Lake Improvement Districts in Minnesota
August 31, 2009

The Minnesota legislature first authorized the establishment of lake improvement districts (LIDs) in 1973. Since then, there have been minor amendments to the statute. A petition to the local government for the establishment of a LID must have a majority of the affected property owners within the proposed boundary. Before that, a petition could be acted upon with just 26 percent of the affected property owners. For details on statute requirements, see Minnesota Statutes 103B.501 – 103B.581.

The legislature assigned the commissioner of natural resources to administer the program and adopt permanent rules to provide guidelines, criteria, and standards for the establishment of LIDs. Details can be found in Minnesota Rules 6115.0900 – 6115.0980. Until now, this responsibility has rested with DNR Waters.

A LID is a form of government that is subservient to the local government that established it, has no taxing powers of its own, and is limited to just those authorities that the parent government gives to it. Most often, the parent government is a county. There are currently 32 active LIDs in Minnesota. The three primary reasons for their establishment are for the purpose of managing water quality (8), water level control (8) and aquatic vegetation (15). Details on when they were established are as follows:

Manage Water Quality	Manage Water Level	Manage Aquatic Vegetation
1976, 1980, 1981, 1990, 1991, 1993, 1999, 2000	1977, 1980, 1990 (2), 2000, 2001 (2), 2003	2004, 2005 (4), 2006 (3), 2007 (2), 2008 (4), 2009 (1)

Two things stand out from the above table. First, until 2005, the number of LIDs formed in any given year was two or less, with an average of less than one a year. More recently, this number has increased to over three a year.

The second major change is in the primary purpose of the LID. LIDs formed to manage water quality were focused mainly on improving sewage treatment around the lake by upgrading failed septic systems or the development of larger sewage treatment systems. LIDs formed to manage water level control were related to the establishment and maintenance of some form of outlet control structure. Both of these are directly related to DNR Waters programs (shoreland management and public water permits). Since 2004, all the LIDs that have formed are for the primary purpose of managing invasive aquatic plants, most notably, curlyleaf pondweed. The affected programs rest with DNR Fisheries and Ecological Services.

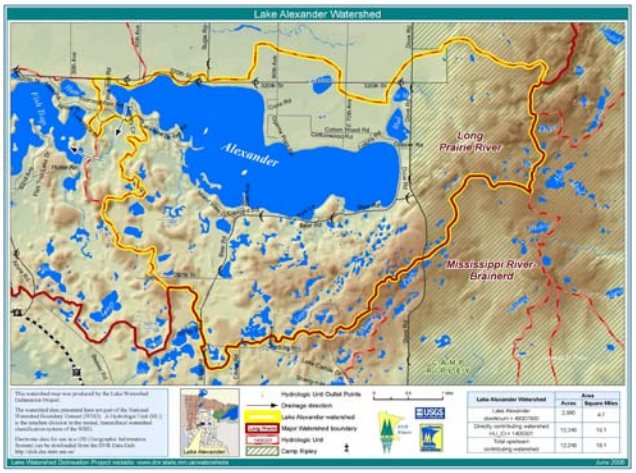
The formation of a LID can be done in three ways: by petition to the local government, by resolution of the local government and by the commissioner after denial by local government. Of these, there has never been a LID approved by DNR after being denied by local government.
In the past, many local governments were hesitant to approve petitions for LIDs because of the added responsibility and cost involved in oversight of their funding and

complexities of program administration and public/political acceptance. However, this, too, is changing. In areas of the state where there are actively engaged lake associations or coalitions of lake associations and where the Heritage Foundation has provided assistance through its Healthy Lakes Program, there is greater acceptance. The successful LID is likely a lake association that is already well-organized and active in various aspects of lake and shore management. Often, it has already conducted detailed aquatic vegetation surveys and has a DNR approved aquatic vegetation management plan. Crookneck LID in Morrison County is a good example. Although control of exotic species may be the primary reason for its establishment, the LID also stresses the importance of education and other methods to manage water quality impacts.

Morrison County is unique in that it is now willing to initiate the approval of LIDs through county resolution rather than through petition, the more common way in which they have been initiated in the past. Crookneck and Sullivan LIDs were approved by resolution in 2005. Alexander LID was approved in 2006. All of these had support of the Healthy Lakes Program and good participation by local DNR fisheries and ecological services staff.

One of the main requirements for DNR on the formation of a LID is the preparation and submission of a DNR advisory report to the local government so that it can be read into the hearing on the LID. Statute and rule specify what the DNR should address. It is appropriate to comment on the stated need, boundary, purposes, and feasibility of the proposed plans and programs, as well as monitoring, potential environmental effects and coordination with other special purpose districts like SWCDs or watershed districts. DNR provides a map of the lake's immediate watershed to accompany the advisory report:

The LID coordinator gathers information from the respective field offices and DNR programs that may have a say or interest in the formation of the LID. I have worked with program managers to provide "boilerplate" to the advisory reports on aquatic plant management and the management of invasive species. If water quality is a specific concern, I also contact PCA for their input.



Because of its advisory nature, the DNR advisory report is intended to provide the local government with technical information it may need to make an informed decision on the establishment of the LID. In addition, it provides program and permitting information that may be required if the LID is approved. A sample advisory report and map is attached.

Sample DNR Lake Improvement District

Advisory Report

July 11, 2008

Ms. Carol Waytashek, Executive Assistant
Morrison County Administration
213 SE Avenue
Little Falls, MN 56345

Dear Ms. Waytashek:

DNR ADVISORY REPORT ON THE FORMATION OF FISH TRAP LAKE IMPROVEMENT DISTRICT, MORRISON COUNTY

Pursuant to Minnesota Rules part 6115.0970 subp. 5, the Minnesota Department of Natural Resources (DNR) has reviewed the information submitted by Morrison County regarding the creation of the Fish Trap Lake Improvement District, and provides the following for submission to the public hearing on July 19, 2008:

1. A map showing the direct watershed area of Fish Trap Lake is attached.
2. Information from DNR LakeFinder shows that Fish Trap Lake has a surface area of 1175 acres with a littoral area (15 feet deep or less as per M.R. part 6280.0100, subp. 9) of 404 acres, or approximately 34% of the lake's surface area. Generally, the littoral zone is the part of a lake where aquatic plants are able to grow, though the maximum depth at which plants can grow depends on water clarity and so varies from lake to lake and even from year to year within the same lake. The lake's maximum depth is 42 feet.
3. Fish Trap Lake is classified as a General Development (GD) lake. GD lakes have structural setbacks of 75 feet above the Ordinary High Water Level (OHWL) in areas without public sewers.
4. The DNR maintains a public access on the northwest side of the lake.
5. Members of the Fish Trap Lake Property Owner's Association (FTLPOA) have participated in the Minnesota Pollution Control Agency's (MPCA) Citizen Lake Monitoring Program regularly since 1974.
6. Formation of this LID is being pursued by resolution of the Morrison County Board according to the procedures set forth in Minnesota Statutes 103B.515.

Analysis

The purpose of the proposed LID is invasive plant species management, specifically control of curlyleaf pondweed and surveillance for Eurasian watermilfoil (EWM). Curlyleaf pondweed was detected in the lake in 1997 and, according to a 2005 DNR survey, is the most abundant plant at depths of 6-20 feet. In some areas, plant abundance has achieved nuisance proportions

and interferes with water surface activities. EWM has not been detected in Fish Trap Lake, but it is present in Lake Alexander, which is connected to Fish Trap Lake via Thoroughfare Creek (an intermittent stream).

Fish Trap Lake has a large littoral area with an abundant and diverse native aquatic plant community that includes 23 submersed, 20 emergent, and 2 floating leaved native plants. This vegetation is critical to maintaining healthy fish populations. Emergent plants such as bulrush occur along the shoreline. It is essential to protect and maintain these plants as they are important for shoreline protection, maintaining water quality, and provide critical spawning habitat. Submerged plants provide food and cover needed by fish and other aquatic species.

The proposed LID's primary goals are to 1.) control curly-leaf pondweed to eliminate nuisance conditions that interfere with recreational use and 2.) attempt to achieve long-term control of curly-leaf pondweed on a lake-wide basis. DNR-Fisheries Aquatic Plant Management (Little Falls) worked with the FTLPOA to develop a Lake Vegetation Management Plan (LVMP) to achieve these goals. The plan calls for curlyleaf pondweed control through early season application of herbicides on a maximum of 55 acres in control areas to be determined by vegetation delineations conducted in June 2008 and every three to five years subsequently. The bay where Thoroughfare Creek enters Fish Trap Lake will be exempt from treatment to provide a barrier to EWM colonization from Lake Alexander. Treatment efficacy will be monitored annually after treatments and evaluated through point intercept surveys conducted in June of 2010 and 2014. When control of curlyleaf pondweed abundance has been achieved, the LID will continue to monitor the lake for curlyleaf and other non-native invasive aquatic plants. The LVMP also specifies educational strategies to assist lake users with identifying and minimizing the spread of curlyleaf and EWM, including providing information at the DNR lake access on boating practices that reduce the risk of invasive aquatic plant infestation.

The DNR reminds the FTLPOA to annually share monitoring results with the DNR and to contact the DNR's Eurasian Watermilfoil Management Program immediately if EWM is detected.

The FTLPOA also intends to promote activities to protect and enhance native aquatic plant communities, especially bulrush. It proposes working with the DNR or Morrison County Soil and Water Conservation Services to encourage property owners to restore shorelines to native plant communities, and identifies no net loss for bulrush frequencies and no or minimal loss in native floating leaf and submersed vegetation frequencies (3 and 10%, respectively) as goals.

The boundaries of the proposed LID include only properties that are riparian to Fish Trap Lake. Minnesota Rules part 6115.0920 subpart 5 requires that the LID boundaries include all lands and waters within the direct drainage basin of the lake (this basin is shown on the attached map). However, this rule also allows the County Board of Commissioners (the Board) to create a LID district boundary less than the entire drainage basin with written Commissioner approval, and if the boundary selected includes a sufficient amount of the lake's watershed to develop and implement feasible solutions to the problems the LID intends to address. Restriction of the district's boundaries to the riparian properties is sufficient to address the issue of curlyleaf pondweed management and EWM monitoring; therefore, in accordance with these rules, the DNR hereby approves the proposed boundaries identified in the petition. However, the DNR

recommends the Board of Commissioners limit the authority of the LID to matters that can be addressed by the riparian property owners, such as aquatic plant management and other in-lake studies and activities.

Water quality protection and improvement will be extremely difficult to achieve with only riparian properties located within the LID boundaries, but there are some strictly riparian activities that the petitioners can pursue to protect and enhance water quality. These activities include education, development, and protection of native vegetation strips as buffer zones along the shoreline and maintenance of compliant sewage treatment systems. Native vegetation in the Shore Impact Zone (defined as half the structure setback) acts as a buffer to filter pollutants and provides habitat and migration corridors for animals living in and around the lake. Noncompliant sewage treatment systems can also be a major source of pollution to a lake, and the petitioners are encouraged to work with Morrison County Planning and Zoning to identify noncompliant sewer systems and develop a plan to eliminate these sources of pollution. If the district boundaries remain unchanged, then promotion of these practices (known as Best Management Practices, or BMPs) is essential to protecting the long-term integrity of the lake, and the DNR strongly encourages the petitioners to work with the MPCA, the DNR, and Morrison County to develop and implement a BMP strategy.

The information provided meets the requirements of lake improvement district statutes and rules. The DNR commends Morrison County and the FTLPOA on their close cooperation with the DNR and development of a very detailed program of lake improvement activities.

Thank you for consideration of these comments. Please contact Kathy Metzker, DNR Land Use Hydrologist at 651-259-5694, if you have any questions. If approved, please provide the name and address of the primary contact of the Board of Directors for the LID and remind the LID of its obligation to provide DNR notice of annual meetings and copies of annual reports per MS § 103B.571.

Sincerely,
DIVISION OF WATERS

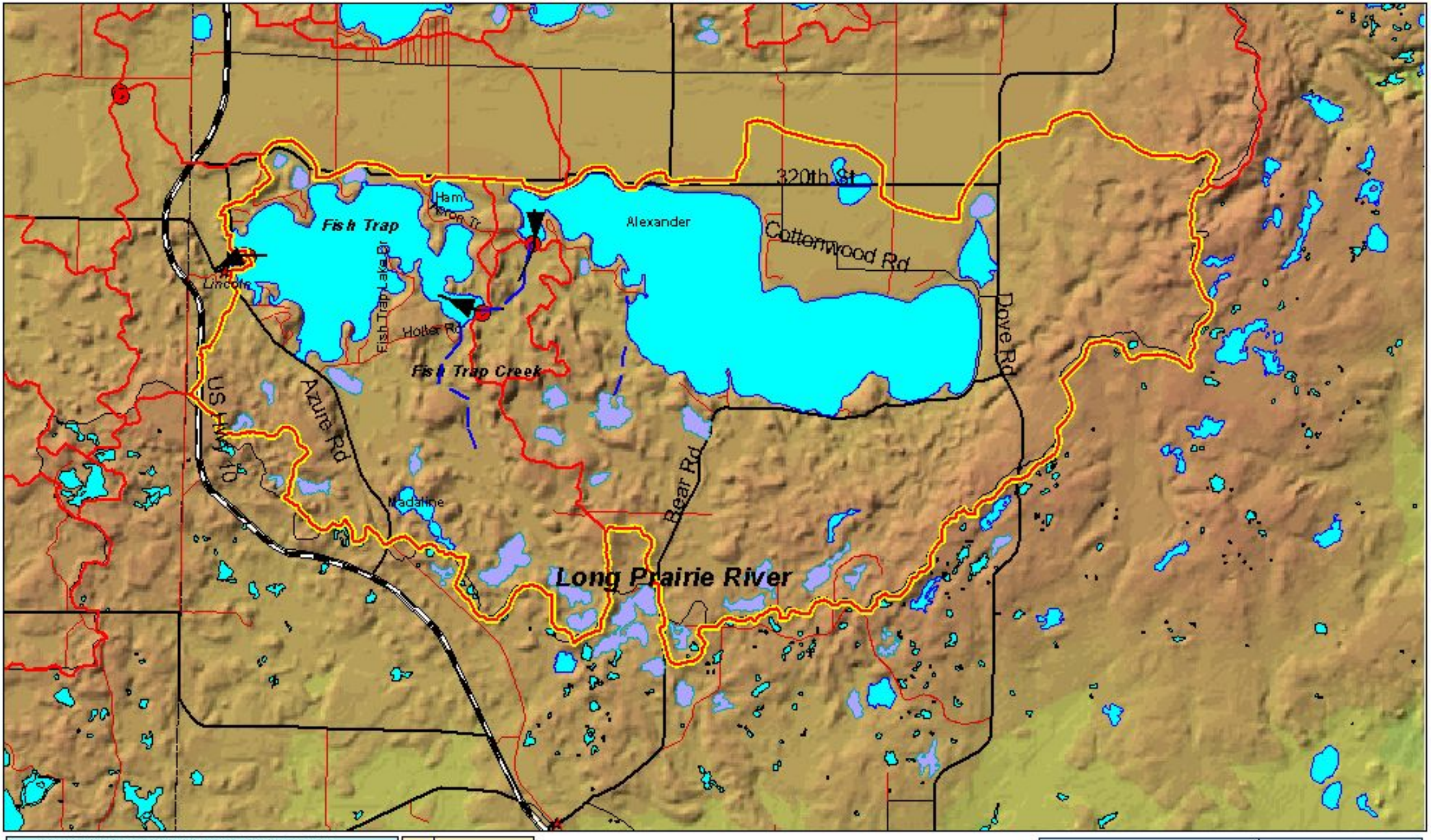
James Japs
Assistant Director

Attachments

c: Dale Homuth
Rebecca Wooden
Peder Otterson
Chip Welling
Tim Crocker
Audrey Kuchinski
Kathy Metzker
Chuck Salter

Sample Watershed Map

Fish Trap Lake Watershed



This watershed map was produced by the Lake Watershed Delineation Project.

The watershed data presented here are part of the National Watershed Boundary Dataset (WBD). A Hydrologic Unit (HU) is the smallest division in the nested, hierarchical watershed classification system of the WBD.

Electronic data for use in a GIS (Geographic Information System) can be downloaded from the DNR Data Deli: http://deli.dnr.state.mn.us/

Flow Direction
1403001 — Hydrologic Units
Long Prairie River — Major Watershed Boundaries
Fish Trap Lake Watershed
Hydrologic Unit Outlet Points

0.5 0 0.5 Miles

N

Watershed	Area	
	Acres	Square Miles
Fishtrap Lake dowlinum = 48013700	1203	2.04
Directly contributing watershed HU_ID = 1403001	6634	3.73
Total upstream contributing watershed	18287	28.68