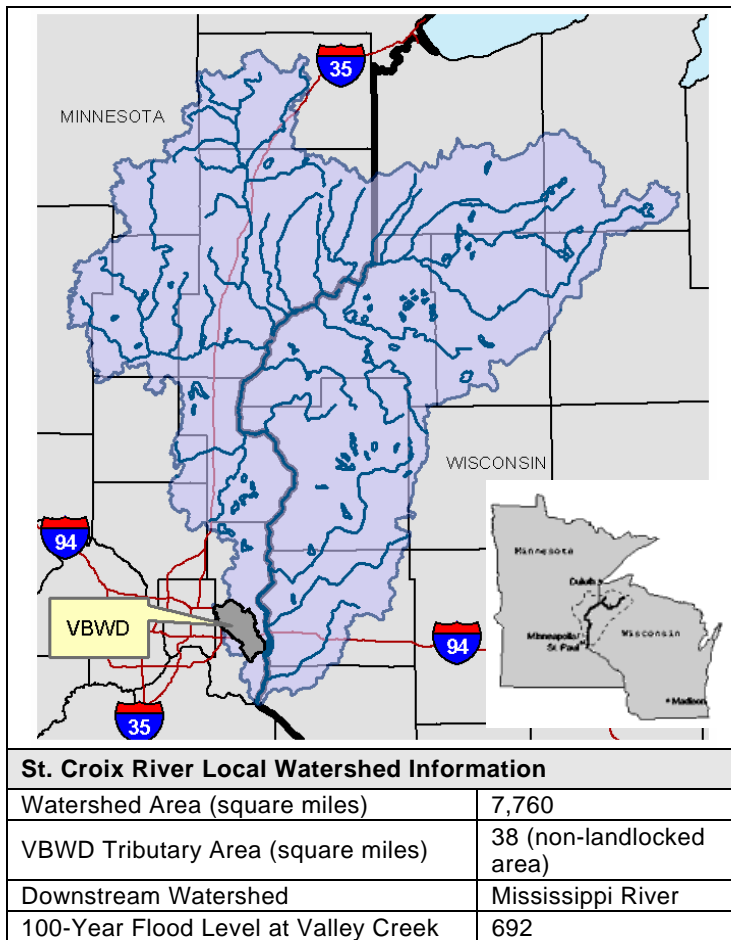


5.36 St. Croix River Watershed Management Plan

5.36.1 General Information



The Valley Branch Watershed District (VBWD) lies within the St. Croix River watershed. The St. Croix River watershed is 7,760 square miles in size. It includes parts of nine Minnesota counties and nine Wisconsin counties. Approximately 46% of the St. Croix River watershed is within Minnesota, and the land of the VBWD makes up 0.8% of the St. Croix River watershed.

There are two points where the VBWD discharges into the St. Croix River. One discharge point is the outlet of the Minnesota Department of Transportation's Interstate 94 storm sewer system in Lakeland, which takes flows from the VBWD's Project 1007 system. The second discharge point is the outlet of Valley Creek in Afton.

The St. Croix National Scenic Riverway, which includes the Namekagon River (Wisconsin) and the

Upper St. Croix River, was established as a unit of the National Park System in 1968. The Lower St. Croix National Scenic Riverway was added in 1972. The VBWD discharges to the Lower St. Croix National Scenic Riverway. Lake St. Croix, formed at the downstream end of the basin, is a focal point for recreation and development.

The river supports 95 fish species, beaver, muskrat, and otters. Eagles, osprey, and ducks nest along the river. Insects, 41 species of fresh water mussels, and hundreds of other species of plants and animals make the St. Croix River basin their home.

5.36.2 Water Quality Management Plan

In 1994, the St. Croix Basin Water Resources Planning Team, comprised of representatives from state, federal, and local units of government and other organizations, developed water resource goals for the river. The team later determined nutrient and sediment loading to be the top issue affecting the water quality in the St. Croix River. The St. Croix Basin Water Resources Planning Team has recommended a 20-percent reduction in total phosphorus loading within the St. Croix River Basin. According to this team, a 20-percent reduction in total phosphorus loading to the river will

approximate the ecological conditions of Lake St. Croix prior to 1950, before changes in diatom communities and productivity occurred.

For more information, see the following websites:

www.pca.state.mn.us/water/basins/stcroix/index.html

www.dnr.wi.gov/org/gmu/stcroix/index.htm

Because so many other agencies have jurisdiction over the St. Croix, the VBWD has no specific water quality management plan for the St. Croix River. The past and future management activities of the VBWD, as discussed in other sections of this plan, have benefited and will continue to benefit the St. Croix River.

5.36.3 Water Quantity Management Plan

The VBWD has no specific water quality management plan for the St. Croix River. When the St. Croix River floods, the flood waters back up into Valley Creek. However, the VBWD is not aware of any structures within the VBWD's legal limits that are within the 100-year floodplain of the St. Croix River.

5.36.4 Groundwater Issues

Groundwater from within and outside of the VBWD legal boundaries contributes to the water resources within the VBWD and the St. Croix River. More information regarding groundwater flow patterns is discussed in two groundwater studies, in which the VBWD was a partner. The studies were completed in the summer of 2005, and are discussed in Section 4.6.