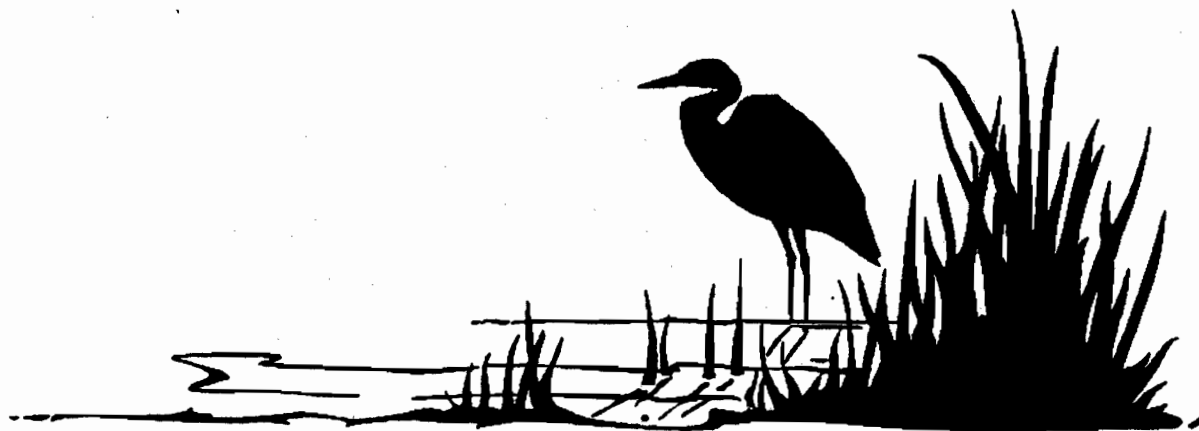


Vilas County Lake Planning Grant: Final Report

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Abstract

The Vilas County Lake Planning Grant Project was the first county-wide lake management project completed in Vilas County. The project was designed to help Vilas County residents, government officials, and community leaders get more involved in lake protection. The project will serve as a foundation for future lake protection activities initiated in Vilas County. In fact, a comprehensive lake planning project and an Eurasian water milfoil prevention project are currently underway that utilize some of the work products from this original lake project.

During the project 115 new self-help lake monitoring volunteers were recruited. A total of 88 of these volunteers were trained to monitor for water clarity. This increased the total number of self-help volunteers in Vilas County to 192. The additional 27 untrained volunteers are signed up to be trained in the summer of 1997. Water quality monitors are valuable because they provide information about our lakes, many of which very little is known. Also, a volunteer serves as a link to lake management agencies, and can share knowledge with other members of the public.

A computer database on Vilas County lakes has been initiated. The lakes database can provide one-stop access to those searching for lake data. Information summaries were generated from the database and provided to all known Vilas County lake management organizations.

A lake education network has been established. Contacts have been identified on virtually all named Vilas County lakes with significant private ownership. The lake network can be used to keep lake residents informed about lake issues.

Two new voluntary lake management organizations were formed during the project, increasing to 57 the number of lake associations or lake districts in Vilas County. Educational activities were also expanded during the project through participation in the Northwoods Lake Fair, serving as the local contact for the Adopt-A-Lake program, and conducting four water resources educational seminars for local government officials. The water resources seminars provided county, city, town and tribal government officials with information that can help them better deal with many water resources related issues.

Introduction

Vilas County has 1,318 lakes, more than any other Wisconsin county. Lakes are an extremely important component of Vilas County's landscape, and have a very significant role in the natural world. These lakes are also valuable for many other reasons. Lakes are the basis for the County's tourism industry, they are sites for many seasonal and permanent homes, and have cultural and historical importance. The Vilas County Lake Planning Grant Project recognized that there are many important reasons to protect, preserve and enhance these lakes, and that Vilas County should be an active participant in lake management.

The Vilas County Lake Planning Grant project began in May of 1995. The project was implemented with the cooperation of the Vilas County Land & Water Conservation Committee and Vilas County University of Wisconsin-Extension. The project goals focused on increasing citizen involvement with lake protection, lake education, and lake database development. Appendix 1 is a fact sheet produced and distributed to explain the purpose of this project.

The completed project goals will serve as a foundation for other lake projects initiated in Vilas County. The overall mission of the project was to provide the county with the knowledge and experience needed to complete future lake management projects. Vilas County has since initiated two additional lake projects, and the work products and background that this project has provided have been invaluable for these new efforts. Hundreds of new people in the county have had some involvement with the project. All of these people now have access to information that can assist them in making more informed decisions on the management of their lakes. In the future it is hoped that Vilas County can continue to work with county residents and be a strong partner in protecting the county's valuable lake resources.

Goals for the Vilas County Lake Planning Grant Project

1. Recruit and train 100 water clarity monitoring volunteers for participation in the Department of Natural Resources Self-Help Volunteer Lake Monitoring Program
2. Establish a lake network with at least one contact person for each named lake in Vilas County.
3. Develop a computer database with available information about Vilas County lakes and provide an information summary to each active lake association.
4. Assist in the formation of at least two new lake management organizations.
5. Expand lake education activities in Vilas County by assisting with the Northwoods Lake Fair, coordinating four water resources educational sessions for local officials, making presentations to lake groups, and serving as a local contact for the Adopt-A-lake program.

Project Accomplishments

Water Clarity Monitoring

The largest goal of the project was to recruit and train 100 new water clarity monitoring volunteers. Project staff were successful in recruiting a total of 115 new people willing to volunteer their time and efforts to conduct water clarity monitoring. Of those, 88 received hands-on, one-on-one training to become self-help water clarity monitoring volunteers. These volunteers are now conducting water clarity (Secchi disk) monitoring on Vilas County Lakes. An additional 27 people who are interested in becoming trained water quality monitors will receive that training during the summer of 1997. Also, many more people are aware of lake related programs in Vilas County, and interest in volunteer lake monitoring will probably continue to grow. Lists of these water clarity monitoring volunteers can be found in Appendix 2 and 3.

An extensive recruitment campaign was conducted for new water clarity monitors. The first step in the recruitment was to identify those lakes that did not have monitors at the beginning of the project. Press releases and newsletter articles then were used to let people know about the program and list which lakes were not receiving any monitoring attention. Lake residents did not like seeing their lake on the "Monitors Needed" list, and many decided to join the program. Large numbers of individuals became aware that monitoring the quality of their lake was an important activity.

There were some limitations to the ability to recruit volunteers. The project staff person was not hired until July, 1995, so much of the first summer was not available for the recruitment/training process. It was difficult to accomplish the goal of adding large number of volunteers in only one-and-a-half summers. Many lake property owners spend only a limited amount of time at the lake, and it is difficult for them to find the time to be trained or even to learn more about the program. Also, by using the local press for releases about monitoring programs many seasonal or occasional residents didn't learn about the recruitment effort. Targeted mailings to lake property owners were also conducted. These proved to be an effective way to reach these additional people.

Increasing the amount of water quality monitors was a very productive goal for Vilas County as it began expanding its lake management programming. Over 100 new people became more aware of lake management agencies, situations that can effect lake water quality, and can now make more informed decisions about their lake. By adding these volunteers there is a larger body of people that are knowledgeable about lakes. Also, the increased amount of lake data is extremely useful. Lake data can help lake managers assess the quality of Vilas County's lakes, can be used in the future to check on trends, and could be used for many other potential lake management projects.

Lake Education Network

A lake education network has been established for Vilas County. Essentially the lake education network was designed to share information with people on named lakes with no management organization or water quality monitors. Vilas County has established at least one contact on virtually all named lakes in Vilas County with some private ownership.

There are 561 named lakes in Vilas County. Approximately 300 of those lakes have substantial private shoreline ownership. The remaining named lakes have shorelines owned by government agencies, corporations, held in trusts, or a combination of these types of owners. There are 75 lakes in the county that are served by lake management organizations, and 169 lakes that are monitored by volunteers. Additional lake education network contacts were established on 170 other lakes. A combination of lake organizations, volunteer monitors, and these newly-established contacts make up the lake network.

Lake network contacts were developed by using records kept by the county that are available to the public. The first step was to identify lakes that needed a contact person. Parcel numbers for properties surrounding those lakes were obtained from the Register of Deeds office. Names and addresses are linked to the parcel numbers and used for tax purposes. These names and address were used to create the lake network mailing list. These contact people were then mailed the *Vilas County Lake Network* newsletter. The newsletter introduced contact people to the lake project and the lake network and provided other information. The newsletter will be sent on an occasional basis when there is important or timely information to share. A copy of the newsletter can be found in Appendix 4.

Lake Database

A Vilas County lakes database has been initiated. The database contains available information about Vilas County lakes. The database information was obtained from the UW-Extension Lake Program's *Lake List*, the DNR Surface Water Inventory Database, DNR Self-Help Lake Monitoring Program, and U.S. Environmental Protection Agency's STORET Water Quality Database.

The database will enable Vilas County to provide one-stop access to people interested in finding information about a specific lake. Also, the database will help the county to develop other electronic lake data sources, and will be directly linked with the geographic information system currently being developed by the Vilas County Land Records Department..

The database was used to create information summaries. The information summaries were sent to each known lake organization in Vilas County. Information summaries were generated and sent to 57 lake organizations with information about 75 lakes. The summaries were designed to allow lake organizations to see not only the data that was available on their lake, but also to recognize where data gaps exist for their lake. The summary included information about the DNR Self-Help Lake Monitoring Program and Lake Planning Grant Programs as suggested ways to increase available data. An example summary can be found in Appendix 5.

The summaries included physical and water quality information. Extra effort was made to add easy-to-understand explanations to the listed data. Many volunteer monitors and lake associations have commented in the past about not knowing what the water quality data means. It is important to make sure groups and individuals can use lake data to assist in their decision making.

Lake Management Organization Formation

Two new lake associations were incorporated with the project's assistance. Lake organizations are extremely important in Vilas County because they have the flexibility needed to perform many different types of tasks specific to the needs of their lake and association members. Lake organizations can also represent the concerns of their members to government agencies, which is important because many lake property owners maintain voting residencies elsewhere.

The two lake management organizations incorporated during the project were Little Crooked Lake Association and the North and South Twin Lakes Riparian Association. A list of lake officers is included in Appendix 6. These associations have already begun to serve the lakes and communities they represent. Little Crooked Lake Association has been active in collecting information and educational materials, and passing them along to members. North and South Twin Lakes Riparian Association is involved in many activities, including a comprehensive lake planning project. In addition, North and South Twin has applied for its first DNR Lake Planning Grant to study water chemistry.

Lake organizations are continuing to form in Vilas County. It is important to inform lake residents that even though a voluntary lake management organization has no regulatory authority, they are an excellent way to accomplish positive changes in and around a lake. Vilas County will continue to encourage and assist with the formation of lake organizations.

Lake Education Expansion

A major portion of the project focused on expanding lake education activities. The project was involved with the Northwoods Lake Fair, the Adopt-A-Lake program, conducted numerous educational presentations for lake organizations, and conducted four Water School educational programs for local government officials and lake leaders. Educational programs are valuable lake protection tools because of the increased awareness provided to participants.

The 1995 Northwoods Lake Fair was held in Forest County at Crandon. The Northwoods Lake Fair is a cooperative project conducted with assistance from educators, lake professionals, and lake organizations in Forest, Oneida, and Vilas Counties. The Vilas County Lake Planning Project assisted with the fair, and provided financial assistance. Lake fairs are an excellent way to put educators and lake managers in touch with large groups of people. An individual can receive large amounts of information from many different people at one location. A program outline is included in Appendix 7. Compiled exit survey results can be found in Appendix 8.

The Vilas County Lake Planning Project served as a local contact for the Adopt-A-Lake youth education program. The project helped coordinate an initial Adopt-A-Lake teacher inservice training workshop for the North Lakeland Elementary School. The workshop was conducted by Libby McCann from the UW-Extension Lakes Program in Stevens Point. Project staff also conducted an evening activity for 90 youth in grades 5-7 from North Lakeland Elementary School participating in the overnight Adopt-A-Lake environmental education program at Camp Manitowish.

An orientation meeting was also coordinated with Northland Pines Elementary School staff and the UWEX Adopt-A-Lake Coordinator. The purpose of the meeting was to identify resources, and identify a process for implementing an Adopt-A-Lake program. The project provided follow-up contact with the 5th grade teacher for implementing a purple loosestrife eradication and education project on Silver Lake during the fall of 1995. A purple loosestrife eradication program on the Vilas County Courthouse grounds was also coordinated during the fall of 1996 with approximately 90 students from Northland Pines Elementary School. The students hand pulled and bagged about 20 large garbage bags of loosestrife. A program outline and evaluation from the North Lakeland program is included in Appendix 9.

Numberous presentations were made to Vilas County lake management organizations. Home drinking water tests were conducted with several area lake organizations including Alma-Moon Lake District, Anvil Lake Association, Nelson Lake Association, Annabelle Lake Association, and Muskellunge Lake Association. Data was interpreted by UW-Extension specialists for the participants so they could understand what the tests mean for their own private wells. Groundwater flow model demonstrations, nitrate screening tests, and exotic species presentations were conducted for the Manitowish Waters Lakes Association. Drinking water nitrate screening tests were also conducted for Kentuck Lake District and Big Sand Lake Association. In addition, a presentation on volunteer lake monitoring was conducted for the Kildare Lake Association.

Four Water School educational seminars were conducted in Vilas County for local government officials. Topics for the seminars were lakes, wetlands, streams, and groundwater. Officials representing county, city, town, and tribal governments attended these sessions. Members of the Vilas County and local lake associations were also in attendance.

The Water School seminars were designed to provide local decision makers with the tools required to make more informed water resource related decisions. Presenters for the sessions were specialists from the Department of Natural Resources, U.S. Army Corps of Engineers, USDA Natural Resources Conservation Service, University of Wisconsin-Extension, and other professionals. The programs were very well received by those that attended. Participation was less than optimal, though, as getting large numbers of officials to attend these sessions proved to be a challenge. Program outlines are included in Appendix 10. Compiled program evaluations are included in Appendix 11 .

Conclusion

The Vilas County Lake Planning Project was highly successful in meeting the goals established for this project. Vilas County has demonstrated that a Wisconsin county can take an active role in managing and protecting its lakes. County level involvement with lake protection is essential because many lake related issues are local in origin, and can best be solved in local communities. The more people involved with these lake issues, the better.

Working to increase public involvement with lake programs benefits everyone involved with lake protection. Better informed people are more effective in effecting positive changes. Having a collective, informed voice of Vilas County lake people makes it easier to communicate lake issues to area leaders. Vilas County is extremely fortunate to have so many dedicated volunteers willing to become involved in this project. This lake planning project was successful because of their participation.

Appendix 1

Project Fact Sheet

Vilas County Lake Management Lakes Project 1995-1996

*A Vilas County UW-Extension and Vilas County Land Conservation cooperative project benefitting
Vilas County's lakes*

Lakes are an extremely important part of Vilas County's natural landscape. They provide habitat for many species of plants and animals, provide aesthetic beauty, recreational opportunities, and are a vital component of the ecosystem. Also, lakes are the main attraction for Vilas County's substantial tourist industry.

Vilas County is home to 1,318 lakes, more than any other Wisconsin county. This multitude of lakes makes up 17% of the surface area of the county. Wisconsin contains 15,057 lakes, and about 9% of those are located in Vilas County. The region has the third highest concentration of inland freshwater lakes in the world.

Though it is clear lakes are important to Vilas County, relatively few receive enough attention to ensure protection. Only two lakes (Escanaba and Kentuck) are regularly monitored by Department of Natural Resources staff for water quality. As of June of 1995, only 104 lakes had trained water quality monitoring volunteers documenting the condition of their lakes. Only 58, or 4.4% of Vilas County's lakes have associations formed to protect, enhance or manage their lake.

The Wisconsin Department of Natural Resources has made it a priority to develop lake management partnerships with counties. This is especially important in lake rich Vilas County. Lakes are a public trust in Wisconsin, and they fall under the jurisdiction of the Department of Natural Resources. However, cooperation with local units of government, lake groups and individual volunteers is critical in the protection of lakes.

Volunteers are especially needed to provide water quality information about specific lakes. Monitoring of water quality is the critical first step in lake protection. Monitoring can answer questions about the condition of the lake, provide insight on the causes of any problems and document any changes in water quality.

The overall objective of the 1995-1996 lakes project is to build a foundation for future lake conservation activities undertaken by Vilas County.

Goals of the Vilas County Lakes Project for 1995-1996

1. Recruitment and training of at least 100 water clarity monitoring volunteers. Volunteers will monitor the overall quality of their lake using clarity as an indicator. Monitoring will be performed using a secchi disk, which is a black and white metal plate lowered into the lake to determine clarity.
2. Establish a lake education network, with a representative from each named lake in Vilas County. The lake education network will be a means to share timely information about lakes. Information shared could include decisions by federal, state or local government; information about a new exotic species threat; or any news that could affect lakes or lake users.
3. Develop of a computer database containing available information about Vilas County lakes. This will provide a one-stop source of information for interested parties.
4. Assist in the formation of lake associations and lake districts. Lake associations are an important means for concerned lake residents to protect, preserve or enhance their lake.
5. Expand lake education activities in Vilas County by assisting with the Northwoods Lake Fair, coordinating Water School workshops for local officials, making presentations to lake associations, and serving as a local contact for the Adopt-A-Lake youth education program.

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