Best Bets for Texas Water

Texas Living Waters Project

Planning for Texas' water future

Thanks for joining us!

- All attendees are muted.
- Use Q&A box to ask questions at any point.
- 40 minutes webinar, 20 minutes for questions.
- Slides and recorded webinar will be available on our website: **texaslivingwaters.org**

Texas Living Waters Project

SIERRA CLUB

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Best Bets for Texas Water

This guidebook evaluates the pros and cons of different water supply strategies based on three criteria:

1. Environmental impact
2. True costs
3. Long-term viability

Dig in deeper: **texaslivingwaters.org/bestbets**

Today we'll cover...

- An outlook for Texas' water future
- How different water supply strategies can impact wildlife and Texans
- How Texas water planning works
- How to get involved
- How you can find out which water supply strategies have been recommended for your community

Texas’ future = less water

Climate change studies for Texas predict more intense periods of both flood and drought, making it more difficult for humans and wildlife to recover in-between these extremes.

Having enough water for communities to make it through longer, more intense droughts is a huge concern. But even in wet years, it’s possible for Texas to use more water than it gets.

Texas' future = less water

2020 → 2070

21.5 million more Texas residents

Texas is potentially short on water by 8.9 million acre-feet each year

Texas will potentially **only be able to meet 60% of its water demands**

One year from now

Predicted population: 29,510,184 people
Existing supplies: 15,218,204 acre-feet per year
Potential shortages: 4,759,781 acre-feet per year

Eleven years from now

Population: 33,628,653 (↑ 14% from 2020)
Existing supplies: 14,892,293 (↓ 2% from 2020)
Potential shortages: 5,633,971 (↑ 18% from 2020)

Twenty-one years from now

Population: 37,736,338 (↑ 28% from 2020)
Existing supplies: 14,502,941 (↓ 5% from 2020)
Potential shortages: 6,365,565 (↑ 34% from 2020)

Thirty-one years from now

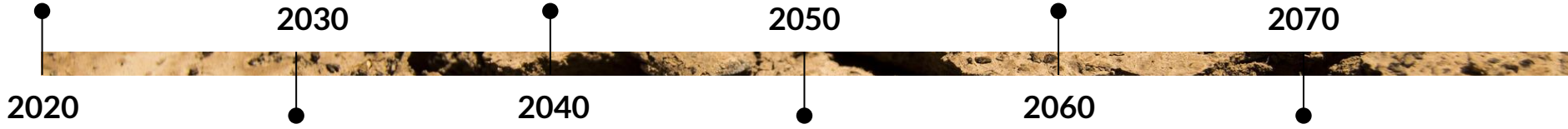
Population: 41,928,264 (↑ 42% from 2020)
Existing supplies: 14,209,786 (↓ 7% from 2020)
Potential shortages: 7,070,952 (↑ 49% from 2020)

Forty-one years from now

Population: 46,354,818 (↑ 57% from 2020)
Existing supplies: 13,953,724 (↓ 8% from 2020)
Potential shortages: 7,842,062 (↑ 65% from 2020)

Fifty-one years from now

Population: 51,040,173 (↑ 73% from 2020)
Existing supplies: 13,571,551 (↓ 11% from 2020)
Potential shortages: 8,891.808 (↑ 87% from 2020)



That's where water supply strategies come in.

It's not possible to create more water, but it is possible to help communities become more resilient by planning wisely for a future with more people and a changing climate.

Water supply & management strategies

Humans have long been innovating to create water supply solutions across regions, cultures and history.

Examples of supply and management strategies include:

01 | Damming rivers to create water storage reservoirs

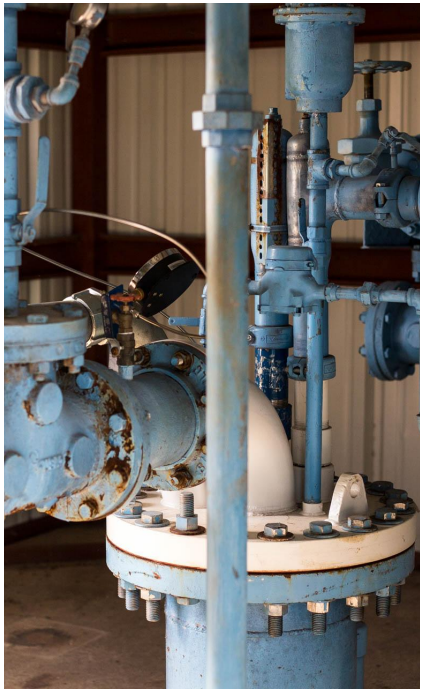
02 | Pulling water up from below the ground

03 | Piping water from one region to another

04 | Removing salt from seawater to make it drinkable

05 | Purifying and reusing wastewater

06 | Storing water underground until it's needed



Potential (negative) impacts on humans and wildlife

1. Every water supply project means **less fresh water in our springs, rivers and bays** – which can be devastating for wildlife and our state's natural heritage.

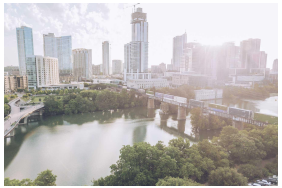
2. Without enough fresh water flowing through rivers into Texas bays, **economically-valuable regions and species suffer**, harming coastal communities and the state's economy.

3. The **high costs for water infrastructure projects are passed down to Texas residents** through the water rates they pay each month.

4. There are also project-specific impacts, such as **permanently flooding valuable agricultural land** to create reservoirs, and **causing land to sink** and become more vulnerable to floods as a result of depleting aquifers.

Top three strategies for Texas' water future

1. Water conservation
   The big idea: Make your community's water last longer by using less of it. Technology, policy, and landscaping and rainwater collection practices can all help a community use less water.



2. One Water
   The big idea: Rethink the way communities manage water. Bring the parks department, urban planners, business leaders and community members into the process to look at the big picture of how water moves through a community. Then, plan and build in ways that use it wisely.

3. Nature-based solutions
   The big idea: Mimic nature's water management solutions to capture more water, whether through rainfall collection systems or through land management techniques that replenish groundwater supplies and slow rainwater runoff. (Ex: rain gardens, permeable pavement, riparian restoration)

Potential (positive) impacts on humans and wildlife

1. Communities that use water conservation to decrease their water demands are **better prepared for droughts and water scarcity**. So are the impacted rivers, bays, and wildlife, which need this water to survive.

2. Communities that use water more wisely – including using rainwater and reusing wastewater – **increase their local water supplies**, which allows them to be more flexible and resilient.

3. By investing in many smaller-scale policies and projects, communities become more resilient and **able to adapt if one strategy doesn't pan out**.

4. Conserving water, One Water and nature-based solutions have additional benefits, such as **making communities less vulnerable to flooding**.

Are these “top three” strategies enough on their own?

Who decides which strategies are implemented, and how can I get involved?

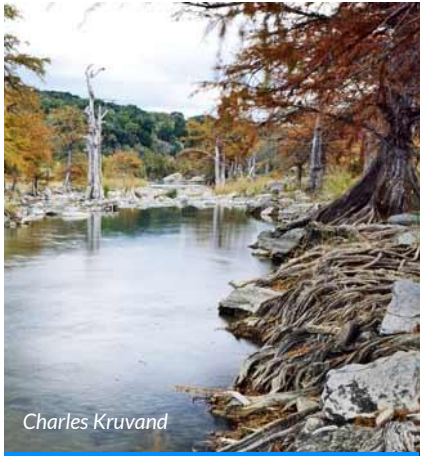
Texas water planning happens on state, regional and local levels. It's important to know who the decision-makers are at each level so you know who you should contact with questions and concerns.

How is Texas water managed?
01 State

Decision-maker(s): Texas Water Development Board

What they do
Prepare the State Water Plan based on regional water plans. This informs Texas water planning for upcoming decades.

It includes projections for population size, water availability, water shortages and which strategies the state recommends for meeting water demands.


Charles Kruvand

QUICK TIP

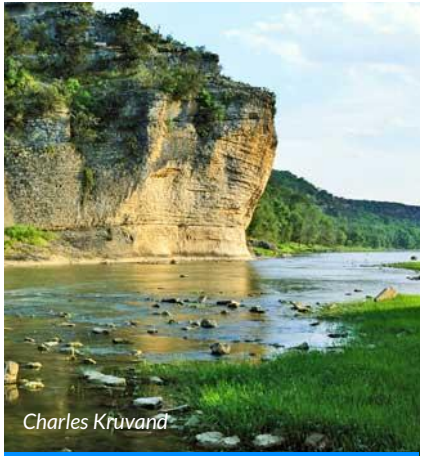
The State Water Plan takes water demands from different sectors into consideration. The environment isn't included in these calculations.

How is Texas water managed?
02 Regional

Decision-maker(s): Regional Water Planning Groups, which are composed of representatives from different sectors and industries.

What they do
Prepare regional water plans – these inform the State Water Plan.

Take a high-level look at the region's water demands vs. supply across different sectors.



QUICK TIP

Texas is split into 16 water planning regions. Find yours: www.twdb.texas.gov/waterplanning/rwp/regions/index.asp

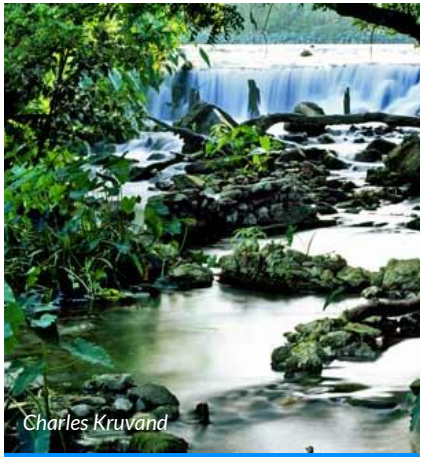
How is Texas water managed?
03 Local

Decision-maker(s): Water providers, city councils.

What they do
Make sure there's enough clean drinking water and that it gets to your water faucet.

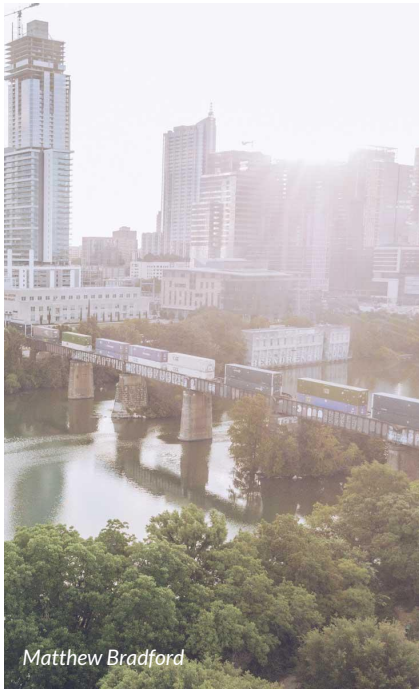
Decide which water supply strategies will be implemented, and how it will be done.

Create five-year Water Conservation Plans.


Charles Kruvand

QUICK TIP

If you don't know where your current drinking water comes from, you can find out by contacting your water provider.


Matthew Bradford

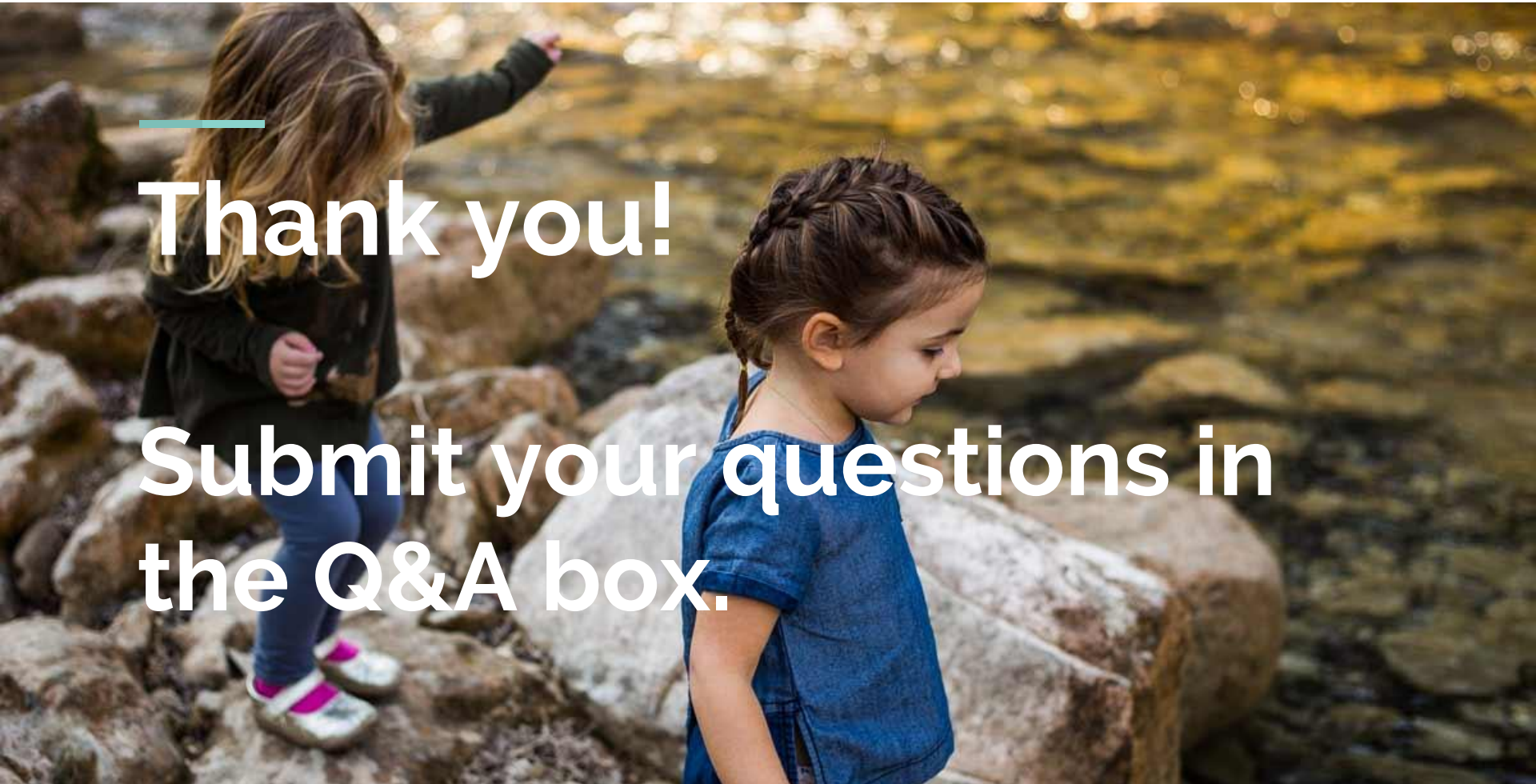
How do I know which water supply strategies have been proposed for my community?

In addition to following local news and reaching out to your water provider, you can use the State Water Plan website to get an idea of which projects are being considered for your community.

Questions to ask as a water advocate

Best Bets for Texas Water: **texaslivingwaters.org/bestbets**

A Water Customer's Guide to Drinking Water Infrastructure: **http://bit.ly/2P7MNaM**


Thank you!
Submit your questions in the Q&A box.