



United States Department of Agriculture



Natural Resources Conservation Service

Oklahoma 2017 Annual Report



OKLAHOMA

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Service

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STATE CONSERVATIONIST'S YEAR IN REVIEW



State Conservationist
Gary O'Neill

2017 was another extremely successful year for the conservation partnership in Oklahoma. Despite large workloads and staffing challenges, significant levels of conservation was implemented through technical and financial assistance from the Farm Bill and State Cost Share programs. Private landowners continue to request assistance that is far greater than the available levels of financial assistance. This represents a significant level of commitment by landowners to address resource concerns and to continue to improve the landscape in Oklahoma.

Soil health system adoption continues to expand in Oklahoma. During 2017 more than 50 local outreach/education events were held to provide farmers and ranchers information about soil health principles and opportunities to rebuild soils through the implementation of soil health systems.

The partnership (NRCS, Oklahoma Conservation Commission, and the Oklahoma Association of Conservation Districts) continues to work with landowners and tribes to establish additional demonstration plots that can be used to determine significant impacts from soil health systems. This includes key indicators that measure the health and productivity of the soils and ultimately economic impacts on producer operations.

Addressing emergency events has always been a critical component of the assistance available from the partnership. During 2017 wildfires impacted more than 830,000 acres in Woodward, Harper, and Beaver counties. NRCS was able to provide EQIP funds to help ranchers address damages caused by the wildfires. The local districts assisted in the massive efforts of finding hay and feed as well as coordinating local meetings to discuss available resources from all state, local, and federal agencies and organizations. The Emergency Watershed Program was utilized to address remaining damages from floods that severely impacted parts of Oklahoma in 2015 and 2016. This included the repairs of 10 flood control structures that were damaged from this flooding.

Additional funding for watershed operation projects during 2017 has injected some new excitement for the small watershed program. Oklahoma received funding for a new upstream watershed dam project plus nine additional dam remedial projects as well. These funds have created some optimism for additional projects to be funded in 2018, which is good news for the sponsors of more than 350 dam projects that have been planned but never implemented. These projects could represent additional infrastructure that can help protect roads, bridges, cropland, and property from future flooding damages. We are currently working with several sponsors to review these projects to update our priority lists.

As we look towards 2018, we will continue to be faced with several staffing issues. We hope to be at a point to be implementing our field office re-structure plan which will provide more flexibility and options for addressing large county workloads across the state. This will create some changes that will require adjustments on how some things are done across the entire partnership.

I am proud of the conservation partnership in Oklahoma, working hand-in-hand with farmers, ranchers, and tribes we are able to have an incredible impact on natural resources in our state. I look forward to a continued effort to strive for even more effective ways to assist our customers in an even more efficient and equitable manner. As always, thanks for all that you do.

STATE OF THE SOIL



State Soil Scientist Steve Aspach

2017 saw an increase in the use of soil health management systems and particularly the use of cover crops. This is important since Oklahoma saw a dramatic increase in the number of acres of cotton planted this year. Cotton, being a low residue crop, increases the need for cover to protect our soils from erosion this winter. Unfortunately, a large part of the state is in moderate drought that began last fall and has persisted into winter. That has led to many fields not having good cover heading into spring. This is particularly true in the western part of the state.

The conservation partnership that promotes the adoption of soil health principles had a banner year in 2017 as there were over 50 events held across the state. Many of these were field days used to show some of the improvements in the soil as these systems are adopted and discuss some of the challenges in learning to manage our soils in this manner. In the coming year we plan to focus on ways for producers to recognize some of the biological improvements in the soil and to further promote basic management methods for those interested in grazing systems on cropland and rangeland.

2017 SOIL CHALLENGES

- Erosion was again a big issue in 2017. The late spring and early summer rains left soils exposed to water erosion. The dry fall left bare fields exposed to wind erosion.
- In regards to soil chemistry, too many fields across the Oklahoma wheat belt struggled with low pH's and need to address this issue.



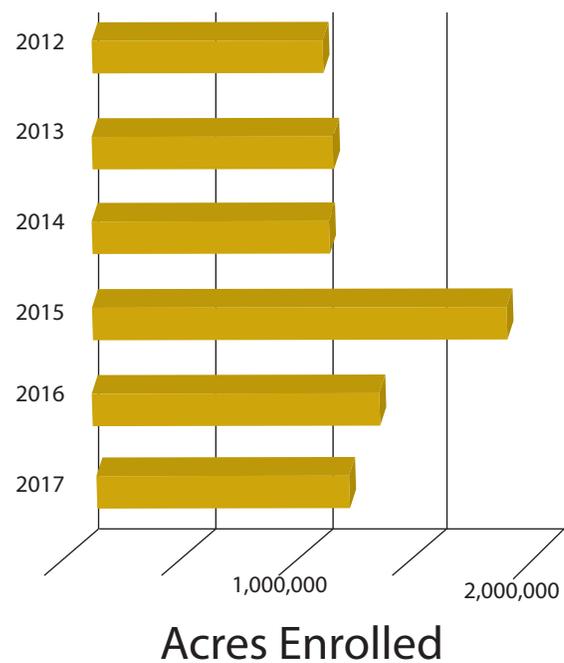
CONSERVATION SUCCESS

Conservation Program Numbers

Top 10 Conservation Practices

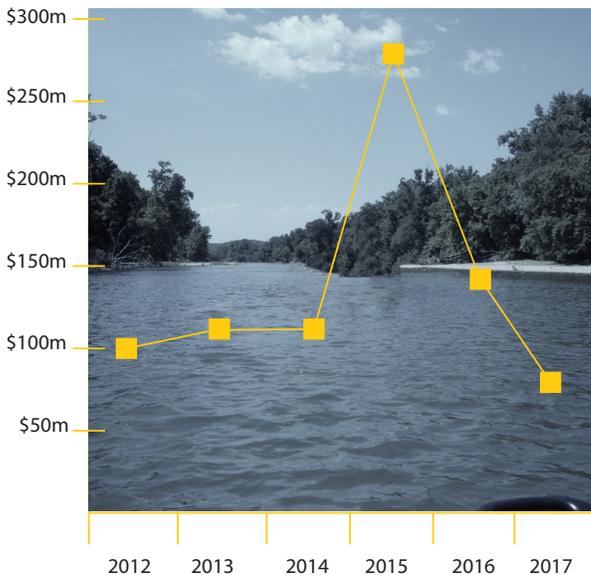
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| 1) Brush Management | 6) Fences |
| 2) Prescribed Grazing | 7) Herbaceous Weed Control |
| 3) Livestock Watering Systems | 8) Critical Area Planting |
| 4) Pasture and Hay Planting | 9) Cover Crops |
| 5) Ponds | 10) High Tunnel Systems |

Acres Enrolled in Farm Bill Programs



Watershed Reports

Damage Prevented by Flood Control Dams



WATERSHEDS PROJECTS AT A GLANCE

NRCS wrapped up the remaining watershed dam repairs from the May and June 2015 floods for the EWP Program. Ten watershed dam repairs were completed in Kiowa, McClain, Grady, Hughes, Carter, Adair, Latimer, Sequoyah and Wagoner counties.

NRCS also completed the rehabilitation of the Barnitz Creek Site 5 watershed dam. The rehabilitation of this dam will protect Oklahoma State Highway 47, four county roads, agricultural land and related infrastructure. Four lives will be protected due to this rehabilitation.

With 2,107 flood control dams in 61 counties, Oklahoma leads the nation protecting its citizens and property from flood disasters.

Today, 9 in 10 Oklahomans lives within 20 miles of a flood control dam. Yet the benefits extend beyond flood control. Water supply, recreation, drought relief, and fire suppression are just some of the benefits the structures offer.



EMERGENCY SUCCESS



Construction on Caddo Creek 27 watershed dam in Carter County

2017 saw plenty of success in emergency management. Ten watershed dam repairs were finished under the Emergency Watershed Program in Kiowa, McClain, Grady, Hughes, Carter, Adair, Latimer, Sequoyah, and Wagoner Counties. Those repairs were needed after the flood events in 2015.

NRCS also completed the rehabilitation of the Barnitz Creek Site 5 watershed dam in Dewey County under the Watershed Rehabilitation Program. The Barnitz Creek Site 5 watershed dam was originally constructed in 1954 as a low hazard dam but the rehabilitation work now has the Barnitz Creek Site 5 watershed dam at the standards for a high hazard dam. As a result of the rehabilitation, the dam will provide better protection to Oklahoma State Highway 47, four county roads, and agricultural land. Four lives will also be protected downstream by the rehabilitation of the dam. Overall, Oklahoma's 2,107 watershed dams had roughly \$75.5 million in realized benefits in 2017.



March of 2017 featured one of the worst wildfire outbreaks that the state of Oklahoma has ever seen. The Northwest Oklahoma Complex fires burned 833,966 acres in Oklahoma and Kansas. With winds gusting well above 50 miles per hour and relative humidity as low as 3%, the fire spread faster than any emergency response team could handle. Several towns were evacuated and many structures, including houses and barns, were burned. Hundreds of miles of fence and a significant amount of livestock was also lost.

Local conservation districts helped in the efforts of finding hay and feed. The local districts also coordinated local meetings to discuss available resources from all state, local, and federal agencies. NRCS responded by providing EQIP funds to help those impacted by the fires. In total, NRCS funded 59 contracts totaling \$1,200,000 and covering 88,350 acres.



Burned land from the March 2017 fires in NW Oklahoma



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