



Maximizing benefits in Mower County

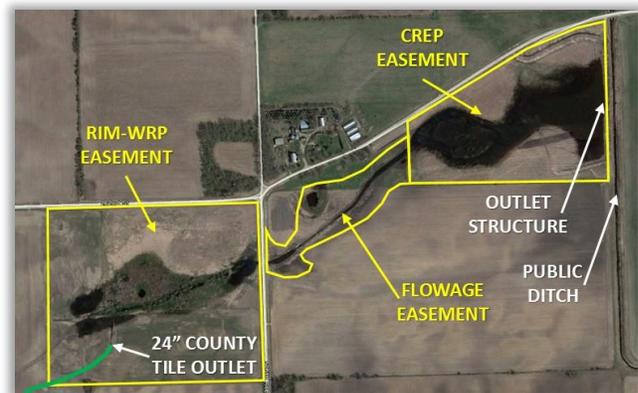
February 2016 Snapshots

Seven miles north of Austin, Minn., a restored wetland complex represents the outcome of several years of work among various conservation partners and landowners. As a result, approximately 33 acres of marginally drained agricultural land has been restored to wetlands within an 86.7 acre conservation easement complex. The results have benefited landowners, the surrounding community, wildlife, and water quality.

In 2005, a local farmer worked with the Mower Soil and Water Conservation District (SWCD) to enroll 31.2 acres of land into a Conservation Reserve Enhancement Program (CREP) easement. The downstream edge of the CREP property is bordered by a public ditch system. Flowing directly through the site was a large 24-inch branch tile of the public ditch system which, along with additional private tile, provided drainage of the former wetland area. Engineering staff from the Minnesota Board of Water and Soil Resources (BWSR) assisted the local SWCD in developing a restoration plan, and construction of the wetland restoration was completed in 2008. While the private tile lines were removed, the 24-inch county tile could not be modified or abandoned because it provided drainage for areas upstream of the CREP easement. As a result, only a partial restoration of this wetland was completed.

That began to change in 2009, when the neighboring, upstream farmer enrolled over 47 acres of land under perpetual easement through the Reinvest in Minnesota - Wetland Reserve Partnership Program. This state-federal partnership provided an opportunity to more thoroughly address important water resource issues and restoration opportunities on the land. The 24-inch county tile that prevented a full restoration of the initial site extended up into this new easement. BWSR's engineers investigated their options and determined that the county tile could be modified to outlet directly into the upper end of wetland system. That meant that drainage from upstream tile could flow into and be treated by the restored wetland before exiting into the downstream ditch.

Unfortunately, a small piece of property still existed between the two conservation easements. Sensing an opportunity to connect both easements and maximize benefits both to the landowners and the environment, the Cedar River Watershed District purchased an 8.2 acre "flowage" easement to connect the two pieces of land and allow for complete restoration of this wetland system.



Pictured, top: An aerial view of the site showing project easements and restored wetland areas. Pictured, bottom: The lower end of the project shortly after construction, and already starting to fill with water.

With all of the land pieces secured, BWSR engineering staff developed a comprehensive design and construction plan that successfully integrated the need for continued drainage benefits upstream of the site as well as restoration of the on-site wetlands. This included modifying the incoming 24-inch county tile so it could outlet directly into the upper end of the wetland system and incorporating an outlet at the bottom end of the project to safely outlet wetland discharges into the adjoining downstream public ditch. This design allowed for the entire length of public tile through the wetlands to be abandoned. Combined, the wetlands support and treat runoff from approximately 1100 acres of watershed area. This important component of the overall project would not have been possible without the support and approval of the Mower County Board, the local drainage authority for the public ditch system.

“This was a really unique project for us locally,” said Justin Hanson, who is Mower SWCD’s District Manager and Cedar River WD’s Administrator. “It was complicated, took a lot of effort and several years to complete, but ultimately it ended up being a really successful restoration.”

Today there is less pressure on the upstream tile system and the downstream ditch system, including some flood control benefits, and natural filtration as water flows through wetlands, reducing the amount of sediment and nutrients making their way to the Cedar River. The wetlands provide habitat for waterfowl and other animals. In addition, approximately 4,100 feet of public drainage tile was abandoned and no longer needs to be maintained by the Drainage Authority. Much of this tile was in poor condition and would have required maintenance in the near future if the restoration project had not been completed.

Like many wetland restorations conducted around the state, this project would not have been as successful had it not been for the patience, commitment, partnership, and cooperation of the landowners, the local conservation and watershed districts, the local drainage authority, and cooperating state and federal agencies. Working together over an extended period of time, these groups were able to maximize benefits and improve the restoration outcomes provided by this site.

“This is one of those great projects where there are a lot of moving parts that all come together in the end, and we couldn’t have done that without everyone working together,” Hanson continued. “I give a lot of credit to BWSR’s staff because they were very good about working with the landowners in a way that made the restoration work in the best way possible, both for the landowner and the environment.”