

Wetland trifecta: habitat, park, roads



Above: More than 64 acres of wetlands were restored after a former golf course in Andover was converted into a city park. **Inset:** Tree trunks removed during construction were placed in shallow ponds to provide habitat and basking opportunities for wildlife such as painted turtles.

Photo Credits: BWSR

A Local Government Road Wetland Replacement Program restoration on the site of a former golf course in Andover benefits birds and pollinators, those who use the 1.7-mile-long trail, and highways and bridges in need of work

ANDOVER — A partnership between the Minnesota Board of Water and Soil Resources (BWSR) and the city of Andover transformed the former Woodland Creek Golf Course into a 64.3-acre wetlands restoration that today functions as a popular city park.

“Opportunities to restore wetlands in the Twin Cities metropolitan area are hard to come by due to a combination of factors including high land values, environmental stressors and project constraints related to adjacent land uses,” said Ken Powell, BWSR Wetland Conservation



Act operations supervisor. “When an opportunity came up to restore an abandoned golf course back to wetland habitat, BWSR was up for the challenge.”

The project area was partially drained

and farmed decades prior to its conversion to a golf course in 1991. After management ceased in 2008, the golf course became overgrown with weeds. It was identified as a potential restoration

site for BWSR's Local Government Road Wetland Replacement Program (LGRWRP). The LGRWRP, which is primarily supported by legislative bonding funds, provides mitigation for lost ecological functions and values of wetlands that are affected by repairs, rehabilitation or replacement of local public roads.

Once BWSR staff identified the property as a potential good fit for the LGRWRP, they approached the city of Andover. The city purchased the property in October 2013; shortly thereafter, BWSR acquired a perpetual conservation easement from the city to establish the wetland mitigation site. The city benefited by gaining public recreation space with a 1.7-mile-long mowed walking trail that has since become popular with walkers, bird-watchers and joggers. BWSR gained high demand wetland mitigation credits for the LGRWRP.

Contractors moved fill from the former tee boxes and mounds into ponds, and flattened slopes to maximize opportunities to establish native vegetation. Construction began in June 2017 and concluded in spring 2018. Wet conditions resulted in a longer construction timeframe than anticipated – but that extended timeline came with a silver lining.

“The delay provided more opportunities to control existing invasive vegetation such as non-native cattails, Canada thistle and reed canary grass,” said Dan Shaw, BWSR senior ecologist and vegetation specialist. “With many projects, we have a short window of time to control invasive vegetation before hydrology is restored. In this case, we



Above: A 1.7-mile mowed trail winds through restored wetlands in the city park that replaced the former Woodland Creek Golf Course.

Below: Wild rice growing in a restored wetland offers structural diversity and food for wildlife.



had two growing seasons, providing excellent control of problematic weeds and allowing for successful establishment of native plants and biodiversity across the site.”

Contractors sowed native seeds and installed potted plants – including water lilies the Como Zoo raised from tubers – to increase plant diversity in open water areas of the park. White and yellow water lilies were then installed in the shallows of several wetlands; BWSR observes these plantings annually to monitor establishment.

“In addition to water lilies, we are also seeing a lot of wild rice — an unexpected but pleasant surprise, as it wasn't part of the restoration plan,” Carol Strojny, BWSR monitoring coordinator said. “Wild rice provides great structural diversity in the deeper wetlands and is an excellent source of wildlife food.”

The project's restoration plan included tree removal to eradicate non-native ornamental trees and to clear the pond edges in preparation for construction. Pond edges were re-graded to be more shallowly sloped, creating



shallow marsh habitat. Trunks from the removed trees were placed in the deeper part of the restored wetlands to provide habitat and basking opportunities for wildlife, such as painted turtles.

While monitoring vegetation and hydrology at the park, BWSR staff has frequently observed songbirds, waterbirds, raptors, trumpeter swans and sandhill cranes. The diverse vegetation also offers habitat for monarch butterflies — listed as federally endangered in December 2020 — and other pollinators.

The park also offers unique opportunities to illustrate the value of wetland restorations. Last September, BWSR held a [field day](#) at the site for 11 Increasing Diversity in Environmental Careers (IDEC) fellows. The IDEC program provides a college-to-careers pathway for under-represented science, technology, engineering and mathematics (STEM) college students who want to pursue a career in environment and natural resources. Students receive a fellowship, mentorship and paid internship through IDEC, which is funded by the Environment and Natural Resources Trust Fund.

“At the end of a project, it's rewarding to step back and see all the positive outcomes,” Strojny said. “There's not only a dramatic shift in vegetation, but public enjoyment of the now permanently protected space.”