WATER for TEXAS

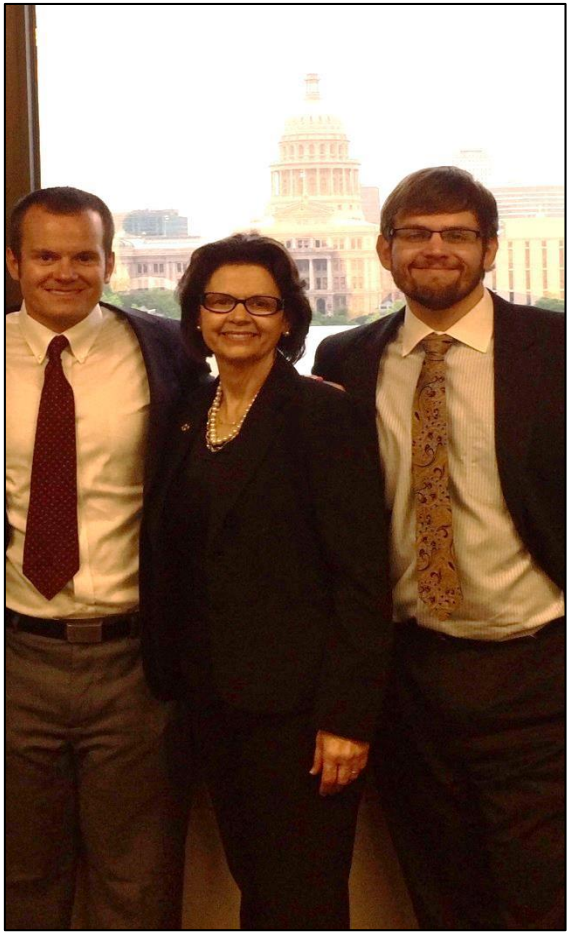
Water CONSERVATION for the Future

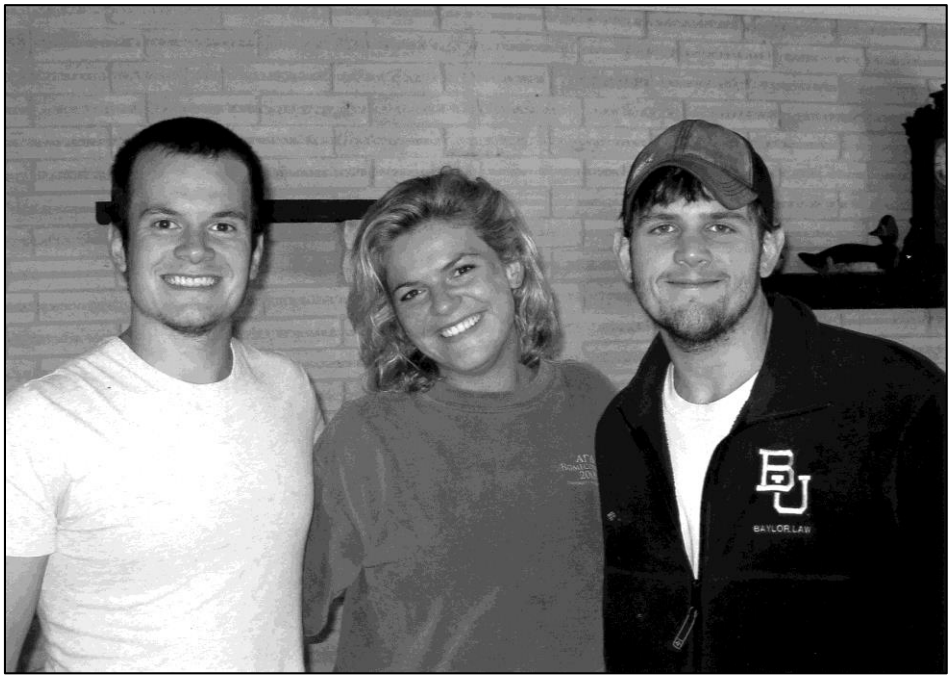
Kathleen Jackson, P.E.
Gulf Coast Water Conservation Symposium
March 22, 2018

Texas Water Development Board

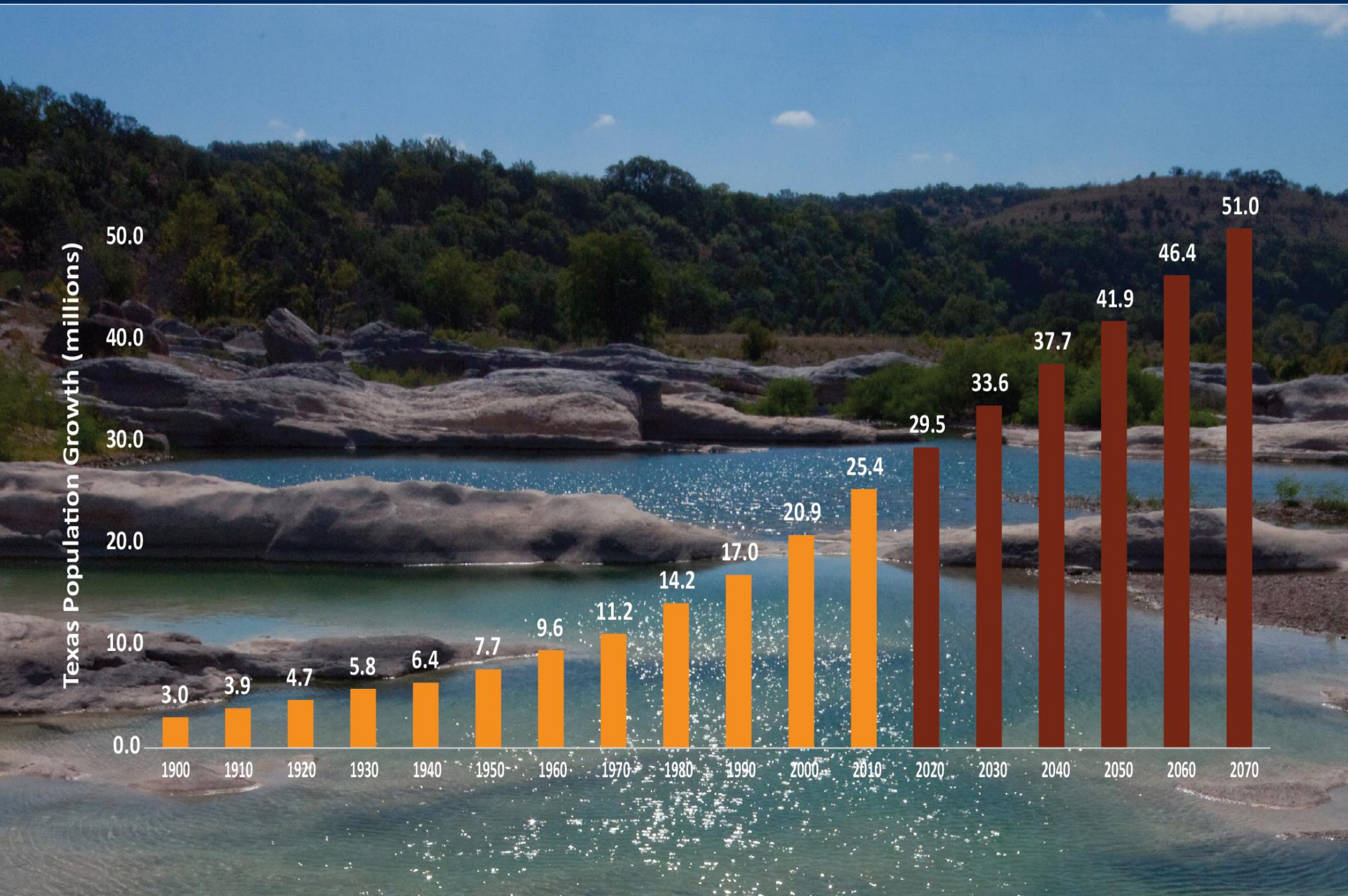
OUR MISSION

To provide leadership, information, education, and support for planning, financial assistance, and outreach for the conservation and responsible development of water for Texas.





HISTORIC AND PROJECTED TEXAS POPULATION GROWTH



HOW CAN WE PROMOTE RESILIENCY?

- **Conservation**
- **Reuse**
- **Brackish groundwater desal**
- **Seawater desal**
- **Aquifer storage and recovery**
- **Aquifers**
- **Reservoirs**

CONSERVATION AND REUSE

Russell Schreiber
Director of Public Works
City of Wichita Falls
Lake Arrowhead

Tom Kula
Executive Director, NTMWD
John Bunker Sands Wetland Center
Seagoville

REGIONAL WATER PLANNING GROUPS

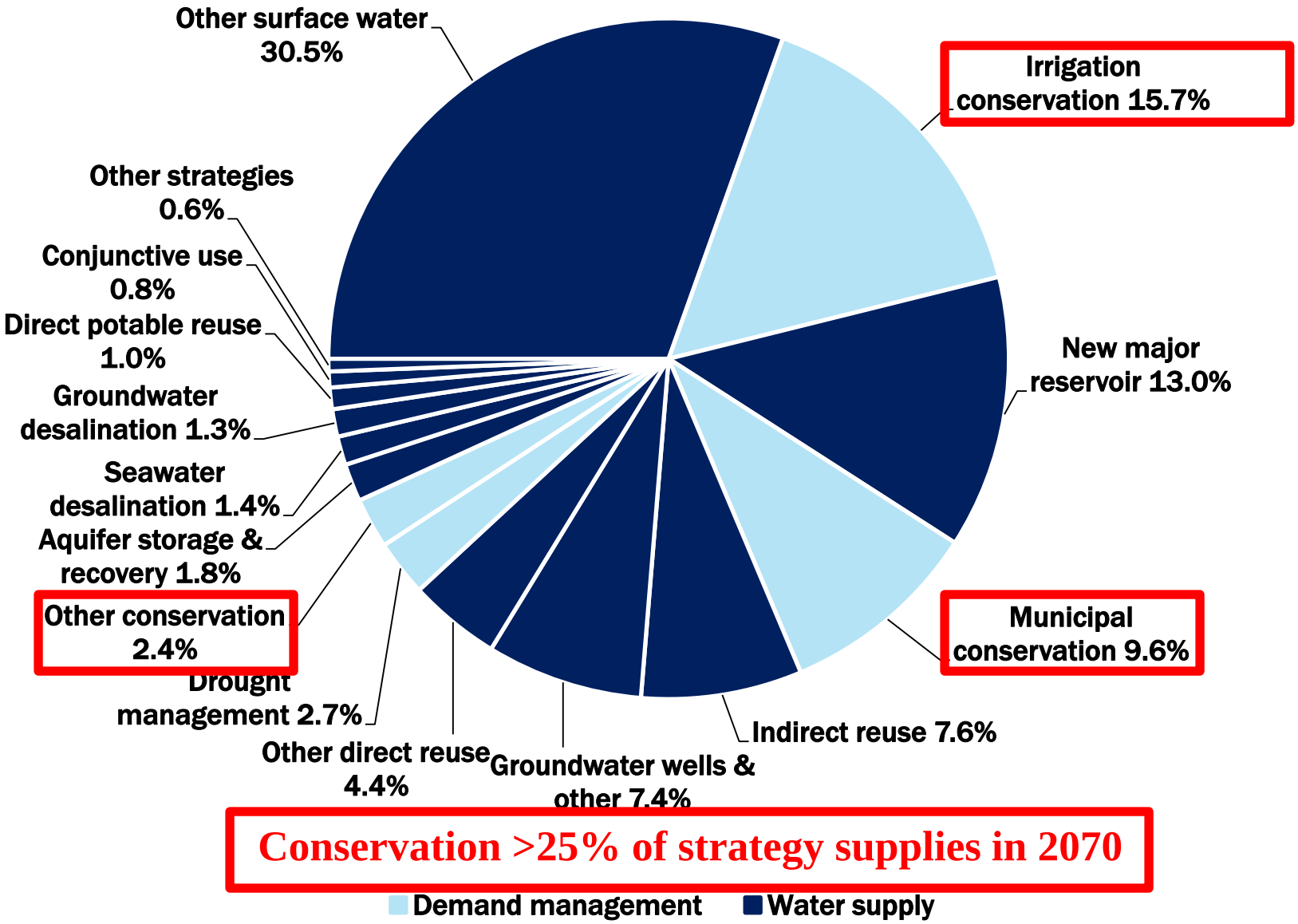
Region H

Region G

- Local Political Subdivision serves as administrator
- Public, consensus-driven
- Local/regional decision making process

Region K

SHARE OF WATER MANAGEMENT STRATEGIES IN 2070



CONSERVATION - 2017 STATE WATER PLAN

Water Supply Strategies 2020-2070

5,500 strategies

$63 billion

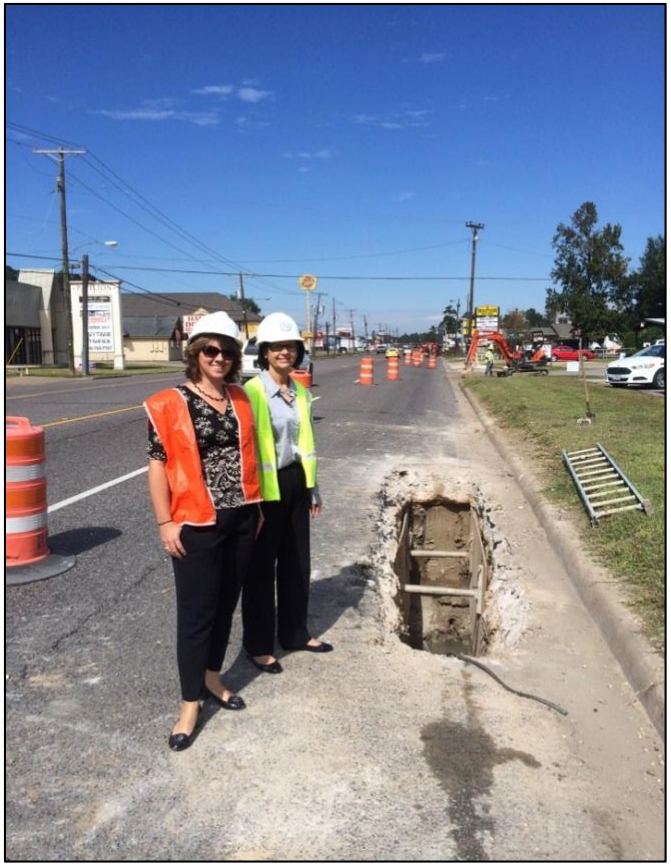
2012 Plan

- Total Cost: $55.6 billion
- Strategies: 3,750
- Conservation: $1 billion
- Conservation and Reuse: 34% of water volume in plan

2017 Plan

- Total Cost: $63 billion
- Strategies: 5,500
- Conservation: $4.4 billion
- Conservation and Reuse: 45% of water volume in plan

IMPROVING INFRASTRUCTURE = CONSERVING WATER



ONLINE 2017 STATE WATER PLAN

PLANNING REGION H

Totals by Decade (acre-feet/year)

	2020	2030	2040	2050	2060	2070
Demands	2,488,883	2,674,720	2,853,311	3,038,675	3,217,833	3,415,333
Existing Supplies	2,505,969	2,447,689	2,458,865	2,467,294	2,475,087	2,482,310
Needs (Potential Shortages)	347,034	554,592	699,392	846,420	983,955	1,161,764
Strategy Supplies	715,982	903,595	1,467,735	1,572,102	1,648,100	1,790,943

http://texasstatewaterplan.org

EXAMPLES OF PROJECTS REGION H IDENTIFIED TO ADDRESS POTENTIAL NEEDS

PLANNING REGION H

Recommended Projects

Total capital cost of recommended projects: **$10,878,701,123.**

Type to filter by project name

Project▲	Decade Online	Sponsor	Capital Cost
ALLENS CREEK RESERVOIR	2030	BRAZOS RIVER AUTHORITY; HOUSTON	$316,226,894
BRAZOS SALTWATER BARRIER	2030	DOW CHEMICAL USA	$55,771,408
BWA BRACKISH GROUNDWATER DEVELOPMENT	2020	BRAZOSPORT WATER AUTHORITY	$34,016,950
BWA CONVENTIONAL TREATMENT EXPANSION	2020	BRAZOSPORT WATER AUTHORITY	$15,951,976
CHCRWA GRP	2030	CENTRAL HARRIS COUNTY REGIONAL WATER AUTHORITY	$0
CHCRWA TRANSMISSION AND INTERNAL DISTRIBUTION	2030	CENTRAL HARRIS COUNTY REGIONAL WATER AUTHORITY	$23,207,659
CITY OF CONROE REUSE PROJECT	2020	CONROE	$0
CITY OF HOUSTON GRP	2020	HOUSTON	$0
CITY OF HOUSTON REUSE	2040	HOUSTON	$78,121,149
CITY OF HOUSTON TREATMENT EXPANSION - PHASE I	2040	HOUSTON	$183,404,685

1 2 3 4 5 Next

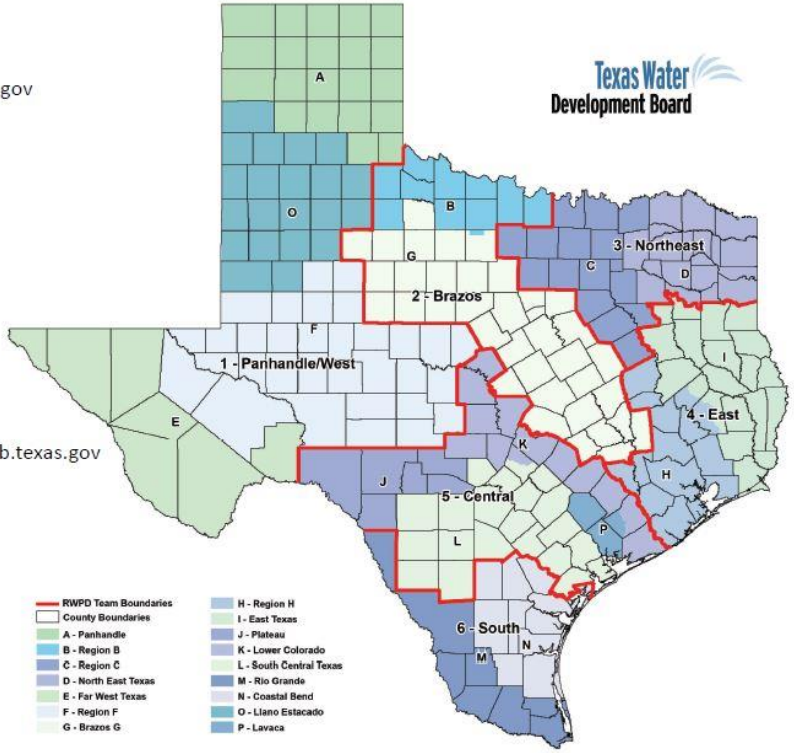
TWDB REGIONAL TEAMS

Team 1 Panhandle/West

- Lee Huntoon
- *Team Manager*

512-463-6021
lee.huntoon@twdb.texas.gov

Regional Water Project Teams



Team 2 Brazos

- Caaren Skrobarczyk
- *Team Manager*

512-475-1128
caaren.skrobarczyk@twdb.texas.gov

Team 3 Northeast

- Luis Farias
- *Team Manager*

512-475-4816
luis.farias@twdb.texas.gov

Team 4 East

- Nancy Richards
- *Team Manager*

512-463-0250
nancy.richards@twdb.texas.gov

Team 5 Central

- Dain Larsen
- *Team Manager*

512-463-1618
dain.larsen@twdb.texas.gov

Team 6 South

- Mireya Loewe
- *Team Manager*

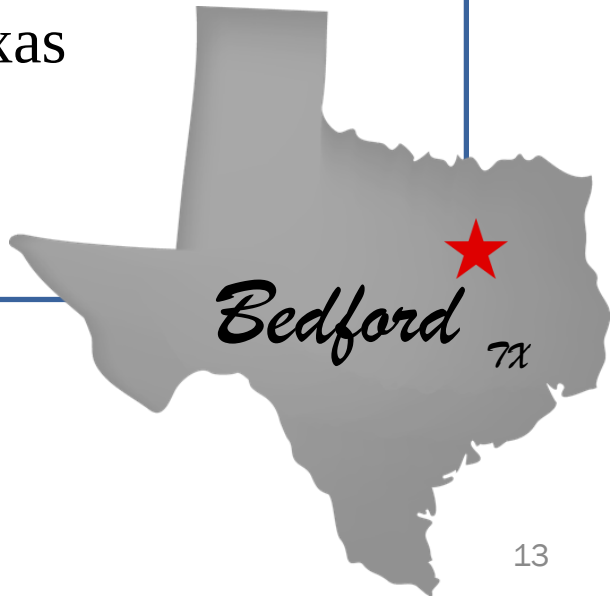
512-475-0590
mireya.loewe@twdb.texas.gov

TWDB FUNDED PROJECT

City of Bedford

Water Distribution Improvements & Automatic Meter Readers

- Replace cast iron and asbestos cement distribution lines
- Replace aging and inaccurate water meters
- State Water Implementation Fund for Texas multi-year commitment of $90,000,000



CITY OF CASTROVILLE

Water Line Replacement

DWSRF = $3,850,000

East Side Lift Station & Force Main

CWSRF = $3,425,000

WWTP Capacity Expansion

CWSRF = $10,550,000

City Administrator Marie Gelles

Small Community Success Story
Population = <3,000

TWDB FUNDED PROJECTS

Hidalgo County Irrigation District #1

SWIFT - $7,100,000
Ag Irrigation Conveyance System Improvements

United Irrigation District

SWIFT - $8,100,000
Off Channel Storage Facility

AGRICULTURAL WATER CONSERVATION GRANTS

TWDB provides funding for projects that research, educate, demonstrate, and implement proven **best management practices** to conserve water and increase irrigation water use efficiency.

RAINWATER HARVESTING

Martin Family Farms
Terry County, Texas Panhandle
Winner of 2016 TWDB Rain Catcher Award in the Ag Category

IMPACT OF HURRICANE HARVEY FLOODING – SOUTHEAST TEXAS

TWDB PRIORITIES ON FLOOD:

- More flood gages
- More outreach
- More flood grants
- More flood modeling
- More weather stations
- More functionality to TexasFlood.org
- More functionality to TexMesonet.org
- Collect LIDAR data for flood modeling
- State Flood Assessment

STATE FLOOD ASSESSMENT FOR TEXAS

STATE FLOOD ASSESSMENT

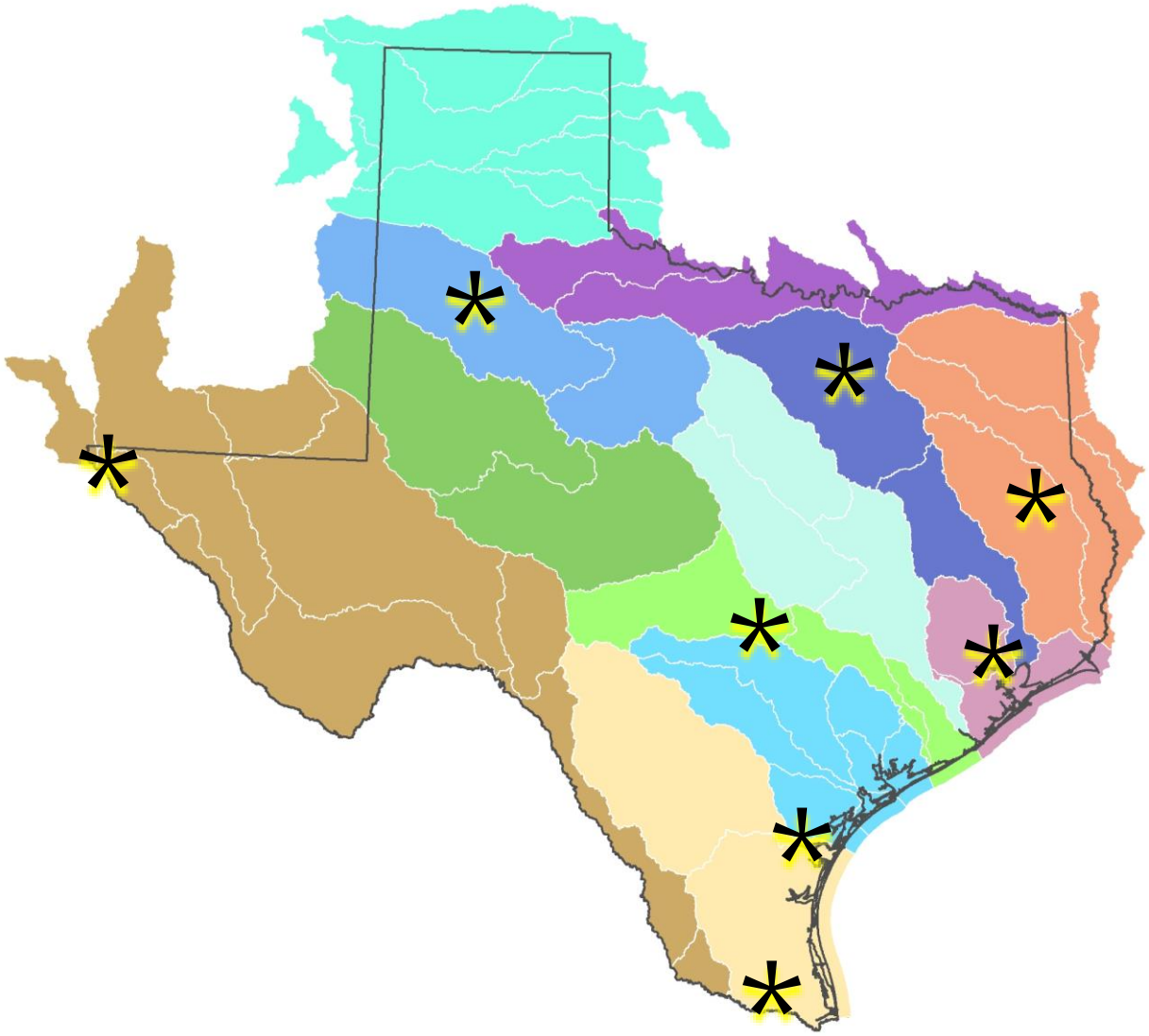
www.TexasFloodAssessment.com

STATE FLOOD ASSESSMENT

- Assess risks and roles
- Estimate flood mitigation costs, and
- Determine the future of flood planning in Texas

GOAL: Report available December 2018

EXTENSIVE OUTREACH



GET ENGAGED TO EFFECT CHANGE!

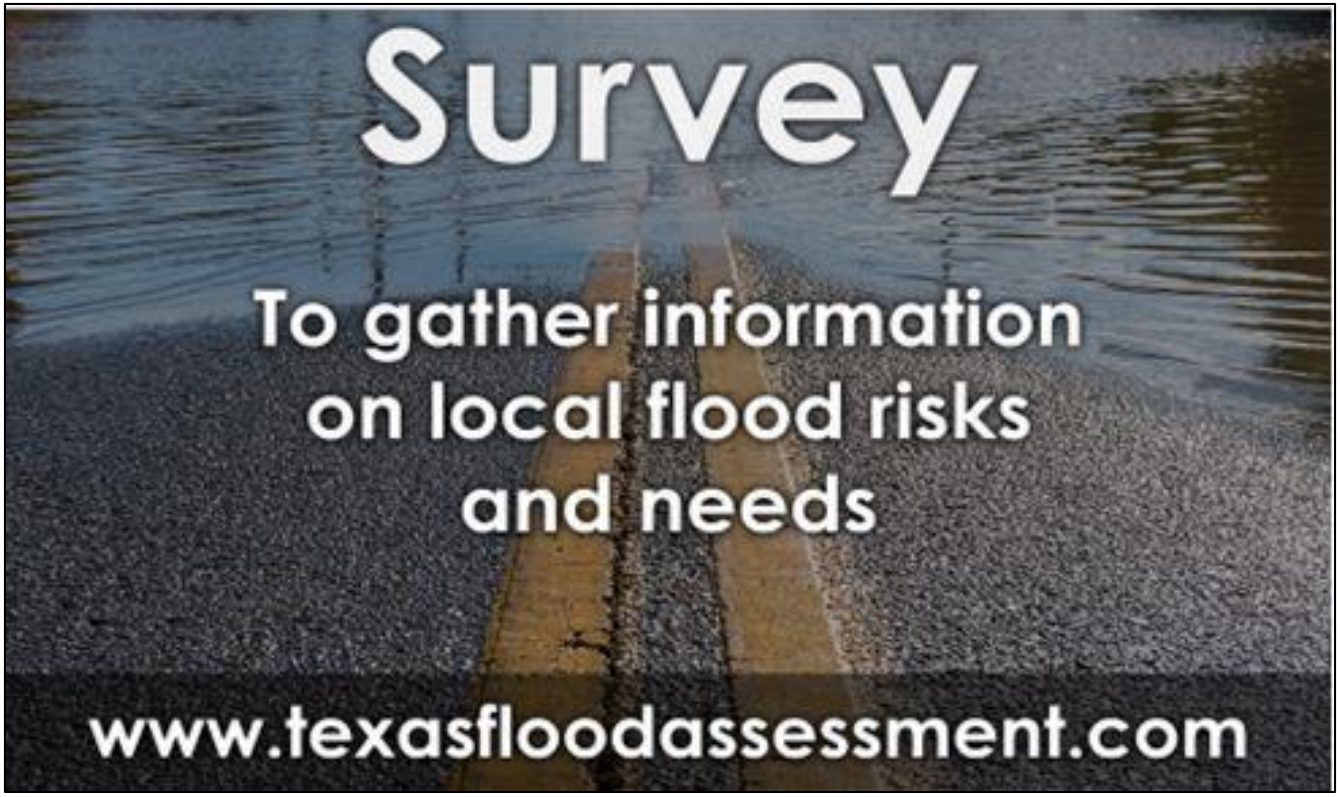
- Attend State Flood Stakeholder Workshop
- Participate in Flood Assessment Survey
- Attend Water Loss Audit and Leak Detection Workshop
- Attend Regional Financial Assistance Workshop

STATE FLOOD STAKEHOLDER WORKSHOPS

DATE	LOCATION
March 27	Austin (LCRA - Dalchau Service Center)
March 29	El Paso (El Paso Water - TecH_2O Center)
April 3	Nacogdoches (Stephen F. Austin State University)
April 5	Lubbock (Texas Tech University - Innovation Hub)
April 10	McAllen (McAllen Public Library)
April 17	Arlington (North Cen. TX Council of Governments)
April 20	Houston (Harris County Flood Control District)
April 25	Corpus Christi (Texas A&M University-Corpus Christi)

*All workshops are 10:00 a.m. – 12:00 p.m.

GET ENGAGED IN OUR FLOOD ASSESSMENT!



Participate in the survey!

TWDB REGIONAL WATER LOSS AUDIT & LEAK DETECTION WORKSHOPS

LOCATION	DATE	TIME
Lubbock	3/27/2018	8:30 a.m. - 12:30 p.m.
Amarillo	3/28/2018	8:30 a.m. - 12:30 p.m.
Fort Worth	4/4/2018	8:30 a.m. - 12:30 p.m.
Mount Pleasant / Sulphur Springs	4/10/2018	8:30 a.m. - 12:30 p.m.
Nacogdoches / Lufkin	4/11/2018	8:30 a.m. - 12:30 p.m.
Waco	TBD	TBD

TWDB REGIONAL FINANCIAL ASSISTANCE WORKSHOPS

LOCATION	DATE	BUILDING NAME	ADDRESS
Sugar Land	April 10, 2018 – 9:00 a.m.	Sugar Land Public Works – Training Room	111 Gillingham Lane Sugar Land, TX
Pleasanton	May 8, 2018 – 9:00 a.m.	Pleasanton Civic Center – Main Exhibit Hall	115 N. Main St Pleasanton TX
Beeville	June 5, 2018 – 1:00 p.m.	Beeville Community Center – Room 101	111 E. Corpus Christi Street Beeville, TX

THANK YOU TO OUR CHAMPIONS IN WATER CONSERVATION!

SWIFT Funding Workshop
Hosted by the Sierra Club (November 2016)

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