BORG ROAD DAM DLSD FACT SHEET August 16, 2005

1885 - William Horton acquired Byron Brown interests in certain water power rights and privileges created by a dam on the outlet of Delavan Lake. The dam was known as the "Tilden Dam" and was located at the site of the present North Shore Drive bridge. Horton later sold his water rights and lake interests to the Hertzel Milling Company.

1907 - The Delavan Lake Improvement Association (DLIA) acquired certain rights from Horton to control the lake elevation during the summer period of June 1 through September 1.

1926 - The agreement between DLIA and Horton was modified to establish a summer lake elevation of 95.25 feet, Wisconsin Public Service Commission (WPSC) datum. The new agreement required the lake to be lowered 2 feet beginning September 1. This lower winter level was to be maintained until the ice came off the lake the next spring.

1931 - WPSC issued an order to lower the winter lake level to 3 feet below the summer level.

1934 - Mr. George Borg acquired certain water rights and dam construction privileges from Hertzel Milling Company and others. A new dam (known as the "Borg Dam") was to be built about 3/4 mile west of North Shore Drive. Town Board of the Town of Delavan passed a resolution to take care, upkeep and maintenance of "Borg Dam" and be made a charge upon the taxable real estate in the Town and required the Town to replace the dam in case of its destruction. The resolution included dikes or embankments, spillways and other appurtenances placed in and about the dam. It also provided for a 20 foot wide easement north of the north embankment of the bank for access to the dam from Borg Road.

1936 - Following completion of the new dam (Borg Dam), WPSC ordered a new summer lake level to be at 94.75 feet WPSC datum, and a new winter lake level to be 9 inches lower. The lake level was be to lowered beginning November 1 to reach winter level by December 1.

1953 - In response to a request by the DLIA, the WPSC order the winter draw down to begin October 1.

1971 - The Town receives dam access easements and assignment of maintenance from Lake Lawn Lodge (for north side of dam), and from Denise Borg (south side). These were recorded with the Walworth County Register of Deeds in Vol. 56, Pages 190 - 193 as Document Numbers 641237 and 641238.

1974 - The DLIA granted by Quit Claim Deed all of its interests in the Borg Dam,

including the right to control the lake level to the Town of Delavan.

1976 - The Wisconsin Department of Natural Resources (WDNR) established the minimum lake stage for the lake at 92.50 feet WPSC datum.

1985 - Access and ownership of the dam was reviewed by the Town during its review of a proposed new subdivision (Woodland Shores Subd.) along the south side of the Outlet. A title report and an opinion by the Town's attorney concluded the Town did not own the lands for the dam. The Town received Quit Claim deed from the owner of record for a 44 foot by 52 foot parcel. This document was recorded in Vol. 350, Page 474 as Document No. 118770. This parcel contained the concrete structure of the original dam discharge gates. The recorded plat of Woodland Shores Subdivision contains a number of notes relative to access and maintenance of the dam. In particular, an 30 foot wide access and maintenance easement was granted to the Town over Outlot 1 of the Woodland Shores Subd. Plat.

1986 - WDNR inspected the dam and provided a report to the Town regarding the condition of the dam. The inspection report noted the dam included not only the 44 by 52 foot concrete structure, but also included approximately 45 feet of embankment south of the structure and about 225 feet of embankment to the north. WDNR considered the dam to be a "large dam" due to its structural height and the volume of water impounded. They also suggested the dam would be classed at least a Class II or a significant hazard dam.

1990 - Modifications were made to dam as part of the lake rehabilitation project. These included replacing manually operated gates with electrically operated gates with the capability of being automatically operated based upon incoming stream flow and current lake stage measurements. A third discharge gate and a separate stilling well were installed in the north embankment of the dam. Donohue & Associates, Inc. were the consulting engineer for the modification of the dam. It is believed that the consulting engineer completed a flood hazard study as part of the documents submitted to WDNR for permit approval to modify the dam. A condominium plat for the expansion area of the Delavan Club Condominium included lands along the north shore of the Outlet, including the north embankment of the dam. This expansion area would later become the Geneva Landings Condominium.

1991 - Town of Delavan petitioned WDNR to establish the "summer maximum lake elevation" as the year-round maximum elevation. Following a public hearing and review of the findings of fact, WDNR issued an order establishing a maximum year-round water elevation. This eliminated the requirement of lowering the maximum elevation of the lake during the winter months.

1994 - The Town experienced significant problems with the new equipment operating the dam correctly over an extended period of time. A report by the U. S. Geological Survey noted a lack of consistent flow matching by the dam.

The condominium plat for Geneva Landings Condominium listed 1995 easements for dam access and maintenance. In response to an inquiry by the Town Lake Committee, WDNR provided a memorandum which outlined a number of tasks to be completed by the Town. That memorandum suggested DLSD assist the Town in developing a plan or guidelines for operation of the dam. DLSD provided guidelines for both automatic and manual operations of the dam to the Town. DLSD staff made periodic visits, on average of 150 days per year, to several USGS sites which were used to provide information to operate the dam. In response to the Town's request, the DLSD began daily inspection visits at the dam in March. These daily inspections have continued to the present. Work performed by DLSD staff at the dam has included daily check of operations, adjusting dam gates as necessary to match stream flows to maintain require lake elevations and remove debris from the dam gates. DLSD staff has also installed and removed the de-icer unit at the dam, which allow the dam gates to be operated during below freezing weather. DLSD receives reimbursement for its costs to monitor the dam from the Town. All other maintenance activities at the dam have been performed by the Town.

1997 - WDNR established a minimum discharge flow requirement for the dam as required by Chapter 31.34, Wisconsin Statutes. State law requires a dam pass at least 25% of the natural low flow at all times. In this case, the minimum discharge requirement established by WDNR was a minimum flow of 0.66 cubic feet per second.

2001 - The Town Board reviewed its costs of operating the dam and in particular the costs a special dedicated telephone line between USGS stream flow monitoring equipment located at the State Road 50 bridge and the dam and the benefits of being able to automatically operate the dam. The Town determined it was not financially justified to continue the option of being able to automatically operate the dam.

2002 - In July, telephone service to the dam was discontinued, and since that date, the dam can no longer be operated automatically. Owners of Lot 8, Woodland Shores Subdivision began construction of a new house. Owner of Lot 8 also owns of the adjacent Outlot 1 which contains the Town's southern access easement to the dam. During the new house construction, excavated material removed for the basement was placed over the Town's easement on Outlot 1, covering the gravel access road from Blue Heron Drive to the dam. Subsequently, additional landscaping has been added over the easement. This additional landscaping has included a vegetable garden, trees, bushes and a boulder across the former easement access road.