Water Data: Challenges and Opportunities
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Focus on Water Data and Tools

Water Tools

GIST (Surface Water Tool) – Brazos River Basin, Texas

Groundwater Recharge Assessment Tool - California

...plus several new tools now under development in Texas and elsewhere

Water Data

CA Water Data Advisory Council

Advisory Council to Data Management Team

Texas Water Data Initiative
Challenges and Opportunities

What we’ve heard in talking with dozens of water agencies and authorities regarding water data…

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Opportunities</th>
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<tr>
<td>1. Data is too costly. Especially true in collecting data and reporting it.</td>
<td>1. Better decisions. Data could really help me make better planning and operational decisions.</td>
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<td>2. Transparency issues. Concern that if I make data more available, someone will misuse it.</td>
<td>2. Single place for data. Would love to have all my data in one place for fast, easy use.</td>
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<td>3. My team is too small. All this new data and technology feels really complicated.</td>
<td>3. Other useful data. I know there is other data (from federal, state, county, etc.) that might be valuable but I don’t know where it is and how to get it.</td>
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<td>4. Don’t know where to start. Don’t have time to make sense of all the data.</td>
<td>4. Find new opportunities. I’m sure there are new opportunities if we could understand the whole system, including how groundwater is trending across an entire aquifer and conjunctive GW-SW. I think we could all be better off.</td>
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Water Data: Today’s Primary Challenge

Costs \( \neq \) Value

(actual financial costs, resources/time, perceived risks) \( \neq \) (better water outcomes, water availability, possible financial benefits)

How do we fix this equation so going forward the value for everyone is higher (and the costs are lower)?
National and State Efforts on Water Data

National Level

Housed by the Nicholas Institute at Duke University

State Level

California
AB 1755: Open and Transparent Water Data Platform for California

Texas
Water is hyper local. Work directly with a key Texas stakeholder, such as GCDs, who needs to make better decisions regarding groundwater.
...and you start with the end users (decision makers) and work back from there.
How do we help Texas groundwater users and managers make better decisions and reach better outcomes using water data?