1965 - 2015

WESTERN STATES WATER COUNCIL

The Water Data Exchange (WaDE) and Other Data-Sharing Initiatives

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Executive Director

2015 Colorado River Water Users Association

December 16th, 2015
Caesars Palace, Las Vegas, Nevada

http://www.crwua.org

Data Sharing Initiative

Big Picture Goals

- To better enable the states to share data with each other, the public and federal agencies
- Encourage sharing of federal data using standardized schemas (formats) with the states, to assist with planning efforts

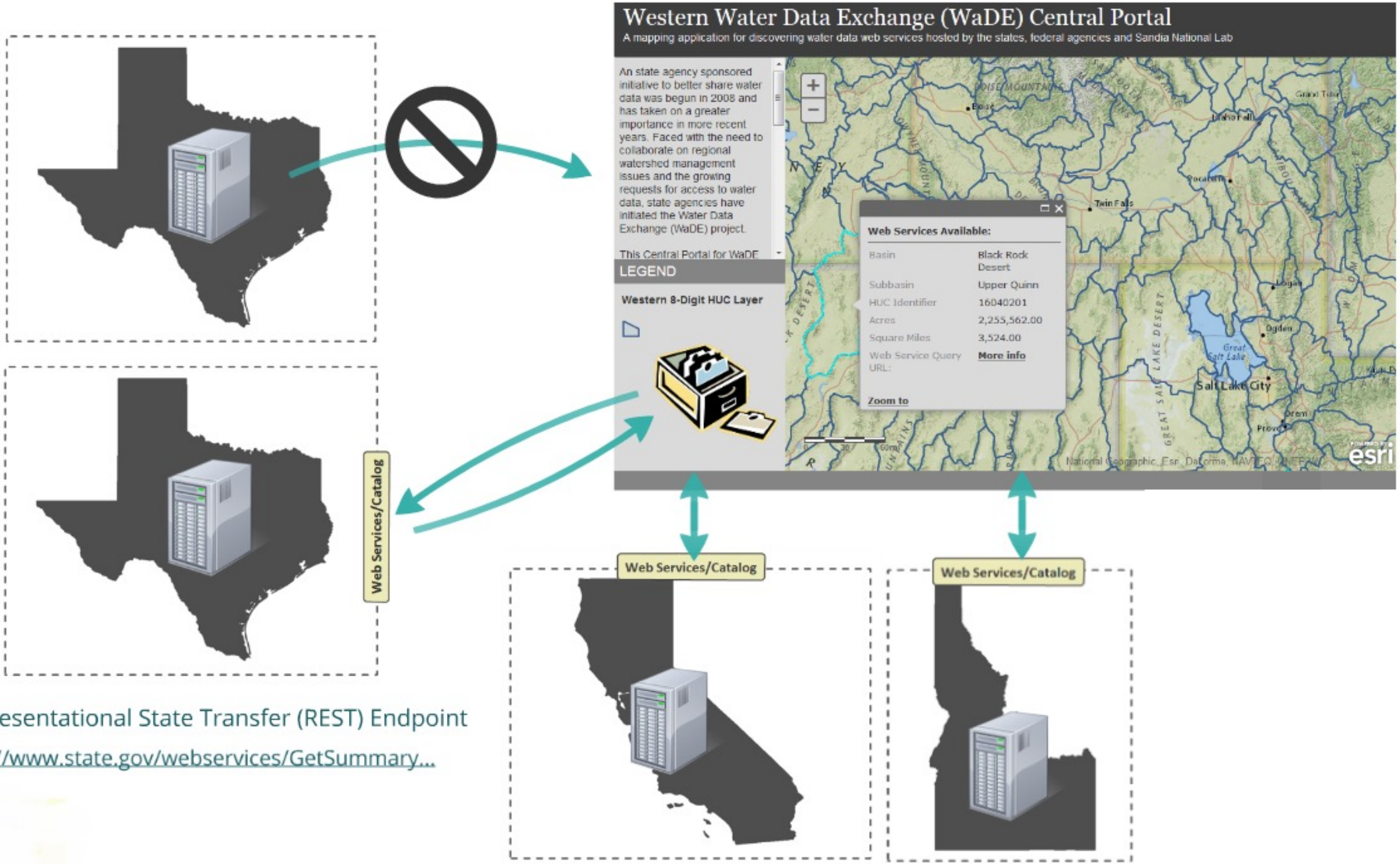
OWDI

WaDE Groundwork

- Variability between the states and a common schema (format) for water planning data (visits, workgroups, surveys)
- Develop prototypes for databases, web services, central portal, cloud implementation
- Outreach and education (visits, conferences)
- Encourage use of standardized data schemas where appropriate (WaterML, GWML, etc.)

Federal Data-Sharing Benefits

- Accessing important data for water modeling and other efforts is time-consuming and disparate – many different agencies on many different websites in many different formats.
- If the federal family shared water data using standardized formats and "open data" strategies, state efforts could be much more streamlined and efficient.
- The ACWI-led Open Water Data Initiative (OWDI) is an exciting step in this direction.

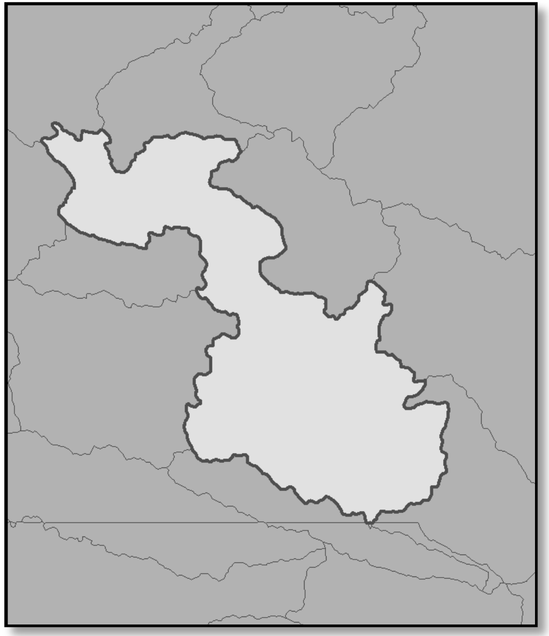


Representational State Transfer (REST) Endpoint

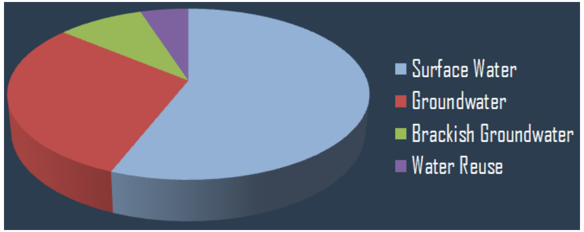
http://www.state.gov/webservices/GetSummary...

Types of Data Exchanged

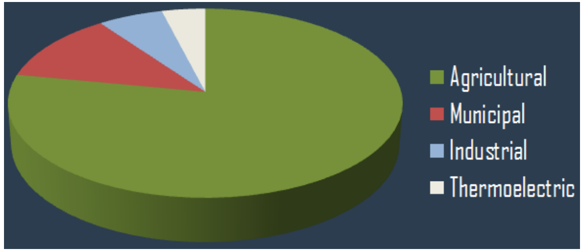
- Summary-level data



Availability Summary: 2,000 AFY



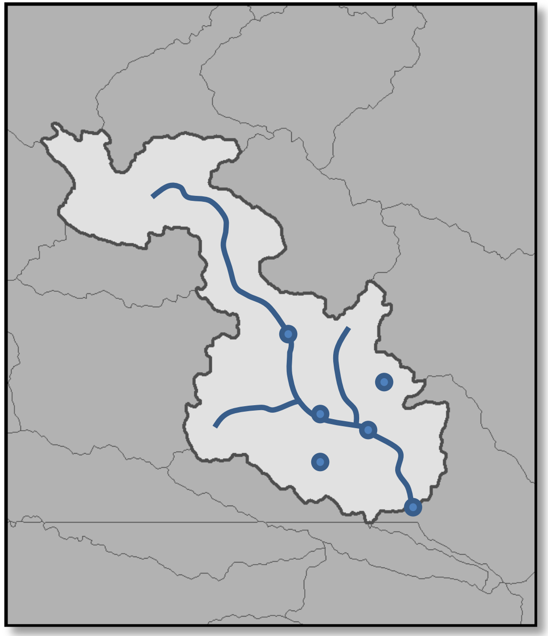
Water Use Summary: 1,500 AFY



Water Supply and Regulatory Information

Types of Data Exchanged

- Detailed/site-specific data



Water Rights/Permit Data

- Owner
- Beneficial Use
- Legal Status
- Priority Date

Diversions

- Locations, Amounts

Consumptive Uses

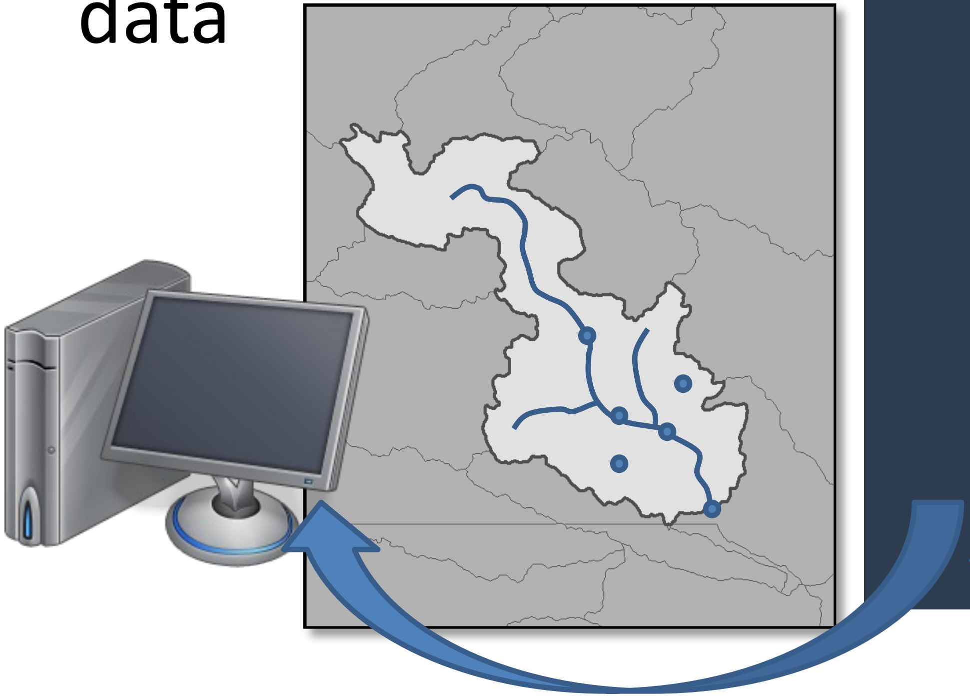
- Locations, Amounts

Return Flows

- Locations, Amounts

Types of Data Exchanged

- Detailed/site-specific data



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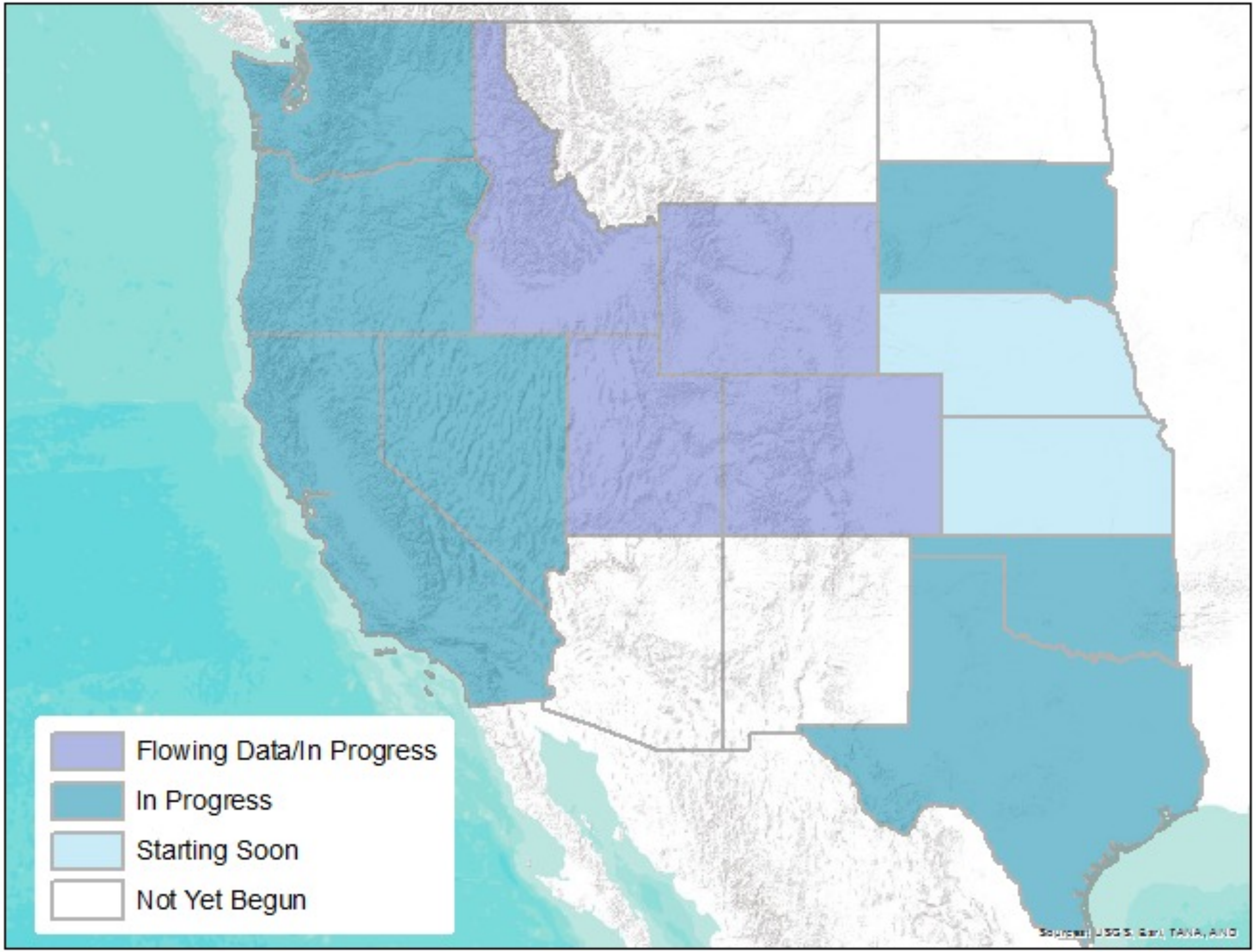


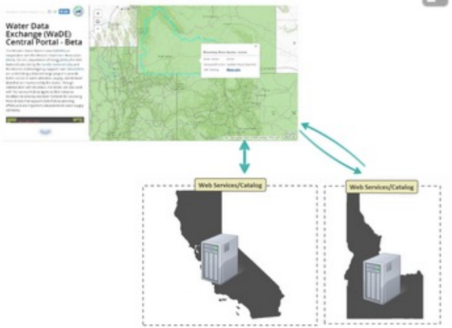
Western States Water Council

Water Data Exchange (WaDE) Central Portal - Beta

regions within each state. Clicking on the catalog link accesses the GetCatalog webservice, which retrieves an up-to-date listing of the types of data that are shared by water agencies/organizations within the region.

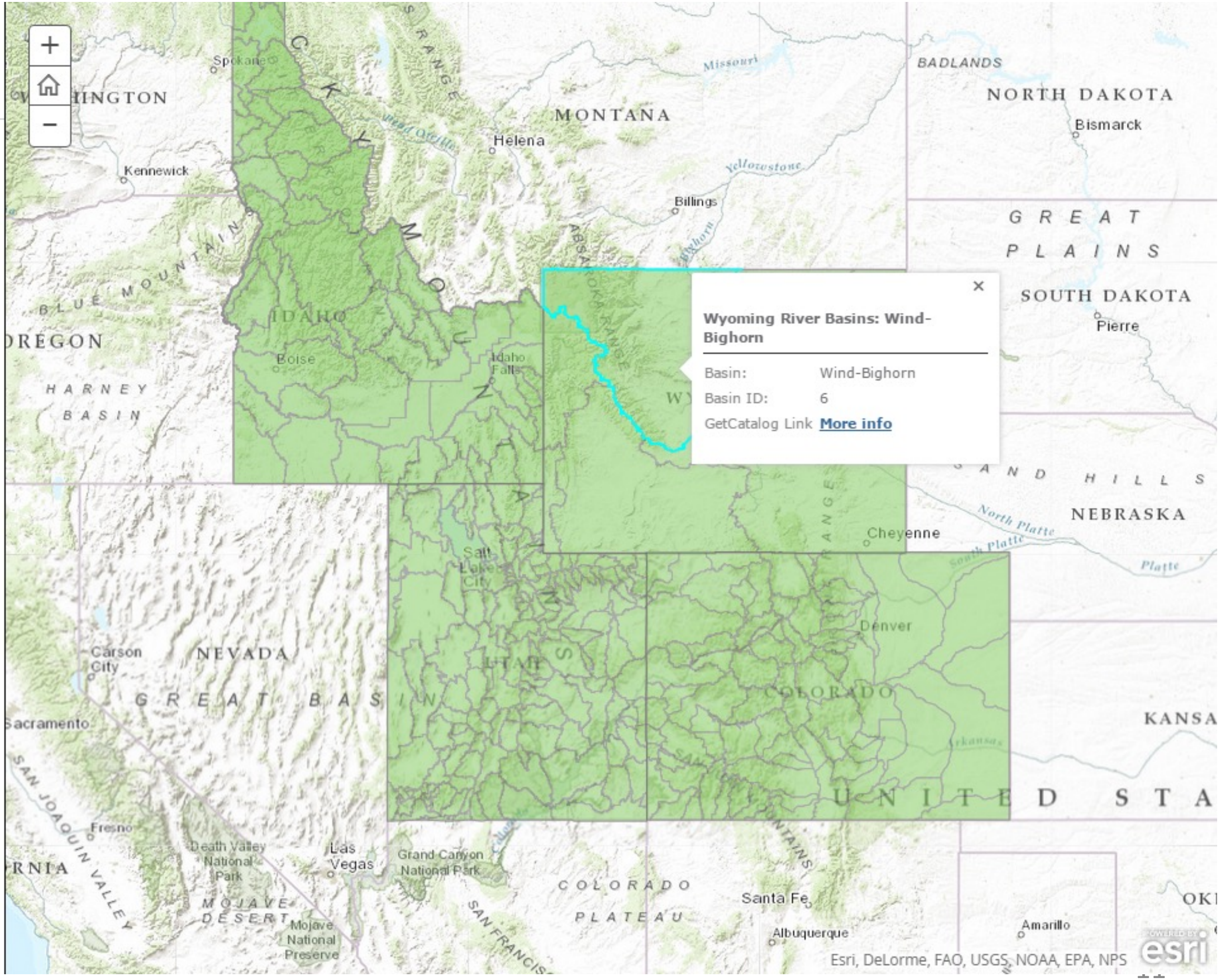
Clicking on links within the the catalog allow a user to retrieve those datasets directly from the state agency and view basic data as a webpage. More extensive data can be accessed within the underlying XML data retrieval.

HOW DOES IT WORK?



Conceptual diagram of WaDE distributed framework

If this is your first visit to WaDE, please step through the short tutorial below for an overview of what type of data are accessible within the WaDE portal, how to access them, and what their limitations may be. Enjoy!



Western States Water Council - Water Data Exchange (WaDE) Catalog

Back to Map   About

Data shared within WaDE are organized by "reports," which are yearly encapsulations of the data, either a water year (Oct. 1st - Sep. 30th), an irrigation year (Nov. 1st - Oct. 31st), or a calendar year. There may be multiple reports for any given year based on the methods used to generate that report.

NOTICE For all data provided, please review the associated methodology information thoroughly to discover data provenance and quality before using, especially when comparing data between states or organizations.

Organization: Utah Division of Water Resources

Geospatial Reporting Unit: REPORTUNIT - 00-01-02

For a listing of methods used by Utah Division of Water Resources and shared within WaDE, click here.

To retrieve ALL of Utah Division of Water Resources's SUMMARY datasets OR ALL of its DETAILED (site-specific) datasets by report:

Report	Data Category	View Entire Report
2005	SUMMARY	All Summary Data
2006	SUMMARY	All Summary Data
2007	SUMMARY	All Summary Data
2008	SUMMARY	All Summary Data
2009	SUMMARY	All Summary Data
2010	SUMMARY	All Summary Data
2011	SUMMARY	All Summary Data
2012	SUMMARY	All Summary Data
2013	SUMMARY	All Summary Data

*Note: Requests for ALL DETAILED DATA may have more extensive data-retrieval times. Use the table below to access detailed datasets by data category and type.

To retrieve summaries or detailed datasets by report and by data category and type:

Western States Water Council - Water Data Exchange (WaDE) Summary Data

Back to Map About

NOTICE For all data provided, please review the associated methodology information thoroughly to discover data provenance and quality before using, especially when comparing data between states, organizations or applications.

Organization: Utah Division of Water Resources

Geospatial Reporting Unit: UT - CUSTOM - 00-01-02 - Park Valley

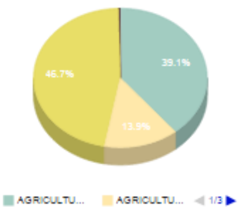
Related Web Feature Service(s) (WFS):

WFS Type	WFS Link	Unique ID Field

This summary is relevant for the reporting year: 2012

These data were reported on: 2015-03-22

Water Use



Beneficial Use	Consumptive Use?	Fresh/Saline	Source Type	Irrigation Type	Acres Irrigated	Crop Type	Population Served	Power Generated (MWH)	Amount	Units	Start Date	End Date	Unique ID	Water Use Methodology
AGRICULTURE	N	FRESH	SURFACE						26204.634	acre feet/year	10/01	09/30		CONSUMPTIVE USE
AGRICULTURE	N	FRESH	GROUND						9293.639	acre feet/year	10/01	09/30		CONSUMPTIVE USE
AGRICULTURE	Y	FRESH	SW/GW						31303.630	acre feet/year	10/01	09/30		CONSUMPTIVE USE
MUNICIPAL/INDUSTRIAL	N	FRESH	SURFACE						12.900	acre feet/year	10/01	09/30		CONSUMPTIVE USE
MUNICIPAL/INDUSTRIAL	N	FRESH	GROUND						176.450	acre feet/year	10/01	09/30		CONSUMPTIVE USE
MUNICIPAL/INDUSTRIAL	N	FRESH	SW/GW						71.061	acre feet/year	10/01	09/30		CONSUMPTIVE USE

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Google


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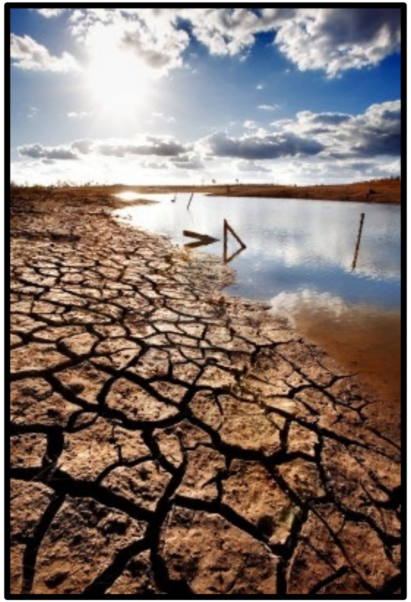
WHY IS IT SO IMPORTANT?



With population growth, greater competition, energy security, food security, drought, climate change…

questions about water availability and demand will only increase!

Questions?

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WESTERN STATES
WATER COUNCIL

To learn more, participate in workgroups, access draft items, sign up to be a beta-tester, etc., please see:

www.westernstateswater.org

and click on the “WADE” tab

OR

Email Tony Willardson: twillardson (at) wswc.utah.gov

OR Sara Larsen: saralarsen (at) wswc.utah.gov