

Thirsty Data: Water Use at Data Centers

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HARC

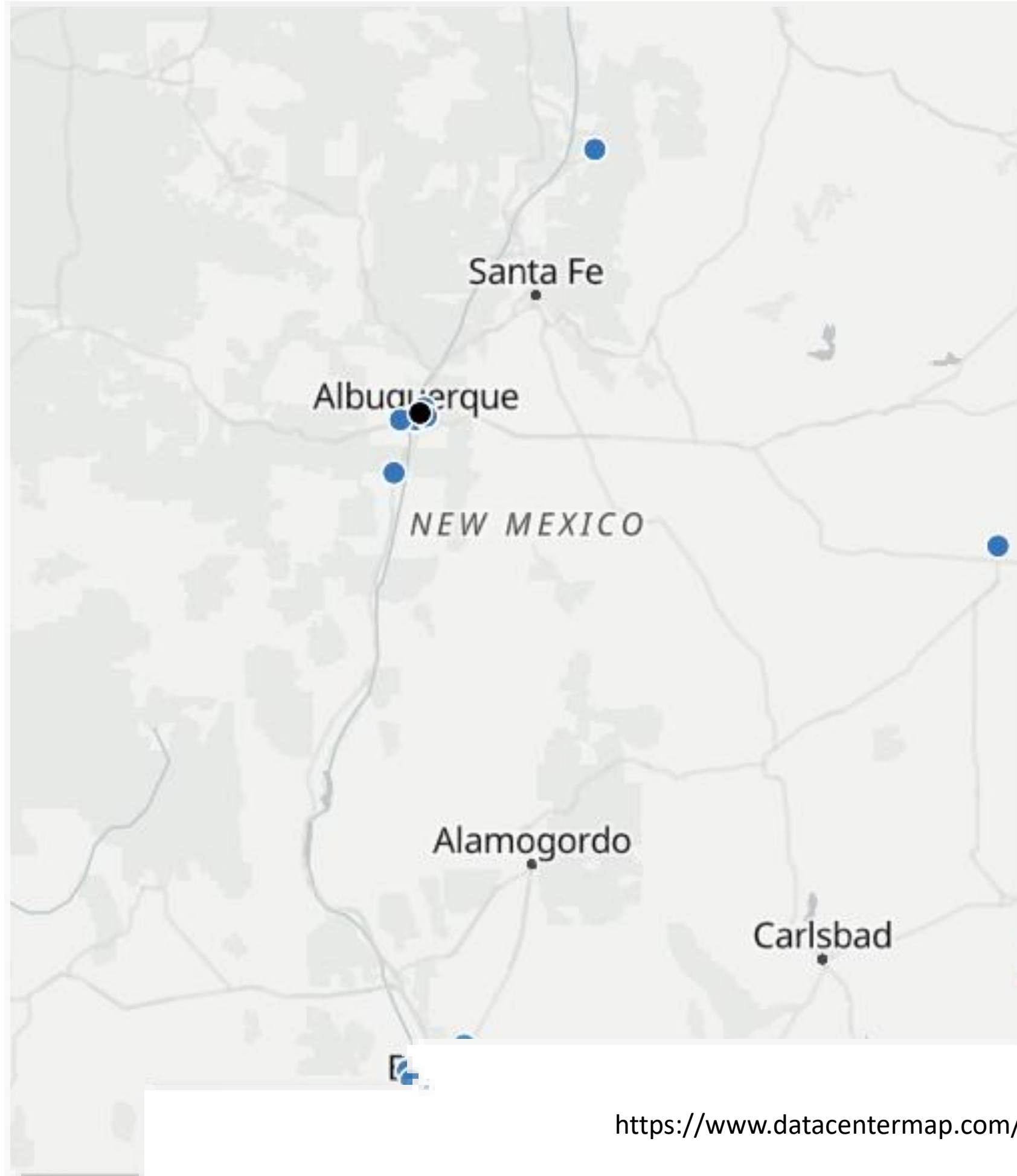
About HARC

HARC is an independent & nonpartisan nonprofit organization focused on advancing science-backed sustainability solutions.

The motivating force behind all HARC's work is to advance a sustainable future for Texas.

HARCresearch.org





<https://www.datacentermap.com/>

New Mexico Data Centers

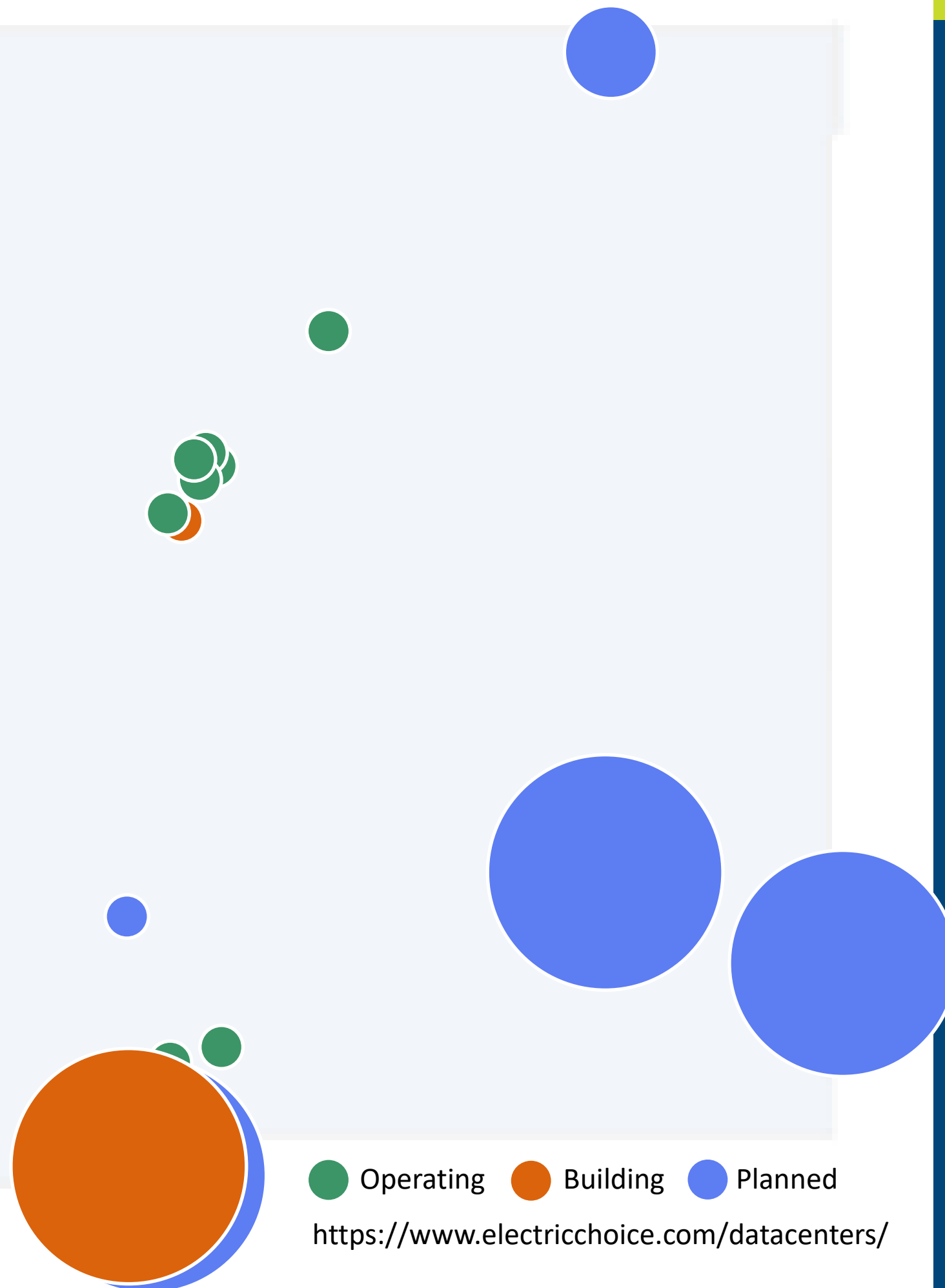
As of August 2026, operating sites:

- Taos – 1
 - Los Lunas – largest campus (8 buildings + 2 under construction)
 - Albuquerque – 5+ sites
 - Clovis – 1
 - Southern NM – 1 site (Santa Teresa)
 - SE NM – 1 site (Hobbs)
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- 1.6 TWh estimated energy use

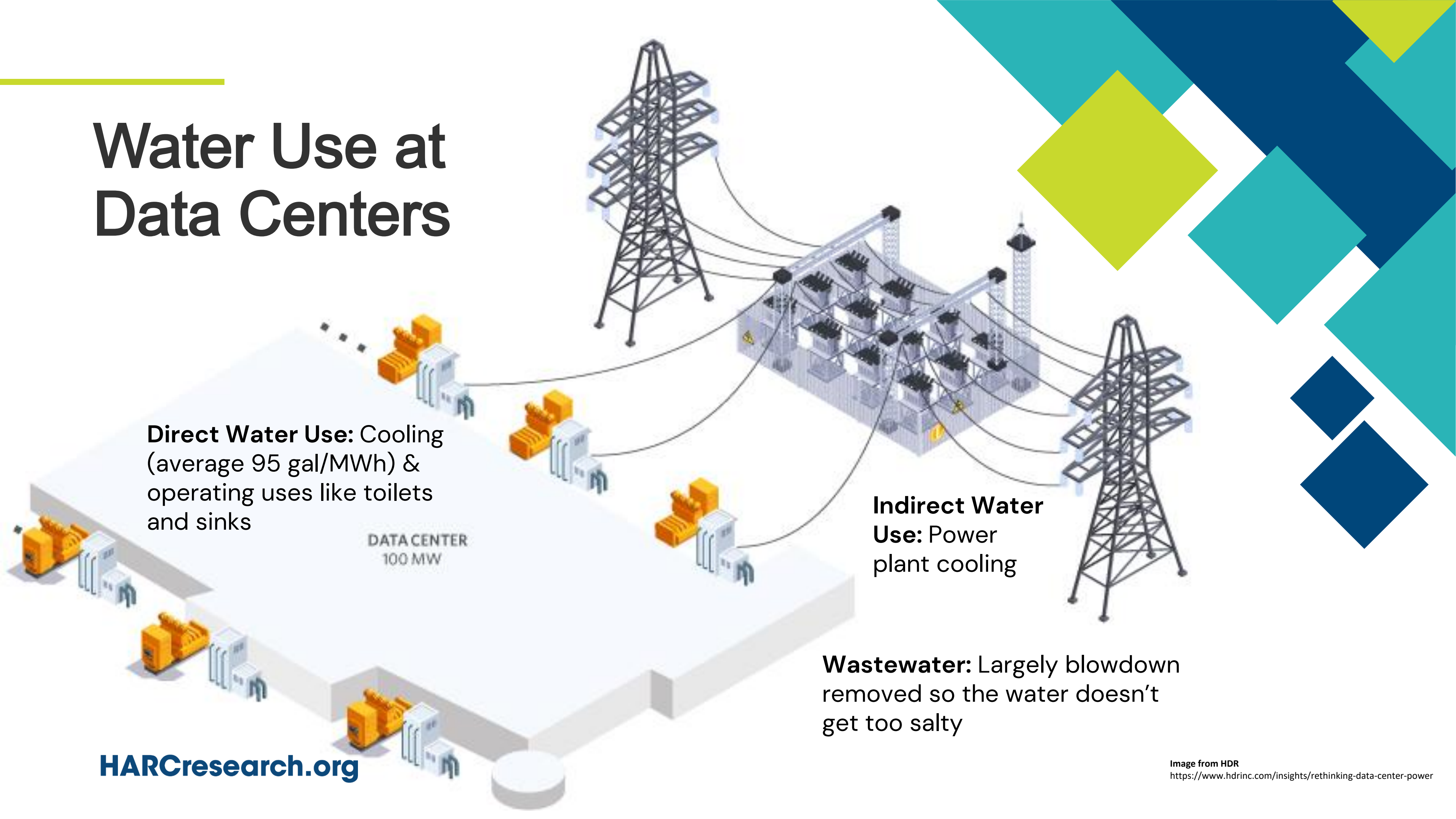
New Mexico Data Centers

As of August 2026, planned data centers:

- Southern NM – 2 planned + 1 under construction (2.45 GW Santa Teresa)
SE NM – 2 planned (7 GW Lea County, 1.24 GW Roswell), 1 prospective expansion
- Northern NM – 1 planned (50 MW)
- Socorro withdrawn
- 75 TWh energy use if operating at 80%



Water Use at Data Centers



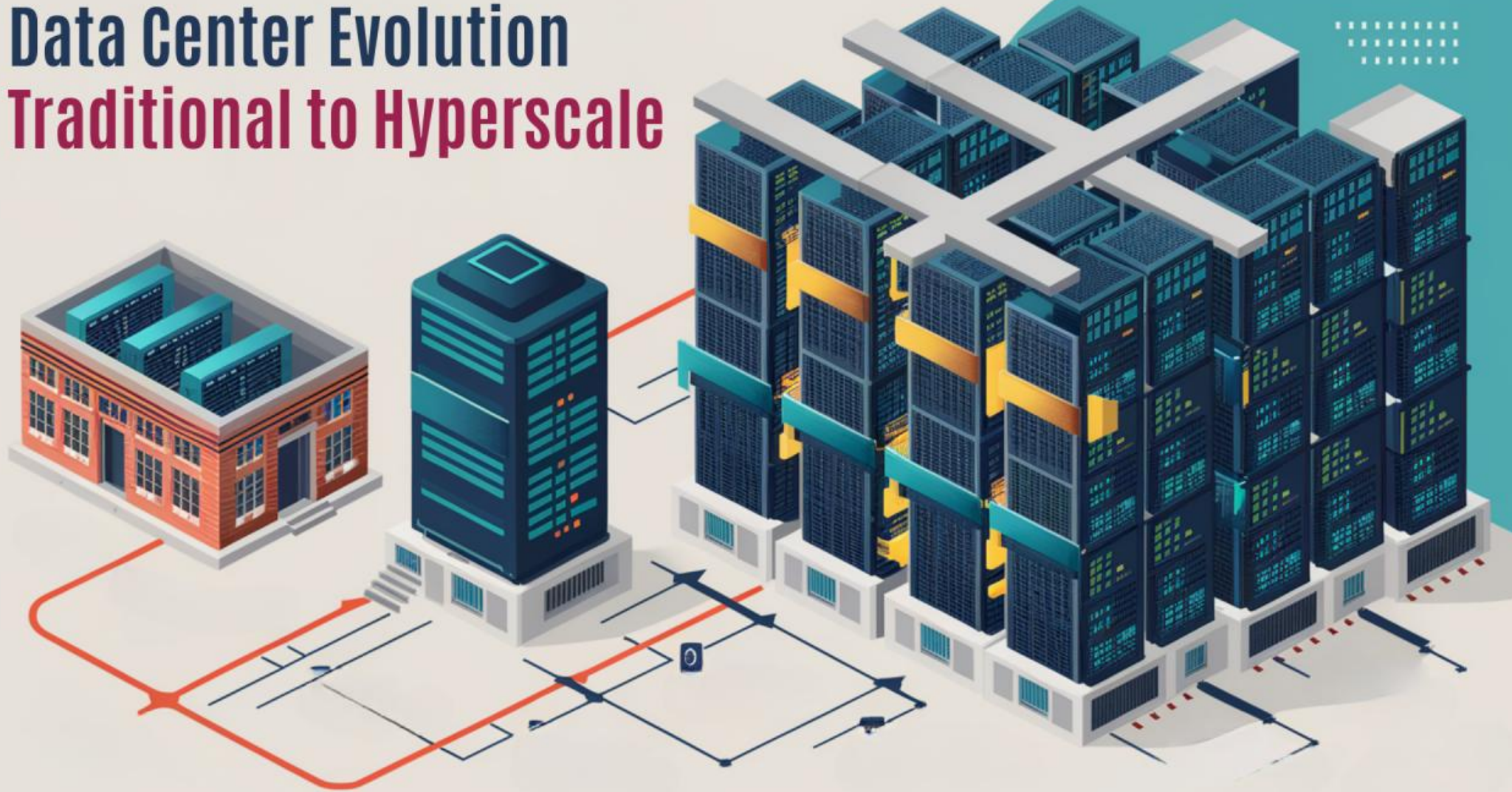
Direct Water Use: Cooling (average 95 gal/MWh) & operating uses like toilets and sinks

DATA CENTER
100 MW

Indirect Water Use: Power plant cooling

Wastewater: Largely blowdown removed so the water doesn't get too salty

Data Center Evolution Traditional to Hyperscale



Factors Influencing Water Use

Amount of water use and environmental impacts depend on

- Computing equipment
- Operating choices
- Cooling type
- Size
- Type (hyperscaler, co-location, small, midsize, crypto, etc.)

Current Water Demand

Current New Mexico data centers use

- ~152 million gallons per year direct cooling + 350 Mgal/yr indirect (power plant) cooling = 502 Mgal/yr total (0.05% of current water use)



Planned Water Demand

Planned New Mexico data centers use (assuming a similar grid)

- ~7.1 Bgal/yr (direct) + 16.5 Bgal/yr (indirect) = 23.6 Bgal/yr total (2.4% of total water use)



Planned Power Plant Retirements

Planned New Mexico data centers use (assuming a newer grid)

- ~7.1 Bgal/yr (direct) + 2.9 Bgal/yr (indirect) = 10 Bgal/yr total (1% of total water use)
- **Older power plants are a significant driver of water consumption**



Challenges of Estimating Water Demands of Data Centers

- Data uncertainty
 - Lack of transparency from data centers
 - Few published studies available
- Municipalities don't have the most up-to-date data to make informed choices
 - Borrowing against future water needs

Recommendations

- **Transparent Data** – Data centers report expected & actual electricity and water use.
- **Forward Looking Water Planning** – Coordinate w/ data center developers, ensure large water industrial users are captured in planning.
- **Efficiency & Alternatives** – Incentivize data centers to use energy-lean and water-lean technologies (e.g., tie to existing tax abatements), use alternative water supplies when possible.
- **Leverage Infrastructure Investment & Public-Private Solutions** – Seek data center investments that serve the local community, including paying their costs and facilitating water replenishment.
- **Draw from Energy Sector Best Practices** – e.g., track planned water use like planned electricity use/interconnection process

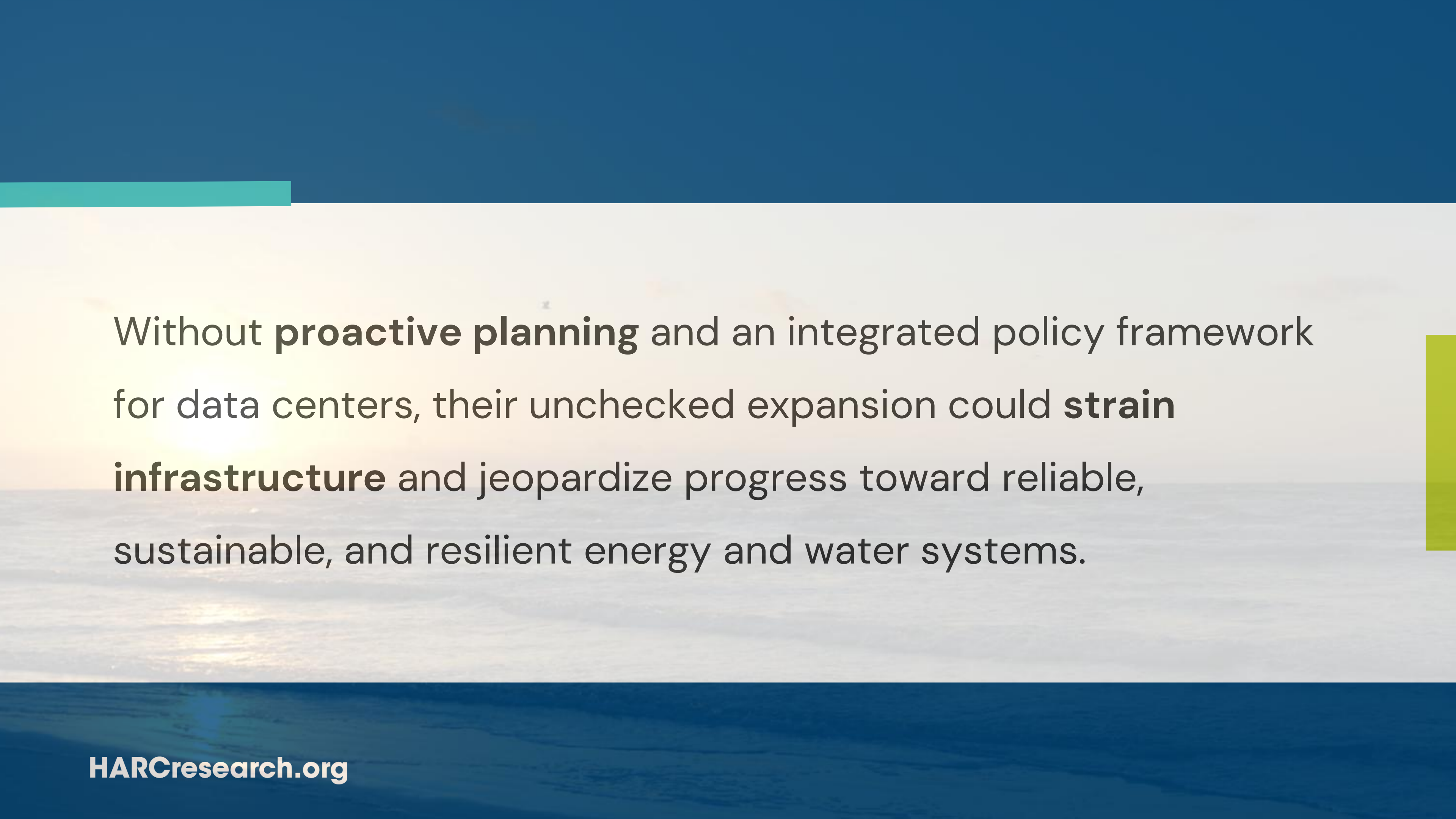
State Policy Recommendations

- **Transparency**
 - Establish a statewide notification process
 - Prohibit NDA provisions that hide water and energy use from the public
 - Require water and energy reporting to the state, regional planners, counties, cities
 - Provide a public dashboard of sites and data
- **Reduce Water Use/Stress**
 - Require drought contingency plans
 - Require/encourage efficient water use (direct + indirect)
 - Require/encourage use of alternative water sources
 - Map water stress and limit water use in stressed areas
 - Encourage projects to offset water and energy use
 - *Continue power plant retirements + build new water-lean power plants*
- **Water Quality**
 - Limit wastewater discharge
 - Evaluate wastewater pretreatment efforts
 - *Disallow siting or construction of data center facilities on protected wetlands*
 - Groundwater protections (no harm to nearby wells, springs, surface water)
 - Allow counties to set impervious cover limits

Balancing the Water Needs of Data Centers and Large Water Users in Texas with the State's Vision for Long-Term Water Security

Policy Recommendations for the 90th Texas Legislature





Without **proactive planning** and an integrated policy framework for data centers, their unchecked expansion could **strain infrastructure** and jeopardize progress toward reliable, sustainable, and resilient energy and water systems.

Thank you!

For more information, contact HARC at
(281) 364-6000 or visit www.HARCresearch.org.

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