

Watershed Structures and Conservation Practices help Reduce Flooding Damages

Extreme rainfall events of May 2019 brought severe flooding and property damage to many residents in central and eastern Kansas. Floodwaters also caused traffic disruptions, including the closure of northbound lanes on the Kansas Turnpike. USDA Natural Resources Conservation Service (NRCS) employees have been surveying the damage from the record-setting rainfall events.

Despite the lowland flooding damage, NRCS engineers and conservationists determined if it hadn't been for the flood control structures installed by watershed district sponsors, flooding damages could have been much worse. NRCS models estimate that the federally assisted watershed dams built in Kansas helped prevent over \$7.0 million in flooding damages from the May 6-8 storms, and \$18.3 million for the May 20-21 storms.

Kansas NRCS State Conservationist, Karen A. Woodrich, said, "Over 50 years ago, NRCS worked with local landowners to construct structures to help reduce flooding damages. Those structures are still doing their job today."

NRCS, with assistance from watershed sponsors and in cooperation with private landowners, has constructed 830 flood control structures in Kansas through the Watershed Protection and Flood Prevention Act. These funds authorized NRCS to provide assistance with the planning and installation of flood control structures and in applying conservation practices. In addition to federally assisted watershed dams, the Kansas Department of Agriculture—Division of Conservation, has assisted with the construction of 550 additional watershed dams.

Flood control structures may easily go unnoticed across the landscape, but after a heavy rain event, like what was recently experienced in Kansas, these structures spring in to action. They capture rushing flood water and hold the water back allowing it to be slowly released downstream. Slowing the water down and allowing it to be gradually released reduces damage to roads, bridges, fences, cropland, and other property.

Kevin D. Gustafson, State Conservation Engineer for Kansas NRCS, added that when flood water is seen flowing around the end of a dam, it does not indicate a problem or that the dam has failed. In fact, this is exactly what they are designed to do during high rainfall events like we have seen the last couple of weeks.

With 1,380 watershed dams constructed statewide, benefits of the Watershed Protection and Flood Prevention Act include significant savings in soil erosion, water conservation, road and bridge damage reduction, wetland/upland wildlife habitat creation, and most importantly—saved lives and property.

For more information on installing conservation practices on your land to help prevent erosion and reduce flooding, contact your local NRCS office located in the USDA Service Center, or learn more at www.ks.nrcs.usda.gov. Follow us on Twitter @NRCS_Kansas.

