

The Economics of Conservation

Oklahoma Conservation Commission
District Services Division

Presented at the 2008 NASCA
Annual Meeting
Whitefish, MT

For years, Oklahoma was know for the Dust Bowl.....



During that same time Oklahoma was also experiencing tremendous floods.



THE CLINTON DAILY NEWS

CLINTON, DELAWARE, THURSDAY, APRIL 4, 1934

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New Flood Warning - Torrent Racing Down Washita, Is Report 15 DEAD AND 6 MISSING IN FLOOD Five Men, Numb With Exposure, Rescued From Tree Tops

RESCUE BOATS BATTLE WATER TO REACH MEN

All Five, Suffering
From Cold, Said To
Be Recovering

Five men, numb with cold and exposure, were rescued from tree tops by rescue boats today, it was reported from the Washita river bottom.

The men were rescued from the tops of trees by rescue boats today, it was reported from the Washita river bottom.

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MOST POPULAR STUDENTS



These are the two most popular students in the Clinton high school, as voted by the students.

MANY COUNTY OIL LEASES RECORDED

Signs Echoes Still
Strong Here

The signs of the oil industry are still strong here, as many new leases have been recorded.

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COUNTY COWBOY GROUP ORGANIZES

League Dues Elected
President

The county cowboy group has organized and elected a president.

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CLINTON STUDENTS TO TAKE PART IN FINE ARTS MEET

100 Candidates From
14 Towns To Enter
Municipal Contest

The Clinton students will take part in the fine arts meet.

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In D. S. for Visit



Visitor from D. S.

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River Bottom Is Hunted for Flood Victims

BULLETIN

Lee A. Hunt, of this city, was called at 4 o'clock this afternoon by C. P. Smith, chief of the Washita river bottom, advising that four more bodies had been located.

Smith said a boat with carbide was used to rescue the bodies. Hunt immediately sent for him to the river.

The four flood victims could not be identified until reached, it was said.

Discovery of these bodies brought the known dead toll to 15.

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APPEAL FOR OLD
CLOTHES ISSUED



Oklahoma's Watershed Upstream Flood Control Program

2105 structures have established a \$2 billion infrastructure providing multiple benefits to thousands of Oklahoma citizens.

Dams & established conservation practices in the watersheds provide \$75 million in benefits each year.

Other Benefits of the Watershed Program

- Protect 1,532 county and highway bridges
- Provide flood prevention for 20,541 farms and ranches
- Traps 9.2 million tons of sediment each year
- Has created or enhanced 44,399 acres of wetlands
- 42 lakes provide municipal water

Watershed Dams In Garfield County

Oklahoma has 129 USDA Natural Resources Conservation Service (NRCS) assisted watershed projects in 54 counties. Over 2,100 watershed dams have been built in the state with financial and technical assistance from NRCS authorized through Public Law 78-534, Flood Control Act of 1944 (Washita River Watershed) and Public Law 83-566 Watershed Protection and Flood Prevention Program.

Watershed projects address a myriad of natural resource issues such as flooding, soil erosion, water quality, animal waste management, irrigation water management, water supply, wetland development or enhancement, fish and wildlife habitat and recreation. Many of these watershed projects also include conservation practices such as terraces, waterways, ponds, gully control, and pasture and rangeland plantings.

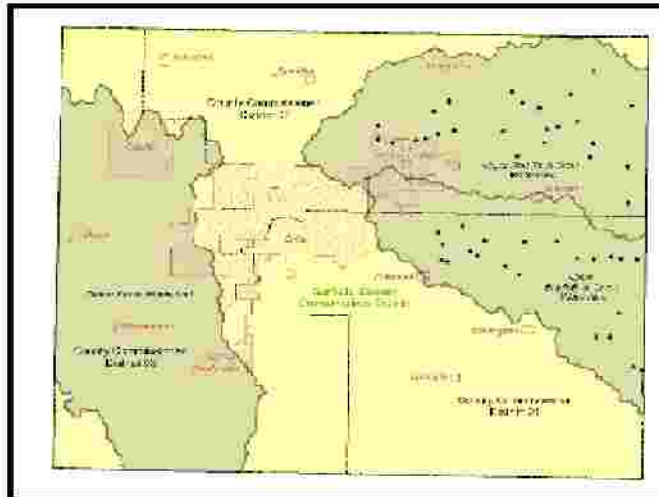
Operation and Maintenance of Watershed Projects

The annual operation and maintenance of dams and their components is a major responsibility for project sponsors (local units of governments, usually conservation districts, conservancy districts, or city or county governments).

Operation and maintenance of watershed dams can be expensive and labor intensive, but is necessary to ensure the dams function as designed and remain safe. Maintenance work includes clearing trees from dams and spillway, repairing soil erosion damage, repairing damage to the spillway and dams after heavy rainstorms, and keeping the inlet towers cleared of debris.

Operation and Maintenance Needs

\$4.4 million is needed to meet operation and maintenance needs on all watershed dams in the state for fiscal years 2008-2012.



Rehabilitation of Aging Dams

NRCS assistance is available to rehabilitate aging watershed dams with 65 percent federal cost-share. Local project sponsors provide 35 percent of the rehabilitation costs. Oklahoma currently has 26 rehabilitation projects in various stages of planning, design or construction. Oklahoma has 132 watershed dams that already exceed their 50-year design life span. Almost 500 dams will reach this milestone in the next five years.

There are 24 dams in the county that are 40-49 years old and 17 dams that are 30-39 years old.

Some Oklahoma dams will need rehabilitation to remain safe and protect the people that live or work downstream. It is estimated that \$30 million will be needed to rehabilitate the highest priority of these dams during the next five years.

Annual Watershed Benefits

Watershed Name	Dams in Watershed	Dams in Garfield Co.	*Monetary Benefits	Farms / Ranches Benefited	Bridges Benefited	Wetlands Enhanced/Created (acres)	Reduced Sedimentation (tons of soil)
Upper Black Bear Ck.	72	22	\$935,071	475	38	1,910	495,767
Upper Red Rock Ck.	42	25	\$488,071	186	17	1,317	217,935
Total	114	47	\$1,424,142	661	55	3,227	714,702

*Monetary benefits include reduction in flood damages and may include other benefits such as soil erosion control, recreational areas, irrigation water, municipal and industrial water supply, and wildlife habitat. (Price Base 2007)

Watershed Dams In House District 38

Oklahoma has 129 USDA Natural Resources Conservation Service (NRCS) assisted watershed projects in 64 counties. Over 2,100 watershed dams have been built in the state with financial and technical assistance from NRCS authorized through Public Law 78-534, Flood Control Act of 1944 (Washita River Watershed) and Public Law 83-566 Watershed Protection and Flood Prevention Program.

Watershed projects address a myriad of natural resource issues such as flooding, soil erosion, water quality, animal waste management, irrigation water management, water supply, wetland development or enhancement, fish and wildlife habitat and recreation. Many of these watershed projects also include conservation practices such as terraces, waterways, ponds, gully control, and pasture and rangeland plantings.

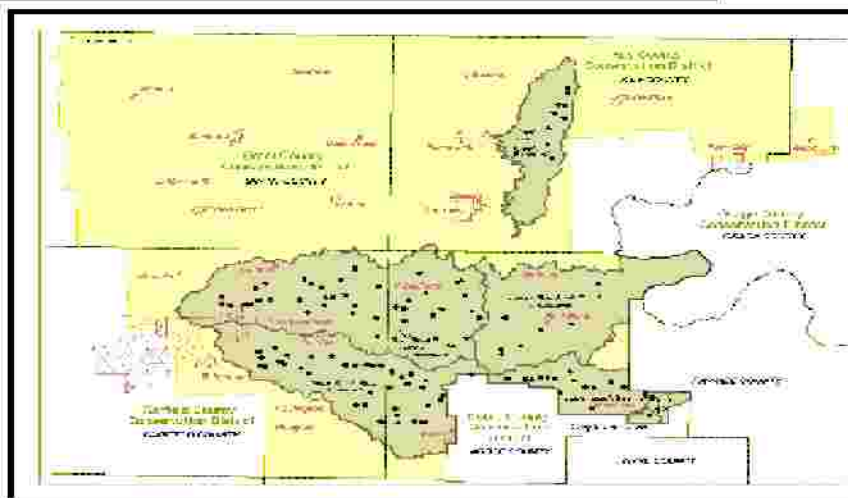
Operation and Maintenance of Watershed Projects

The annual operation and maintenance of dams and their components is a major responsibility for project sponsors (local units of governments, usually conservation districts, conservancy districts, or city or county governments).

Operation and maintenance of watershed dams can be expensive and labor intensive, but is necessary to ensure the dams function as designed and remain safe. Maintenance work includes clearing trees from dams and spillway, repairing soil erosion damage, repairing damage to the spillway and dams after heavy rainstorms, and keeping the inlet towers cleared of debris.

Operation and Maintenance Needs

It will take \$4.4 million dollars to meet the operation and maintenance needs of all the 2,105 watershed dams in the state for the fiscal years 2008-2012. There are 115 dams in House District 38.



Rehabilitation of Aging Dams

NRCS assistance is available to rehabilitate aging watershed dams with 65 percent federal cost-share. Local project sponsors provide 35 percent of the rehabilitation costs.

Oklahoma currently has ten completed rehabilitation projects and 29 more in various stages of planning, design or construction. Oklahoma has 250 watershed dams that already exceed their 50-year design life span. In five years that number will be 807 and in ten years will be 1,354.

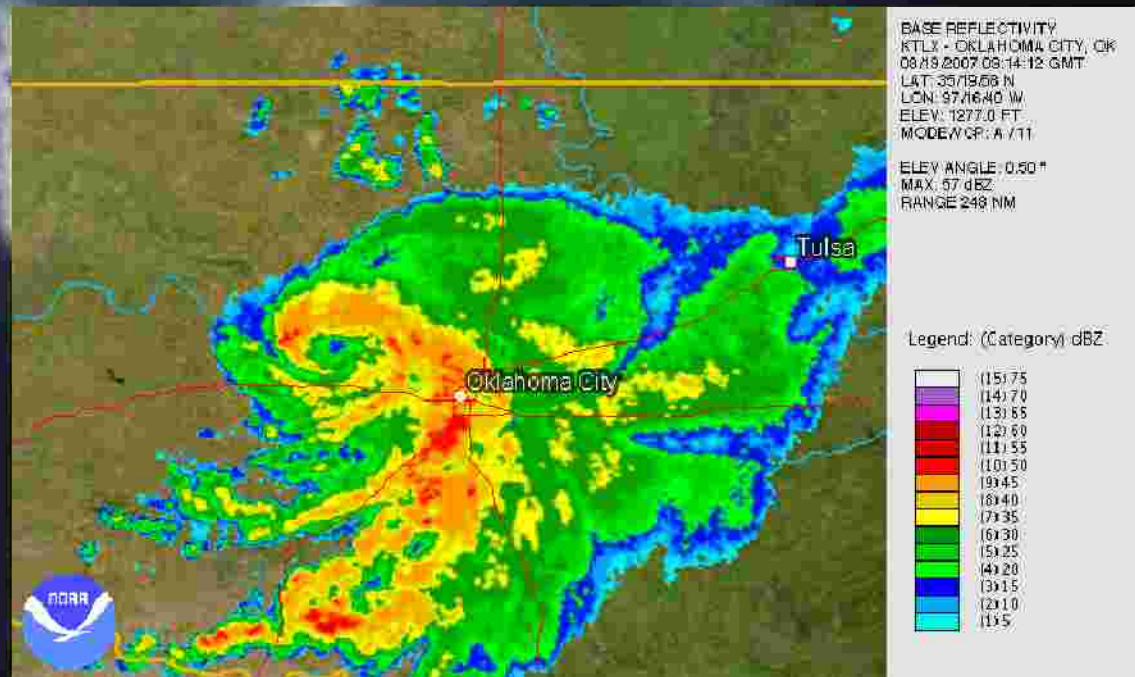
There are 46 watershed dams in House District 38 that are 40-49 years old and 38 that are 30-39 years old.

Some dams will need rehabilitation to remain safe and protect the people that live or work downstream. It is estimated that \$30 million will be needed to rehabilitate the highest priority of these dams during the next five years.

Annual Watershed Benefits (Entire Watershed)							
Watershed Name	Dams in Watershed	Dams in District 38	*Monetary Benefits	Farms / Ranches Benefited	Bridges Benefited	Wetlands Enhanced/Created (acres)	Reduced Sedimentation (tons of soil)
Long Branch Creek	11	1	\$69,976	73	12	197	31,430
Lost Duck Creek	9	9	\$377,564	69	12	249	40,386
Lower Black Bear	19	2	\$1,685,953	280	10	374	77,233
Lower Red Rock	7	7	\$85,084	46	2	124	18,308
Upper Black Bear	72	54	\$881,216	475	38	1,910	496,767
Upper Red Rock	42	42	\$427,858	186	17	1,317	217,935
Total	160	115	\$3,527,651	1,129	91	4,171	8,820,069

*Monetary benefits include reduction in flood damages and may include other benefits such as soil erosion control, recreational areas, irrigation water, municipal and industrial water supply, and wildlife habitat.

August 18 & 19, 2007
Tropical Storm Erin hits
Oklahoma!



And then the rains came.....
and it rained.....
and it rained some more !!!!!!!





Sugar Creek L-44



Sugar Creek L-44







Godwin Pond, Blaine County, west of Watonga



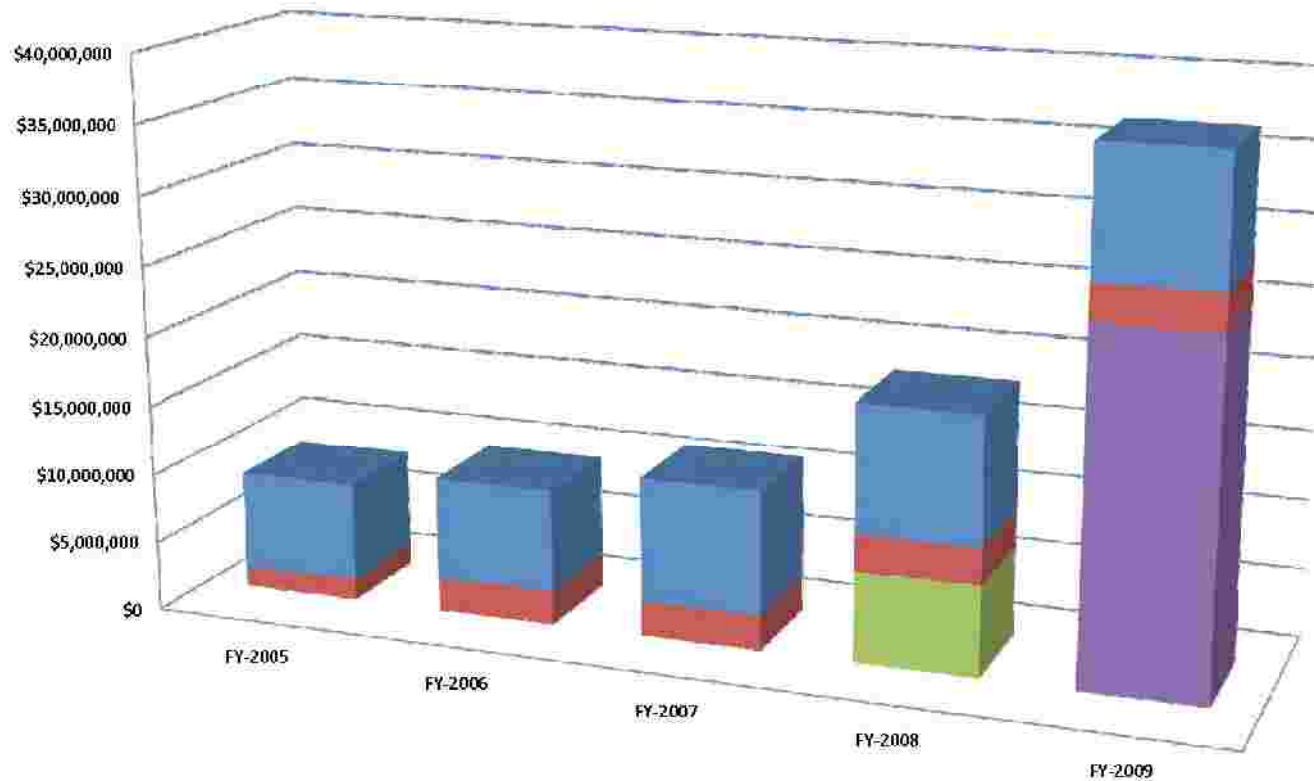
Kingfisher area flood damage



2007 – A Record Year in Oklahoma

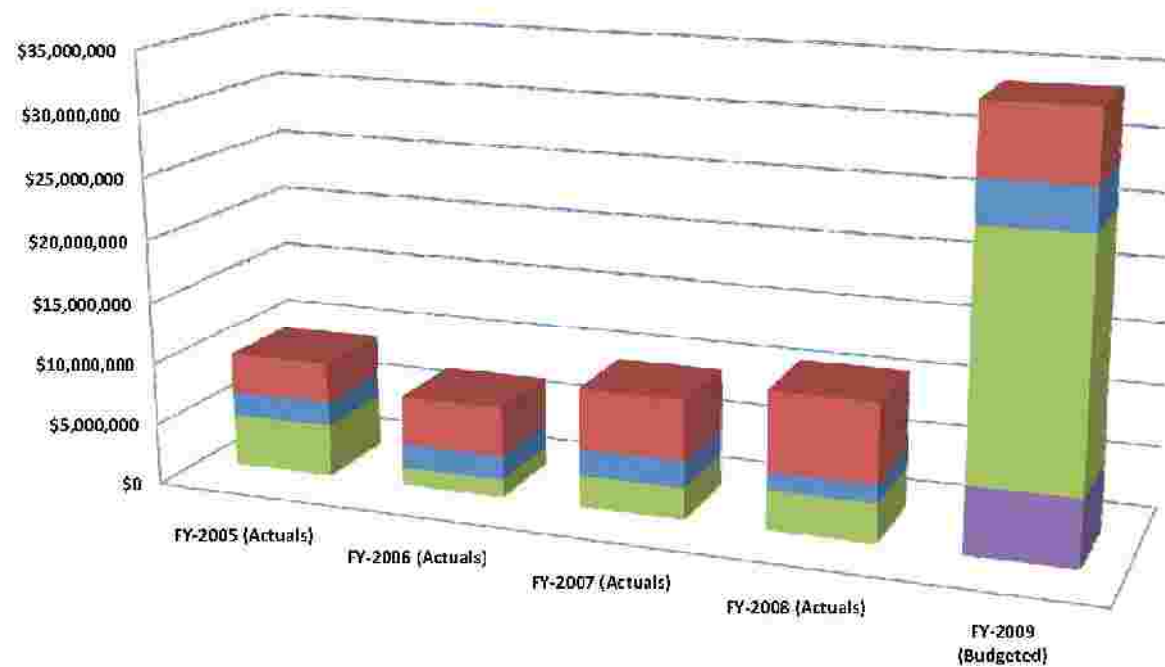
- Federal Government issued a record eight disaster declarations
- \$290 million in benefits recognized from flood reduction due to control structures from January – July, 2007
- Flood control structures prevented an additional \$30 million in flood related damages between August 18 & 19

OKLAHOMA CONSERVATION COMMISSION 5 Year State Funding Summary



	FY-2005	FY-2006	FY-2007	FY-2008	FY-2009
General Revenue	\$7,117,658	\$7,403,928	\$8,955,795	\$9,187,084	\$9,187,084
Gross Production Tax on Oil	\$1,500,000	\$2,400,000	\$2,496,500	\$2,627,701	\$2,627,701
Constitutional Reserve				\$6,500,000	
Bond Issue					\$25,000,000

OKLAHOMA CONSERVATION COMMISSION 5 Year Federal Funding Summary



	FY 2005 (Actuals)	FY 2006 (Actuals)	FY 2007 (Actuals)	FY 2008 (Actuals)	FY 2009 (Budgeted)
EPA	\$0.250,821	\$4.024,827	\$4,992,861	\$6,433,957	\$5,626,974
Department of the Interior	\$1,953,257	\$1,950,183	\$2,111,932	\$1,457,270	\$3,381,294
USDA NRCS	\$4,228,687	\$1,386,651	\$2,527,846	\$3,185,779	\$19,480,618
FCMA					\$5,392,943

How do we deliver????



- ü No additional staff
- ü No additional operating funds

The only thing worse
than having no funds is
having too much!



2008 - 09 Legislative Initiative

Build Capacity in Conservation Districts

- § Operations

- § Staffing

The Challenge – Selling this to a legislature that doesn't want to “grow” government.

The solution – Show them what's in it for them.

The Economic Impact of Conservation in *Garfield County* Conservation District

Dollars

	2004	2005	2006	2007	2008
Federal	USDA Producers	USDA Producers	USDA Producers	USDA Producers	USDA Producers
Environmental Quality Incentives Program	154,978.46 115,849.46	109,235.59 105,865.54	185,443.77 109,848.85	245,944.66 70,093.64	204,493.13 20,544.15
Wildlife Habitat Incentives Program	0	0	1,378.31 496.31	0	0
Emergency Watershed Program	\$921,000.00	\$344,135.00	0	0	0
Conservation Reserve Program	\$217,680.00	225,438.00	238,634.00	250,000.00	0
PL566 Watershed Program	0	0	0	0	0
Wetland Reserve Program	473,746.25	0	112,559.85	42,172.70	0
Rehabilitation of Flood Control Dams	0	0	0	0	0
Conservation Security Program	507,138.68	534,935.00	0	0	0
RC&D (grant money used in county)	154,156.00	82,175.00	80,000.00	320,500.00	33,000.00
RC&D (funds for secretarial help, supplies, etc.)	15,000.00	15,000.00	15,000.00	15,000.00	15,000.00
Gas and service expenses for federal vehicles	60,000.00	60,000.00	80,000.00	68,000.00	60,000.00
Rent and Utilities paid for office space by USDA	65,569.00	65,569.00	65,569.00	79,746.00	70,746.00

Dollars

2004

2005

2006

2007

2008

StateOCC Allocated Funds (Operating Expenses
(do not include employee salaries and benefits))

3,000.00

3,000.00

3,000.00

4,000.00

4,000.00

OK, Cost Share funds

10,227.00

12,500.00

11,475.00

11,475.00

30,000.00

Cost Share Funds (Producers Share)

14,681.28

8,664.05

20,492.15

20,492.15

9,615.68

Operation and Maintenance (flood control)

0

0

11,690.13

0

0

Rehabilitation of Aging Flood Control Dams

0

0

0

0

0

County & District

District Revenue from seeds, sprigging, etc.

50,281.00

25,990.00

49,982.00

97,892.00

59,942.66

Operation and maintenance for flood control dams
(conservancy district and other local funds)

18,290.63

15,789.13

26,164.92

31,751.75

17,366.42

Office Salaries

(Both federal and conservation District employees)

175,000.00

179,168.35

183,342.95

187,523.81

175,000.00

Subtotals

3,013,815.60

1,908,054.50

1,249,939.20

1,503,931.70

803,498.66

Multiple the Subtotal by four to adjust for
the multiplier effect of those dollars
circulating through the community.**Total**

12,055,262.00

7,632,218.00

4,999,756.80

6,015,726.80

3,213,994.60

Garfield County Conservation District Activities Benefit Local Economy by \$1.7 Million Annually

The Garfield County Conservation District and the USDA Natural Resources Conservation Service (NRCS) provide technical assistance to land users to assist them to conserve and protect natural resources. They also administer conservation programs that provide financial assistance for the application of conservation practices.

But you may not know about another important benefit to the county that comes from this conservation partnership. That is the economic benefit to the county that conservation programs and activities generate. Over \$1.7 million comes into the local economy annually from having the conservation district and NRCS offices in Enid. This is an average annual dollar figure based upon the five-year period from 2004-2008.

It is difficult to put a total dollar figure that has come into the county due to conservation efforts since the Garfield County Conservation District came into existence in 1939, but the figure would certainly be in the millions of dollars.

Money comes into the local economy from the federal and state government and through funds earned locally by the conservation district from their sprigging operation, drill rentals and seed sales.

The \$1.7 million figure includes funds received for employee salaries, office rent and utilities, purchase of gasoline and supplies, and other related expenses. It includes federal conservation programs such as the Environmental Quality Incentives Program (EQIP), Wildlife Habitat Incentives Program (WHIP), etc., which averages over \$999,000 annually and is combined with over \$225,000 provided by landowners.

State allocations to the Garfield County Conservation District have averaged over \$80,000 annually for the past five years.



Application of new conservation practices or the maintenance and repair of existing ones such as flood control dams means income for contractors and businesses.

This includes money for salaries, benefits, and expenses for conservation district employees and the Oklahoma Conservation Cost Share Program.

Economists say that funds coming into a local economy multiply several times before leaving the community. For example, federal cost share dollars for conservation practices require landowners to provide part of the cost of applying the practices. Getting \$100,000 of federal cost share dollars in the county usually means landowners put in another \$30,000-\$40,000 to carry out the conservation work. This money goes to contractors and businesses that sell seed, fertilizer, gasoline, equipment, etc. This may allow these businesses to expand or buy more supplies and equipment that puts more money into the local economy.

Bottom line, the Garfield County Conservation District provides assistance to land users to help them protect and conserve our natural resources and as an additional benefit, conservation activities adds millions of dollars into the local and state economy.

For more information about the Garfield County Conservation District, come by our office at 1216 W. Willow Rd. Suite D in Enid.

Garfield County Statistics

- County Area – 677,120 acres
- County Population – 57,000
- County Seat Population – Enid, OK 46,514
- 54 people per square mile
- 614,690 acres in farms
- Median Household Income - \$35,597

The Challenges Continue.....

Before April 2008



After April 2008 è

