

Introduction

Many counties in Wisconsin, including Vilas, have adopted Lakes Classification as part of their shoreland zoning ordinances to protect lake water quality from degradation over time. As a part of the Vilas County Lakes Classification system, sensitivity scores of high, medium, or low have been assigned to a number of local lakes based on their capacity to accommodate shoreline growth and development. The county classification of lakes in this way has provided resource managers with a valuable prioritization tool to protect lakes from further degradation by placing zoning restrictions on lakes with a high or medium sensitivity status.

In a county where there are more than 1320 lakes that need protecting and only 3 staff persons employed in the Conservation Department, we needed a tool similar to Lakes Classification that would help us to focus where our work efforts were needed most for lake protection. The county Land and Water Resource Management Plan (LWRMP) is one tool that currently exists for us to define and focus priority goals. Phase 1 of the Vilas County Lakes & Watersheds project will allow us to take the LWRMP priorities one step further by clarifying *where* to focus our efforts. It has provided us with a valuable starting point as to what lakes (or lake organizations) will receive priority assistance from the county.

The benefits of the Phase I Lakes and Watersheds project activities were mutually exclusive to Vilas County and to both the regional and central offices of the WDNR. The county was able to begin our efforts to focus staff workload and develop a prioritization tool, and the WDNR was able to gain information about the current status of lake management plans that had received past funding from the lake planning grant program as well as accomplish regional summer field duties with the assistance of county staff.

In recent years, Wisconsin counties have been vulnerable to losses of staff because of budgetary cuts in Conservation programs. Vilas County is thankful for the financial support that this WDNR grant provided to sustain our Conservation Department staff over the course of 2013-2014, and we appreciate the cooperative manner by which DNR staff worked with us to achieve our goals for Phase I.

Project Scope & Activities – Phase I

The scope of the lakes and watersheds project included the following activities. Each item is outlined further in the next section.

- (1) Inventory current and past projects conducted within the county that had received state lake grant program funding.
- (2) Summarize project types found during the inventory and determine what (and where) future lake management activities are needed.
- (3) Prioritize staff assistance to grant funded lake projects based on lake classification sensitivities outlined in the county ordinance – high level sensitivity lakes first, medium level lakes second, and low level sensitivity last. Development and lake size parameters will determine staff assistance priority thereafter.
- (4) The County will assist the WDNR with accomplishing their work plan objectives in regard to lake management and in evolving the Lake Classification Grant program
- (5) Convene an advisory group to flesh out the Lake Classification grant program
- (6) Administer the grant for reimbursement purposes

- (7) The advisory group will recommend criteria to be utilized in the development of the lake classification grant program and recommend further development for the next phases of this comprehensive study.

Project Deliverables & Accomplishments

The Lakes and Watersheds grant project (Phase I) was successful in that it provided Vilas County Conservation with opportunities: to begin prioritizing the Conservation Department workload by understanding the current status of lake grants, to support Wisconsin Lakes Partnership and WDNR activities, and to provide technical and educational assistance to local groups. As Vilas County accomplished tasks and activities that were identified in the project scope above, we were able to assist the local WDNR in addressing some of their annual management priorities as well. Thus, Phase I provided mutual benefit for both parties and has paved the way nicely for future phases of the Lakes & Watersheds project.

Specific accomplishments addressing each project objective are described here.

Objective (1) Inventory the status of Vilas County lake projects funded through the state's lake planning grant program.

A. Develop Spreadsheet / Database to Store Collected Data

As part of a similar statewide effort (Lake Grant Audit Project), Michael Putnam of the WDNR in Madison created a spreadsheet to incorporate existing information for large and small scale Lake Planning Grants. He shared the Vilas County specific one with us. We utilized this spreadsheet to use in the Vilas County database because many of the same data components were to be collected as part of the Phase 1 project, and also it provided consistency over projects. The spreadsheet is organized by columns across the top with the information components, each grant received by the sponsor, and finally by individual lake tabs at the bottom of the spreadsheet.

A listing of database components collected are as follows, with further explanations given in Section B below:

General Grant Information

Grant Number; Formal Project Title; Grant Award; Start/End Dates; Grant Sponsor; County; Region; Grant Status; Primary Contact & Title; Contact Information; Lake Name; Grant Ranking; and Public Access Status

Project Elements / WQ & Watershed

Social Opinion Survey; Water Quality Sampling; Secchi; TSI Suite; Other Chemistry; Paleocore/Sediment; Historical Data; SWIMS Data; Watershed Assessment; Habitat; TMDL; Recommendations

Project Elements / Aquatic Plants

Point Intercept Survey; Species List; FQI; APM Recommendations

Project Elements / Shorelands

Shoreland Assessment; Critical Habitat Identified; Shoreland Recommendations

Project Elements / Other
Lake Map; Other/Miscellaneous

Lake Management Plan Type
Completed Plan?; APM Plan?; Watershed Plan?; Recreational Use?;
Comprehensive Plan?; Adopted by Lake Organization?; DNR Approved?;
Written Listing of Plan Recommendations / Actions

If No Lake Plan, then?
Project Deliverables Accomplished?

Additional Information
More Projects?; AIS Grant Application?; Lake Protection Grant Application?;
Lake Classification Sensitivity

B & C. Notification of the Vilas County Project & Data Acquisition

Several sources were utilized to capture bits and pieces of the data that are encompassed in the final spreadsheet (refer to CD for completed spreadsheet). Town governments, consultants, and certain lake-active citizens in the county were contacted by phone, newsletter, or email early on in the data acquisition process. The article shown at right, appeared in the September, 2013 issue of VCLRA newsletter. The purpose of the contacts were twofold - to inform them about the Lakes & Watersheds Phase 1 project and to seek their input as to where certain reports could be found. They were asked to email any information or electronic reports to us if they were available. In certain cases, we received CD's in the mail which worked out well.

If no electronic reports were available, we gathered up actual hard copies of reports from offices around the county or at the WDNR in Rhinelander. This was the typical situation for Town/County/State Governments or Vilas County Lakes & Rivers Association project reports. Town Clerks were a good source to contact for grants awarded to Town Lake Committees. Many existing hard copy reports were found on the Conservation Department office shelves, or within our Land & Water Conservation office lake files. We also were able to scan through all of the "Vilas County Lakes" paper copy file drawers at the Rhinelander DNR office.

**Vilas County Lakes & Watersheds Program
September 2013**

Vilas County Land and Water Conservation Department was recently awarded a WDNR Lake Classification Grant to study the current status of county and citizen lake protection efforts. In the past decade or more, the Wisconsin Department of Natural Resources has contributed tens of thousands of grant dollars to lake groups across the state (including Vilas County), for the purpose of gathering baseline data and creating lake management plans. "What's discouraging", says Carroll Schaal, WDNR Lakes and Rivers Section Chief, "is that once a group receives the grant money and a consultant has long since been paid for services rendered, the resulting management plans often get placed on a bookshelf and forgotten." Those once valid and helpful lake resource plans are of no value to anyone when a significant time period has lapsed.

Vilas County wants to change and reverse that trend - and intends to start with this lake classification grant project. Carolyn Scholl, Vilas County Conservation Department Administrator said "we would like to focus lake conservation and protection efforts where they are needed and guide our future work plans for most efficient use of our limited personnel and financial resources." Beginning in the Fall of 2013, county staff will inventory the status of existing grant funded lake management projects. Information collected during the inventory phase will include 1) who has received grant funding; 2) what type of project was funded and did management recommendations result; 3) where does the lake data exist now; and 4) if management implementation projects were started at all, when were they completed?

Once the Phase I inventory is finished, the Conservation Department will be able to easily identify where additional management efforts would be most productive within the boundary of the county. County Conservation Department staff will then work with those lake groups who are most in need of completing lake management plans or lend technical assistance during management plan implementation efforts.

If you know of a lake group that could use a push in moving ahead with a lake management plan, please contact Carolyn Scholl of the Vilas County Land and Water Conservation Department at cascho@co.vilas.wi.us

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The DNR website “Find a Lake” page was very helpful in gathering information about what types of grants each individual lake organization had historically received, up to and including present day projects. We accessed this information by searching for a given lake, and then clicking on the “More” tab for that lake. Any type of grant that had been associated with a given lake, was included within this tab area. This information tab gave us the ability to expand our data collection and incorporate within the spreadsheet all types of grants received by a given lake organization (AIS Grants, Small Scale Planning Grants, or Protection Grants).

Other helpful online resources used for gathering data were the DNR “Grants Awarded” website pages (information such as how the grant ranked, as well as the amounts of the grant awards were accessed here); if a lake organization had an accessible website, sometimes the actual report was placed there as a .pdf file for public viewing; and lastly, consultant websites were found to be helpful to access more recently completed grant projects.

While acquiring the data from various sources, it became clear because of differences in grant projects, that certain criterion needed to be established to provide some consistency in what / how data was captured. We included lakes that lay wholly within Vilas County or lakes that lay mostly within the bounds of Vilas County but worked along with Vilas County entities (County, Town, VCLRA) as sponsors of grant proposals. If a project was currently of “ACTIVE” status, no additional information was collected for the project. Other specific criterion are outlined below:

Secchi – “yes” was recorded if secchi data was collected as part of the specific grant project, and/or if historical secchi readings were reviewed in the final report

TSI – “yes” was recorded if Trophic State Index data (Clarity, P, Chl a) was collected and calculated as part of the specific grant, and/or if historical TSI data were reviewed in the final report

Other Chemistry – “yes” was recorded if any other wet chemistry data was collected as part of the specific grant, and/or if historical chemistry data were reviewed in the final report

Paleocore – “yes” was recorded if lake-bottom paleocore sample(s) were collected as part of the project

Historical Data – “yes” was recorded if any social or lake history was collected and compiled as part of the specific grant

SWIMS – “yes” was recorded if water quality data were specifically entered into the SWIMS database by the consultant, or if CLMN data reviewed in the plan write up was taken from SWIMS

Watershed Assessment – “yes” was recorded if the plan contained an assessment of the lake’s drainage basin was delineated and/or landuses and potential pollution sources were described in the final plan

Habitat – “yes” was recorded if any fish, special plant communities, or any other in-lake habitat data was collected and described in the final plan

TMDL – “yes” was recorded if Total Maximum Daily Load of phosphorus was calculated and/or modeled and described in the final plan

Recommendations – “yes” was recorded if any management recommendations existed in the final report; a written listing of the recommendations was then included in the “Recommendations” column of the spreadsheet

Aquatic Plants – “yes” was recorded if a Point Intercept Survey was completed, a Species List was included, and/or if an FQI was calculated as part of the project

APM Recommendations – “yes” was recorded if any management recommendations specific to aquatic plants existed in the final report; a written listing of the recommendations was then included in the “Recommendations” column of the spreadsheet

Shorelands – “yes” was recorded if an assessment of the Shoreland Condition or Critical Habitats were identified and included in the final report

Shoreland Recommendations – “yes” was recorded if any management recommendations specific to shorelands or critical areas (including Zoning) existed in the final report; a written listing of the recommendations was then included in the “Recommendations” column of the spreadsheet

Lake Map – “yes” was recorded if any map of the lake was included in the final report (PI survey points, Topo, Watershed, etc)

Other – anything contained in the final report that hadn’t been captured yet was recorded in this column

Lake Management Plan Type – If a plan was written, a “yes” was recorded in the “Completed Plan” column; furthermore, a “yes” was recorded in any of the following columns to clarify what type of plan was delivered: APM Plan; Watershed Plan; Recreational Use; or Comprehensive Plan

No Lake Management Plan – If there was no lake plan developed for a project, a “yes” was recorded if the expected grant deliverables were completed

Additional Information – If it was understood or found that the given project resulted in movements toward other types of future projects, the appropriate column(s) was marked with a “yes”

D. *Identify Groups in Need of Further Assistance (Results)*

A primary end goal for this project was to identify lake organizations or town lake groups that might need additional assistance to begin implementation of completed lake management plans. In addition, the Conservation Department needed a good way to prioritize workload by identifying lake groups most in need of our assistance to move ahead on plan implementation projects.

Once the spreadsheet data was completed, we used the “Sort & Filter” feature within Excel in various combinations to come up with a final listing of lakes that: 1) had a grant status of CLOSED; 2) had used a WDNR lake planning grant (LPL, SPL, or ALPL) to complete a management plan; 3) identify what kind of plan was completed (APM, Water Quality, Landuse, or Comprehensive, Adaptive); and 4) identify lakes with an existing plan, but have not yet applied for WDNR lake protection grant funding to implement the plan recommendations. Lake Protection grants that we included in this analysis were either in the LPT or AEPP categories, we did not recognize either CB/CW or ACEI type grants that may have been sought by lake groups in response to their completed planning projects, nor did we recognize ACTIVE status projects. Another consideration here is that some of the plans that had been completed with the use of Lake Planning funds may be over a decade old. We further prioritized lakes by the Vilas County Zoning Lake Classification - Sensitivity status. Tables 1-3 below show the final prioritized listings of Vilas County lake groups in need of further assistance.

Table 1 Vilas County Lakes – High Priority Listing		
LAKE NAME	PROTECTION GRANT?	LAKE SENSITIVITY
SPECTACLE	NO	HIGH
ALMA	NO	HIGH

Table 2 Vilas County Lakes – Mid Priority Listing		
LAKE NAME	PROTECTION GRANT?	LAKE SENSITIVITY
AMIK	NO	MEDIUM
LITTLE ST GERMAIN	NO	MEDIUM
VAN VLIET	NO	MEDIUM
ROUND & AMIK	NO	MEDIUM
LITTLE ARBOR VITAE	NO	MEDIUM
BIG ARBOR VITAE	NO	MEDIUM
ANVIL	NO	MEDIUM
BIG PORTAGE	NO	MEDIUM
NINEMILE, UPPER	NO	MEDIUM
ANNABELLE	NO	MEDIUM
PLUM	NO	MEDIUM
BALLARD & WHITE BIRCH	NO	MEDIUM
MOON	NO	MEDIUM

Table 3 Vilas County Lakes – Lowest Priority Listing	PROTECTION GRANT?	LAKE SENSITIVITY
BIG ST. GERMAIN	NO	LOW
DEAD PIKE	NO	LOW
BIG SAND	NO	LOW
NORTH / SOUTH TWIN	NO	LOW
CONTENT	NO	LOW
LAC VIEUX DESERT	NO	LOW
FOUND	NO	LOW
IRVING	NO	LOW
LOWER NINEMILE	NO	LOW
LOST	NO	LOW
MUSKELLUNGE	NO	LOW

Most of the lakes fell into the “Medium Sensitivity lakes” category. Only two of the lakes that had completed a management plan (or plans) with WDNR Lake Planning grant funding were within the category of “High” lake sensitivity; eleven lakes were listed in the “Low” lake sensitivity, and the remaining thirteen lakes fell into the medium sensitivity status. In Phase 2 of the Lakes and Watersheds Study, conservation staff in Vilas County will focus on direct communications with each of the lake groups that are listed in these tables. The current spreadsheets will be consulted and if they are not already involved in further planning or protection efforts, we will speak with the groups and ask them if they would like to further pursue lake management implementation steps.

Chart 1: Summary of Vilas County closed grants to date

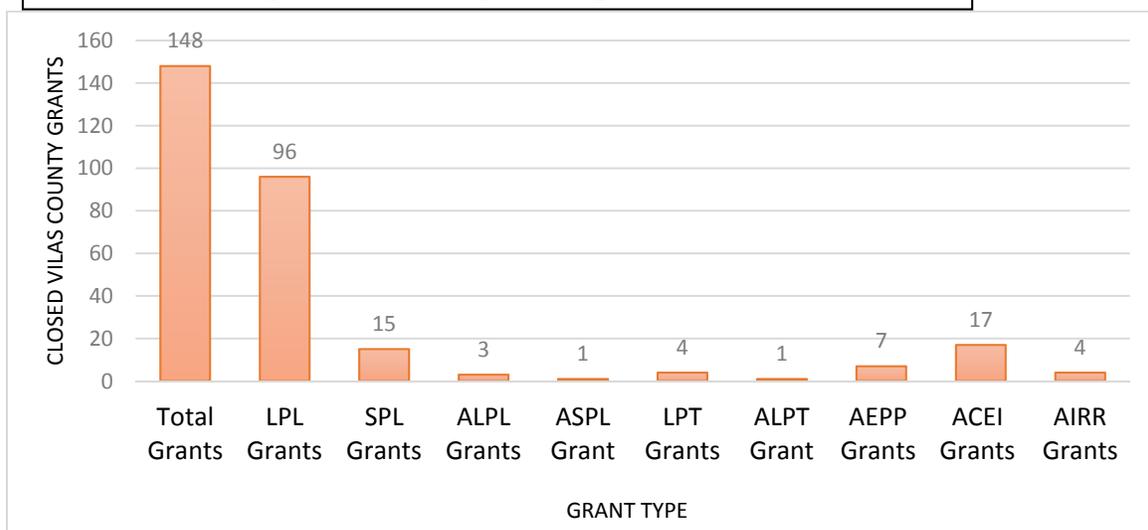
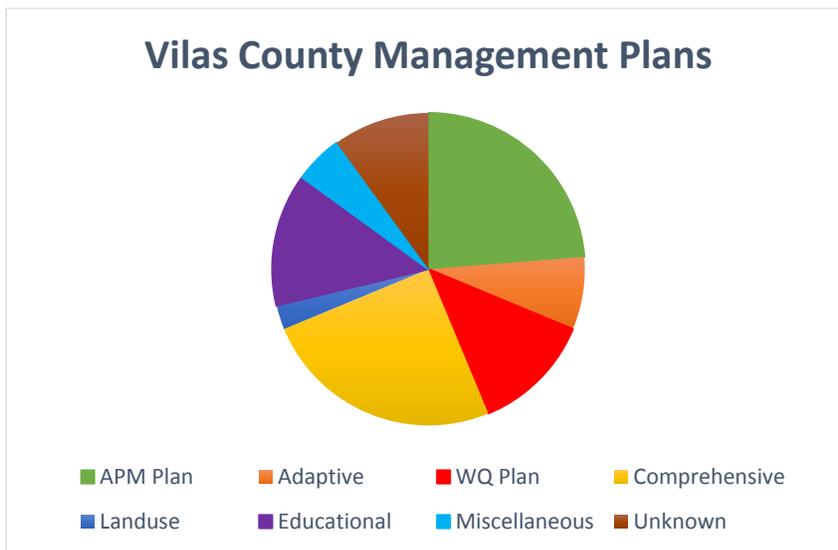


Chart 1 above shows a summarized listing of all CLOSED status grants in Vilas County as of the date of this report. In total, 96 Lake Planning Grants (LPL Grants) are on record in CLOSED status. Additional CLOSED status planning grants on record are 15 SPL, 3 ALPL, and 1 ASPL – thus increasing the total planning grants to 115. A variety of project types and management plans resulted from the planning grants and are illustrated in the Chart 2. Of the total planning grants, only 19 of those projects indicate a completed aquatic plant management plan; 2 projects indicate completion of a landuse plan; 6 of them are part of an adaptive management strategy; 10 projects were water quality based plans; 8 projects were not clear as to the type of project completed and thus marked as unknown; 11 projects were educational type projects; 4 were miscellaneous projects; and 20 plans were comprehensive in nature.

Chart 2: Vilas County management plans that are a result of lake planning grants



Of the 115 planning grants in total, 39 of the projects went on further to seek additional lake planning grants. Only nine Lake Protection Grants are on record in Vilas County and are listed below along with the project titles and the current status. Three of the projects sought further funding from an LPT grant, 3 protection grants were sought in the form of AEPP funding, and 1 project was sought from a previous ALPT grant. There are 2 lake protection grants on record of the Shoreland Restoration type and there is no indication that these resulted from previous planning project efforts.

- LPT-153-01 L. St. Germain Lake Aeration & Phosphorus Removal Engineering (CLOSED)
- LPT-197-03 Tambling Lake Aeration System (CLOSED)
- LPT-330-09 Restoring Shoreline Habitat on Moon lake (No Planning Grant)(CLOSED)
- LPT-344-10 Restoring Shoreline Habitat on Lt. Saint Germain Lake (No Planning Grant)(CLOSED)
- LPT-440-12 Lake Management Plan Implementation Project for Anvil Lake (ACTIVE)
- ALPT-008-04 Exotic Aquatic Species Control Project (CLOSED)
- LPT-457-14 Vilas Co Lakes & Watersheds Phase 1 (ACTIVE)
- LPT-471-15 Vilas Co Lakes & Watersheds Phase 2 (ACTIVE)
- LPT-480-15 Kentuck Lake Plan Implementation: Water Quality & AIS (ACTIVE)

Objective (2) Support activities of the Wisconsin Lakes Partnership and assist the WDNR, UWEX-Lakes, Wisconsin Lakes, Wisconsin Land and Water Conservation Association, River Alliance of Wisconsin, Wisconsin Wetlands Association and research institutions.

WDNR Activities and Support

The Vilas County Land and Water Conservation Department provides assistance to the Wisconsin DNR throughout the year on various aspects of lake management in Vilas County. This relationship is mutually beneficial to both the DNR and Vilas County on many levels, and allows both entities to accomplish their annual goals.

When needed, the DNR has the ability to use additional personnel from the county conservation department with limnology skills to manage the many lakes in Vilas County during the busy field season. Alternatively, County staff are sustained and have the opportunity to maintain professional field skills. This is true of the Aquatic Plant Point Intercept surveys and data entry that DNR asks of County staff. The Conservation Specialist on staff here in Vilas County is talented in regard to accurate identification of aquatic plants. During the course of this grant project, she assisted DNR staff with surveys on Vilas County lakes for: Smokey and Forest Lakes in 2013, and for Lost Lake in the 2014 field season. She also assisted with Point-Intercept computer data entry for Upper and Lower Buckatabon lakes during the winter of 2014.

Vilas County staff is also talented in shoreland management issues, and is a great knowledgeable resource for DNR staff, private landowners, and lake organizations during project planning and implementation project phases. During the Phase 1 grant timeline for Lakes and Watersheds, the Conservation Specialist provided technical expertise in various capacities: 1) on shoreland restoration practices to the local DNR Water Regulations Specialist as he worked on a contentious pier expansion issue at the Wild Eagle Lodge in Eagle River; 2) she reviewed and commented on a shoreland restoration plan developed by a lake consultant and commented on the plan for a Black Oak Lake Shoreland Restoration Planning project; 3) reviewed and commented on the update of the DNR Shoreland Restoration Lake Management Grant (aka Healthy Lakes Initiative).

The Conservation Specialist also attends partner meetings and trainings on a regular basis to learn and share information with other partners: for example the DNR Northern Region Lakes Partners Meetings and Aquatic Plant ID training workshops.

Lakes Partnership(s)

Vilas County Land & Water Conservation is heavily invested in supporting the Wisconsin Lakes Partnership. To that end County staff participate fully in educational outreach developed by UWEX and Wisconsin Lakes. The Department usually has at least one representative attend the Lakes & Rivers Monthly Live meetings on an ongoing basis. Vilas County annually participates in the Wisconsin Lakes Convention. In both 2013 and 2014, the Conservation Specialist developed and presented a very well attended workshop on erosion control and shoreland management for professional managers, contractors, and for private landowners. In other Partnership meetings, the Conservation Specialist has presented information about the Vilas County Cost Share program, for UWEX shoreland management contractor certification training workshops.



Above: Members of VCLRA evaluate a shoreline for the Blue Heron Program

County staff regularly assist in the efforts of the Vilas County Lakes and Rivers Association, and have hosted information tables at the VCLRA “Celebrating Lakes” days in Land O Lakes (June 2013) and Rhinelander (2014). The Conservation Specialist works closely with VCLRA on their Blue Heron Shoreland Stewardship Awards program. In 2013 she assisted them with the development of an informational Power Point presentation specifically about the about the Blue Heron program. In 2013 and 2014 she served on the Blue Heron awards panel judging

some of the nominated properties. She regularly attends VCLRA BOD meetings and has volunteered to assist with the lake home buyer education program.

Other support to lake associations included providing support letters to lake groups seeking grants; reviewing and commenting on the Bear Creek Watershed Management Plan being developed by the Lac du Flambeau Town Lakes Committee; and attending Eagle River Chain of Lakes Association Board meetings and Unified Lower Eagle River Chain Commission meetings and providing support for their activities as needed.

During 2013 and 2014, Vilas County staff participated in the planning and implementation portions of the statewide Lakes Convention, and the Wisconsin Land & Water Conservation Association (WLWCA) Annual Convention. The Conservationist places time and effort into the planning sessions and follow-up for both Conventions. We believe it is through the Lakes Convention that so many lake enthusiasts learn new things and the network of citizens, volunteers, professionals, and associations have increased dramatically over the years. The WI Lakes Convention is a powerful tool and mechanism to teach about anything “lake”, and the WLWCA Convention is a powerful source of professional information for County Conservation staff throughout the state. Both convention events contribute to sustaining the health of Wisconsin’s surface waters in different ways.

Objective (3) Provide technical assistance and educational outreach to the public.

Public Assistance

One of the primary objectives of the Conservation Specialist position in Vilas County is to educate land owners and lake organizations about the need for good shoreland stewardship. It is important to encourage them to implement shoreland management practices that protect water quality, maintain and improve wildlife habitat, and address soil erosion issues. During 2013 and 2014 the Conservation Specialist helped several dozen landowners who had concerns about the health of their shorelines. She worked with the DATCP engineer and land owners to design and install 7 cost share Shoreland Restorations over those 2 years as well as developed 3 shoreland restoration plans through our Technical Assistance program. In 2013 and 2014 she visited 45 cost shared restoration sites installed over the last 13 years for monitoring and compliance checks. The objective of those visits was to ensure that the landowners remained in compliance with the contracts they signed with the County. These monitoring visits also provide an opportunity to review the effectiveness of past practices installed so that we continue to learn how to best develop future shoreland restoration practices.



During the 2013-2014 field seasons, just some of the organizations the Conservation Specialist provided information to on shoreland management practices and shoreland technical assistance include landowners on: Manuel lake, Big Crawling Stone Lake, the Presque Isle Town Lakes Committee, Catfish Lake, N. Turtle Lake, and Mann Lake.

The North Lakeland Discovery Center Shoreland Committee (in Manitowish Waters) decided to use a Vilas County cost shared shoreland restoration to create an Educational Garden. The Conservation Specialist provided technical assistance to the DC staff and volunteers on planning, installation and maintenance of shoreland restorations. She also helped develop educational materials to encourage visitors to consider using native plant species in their own northwoods gardens and shorelines. The project has now grown to a second shoreland restoration site on the DC campus.



In 2013-2014, Vilas County staff assisted science teachers at the Northland Pines High School in Eagle River with the development of a native plant flower bed, to use as both an outdoor lab and as a public example of landscaping with native plant species. The Conservation Specialist addressed 3 biology classes and solicited the assistance of students in growing plants, weeding and planting seedlings in the 3000+ft² flower bed at the rear main entrance to the school. She has

recruited volunteers from the Vilas County Master Gardeners to assist with maintaining the beds. The School district supports the effort to show that native plant species can be used for landscaping in a pleasing way. We hope to encourage the use of native plants for local wildlife and pollinators habitat and to discourage the use of non-native and potentially invasive plant species. This area serves as an easily accessed demonstration site of the use of native landscaping with which to encourage landowners (including riparians) to use native species in their gardens. This was the Conservation Specialist's Community Development project for her VILAS Visions Leadership program – see below.



Presentations

The Conservation Specialist routinely gives Power Point Presentations to Lake Organizations and other interested audiences. Topics include Shoreland restoration and management, gardening for wildlife and native plant gardening and more recently the economic value of the aquatic habitats of Vilas County.

*Presentation on Vilas County's History of Shoreland Restoration Activities at the Society for Ecological Restoration Meeting in Madison, 2013

*Presentation on Shoreland Restoration at the Lac du Flambeau Town Lakes Committee Lake Stewards Workshop, 2013

*Presentation at the 2013 WI Lakes Partnership Convention on in-lake woody habitat.

*Co-presented workshops at the 2014 WI Lakes Partnership Convention to address shoreland erosion and shoreland restoration.

*Presentation at local nursery on "Gardening for Wildlife and Landscaping with Native Plants" Aug 2013 and 2014.

*6 additional presentations to area lake organizations (Landscaping with Native Plants, Shoreland Management, and Vilas County Wetlands) 2014



Quita Sheehan,
Vilas County Land & Water Conservation Department
Katie Bevernitz,
Custom Landscaping of Eagle River



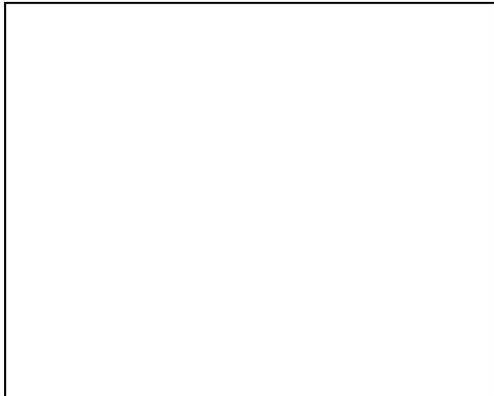
Field Instruction & Workshops

*Stream Biology Workshop, Trees for tomorrow, July 16th, 2013

*North Lakeland School District 6th Grade Wetland Education Field Trip September 2013 and 2014.

*North Lakeland School District 7th Grade Stream Ecology Day Sept 2013 and 2014.

*Botany field trips in 2013 and 2014 with the Northwoods Native Plant Society emphasizing wetland and aquatic habitats.



In the fall of 2014 the Vilas County Conservation partnered with a number of other County Departments (Mapping, Tax Listing, Tourism, UWEX) to develop information about the economic value of the aquatic habitats in Vilas County. We collected data on the value of 2013 water-front property to the tax base of the county (77% of all taxable land in Vilas County is waterfront property), as well the economic impact of visitors (in 2013 Vilas County had the 3rd highest per capita income from visitor spending in WI). We then prepared a Powerpoint presentation with this information along with the ecosystem data we had

developed for the 2015 LWRM plan (Vilas Co is 15.6% surface water and 18.5% wetland –

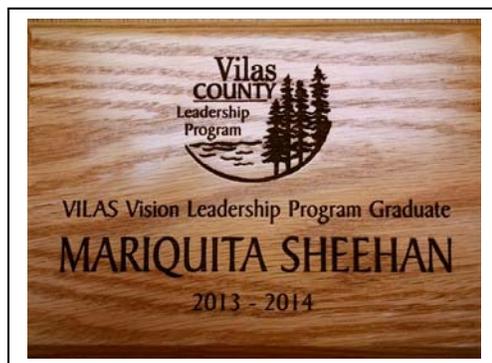
more than twice as wet as the state of WI as a whole). Since the completion of that project, the Conservation Specialist has been sharing these data with lake organizations, local governments and other community organizations. A poster was also developed and presented at the 2015 WI Lakes Convention. The outcome of this project was amazing, and the reactions from the audiences are very positive. It really has made people stand back and really begin to appreciate our unique water-rich area, and when the time comes they will hopefully take actions to protect the resources.

Objective (4) Remain current on lake and watershed oriented information and developments.

To keep her skills sharp and stay current with the latest scientific information on ecology, limnology, botany and resource management, the Conservation Specialist attended a number of trainings and professional development workshops during the course of Phase 1.

Trainings include:

- *Army Corps of Engineering Stream Sediment Monitoring Training, Oct 2013 in Green Bay
- *Training for DNR Forestry BMP Monitoring teams and participation on a team in 2013
- *Aquatic Plant Identification Training – June 2013 and 2014
- *STEPL Model Training
- *Society for Ecological Restoration Conference in Madison Nov 2013
- *WLWCA Annual Meeting – Appleton – March 2014
- *Wetlands Trainings (WI Wetlands Association workshop and webinar)
- *Science in the Northwoods Conference organized by UW- Madison in Boulder Junction 2014
- *Vilas Visions Leadership Program - 6 months / 2013 - 2014



Objective (5) Administer and manage the lake protection grant for reimbursement purposes.

Vilas County did not receive an advance payment for use in this grant project. All expenses incurred were paid my Vilas County. This report is the first and final reimbursement request submitted for this project.

A. Create a Reporting Database for County Staff

County Staff created a depository database to hold all information regarding the grant project activities and financials – staff activity/time log, in-kind contribution log,

mileage & travel information, and any material costs. The completed and summarized reporting database is included as part of the CD submitted with this report.

B. Phase I - Reporting and Close Out

Periodically throughout the grant project, county staff met amongst themselves and with the regional Lakes Coordinator to discuss the status of the data collecting process. The grant expenses were logged and summarized to complete Form 8700-001 (Grant Payment Request). When the data collection portion was completed, sorting of the data and creation of the data tables and graphs were created for the purpose of reporting the specific findings of the grant project. A compact disc was created to hold the very large and cumbersome grant data collection, the staff reporting database, and any other miscellaneous information pertaining to the grant project.

Project Impacts & What Next?

Prioritization of the Conservation Department workload is listed as a primary goal within the Vilas County Land and Water Resource Management Plan. Funding from this grant for Phase 1 of the Lakes and Watersheds project allowed us to realize our workload priority goal setting, along with several other public outreach and education goals. As a result, we believe that progress was made to increase the awareness level of the general public and the current county board of supervisors for our unique water-rich area, and their decision making roles in protecting those resources for future generations. And, as part of the Lakes & Watersheds Phase 2 project, we will further prioritize workload in the Conservation Department by LiDAR mapping to study potential erosion problems within HUC 12 level watersheds.

The Conservation Department intends to keep the momentum rolling forward – to continue to raise awareness levels of local governments, individuals, and lake organizations. During the data collection portion of the Phase 1 project, we became aware of certain gaps in grant data that was collected, some of the management plans, or other important areas. We will pursue these topics in various ways as outlined:

Aquatic Invasive Species (AIS) – Generally, lake groups that were not pursuing any kind of AIS treatments, did pursue grant funding for the Clean Boats/Clean Waters program. This was a positive finding because those groups were working proactively to protect their lake. Prior to the existence of the CB/CW grant program, watercraft inspection actions were identified within AEPP or ACEI grants. Other potential areas of AIS management that we may advise lake groups to pursue would be:

- * To restore native vegetation following a disturbance
- * To form AIS surveying “teams” with reporting responsibilities (similar to the Black Oak Lake program)

Citizen Lake Monitoring Network (CLMN) – Many of the existing management plans contain recommendations to pursue CLMN activities on lakes that don’t already have an existing volunteer(s). We will follow up to cross check if these groups have trained volunteers who are

actively involved in CLMN. Other potential areas of CLMN that we may advise lake groups to pursue would be:

- * To partner with WDNR and UWEX to recruit, train, and retain CLMN volunteers
- * The Conservation Department will serve as a “hub” to store and lend out monitoring equipment and/or supplies as needed
- * To inform potential volunteers about other types of citizen monitoring (amphibians, invertebrates, bats, birds, loons)

Shorelands – Many of the existing plans contain very general shoreland restoration recommendations with little to no direction given as to how to accomplish them. To interest landowners or lake associations in moving ahead with shoreland initiatives, we may advise lake groups or individuals to:

- * To host an educational workshop (or a presenter) to educate riparian landowners or entire lake groups about what they can do to increase shoreland health and wildlife habitat
- * To utilize the new DNR Healthy Lakes grant program to help them with the costs of restoration or habitat improvements
- * To utilize the Vilas County cost sharing program to help them cover the expenses of more costly or complex restoration projects

Recreational Use – There were only a few plans that address recreational use issues. The use conflicts became apparent from results of the stakeholder surveys. This was actually a positive finding in that the groups had become more aware of these conflicts, and they could address them as needed. We will follow-up with these groups to find out what they have done to address the issues or if they have been resolved. If no action has been taken, we will advise them to (depending on the problem):

- * Pursue slow-no-wake for smaller lakes, or bay areas for wildlife protection
- * Pursue ordinance changes for lakes with dangerous conflict issues
- * Provide education about wave induced erosion and the economic and ecological impacts

Watersheds – The existing management plans only briefly address the watershed area, and most do not include action recommendations for the watershed. It is very important for these groups to understand the inter-connectedness of a lake and its’ watershed. We will follow up with the groups to find out if they would like to have more education on:

- * How the watershed and area land-uses affect lake health
- * Why wetland areas are so important to lake and stream health

Management Plan Revisions – Many of the plans that were reviewed for this project were completed at least 10 years ago. In these cases, we may advise groups to begin the planning process again and/or to have the plans updated. A lot will depend on the current status of the lake group and any issues they are now facing as opposed to those they faced back when the plan was completed.

In the coming year, the County will be sending out a letter (snail and/or email) to all lake organizations who have utilized WDNR lake planning grants in the past. A draft version of the

letter is shown below. Once the letters go out, we hope to get feedback from the organizations themselves. However, we know that we won't hear back from most. Taking the communication one step further, the County will begin calling the last known contacts for each group that we have on file (or we will use the current UWEX Lake List). It is through this process that we hope to "light some fires" and increase their steps toward management plan implementation. Whatever the reason(s) are for not moving ahead on implementation, we will get to the source. If enough time has passed since the management plan was completed, perhaps an update of the plan will be encouraged.

January, 2016

Dear _____ Lake Association,

The Vilas County Land and Water Conservation Department has recently compiled information on all of the DNR grant funded Lake Management Plans completed for Vilas Co lakes. The purpose of our project was two-fold: 1) to find out what lake groups in the county have completed management plans in the past; and 2) offer our staff assistance to groups who have not moved ahead with management implementation projects since completion of their plan.

There are many reasons that groups may not have moved ahead with projects once the planning phase was completed. Sometimes moving forward may seem daunting or complicated, it could be that finances needed to be recouped, or that the group simply didn't realize they should take another step with their management plan.

Vilas County Conservation staff would like to extend our services to any group wishing to move further in lake planning or protection efforts. Our staff has extensive knowledge about all of the DNR lake grant programs and can assist you in moving ahead with any number of management actions – including, but not limited to: Invasive Species Management & Education (both aquatic and terrestrial); Shoreland Buffer & Habitat Management; Water Quality Monitoring; Lake Association Revitalization; and more.

Check out our website at www.vilasconservation.org or give us a call today! We are looking forward to hearing from you.

Sincerely,

Carolyn Scholl,
Mariquita Sheehan,
& Cathy Higley

Additional Information

Vilas County Conservation wishes to acknowledge and render apologies to the WDNR for a few aspects of the Phase 1 grant project that were not completed, or not completed in a timely manner.

Back when the Phase 1 grant proposal was conceived, there was thought put into the possibility of utilizing monies from the Lake Classification grant program to fund county lake staff and/or lake specific county projects. Thus, Vilas County had intended to convene an advisory group to discuss these possibilities. Upon further thought and discussion with regional DNR staff, it was decided that other avenues of county funding for lake programs would be sought instead of

tapping into the Lake Classification grant money. Other possibilities of county funding for lake programs are being sought at a statewide level and discussions are taking place. It is unknown at this time where these discussions may go into the future.

Finally, we apologize for any inconveniences caused by the late submittal of this grant project report. Vilas County Conservation staff will not allow this to happen again on any future grant projects.