# **Flood Control Dams in Grady County**

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. One hundred and fifty-four of these dams are in Grady County.

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 Grady County.



# **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.

Of the 154 dams in Grady County seven are classified as high hazard and have the potential for loss of life if they 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.

Watershed Name	Dams in Watershed	Dams in Grady County	*Monetary Benefits	Farms/ Ranches Benefited	Bridges Benefited	Wetlands Enhanced/Created (acres)	Reduced Sedimentation (tons of soil)
Bitter Creek	19	19	\$384,570	150	13	217	49,257
Ionine Creek	3	3	\$13,401	5	2	0	80,722
Little Washita River	45	27	\$784,376	148	4	750	186,995
Roaring Creek	40	40	\$1,004,906	199	12	290	59,373
Round Creek	9	6	\$312,263	148	10	208	40,426
Rush Creek	55	36	\$2,819,293	570	9	778	181,337
Winter Creek	24	23	\$524,972	204	10	356	62,267
Total	194	154	\$5,843,781	1,424	60	2,599	660,377

# Average Annual Watershed Benefits (Entire Watershed)

\*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 is the conservation district located in Grady County that has watershed projects and other conservation agencies that can be contacted for more information about the watershed program.

# **Grady County Conservation District**

828 W. Choctaw Ave. Chickasha, OK gradyccd@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: <u>http://www.ok.gov/conservation</u> Twitter: <u>https://twitter.com/conservation\_ok</u> Facebook: <u>https://facebook.com/conservationok</u>

## **Natural Resources Conservation Service**

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

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