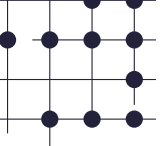


DATA CENTER POLICY CONSIDERATIONS FOR STATE WATER RESOURCES MANAGERS

A quick reference guide

Prepared By.

**ICWP Data Center
Committee**

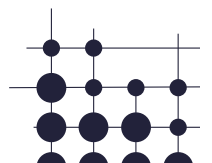


Background

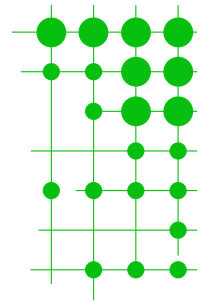
Managing data center
water demands, oversight,
and costs



With concerns over fragmented oversight, hidden demand, local capacity constraints and unmitigated cost shifting, the Interstate Council on Water Policy (ICWP) offers the following considerations for state and interstate water managers to help them address water supply and demand issues associated with hyperscale data centers and AI infrastructure development.



Five Water Management Risks of Data Center Development



State Authority Gap

Data center developers often overlook or misunderstand state regulatory roles in water permitting, focusing primarily on utility/municipal negotiations while missing state-level requirements.



Regional Variability

Water governance structures vary significantly by state (i.e.-Dillon rule states like Arizona struggle with local ordinance authority, while riparian vs. prior appropriation systems create different challenges for developers).



Unused Permit Capacity

Municipalities may have unused portions of state-issued water permits that could be applied to data center development, creating consumption increases not reflected in "available water" calculations.



Chip Obsolescence Risk

Data center chips can become obsolete within 5-10 years, and replacement costs may incentivize facility abandonment, creating financial risks for communities that lack protective instruments.



Conservation Paradoxes

Some jurisdictions are actively recruiting data centers due to successful water conservation creating surplus supply, despite statewide drought concerns.



Top Priorities for Water Managers

Addressing **data transparency** and **shifting the financial burden to developers** have been identified by ICWP members as the most immediately relevant need.



Policy Options

- State water managers can promote policies that improve transparency and oversight, require independent analysis and reporting, protect local decisions, and shift infrastructure costs to developers.

Transparency

Oversight



Local
decisionmaking

Shift costs

Independent
analysis





Rapid Implementation Checklist



Make water, wastewater, and electrical demand information public before formal negotiations or hearings.



Require direct state review for major water users, including facilities served through municipal systems.



Coordinate land-use and water-permitting decisions so annexation cannot conceal project-scale withdrawals.



Use independent hydrological analysis to evaluate cumulative and multi-year surface and groundwater impacts.



Protect municipalities that deny projects because of documented environmental or infrastructure limits.



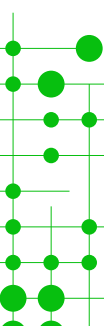
Require automated consumption reporting and public access to non-sensitive data.



Assign all project-related utility expansion, maintenance, wastewater-treatment, and grid-mitigation costs to the developer.



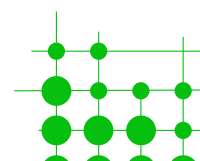
Link tax incentives to closed-loop or similar non-evaporative cooling methods, non-potable water use (where regionally appropriate), and compliance with reporting and resource-protection requirements.

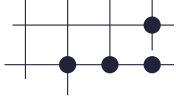




Tools to Consider

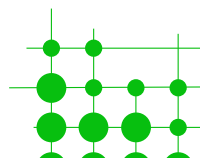
Policy Area	Action	Output
Community Benefit Agreements	Weave hydrological safety nets (such as consumptive water use thresholds) directly into the facility's operating blueprint.	Move away from handshake deals toward legally enforceable contracts that are defined and agreed upon prior to development.
Government-Industry Non-Disclosure Agreements (NDAs)	Prohibit non-disclosure terms from applying to public-resource capacity or demand.	Proposed water withdrawals, electrical loads, and wastewater discharge profiles remain in the public record from the start of negotiations so decisionmakers can assess cumulative effects.
Pre-negotiation disclosures	Require a standardized infrastructure impact statement before any land-use, zoning, or annexation hearing is scheduled.	At minimum, disclose peak daily water intake, chemical and thermal wastewater characteristics, and steady-state electrical demand.
Real-time reporting	Require hyperscale data centers to install automated water and energy meters.	Transmit real-time consumption data directly to state environmental agencies and a publicly accessible database.





Tools to Consider

Policy Area	Action	Output
Aquifer stress testing	Require developers to fund independent, multi-year hydrogeological modeling and aquifer stress testing before approval of high-volume water permits.	Deny permits when modeled drawdown would compromise agricultural wells, municipal drinking-water supplies, or slow-recharging aquifers.
Developer-funded infrastructure	Require developers to pay all upfront and long-term maintenance costs for trunk-line extensions, wastewater-treatment expansion, and high-capacity booster stations.	Do not shift project-driven capital or maintenance costs to local taxpayers or existing utility customers.
Tax incentives	Condition state sales- and property-tax exemptions on closed-loop cooling and non-potable or recycled-water use.	Remove exemptions from facilities that use aquifers or surface water reservoirs for evaporative server cooling.
Wastewater costs	Apply surcharges to concentrated, mineral-rich cooling-system blowdown discharged to municipal sewers.	Set charges to offset the additional chemical and thermal treatment burden placed on public wastewater plants.
Energy-Water tradeoff	Require data-center operators to integrate on-site backup batteries with the local utility framework.	During peak summer demand, require the battery system to support the public grid and reduce reliance on water-intensive fossil-fuel generation.



Additional Resources



Source	Title & Link
American Association for the Advancement of Science	Local Policy Responses to Data Center Development: Moratoria, Zoning, Agreements and Community Engagement Key Trends in Data Center Policy
Climate Xchange	State Policy Toolkits for Data Center Regulation: Transparency and Accountability
Interstate Council on Water Policy	ICWP 2026 Data Center Report
Pacific Northwest National Laboratory	Resilience of Energy and Water Systems Workshop Summary
University of Michigan	From Infrastructure to Implications: Data Center 101 for Urban Planners
Water Data Forum	Water Management for Data Centers