Alyssia Bell considers herself a hands-on, in-person learner. After studying remotely for more than a year because of COVID-19, she welcomed a summer field day led by Minnesota Board of Water and Soil Resources (BWSR) staff at a wetland restoration site.

Bell, a junior at Metropolitan State University studying environmental science and minoring in physics, was one of 11 Increasing Diversity in Environmental Careers (IDEC) fellows who attended the Aug. 5 field day at Woodland Creek wetland restoration in Andover.

“I learn best when I can see firsthand the concepts we are learning and be able to ask questions live,” Bell said. “This is my favorite part of the entire IDEC program. I went home and told my family everything I learned, and they could see the excitement on my face.”

The IDEC program is a strategic partnership among BWSR, the Minnesota Department of Natural Resources (DNR), the Minnesota Pollution Control Agency and Conservation Corps Minnesota & Iowa. IDEC 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.

Funding comes from the Environment and Natural Resources Trust Fund (ENRTF). The DNR received a total of $1.28 million to implement three separate cohorts serving a total of 43 students; 16 students are participating in this year’s cohort.

CCMI Career Pathways Program Manager May Yang accompanied fellows to the wetland restoration site, where BWSR staff members highlighted different aspects of the project.

“These hands-on activities are so important because it helps them get an
idea of what they might want to do (professionally). It’s a well-rounded experience,” Yang said. “Being out here in the field, there’s no Zoom (meeting) fatigue. Feeling the wind and seeing the wildlife, when you can use all your senses, it makes a big difference.”

The city of Andover purchased the former golf course in 2013. BWSR partnered with the city to restore 64.3 acres of wetlands through the Local Government Road Wetland Replacement Program (LGRWRP), which restores wetlands to generate wetland banking credits. Contractors moved fill from the former tee boxes and mounds into ponds, and flattened slopes to maximize opportunities to establish native vegetation. Today, the site functions as a city park with a mowed walking trail.

“One of the most successful ways we do (wetland) mitigation is through the wetland bank,” Wetland Specialist Ben Meyer said during a site overview. “The thing that’s unique about these wetland banking sites is they have a conservation easement on them. The easement is a protection mechanism the state uses to keep this wetland protected in perpetuity.”

Easement Acquisition Specialist Senior Lucy Dahl provided a bit of background about conservation easements in Minnesota. Dahl informed students that BWSR holds more than 8,000 easements statewide on more than 350,000 acres.

“There aren’t many things in our lives or in our world that are permanent, but conservation easements are protected forever,” Dahl said. Students rotated among three stations, where Meyer discussed soils, Senior Ecologist and Vegetation Specialist Dan Shaw discussed native vegetation, and Conservation Engineering Technician Karen Bonde discussed engineering and hydrology. Students collected seeds, assessed native vegetation, worked with soil samples, and viewed an outlet structure. They saw bumblebees, monarch butterflies and swans during the six-hour visit.

Bell said her favorite station was engineering and hydrology.

“I learned about GPS and how it’s used to understand the land,” Bell said. “It makes me look at the land I am walking on a little closer. You never know what is underneath.”

Legislative Coordinator Megan Lennon leads the IDEC initiative at BWSR and organized the field day.

“When creating the internship at BWSR we wanted to provide a hands-on and experiential learning environment for the IDEC fellows. As an added bonus, our staff benefits greatly from the conversations and interactions with the brilliant and enthusiastic students,” Lennon said. “It’s so rewarding to work with the next generation of natural resources professionals and give them a head start in their future careers.”

Top: BWSR Conservation Engineering Technician Karen Bonde (right) led an engineering and hydrology station during the field day. Middle: Bumblebees were among wildlife student fellows observed during the six-hour event. Bottom: Woodland Creek wetland restoration in Andover spans more than 63 acres. It functions as a city park with a mowed walking trail.