

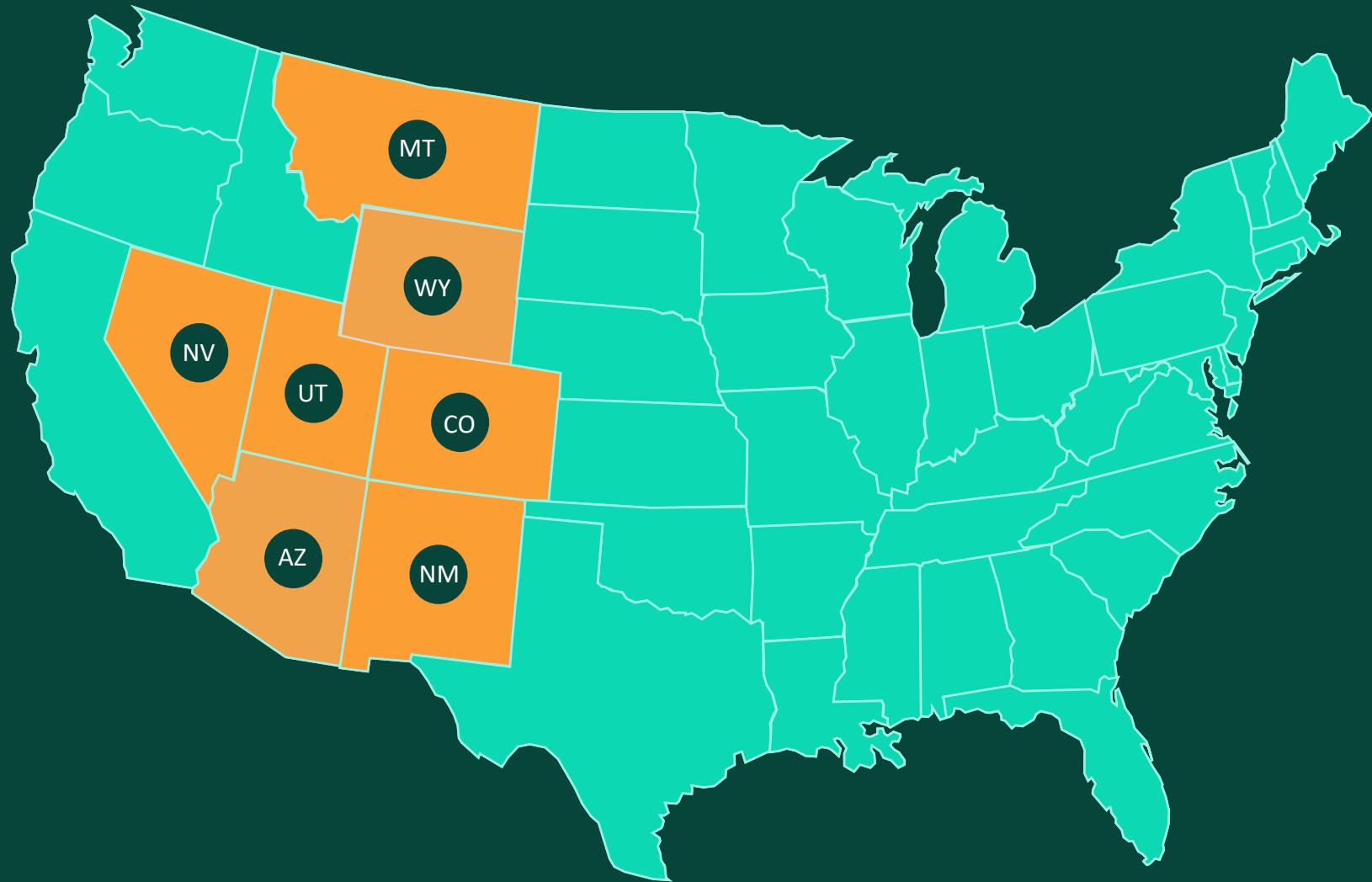


Data Center Water Use – Dispelling Myths

Bart Miller

Bart Miller, Healthy Rivers Director
Colorado River Water Users' Association: December 17, 2025

wra Western
Resource
Advocates®



Western Resource Advocates

- Federal & Regional Collaboration
- State Legislatures
- State Agencies & Commissions
- Local Governments
- Electric Utilities
- Diverse Coalitions & Communities

WRA works across seven states in the Interior West to protect our climate, land, air, and water.



Myth/Belief:

Data centers gobble up water and have no place in the desert Southwest.



Myth/Belief:

Data centers gobble up water and have no place in the desert Southwest



Myth/Belief:

Data centers gobble up water and have no place in the desert Southwest





DATA CENTER IMPACTS IN THE WEST

Policy Solutions for Water and Energy Use

AUTHORS

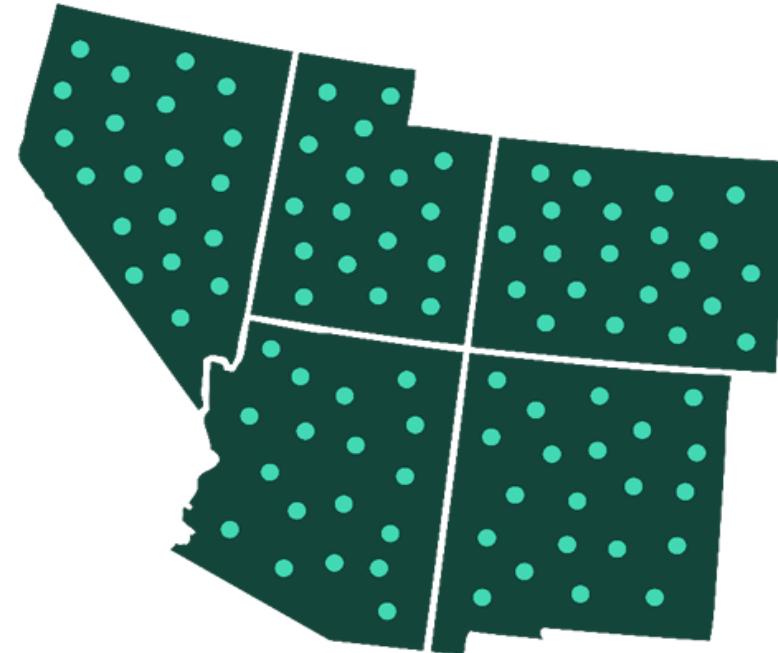
Deborah Kapiloff | Policy Advisor
Lindsay Rogers | Policy Manager for Municipal Conservation
Stacy Tellinghuisen | Deputy Director of Policy Development



Data Center Resource Use in the West



Estimated Water Use on-site



● Is equivalent to 2,000 people,
representing 194,000 people
in total.



13.7K

estimated acre-feet of
consumptive water use
by 2030.

21.6K

estimated acre-feet of
consumptive water use
by 2035.

Water Impacts

- Water is used on-site for cooling
- Water use efficiency varies a lot based on cooling technology, local climate, and design
- Water also is needed “off-site” to generate electricity for the centers



≡ THE DENVER POST SU SEARCH

NEWS > ENVIRONMENT • News

A new Denver data center could use as much water as 16,000 people every day. Should the city give it a tax break?

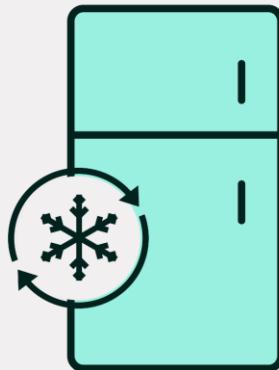
CoreSite plans to build a three-building, 600,000-square-foot data campus in Elyria-Swansea



A rendering shows the design of a new CoreSite data center proposed for Denver's Elyria-Swansea neighborhood. (Provided by CoreSite)

By **ELISE SCHMELZER** | eschmelzer@denverpost.com | The Denver Post
UPDATED: October 14, 2024 at 6:03 AM MDT

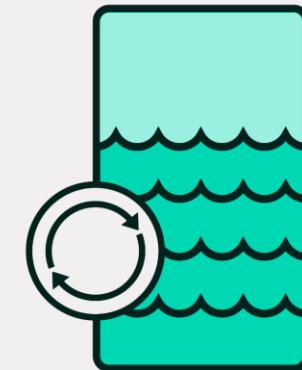
Water vs. Energy Tradeoffs



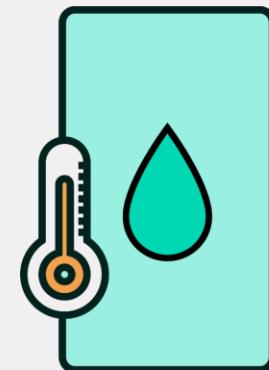
Refrigeration cooling systems use an air handler, circulate either cool air or water in the data center, and remove hot air.



Adiabatic- or direct-evaporative-cooling systems use water to cool air that is circulated in the data center.



Free-cooling systems take advantage of outdoor ambient air or water temperatures to cool the air that is circulated in a data center.



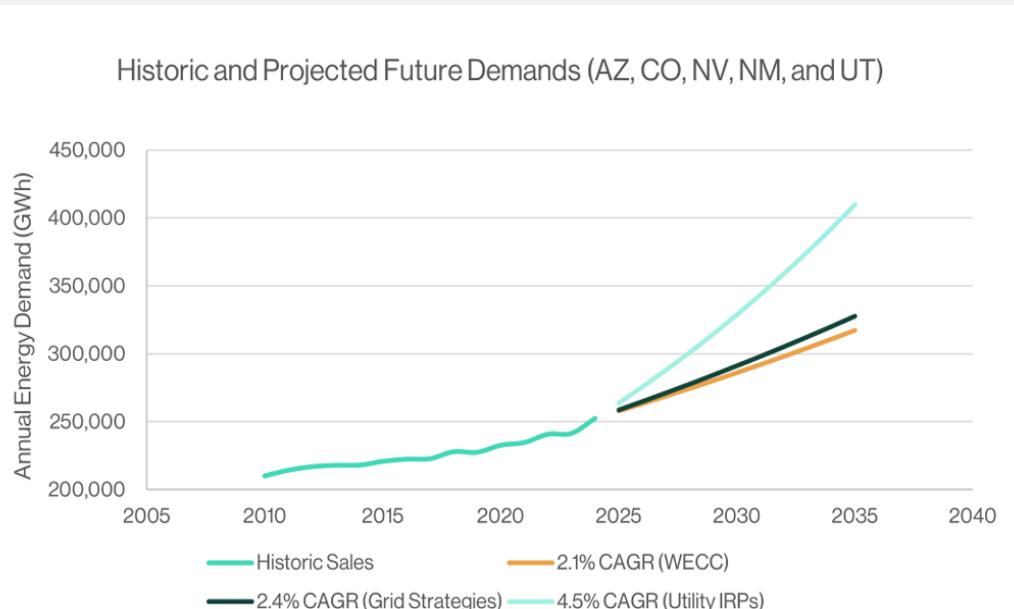
Liquid-cooling systems directly absorb heat from computer components, rather than cooling the air around the computers.

Data Center Resource Use in the West

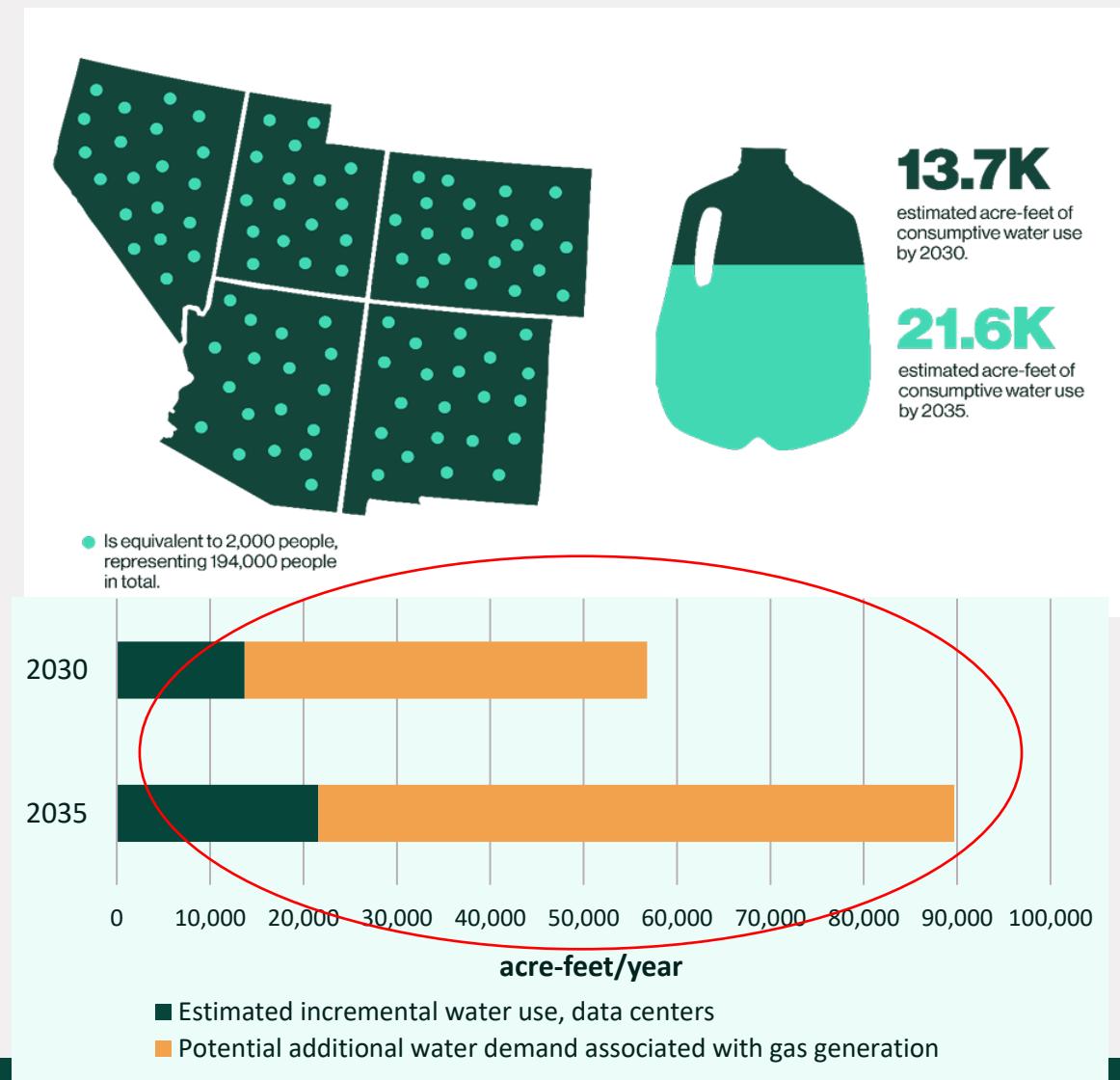


Energy Demand

Maybe add/swap p. 24 graphic



Water Use



Myth/Belief:

*Data centers gobble up water and have
no place in the desert Southwest*



Navigating Water Demands

1. Consistent, transparent water use reporting
2. Technical best management practices for on-site water management
3. Large water users policies

Water authority moves to conserve on cooling systems in Southern Nevada

High-consumption evaporative systems banned in new commercial buildings amid drought



Steven Lewis, general manager for the a/c company Ambient Edge, showing their own evaporative cooling unit at their shop in Henderson, Nevada. Thursday, September 14, 2023. Brian Ramos Photo by: Rhiannon Saegert

By Rhiannon Saegert
Monday, Sept. 25, 2023 | 2 a.m.

After Project Blue outcry, Tucson adopts rules for large water users

New ordinance adds oversight and transparency for companies seeking millions of system

[Email](#) [Bluesky](#) [X](#) [Facebook](#)

PROTECT
OUR
WATER!
NO BLUE



Sign at the Project Blue info session at the TCC on Aug. 4, 2025. Photo by Michael McKisson // sostiene un cartel en la sesión informativa del Proyecto Blue en el TCC el 4 de agosto de 2025.

Denver and El Paso County order disclosure of data centers' water consumption records

Energy/water connection



Myth/Belief:

*Data centers ~~gobble up~~ will impact
water and energy use and ~~have no~~
~~place in~~ pose complicated questions for
communities in the desert Southwest*





Thank You!