

TWDB's Water Conservation Programs and Resources

TPWD Texas Waters Webinar
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About Us



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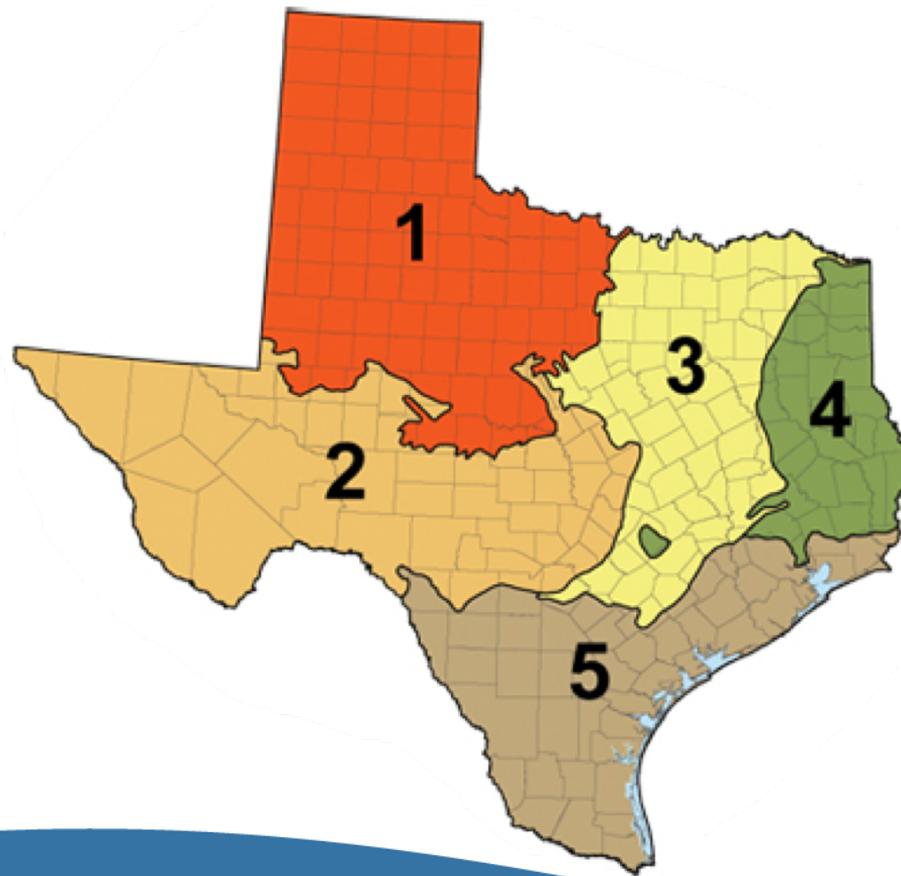
Poll Question #1

Which describes you best?



Poll Question #2

Which region of the state are you in?



Texas Water Development Board

TWDB's mission:

To lead the state's efforts in ensuring a secure water future for Texas and its citizens.



Poll Question # 3

TWDB's responsibilities



TWDB – What We Do

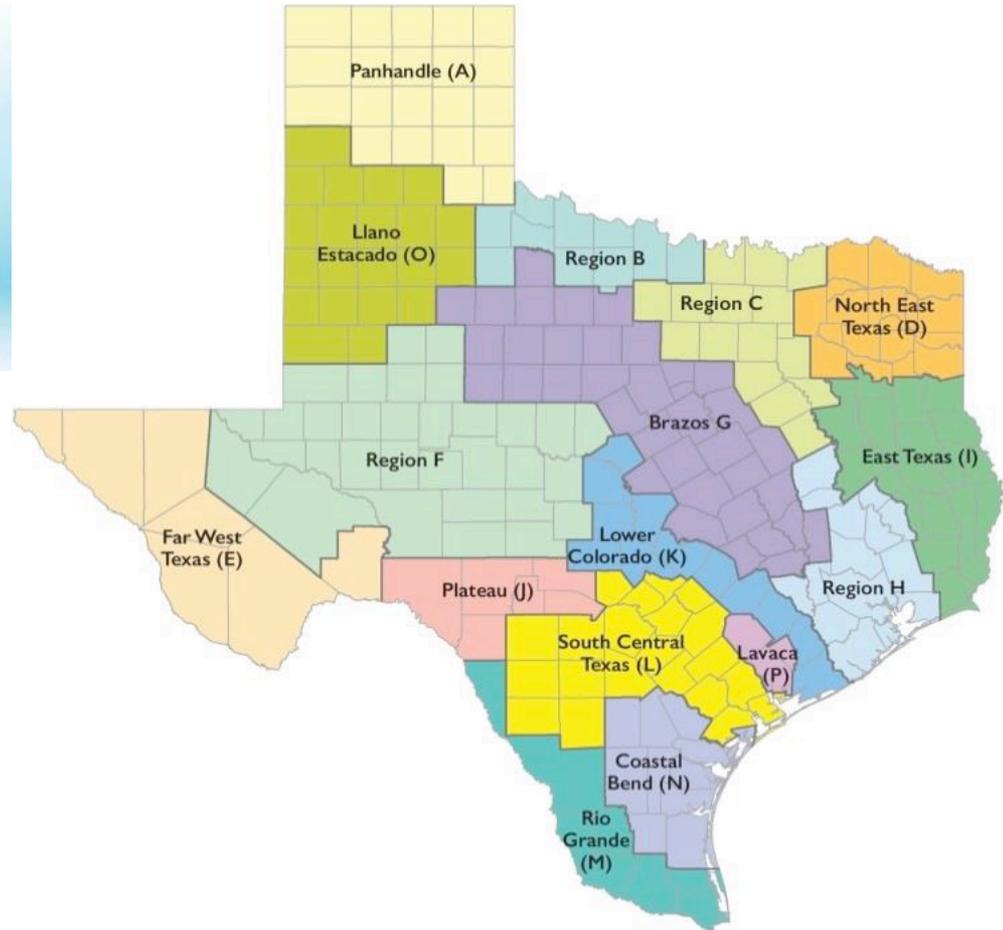
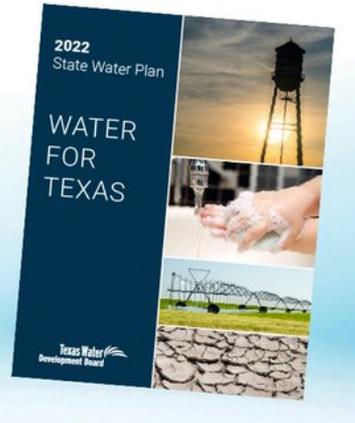


Importance of Water Conservation to the State

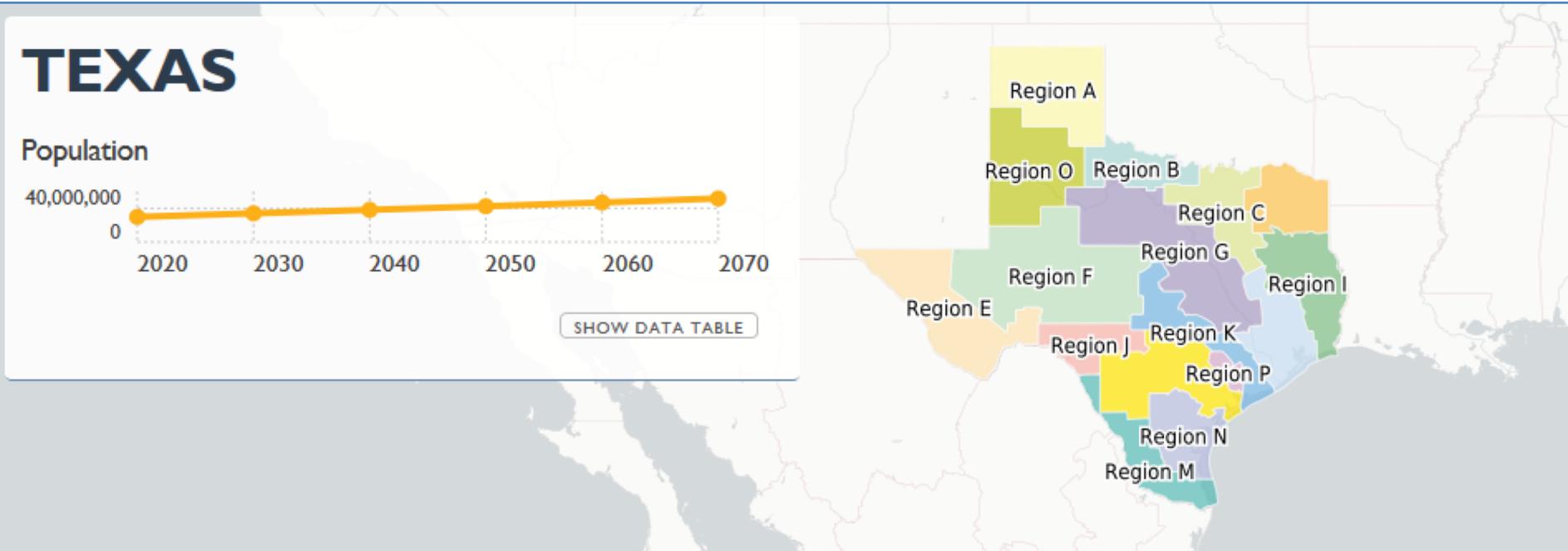


Water Planning

2022 State Water Plan



Statewide Population Growth

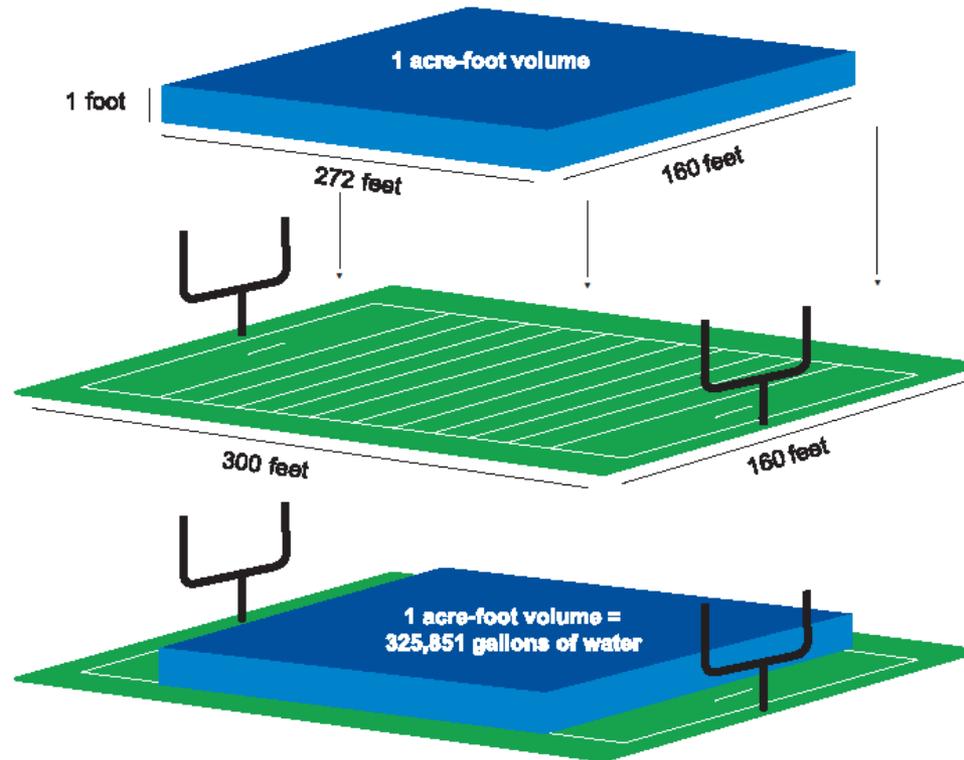


Source: 2022 State Water Plan, Texas Water Development Board.

2020 – 29,695,345

2070 – 51,486,113

WHAT IS AN ACRE-FOOT?



One acre-foot is the amount of water it would take to flood one acre to a depth of one foot.

One acre-foot of water is enough to support the municipal use of six Texans for one year.

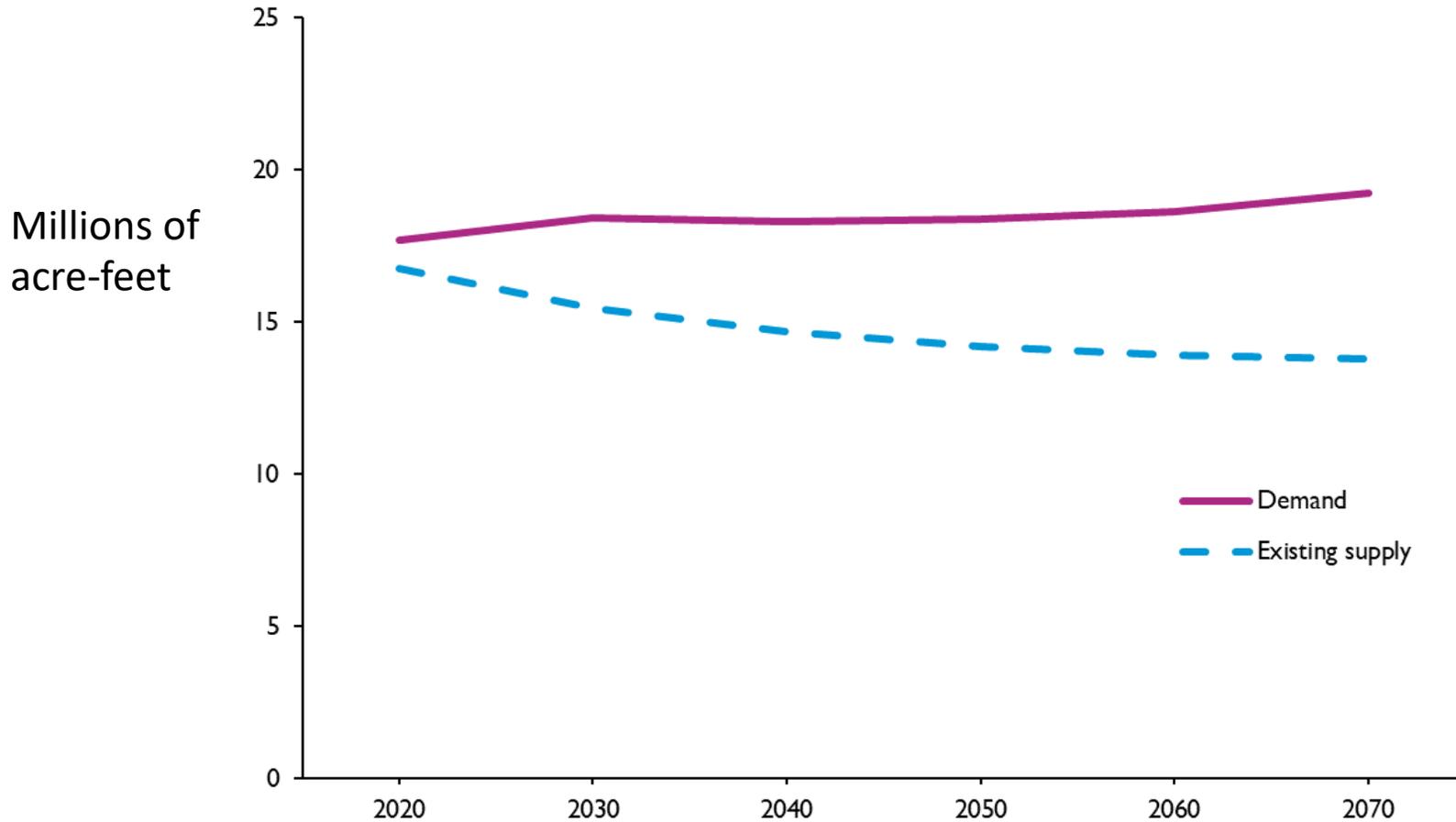
By 2020, Texas is projected to have a demand of 18.5 million acre-feet of water for all water uses per year.

For games and animation, visit our TWDB Kids website.

<http://www.twdb.texas.gov/kids>



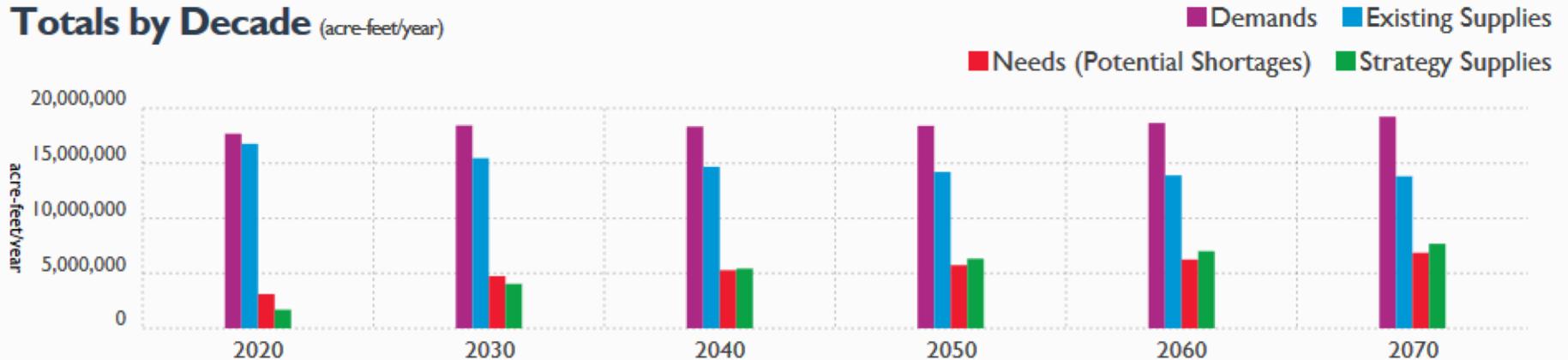
Statewide Water Demand



Source: 2022 State Water Plan, Texas Water Development Board.

Statewide Demands/Needs

Totals by Decade (acre-feet/year)



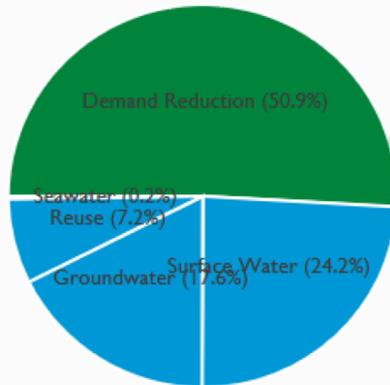
	2020	2030	2040	2050	2060	2070
Demands	17,680,444	18,426,781	18,326,558	18,394,477	18,647,792	19,230,876
Existing Supplies	16,763,586	15,461,714	14,683,204	14,209,494	13,901,890	13,817,572
Needs (Potential Shortages)	3,116,261	4,744,425	5,281,460	5,740,132	6,248,900	6,859,300
Strategy Supplies	1,696,978	4,039,444	5,427,081	6,323,047	7,007,178	7,691,225

Source: 2022 State Water Plan, Texas Water Development Board.

Statewide Strategies in 2020

Strategy Supplies Breakdown - 2020 (acre-feet/year)

Share by Water Resource



Share by Strategy Type

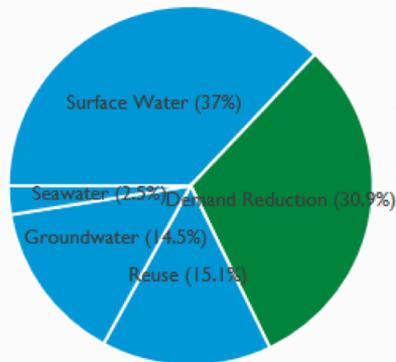
Strategy Type	Amount ▼
<u>AGRICULTURAL CONSERVATION</u>	31.5% (534,840)
<u>OTHER SURFACE WATER</u>	20.3% (344,584)
<u>GROUNDWATER WELLS & OTHER</u>	15% (255,269)
<u>MUNICIPAL CONSERVATION</u>	12.9% (219,644)
<u>DROUGHT MANAGEMENT</u>	5.1% (86,777)
<u>NEW MAJOR RESERVOIR</u>	3.6% (60,367)
<u>INDIRECT REUSE</u>	3.4% (58,070)
<u>OTHER DIRECT REUSE</u>	3% (51,004)
<u>INDUSTRIAL CONSERVATION</u>	1.4% (23,042)
<u>GROUNDWATER DESALINATION</u>	1.1% (19,374)
<u>AQUIFER STORAGE & RECOVERY</u>	1.1% (18,868)
<u>DIRECT POTABLE REUSE</u>	0.7% (12,321)
<u>OTHER STRATEGIES</u>	0.5% (7,757)
<u>CONJUNCTIVE USE</u>	0.3% (5,061)
<u>SEAWATER DESALINATION</u>	0% (0)

Source: 2022 State Water Plan, Texas Water Development Board.

Statewide Strategies in 2070

Strategy Supplies Breakdown - 2070 (acre-feet/year)

Share by Water Resource



Share by Strategy Type

Strategy Type	Amount ▼
<u>OTHER SURFACE WATER</u>	25.4% (1,950,727)
<u>AGRICULTURAL CONSERVATION</u>	15.6% (1,197,343)
<u>MUNICIPAL CONSERVATION</u>	12.7% (977,058)
<u>NEW MAJOR RESERVOIR</u>	11.3% (865,939)
<u>INDIRECT REUSE</u>	9.6% (739,124)
<u>GROUNDWATER WELLS & OTHER</u>	9.2% (704,953)
<u>OTHER DIRECT REUSE</u>	4% (304,535)
<u>AQUIFER STORAGE & RECOVERY</u>	2.5% (193,106)
<u>SEAWATER DESALINATION</u>	2.5% (191,615)
<u>DROUGHT MANAGEMENT</u>	2.1% (158,078)
<u>GROUNDWATER DESALINATION</u>	2% (156,897)
<u>OTHER STRATEGIES</u>	1% (78,283)
<u>CONJUNCTIVE USE</u>	0.9% (66,860)
<u>DIRECT POTABLE REUSE</u>	0.8% (62,306)
<u>INDUSTRIAL CONSERVATION</u>	0.6% (44,401)

Source: 2022 State Water Plan, Texas Water Development Board.

Municipal Conservation



Conservation is critical

Texas Water
Development Board



**Turn off
the water
while
brushing
your teeth.**



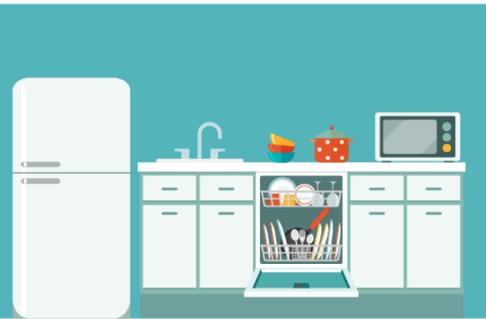
Texas Water
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Shorten your shower time to save water!



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**Handwashing
dishes uses
2 to 4 times
as much
water as a
dishwasher.**



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**Run the
washing
machine
only
when full.**



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**Check for
and repair
leaks.**



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Put your
rainwater
to good use.



Intersection of Urban and Rural



‘Thousands of people are moving to Texas every year and they are not bringing water!’

Picture from the Dallas Morning News

Poll Question #4

TWDB's Conservation Program



Agricultural Conservation

**Water is essential
to grow crops**

**Texas Water
Development Board**

Irrigation Water Use Estimates

- Staff produce annual estimates of irrigation water use by crops— for all counties in the state.



Crop Number	Crop Name	Acres	Inches-Acre	Acre-Feet
1	COTTON	56,770	8	37,847
2	SORGHUM	34,450	10	28,708
3	CORN	73,170	9	54,878
4	RICE	-		-
5	WHEAT	19,980	11	18,315
6	OTHER_GRAIN	7,560	11	6,930
7	FORAGE_HAY_PASTURE	6,010	12	6,010
8	PEANUTS	470	10	392
9	SOY_OIL	6,170	9	4,628
10	VINEYARD	-		-
11	ORCHARD	-		-
12	ALFALFA	3,860	17	5,468
13	SUGARCANE	-		-
14	VEGETABLES	5,010	10	4,175
15	OTHER	-		-
16	GOLF_COURSES	-		-
17	FAILED	7,490	4	2,497



The TWDB has provided more than \$100 million in grants and low-interest loans to farmers and ranchers



#txwater

Texas Water 
Development Board



Demonstration/Education Projects



Partners with university systems, extension service

Engages local producers

Provides education and cost-share opportunities



On-Farm Irrigation Efficiencies

<https://texasawe.com/>



Metering Projects



What is the value of Irrigation Meters?

You cannot save water without knowing how much water you are initially using!

Meters help us measure the amount of water used for each irrigations.

Other advance technology, such as **irrigation scheduling**, can stop and start irrigations remotely and help farmers monitor the amount of water their field has received

Irrigation System Improvements

- Examples project types:
 - Canal lining & pipe replacement
 - SCADA & automated gates



Education/ Outreach

- Promote TWDB resources and programs directly to producers
- Offer technical assistance related to grant program at Field Days organized by partners



Poll Question #5

TWDB develops a new
State Water Plan



Putting it all Together – Stakeholder Engagement

- With so many water users utilizing the same water supply, bringing water users together becomes important to conserve our most precious resource.



Photo: Benjamin Child on Unsplash

Water Conservation Advisory Council

- Created in 2007 to establish the resource of a group of water conservation professionals for the benefit of Texas.



Facts on WCAC

- Made up of 23 members each representing different interest groups.
- 7 Legislative Charges
- Meets at least once every quarter
 - Open public meetings



WCAC Workgroups

- 7 Workgroups
 - Serve as a sounding board for stakeholders within specific sectors.
 - Introduce ideas, draft documents, and develop potential action steps for issues within the sector.
 - Bring ideas, insight, and perspectives to the Council for continued discussion and potential action.

WCAC - Duties

- Legislative Report
- Best Management Practices
- Awards

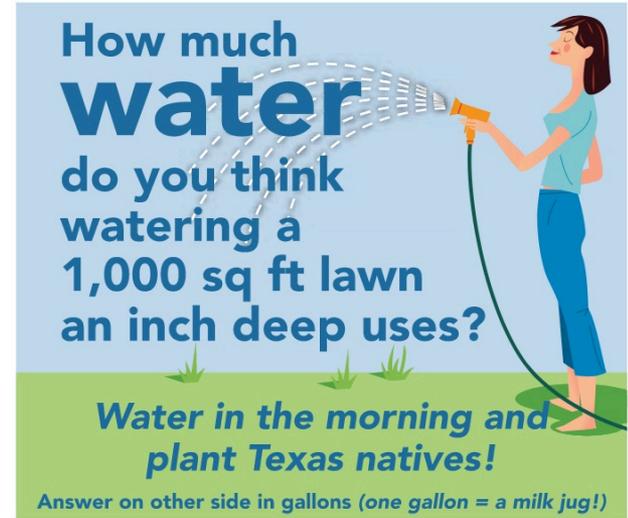
**Progress Made in
Water Conservation in Texas**

Report and Recommendations to the 87th Texas Legislature



TWDB & You

- [TWDB Conservation Literature](#)
- [TWDB Kids](#)
- [TWDB Water Data](#)
- Staff Availability



TEXAS WATER DEVELOPMENT BOARD K-12 EDUCATIONAL RESOURCES

TWDB KIDS
www.twdb.texas.gov/kids



References

- Interactive State Water Plan:
<https://texasstatewaterplan.org/statewide>
- Regional Water Planning Groups:
<http://www.twdb.texas.gov/waterplanning/rwp/regions/index.asp>
- Water Conservation Advisory Council:
www.savetexaswater.org



Questions?



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