Carver County habitat restored

A wetland and part of a lakebed once drained for crop production support wildlife and benefit water quality in a watershed that flows to the Minnesota River. MN CREP was the best option for landowners, who enrolled in the voluntary state-federal program via Carver SWCD staff.

A few months after a wetland and part of a previously-drained lakebed were restored, trumpeter swans swim at the site in Carver County near Waconia. The Carver SWCD worked with landowners to enroll the land in MN CREP easements.
Photo Credit: Karen Bonde, BWSR

Clean Water Funds are one source of MN CREP easement funding.

WACONIA — One Carver Soil & Water Conservation District (SWCD) project encompassing two Minnesota Conservation Reserve Enhancement Program (MN CREP) easements on either side of Minnesota Highway 25 has restored a previously drained segment of Patterson Lake and an upstream wetland.

Together, the 152 acres in conservation easements will improve water quality and wildlife habitat.

Before it was restored, the land produced corn and soybeans. Aerial photos from 1937 show row crops growing there; farmers worked the land in dry years. Drainage installed in the 1970s — an open ditch, miles of subsurface drainage tile, and two lift stations — made annual crop production possible. The lift stations pumped water directly from the drained and tiled lakebed back into the lake.

"When we bought it, it wasn't farmed because it was peat ground and often quite wet, so my husband did some ditching and then some tiling and then was able to farm it. He was an avid farmer, but after he died it was hard for me to rent the land out because it was often wet," said Pat Beier, 81, who enrolled the Waconia Township lakebed parcel into MN CREP.

Beier's two daughters co-own the Camden Township land, where the MN



Northeast-facing **(left)** *and north-facing* **(right)** *views show the restored wetland, one of two related MN CREP easements in Carver County that enrolled a combined 152 acres. Water that flows through the wetland eventually reaches a previously drained segment of Patterson Lake,* **(center)***, viewed from Minnesota Highway 25. That segment of lake also was restored.* **Photo Credits:** Ben Datres, Carver SWCD

CREP enrollment includes the restored wetland and surrounding uplands. Highway 25 divides Waconia and Camden townships.

Carver SWCD Farm Bill technician Ben Datres worked with the landowners and staff from the Minnesota Board of Water and Soil Resources (BWSR) on the MN CREP enrollments.

"Ben approached me with the conservation program, and I thought, 'Well that would be perfect because I believe in the conservation, for the future of the rest of the people,'" Beier said. "We need more wetlands."

Combined, the two-site project's 56.5 acres of restored wetlands and 95.5 acres of surrounding uplands filter water from about 480 acres of farmland within the watershed that drains to the project area. Sediment and the pollutants it carries settle out as water moves through the wetland and percolates through the soil before it reaches the lake. Water from Patterson Lake eventually flows into the Minnesota River.

Some wildlife benefits appeared immediately after the restoration.

Trumpeter swans and other waterfowl occupied the restored lakebed in May 2020 when BWSR engineering specialist Karen Bonde inspected the site a few months after construction.

Datres

Bonde

As native prairie grasses and forbs mature, the uplands will attract pheasants, songbirds and pollinators.

The two easements tie in to about 1,000 acres of permanently protected habitat, including public land, that lies within a 1.5-mile radius of the sites. Connecting or augmenting existing habitat is among the ranking considerations that determine which MN CREP projects are funded.

"I'm very pleased with it," Beier said. "It's truly a wetlands, and last fall I drove by one day and there were I'm sure at least 50 (trumpeter) swans."

How MN CREP Works

The voluntary, federal-state funded program targets the highest priority areas across 54 counties in southern and western Minnesota. Landowners enroll simultaneously in a 14- to 15-year federal Conservation Reserve Program (CRP) contract administered by the USDA's Farm Service Agency, and a perpetual Reinvest in Minnesota (RIM) conservation easement administered by BWSR. Enrollments remain privately owned. The easements are not open to public hunting.

Restoration work started with the wetland site in early December 2019 and finished with the lakebed extension in late January 2020. The project removed two pumps, disabled about 17,800 feet of drainage tile and filled about 300 feet of ditch within the lakebed site. It disabled another 6,500 feet of drainage tile in the Camden Township restored wetland site.

"The minute we took out the pumps and earthen plug, the lake water just flowed right into the low area," said Bonde, who helped design the project. "Now we get more filtration and more sediment fallout before it gets into the main part of the lake."

Water flows through the two-part restoration starting in the Camden Township wetland. It travels through a structure under the highway, and then up through an intake on the east side of the road. From there, water flows to a culvert and ditch leading to the restored segment of Patterson Lake.

Other elements of the restoration include a reinforced concrete pipe that creates access to otherwise landlocked fields. Rerouting a powerline and constructing a berm to keep water from the wetland out of the Highway 25 right of way were among the project's biggest challenges. Negotiations with neighboring landowners whose drainage was altered made the work possible.

Schneider Excavating & Grading of Norwood Young America finished the wetland restoration in December 2019. Burns Excavating of Mayer finished the lake restoration in January 2020.

"Just the size of it and the restoration potential made it stand apart," Datres said. We have roughly 160 acres now of permanently restored land within 20, 30 minutes of the (Twin) Cities."