



NRCS - Assisted Watershed Projects Putting Flood Resiliency to the Test Southwest Nebraska Flood Infrastructure Saves More Than \$700,000 in Damages

There are 2,100 watershed projects in the nation established by local units of government with the assistance of the USDA Natural Resources Conservation Service (NRCS) Watershed Program (Public Law 78-534 and Public Law 83-566). These projects consist of over 11,000 flood control dams and thousands of conservation practices that provide over \$2 billion in annual benefits in flood prevention, water supplies, recreational areas, and other benefits. The following is just one example of how the Watershed Program is benefiting local communities and the nation.

The following information taken from a Nebraska NRCS news release provides an example of the benefits of watershed projects during heavy rainfall events. It is estimated that the two watershed projects described below reduced flood damages during late May storms by over \$700,000.

June 15, 2023 -LINCOLN, Nebraska – In the wake of flooding that struck southwest Nebraska in late May, the region’s flood infrastructure has emerged as a symbol of resilience and strength.

The flooding, triggered by unprecedented rainfall and the rapidly rising Republican River, swept across southwest Nebraska. However, thanks to the foresight and investment in flood infrastructure, the impact on homes, businesses and agricultural land was significantly mitigated.

The Blackwood Creek Watershed, northwest of McCook, Nebraska, has 11 watershed flood reduction dams and the Dry Creek Watershed Project has six watershed flood reduction dams. These dams were constructed through a partnership between the Middle Republican Natural Resources District (NRD) and the U.S. Department of Agriculture’s Natural Resources Conservation Service (USDA-NRCS). While these dams do not actively hold water, when large rainfall events occur, they capture runoff then safely release the floodwater.

The May heavy rain events saw an average of four inches of precipitation in the Blackwood Creek watershed in just six hours. The dams functioned as designed, capturing stormwater and runoff. It is estimated these dams prevented \$677,000 in damage to downstream property and infrastructure.

The Dry Creek watershed southwest of McCook saw between 7-10 inches of rainfall during the same storm event. Along that portion of Dry Creek, the Middle Republican NRD’s six watershed dams prevented \$37,600 in damages from widespread flooding, safeguarding the surrounding areas.

“Investing in flood infrastructure is a proactive step that mitigates damages, reduces recovery costs, and ensures long-term resilience,” said Jack Russell, Middle Republican NRD general manager. “The benefits go beyond cost savings; these structures can be lifesaving.” Throughout the state, Nebraska’s NRDs have utilized this federal funding and worked in partnership with USDA-NRCS to build and maintain flood reduction infrastructure.

“The proactive measures and robust engineering of the flood protection systems played a crucial role in minimizing the impact on local communities,” said Allen Gehring, USDA-NRCS state conservation engineer. “The larger watershed contains a network of infrastructure that minimized the overall flooding from the Republican River and its tributaries.”

According to the Federal Emergency Management Agency, for every dollar spent on flood mitigation, an average of \$6 can be saved in post-disaster recovery costs.

The flood infrastructure in southwest Nebraska was a result of collaborative efforts between local, state, and federal partners, as well as engineering firms and community stakeholders. Through these partnerships, investments in flood mitigation continue to pay off today enhancing their overall effectiveness in the face of extreme weather events.

NRDs are unique to Nebraska, and act as local government entities with broad responsibilities to protect Nebraska’s natural resources. Major Nebraska river basins form the boundaries of the 23 NRDs, enabling districts to respond to local conservation and resource management needs. Learn more about Nebraska’s NRDs at www.nrdnet.org.