Flood Control Dams in Oklahoma Senate District No. 14

Oklahoma has 2,107 flood control dams in 61 counties. These dams have been constructed through local watershed project sponsors with financial and technical assistance from the USDA Natural Resources Conservation Service (NRCS) authorized through Public Law 78-534 (Washita River Watershed) and Public Law 83-566 Watershed Protection and Flood Prevention Program. There are 126 of these dams in Senate District No.14.

The primary purpose of flood control dams is to reduce flooding. The secondary benefits of the dams address a myriad of public needs such as water supply, water quality, soil health, water management, wetland enhancement, fish and wildlife habitat, and recreation. Flood control dams improve public safety, contribute to a healthy economy and support a strong nation.

Watershed projects also include the installation of natural resource conservation practices such as terraces, waterways, ponds, gully repair, and pasture and rangeland plantings. These conservation practices improve water quality and soil health and reduce sedimentation into the lakes formed by the dams.

Operation and Maintenance of Dams

The annual operation and maintenance of dams is the responsibility of project sponsors (local units of governments such as conservation districts).

Operation is the administrative and management activities necessary to ensure the dams function as designed and remain safe. Operation work includes annual dam inspections and inspection immediately following heavy rains.

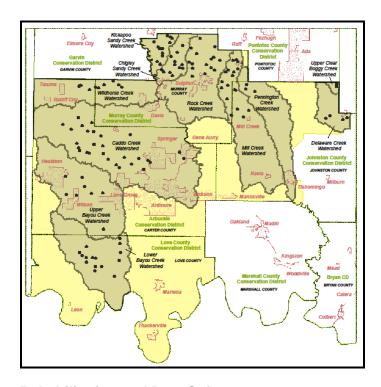
Maintenance work includes removing trees from dams and spillways, repairing erosion damage, repairing damage to the spillway and dams after heavy rainstorms, and keeping the principal spillway inlet towers cleared of debris.

Operation and Maintenance Needs

Operation and maintenance of dams can be expensive and labor intensive. \$4 million is needed to operate and maintain all 2,107 flood control each year. Only through continued investment in operation and maintenance will future generations enjoy the promise of safety these dams offer.

Annual Benefits

The 2,107 flood control dams and conservation practices in watershed projects provide \$91 million in average annual benefits. The table on the back of this page lists the annual benefits provided by watershed projects in Senate District No. 14.



Rehabilitation and Dam Safety

As dams age some will need rehabilitation to remain safe and protect the people that live or work downstream.

At the conclusion of 2016, 260 flood control dams in the state have been classified as high hazard. Of these 115 do not meet current state or federal safety criteria. Approximately \$300 million is needed to upgrade the 115 dams.

Twenty of the 126 dams in Senate District No. 14 are classified as high hazard and have the potential for loss of life if it should fail.

The number of high hazard dams will continue to increase as long as residential and business development is allowed downstream of the dam in the breach flood area.

NRCS can provide 65 percent of the rehabilitation costs and technical assistance to rehabilitate high hazard dams. Local project sponsors provide 35 percent of the cost and obtain any needed additional land rights.

As of December 2016 thirty-five dams in the state have been rehabilitated and 18 others are in various stages of planning, design or construction.

One dam has been rehabilitated in Senate District No.14 (Mill Creek Dam No.18 in Johnston County) and two dams are scheduled for rehabilitation (Rock Creek Dams Nos. 15 & 17 in Murray County).

Average Annual Watershed Benefits (Entire Watershed)

| Watershed | Dams in | Dams in | *Monetary | Farms/Ranches | Bridges | Wetlands | Reduced |
|--------------------------|-----------|----------|--------------|---------------|-----------|------------------|----------------|
| Name | Watershed | District | Benefits | Benefited | Benefited | Enhanced/Created | Sedimentation |
| | | 14 | | | | (acres) | (tons of soil) |
| Caddo Ck. | 28 | 28 | \$2,179,828 | 697 | 17 | 796 | 126,254 |
| Chigley Sandy Ck. | 14 | 10 | \$191,609 | 86 | 7 | 291 | 53,531 |
| Delaware Creek | 2 | 4 | \$41,875 | 23 | 2 | 5 | 974 |
| Kickapoo Sandy Ck. | 20 | 14 | \$240,851 | 104 | 8 | 305 | 49,728 |
| Lower Bayou Ck. | 15 | 15 | \$1,110,120 | 125 | 4 | 213 | 41,374 |
| Mill Creek | 18 | 18 | \$143,597 | 177 | 10 | 340 | 49,903 |
| Pennington Creek | 3 | 3 | \$18,641 | 188 | 7 | 114 | 18,917 |
| Rock Creek | 17 | 15 | \$373,531 | 337 | 10 | 259 | 41,129 |
| Upper Bayou Ck. | 8 | 8 | \$370,346 | 93 | 3 | 266 | 43,612 |
| Upper Clear Boggy Ck. | 49 | 2 | \$1,151,130 | 394 | 20 | 1,033 | 167,410 |
| Wildhorse Creek | 107 | 9 | \$5,631,557 | 629 | 31 | 1,250 | 509,141 |
| Total | 281 | 126 | \$11,453,085 | 2,853 | 119 | 4,872 | 1,101,973 |

^{*}Monetary benefits include reduction in flood damages to crops, roads, bridges, fences, etc. and may include other benefits such as irrigation, municipal and industrial water supply and recreation.

Conservation districts are a primary sponsor of most watershed projects in Oklahoma. Listed below are conservation districts located in Senate District No. 14 that have watershed projects and other conservation agencies that can be contacted for more information about the watershed program.

Arbuckle Conservation District

2428 Autumn Run Road, Ste. A, Ardmore, OK arbucklecd@conservation.ok.gov

Johnston County Conservation District

1014 North Kemp, Tishomingo, OK johnstonccd@conservation.ok.gov

Love County Conservation District

1215 N. Highway 77, Marietta, OK loveccd@conservation.ok.gov

Murray County Conservation District

3490 Highway 7 W, Sulphur, OK murrayccd@conservation.ok.gov

The Oklahoma Conservation Commission is the lead state agency for upstream flood control programs and provides assistance and guidance to conservation districts.

The USDA Natural Resources Conservation Service (NRCS) is the federal agency that administers the watershed program and provides technical and financial assistance to the local project sponsors.

Oklahoma Conservation Commission

2800 N. Lincoln Blvd. Suite 160 Oklahoma City, OK 73105-4210 (405) 521-2384

Web Page: http://www.ok.gov/conservation
Twitter: https://twitter.com/conservation.ok
Facebook: https://facebook.com/conservation.ok

Natural Resources Conservation Service

100 USDA, Suite 206 Stillwater, OK. 74074-2655 (405) 742-1204

COMMISSION