



## Project Recharge addresses declining water trends in Crow Wing County lakes

### Featured Project

**Project Recharge**, led by the Crow Wing Soil and Water Conservation District (SWCD), received state grants to identify water quality trends and to assist homeowners and communities with strategies for being proactive on water quality protection, which is less costly and more efficient than being reactive to water quality problems.

In 2008, Crow Wing County received a grant from the Board of Water and Soil Resources (BWSR) to look at water quality trends and watershed conditions around 16 of the county's largest lakes and to incorporate that information into the county's Comprehensive Water Plan.

None of the lakes were classified as impaired for nutrients, but about one-third need additional data to make a classification and about one-third showed declining water quality. Activities that contribute pollutants and excess runoff to the lakes include the addition of impervious surfaces, such as parking lots and roofs, as well as conversion of the forested landscape for agricultural, residential and commercial purposes.



Crow Wing SWCD received a competitive grant for Project Recharge through BWSR in 2010 to address those pollution sources by completing many conservation projects, including shoreland restorations, rain gardens, and stormwater management practices that filter and treat polluted stormwater around the Brainerd Lakes Area. The grant was funded by the Clean Water Land and Legacy Amendment.

The Brainerd Lakes Area is one of Minnesota's top vacation destination and recreation areas. Large numbers of Minnesota residents have primary or secondary homes on the lakes, and residents and non-residents are drawn to the area to stay at one of the many resorts. Lake water quality is important to the long-term economic health of the area.



Pelican Lake is one of the lakes that will benefit from the project. The lake covers 8,367 acres, which places it in the upper 5 percent of lakes in Minnesota in terms of size. Pelican Lake is one of few lakes in Crow Wing County that is considered to be "Oligotrophic," which is indicated by its depth, clear water, rocky and sandy bottoms, and very little algae. This project on Pelican Lake was completed in 2010 through collaborative efforts of the SWCD, Thirty Lakes Watershed District (TLWD), Westwood Engineering, Pelican Lake Association, local landowners and contractors, and Breezy Point Resort. Landowners and communities around many of the other lakes in the county also stepped forward to implement water quality protection activities.

**Location:** Crow Wing County.

**Partners:** Cities of Crosby, Crosslake, Breezy Point, and Fifty Lakes, Thirty Lakes Watershed District, Whitefish Area and Fifty Lakes Property Owners, Pelican and Serpent Lake Associations and others.

---

# BWSR Featured Project

---

**Project Timeline:** The Pelican Lake/Breezy Point Project has been in discussion for many years. Complicated land ownership and lack of funds have delayed implementation of acceptable solutions. Planning and implementation began in earnest after Crow Wing SWCD received a \$180,000 grant from the Clean Water Fund through BWSR in 2010.

**Project Costs / Funding Sources:** \$180,000 from the Minnesota Clean Water Fund (from the Legacy Amendment), which leveraged \$60,000 in local matching funds from the Thirty Lakes Watershed District.

**Keys to Success:** Lake Residents, community and business leaders and natural resource professionals all recognized that declining water quality trends are serious economic and environmental concerns. Taking immediate small steps to protect and improve water quality is much more effective than waiting for a lake to decline so far that it is listed as impaired.

"The success of this project can be attributed to the collaborative effort of all affected and benefited parties," said Tim Ramerth, engineer with Westwood Professional Services. "Due to the fact that this was a retro-fit project, there was little land area available for providing water quality solutions that were affordable. The treatment train approach to water quality was the best solution that met the majority of the concerns, provided adequate stormwater runoff treatment for protecting Pelican Lake and keeps water where it falls."

**BWSR role:** BWSR awarded a competitive grant for the study that identified the declining water quality trend. BWSR also awarded a competitive grant for the project implementation.

**Measurable Outcomes:** Collectively, over two tons of sediment, 16 pounds of phosphorus, and six million gallons of annual runoff is prevented from entering Pelican, Serpent, Crosslake, Rush, East and West Fox lakes.

**Link / contact for more information:** Crow Wing SWCD, [www.co.crow-wing.mn.us/swcd/Stormwater.htm](http://www.co.crow-wing.mn.us/swcd/Stormwater.htm)

Thirty Lakes Watershed District, <http://www.30lakes.org/PelicanLakeStormwaterBreezyPoint2010.html>