

The Water Data Exchange Program (WaDE)

**WSWC Fall (197th) Meetings – South Dakota
Sept 14, 2021**

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WaDE Phases

PHASE I (2011-2018)

Establish the WaDE Program, build relationships, identify challenges and needs, and create WaDE 1.0 schema within a distributed data system

PHASE II (2019-2021)

Improve schema to 2.0, adapt to centralized cloud hosting, partner with the Internet of Water, import states' data to the new database, define use cases and prototype dashboard

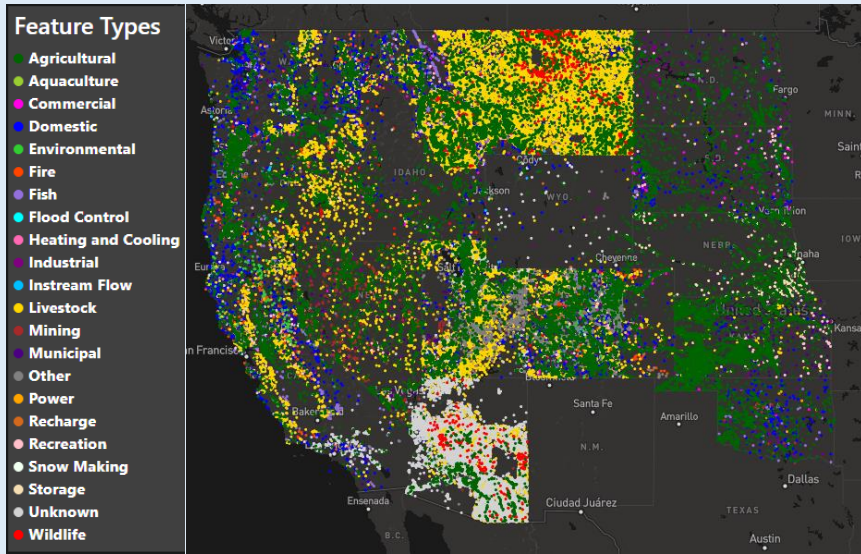
We are here

PHASE III (2022-2026)

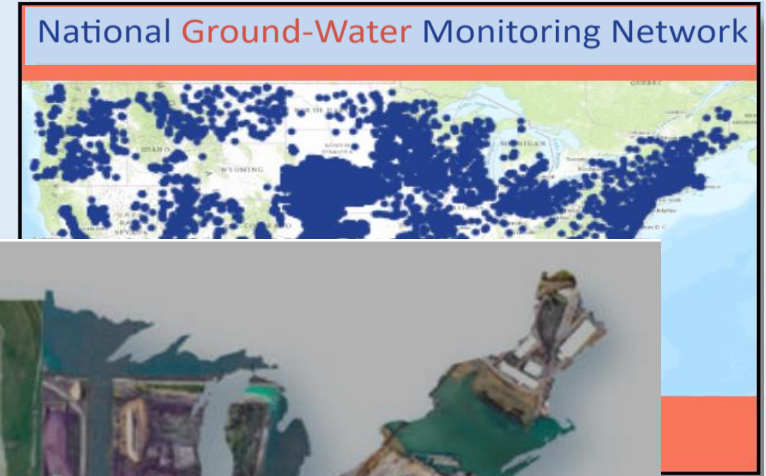
Develop the Western States Water Data Access and Analysis Tool (WestDAAT), operationalize data services, demonstrate interoperable use cases, and support regional water planning and management policy discussions

Water Data Shared by WaDE

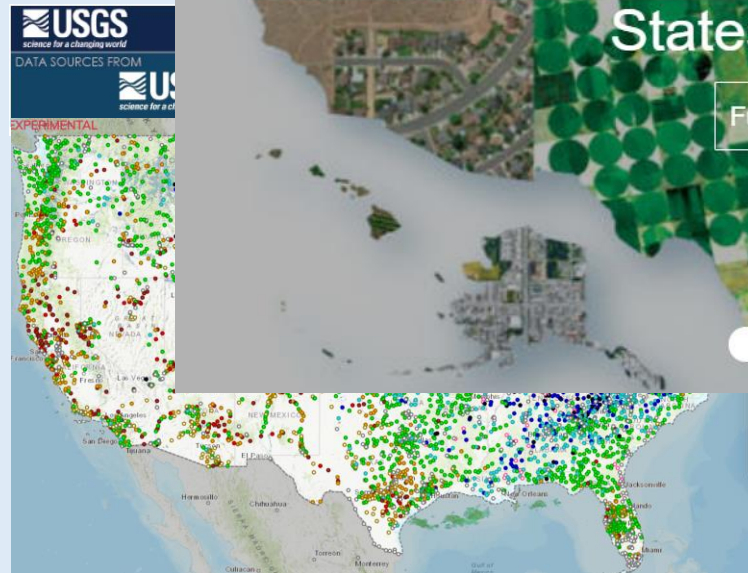
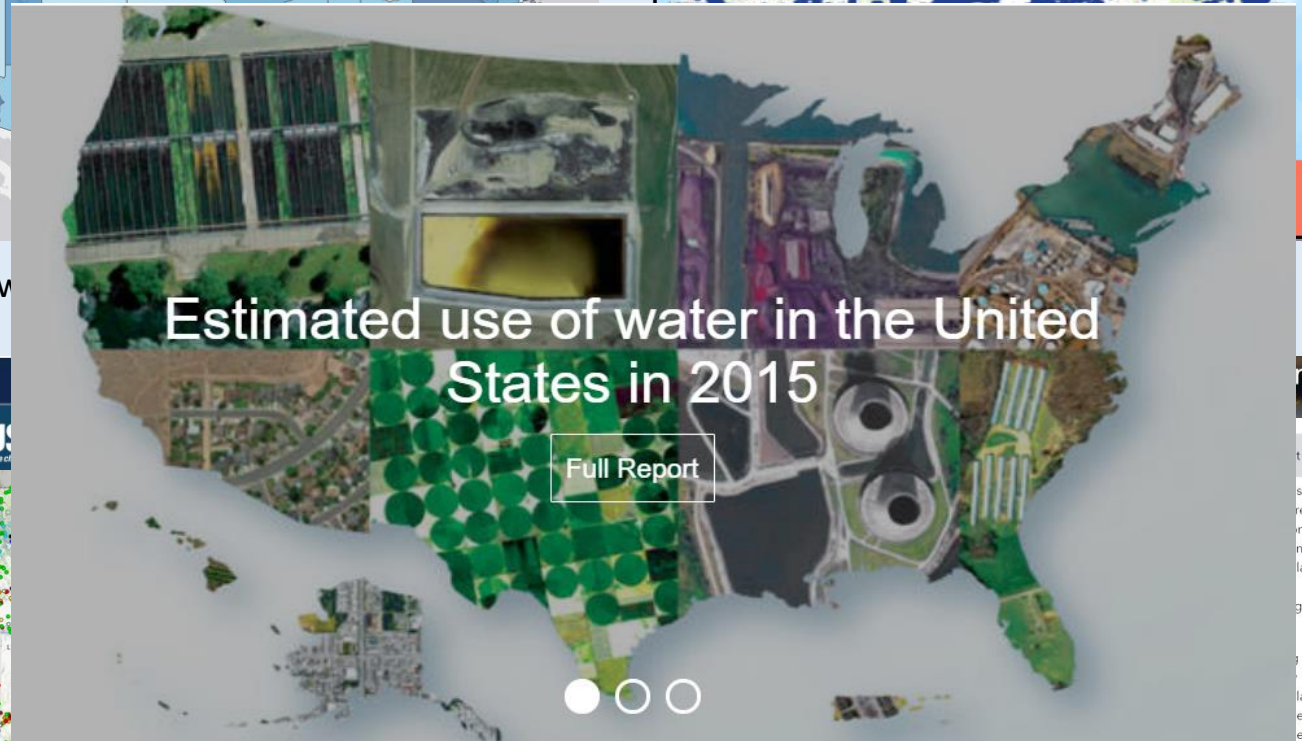
- Water rights
- Site-specific use and withdrawals
- Aggregated water budget estimates
- Regulatory overlays



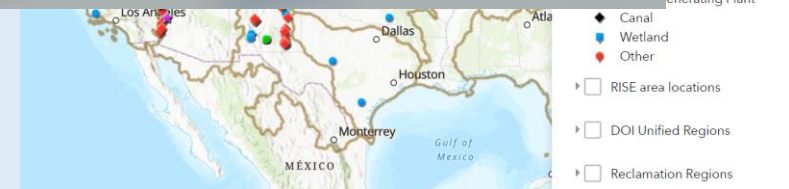
Water Data Shared by Federal Agencies



<https://www...>

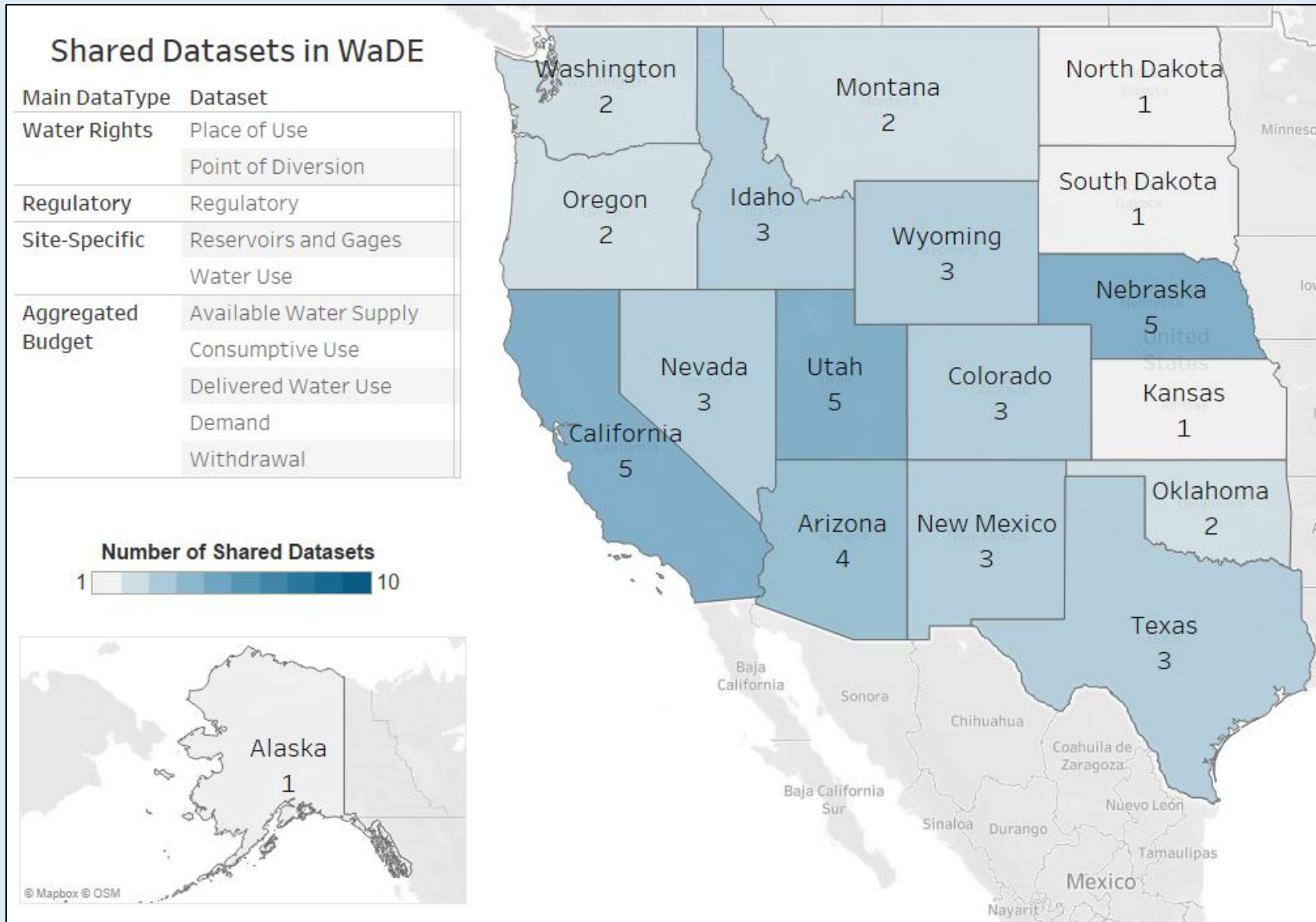


<https://dashboard.waterdata.usgs.gov>

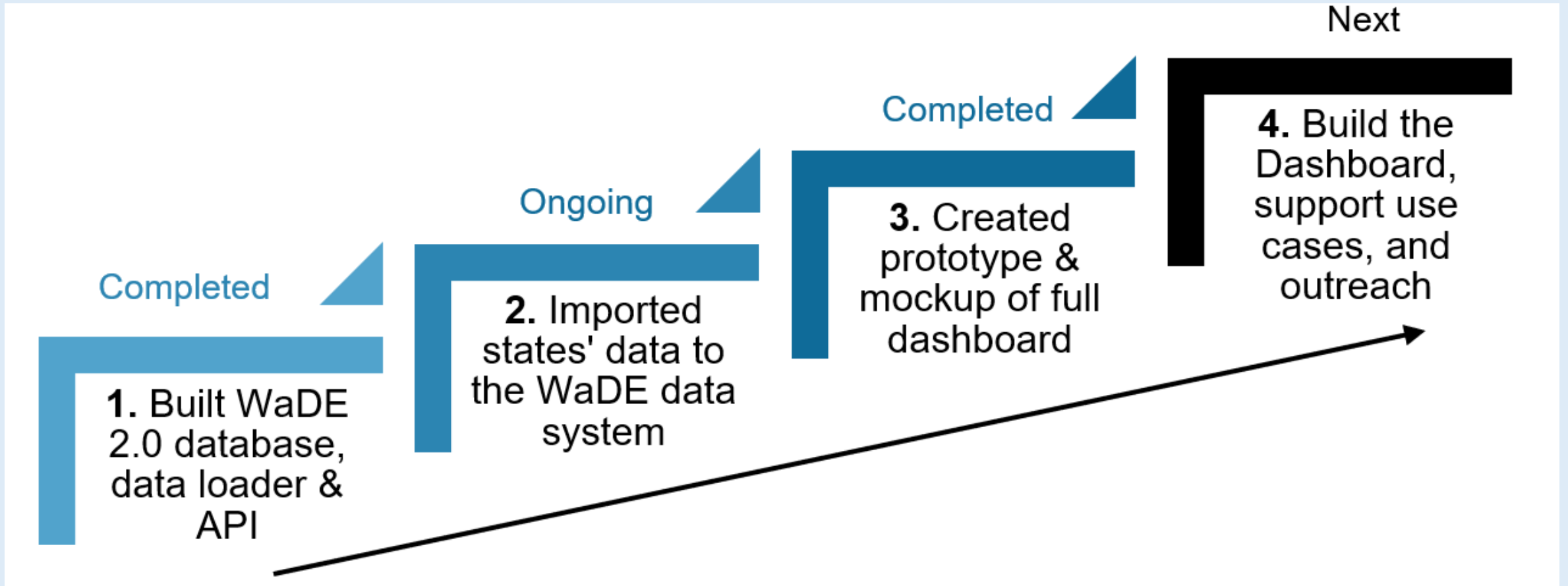


<https://data.usbr.gov/riase-map>

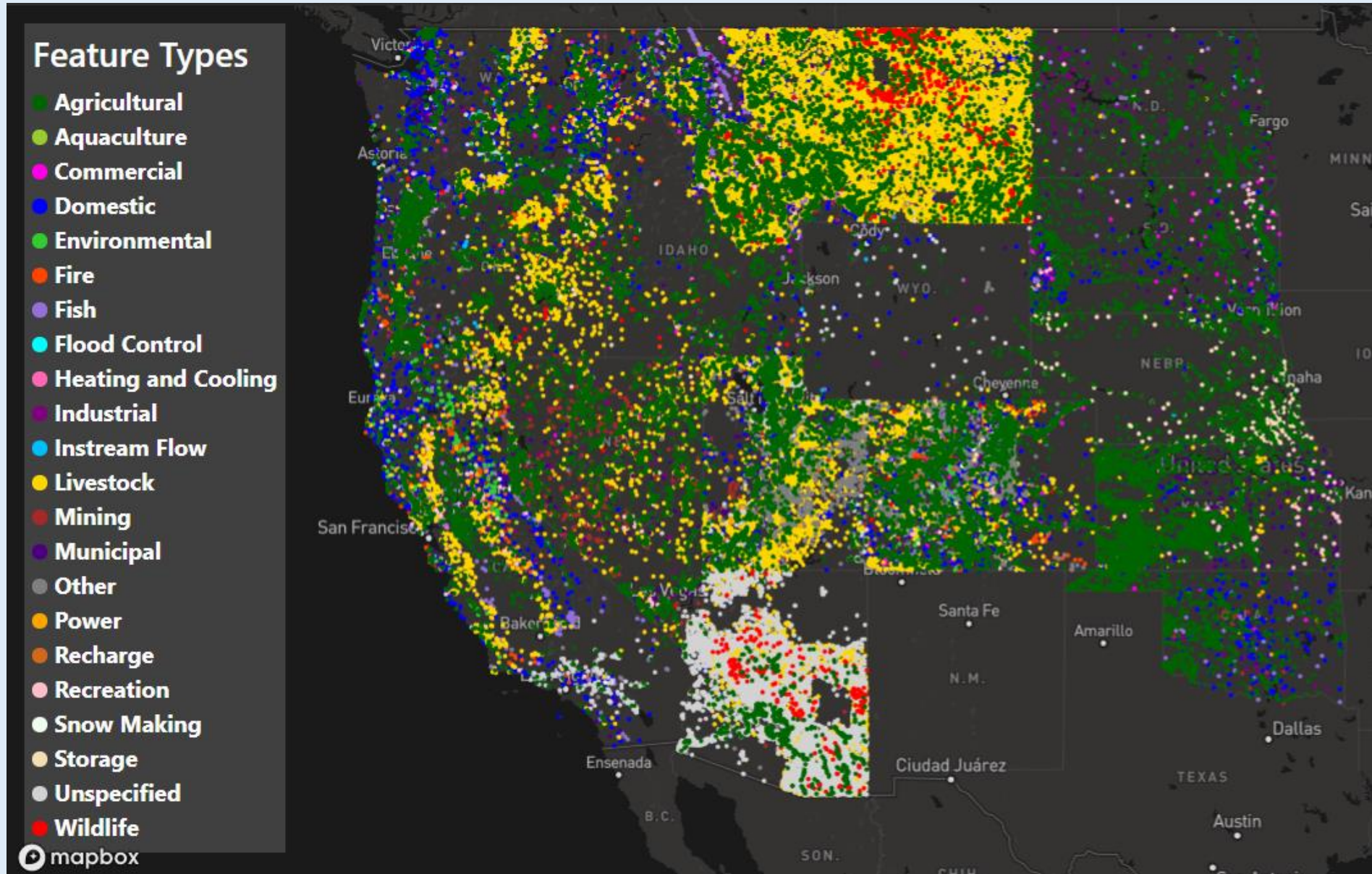
Status of Mapping Data To WaDE



WaDE 2.0 Development Stages



Water Rights Data (PODs)



WaDE Use Cases and Personas

1. Gary the Governor
2. Stan the State Engineer
3. Maggie the River Basin Manager
4. Laila the Land Use Manager
5. Frank the Farmer
6. Ratibah the Researcher



WaDE Integration with OpenET

Western States Water Council | Water Data Exchange Data (WaDE) Dashboard | Log In

Water Rights | Aggregations | Site Specific | Download Map

3 Points of Divisions Displayed

SITE SELECTION FILTERS

Learn about WaDE filters

Reset All Filters

TOGGLE VIEW

Both | POB | POU

Search Location

Search Allocation Owner

State

- Select State(s) -

Beneficial Use

- Select Beneficial Use(s) -

Water Source Type

- Select Water Source Type(s) -

Owner Classification

- Select Owner Classification(s) -

River Basin Area

- Select Sites in River Basin(s) -

OpenET Model: ensemble
Reporting Area: HUC1
Year: 2001

View Metadata

Category	Total Water Volume (AF)
Permitted Water Rights	1500
ET	750
Net ET	800
Reference ET	600
Precipitation	950

Legend: Net ET vs Permitted Water Volume Ratio

- 20%
- 40%
- 60%
- 80%
- 100%
- 120%

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WaterSmart Grants

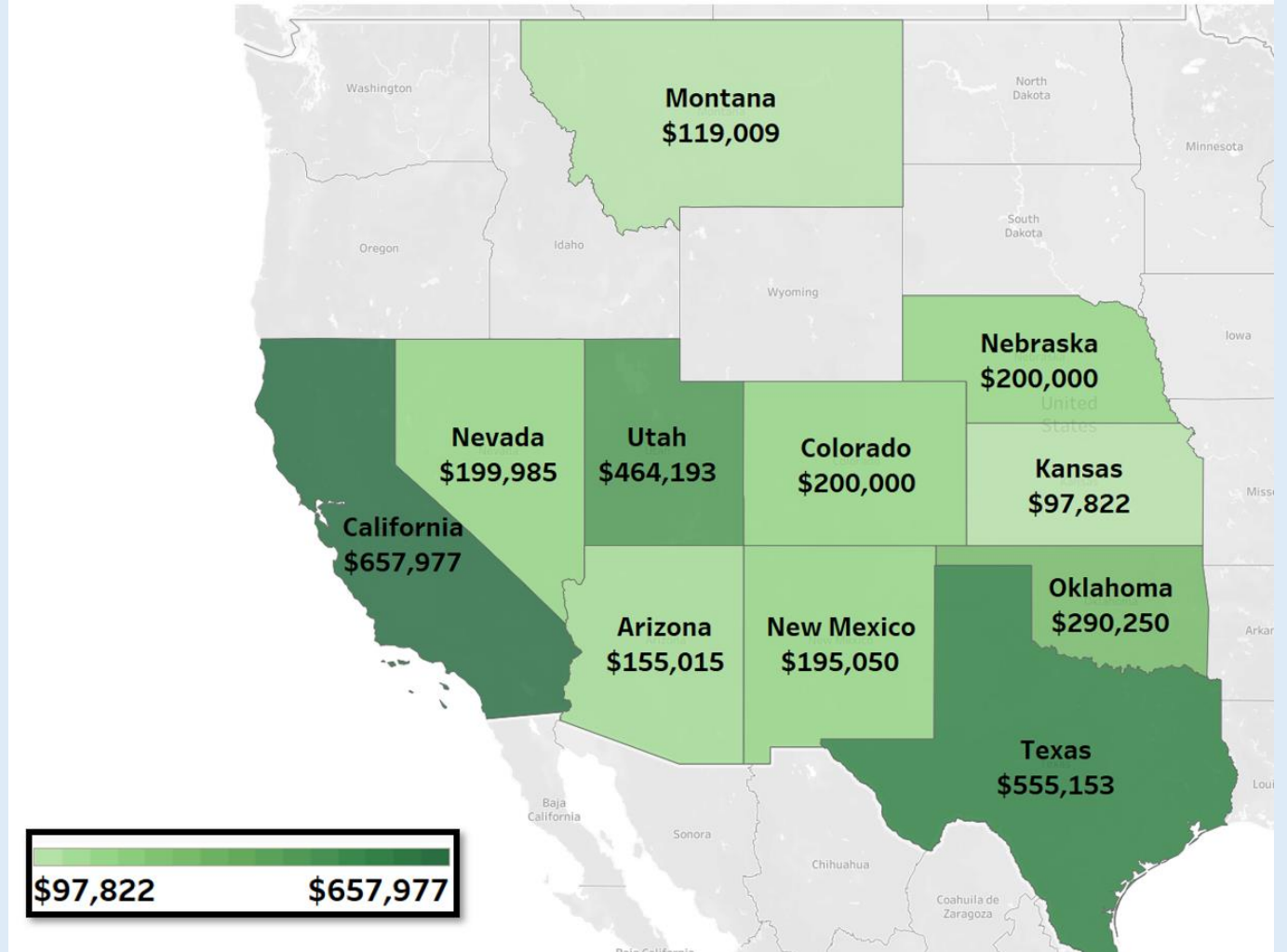
Reclamation awards \$3.1 million in grants to develop water data, modeling and forecasting tools and information for water managers



The Bureau of Reclamation selected 20 projects to share \$3.1 million in applied science grants to develop tools and information to support water management decisions. These projects in 11 western states include improved water data, modeling and forecasting capabilities. [Read More →](#)



WaterSmart Grants: Reclamation Funding (\$) per State



WaDE Program 5-Year Work Plan

#	Main Task	Time Frame				
		1 Year	2 Year	3 Year	4 Year	5 Year
1	Provide access to water rights data including point of diversion (POD), place of use (POU), and regulatory overlays					
2	Provide access to aggregate water use data					
3	Develop an operational WaDE dashboard (WestDAAT)					
4	Incorporate federal water rights ownership interests recognized by states or court decrees, or settlements, and map water rights on federal lands					
5	Streamline the sharing of western states' site-specific time series water use data with USGS as part of the national water assessment and use reporting					
6	Provide access to site-specific time series reservoir and gage stations water data					
7	Conduct outreach and pilot projects to develop "personas" and use cases and sustain the WaDE Program and its dashboard					

Funders, Collaborators & Partners

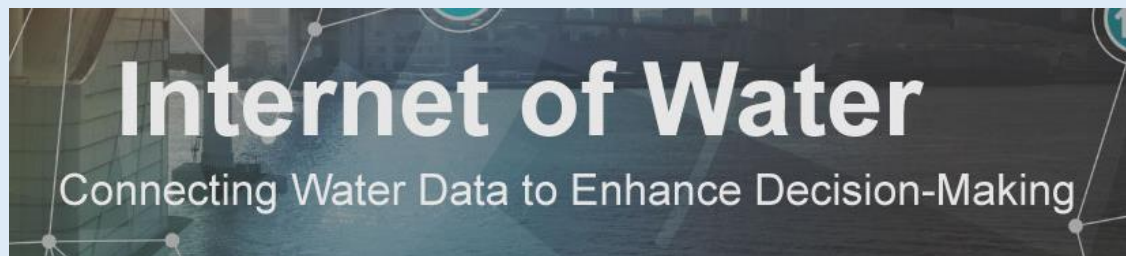
Water Foundation

Mitchell Foundation

Moore Foundation

EPA Exchange Network Grant Program

Western States Water Agencies



Thank You!

Questions?

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<https://westernstateswater.org/wade>
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WaDE Integration with Geoconnex and NLDI

