

*Iron County LWCD
Lake Protection Grant
Grant Reimbursement Report
LPT-425-12
May 23, 2017*

Grant Overview

In 2011 the Iron County LWCD was awarded a Lake Protection Grant to provide education, outreach and assistance to lake groups and property owners in an effort to promote healthy shoreland in Iron County. In 2012, the department hired a Lake Specialist who assists with shoreland mitigation and Iron County's future shoreland ordinance rewrite. The Iron County Zoning Department completed the shoreland zoning ordinance in 2016 and a shoreline guide will be available for landowners in 2017. This project has been a great success over the past five years. Through the hiring of a Lake Specialist or Conservation Specialist the department has been able to educate more landowners on shoreland habitat and water quality. The project did have some hurdles to overcome with staff changes and the state making major changes to the shoreland zoning ordinances. Through those challenges came an impressive project which exceeded the goals and objectives of the initial grant proposal. This report will outline all of the goals, objectives and activities, show the outcomes of each year and will summarize the activity with notes on how the LWCD will go forward with these measures. For more more in depth information on each year of the project please refer to the individual year-end report which describes each activity in depth with pictures, site plans, examples and maps.

Goals, Objectives and Activities Summary by year.

Projected outcome is italicized in the activity and completed work listed in bold in the activity.

Total Deliverables

Goal A. Develop Shoreland Protection Program to provide technical assistance and promote education to property owners for the development of shoreland restoration plans. Target audiences include: property owners, lake associations, recreational groups, etc

Objective A1: Provide technical assistance to shoreland property owners for voluntary and mitigation restoration plans.

Activity 1.1: Develop shoreland restoration plans for voluntary sites.

2012 Implemented (9) voluntary restorations

In 2012, the lake specialist worked with five property owners on six sites at the birch point property owners association. Six shoreland properties were restored on the Turtle Flambeau Flowage.

2013 Implemented (1) voluntary restorations

In 2013 the County Conservationist implemented a voluntary shoreland restoration on Mercer Lake restoring 870 square feet of shoreline. This restoration consisted of planting 192 grasses and wildflower plugs, 13 shrubs and 7 trees in the 870 square foot project area.

2014 Field Season: Implemented (4) voluntary restorations

In 2014 the County Conservationist implemented four voluntary shoreland restoration projects on the Montreal River, Echo Lake, and Turtle Flambeau Flowage restoring a total area 13,375ft² of shoreland with native vegetation. Within the restored area there were 2,579 grasses and wildflowers planted along with 593 shrubs.

2015 Field Season: Provided technical assistance for (13) shoreline restoration projects

In 2015 the LWCD implemented two voluntary shoreland restoration projects; one on Echo Lake, and one at Campsite F-17 on the Turtle Flambeau Flowage. In total 950 square feet of shoreland was restored with native vegetation. Within the restored area there were 870 grasses and wildflowers planted along with 24 shrubs. In addition, technical assistance was provided at 11 other sites. These sites were along shorelines on Echo, Mercer, Payment, Grant, Lake Michelle, Turtle Flambeau Flowage Camp sites F-9 & F-12, Turtle Flambeau Flowage Donner Bay, Rice, French, and Boot Lakes.

2016 Field Season: Provided technical assistance for (4) shoreline restoration projects

In 2016 the LWCD implemented three voluntary shoreland restoration projects; one on Grant Lake, one on Mercer Lake and a large restoration project on Boot Lake. In total 9,134 square feet of shoreland was restored with native vegetation. Rain gardens, water diversion practices, and shoreline stabilization and water run off practices were all built into the site plans. Four other practices were engineered in 2016 including, one dam removal, two culvert replacements, and one water diversion and run off practice with the City of Hurley. All projects were designed to protect water quality and erosion.

Summary – Overall the shoreland restoration program in Iron County has been and continues to be successful, year to year the number of restorations varies. The variable number has much to do with other project requests and cost share money awarded to the department. In the future it is anticipated that shoreland restorations will continue to grow as more people see restorations done by neighbors or friends.

Activity 1.2: Develop shoreland restoration plans /educate landowners on mitigation sites. (10 annual)

2012 Implemented (1)

Iron County has not completed their shoreland zoning rewrite at this time. The LWCD has been working with the zoning department on mitigations as necessary. This summer there was one shoreland mitigation. The site was visited by both the Lake Specialist and the Zoning Administrator. The Lake Specialist provided the landowner with restorations recommendations specific to his site. The landowner will implement the restoration and

the zoning department will conduct a follow up review. Once the shoreland zoning plan has been completed, the LWCD anticipates at least 10 mitigations annually.

2013 Implemented (1)

This summer there was one shoreland mitigation. The Iron County Zoning Administrator and the DNR Water Regulation Specialist visited the site. The Zoning Administrator recommended the landowner contact the Iron County LWCD to get recommendations on seeding the disturbed area in need of mitigation. The Conservationist provided seeding recommendations for the landowner with instructions for seeding the site.

2014 Field Season (1 consult)

The LWCD has been working with the zoning department on mitigations as necessary. This summer there was one shoreland mitigation. The site was reported to the County Conservationist who visited the site in September. Due to the time of year both the Conservationist and the Zoning Administrator felt it was too late in the year to do a restoration. The LWCD recommendation for restoration is to be completed by September 15th of the year. Restoration work would not have been able to be completed by this deadline, so it was communicated to the landowner they would have to complete the mitigation plan early in June to establish the plants throughout the 2015 growing season.

2015 Field Season (2)

This summer there were two shoreland mitigation sites addressed by Iron County LWCD. The Iron County Zoning Department and LWCD have been working closely on these projects to ensure they run as smooth as possible.

2016 Field Season (1)

The LWCD has been working with the zoning department on mitigations on an as needed basis. The idea of prevention and proper planning before a mitigation occurrence was our primary goal. This summer there was only one shoreland mitigation site addressed by Iron County LWCD. 1200 square feet was replanted and restored based on the department site plan and landowner agreement. The Iron County Zoning Department and LWCD have been working closely on this projects to ensure it runs as smooth as possible. The landowner was easy to work with and cooperated in all aspects of the plan. Follow up visits were conducted in the fall to see that the landowner is in compliance or if any supplemental panting were needed. After site visit the LWCD suggested better deer fencing was needed.

Summary- Overall, this deliverable was far less successful than anticipated. This was due to the state changing the shoreland zoning authority of the counties. Iron County postponed their rewrite until the state finalized shoreland zoning. In addition to the county waiting on their rewrite of their ordinance, there was very little development after the recession, Iron County has just started to see applications for zoning permits. In the past 5 years with few permit applied for, there was little opportunity for mitigation efforts. Now that the Shoreland Zoning Ordinance has been updated and passed and building permits have started to increase it is anticipated that mitigations will increase.

The Zoning Department and the LWCD staff will continue to work closely to ensure that shoreland health is maintained and properties who are in violation will achieve compliance.

Activity 1.3: Contact previous shoreland permit applicants to encourage restoration as needed. (5 annual)

2012 Conducted (1)

2013 Conducted (0)

This deliverable was one that was not met due to change in staff.

2014 Field Season (0)

This deliverable was one that was not met due to change in staff.

2015 Field Season (0)

New home construction or permitted applications for remodels on shorelines in Iron County were halted during the 2015 field season due to changes in shoreland zoning. No site visits were made in 2015.

2016 Field Season (0)

The LWCD has been working with the zoning department on shoreland permit applications on an as needed basis. The Iron County Zoning Department and LWCD have been working closely on these projects to ensure landowners are in compliance. Permittees are encouraged to plant /restoration disturb soils with native plants, particularly near shorelines.

Summary – Staff in the Zoning Dept and LWCD work closely and will continue to do so in the future to make sure landowners are educated on water quality issues and encourage responsible development to promote healthy habitats. While the numbers of old permits were not met, the LWCD is consistently referred by the Zoning department as a reference for property owners to use for shoreland development questions and expertise. This was a difficult measurable that seems to be unmet, however, each year the LWCD assisted landowners who contacted the department for expertise on the recommendation of the Zoning Administrator.

Objective A2: Develop Shoreland Restoration Demonstration Sites.

Activity 2.1: Develop restoration for Town of Mercer-Carow Park. 450+ ft. voluntary restoration –

2012– Conducted initial visit for Carow Park

A site visit was done on October 20th to measure out the restoration area. The Lake Specialist will develop a site plan for restoration to occur in 2013.

2013 – Completed restoration. – for detailed site plan and pictures see 2013 annual report.

In August of 2013, a group of volunteers restored 8,750 square feet of shoreline on Grand Portage Lake at the Carow Park for the Town of Mercer. This project was paid for by the Iron County LWCD cost-share program and by a US Fish and Wildlife Grant. The 250 linear feet of shoreline has now been restored with native grasses and wildflowers (5,256 plugs), 102 shrubs and 5 trees. This restoration will serve as a demonstration site for shoreland restoration.

2014 Field Season

Land and water conservation department staff visited the sites three times throughout the season, monitoring for plant growth and condition of the fencing. In general, there was good plant growth throughout the site. During a visit it was noted that the deer fence was in need of repair, this was reported to the town of Mercer and taken care of.

2015 Field Season

Land and Water Conservation Department staff visited the restoration to monitor the condition of the planting. The slope has been stabilized and the plants have been filling in well.

2016 Field Season

Land and Water Conservation Department staff visited the restoration monitoring the condition of the planting. The slope has been stabilized and the plants have been filling in well. Some invasive species control could be addressed in order to knock back spotted knapweed.

Activity 2.2: Develop restoration plan for Turtle Flambeau Birch Point Condo demonstration. 300+ ft voluntary restoration. –

2012 developed and implemented restoration plan for 450 linear feet at Birch Point.

Early in 2012 the lake specialist met with 5 different landowners and worked with them to develop shoreline restoration plans for 6 properties. The total restoration included approximately 450 linear feet of shoreline restored with native grasses, wildflowers, trees and shrubs for a total area of 9,525 square feet. Each landowner signed a covenant to ensure the future of the restored shoreline.

2013 – Visited restoration sites to assist some of the property owners with questions regarding maintenance of their planted areas.

2014 – Sites were visited and pictures taken to use as a shoreland demo to encourage restorations.

Objective A3: Reduce storm water runoff impacts through management practices. Website info maintained.

Activity 3.1: Install rain garden or rain barrels at one restoration site. –

2012 (1) rain garden installed and (2) rain barrels installed at each of 2 community gardens.

A rain garden was installed on the Turtle Flambeau Flowage through the Iron County LWCD cost share program. The staff worked with a voluntary landowner who wished to install a rain garden on their property to collect roof runoff that pooled in their yard. The rain garden now infiltrates storm water into the ground rather than it running into the flowage.

2015 -Rain garden and water infiltration trench was installed on Echo Lake. For more information including pictures see the 2015 grant report.

2016- Raingarden, water infiltration trench, and a depressional area (similar practices to raingardens) were installed on a property in the town of Sherman on Boot Lake at a resort dealing with serious runoff problems. For more information including pictures see the 2016 grant report.

Summary – Installations of raingardens, infiltration trenches, depressional areas and other storm water retention practices will likely gain popularity as development grows.

Goal B. Provide shoreland restoration education to property owners, students, lake groups, contractors, & elected officials.

Objective B1: Update Shoreland Restoration Guide, Shoreland Folder, & Shoreland Web Page. – Ongoing in 2016.

Activity 1.1: Update and reprint Shoreland Restoration Guide. Distribute to landowners. Print 500 copies; distribute annually

2012 - The shoreland Restoration Guide revision was just started at the end of 2012 and work to complete the revision will take place in the early part of 2013.

2013 -The Shoreland Guide was revised in late 2013 and 500 copies were printed.

2014 Field Season:

The new Shoreland Restoration Guide was distributed as requested.

2015 Field Season:

The new Shoreland Restoration Guide was distributed as requested and handouts were made available at special events and programs.

2016 Field Season:

The new Shoreland Restoration Guide was distributed as requested and handouts were made available at special events and programs.

Activity 1.2: Distribute Shoreland Folders to realtors and new shoreland property owners. Distribute 50 annually. -

2012 distributed (10); additional offered but not needed.

In the summer of 2012 area realtors were offered additional shoreland folders all of which had a supply of shoreland folders. One realtor requested additional copies of the Shoreland Management and Development Guide for Mercer, 10 additional copies were provided.

2013 distributed (0); Never contacted to re-supply realtors.

With the Lake Specialist position vacant area realtors were not contacted to see if they needed additional copies. None of the realtors contacted the LWCD for additional shoreland folders. In 2014 the Lake Specialist will make sure all realtors are contacted and supplied with shoreland folders as needed.

2014 Field Season (10)

The Lake Specialist contacted local realtors to refill their supply of shoreland folders and to see if they needed additional copies. Folders and information was also distributed during area events such as Loon days and during Iron County Lakes and Rivers Alliance meetings. The Turtle Flambeau Flowage/Trude Lake Property Owners Association requested 10 copies for the association to hand out to new property owners.

2015 Field Season (15)

The Lake Specialist contacted local realtors to refill their supply of shoreland folders and to see if they needed additional copies. Folders and information was also distributed during area events such as Loon days and during Iron County Lakes and Rivers Alliance meetings. Materials in shoreline folders were evaluated for their effectiveness due to comments from individuals and real-estate agents suggesting that the folders had too much information in them and needed to be simplified. The Lake's Specialist reduced the amount of information in the packets, focusing on the core elements for shoreline owners and provided more information on the LWCD website.

2016 Field Season (8)

The Lake Specialist contacted local realtors to refill their supply of shoreland folders and to see if they needed additional copies. Folders and information was also distributed during area events such as Loon days, conservation on tap lecture series and during Iron County Lakes and Rivers Alliance meetings. Materials in shoreline folders were evaluated for their effectiveness due to comments from individuals and real-estate agents suggesting that the folders had too much information in them and needed to be simplified. The Lake's Specialist reduced the amount of information in the packets, focusing on the core elements for shoreline owners and provided more information on the LWCD website.

Summary – The Shoreland Folders have been streamlined to focus on the most important shoreland issues. One of the main intentions for the folders was to provide the realtors for them to present to new waterfront property owners so they would have

information on their new resource. LWCD staff found most of the realtors did not distribute the folders to the new landowners. An idea for the future is to print business cards with the website address for the Shoreland Zoning Guidebook for realtors and others to distribute.

Activity 1.3: Revise / update Shoreland information & regulations on county web page. As necessary.

2012 - No changes have been made at this time.

2013- No changes have been made at this time. In 2014 the entire LWCD website will be revised.

2014 Field Season:

In 2014 the Iron County LWCD redesigned their website. In addition to the LWCD website updates, a LWCD Facebook page was created and maintained to improve communication and awareness of shoreland restoration cost-share program, new regulations on zoning and NR40, and additional educational topics. A link to the Land and Water Conservation Department's webpage was created on the Northwood's Cooperative Weed Management Area's (NCWMA) webpage and the Turtle Flambeau Flowage Property Owners Association (TFFPOA).

- LWCD Website: <http://ironcountylcd.org/education/ais/>,
- LWCD Facebook: https://www.facebook.com/pages/Iron-County-Land-Water-Conservation-Department/1441783062725866?sk=timeline&ref=page_internal
- TFFTL POA Website: <http://www.tfftl.org/>
- NCWMA Website: <http://www.northwoodscwma.org/>

2015 Field Season:

The LWCD updates their website and Facebook page regularly as well as providing partners with updated information for their sites as needed/required. In addition to the list from 2014 the following site was added.

- Mercer K-12 Public School: <http://www.mercer.k12.wi.us/links>

2016 Field Season:

The LWCD updates their website and Facebook page regularly as well as providing partners with updated information for their sites as needed/required. The sites remained the same as the lists in previous years, the updates were made and linked to partnering sites.

Summary – The website and more specifically the Facebook page has gained the attention of the public and has been a valuable tool to communicate, education and reach the public on events and information that staff feels is important to get out quickly.

Activity 1.4: Assist Zoning to update shoreland ordinance & develop a Shoreland Zoning Book. As necessary.

2012-2015 – During this time the Zoning Department was unable to complete the Iron County Shoreland Zoning Ordinance due to the state making multiple changes. During this time, several counties halted their process in order to allow the legislature to come to a decision on the changes to NR115.

2016 Field Season:

The Iron County Shoreland Zoning booklet was completed in 2016 and will be available for distribution in 2017. The older zoning guidebook was also reprinted in 2016 and added to the Shoreland Folders.

Summary- The shoreland zoning guide will be made available on the Iron County Website and on the LWCD webpage. They will also be available in print upon special request.

Objective B2: Provide shoreland restoration presentations, workshops, and field visits.

Activities 2.1: Conduct shoreland education & WQ sampling program with local students. 8 programs annual.

2012 (13) Implemented.

Each year the LWCD sponsors a loon research project with the North Lakeland Discovery Center for the two schools in Iron County. This project educates youth on loon ecology, shoreland development, water quality, and both native and invasive species. Each school visits multiple lakes to study loon reproduction, water chemistry, macro invertebrate collection, and general shoreland health. In 2012, there were 34 Iron County students who participated in this project, collecting data on 5 Iron County lakes. In addition to the Loon Project, there were 7 additional youth programs provided at two separate camps on water quality reaching a total of 140 kids. For more detail on these programs see the 2012 report.

2013 (16) Implemented.

In 2013, there were 27 Iron County students who participated in the loon project, collecting data on 5 Iron County lakes. In addition to the Loon Project, there were 3 additional youth programs provided a summer camp on water quality reaching a total of 60 kids.

The LWCD managed to again grow the Citizen Lake Monitoring Program (water quality volunteers) in Iron County during the 2013 season. Iron County added two new lakes taking secchi readings (Long Lake and Weber Lake) in addition to increasing the number of water quality volunteers taking dissolved oxygen measurements on their lakes by an addition 3 lakes (Spider Lake, Little Pine Lake and Long Lake). Each volunteer was trained individually by the County Conservationist in partnership with Sandy Wickman with WDNR providing locations and secchi equipment. The dissolved oxygen volunteers were trained on how to use the appropriate meter/probe unit for their lake. The water

quality meters are housed at the Mercer DNR Ranger Station and available for check out through the LWCD.

In addition to the shoreland education, the LWCD focused on wetland education in 2013. The LWCD assisted in the Wisconsin Wetland Association training in Iron County on July 23rd. This workshop educated participants on the importance of wetlands, types of wetlands and wetland delineation as well as how humans impact wetlands through various forms of development.

Another education opportunity for wetland education came when Iron County Forestry requested the County Conservationist to provide education and outreach to over 700 kids from 4-10th grade at their Log-A-Load For Kids event on October 3-4, 2013. The County Conservationist educated each of the attendees on the importance of wetlands for water quality and the need for wetland protection. The students learned how to distinguish a wetland, their importance for wildlife and humans and best management practices for logging to protect wetlands.

2014 Field Season (6)

Each year the LWCD sponsors a loon research project titled Iron County Lake and Loon Practicum with Naturalist Zach Wilson of Northwoods Learning Adventures. This project educates Iron County youth on loon ecology, shoreland development, water quality, shoreland buffers, littoral zones, and both native and invasive species. Hurley and Mercer Schools visited multiple lakes to study loon reproduction, water chemistry, macro invertebrate collection, and general shoreland health.

This year the project introduced a new loon nest monitoring method. A motioned censored camera was mounted to two loon platforms in hope of learning more about nest abandonment and success. In 2014, there were 28 Iron County students who participated in this project, collecting data on seven Iron County lakes.

2015 Field Season (18)

In 2015, 30 Iron County students participated in the loon and lake project, collecting data on seven Iron County lakes. The local news station joined the project on two separate occasions to learn more about the program. Students were interviewed and instructed the news reported on how to take water quality samples, about the importance of healthy watersheds and loon ecology.

In addition to the loon project, the LWCD co-directed the Wisconsin Land & Water Conservation Summer Youth Camp held in Eagle River. The camp was held on June 22-26 at the Trees for Tomorrow Campus. 23 students attended the camp, one of which was from Iron County. Students learned about a variety of conservation topics and activities including a hands on trout stream restoration project on the Alvoy Creek in Eagle River in Cooperation with the US Forest Service. The students also were taught how to take water quality samples such as dissolved oxygen, pH, and temperature as well as how to sample for macro invertebrates.

2016 Field Season (21)

In 2016, 32 Iron County students participated in the loon and lake project, collecting data on seven Iron County lakes.

In addition to the loon project, the LWCD co-directed the Wisconsin Land & Water Conservation Summer Youth Camp held in Eagle River. The camp was held on June 20-24 at the North Lakeland Discovery Center, in Manitowish Waters. 25 students attended the camp from all over the State including Michigan. Students learned about a variety of conservation topics and activities including participating in a shoreland restoration project on Grant Lake, in Iron County. The students also were taught how to take water quality samples such as dissolved oxygen, pH, and temperature as well as how to sample for macro invertebrates and fresh water mussels.

Summary – Youth education and outreach programming has been a large part of the LWCD’s focus. Iron County’s program has long served as a model for other counties across the state. The staff will continue their efforts to educate youth on their natural surrounds and engage them in promoting sound stewardship practices as they grow into future leaders.

*Activity 2.2: Conduct annual presentations to lake groups & elected officials.
8 programs/year.*

2012 (8) presentations conducted.

On July 7th, 2012 the lake specialist presented to the Rice Lake Association on the functions of the native aquatic plant community on Rice Lake. There were 25 residents present who eagerly learned about their diverse plant community. The Lake Specialist attended each of the Iron County Lakes Alliance (ICLA) meetings (a total of 3) and provided a brief presentation on the various lake projects throughout the county. The Iron County Land Conservation Committee meet quarterly and was updated on the projects conducted by the Lake Specialist.

2013 (4) presentations conducted.

The County Conservationist remained on the program committee for the Iron County Lakes and Rivers Alliance. In 2013 there were again 3 meetings total. The Iron County Land Conservation Committee was updated on the projects completed in 2013 at their August meeting. Plans to hire a new Lake Specialist were made at that meeting, a timeline for advertising the position, interviewing and hiring was made with the anticipated hire to start in early 2014. The LCC was very supportive of hiring a Lake Specialist for Iron County.

2014 Field Season (7)

The County Conservationist remained on the program committee for the Iron County Lakes and Rivers Alliance. In 2014 there were three meetings total. The Iron County Land Conservation Committee was updated on the project as well as all the restoration projects at their meetings. Meetings were scheduled in May, September, and two meetings in December. The December meetings were to hire a new Lake Specialist position to carry out the grant project.

The LWCD managed to again grow the Citizen Lake Monitoring Program (water quality volunteers) in Iron County during the 2014 season. Iron County LWCD staff facilitated a new volunteer training. Each volunteer was trained individually by the County Conservationist in partnership with Sandy Wickman with WDNR providing locations and secchi equipment. A new volunteer was trained on the dissolved oxygen meter on Fisher Lake. The water quality meters are housed at the Mercer DNR Ranger Station and available for check out through the LWCD.

2015 Field Season (6)

Information on the benefits of protecting shoreline and the overall lake health was provided at each of the Iron County Lakes and Rivers Alliance meetings throughout the summer, three were held. The Iron County Land and Water Conservation Committee was also updated on restoration projects at each board meeting. Meetings were scheduled in May, August, and December.

2016 Field Season (8)

Information and updates were provided at each of the Iron County Lakes and Rivers Alliance meetings, there were three meetings held two of which LWCD staff participated in discussions and/ or presentation. Conservation Specialist presented on the state of Iron County's lakes and rivers. On June 18th, the Conservation Specialist attended the annual Turtle Flambeau Flowage Trude Lake Property Owners Association's meeting. On August 18th the Conservation Specialist also presented at "The Pines" in Mercer on the importance of shoreline buffers / habitat. The event was advertised and sponsored by the Iron County Lakes and River Alliance. 45 people were in attendance. In addition, to our annual public presentations to lake groups the Land and Water Conservation Department communicate regularly with our local town, county, and state representatives regarding water quality and general conservation practices conducted by the department. We feel that we have a strong positive relationship with our elected representatives.

Summary – In addition to the lake group and county official meetings, the LWCD started a program called Conservation on Tap. This lecture series has become a wildly popular monthly event. It was modeled after the Trout Lake Station's Science on Tap held monthly from October-May. Conservation on Tap is held at The Pines in Mercer, WI in their beer garden an outdoor venue once a month from June-September. Attendees can come enjoy dinner or a drink and hear a 30-45min presentation on a natural resource topic. After a short break, there is a question/answer period for attendees get their questions answered. The first year this program started in 2014 there were 20-60 attendees at each event, in 2016 the program was consistently drawing 100+ people. This has been a large success in educating the public on natural resource topics and in gaining the public's awareness of the LWCD.

Activity 2.3: Coordinate a Shoreland Restoration Workshop for local contractors.

Summary – This grant was written and awarded before the Wisconsin Lake Partnership developed the Lakeshore Habitat Restoration Training for Professionals. In the infancy of the grant project partners were contacted to develop a program and it was suggested to

wait and use the Wisconsin Lakes Partnership as a model. The Lake Specialist was certified in Crew 1 in 2014. Again the idea was discussed with partners and it was advised that rather than doing a separate training/workshop the Iron County LWCD promote contractors to go through the Lakeshore Habitat Restoration Training for Professionals. Since then the LWCD has promoted the program, encouraging contractors to take the course.

Objective B3: Conduct tours at Demonstration Sites.

Activity 3.1: Conduct field visit / tour of Demonstration sites and other restoration sites. 2 tours/year.

2012 - To be implemented in 2013.

The first demonstration site was installed in 2012.

2013 - To be implemented in 2014.

This deliverable was not met in 2013 as planned due to lack of staff.

2014 Field Season:

Iron County LWCD County Conservationist conducted field visits to both of the demonstration sites during the 2014 field season. The Birch Point Condo Association restoration sites were installed in 2012 and with a couple of growing seasons in proved very successful. Landowners were very happy with their projects. Staff monitored plant growth, property owner contracted agreement obligations and general maintenance.

2015 Field Season:

Iron County LWCD staff conducted field visits to six past restoration sites. Demonstration sites were visited during the 2015 field season to monitor plant growth and overall site status. Landowners at volunteer restoration sites were very happy with their projects however several sites needed weed pulling and attention. LWCD staff followed up with each site visit mailing each landowner a letter with directions on maintenance needed on the particular site.

2016 Field Season:

Iron County LWCD staff conducted field visits to 14 past restoration sites. Demonstration sites were visited during the 2016 field season to monitor plant growth and overall site status. Landowners at volunteer restoration sites were very happy with their projects. One past restoration site is in violation, a follow up letter will be sent in 2017. The landowner has removed planting and built a patio on the former restoration site.

Summary – In the future, the LWCD staff will attempt to offer tours on an annual basis to LCC members and general public on restoration sites throughout the county to educate public and elected officials on cost shared practices by the LWCD.

Goal C: Monitor new and existing shoreland restoration sites and track with GIS mapping.

Objective C1: Develop GIS layer to locate & distinguish between voluntary & mitigation sites. 30 sites tracked

Activity 1.1: Monitor new and existing sites; add voluntary and mitigation sites in database. 15 new sites annual; (25+ existing).

2012 (16) Shoreland sites added.

Using Arc GIS software a shoreland restoration mapping database was created, this database provides information on the area restored, pictures of the project and notes on the restoration. In addition, we also monitor the cost share practices implemented by the department (49 additional sites). This includes culvert replacement projects to promote water quality and fish passage.

2013 (0) Shoreland sites added.

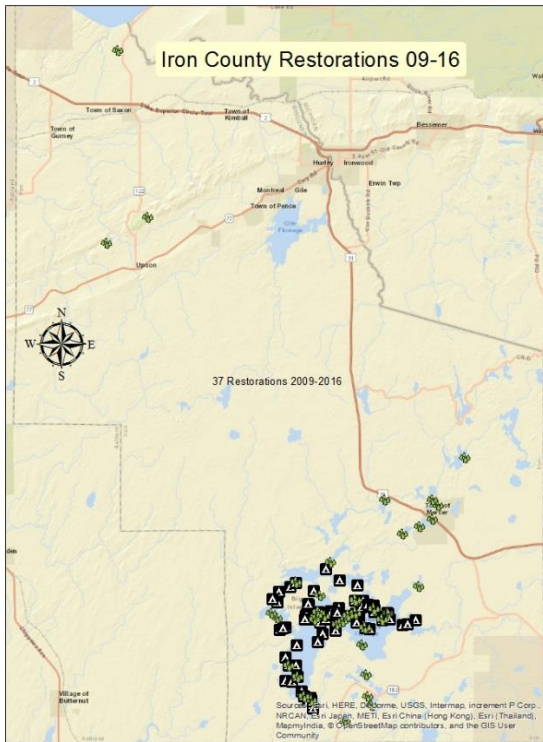
Mapping project for 2013 projects to be completed by new Lake Specialist in 2014.

2014 Field Season (2)

Mapping the 2014 projects were added taken, due to change in staff mid-field season the projects will be added to the county's mapping database in 2015. Aside from the two demonstration sites there were no additional existing restorations monitored.

2015 Field Season (5)

A GIS mapping layer of volunteer and mitigation site from 2010-2015 was created. ArcGIS online as well as ArcGIS desktop mapping was also created for tracking and sharing information between agencies and the general public. A spread sheet of new and existing sites with site visit information was created to help LWCD staff track contractual agreements for maintenance and general up keep. A rotation of yearly site visits help LWCD staff maintain communication and to help answer any questions volunteer landowners and mitigated site owners may have regarding their sites.



Map of Iron County Restoration Projects 2009-2016 (37 shoreline restorations)

2016 Field Season (25)

During the field season LWCD staff made 25 project site visits, meeting with landowners, and photo documenting sites. This includes non-shoreland projects, most of which were culvert/stream stabilization projects done in the past. There were a number of these checked due to the storm event on July 11, 2016 which left many culverts blown out and massive flooding in the area.

Goal D: Manage Shoreland Protection Grant & develop funding opportunities for restoration.

Objective D1: Administer Shoreland Restoration Lake Protection Grant. As necessary.

*Activity 1.1: Draft application and submit to DNR.
As necessary. - Completed in 2011.*

Activity 1.2: Submit reimbursement requests and project reports as required.

Annual reports 2012 & 2013 (2)

The end of the year project report submitted to WDNR office in Rhinelander, reimbursement request submitted to WDNR office in Spooner (Jan-Feb 2013).

Annual reports 2012 & 2013 (2)

The end of the year project report submitted to WDNR office in Rhinelander, reimbursement request submitted to WDNR office in Spooner (Feb-Mar 2014).

2014 Field Season (2)

The end of the year project report submitted to WDNR office in Rhinelander, reimbursement request submitted to WDNR office in Spooner.

2015 Field Season (2)

The end of the year project report submitted to WDNR office in Rhinelander, reimbursement request submitted to WDNR office in Spooner.

2016 Field Season (2)

The end of the year project report submitted to WDNR office in Rhinelander, reimbursement request submitted to WDNR office in Spooner.

*Activity 1.4: Close out Shoreland Restoration Lake Protection Grant
Final report in 2016.*

2014 Field Season:

Shoreland Restoration Lake Protection Grant has been extended until December 2015. Annual reports are created once a year and submitted to WDNR office in Rhinelander, and reimbursement request submitted to WDNR office in Spooner.

2015 Field Season:

Shoreland Restoration Lake Protection Grant has been extended until December 2016. Annual reports are created once a year and submitted to WDNR office in Rhinelander, and reimbursement request submitted to WDNR office in Spooner.

2016 Field Season:

Shoreland Restoration Lake Protection has now completed the requirements listed in the grant. A final annual reports has been created and submitted to WDNR office in Rhinelander, and reimbursement request submitted to WDNR office in Spooner.

Summary – This project was extended due to change in staff, as mentioned in many areas of the grant reporting. Early in the grant the County Conservationist left, and was replaced by the Lake Specialist. The position was vacant for a year before rehired, after 6 months the Lake Specialist left leaving the position vacant again for another 6 months. The vacancies provided enough savings in the grant to obtain two extensions.