

# *Texas Information on the Web*



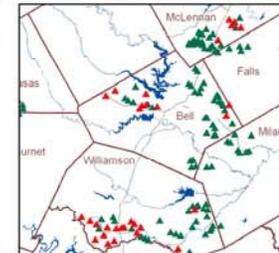
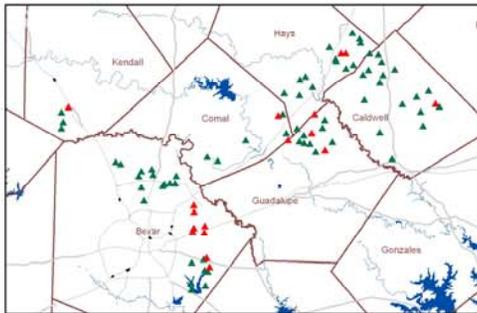
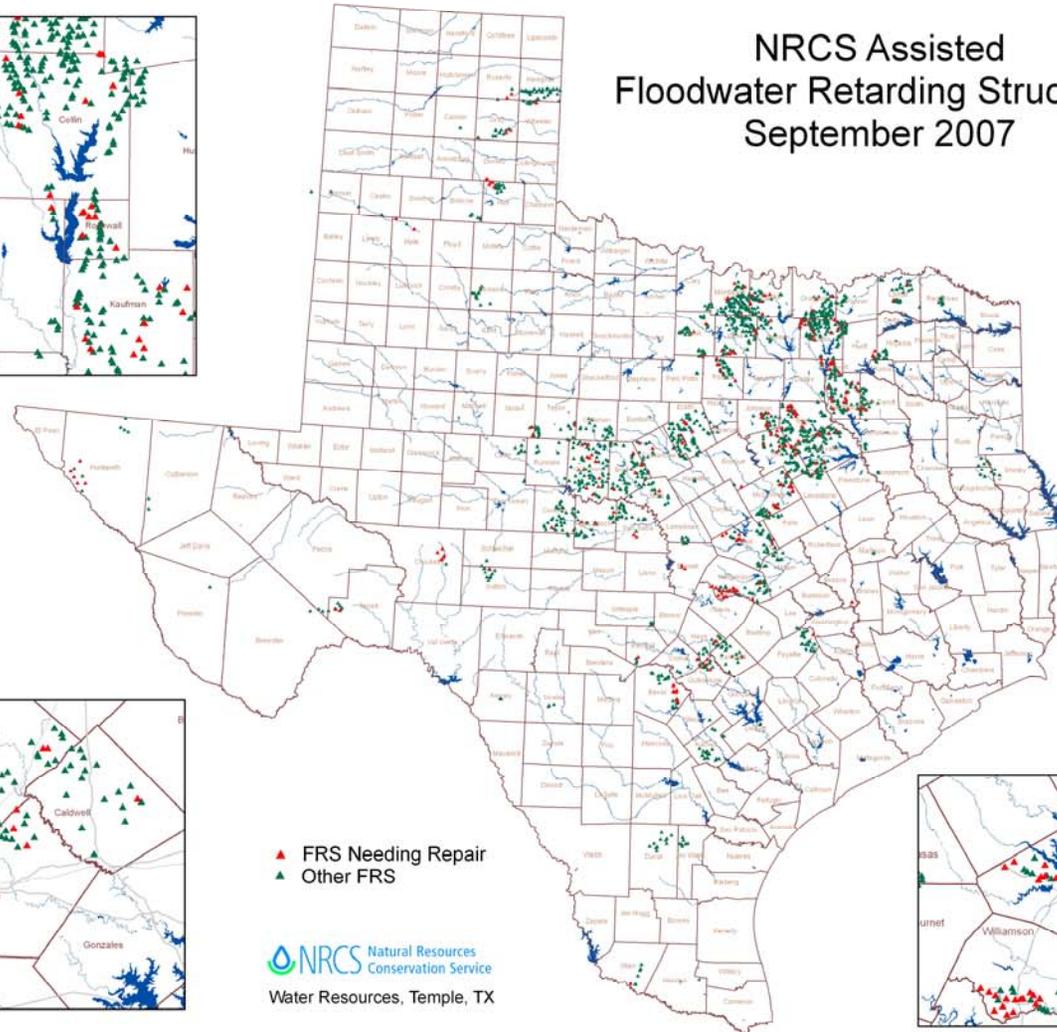
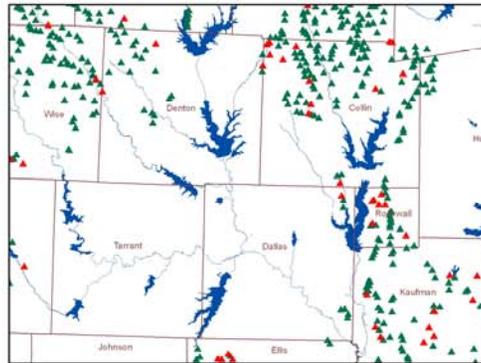
<http://www.tx.nrcs.usda.gov/programs/watersheds/index.html>

# Texas Watershed Web

- Background, Authorities and History
- Facts and Figures for Texas
- Benefits, Reports, and Funding
- Related Links
- Rehab Application Forms
- News Releases, Fact Sheets
- Watershed Training Presentations
- Project Maps

# Texas Watershed Web

NRCS Assisted  
Floodwater Retarding Structures  
September 2007



- ▲ FRS Needing Repair
- ▲ Other FRS

 NRCS Natural Resources  
Conservation Service  
Water Resources, Temple, TX

# Know Your Project's Investment and Benefits

# Watershed Program Investments and Benefits in Texas

- Local sponsors have invested \$870 million for land treatment, landrights, O&M, and construction.
- Federal Government Invested \$1.2 billion in financial assistance.
- Capitalized benefits have exceeded \$3.9 billion to date; average annual benefits exceed \$110 million.
- Return of \$3.17 for every \$1.00 invested

# Federal Investment by Watershed

## Watershed Operations Federal Financial Assistance - Texas

Project Name	Project Number	Program	Year Authorized	Federal Cost Incurred <sup>1</sup> (2006\$)	Congressional District (110th Congress)
Agua Dulce	2021	PL-566	1959	\$1,296,100	15,27
Alamo Arroyo	2013	PL-566	1957	\$2,723,200	23
Aquilla-Hackberry Creek	2066	PL-566	1969	\$11,282,600	17
Attoyac Bayou	2048	PL-566	1965	\$14,733,400	1
Auds Creek	2016	PL-566	1958	\$2,793,100	4
Bennett Creek	2061	PL-566	1969	\$3,729,300	11,31
Bexar-Medina-Atascosa	2103	PL-566	1998	\$79,400	23,28
Big Creek (Brazos County)	2047	PL-566	1964	\$488,900	17
Big Creek (Delta County)	2097	PL-566	1987	\$61,600	4
Caddo Creek	2096	PL-566	1986	\$13,600	4
Calaveras Creek	-	Pilot	1954	\$3,566,800	21,23,28
Camp Rice Arroyo	2034	PL-566	1961	\$2,425,200	23
Caney Creek	2023	PL-566	1959	\$3,340,600	4
Castleman Creek	2049	PL-566	1965	\$2,739,700	17
Chiltipin-San Fernando Creek	2019	PL-566	1959	\$14,167,000	15,27
Chocolate, Little Chocolate, Lynn Bayou	2052	PL-566	1965	\$7,559,100	14
Choctaw Creek	2055	PL-566	1966	\$15,753,100	4
Comal River	2069	PL-566	1970	\$11,302,900	21,28
Cornudas, North And Culp Draws	2078	PL-566	1974	\$6,334,000	23
Cow Bayou	-	Pilot	1954	\$11,029,900	17,31
Cummins Creek	2005	PL-566	1956	\$9,342,100	10,25
Deport Creek	2079	PL-566	1975	\$1,399,000	4
Diablo Arroyo	2014	PL-566	1958	\$2,782,400	23
Donahoe Creek	2050	PL-566	1965	\$2,670,600	31
Dry Devils River & Lowrey Draw	2018	PL-566	1958	\$12,775,300	11,23
Duck Creek	2051	PL-566	1965	\$9,311,000	13,19
East Bay Bayou	2039	PL-566	1962	\$1,308,200	2,14
East Keechi Creek	2028	PL-566	1960	\$4,692,700	12,13
Ecleto Creek	2074	PL-566	1971	\$4,481,000	15,28
Elm Creek (1250)	2094	PL-566	1982	\$4,778,100	11,19

# Benefits by Watershed Project

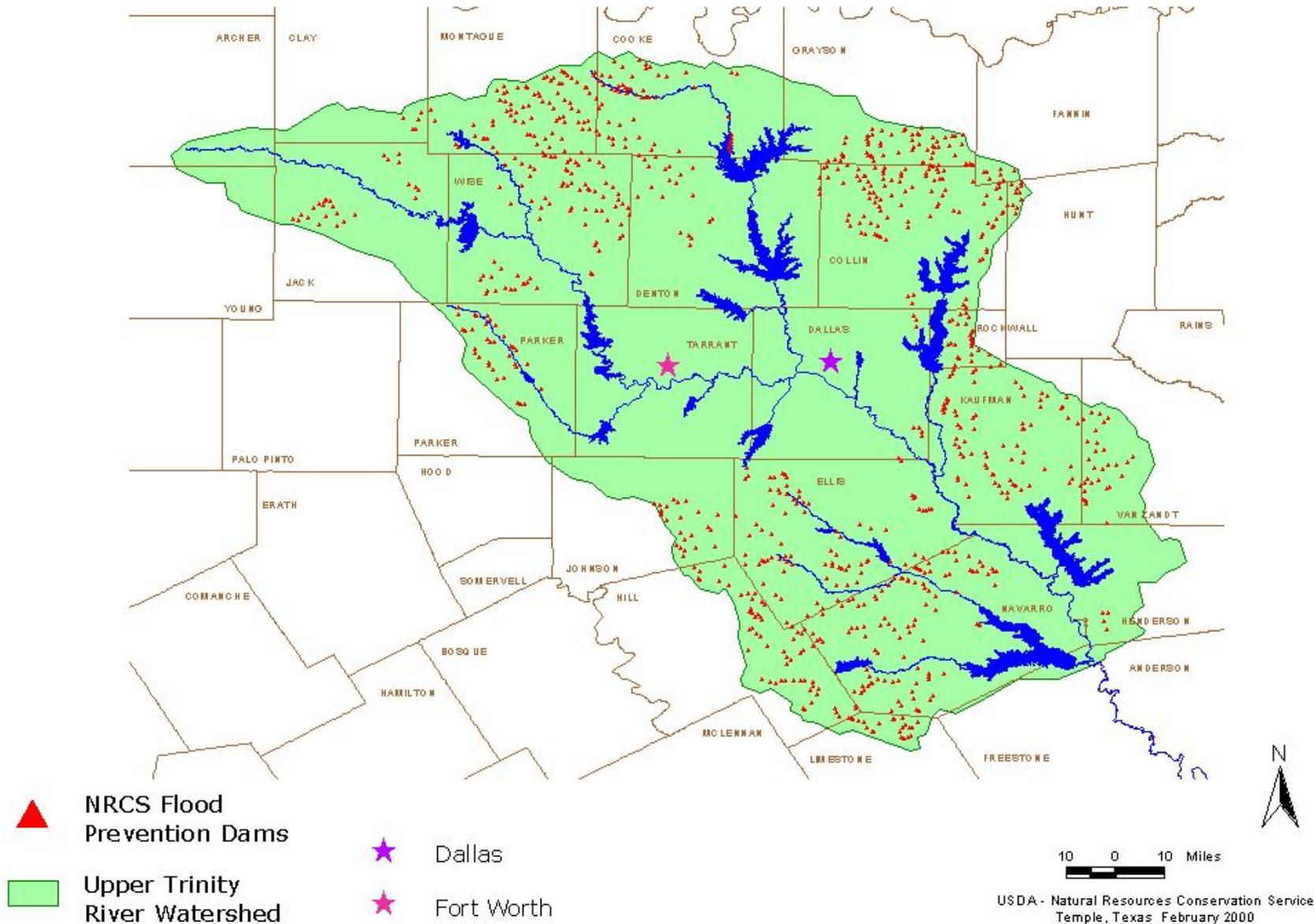
## 1.8 Watershed Operations Monetary Benefits FY2006

State	Project Name	Project Number	Program	Congressional District	Flood Damage Reduction Benefits to Agriculture	Flood Damage Reduction Benefits to Non-Agriculture	Non-Flood Damage Reduction Benefits to Agriculture	Non-Flood Damage Reduction Benefits to Non-Agriculture
PL-566								
Texas	Agua Dulce Creek	2021	PL-566	15-TX; 27-TX	\$136,000	\$91,000	\$0	\$0
Texas	Alamo Arroyo	2013	PL-566	23-TX	\$102,000	\$14,000	\$0	\$2,000
Texas	Aquilla-Hackberry Creek	2066	PL-566	17-TX	\$231,000	\$57,000	\$32,000	\$172,000
Texas	Attoyac Bayou	2048	PL-566	01-TX	\$209,000	\$100,000	\$226,000	\$303,000
Texas	Auds Creek	2016	PL-566	04-TX	\$140,000	\$26,000	\$3,000	\$3,000
Texas	Bennett Creek	2061	PL-566	11-TX; 31-TX	\$71,000	\$16,000	\$15,000	\$59,000
Texas	Bexar-Medina-Atascosa Counties Water Conservation	2103	PL-566	20-TX; 23-TX; 28-TX	\$0	\$0	\$22,000	\$0
Texas	Big Creek	2047	PL-566	15-TX	\$26,000	\$0	\$9,000	\$0
Texas	Big Creek(Delta Co.)	2097	PL-566	04-TX	\$0	\$0	\$68,000	\$0
Texas	Caddo Creek	2096	PL-566	04-TX	\$0	\$0	\$168,000	\$0
Texas	Camp Rice Arroyo	2034	PL-566	23-TX	\$139,000	\$24,000	\$0	\$0
Texas	Caney Creek	2023	PL-566	04-TX	\$114,000	\$50,000	\$3,000	\$0
Texas	Castleman Creek	2049	PL-566	17-TX	\$318,000	\$32,000	\$0	\$99,000
Texas	Chiltipin-San Fernando Creek	2019	PL-566	15-TX; 25-TX; 27-TX	\$247,000	\$234,000	\$76,000	\$0
Texas	Chocolate;Little Chocolate;Lynn Bayou	2052	PL-566	14-TX	\$337,000	\$4,000	\$337,000	\$338,000
Texas	Choctaw Creek	2055	PL-566	04-TX	\$175,000	\$636,000	\$2,000	\$1,030,000
Texas	Comal River	2069	PL-566	21-TX; 28-TX	\$32,000	\$657,000	\$72,000	\$66,000
Texas	Cornudas; North And Culp Draws	2078	PL-566	02-NM; 23-TX	\$413,000	\$13,000	\$113,000	\$99,000
Texas	Cummins Creek	2005	PL-566	10-TX; 15-TX	\$485,000	\$618,000	\$56,000	\$0
Texas	Deport Creek	2079	PL-566	04-TX	\$2,000	\$128,000	\$0	\$12,000
Texas	Diablo Arroyo	2014	PL-566	23-TX	\$74,000	\$13,000	\$1,000	\$0
Texas	Donahoe Creek	2050	PL-566	31-TX	\$85,000	\$12,000	\$0	\$20,000
Texas	Dry Devils River & Lowrey Draw	2018	PL-566	11-TX; 23-TX	\$3,000	\$1,732,000	\$0	\$13,000
Texas	Duck Creek	2051	PL-566	13-TX	\$609,000	\$191,000	\$5,000	\$168,000
Texas	East Bay Bayou	2039	PL-566	02-TX; 14-TX	\$40,000	\$0	\$446,000	\$0
Texas	East Keechi Creek	2028	PL-566	12-TX; 13-TX	\$121,000	\$44,000	\$13,000	\$0

# Other Benefits

- Sediment Storage above 20 Major Reservoirs
- Example: Lake Lavon
  - Sediment Storage
    - Lake Lavon 82,600 ac-ft
    - Project Dams Above Lake Lavon 21,500 ac-ft
- Projects impacted 12.3 million people

# USDA - NRCS Dams in the Upper Trinity River Watershed



**Know Your Project's Needs**

# Future Obligations in Texas

(Projects Planned but Not Constructed)

- 268 Floodwater Retarding Structures remain to be built.
- Bexar-Medina-Atascosa Irrigation Project
- Estimated Cost of Backlog: \$438,000,000
  - \$ 170,000,000 - PL-566
  - \$ 268,000,000 - PL-534

# Repair Needs in Texas

- 120 Structures in Texas are in need of repair.
- Estimated cost exceeds \$30 million.

# Watershed Rehabilitation Needs

- Rehabilitation extends the useful life and benefits for an additional 50 to 100 years.
- 120 Structures in Texas are in need of repair; estimated cost exceeds \$30 million.
- Approx. 122 dams need upgrading to current safety criteria
- Estimated total cost of rehabilitation needs in Texas \$200 million
- Estimated Sponsor's share of total rehabilitation cost \$70 million

# Funding Needs and Sources

Operation, Maintenance, Repair, and Rehab

## Funding Sources

- Local Taxes
- Developer Fees
- State
- Others?

# Know your Dams!

- Know current dam hazard classification.
- Know design hazard classification
  - Are they the same?
- Know your easement boundaries.
- Know extent of breach inundation zone
- Know what is downstream of each dam
  - What is future potential use?

# Know Your Dams!

## Aging Dams in Texas

- Number of floodwater retarding dams 1,973
- Number of dams exceeding 50 years of age in 2007 208
- Number of dams that will exceed 50 years of age in 2011 543
- Number of dams that need major repair 120
- Estimated total cost of repairs needed \$30 million

# Know Your Dams!

## Aging High Hazard Dams in Texas

- Number of dams classified as high hazard 218
- Number of dams originally classified as low or significant hazard that need to be upgraded to high hazard criteria 122
- Number of high hazard dams greater than 50 years of age in 2007 14
- Number of high hazard dams greater than 50 years of age in 2011 61

# Take Action!

To Prevent Structures in Flood Pool

- Notify all property owners in flood pool of potential inundation during floods.

# Take Action!

## Easements To Prevent Hazard Class Increases

- Ownership or development control of land downstream of dam
  - Purchase easement
  - Purchase land
  - Enroll in easement program such as WRP, GRP, or other easement program.

# Take Action!

## Zoning To Prevent Hazard Class Increases

- Do SWCDs have zoning Authority. No
- Do Counties have zoning Authority ?
- Most cities have Zoning Authority within city limits and ETJ.
- Some Watershed Authorities and WCIDs have zoning authority.
- Other methods of “zoning”
  - Septic Tank Permits
  - 911 address

# Who should know?

- Notification of downstream landowners of dam hazard, and upstream landowners of potential inundation during floods.
  - Not a problem solver
  - Owner must disclose known defects to potential buyers
  - May provide some liability relief

# Who should know

- Notification of Tax assessors office or planning and zoning
  - Get area outlined on tax assessors map



# Who should know

- Notify area lenders, such as banks
- Notify area surveyors who complete flood certification for banks and surveys for new residential development



# Be proactive



Lot for sale  
immediately  
downstream of  
dam

AUG 26 2009

- Notification of all realtors and anyone who places a “for-sale” sign on a lot in the breach inundation zone.
  - Seller must disclose all known defects.

# Inform and educate

- Educate community of benefits of dams
  - property values enhanced by flood prevention
  - roads protected from flood damage
  - reduced interruption of public safety assistance (fire, health, police) during storm event due to reduction of flooding.
- Run regular news articles in paper

# Future NRCS Initiatives

- Provide training to NRCS employees and sponsors.
  - Presentations are on the Web in .pdf format. NRCS FO can download .ppt version from State Office.
- Public education: Fact Sheets, news releases, public meetings
  - Texas Watershed Web:  
<http://www.tx.nrcs.usda.gov/programs/watersheds/index.html>
  - Watershed projects are part of public infrastructure, just like roads and bridges.
  - Benefits: Flood damage reduction to infrastructure (roads, bridges) and urban development, sediment reduction, etc. Prepare storm reports, auxiliary spillway flow reports.
  - Public safety
  - Funding needs for maintenance, repair, rehabilitation