DAM MAINTENANCE, REPAIR, REHABILITATION, AND UPGRADE
- FUNDING OPPORTUNITIES FOR WATERSHED PROGRAM SPONSORS
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- TSSWCB

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BACKGROUND
- 2,041 DAMS BUILT BY USDA-NRCS IN 150 WATERSHED PROJECTS IN TEXAS
- FIRST DAM BUILT IN 1948; LAST DAM BUILT IN 2008
- NRCS PAID FOR PLANNING, DESIGN, AND CONSTRUCTION
- AFTER CONSTRUCTION LOCAL SPONSORS WERE RESPONSIBLE FOR OPERATION, MAINTENANCE, AND REPAIR OF THE DAMS
- AVERAGE ANNUAL BENEFITS OF WATERSHED PROJECTS IN TEXAS IS $151 MILLION

BACKGROUND
- LOCAL SPONSORS INCLUDE:
  - Soil & Water Conservation Districts: (106)
  - Counties: (50)
  - Cities: (22)
  - Water Control & Improvement Districts: (20)
  - Other: (7)

BACKGROUND
WATERSHED PROJECTS

BENEFITS – ROADS & BRIDGES

<table>
<thead>
<tr>
<th>COUNTY</th>
<th>BRIDGE AND ROAD TOTAL BENEFITS</th>
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<tbody>
<tr>
<td>MONTAGUE</td>
<td>$313,400 (283 BRIDGES) $2,269,200</td>
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<tr>
<td>WISE</td>
<td>$286,300 (396 BRIDGES) $2,365,600</td>
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<tr>
<td>COLLIN</td>
<td>$871,900 (485 BRIDGES) $4,178,000</td>
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<tr>
<td>COOKE</td>
<td>$330,900 (219 BRIDGES) $1,458,000</td>
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<tr>
<td>COLEMAN</td>
<td>$679,900 (795 BRIDGES) $3,381,600</td>
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No Upstream Dams
**Benefits – Sediment Storage**

- 905 Watershed Program Dams, upstream from water supply reservoirs in the Dallas/Fort Worth area.
- 124,000 ac-ft of sediment storage capacity.
- 570,000 ac-ft of flood storage.

**Problems**

- As the dams aged, maintenance and repair costs became much higher than anyone anticipated.
- Currently, $14 million is needed to get caught up on maintenance.
- 204 dams need repair, estimated cost of $76 million.

**Problems**

- Storm damage.
- Sometimes federal Emergency Watershed Protection (EWP) funding is available.
  - Federal 75%
  - State 25%
  - Sponsor 1.25%

From 2010 to 2015, over 15 dams were overtopped in Navarro County.
PROBLEMS

• MOST OF THE DAMS ORIGINALLY BUILT IN RURAL AREAS AS “LOW HAZARD”
• URBAN DEVELOPMENT AROUND THE DAMS AND DOWNSTREAM HAS RESULTED IN OVER 500 DAMS BEING RECLASSIFIED TO “HIGH HAZARD”, BUT THESE DAMS DO NOT MEET HIGH HAZARD CRITERIA
• ABOUT 20 DAMS PER YEAR ARE BEING RECLASSIFIED TO “HIGH” BECAUSE OF URBAN DEVELOPMENT
• CURRENT COST TO UPGRADE 500 DAMS IS ABOUT $1.5 BILLION

SOLUTIONS

• FEDERAL DAM REHABILITATION PROGRAM (NRCS)
• FIRST FUNDING TO TEXAS IN 2002
• 27 DAMS HAVE BEEN REHABILITATED AND UPGRADED SINCE 2002
• 10 DAMS CURRENTLY IN DESIGN AND CONSTRUCTION
• LOCAL SPONSOR FUNDING 35%
SOLUTIONS

- Texas State Soil and Water Conservation Board (TSSWCB) received funding in 2010 to assist sponsors with maintenance and repair.
- Average annual funding of about $7 million.

- Cost share rates:
  - Maintenance: 90% State, 10% Sponsor
  - Repair, Upgrade: 95% State, 5% Sponsor
  - Federal Rehab: 65% NRCS, 33.25% State, 1.75% Sponsor

- Average costs per dam:
  - $400,000 for repair
  - $4,000,000 for rehabilitation or upgrade

SOLUTIONS

- On June 6, 2019, TSSWCB received a supplemental appropriation from the Economic Stabilization Fund (ESF) for dam infrastructure projects:
  - $150 million
  - Based on a flood control plan developed by TSSWCB
  - All funds must be obligated in contracts by June 5, 2021

Applications for additional projects:
- 18 dam repairs
- 13 dam upgrades
PROCEDURES

- Soil and Water Conservation Districts and other local sponsors may apply for funding for dam maintenance, repair, rehab, and upgrade.
- Application forms and instructions are on the TSSWCB website: https://www.tsswcb.texas.gov/programs/flood-control.
- All sponsors responsible for the dam must sign the applications.

WORK IN PROGRESS

- 18 dam repairs will be contracted for construction in the next few months.
- Design work will begin on additional 18 dam repairs.
- 13 federal rehab projects are at various stages of planning, design, and construction.
- 9 new federal dam rehab planning starts in 2019.
- Designs are underway on 20 state-funded dam upgrades.
- $5 million state funds also available for dam maintenance.