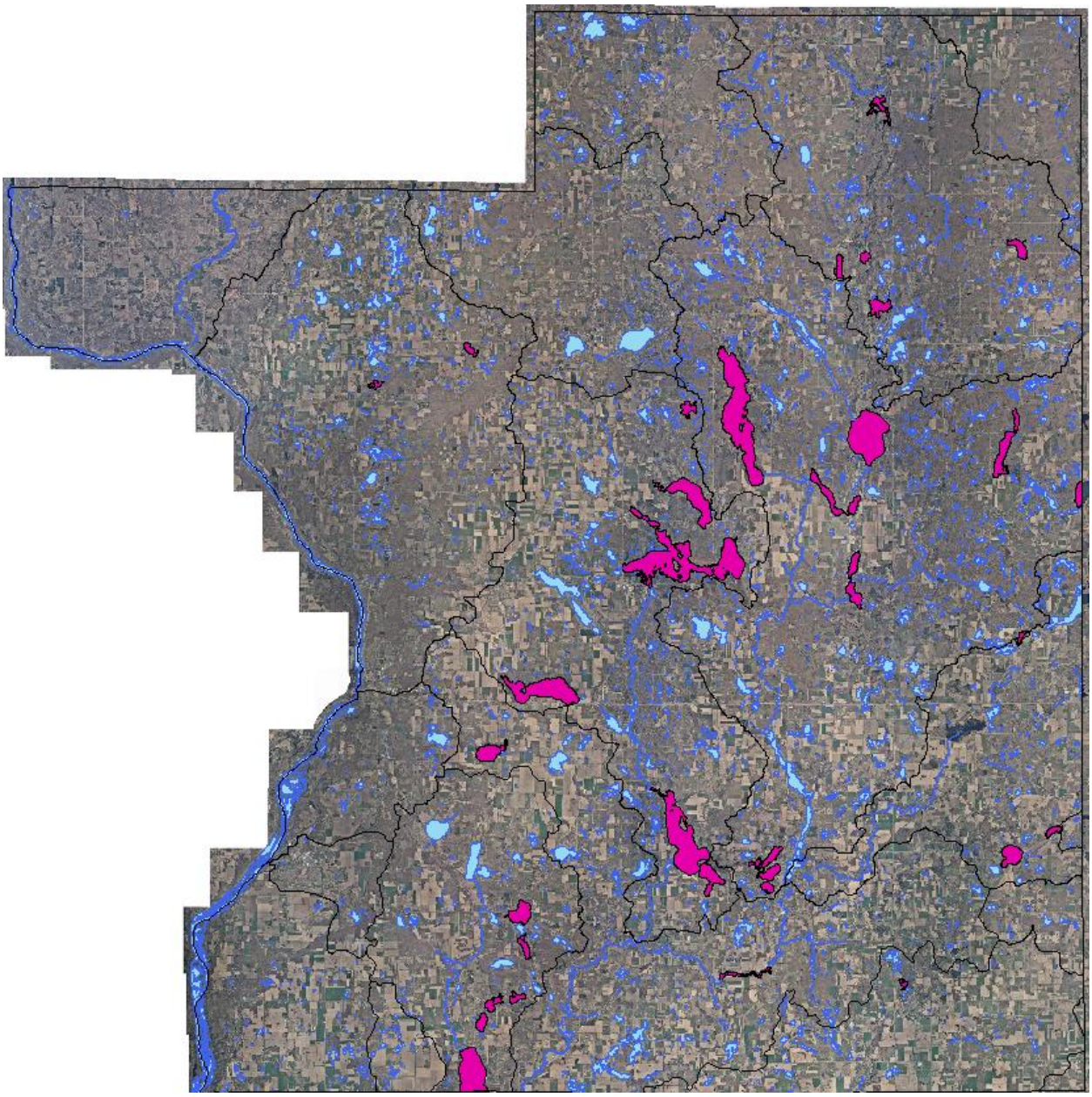


Knotweed has been documented on 9 Polk County waterbodies as of December, 2015 including: the Apple River Flowage, Balsam Lake, Big Lake, Cedar Lake, Hatchet Lake, Little Butternut Lake, the St. Croix River, Unnamed pond, and Wapogasset Lake

Chinese Mystery Snails

Chinese mystery snails were imported to the west coast in the late 1800's as a food source for the Asian market and have spread via aquarium release and other accidental and intentional introductions. When introduced to a new water body, the Chinese mystery snail alters the ecosystem composition, structure, and function by competing with native snails for food and space.

Populations of Chinese mystery snails are now established in many Northern Wisconsin lakes. As of December 2013, Chinese mystery snails were documented on 35 Polk County waterbodies. The Polk County Land and Water Resources Department documented the species in three additional waterbodies in 2014-2015: Big Round Lake, Largon Lake, and Little Blake Lake.



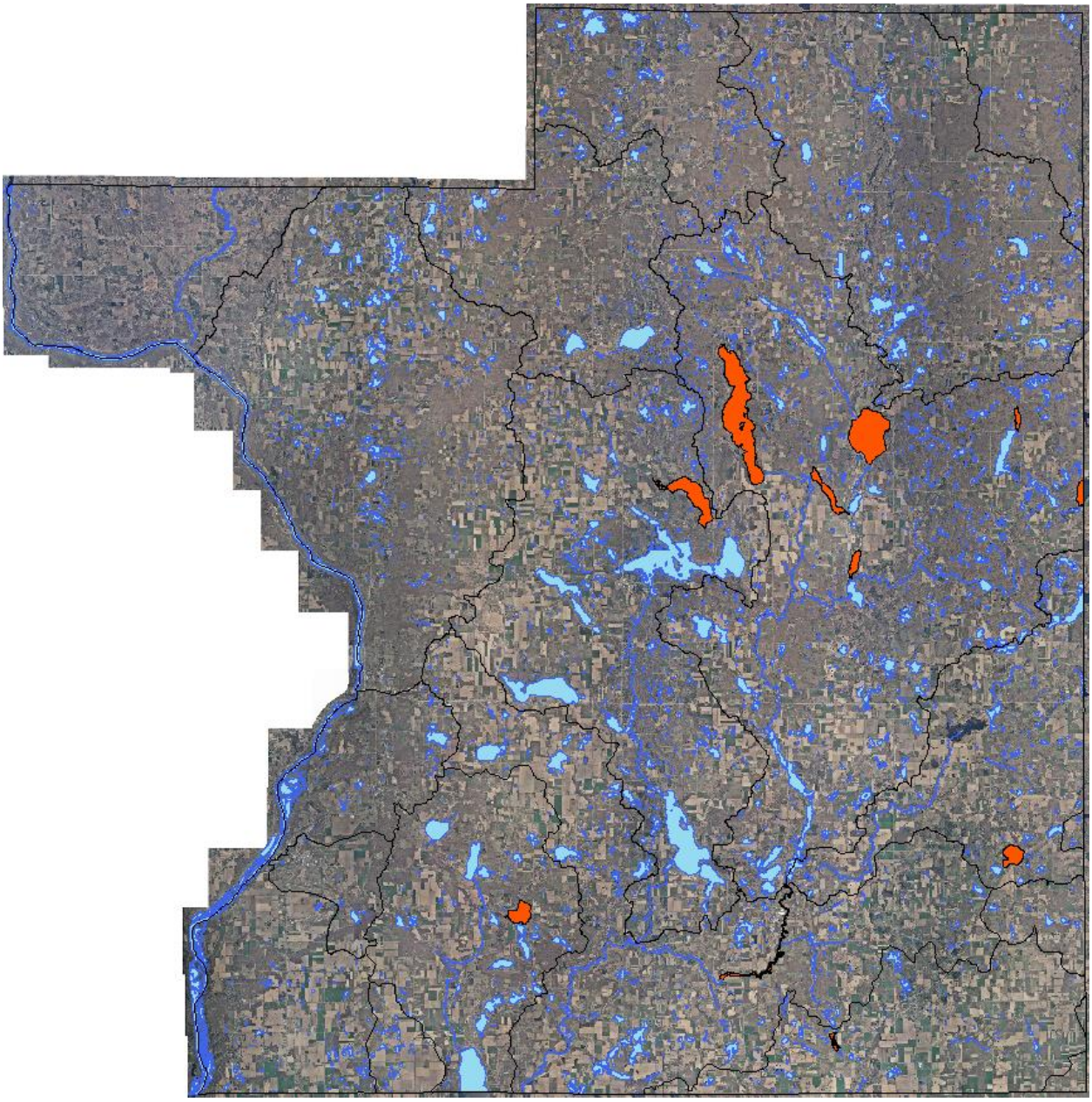
Chinese mystery snails have been documented on 38 Polk County waterbodies as of December, 2015 including: Antler Lake, Apple River, Balsam Lake, Bear Trap Lake, Big Blake Lake, Big Lake, Big Round Lake, Black Brook Flowage, Bone Lake, Camelia Lake, Cedar Lake, Church Pine Lake, Clam Falls Flowage, Clear Lake, Deer Lake, Half Moon Lake, Horseshoe Lake, Largon Lake, Little Blake Lake, Lower Pine Lake, Magnor Lake, McKenzie Lake, Middle Pine Lake, North Pipe Lake, North Twin Lake, North White Ash Lake, Pike Lake, Pine Lake, Pipe Lake, Sand Lake, Sandhill Lake, Silver Lake, South Twin Lake, Staples Lake, Swede Lake, Wapogasset Lake, Ward Lake, and White Ash Lake

Banded Mystery Snails

Banded mystery snails are native to the southeastern United States, being found primarily in the Mississippi River System up to Illinois. This invasive snail species is popular in the aquarium trade which likely explains it's presence outside its native range. Besides causing aesthetic problems, banded mystery snails can cause mortality of largemouth bass embryos if nests are invaded.

The banded mystery snail is easily distinguished by the presence of reddish bands which are arranged parallel to the whorl of the shell.

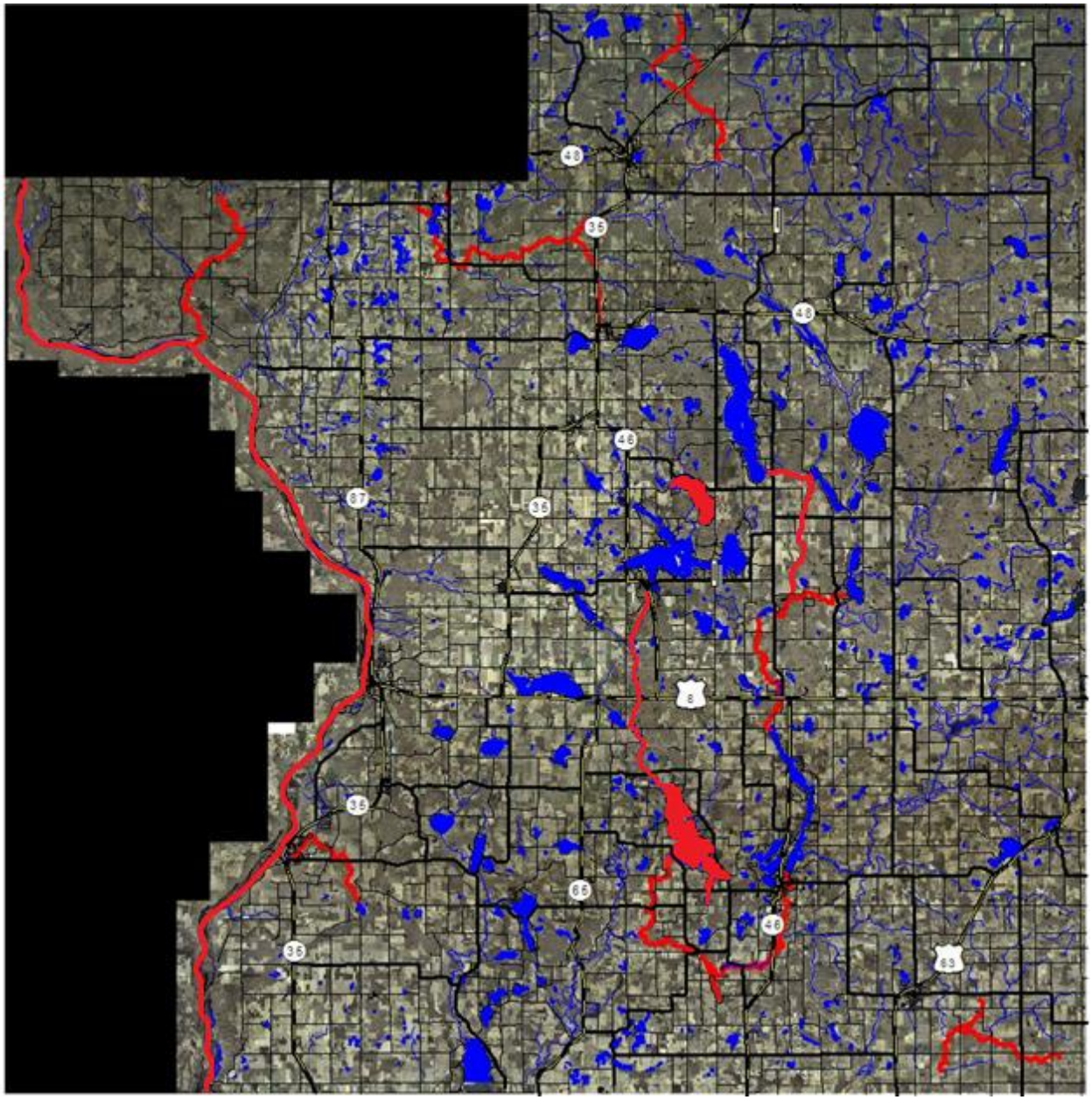
Banded mystery snails were first documented in Polk County in 2003 in Half Moon Lake. Although their spread had continued, they are still much less common in Polk County as compared with the Chinese mystery snail and had been documented on only 10 Polk County waterbodies as of December, 2013. The Polk County Land and Water Resources Department documented the species in one additional waterbody in 2014-2015: Big Round Lake.



Banded mystery snails have been documented on 11 Polk County waterbodies as of December, 2015 including: Big Blake Lake, Big Lake, Big Round Lake, Black Brook Flowage, Bone Lake (2454400), Bone Lake (2628100), Half Moon Lake, Magnor Lake, North Pipe Lake, North White Ash Lake, and Staples Lake

Rusty Crayfish

Rusty crayfish are invasive crustaceans that can have profound impacts on lakes, rivers, and streams. They are more aggressive than native crayfish and are better able to avoid predation than native crayfish. Rusty crayfish can also harm native fish populations by eating their eggs and young.



Rusty crayfish have been documented on 10 Polk County waterbodies as of December, 2015 including: Apple River, Balsam Branch, Fox Creek, Half Moon Lake, Osceola Creek, St. Croix River, Trade River, Wapogasset Lake, Willow River, and Wood River

Phragmites

Phragmites is a wetland grass that invades moist habitats, although it can tolerate dry conditions. It can grow from 3-20 feet in height and has dull, rigid, hollow stems.

Phragmites has not been documented in Polk County. Phragmites was previously misidentified on Lotus and McKenzie Lake. Both sites were revisited and confirmed as native phragmites.

Zebra Mussels

Zebra mussels are aquatic invasive mussels with a D-shaped shell exhibiting alternating black and white stripes. Since they are able to attach to hard surfaces, zebra mussels can clog water intakes and damage equipment such as boat motors. When water bodies are infested with zebra mussels their shorelines become littered with sharp shells, impeding human recreational opportunities. Additionally, zebra mussels damage ecosystems by harming fisheries and smothering native mussels, snails, and crayfish.

Zebra mussels arrived in the Great Lakes in the late 1980's from contaminated ballast water. Since that time they have expanded in range via the Mississippi River. Zebra mussels have not been found in Polk County; however, in 2010 they were discovered in Bass Lake in St. Croix County.

AIS Early Detection Smart Prevention Protocol

The Polk County Land and Water Resources Department partnered with the WDNR to implement the statewide AIS early detection smart prevention protocol on Polk County Lakes. This study began in 2011 and concluded in 2015.

The protocol includes the collection of basic water quality data (secchi depth and conductivity) along with numerous detection methods for aquatic invasive species:

- ✓ Thirty minute snorkel searches at all boat landings
- ✓ Ten minute snorkel searches at five sites
- ✓ Three spiny water flea tows
- ✓ Three zebra mussel veliger tows
- ✓ Rake throws and D-nets while completing a shoreline meander

Lakes monitored in 2014 include:

- ✓ Apple River Flowage
- ✓ Balsam Lake
- ✓ Big Round Lake
- ✓ Church Pine Lake
- ✓ King Lake
- ✓ Largon Lake
- ✓ Lower Pine Lake
- ✓ Pipe Lake
- ✓ Wapogasset Lake

Lakes monitored in 2015 include:

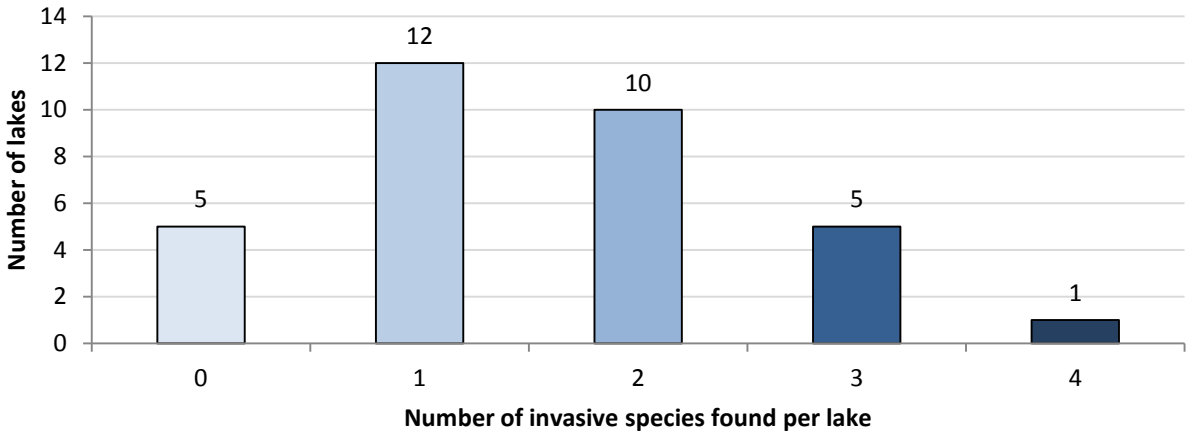
- ✓ Half Moon Lake
- ✓ Herby Lake
- ✓ Little Blake Lake
- ✓ Lower Pine Lake (revisit lake)
- ✓ Pickerel (Crescent) Lake
- ✓ South Twin Lake
- ✓ Swede Lake

Apple River Flowage, purple loosestrife, 2014

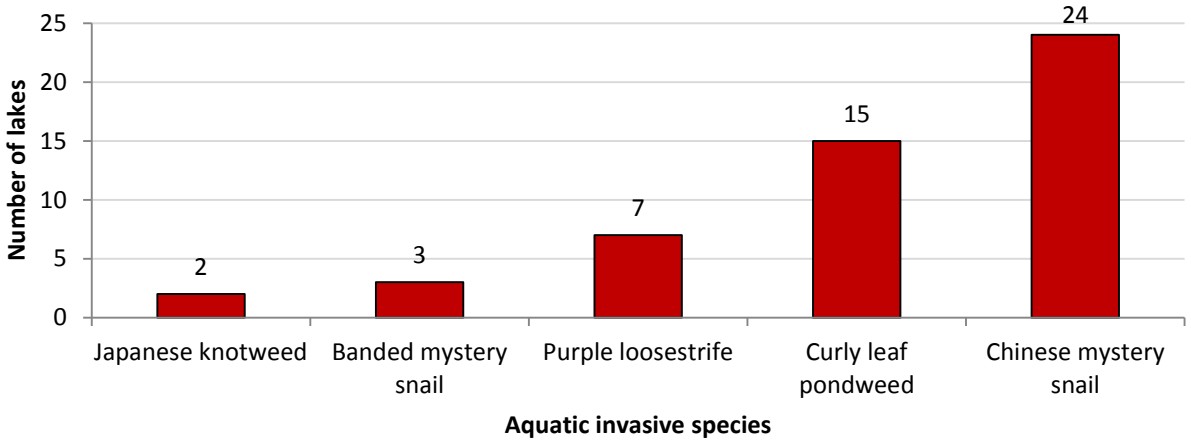
Data for secchi depth, conductivity, and GIS location of AIS populations was entered into the Surface Water Integrated Monitoring System (SWIMS). Aquatic plant specimens were sent to the UW-Stevens Point Herbarium, waterflea and veliger samples were sent to the Wisconsin DNR, and snail specimens were sent to the UW-La Crosse Biology Department.

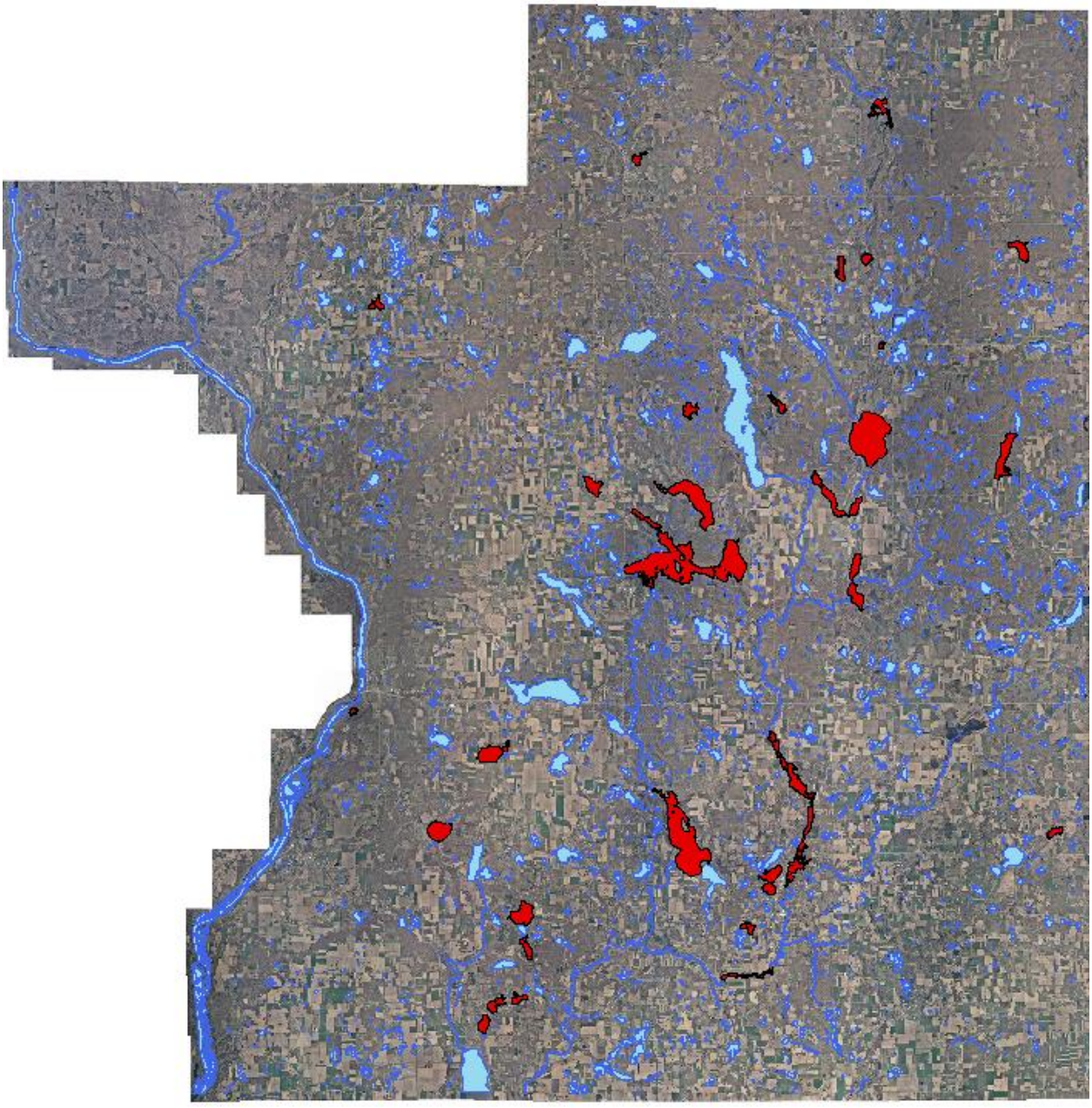
Under previous aquatic invasive species grants, LWRD implemented the protocol on an additional nine lakes in 2011, seven lakes in 2012, and three lakes in 2013.

In total since 2011, thirty-three Polk County Lakes have been monitored for AIS with the early detection smart prevention protocol. Additionally, Big Blake Lake and Lower Pine Lake were chosen as revisit lakes and monitored twice. The number of invasive species per lake ranged from zero to four. Fifteen percent of lakes sampled (n=5) had zero invasive species present, 36% of lakes (n=12) had one invasive species present, 30% of lakes (n=10) had two invasive species present, 15% of lakes (n=5) had three invasive species present, and 3% of lakes (n=1) had four invasive species present.



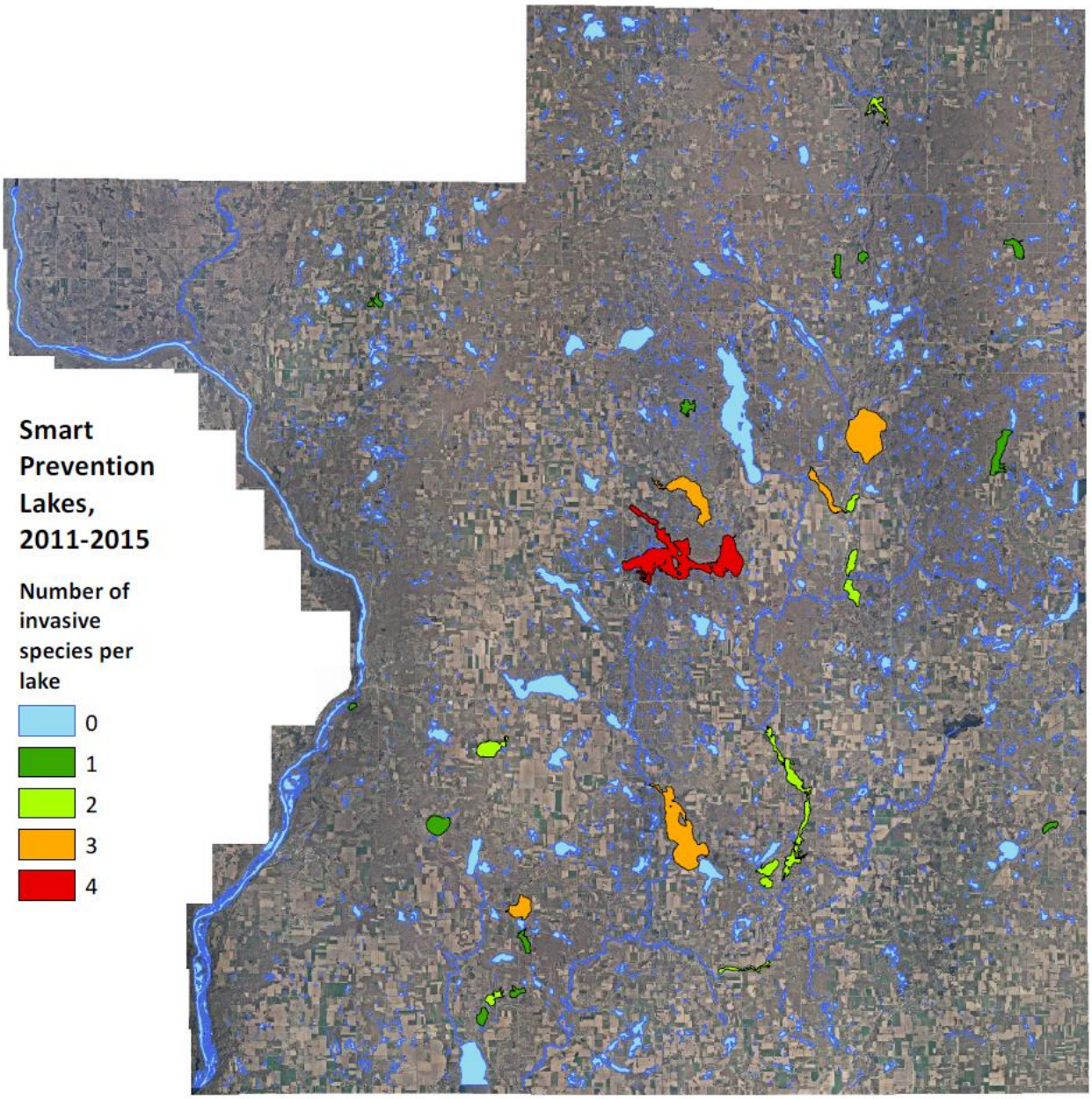
Species detected through the protocol include: Japanese knotweed, banded mystery snail, purple loosestrife, curly leaf pondweed, and Chinese mystery snail. Japanese knotweed was detected in only 6% of lakes sampled (n=2), banded mystery snail was detected in only 9% of lakes sampled (n=3), and purple loosestrife was detected in 21% of lakes sampled (n=7). Curly leaf pondweed was found in nearly half of the lakes sampled (45%, n=15) and Chinese mystery snails were found in nearly three-quarters of lakes sampled (73%, n=24).





AIS early detection smart prevention protocol lakes, 2011-2015

Antler Lake, Apple River Flowage, Balsam Lake, Big Blake Lake, Big Lake, Big Round Lake, Black Brook Flowage, Camelia Lake, Church Pine Lake, Clam Falls Flowage, Coon Lake, Half Moon Lake, Herby Lake, King Lake, Lake O' the Dalles, Largon Lake, Little Blake Lake, Lotus Lake, Lower Pine Lake, McKenzie Lake, North Twin Lake, North White Ash Lake, Pickerel Lake, Pine Lake, Pipe Lake, Rice Lake, Sand Lake, South Twin Lake, Swede Lake, Vincent Lake, Wapogasset Lake, Ward Lake, White Ash Lake



Number of aquatic invasive species found per lake

AIS early detection smart prevention protocol lakes, 2011-2015

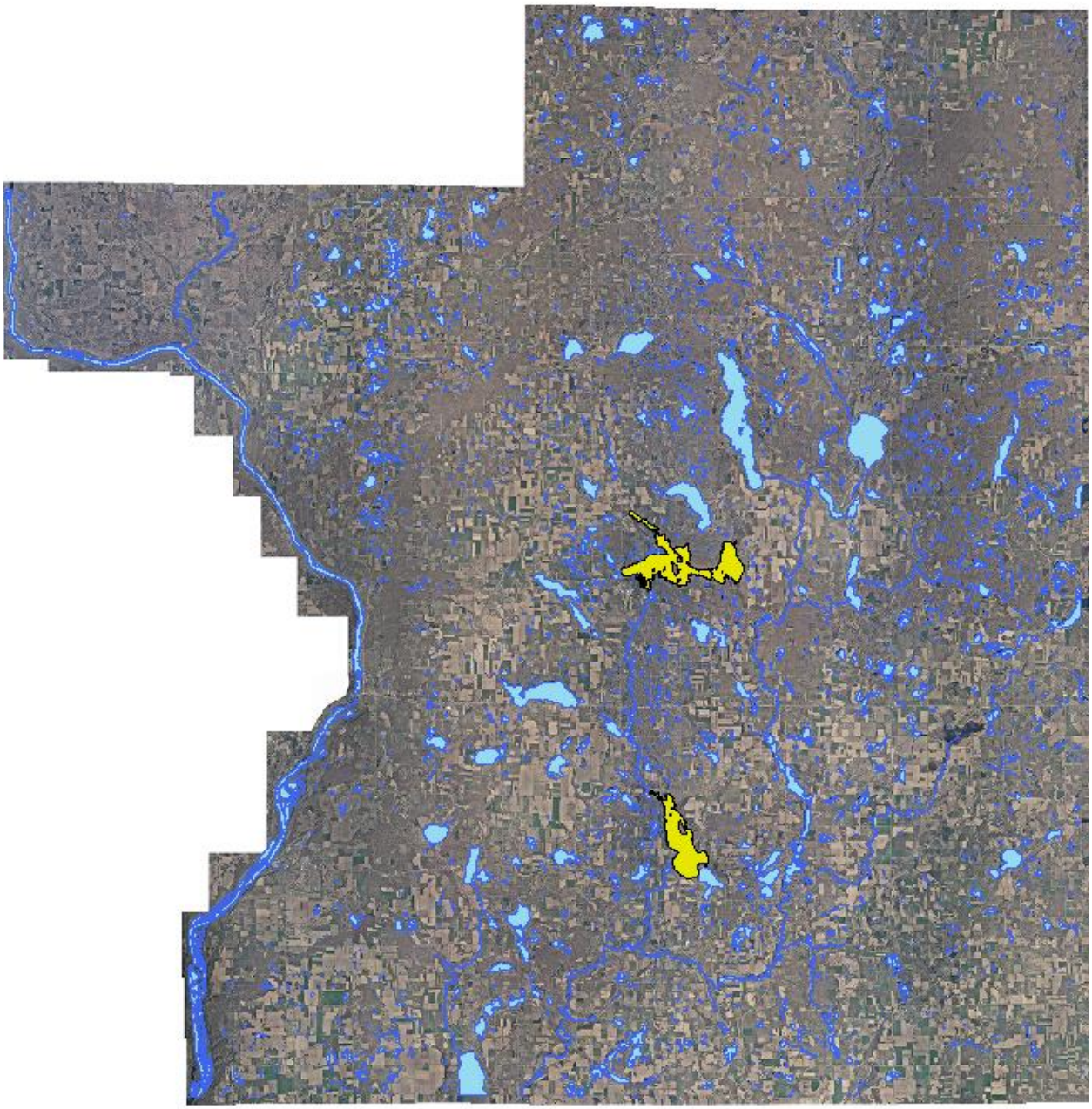
Lakes with 0 AIS: Coon Lake, King Lake, Pickerel Lake, Rice Lake, Vincent Lake

Lakes with 1 AIS: Antler Lake, Camelia Lake, Church Pine Lake, Herby Lake, Lake O' the Dalles, Largon Lake, Lotus Lake, Lower Pine Lake, McKenzie Lake, Pipe Lake, Swede Lake, Ward Lake

Lakes with 2 AIS: Apple River Flowage, Black Brook Flowage, Clam Falls Flowage, Little Blake Lake, North Twin Lake, North White Ash Lake, Pine Lake, Sand Lake, South Twin Lake, White Ash Lake

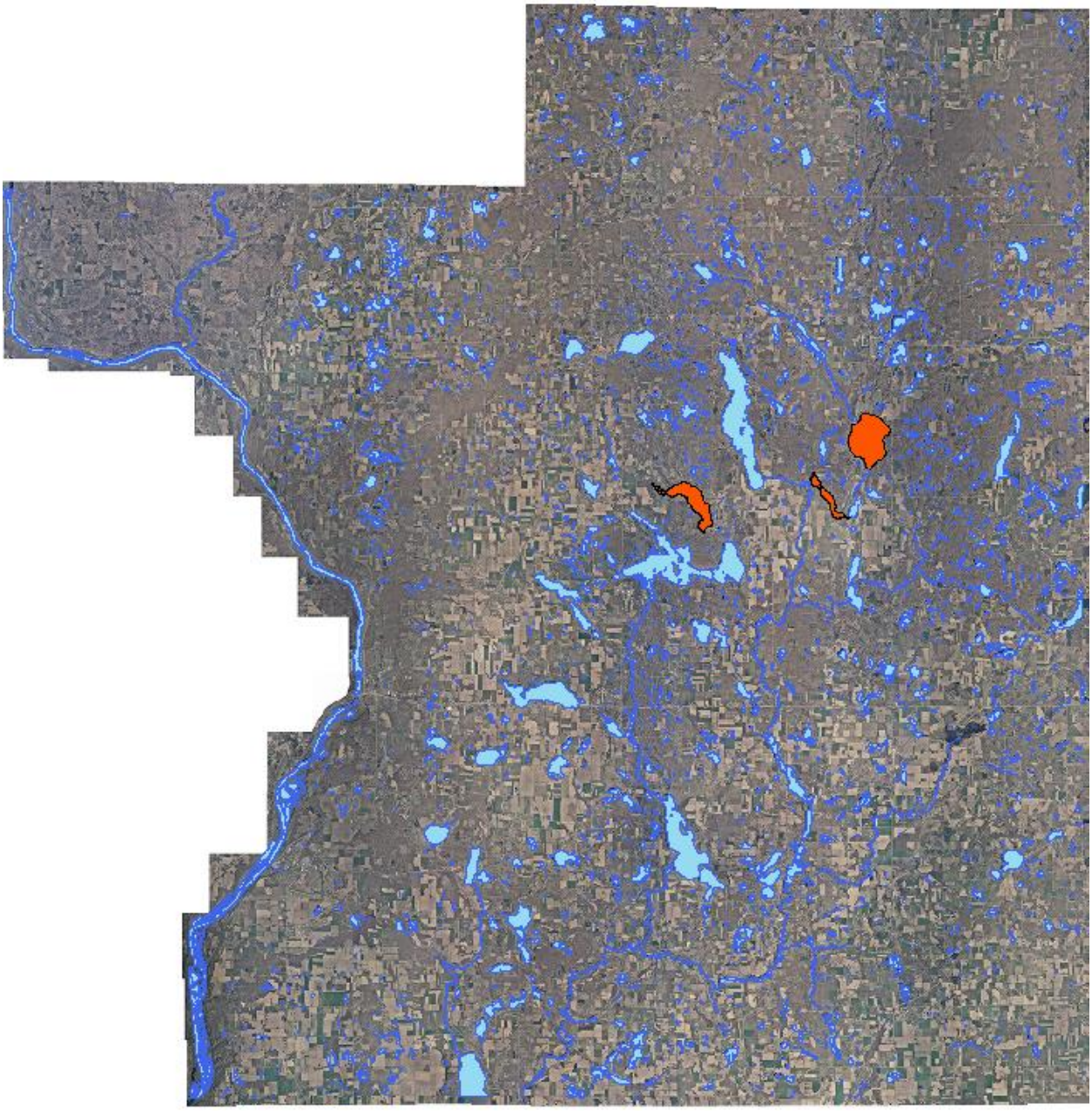
Lakes with 3 AIS: Big Blake Lake, Big Lake, Big Round Lake, Half Moon Lake, Wapogasset Lake

Lakes with 4 AIS: Balsam Lake



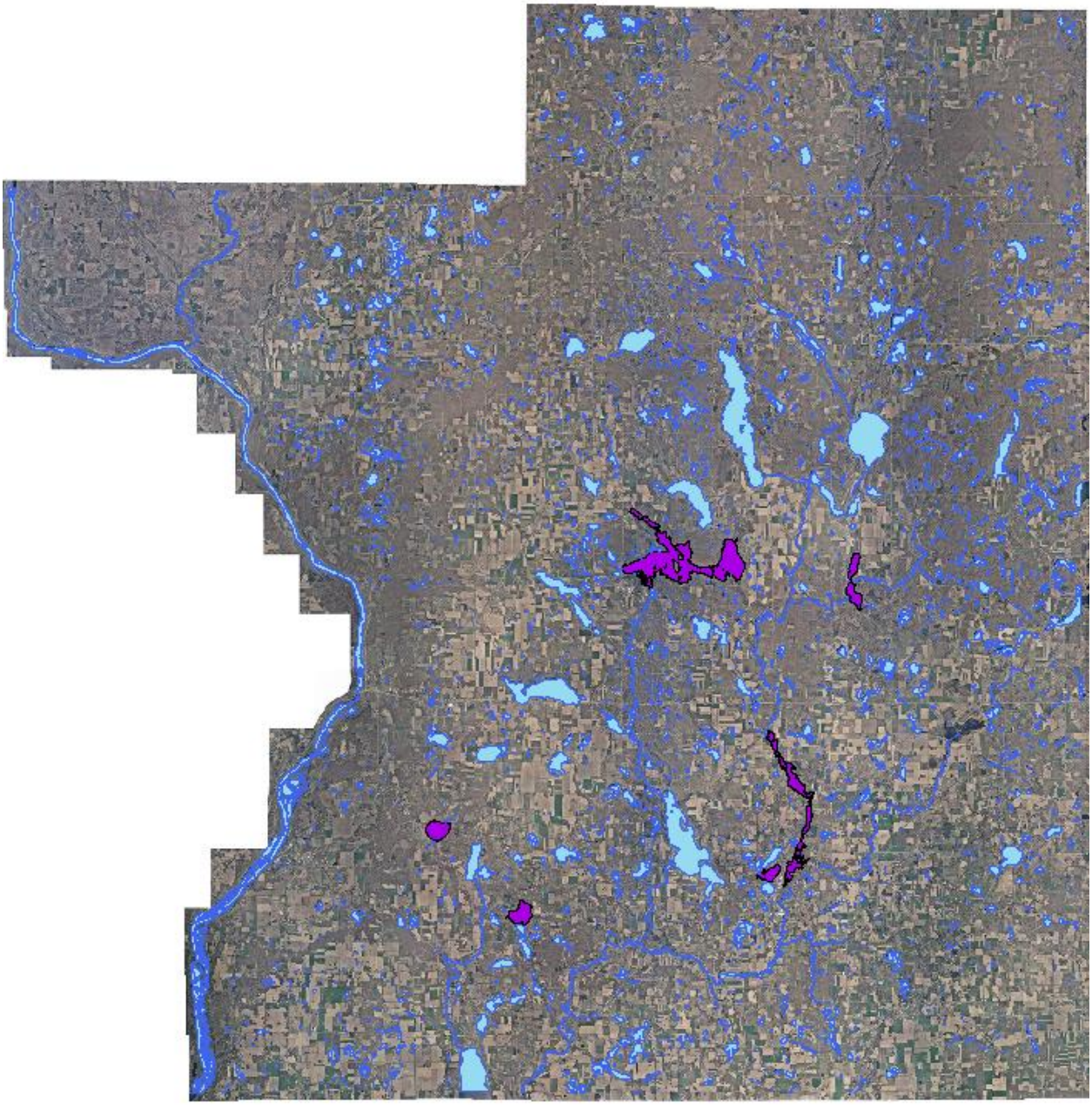
Japanese knotweed
AIS early detection smart prevention protocol lakes, 2011-2015

2 Lakes: Balsam Lake, Wapogasset Lake



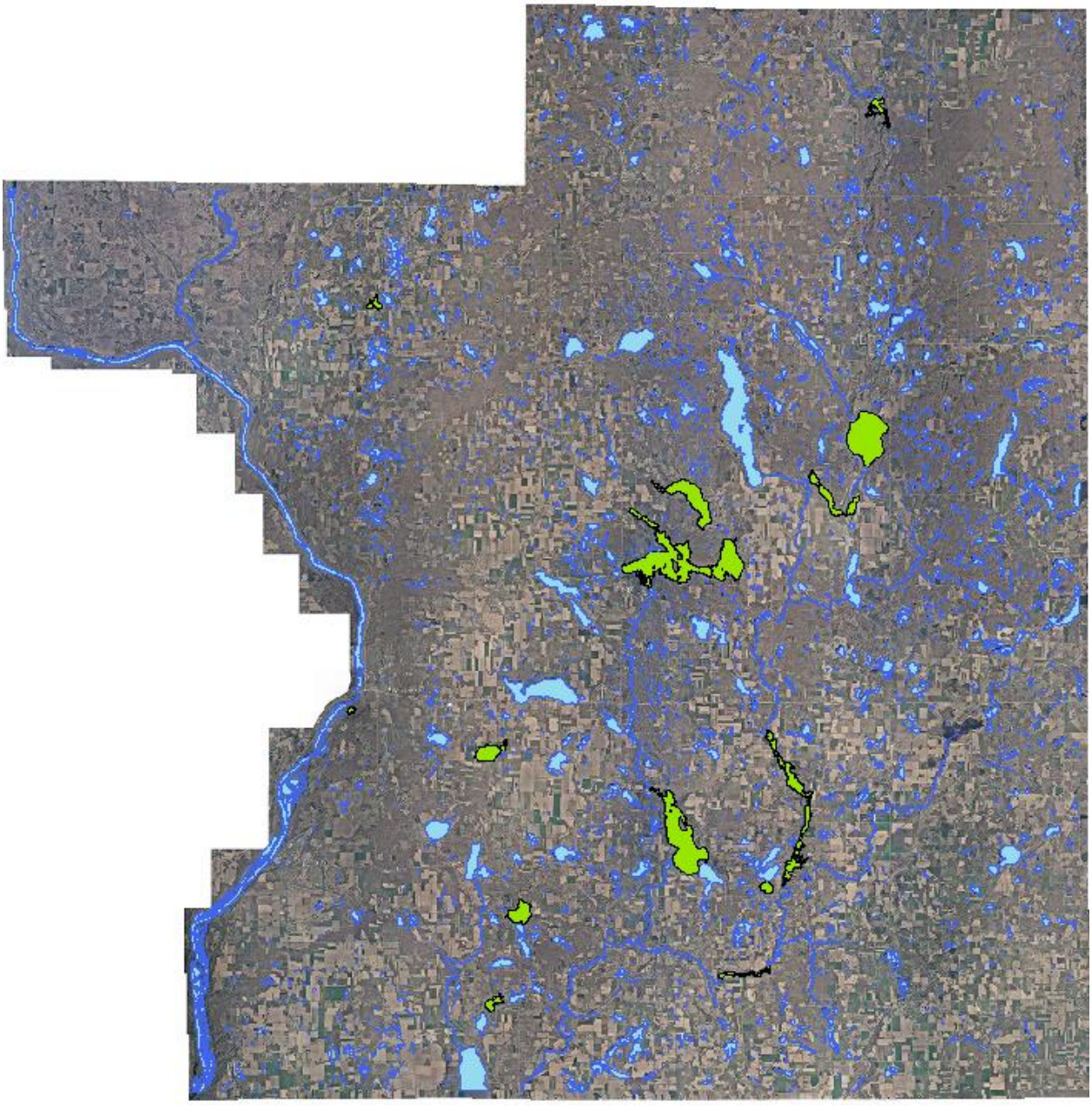
Banded mystery snail
AIS early detection smart prevention protocol lakes, 2011-2015

3 Lakes: Big Blake Lake, Big Round Lake, Half Moon Lake



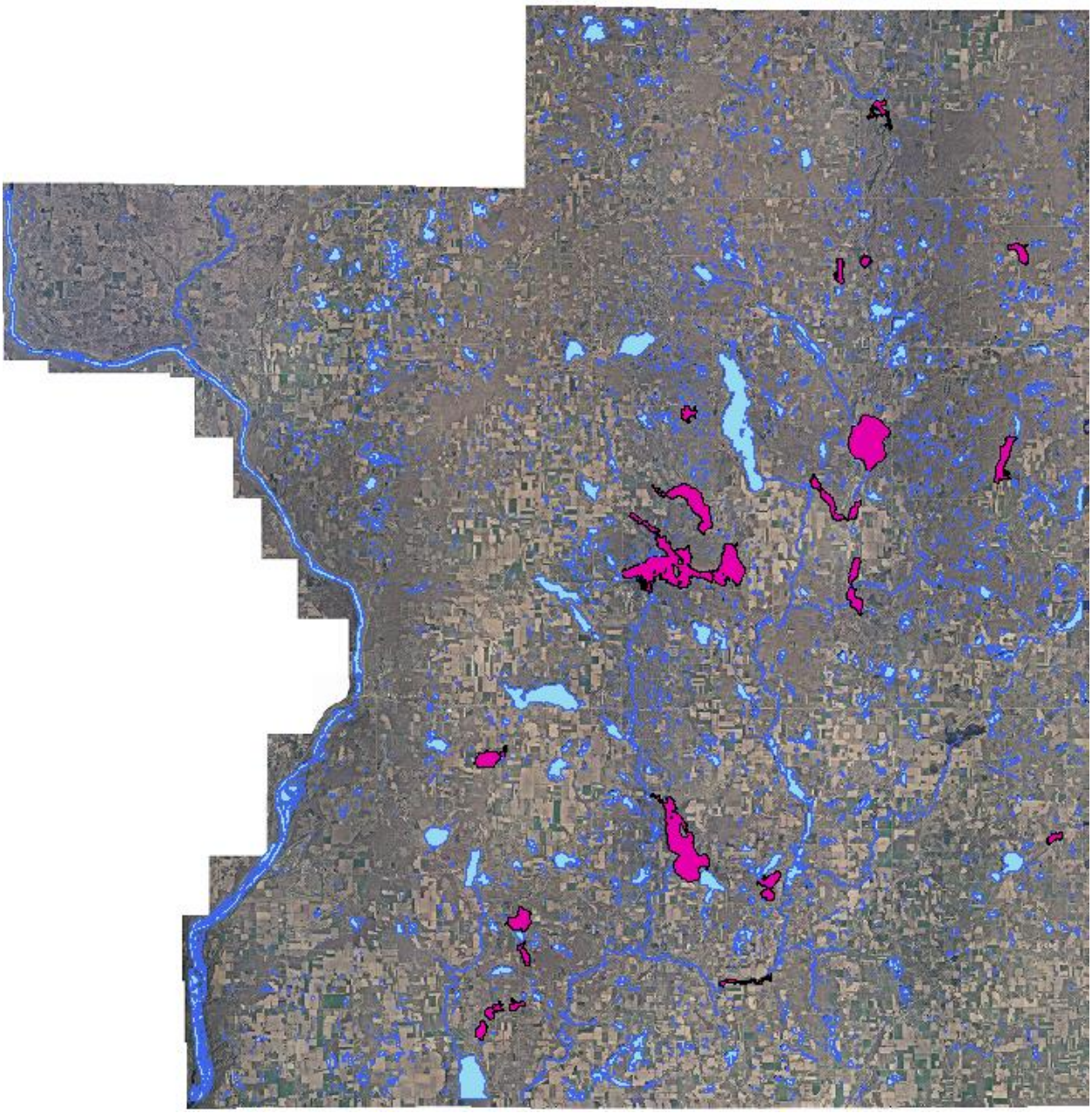
Purple loosestrife
AIS early detection smart prevention protocol lakes, 2011-2015

7 Lakes: Apple River Flowage, Balsam Lake, Big Lake, Lotus Lake, North Twin Lake, North White Ash Lake, White Ash Lake



Curly leaf pondweed
AIS early detection smart prevention protocol lakes, 2011-2015

15 Lakes: Apple River Flowage, Balsam Lake, Big Blake Lake, Big Lake, Big Round Lake, Black Brook Flowage, Clam Falls Flowage, Half Moon Lake, Herby Lake, Lake O' the Dalles, Little Blake Lake, Pine Lake, Sand Lake, South Twin Lake, Wapogasset Lake



Chinese mystery snail
AIS early detection smart prevention protocol lakes, 2011-2015

24 Lakes: Antler Lake, Balsam Lake, Big Blake Lake, Big Lake, Big Round Lake, Black Brook Flowage, Camelia Lake, Church Pine Lake, Clam Falls Flowage, Half Moon Lake, Largon Lake, Little Blake Lake, Lower Pine Lake, McKenzie Lake, North Twin Lake, North White Ash Lake, Pine Lake, Pipe Lake, Sand Lake, South Twin Lake, Swede Lake, Wapogasset Lake, Ward Lake, White Ash Lake

Clean Boats, Clean Waters

The Polk County Land and Water Resources Department provided countywide Clean Boats, Clean Waters trainings in both 2014 and 2015. Both trainings were held prior to the fishing opener and were attended by eight and thirteen individuals, respectively. In 2014 an individualized training for the Balsam Lake and Long Lake Protection and Rehabilitation Districts was attended by ten volunteers and in 2015 an individualized training for the Balsam Lake Protection and Rehabilitation District was attended by five volunteers. Individualized trainings were also held for the Apple River Flowage and Big Round Lake in 2014 and Big Round Lake in 2015. Template presentations were edited to include local AIS locations and concerns. Materials can be found in Appendix A.

Balsam and Long Lake Protection and Rehabilitation District Clean Boats, Clean Waters training, 2014

Landing Blitz

In 2014 and 2015, the Polk County Land and Water Resources Department assisted in organizing the Landing Blitz by providing information to all lake organizations in Polk County and gathering participant information. Both years LWRD wrote a press release promoting the event and served as a pick up site for towels and educational materials. Seventeen waterbodies participated in the Landing Blitz in 2014 and ten participated in 2015.

Drain Campaign

In 2014 and 2015, the Polk County Land and Water Resources Department promoted the Drain Campaign to local lake organizations and signed lakes up for this statewide initiative. LWRD also authored a press release to promote the event, served as a pick up site for ice packs, and ordered the free flyers and educational brochures for each participating lake. In total, seventeen lakes participated in the Drain Campaign in 2014 and sixteen lakes and rivers participated in 2015.

Fall Snapshot Day

In 2014, the Polk County Land and Water Resources Department partnered with the St. Croix River Association to offer the Fall Snapshot Day in Polk County. Four volunteers attended the training and monitored four sites: Apple River at the Apple River County Park, Balsam Branch at DD Kennedy Environmental Area, Big Rock Creek at Big Rock Creek Farm, and Osceola Creek at Osceola Road. The

only invasive species found was curly leaf pondweed at the Balsam Branch site. LWRD also served on the statewide planning committee for the 2015 event. Although the event was planned for 2015, it was cancelled due to low registration. Materials can be found in Appendix B.

AIS Citizen Lake Monitoring Network

An AIS Citizen Lake Monitoring Network training was offered by the Polk County Land and Water Resources Department in 2014 and 2015. The 2014 training was attended by twenty-nine volunteers and the 2015 training was attended by eight volunteers. Both trainings included a hands-on session to view specimens of AIS with a focus on native as well and invasive plants. Template presentations were edited to include local AIS locations and concerns. The St. Croix River Association assisted with the 2015 training. As a result of the training, volunteers from Long Lake brought in a specimen of curly leaf pondweed. The specimen was vouchered. Materials can be found in Appendix C.

Project RED

The Polk County Land and Water Resources Department partnered with the St. Croix River Association, the National Park Service, and the River Alliance to offer Project RED trainings in 2014 and 2015. Twelve volunteers attended the training in 2014 and ten volunteers attended the training in 2015. Two volunteers returned two datasheets in 2014 and two volunteers returned thirteen data sheets in 2015. Data was entered into SWIMS. Template presentations were edited to include local AIS locations and concerns. Materials can be found in Appendix D.

Education and Outreach

Polk County Land and Water Resources Department delivered AIS education and outreach at numerous events and meetings for a variety of audiences. Materials can be found in Appendix E.

- ✓ Earth Day Celebration for all Polk County schools, 2014
- ✓ Governors Fishing Opener, 2014
- ✓ Clayton High School, 2014
- ✓ Horseshoe Lake Education Fair, 2014
- ✓ Bone Lake Annual Meeting, 2014
- ✓ Polk County Fair, 2014 and 2015
- ✓ Luck School 3rd grade, 2014 and 2015
- ✓ Bi-weekly radio program, 2014 and 2015
- ✓ Osceola School 4th grade, 2014 and 2015
- ✓ Balsam Lake Dockside newsletter, 2014 and 2015
- ✓ DNR press release templates to local papers, 2014 and 2015
- ✓ West Denmark Family Camp, 2015
- ✓ St. Croix Falls 5th grade, 2015
- ✓ Balsam Lake Annual Meeting, 2015
- ✓ Balsam Lake/Milltown Library, 2015

Lake Maps

In 2014, the Polk County Land and Water Resources Department assisted the Polk County Association of Lakes and Rivers with a reprint of customized waterproof AIS lake maps. Four lake organizations reprinted maps and one organization paid for a map to be designed for their lake.

AIS Signs

Lakes that were visited were checked for WDNR AIS signs at the boat landings. An AIS sign was installed at Largon Lake.

Augmented Enforcement

In 2014, the Polk County Land and Water Resources Department worked with the Polk County Sheriff's Department to organize augmented enforcement of the Balsam Lake Boat Landing during their annual town festival. However, due to arising priorities, deputies were unable to provide augmented enforcement.

In 2015, the Polk County Land and Water Resources Department and St. Croix River Association worked with the WDNR Water Guard to provide augmented enforcement at two area boat landings over two weekends in July. The area water guard was at Garfield Park on Lake Wapogasset and Lions Park Landing on the St. Croix River with a decontamination unit. Both opportunities were paired with local Clean Boats, Clean Waters programs and the Lake Wapogasset project included a partnership with the Lake District, Lake Association, and Town of Garfield. LWRD was the project lead for the Lake Wapogasset project and the St. Croix River Association was the project lead for the St. Croix River project.

WDNR Water Guard Ashely Dooley and Lake Wapogasset Clean Boats, Clean Waters volunteer Rick Bazille, 2015

AIS Trainings

Polk County Land and Water Resources Department staff attended all WDNR AIS trainings in 2014 and 2015 including spring and fall AIS coordinator meetings and a regional AIS rapid response exercise and coordinator meeting. Staff also attended all train-the-trainer workshops for programs such as Clean Boats, Clean Waters and the Citizen Lake Monitoring Network.

Polk County Aquatic Invasive Species Strategic Plan

Up until 2015, Polk County did not have an aquatic invasive species strategic plan. Using existing county, regional, and state aquatic invasive species strategic plans as a template, LWRD drafted a Polk County Aquatic Invasive Species Strategic Plan as a starting point for citizen input.

Two planning meetings were held to develop a strategic plan to prioritize which actions should take place in Polk County in response to aquatic invasive species. The agenda for the first meeting—held on May 20th, 2015—included a review of AIS issues, a summary of the draft Polk County Aquatic Invasive Species Strategic Plan, and an opportunity to review and provide feedback on the goals, objectives, and actions of the plan. A second meeting—held on June 17th, 2015—provided a review of changes made in response to the May meeting and also provided an opportunity for additional changes to be made to the plan. The meeting dates coincided with the dates, times, and places of Polk County Association of Lakes and Rivers (PCALR) meetings, with the second meeting taking place directly preceding the 2015 Annual Meeting of the organization.

The meetings were publicized in the Polk County Leader, through press releases submitted to all Polk County papers, through the Polk County Association of Lakes and Rivers email list, and through direct emails to stakeholders. Once the plan was finalized, it was opened to a 30 day public comment period ending on Friday, July 31st, 2015. Notice of taking public comment was posted in the Polk County Government Center, the Polk County Justice Center, the Village of Balsam Lake Municipal Building, and as a two week ad in the Polk County Leader. The plan was approved by the Polk County Conservation, Development, Recreation, and Education Committee on Tuesday, September 2nd, 2015; by the Polk County Board of Supervisors on September 15th, 2015; and by the Wisconsin Department of Natural Resources on October 5th, 2015.

While creating this plan, citizens determined that progress on the plan should be reviewed and updated on an annual basis. Likely, this review will take place in conjunction with PCALR meetings.

Materials can be found in Appendix F.

Regional Aquatic Invasive Species Strategic Plan

Polk County Land and Water Resources Department also participated in the AIS Work Group lead by the St. Croix River Association to develop a St. Croix Basin Aquatic Invasive Species Strategic Plan.