BOARD OF WATER AND SOIL RESOURCES

NRCS award doubles the available funds for state water storage program



\$21 million grant the USDA's Natural Resources Conservation Service (NRCS) <u>awarded</u> to the Minnesota Board of Water and Soil Resources (BWSR) more than doubles available funding for a state program that puts water storage practices on the ground to protect infrastructure, improve water quality and mitigate the impacts of a changing climate.

Minnesota is experiencing more frequent and intense rainfall events, which can erode fields and threaten infrastructure. In response, the state Legislature in 2021 allocated \$2 million to BWSR to develop the Water Quality and Storage Program. A \$17 million appropriation for the program followed in 2023.

The \$21 million award from NRCS is part of the <u>Regional Conservation</u> <u>Partnership Program</u> (RCPP), which leverages public-private partnerships to address conservation challenges on agricultural land. BWSR was one of 92 organizations in the U.S. selected by NRCS last year to receive a \$1.5 billion investment via RCPP.

Water storage is a priority identified in the state's <u>Climate Action Framework</u>. Water storage projects are sited and designed to slow down or temporarily hold back water from re-entering a stream or river. Slowing down the water can reduce flooding and erosion and improve water quality. Water storage projects and practices include retention structures and basins; soil and substrate infiltration; wetland restoration, creation or enhancement; channel restoration or enhancement; and floodplain restoration or enhancement.

"Increasing water storage capacity offers benefits to both Minnesota farmers and communities," said

Area II Minnesota River Basin Proiects constructed this grade stabilization structure (small dam) in 2021 in Redwood County with support from a Water Quality and Storage Program grant from BWSR. The program prioritizes projects located in the Minnesota and Lower Mississippi river basins. Photo Credit: Area II Minnesota River **Basin Projects**

Rita Weaver, BWSR chief engineer. "Putting more of these practices on the ground will help protect infrastructure and water quality in areas of the state that are especially vulnerable to flooding."

BWSR plans to open an application period for Water Quality and Storage Program grants later this month. This round of grants will be funded by state dollars; RCPP funding will be applied to future rounds. While there are not significant changes to the Water Quality and Storage Program this round, use of the RCPP funds will bring additional options in the future.

"Next round, we will include edge-of-field practices such as saturated buffers, denitrifying bioreactors, and controlled drainage systems. We also hope to incorporate drainage water reuse, have a mechanism (to construct) more projects that have been designed and have been sitting on the shelf ... and fund more projects that didn't score as well in previous rounds of funding

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- Rita Weaver, BWSR chief engineer

but are still really good projects," Weaver said.

Since the program began in 2021, BWSR has awarded 16 grants totaling \$5.5 million. The majority of funding is set aside for implementation, but grants are also available for modeling and conceptual design. BWSR began offering the modeling and conceptual grants last year, awarding five grants totaling \$213,250.

Projects located in the Minnesota and Lower Mississippi river basins are prioritized because the topography of both areas includes steep elevation changes that make flooding and erosion pressing concerns.

Weaver said the most successful applicants have shown projects that will make a significant impact on downstream conditions, whether it be flood reduction or waterquality improvement. BWSR also strives to implement projects downstream to maximize the benefits of soil health practices.

"Structural practices all have a limited lifespan, and one way to ensure a lifespan as long as possible is to have good soil health practices upstream," Weaver said. "The less debris entering into these storage practices, the better they will function." Weaver said another program goal is to create benefits for people who own land along drainage systems.

"Implementing storage along drainage systems can reduce the need for an improvement to the drainage system, or even remove the need for an improvement, allowing a drainage system to get by with only a repair and significantly lessening legal requirements for the work," Weaver said.

"The drainage system will still be required by law to pay for specific parts of the work, but if there are drainage systems that are in need of improvements, we encourage them to reach out to BWSR staff to talk about how water storage may reduce the cost of fixing the system while also helping reduce flooding and improving water quality downstream."

BWSR staff members write and produce Snapshots, a monthly newsletter highlighting the work of the agency and its partners.