

# Texas Water Development Board

## *Infrastructure Project Financing*

# Topics

- What is the Texas Water Development Board (TWDB)?
- What financing tools do we offer?
- How can the TWDB help you?



Texas has always been associated with opportunity, fertility, and growth.





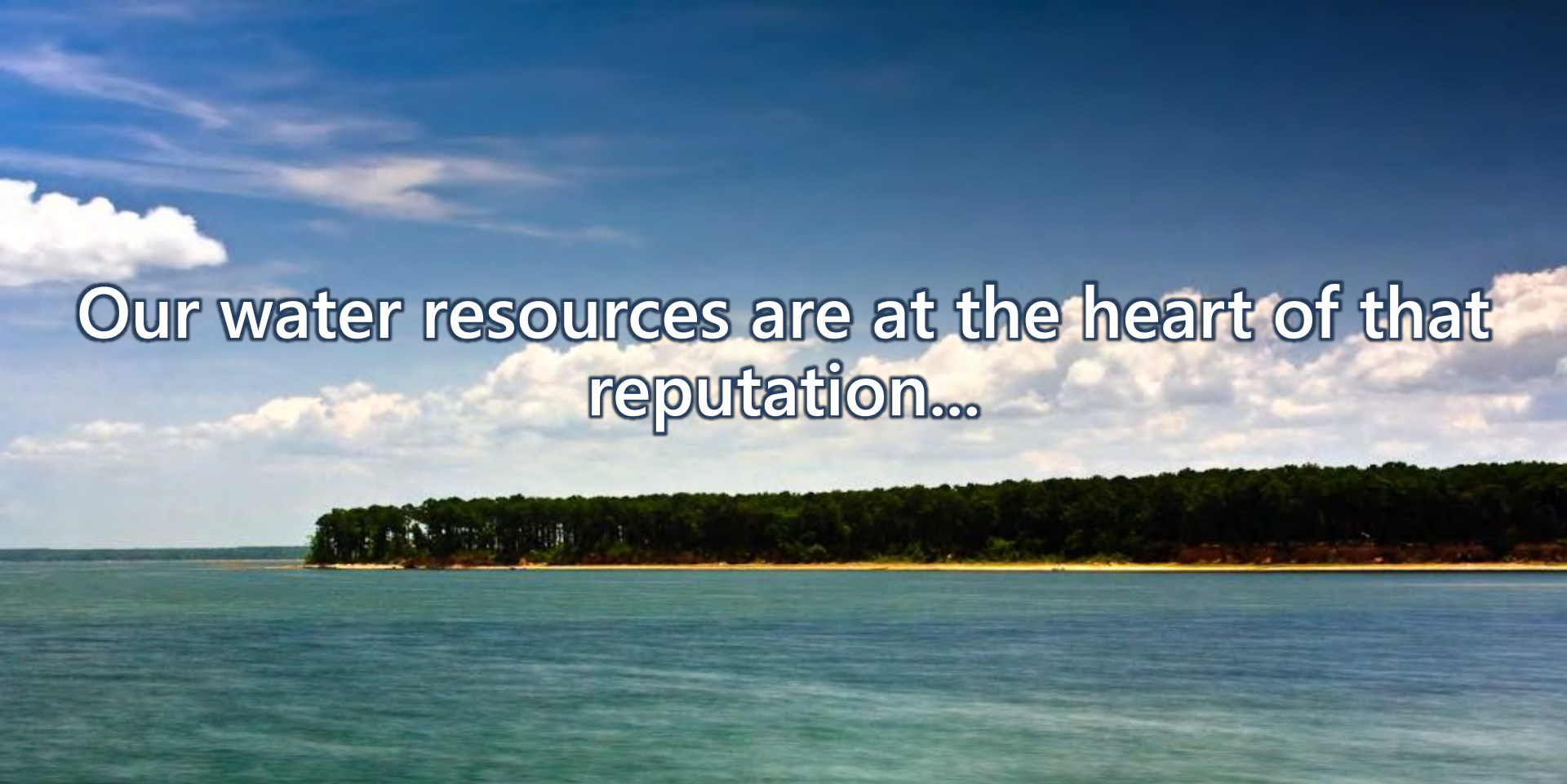
Texas has always been associated with opportunity, fertility, and growth.





Texas has always been associated with opportunity, fertility, and growth.





Our water resources are at the heart of that reputation...



# *TWDB History is Texas History*

...and sometimes they are in short supply.



# *TWDB History is Texas History*

1822

- Central Texas colonists led by Stephen F. Austin lose their initial food crops to drought

1884

- Settlers in West Texas return to the East after crops fail

1956

- **Drought of Record:** severe statewide drought

1957

- **Texas Water Development Board** created; statewide water planning begins

2011

- Severe statewide drought returns



# *TWDB History is Texas History*

1869

- Bastrop evacuates as flood waters reach 46 feet

1925

- Flooding destroys 13 bridges and drowns 51 people in San Antonio

1935

- Downtown Houston inundated by flooding of the Buffalo Bayou

1949

- Fort Worth flooded by the Trinity River, causing \$10M in damage and killing 10 people

1952

- Flooding in Central Texas kills 5 and destroys 17 homes

2015

- Blanco river rises 36ft in a few hours, washing away entire residential blocks in Wimberley

# A Toolbox for Public Water Utilities

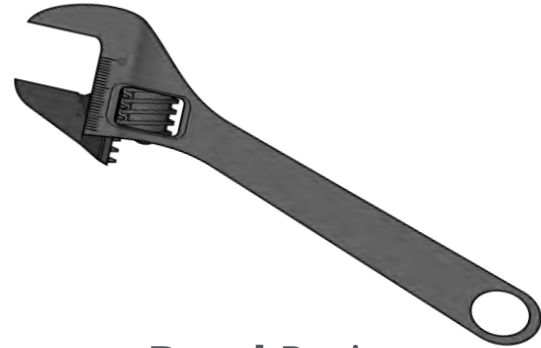
The legislature has entrusted the TWDB with a set of financing tools to help public utilities achieve their infrastructure goals.





# A Toolbox for Public Water Utilities

Each tool is unique, and some are designed for special purposes



**Rural** Projects

# A Toolbox for Public Water Utilities

Each tool is unique, and some are designed for special purposes

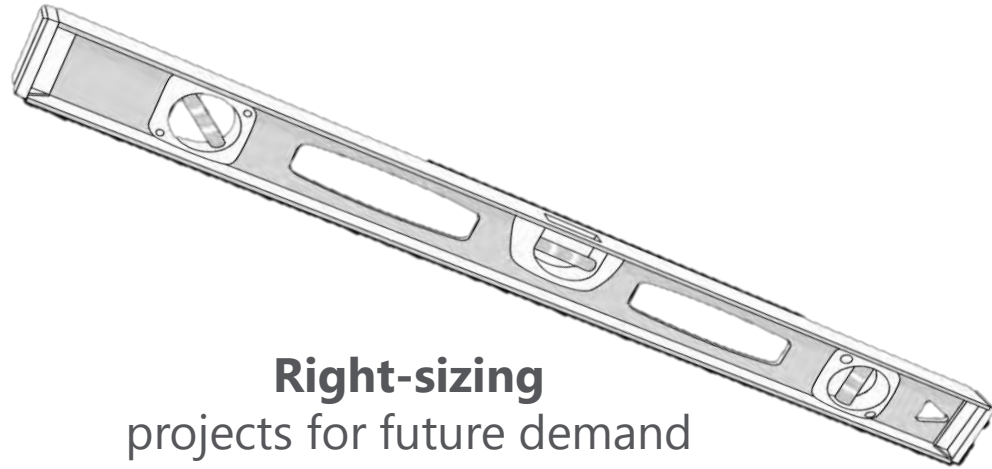


Projects serving **Economically Distressed** Areas



# A Toolbox for Public Water Utilities

Each tool is unique, and some are designed for special purposes



**Right-sizing**  
projects for future demand

# A Toolbox for Public Water Utilities



Agricultural Water Conservation Loans/Grants (AG)



Clean Water State Revolving Fund (CWSRF)



Drinking Water State Revolving Fund (DWSRF)



Economically Distressed Areas Program (EDAP)



Rural Water Assistance Fund (RWAf)



State Participation Program (SP)



State Water Implementation Fund for Texas (SWIFT)



Texas Water Development Fund (DFund)



# How Can These Tools Work for You?

AAA Bond Rating

Funding to  
accommodate projects  
of all sizes

Some projects qualify  
for combined funding  
through multiple  
programs








All project phases are  
eligible for funding

# Eligible Applicants

	SWIFT	CWSRF	DWSRF	EDAP	RWAF	SP	DFund
Political Subdivisions							
Non-profit WSC's							
Investor-owned Utilities							



# Eligible Projects

	SWIFT	CWSRF	DWSRF	EDAP	RWAF	SP	DFund
Water Supply – Current Need							
Water Supply – Future Need							
Water Treatment							
Water Transmission & Distribution							
Potable Reuse							
Wastewater Collection							
Wastewater Treatment							
Nonpoint Source Pollution Control							
Flood Control/ Stormwater Management							

## State Revolving Fund (SRF) Programs

- Partially funded by the US Environmental Protection Agency (EPA)
- Subsidized financing
- Partial principal forgiveness available for certain project types
- Multi-year Commitment option



# Drinking Water State Revolving Fund (DWSRF)



Offers financing 125 basis points below the applicant's market interest rate



Repayment terms up to 30 years



Partial principal forgiveness available for Disadvantaged Communities, Very Small Systems, Urgent Need projects, and projects with Green components

# Disadvantaged Community Eligibility

- 75% or less of state-wide Annual Median Household Income (AMHI)
  - State's AMHI is \$53,207 (per 2015 ACS data)
  - $\$53,207 \times .75 = \mathbf{\$39,905}$  eligibility threshold
- Documented using Census information or a household survey



## Eules: Automated Metering & Leak Detection

- Addresses increased demand on existing water infrastructure
- Helps defer the need for additional water supply and treatment facilities
- Replacement of about 14,000 meters
- Qualified for loan forgiveness (Green project)
- \$5.5 million total DWSRF commitment



## Eules: Automated Metering & Leak Detection

- Addresses existing water supply issues
- **Cost savings: \$1,625,882!**
- Helps defer need for additional water supply and treatment facilities
- Replacement of about 14,000 meters
- Qualified for loan forgiveness (Green project)
- \$5.5 million total DWSRF commitment



# Clean Water State Revolving Fund (CWSRF)



Offers financing up to 155 basis points below the applicant's market interest rate



Repayment terms up to 30 years



Partial principal forgiveness available for Disadvantaged Communities and projects with Green components



## Sulphur Springs: WWTP Upgrade

- Upgrades required in order to maintain treatment standards
- Replacing aging infrastructure while improving treatment capacity
- New clarifiers, pump station, blower facility, splitter structure, and SCADA system
- \$18,200,000 total financing through CWSRF



## Sulphur Springs: WWTP Upgrade

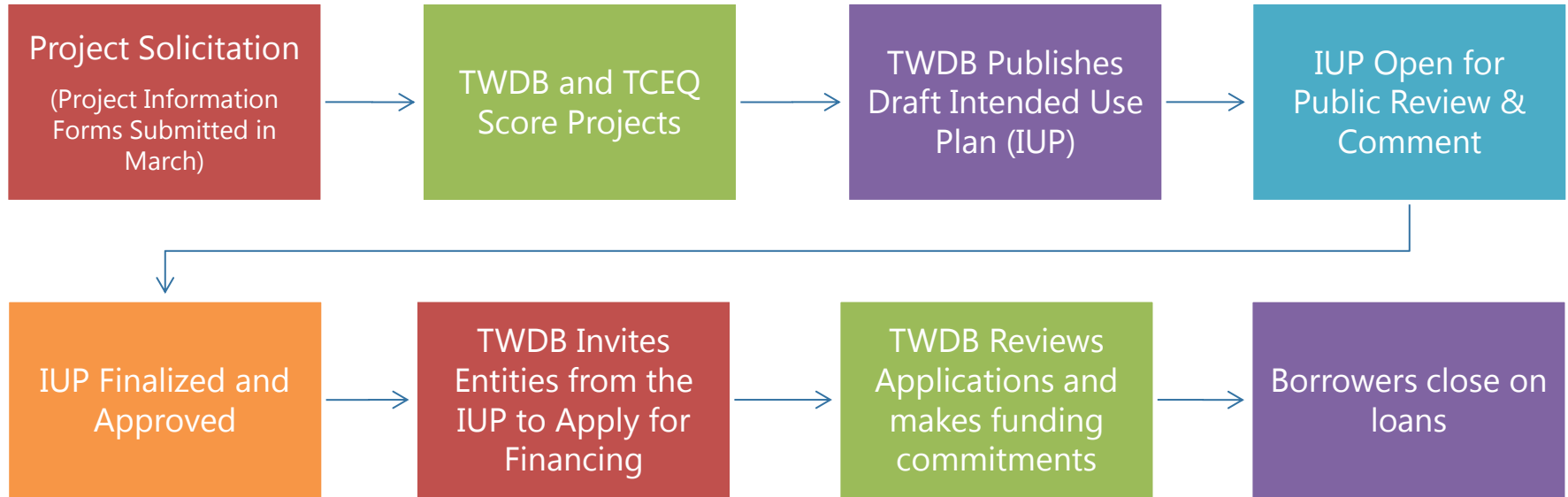
- Upgrades required in order to maintain

**Cost savings: \$2,268,503!**

- Rep while improving treatment capacity
- New clarifiers, pump station, blower facility, splitter structure, and SCADA system
- \$18,200,000 total financing through CWSRF

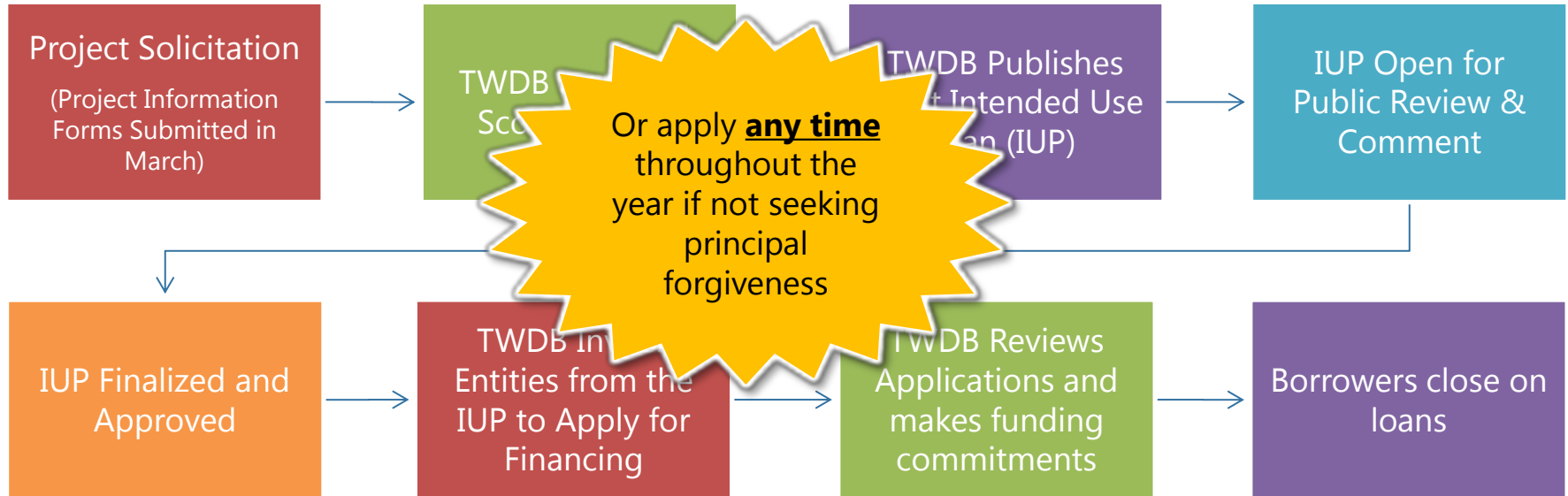


# SRF Annual Funding Cycle





# SRF Annual Funding Cycle





# Primary SRF Program Requirements

- Disadvantaged Business Enterprise (DBE) Procurement
- Environmental Review
- Davis-Bacon prevailing wage rates
- American Iron & Steel



## State Funded Programs

- Funded with bond proceeds (AAA bond rating)
- Loans based on TWDB's cost of funds
- Grants available (EDAP)
- Subsidization and deferral available (SWIFT)





## State Water Implementation Fund for Texas

### Eligible Projects

- Recommended Water Management Strategies in the state water plan
- Includes a wide range of water supply and conservation projects

### Financing Options

- Low-interest loans
- Deferred loans
- Board Participation
- Multi-year commitments

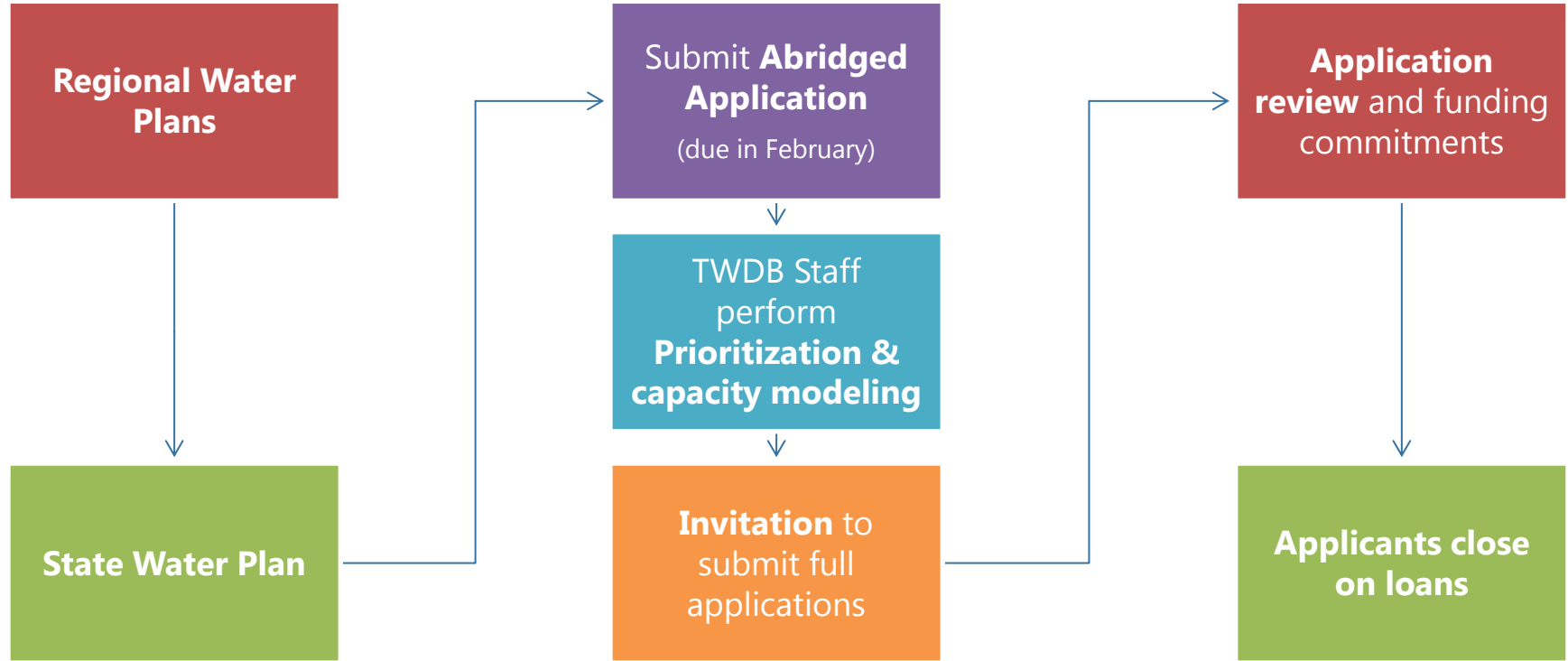
# New for 2017

- Low-interest loan interest rate subsidies specified for taxable financing and Rural entities

Term	Low-Interest Loans		Subsidized Rural/Agriculture	
	Tax-Exempt	Taxable	Tax-Exempt	Taxable
20 Years	35%	28%	50%	40%
21-25 Years	25%	20%	33.5%	27%
26-30 Years	20%	16%	26.15%	21.5%

- Rural: communities with population 10,000 or fewer, located outside extraterritorial jurisdiction of any city with population of 500,000 or greater.

# SWIFT Funding Cycle





# Upper Trinity Regional Water District: Lake Ralph Hall

- Planning, design, and acquisition phases
- Expected firm yield of 30 mgd for municipal supply
- Earthen dam, intake/pump station, bridge, road relocation, pipeline, etc.
- \$44,680,000 SWIFT commitment
- Combination of Deferred Loan and Board Participation



# Upper Trinity Regional Water District: Lake Ralph Hall

- Planning, design, and acquisition phases

- Expenses

**Cost savings: \$8,301,303!**

(on \$29 million Deferred Loan)

- Earthen dam, intake, pump station, bridge, road relocation, pipeline, etc.
- \$44,680,000 SWIFT commitment
- Combination of Deferred Loan and Board Participation



**APPLICATION FOR FINANCIAL ASSISTANCE  
FOR WATER AND WASTEWATER INFRASTRUCTURE PROJECTS**

**NOT REVIEWED**  
This application is comprehensive, containing all loan information, analysis and application for water and wastewater infrastructure financing. It is not to be used for minor changes. The Texas Water Development Board (TWDB) does not accept applications for minor changes. Applications are accepted for review and approval for both the application and TWDB staff. The application is used to provide a policy decision, including whether to apply corrections.

Please submit one double-sided original and one indexed, electronic copy, via electronic storage media such as CD or flash drive using MS Word, Excel and/or Adobe Acrobat.

Please submit your application to:

Texas Water Development Board  
Water Supply and Infrastructure-Regional Water Planning and Development  
P O Box 13231  
1700 N. Congress Avenue, 5<sup>th</sup> Floor  
Austin, Texas 78711-3231  
(78701 for courier deliveries)

A complete application consists of all of the applicable information and forms requested in this document. When preparing this application please review the Application and all Guidance and Forms, listed at the end.

For more information, please contact your Regional Project Implementation Team at:

[http://www.twdb.texas.gov/financial/programs/swift/regional\\_project\\_teams.asp](http://www.twdb.texas.gov/financial/programs/swift/regional_project_teams.asp)

Thank you.

**TWDB Use Only**

Name of Applicant: \_\_\_\_\_

Date application received: \_\_\_\_\_

Date administratively complete: \_\_\_\_\_

SWIFT is the only state funded program with an application deadline. Applications for the other state programs are accepted at any time.

## **EDAP** assists projects in areas where:

- Income is not greater than 75% of statewide median
- Infrastructure is substandard or doesn't exist
- Model Subdivision Rules (MSR's) are in place to prevent further substandard development

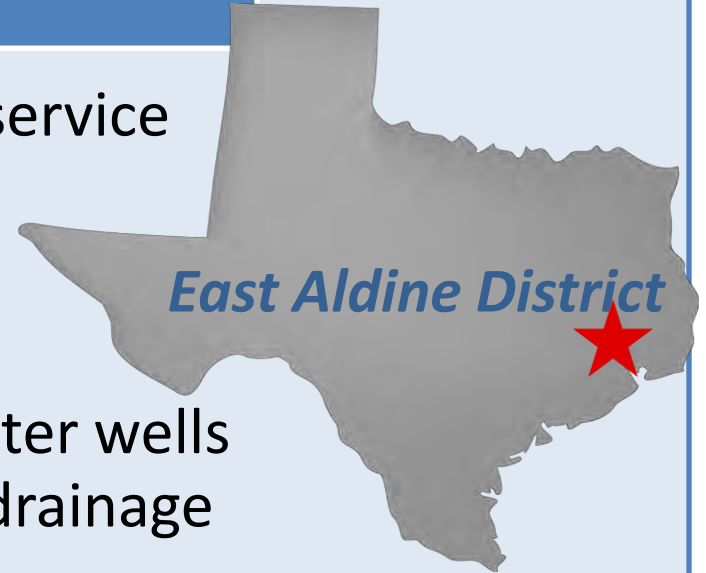


# EDAP offers **GRANTS**

- Grant/loan ratio depends on project phase & affordability calculation
- Nuisance determination required for > 50% grant
- Popular program...current bonding capacity has been met
- Stay tuned for announcements regarding capacity for next biennium

## East Aldine Management District

- First-time water & wastewater service to two areas
- Documented > 50% failure rate on private septic systems
- Small lot size means shallow water wells are less than 50 ft. from septic drainage
- TDSHS Nuisance Determination
- \$10,912,331 total EDAP assistance



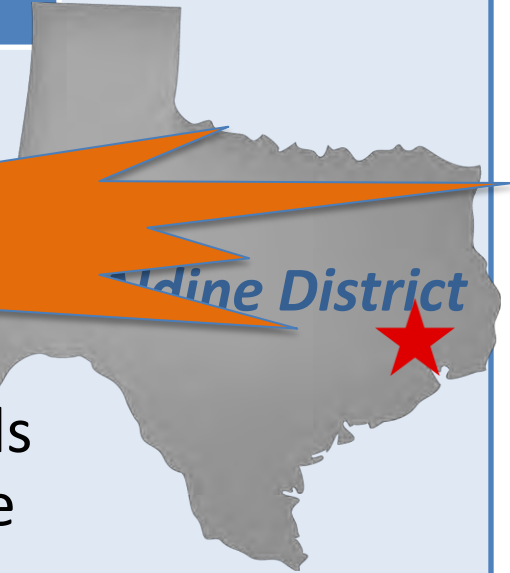
## East Aldine Management District

- First-time water & wastewater service to two areas

**\$10,335,331 GRANT!**

- Decree rat

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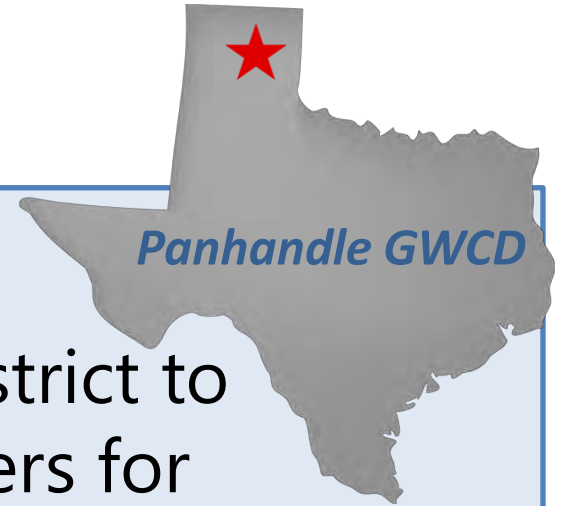


## Ag Conservation Loans

- Projects that improve irrigation efficiency
- Purchase & installation of devices to measure use of irrigation water
- Technical assistance programs
- Research, demonstration, technology transfer, or educational programs
- ...and more



## Panhandle GWCD



- TWDB financing allows the District to make loans to individual farmers for more efficient irrigation systems.
- \$2,000,000 loan

## Panhandle GWCD



**Cost Savings: \$206,475**

- TWDB will make loan available to farmers for more efficient irrigation systems.
- \$2,000,000 loan

# Ag Conservation Grants



- Water use monitoring equipment, demonstration & technology transfer, irrigation efficiency studies
- [Cameron.Turner@twdb.texas.gov](mailto:Cameron.Turner@twdb.texas.gov)

# Flood Protection Grant Programs



## Flood Protection Planning

- Grants to conduct feasibility studies for structural and non-structural solutions to flood hazards in an entire watershed



## Flood Mitigation Assistance

- Federal funding for cost-effective measures to reduce or eliminate long-term flooding risk



## Severe Repetitive Loss

- Federal funding to assist implementation of mitigation measures to reduce or eliminate long-term risk



# Primary State Program Requirements

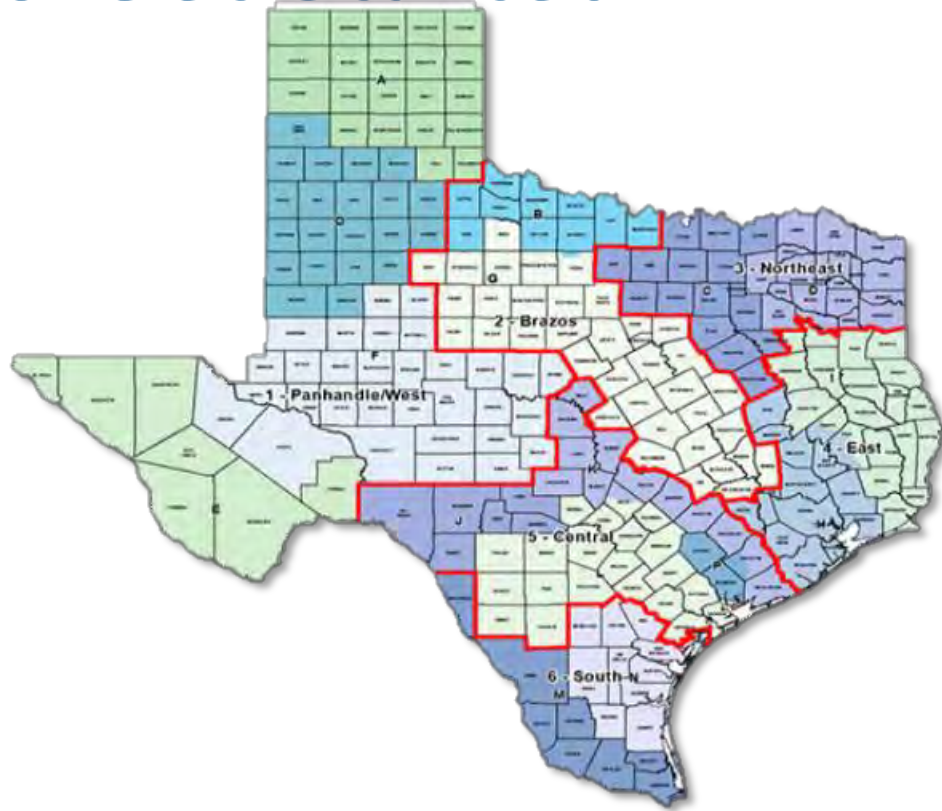
- Water Conservation and Drought Contingency plans
- Environmental Review
- US Iron & Steel (except SWIFT)
- Water loss threshold requirements



# How to Get Started

## CONTACT US!

<b>Team 1</b> Panhandle/West Regions: A/O/E/F	<b>Lee Huntoon</b> (512) 463-6021
<b>Team 2</b> Brazos Regions: G/B	<b>Caaren Skrobarczyk</b> (512) 475-1128
<b>Team 3</b> Northeast Regions: C/D	<b>Luis Farias</b> (512) 475-4816
<b>Team 4</b> East Regions: H/I	<b>Nancy Richards</b> (512) 463-0250
<b>Team 5</b> Central Regions: J/K/L/P	<b>Dain Larsen</b> (512) 463-1618
<b>Team 6</b> South Regions: M/N	<b>Mireya Loewe</b> (512) 475-0590



# Pre-Application Meetings



\* Return to previous screen

- General Info
  - Intro
  - Application Roles \*
  - Legal Authority
  - General Info
  - Associated PIF(s)
  - Project Desc
  - Officers & Members
  - Daily Contact
  - Contributors
  - Contributor docs
  - County
  - Population
  - Funding Program
  - Other Funding
  - Project Type
- Legal
  - Revenue Pledge
  - Resolution and Affidavit
  - CCN & Enforcement
  - Service Area
- Financial
  - Water/Wastewater
  - Issues
  - Taxing Authority
  - Sales Tax & Tax Status
  - Debt Repayment
  - Statements
  - Outstanding Debt
  - Largest Employers
  - Bond Ratings
  - Another Entity

## Texas Water Development Board Online Application

Editing

Welcome to the Texas Water Development Board's Online Application (OLA). OLA allows entities to apply for financial assistance from any of the TWDB's funding programs.

Applications for State Revolving Funds and the SWIFT must first receive an invitation to apply for funds from those programs. Applications for other funding programs may be submitted at any time.

Prior to submitting an application for financial assistance, a Pre-Application Meeting with TWDB staff is required. If you have not had a Pre-Application Meeting or would like more information about the application contact the TWDB Team Manager for your area [http://www.twdb.texas.gov/contact/doc/RWPD\\_Teams.pdf](http://www.twdb.texas.gov/contact/doc/RWPD_Teams.pdf)

**Online Loan Application System**  
<http://ola.twdb.texas.gov>

# Other TWDB Resources



## Project Financing

- Water
- Wastewater
- Flood Control
- Nonpoint Source Pollution Control



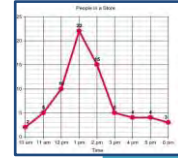
## Science

- Groundwater availability
- Environmental flows
- Lake surveys
- Conservation
- Innovative Technologies
- TexMesonet (Weather Data)



## Planning

- State Water Plan
- Interface with regional water planning groups
- Water Use Surveys



## Data

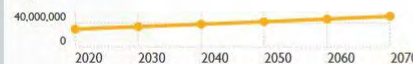
- State's official repository for mapping & GIS data
- Demographics
- Flood Data
- Interactive State Water Plan



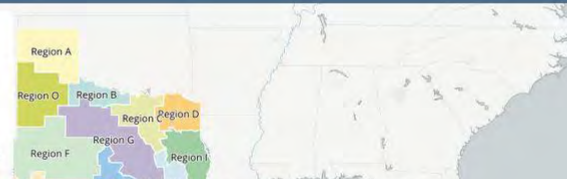
View data for All of Texas GO

## TEXAS

Population



SHOW DATA TABLE



# Interactive State Water Plan

([www.TexasStateWaterPlan.org](http://www.TexasStateWaterPlan.org))

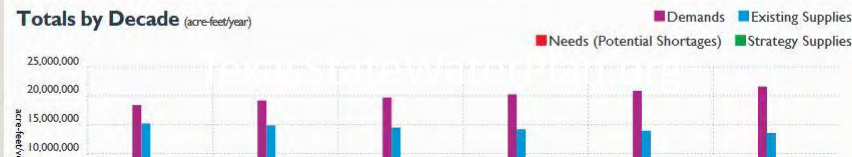
© OpenStreetMap contributors, © CartoDB

plans, the plan addresses the needs of all water user groups in the state – municipal, irrigation, manufacturing, livestock, mining, and steam-electric power – during a repeat of the drought of record that the state suffered in the 1950s. The regional and state water plans consider a 50-year planning horizon: 2020 through 2070.

This website lets water users statewide take an up-close look at data in the 2017 State Water Plan and how water needs change over time by showing:

- projected water demands,
- existing water supplies,
- the relative severity and projected water needs (potential shortages),
- the water management strategies recommended to address potential shortages, and
- recommended capital projects and their sponsors.

### Totals by Decade (acre-feet/year)

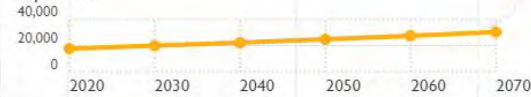




# MOUNT PLEASANT

Water User Group in Titus

Population



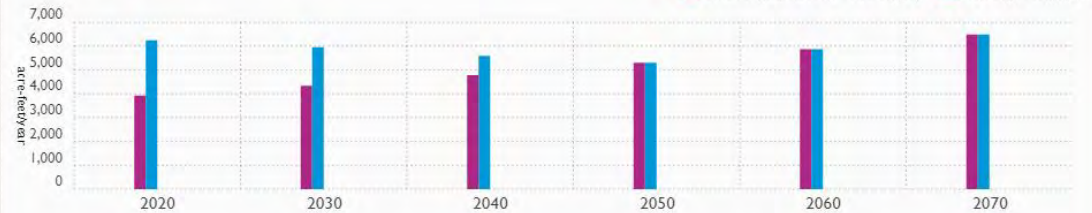
SHOW DATA TABLE



© OpenStreetMap co

MOUNT PLEASANT

Totals by Decade (acre-feet/year)

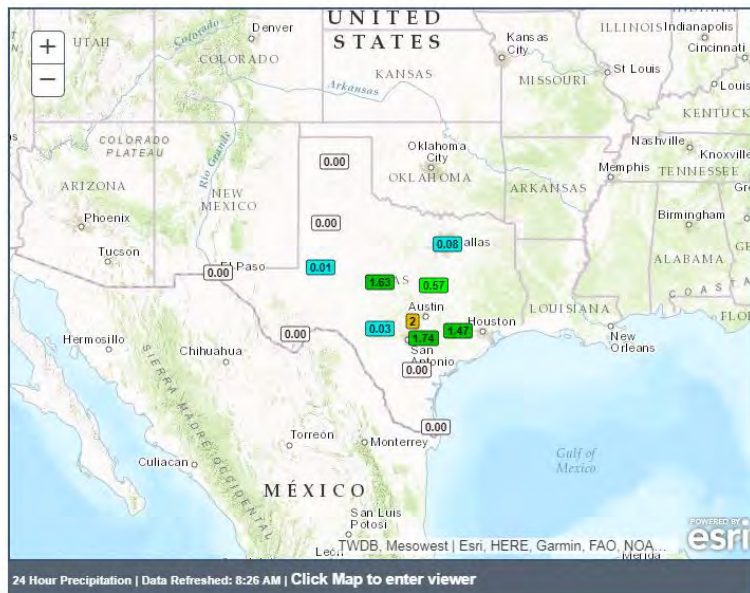


	2020	2030	2040	2050	2060	2070
<b>Demands</b>	3,918	4,334	4,780	5,299	5,871	6,481
<b>Existing Supplies</b>	6,240	5,948	5,585	5,299	5,871	6,481
<b>Needs (Potential Shortages)</b>	0	0	0	0	0	0
<b>Strategy Supplies</b>	(none)	(none)	(none)	(none)	(none)	(none)

MOUNT PLEASANT

Water Management Strategies (acre-feet/year)

[Weather](#) [Forecast](#) [Historical Weather](#) [Data Services](#) [About](#)



## 2017 Hurricane Season

June 1st to November 30th

[TxDOT Hurricane Info](#)

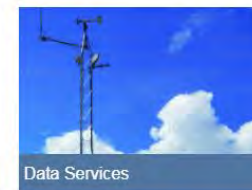
[Texas Emergency Preparedness](#)

Austin, TX

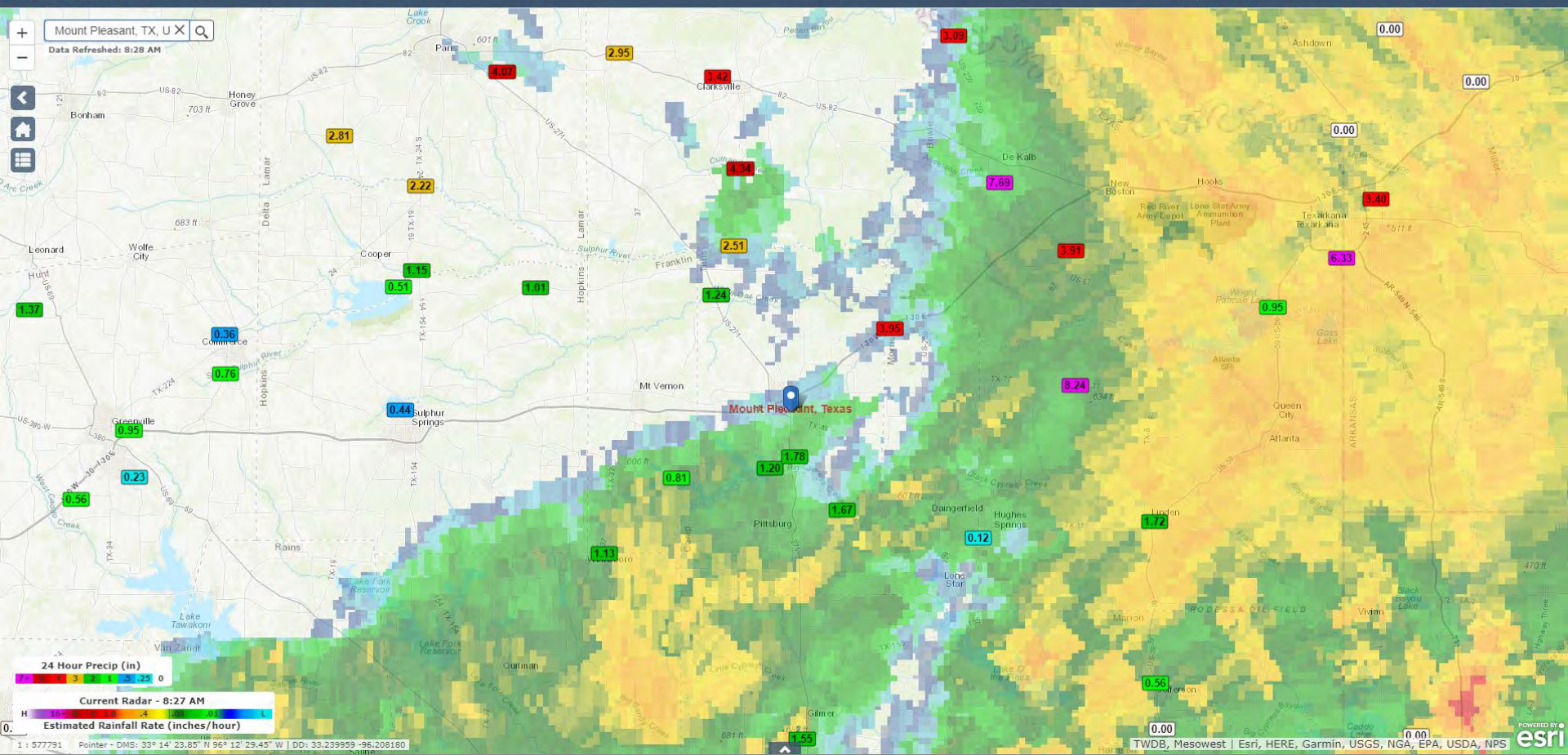
Monday (8/7/2017) | Showers And Thunderstorms | ( 92°F / 75°F )

National Weather Service Forecast

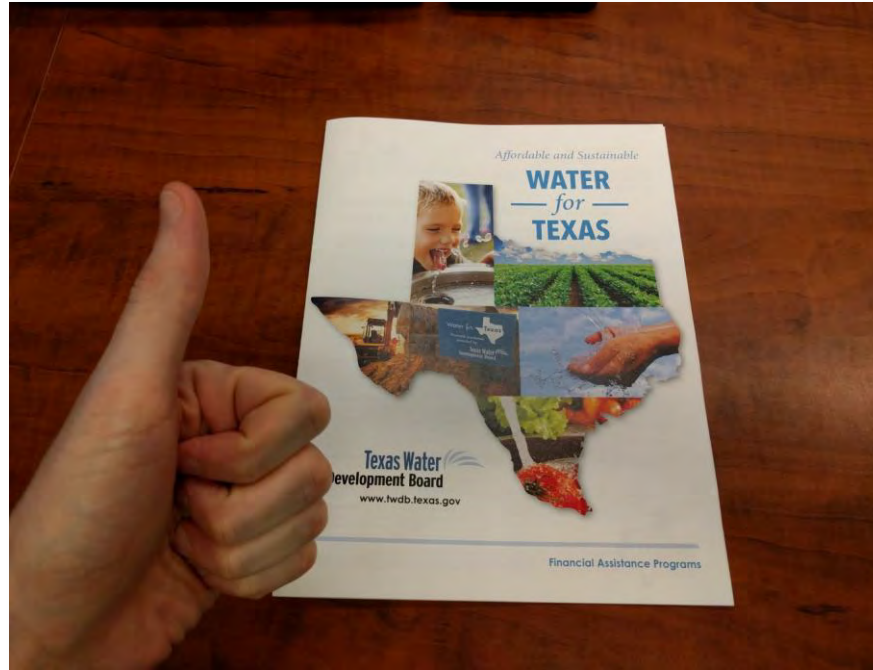
Today: 92°F	Tuesday: 93°F	Wednesday: 93°F
100% → 60%	50% → 40%	40% → 30%
Showers And Thunderstorms	Chance Showers And Thunderstorms	Chance Showers And Thunderstorms







# Financial Assistance Programs Handbook







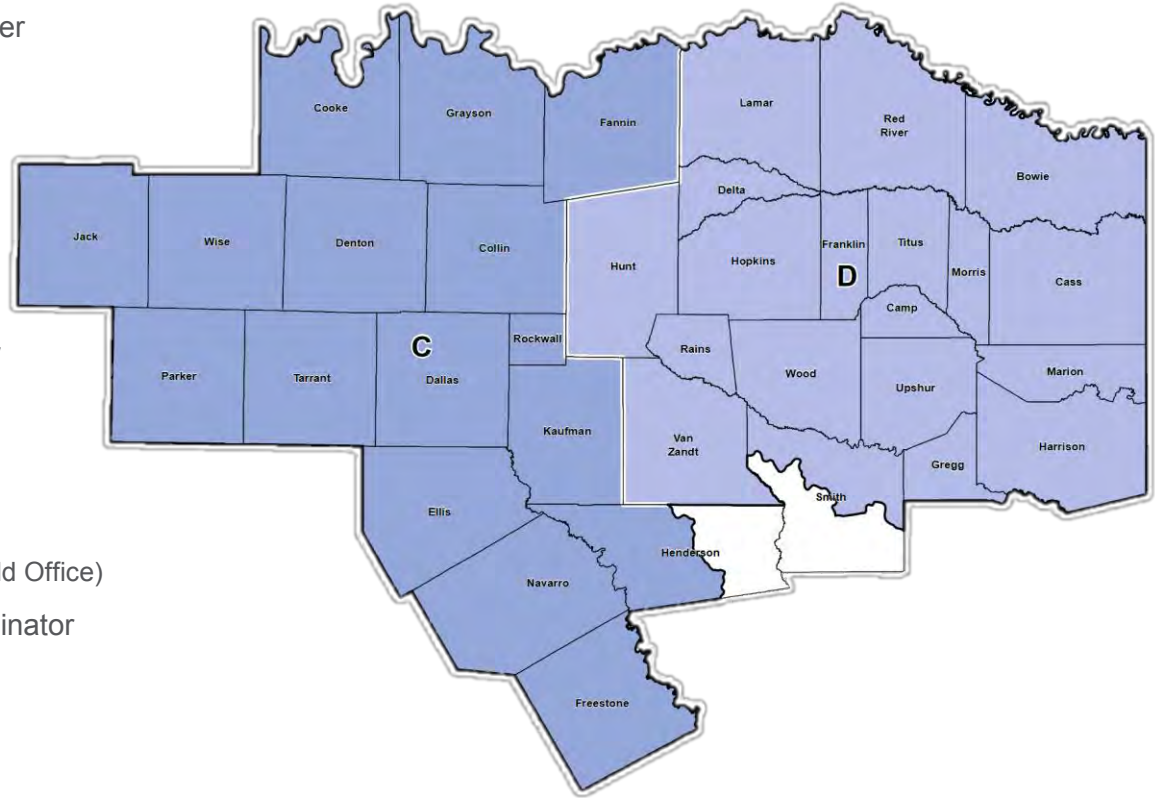
TEXAS  FLOOD.org

What to Do? Before, During, and After a Flood



# Team 3: Northeast Texas

<b>Luis Farias</b>		Manager
<b>Joe Koen</b>		Senior Review Engineer
<b>John Squires</b>		Engineer
<b>David Dera</b>		Engineer
<b>Michael Brooks</b>		Project Manager
<b>Dean Crenshaw</b>		Project Manager
<b>Ben Munguia</b>		Financial Analyst
<b>Kathy Calnan</b>		Environmental Review
<b>Annette Mass</b>		Attorney
<b>Connie Townsend</b>		Planner
<b>Ron Ellis</b>		Planner
<b>Raphael Castro</b>		Engineer (Mesquite Field Office)
<b>Tom Entsminger</b>		State Programs Coordinator
<b>Matthew Schmidt</b>		DWSRF Coordinator
<b>Mark Evans</b>		CWSRF Coordinator
<b>Rosario Flores</b>		DBE Coordinator



# Thank You!

- Questions?
- Evaluations/Follow up requests