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National Water Availability Assessment

[Name of presenter, Affiliation]

[Venue of presentation]

U.S. Department of the Interior
U.S. Geological Survey

National Water Availability Assessment

Comprehensive, scientific assessment of water availability in the United States, integrating water quantity, quality, and use

First of its kind – provides **new water availability information**, including potential imbalance between water supply and demand

Complementary to forthcoming Regional Water Availability Assessments

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How to access the National Assessment

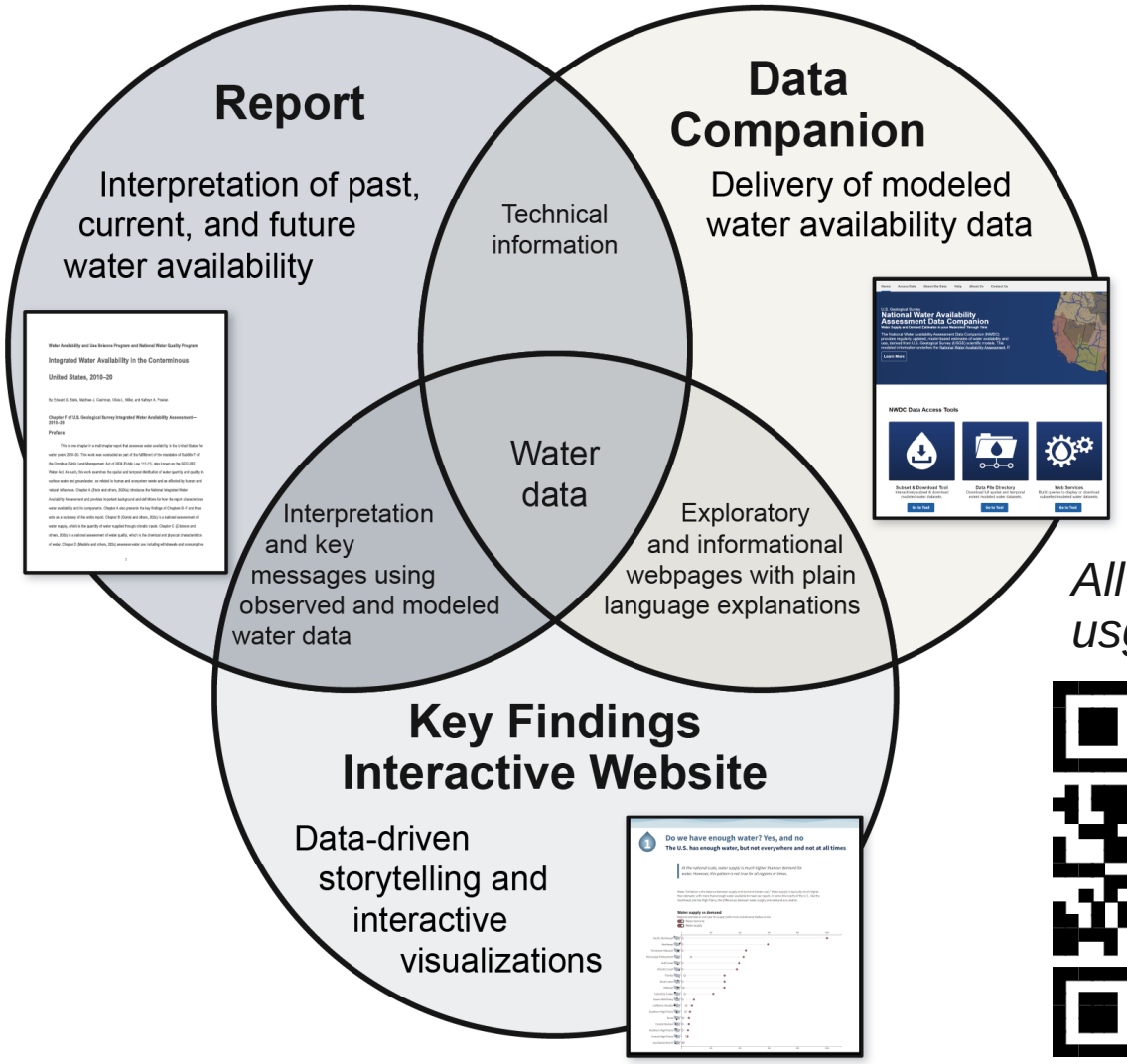
Read the report:

doi.org/10.3133/pp1894

Get the data:

water.usgs.gov/nwaa-data

See the data visualizations:
water.usgs.gov/vizlab/water-availability



All available at usgs.gov/iwaas

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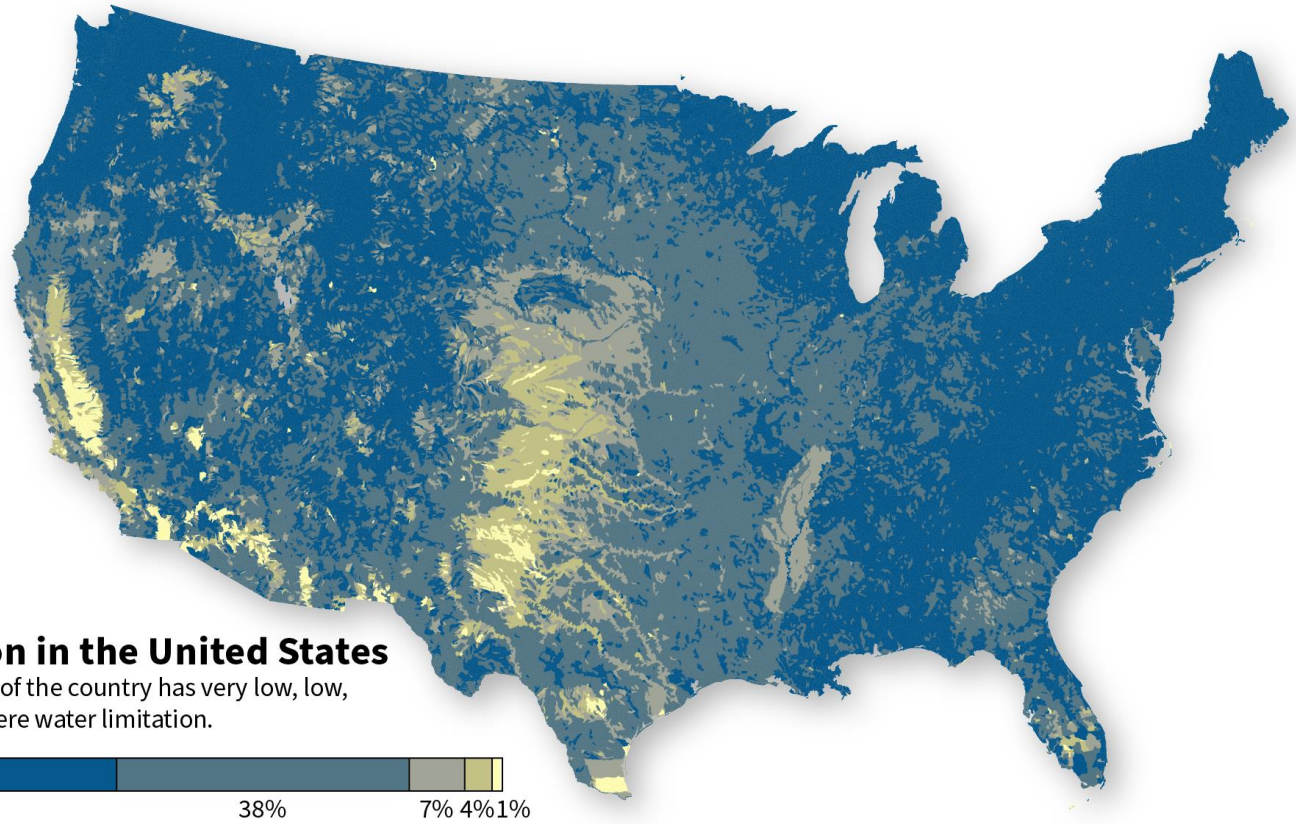
Key findings from the National Assessment

1 Do we have enough water? Yes, and no

The U.S. has enough water, but not everywhere and not at all times

At the national scale, water supply is much higher than our demand for water. However, this pattern is not true for all regions or times.



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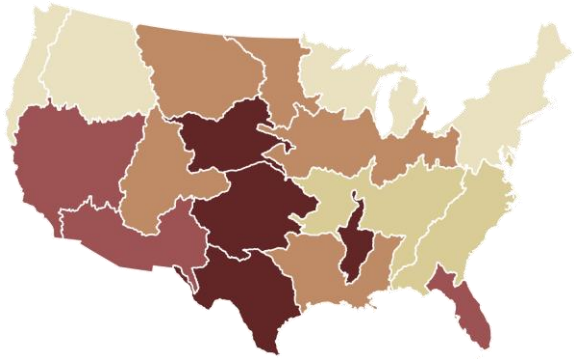
2 Limits on water availability

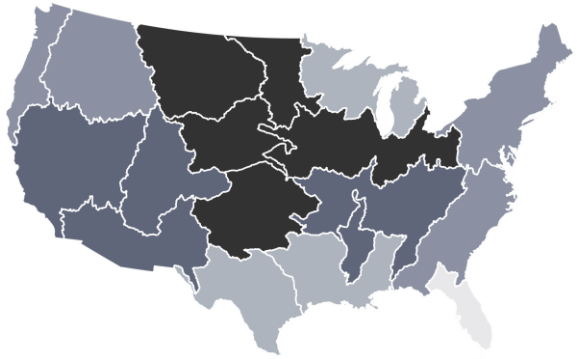
Water availability is affected by water quantity, quality, and flow

Every region in the lower 48 United States faces limitations to water availability from at least one aspect of water quantity, quality, or flow.

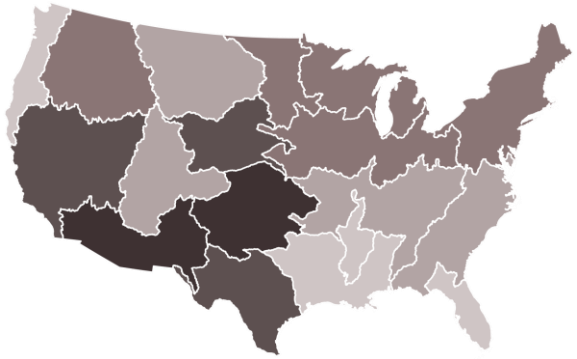
Water quantity



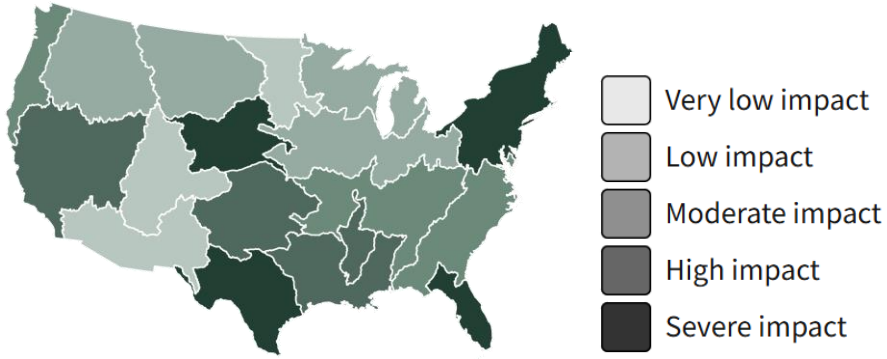
Surface water quality



Groundwater quality



Altered natural flows



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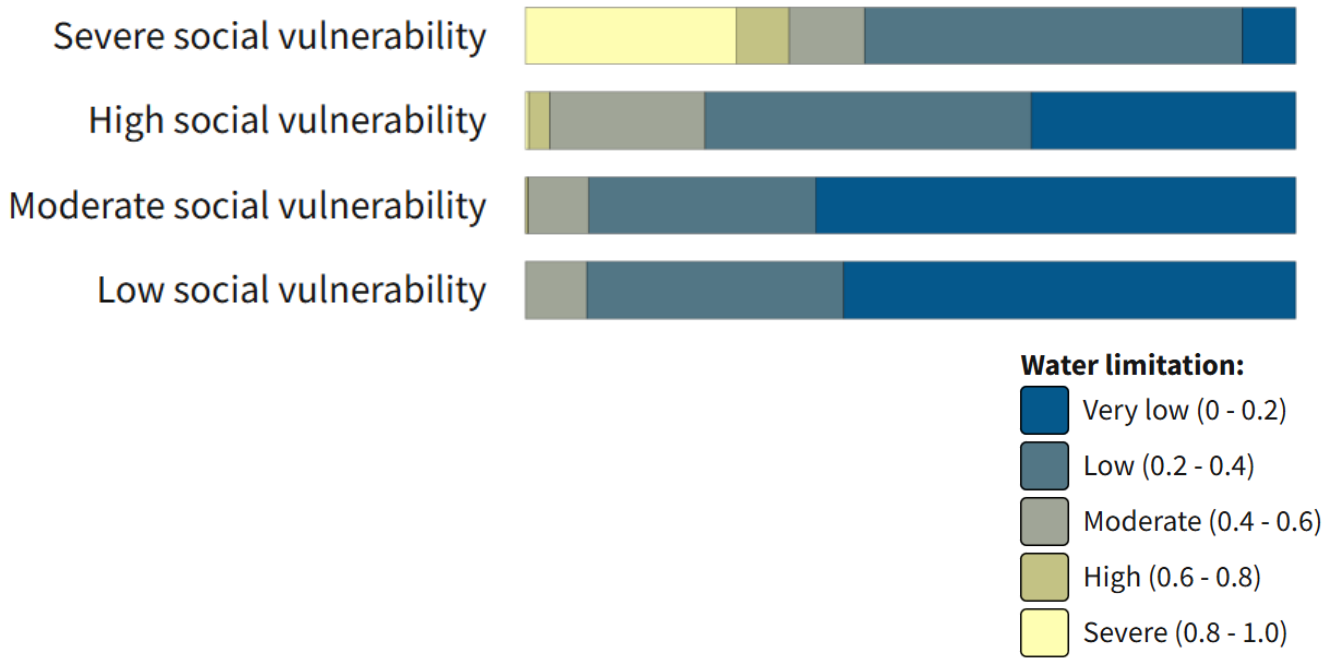
3 Unequal access to water

Socially vulnerable Americans have a higher risk of water limitation

Water limitation disproportionately affects socially vulnerable populations in the U.S., creating problems for equitable access to clean water.

Proportion of the population living in varying levels of water limitation for each social vulnerability classification



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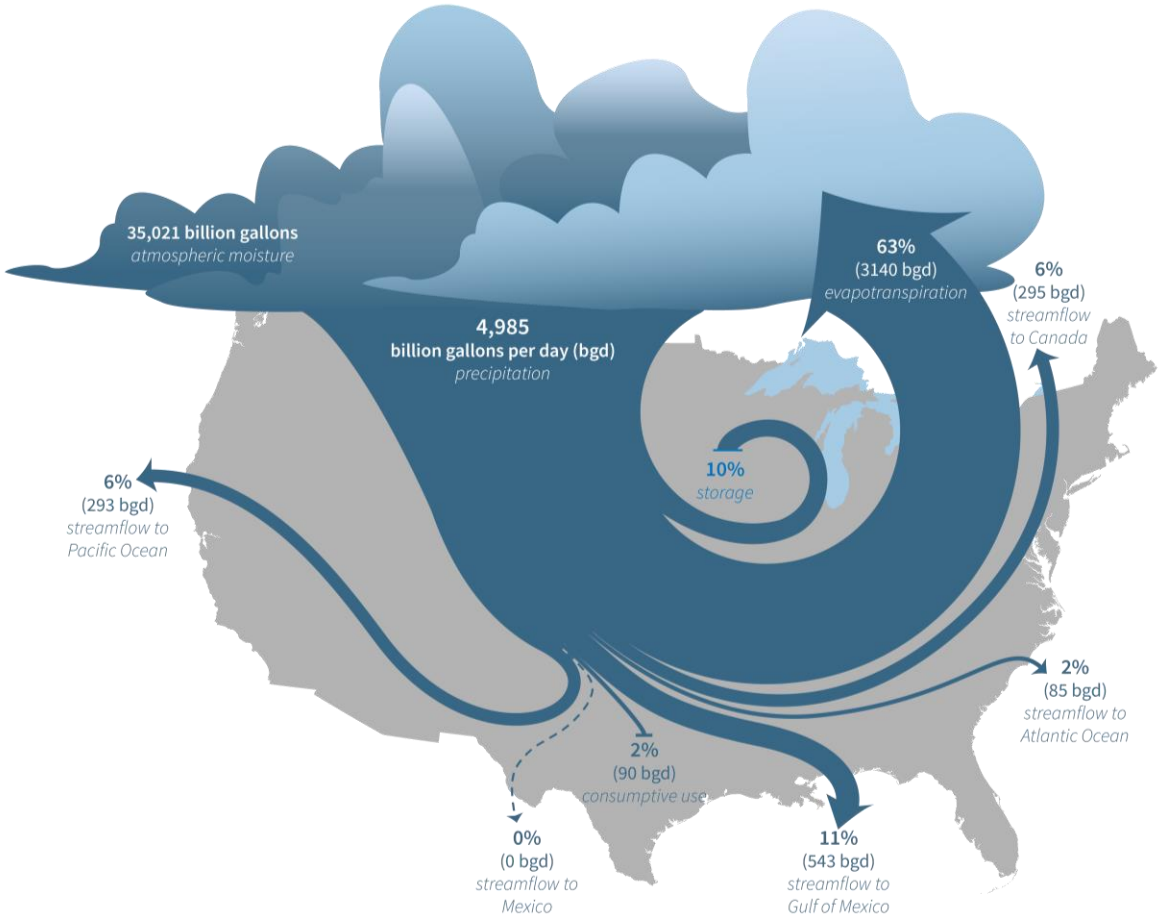
4 Not enough rain and snow

Limited water supply can cause water imbalance

Periods of low precipitation can have cascading effects throughout the water cycle, expanding areas of water limitation.



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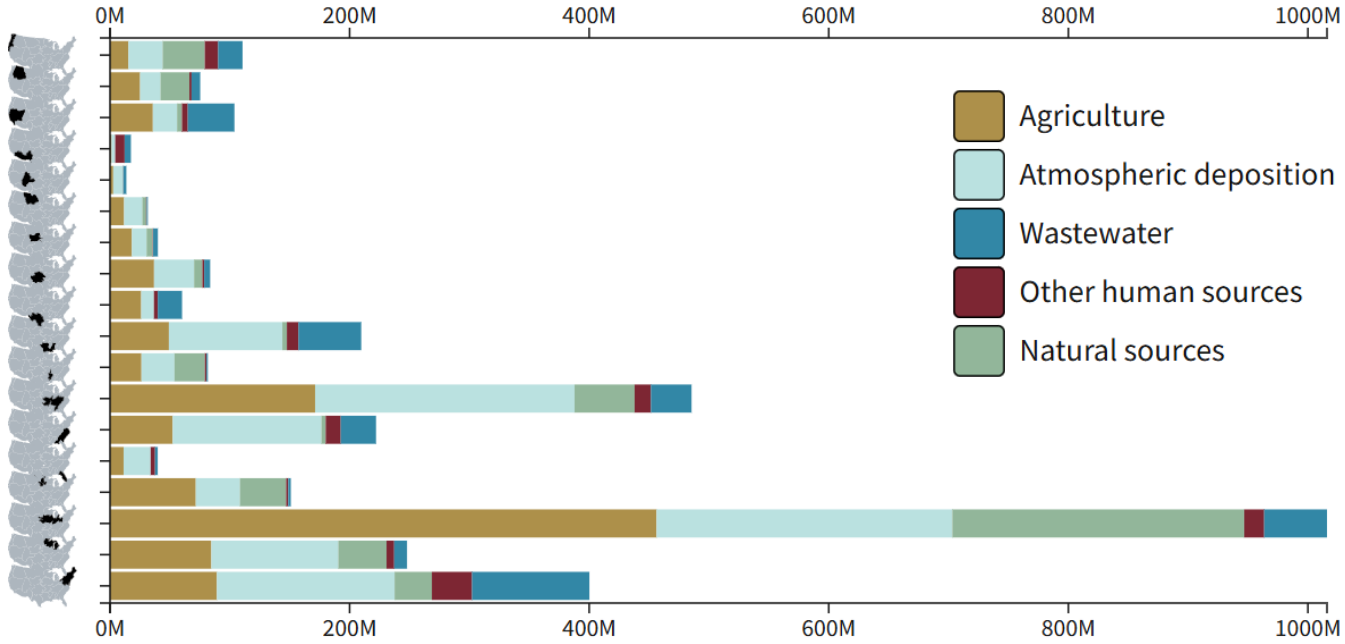
Nutrients in the water

Natural and human sources of nutrients degrade water quality

Sources of nutrients in our water vary across the United States. Common sources of nutrients such as nitrogen and phosphorus include fertilizer and manure, atmospheric deposition, wastewater treatment plants, urban land, and a range of natural sources including stream channel and geologic sources.

Total load of Nitrogen (kg/year) entering water by source and aggregated region of U.S.



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Threats to water quality

Water quality issues can affect human and aquatic health

Drinking water, fish consumption, and recreational water use face different water quality threats.

	Drinking Water	Fish Consumption	Recreational Use
Non-Mercury Metals	19.7%	2.7%	3.5%
Salinity	9.3%	0.6%	1.6%
Sediment	6.2%	1.6%	3.1%
Temperature	5.9%	1.9%	3%
Pathogens	4.5%	11%	25.6%
Oxygen Depletion	3.4%	2.6%	4.1%
Other Nutrients	3.3%	1.7%	4.7%
Turbidity	2%	1.5%	2.6%
Acidity/pH	1.5%	1.8%	1%
Pesticides	1.4%	3.1%	1.4%
Mercury	1.2%	17.9%	2.4%
PCBs	0.4%	21.4%	3.4%
Biotoxins	0.4%	0%	0.8%
Algal Growth	0.3%	0.5%	0.5%
Dioxins	0.2%	1.4%	0.3%
Toxic Organics	0.1%	0.7%	0.1%
Ammonia	0.1%	0.6%	0.2%
Oil and Grease	0%	0%	0.1%

% river miles impaired

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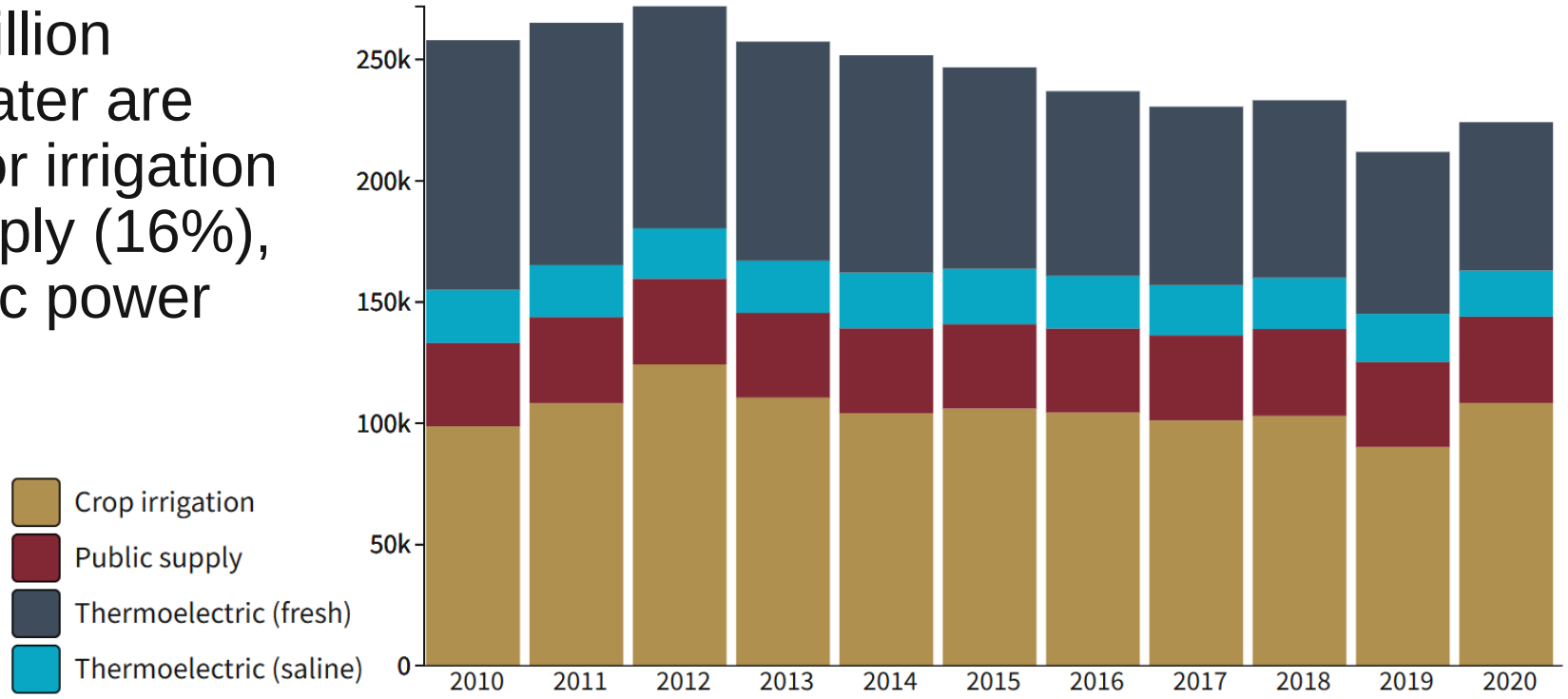
7

For farm, home, and energy

The largest demands for water are for crop irrigation, public supply, and thermoelectric power

About 224,000 million gallons of freshwater are used every day for irrigation (48%), public supply (16%), and thermoelectric power (36%).

Average daily water use from 2010 to 2020 in million gallons per day



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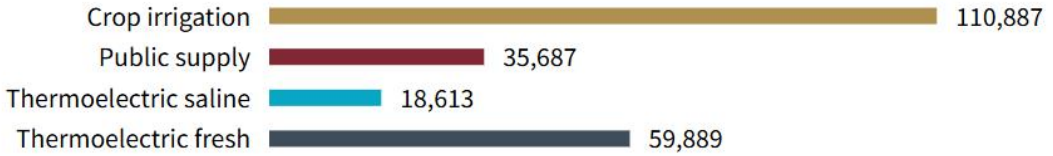
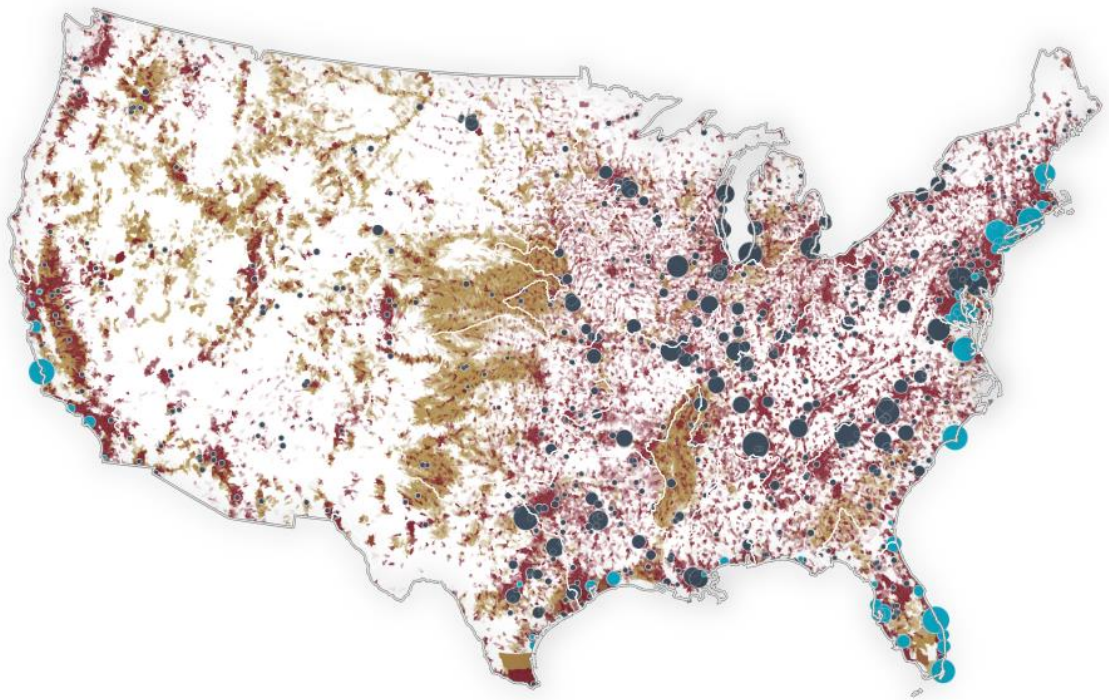
From sea to shining sea

How we use water varies across the country

The Western and High Plains regions use water primarily for crop irrigation, while the eastern half of the country uses water primarily for public supply or thermoelectric power.

Daily water use in 2020 in million gallons per day





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How can you learn more?

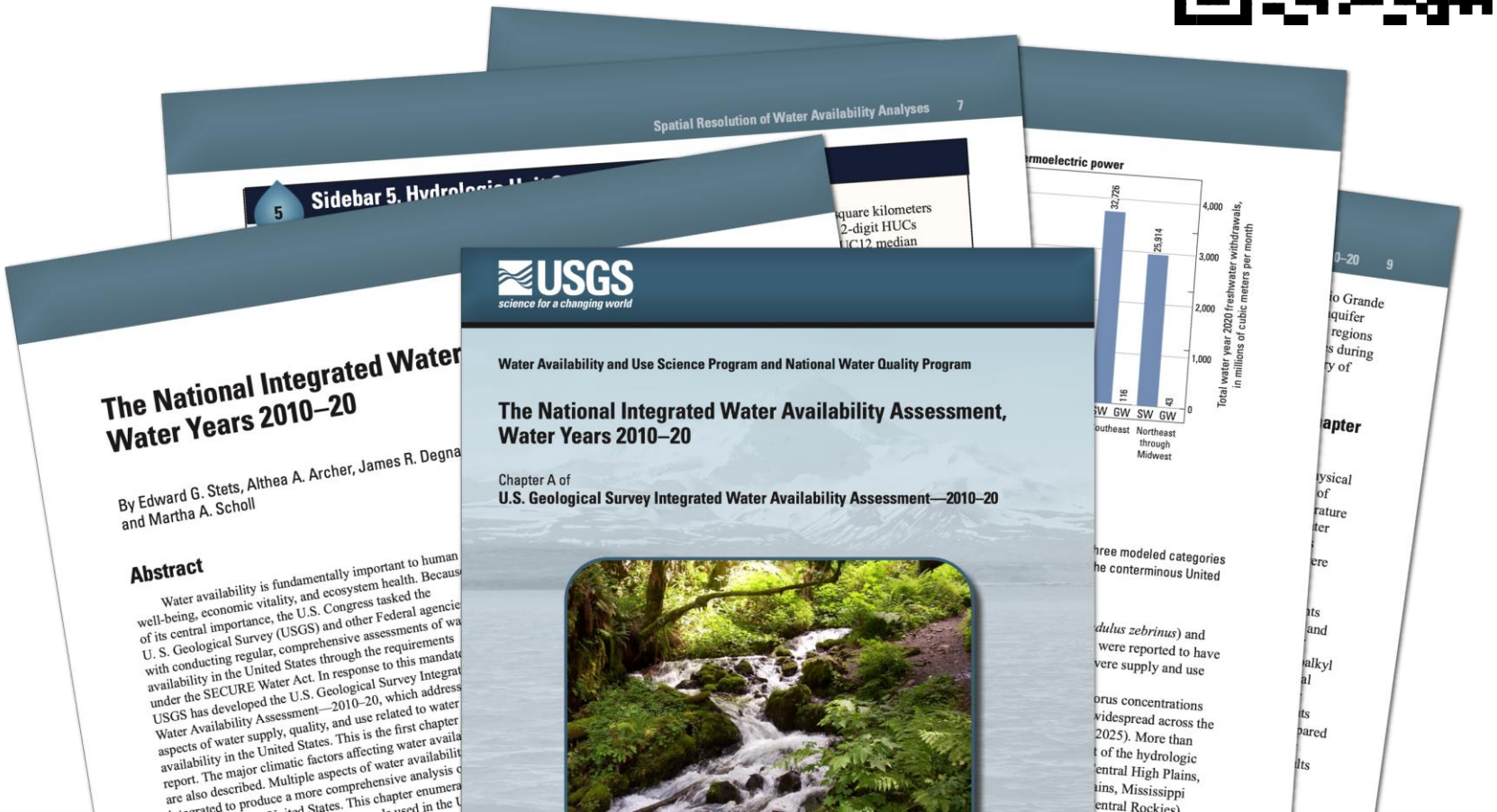
Read the report:

doi.org/10.3133/pp1894

Also available at usgs.gov/iwaas

Chapters

A. Executive Summary
B. Water Supply
C. Water Quality
D. Water Use
E. Future Water Availability
F. Integrated Water Availability



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Get the data:

water.usgs.gov/nwaa-data

Home | Access Data | About the Data | Help | About Us | Contact Us

U.S. Geological Survey

National Water Availability Assessment Data Companion

Water Supply and Demand Estimates in your Watershed Through Time

The National Water Availability Assessment Data Companion (NWDC) provides regularly updated, model-based estimates of water availability and use, derived from U.S. Geological Survey (USGS) scientific models. This modeled information underlies the National Water Availability Assessment.

Learn More

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See the data visualizations:
water.usgs.gov/vizlab/water-availability

What's next for water availability assessments?

Version 1a
Water Availability in the United States: Current Status

2025

2026

Version 1b
Water Availability in the United States: Historical Trends and Regional Perspectives on Water Availability

Version 2
Water Availability in the United States (Regional and National): Trends, Status, and Projections

2030

2035

Version 3
Water Availability in the United States (Regional and National): Trends, Status, and Projections

Version 4
Water Availability in the United States (Regional and National): Trends, Status, and Projections

2040

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