

*Lake Washington Improvement Association
Of Meeker County*

Lake Management Plan

2010

VISION: A management plan that will provide long-range direction, sustainable decision-making, flexibility, and cooperation from all stakeholders to address the concerns and needs in a timely sensitive manner.

MISSION: A renewable plan to provide high quality sustainable practices of excellence to protect, maintain, and improve the water quality and value of Lake Washington as a resource for generations.

Introduction:

This management plan for Lake Washington is designed to address ongoing concerns and issues we are aware of at this time and look at long range planning for the lake community. The plan is intended to be a dynamic document that will provide direction and aid in cooperative decision making for residents of the lake, members of the lake association, state organizations, county and state government, and the public at large with vested interests in establishing and maintaining high standards of water quality and sustainable use of this lake as a natural resource for generations to come.

The Lake Washington Board of Directors adopted the lake plans (revised 1988; 2005, 2008, 2010) as a useful impetus for organizing the members in a meaningful manner. The goals of improving the water quality continue being sustainable because the Lake Association recognizes the need for monitoring water quality. The Board of Directors note changes to the lake are ongoing and new issues continue to develop. With this in mind the decision was made to continue this as a renewable and sustainable lake management plan. The Board's intent is to review, evaluate, update, and improve this plan on an as needed basis.

Lake Washington community is one of predominantly permanent homes. Estimates are more than 70% of all lakeshore and lakeview properties are year round residences at this time. There continues to be improvement, additions or rebuilding of existing home-sites, along with the potential for additional building on undeveloped lakeshore and lakeview property. This presents many new and different issues for the management of Lake Washington.

In this Lake Plan the Lake Washington Association will address the following issues, practices, and action plans: monitoring and maintaining high level of water quality, additional recreational use of the lake over longer more sustainable periods, shoreline management, education and communication with lake property owners, greater cooperation and partnerships with regional, county, and state organizations to do such things as identification and control of Invasive species, monitoring and development of a five year Lake Vegetation Management Plan, watershed management, septic updates and improvements, and fish management.

Geographical Characteristics:

Lake Washington is situated in the southeastern part of Meeker County, between the cities of Dassel and Darwin, Minnesota. The lake covers 2,639 acres with 10.6 miles of associated shoreline; of this acreage 2,449 acres are littoral. The lake is relatively shallow with a mean depth of 8.6 feet and maximum depth of 17 feet. The configuration of the lake is oblong, with a 3-mile long major axis oriented in an east-west direction and 1.5 mile north-south axis. The primary inlet from the surrounding watershed is on the west side of the lake. The outlet is located on the north-northeastern edge of the lake and discharges into Washington Creek. The watershed draining into Lake Washington is 22,063 acres. Several smaller lakes, streams, culverts, and creeks in the watershed eventually drain into the lake. The land in this watershed is a mixture of agriculture (primarily crops), with some larger stands of deciduous trees, and other large areas in Conservation Reserve Program acres.

Lake Washington provides opportunities for many uses by property owners and the general public. There are two public landings. One is located on the south shore (Ellsworth Landing) and the second is located on the east shoreline. The MnDNR maintains both. The lake association pays for year round lighting in the parking lot of the Ellsworth Landing.

There is also a private landing on the northeast shoreline maintained by the Dassel Rod and Gun Club. Additionally, the lake association through donations installed a weather warning alarm siren at the Ellsworth Landing. This siren is being maintained by the Meeker County Sheriff's Department beginning in April 2010.

On any given day during the spring, summer, or early fall, one can find people taking part in such water activities as: boating, waterskiing, tubing, parasailing, sail boating, jet skiing, canoeing, paddle boating, or fishing.

Any water activity possible can be found on Lake Washington. It is the home of fishing tournaments throughout the year. In the winter there are numerous fish houses sprinkled around the lake.

The Lake Washington Board of Directors has determined the following seven areas to be essential elements to this lake management plan. Goals have been developed in each area and specific strategies to help achieve these goals. Some areas we are actively working on need continuous monitoring and work, others are long range in nature and yet others will provide historical documentation so future generations will know what and how we attempted to tackle the problems of our day.

I. Water Quality:

This is truly the centerpiece of our lake management plan. We fully understand the importance and need to maintain and improve the lake's water quality. The membership recognized this as the primary objective of the original lake plan of 1988 and again in 2005, 2008, and 2010. We have continued the goals while increasing the water samplings number and content we test for. Presently we contract with a professional lake management company to do the water testing from April through September. They provide us with an annual analysis of our lake water quality at the end of each year. The association recognizes the many additional pressures being put on the lake. Development has significantly increased and with more land to develop on or around the lake this will continue to put more pressure on maintaining and improving water quality. Improved enforcement of zoning and building rules brought about more consistent and updated septic systems around the lake. The Board does acknowledge that sometime in the future the lake community is going to need to take a look at a much larger wastewater treatment plan, before the heavy use and increased population put unbearable stress on the water quality of Lake Washington. To this end we do have a preliminary septic plan/report drawn up in 2004.

Goal: To maintain and/or improve the water quality in Lake Washington.

Strategies:

- Test water quality from April through September each year.
- Increase what we test for and maintain records for ongoing yearly comparisons.

- Maintain monthly secchi disk readings through out the year and share this information with the state.
- Monitor water levels.
- Analyze the data we gather each year on the state of the water quality in Lake Washington using this information to provide direction for planning.
- Explore all sources of water / runoff into the lake and the impact this has on the water quality.
- Continue exploring septic options that can minimize the impact on drinking and lake water qualities in the Lake Washington Community.

II. Education:

The Board recognizes the importance of keeping all stakeholders involved in the process of informed decision-making. This requires ongoing communication with all parties involved with issues and concerns of the lake. Education is considered a corner stone to our public relations with lake property owners, state and county organizations, and other interested parties. We are providing education about what is happening to the lake, the actions we see necessary to address these issues, and information about what is good stewardship through our web site, annual meetings (May and August), newsletters (three per year), updating our Lake Washington Directory approximately every five years (a treasure of history, information, and knowledge), other mailings or email notification when deemed necessary by the Board. Through sponsorship of meetings involving state, county, township, and local individuals and organizations to provide information, answer questions and in general inform members of issues, concerns, laws, best practices, and more knowledge for making informed decisions.

Goal: To keep all stakeholders informed, knowledgeable, and involved in matters that impact the lake and surrounding areas.

Strategies:

- Continuously improve and update the Lake Washington web site.
- Publish 3 newsletters per year – informing membership of current issues, planned actions, and up coming events.
- Updating of the Lake Washington Directory
- Develop an updated email database to more easily contact and communicate with members and others.

- Form committees to learn and more fully understand issues, develop ideas and provide the knowledge necessary to make informed decisions.
- Maintain working relationships with the MnDNR, Crow River Organization of Waters (CROW), local and state Soil and Water Conservation, Meeker County Commissioners, and Meeker County Association of Lakes (MCAL), Townships to keep members informed of changes to rules, laws, and new information that members can use to improve quality of life and maintain our high standards of always improving water quality for the lake.
- Use Shoreline Captains as a means to gather and provide information and bring feed-back from lake shore owners directly to the board.
- Provide local, county, and state officials with the most current information on issues, subjects, and concerns of the lake community.

III. Aquatic Plant Management:

This is a major concern requiring organized action and planning for the Lake Association and other interested parties. The discovery of infestation by Eurasian Water Milfoil (EWM) in Lake Washington in 1999 has been a learning and community building experience for all. We were grateful the DNR took control of managing EWM from 1999-2002. This provided us with ideas, models, and time for us to generate interest in taking a more active leadership role in developing a vegetation management plan. The membership stepped up and became involved with plotting sites of EWM through the use of a GPS or reporting to board members. The use of GPS allowed members to do lake searches for EWM and plot their existence. Our lake monitoring for EWM and now Curly Leaf Pond Weed (CLPW) and subsequent plotting of the sites has become an ongoing fulltime venture, as some even monitor the presence during ice fishing. The membership also recognized the need to raise money for milfoil treatment, and have donated enough to supplement the DNR grants we have been able to acquire.

As the lake association moved to the forefront in EWM and CLFW management it became evident we needed to consider vegetation management as a balancing act between: the importance vegetation is to maintaining sustainable aquatic life and the nuisance matted vegetation presents to lake users, property shore owners, and the impact this has on natural vegetation and fish populations which need our protection.

The Lake Board recognized the need for a subset of individuals to become knowledgeable and capable stewards in our practices of EWM management. To this end a committee of four people took on this charge. This provided us with a group knowledge set that can be shared and passed on to newer members joining the group. During the summer, fall and winter of 2003 into the spring of 2004, this committee learned what needed to be done, how to do it, and the equipment we would need to provide treatment for EWM on Lake Washington.

In 2004 with the cooperation of the DNR, providing Lake Washington with grant money and a knowledge base we could explore and learn from, our Milfoil Committee developed a plan to provide treatment for over 180 acres of matted milfoil left from the 2003 treatments. They also became skilled volunteer applicators thereby allowing the lake membership to better use funds for treatment. They continued monitoring the results of these treatments and in late summer did a second application on other areas of concern. Their feedback regarding the treatment process and successfulness of these treatments are: the earlier application did a much more thorough job of eliminating the milfoil and allowing some natural vegetation to begin growing, than treatments conducted in late summer. This group is also aware of other options we need to consider when it comes to treating smaller areas that can possibly be pulled or hand treated.

As membership in the lake association has changed, so to have the members and methods of this group. Presently (2010) this group is identified as the “Invasive Exotic Species Committee” and consists of three persons selected from the current Lake Washington Improvement Association Board of Directors. The Lake Association is not presently using their own equipment and members to apply chemicals to the identified areas of Curly Leaf Pondweed (CLPW) and Eurasian water milfoil (EWM), because of some liability concerns. The Invasive Species Committee monitored infestations during the 2005 and 2006 season, but no mechanical or chemical treatments were done. In 2007 MnDNR approved a permit that allowed the association to treat a total of 16 acres of EWM in two locations, in 2008 22 acres, and in 2009 nearly 80 acres were treated. The lake association hired a contractor to apply the chemicals to specific areas of EWM identified by the Invasive Species Committee and DNR. These areas were chosen to allow for access by property owners and allow for maximum recreational use of the lake. The treatments have been judged successful. It is anticipated that the

association will be seeking permits to treat additional EWM in the late spring and early summer of 2010. The Lake Association has developed a five year Lake Vegetation Management Plan in cooperation with the state Fisheries and Waters Departments of Natural Resources. The purpose and focus of this plan was to develop a long range plan for treatment of EWM. The plan proposes treating 20% of the EWM currently surveyed in the spring of or 80-100 acres each year. This will allow the Invasive Species Committee/Lake Washington Association to develop a long range budgeting plan for the treatments.

As a result of infestation of EWM and CLPW, and the subsequent lead role the Lake Association has assumed in the treatment and management it has become abundantly clear that a Lake Vegetation Management Plan (LVMP) is a moving target and will need adjustments from year to year. The main purpose being to provide the Lake Association a targeted budget needed on an annual basis. This LVMP will also help meet state requirements for permitting treatments and continue to be eligible for grant monies. Because of the vast littoral nature of our lake, managing exotic species of plants requires ongoing monitoring of the lakes vegetation patterns. The lake management company that does our water testing also monitors the vegetation growth in the lake. To this end, our present lake vegetation management plan primarily consists of the Invasive species committee charting the continuing changes and conditions of EWM and CLPW plotting their existence in the lake and keeping members informed of these patterns. This information provides great data and helps in maintaining a clearer picture of the vegetation cover as it changes year to year. This leads to discussions with DNR and State Exotic Species Department regarding treatment/management options that can and should be considered on a year to year basis to allow for management of EWM and CLPW in Lake Washington. The exotic species committee using this knowledge and information presents the board with its recommendation for treatment/management of vegetation in the early spring of each year.

Goals: To develop a long term, flexible aquatic plant management plan that addresses control of EWM and CLPW, while encouraging the development and growth of natural vegetation.

To implement Lake Vegetation Management Plan that was developed in 2010 and shared with the DNR.

Continue regular vegetation surveys, the last one was completed in 2009 by Professional Lake Management.

Strategies:

- Develop and monitor the yearly management plan for invasive species to identify needs, determine treatment options, and provide treatment earlier in the year to obtain maximum benefits of the treatment.
- Continue conducting lake vegetation surveys, in conjunction with the professional lake management company, to establish a picture of what the lakes vegetation looks like on a year to year basis.
- Establish core group of individuals on the exotic species committee, adding new members regularly with a plan for the future.
- Continue partnerships with local and state units to work together providing information, expertise, support, grants, and knowledge about needs and updated technologies/treatment/management options.
- Do ongoing vegetative surveys throughout the year to provide good data that can be used to develop yearly treatment plans.
- Annually seek (financial and professional) support from all state and local agencies that are stakeholders in this management plan.
- Monitor and maintain a long range (5 year) vegetation plan that provides an outline for treatment of a certain percentage or acreage each year of EWM or as needed, thereby allowing us to better budget and plan.

IV. Fish Management:

Where there is water in Minnesota there are fish. The cleaner and healthier the water is the better the fishing will be. So it stands to reason if we are so invested in establishing and maintaining clean water in Lake Washington, we are also supportive of maintaining and improving fish populations. We recognize fishing is a very important part of the culture of Lake Washington. There is a long and illustrious history detailed in the over fifty years of records kept by Lake Washington Improvement Association. Much of this history provides insight and historical data about fishing and fish populations on Lake Washington. The area DNR Fisheries Department has conducted numerous fish surveys over the years, been responsible for

stocking of Lake Washington and developed an action plan for fish management. They have provided ongoing information and knowledge to the lake community regarding fish populations and best practices. This plan needs to detail our belief that fishing and fish management is a very vital part of our lake management plan. In discussion with the DNR in 2009, they did not recommend any additional dollars be give for walleye stocking. Numbers for the upcoming walleye class looked excellent according to the most recent fish survey completed.

Goals: Support and be active members in the local Minnesota Fisheries plans for monitoring and managing the fish populations in Lake Washington.

Strategies:

- Support fish surveys.
- Stay informed of the fish populations and what we as association members can do to support fish management.
- Maintain open communication with the DNR and support their fish management plans for the lake.
- Look for ways to encourage healthier fish environments.

V. Shoreline Management

Shoreline management is a defining piece of any lake management plan. This provides a perspective for us to look at five, ten, twenty years down the road and determine how effective our stewardship of the lake has been. This is part of the lake management plan that does hold significant importance, because each property owner assumes responsibility for implementation. Shoreline management practices currently have a significant impact on runoff, filtering of waters entering the lake, and maintenance of shoreline and their structural importance to the lake.

The association will continue to promote and support efforts by local and state organizations to enhance shoreline management. To this end the Lake Association will continue the practice of education for property owners by sponsoring speakers, joining the DNR in sponsoring and developing lakescaped properties around the lake, and providing in-kind services to achieve this end.

Goal: Encourage development of improved shoreline management practices.

Strategies:

- Provide continued education and up dates about lakescaping and shoreline management.
- Support plans and encourage projects that enhance and provide for stabilization of lakeshores.
- Provide resources in the way of plans, nurseries that provide high quality stock for planting (be sure plants are intended for lake).
- Share books, CD's from the DNR, and videos we have or know of.
- Provide in-kind services to encourage the sponsorship of projects by local and state organizations.

VI. Communication:

This is one of the more important tools we have as a community and association to become better organized, informed, committed, and connected. Through membership in the Lake Washington Association we provide a community voice that can be better heard by others. Our membership hovers at about 59% of the people on our mailing list that have a connection to property on the lake. The waters of Lake Washington touch us all. We have a very common thread that we have chosen to be a valuable and very important component in our lives. It is by choice we are all gathered in this community surrounding this great body of water. This is one of the few natural resources that truly facilitates bonding at a community level. We are just that a community of Lake Washington. The fact four different townships (Darwin, Dassel, Ellsworth, Collinwood) intersect in the Lake, or that some would rather fish than ski, or swim than sail... all things we do connected to Lake Washington are dependent on the water. That is the focus of our conversations when we gather to talk about what we should or need to do to protect our one shared and valuable resource. This requires communication between all stakeholders with interests in Lake Washington. A lake management plan cannot be complete unless we define how and what we are going to talk about and how we plan to facilitate communication between us. For it is through communication we have heard the stories of Lake Washington and we will share the stories with future generations.

Goal: To develop more direct lines and means of communication with all people concerned with the life, health, and well being of the Lake Washington Community.

Strategies:

- Develop ways to get information out in a timelier manner.
- Provide up to date current contacts for members.
- Use Shoreline Captains to gather information and provide communications to the members directly connected to them.
- Look at ways to increase information in newsletters and share this information with state and local agencies we talk to frequently.
- Conduct surveys to enhance feed back that can help the Board make decisions.
- Improve and update regularly the Lake Washington Association Webpage. (www.lakewashingtonassn.com)
- Develop more effective emails lists.
- Provide area newspapers with more information about things happening on or to Lake Washington.
- Maintain open ongoing dialogues with local, county, and state organizations regarding issues and concerns of the lake community.
- Being involved with area lakes sponsoring “The Spring Fling.”
- Continue developing or sponsoring strategies to promote our lake community, i.e. cookbooks, signage around the lake, light at Ellsworth landing, supporting events and others with a vested stake in the well-being of Lake Washington.
- Have all property owners be members of Lake Washington Improvement Association of Meeker County.

VI I. Watershed / Lake Improvement District:

The development of a watershed district or lake improvement district has come up in conversations over the years with, membership, county, and state officials. The Board sees this as a vital means to further our goal of maintaining and improving water quality for generations to come. We recognize these as very specific organizational tools to better manage water quality before it reaches our lake and a way to more fairly assess the needs of our lake with the stakeholders. .

At the present time, it appears that the lake improvement district would serve Lake Washington the best. It would be our ultimate goal to create the lake improvement district to have property owners equally share in the costs of

monitoring and maintaining the highest standard of water quality we can for Lake Washington and as a means for managing Invasive species.

Goal: To keep all options on the table for discussions regarding monetary needs to support Lake Washington Association's plan of maintaining the highest water quality standards we can well into the future.

Strategies:

- Have conversations with the Meeker County Commissioners
 - Determine interest, help in formation of committees.
 - Explore the advantages of each plan
 - Begin a dialogue with lakeshore property owners.
 - Provide information about what these plans do and survey stakeholders about their options.
 - Talk to other lake associations that have created Lake Improvement Districts (LID) and how they did it.
- There are 32 LIDs in the state at the present time