
A delicate balance:

Flood control in the Tri-Lakes area



Valley Branch Watershed District
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The Tri-Lakes (DeMontreville, Olson, and Jane) are important and beautiful resources. The goal of the Valley Branch Watershed District (VBWD) is to protect these resources and prevent flooding. Sometimes, achieving these goals requires a delicate balancing act.

Flood relief and the VBWD

The VBWD was formed in 1968 when citizens petitioned the State of Minnesota to form a government unit that would address flooding problems in this landlocked area. An early effort to mitigate flooding involved pumping water from Lake Jane to a downstream infiltration basin (a shallow pond with permeable soils that allow water to infiltrate). Continued flooding, however, prompted both residents and member cities to ask the VBWD to plan and implement a major flood-relief project. Completed in 1987, that project is known as Project 1007 (see system path marked in red on map). The Tri-Lakes area is in the northwest area (upstream end) of the project.

Project 1007

Project 1007 directs outflows from the northern two-thirds of the VBWD south and east to a storm sewer pipe along Interstate 94. Ultimately, the flow discharges to the St. Croix River. As illustrated in the figure below, the project has been extremely effective in reducing wide water-level fluctuations and preventing

flooding. By preventing flooding and associated erosion, the project also enhances water quality.

The balance

The VBWD, the Department of Natural Resources (DNR), and the City of Lake Elmo work together to protect the Tri-Lakes and area residents. The DNR has jurisdiction over all Minnesota waters and controls any deliberate changes to a lake's outlet and water level. The DNR also establishes the ordinary high water level (OHWL) elevations for Minnesota lakes. The OHWL is the point where the lake's vegetation changes from predominantly aquatic to predominantly land-based. Any work below the OHWL and modifications to lake outlets require DNR permits. These DNR regulations ensure that outlet modifications and other projects protect the public interest.

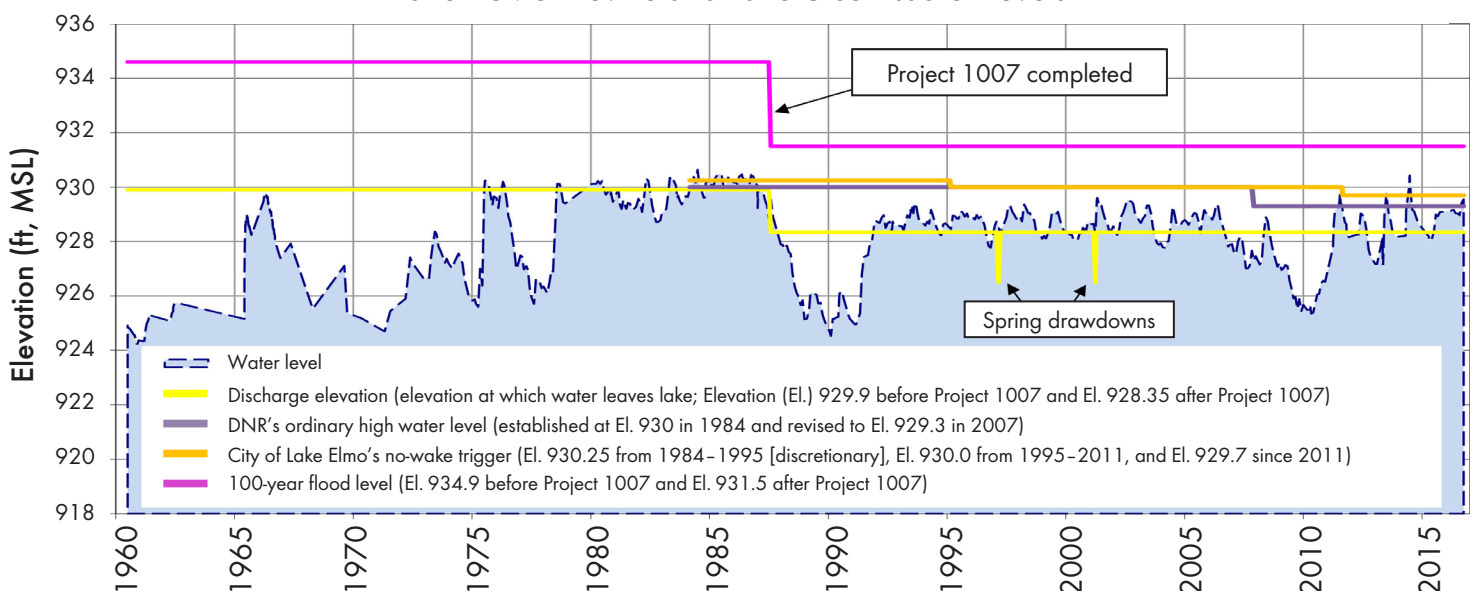
The City of Lake Elmo establishes no-wake restrictions for the Tri-Lakes to balance the needs of lakeshore residents and recreational users. These temporary restrictions, which ban fast boating, are enforced on Lake Olson and Lake DeMontreville when

water levels exceed 929.7 feet and on Lake Jane when levels exceed 924 feet. Fishing, swimming, recreational boating, and other lake uses are still allowed during no-wake restrictions.

The primary goal of the VBWD is to prevent homes from flooding. In the past, the DNR has permitted the District to lower system water levels for flood prevention—but only between February 15 and April 15 if the water content of the snowpack is 4 or more inches. The District is not allowed to manipulate water levels to avoid no-wake restrictions. That's because manipulating water levels at the upstream end of the Project 1007 system may cause dangerous flooding downstream. In addition, if lake water levels are lowered in anticipation of rain that does not occur, those levels could be artificially low for an extended period of time.

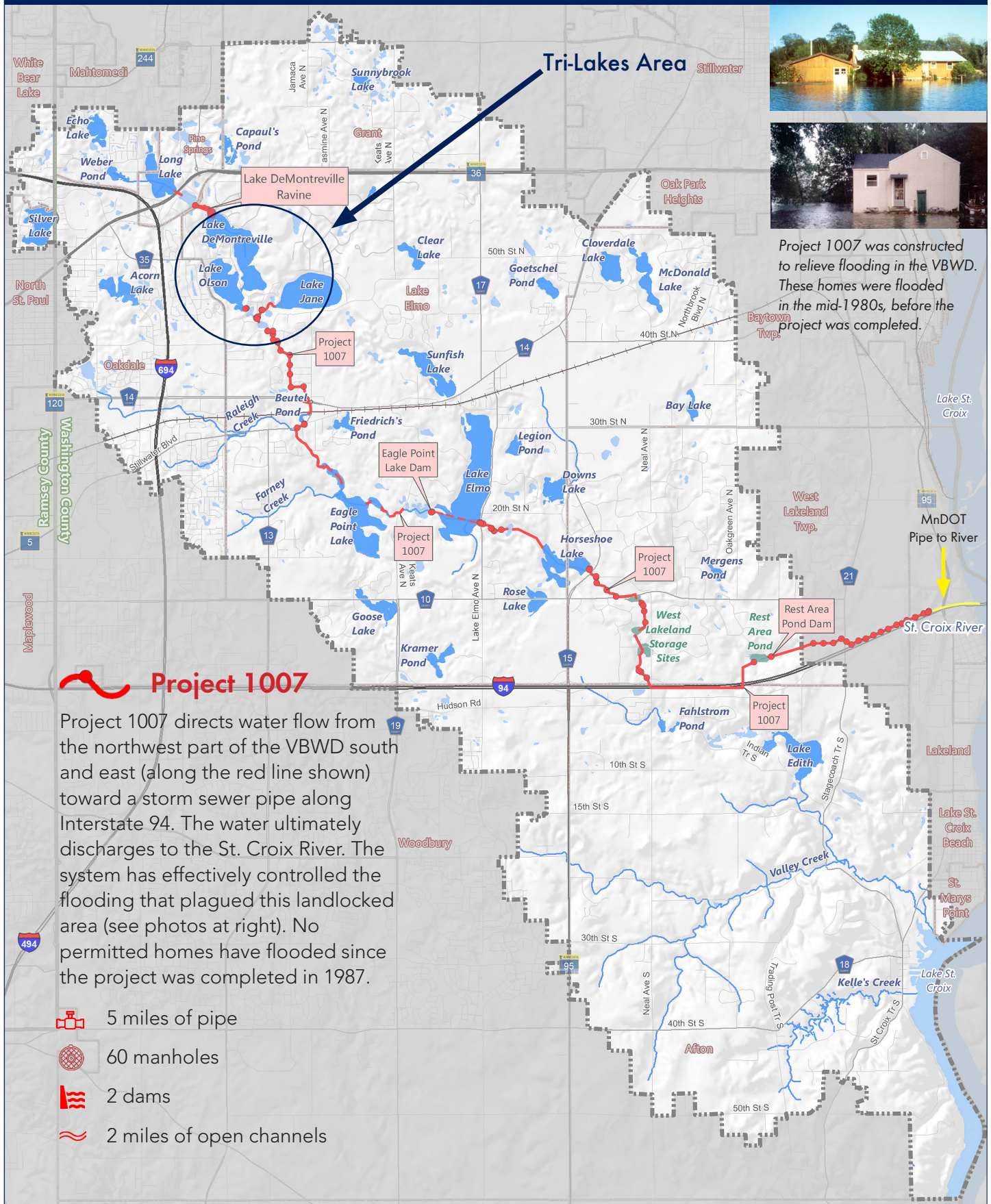
In short, fluctuating water levels are a natural part of surface water systems. While the VBWD may intervene to protect lives or property, the community is best served when nature is allowed to achieve its own balance.

Lake DeMontreville and Lake Olson Water Levels



Water levels in Lake DeMontreville and Lake Olson before and after implementation of Project 1007 indicate that the project is preventing lake-level extremes.

Project 1007 | Managing flooding in the Valley Branch Watershed District



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About the Valley Branch Watershed District (VBWD)

The Valley Branch Watershed District (VBWD) manages water resources within approximately 70 square miles of Washington County and one square mile in Ramsey County. It includes 14 cities and townships (see table below). It was created in 1968 to address flooding problems within the watershed. Since that time, the District's role has been expanded to address all facets of water resource management.

The VBWD is governed by a Board of Managers (four appointed by Washington County and one by Ramsey County). They meet two times each month (currently the second and fourth Thursday of the month) at Lake Elmo City Hall. For more information, go to www.vbwd.org.



Washington County Communities		
City of Afton	City of Mahtomedi	City of St. Mary's Point
Baytown Township	City of Oak Park Heights	City of Woodbury
City of Grant	City of Oakdale	West Lakeland Township
City of Lake Elmo	City of Pine Springs	
Ramsey County Communities		
City of Maplewood	City of North St. Paul	City of White Bear Lake