

Restoring a Rustic Gem in Dakota County

April 2014 Snapshots

Dakota County is proud of its parks. Tucked in the southeast corner of the county, where the Trout Brook and Cannon River come together, Miesville Ravine Park Reserve is a rustic beauty. There isn't much to be found in terms of paved trails or indoor plumbing, but with miles of trails for hiking, bird-watching and exploring in all seasons and cold water fisheries for anglers, it's a destination for many. In many instances when a weather event happens at the park, nature is left to deal with the aftermath. But when runoff from two major storm events caused severe flood damage in 2012, risks to public health and safety called for human intervention. The Dakota County Parks had their work cut out for them.



One of the major projects was an earthen dam that blew out during the heavy rainfalls, sending approximately 5,500 tons of sediment downstream and leaving unstable vertical banks behind. Constructed in the 1970s, to provide rate control for an upland watershed to the Cannon River, there was not enough funding available to replace the dam. Those banks were a safety risk in the park, though, which made repairs on the public land eligible for FEMA funding.



This is where the Dakota County Soil and Water Conservation District (SWCD) stepped in, providing technical assistance to evaluate damage and design solutions, secure cost share funding, obtain engineering services, and provide construction quality control. Leveraging funding from federal, local and state partners, including BWSR, the SWCD rolled up its sleeves and got started on repairs. BWSR funding was used to facilitate engineering, design and technical assistance pieces of the project. Ultimately, those resources combined with federal and county money enabled the successful completion of the \$72,885 project.



The SWCD graded the vertical banks into gentle slopes and installed permanent geotextile turf reinforcement mats to hold soil in place, and then reestablished site vegetation using topsoil, native seed and more erosion control blankets.

Top picture: the site after flood event. Middle picture: laying down the geotextile turf reinforcement mats. Bottom picture: the site after work

Besides restoring the site to its former beauty, this project will save 614 tons of soil and 614 pounds of phosphorus annually. "This wasn't as simple as just replacing the earthen dam," Dakota County SWCD District Manager Brian Watson said. "It was about assessing cost effective solutions and installing conservation practices to stabilize the site, and the areas downstream, from damage during future rain events."

was completed.