

**ACWI**  
**Streamflow Information Collaborative (SIC)**  
**Conference Call Minutes**  
 Tuesday, July 10, 2018, 2018  
 10:30am Central

**Call Purpose:**

- Overview of Water Data Exchange
- Update on streamflow related activities

**Agenda:**

- Approval of agenda – additions/deletions
- Approval of previous meeting minutes
- Water Data Exchange presentation
- Info exchange – streamflow information related activities

**Attendees:**

First Name	Last Name	Organization
Ryan	Mueller	Department of Natural Resources
Seyoum	Asamenaw	FERC
Wilbert	Thomas	Michael Baker International
Richard	Rockel	Kansas Water Office
Tom	Littlepage	Ala Office of Water Resources
Amy	Shallcross	Delaware River Basin Commission
Heather	Gacek	Gwinnett County (GA) Department of Water Resources
Christina	Stringer	New England Interstate Water Pollution Control Commission
Greg	Kruse	Minnesota Department of Natural Resources
Jennifer	Shourds	USGS NJWSC
Steve	Wolff	Wyoming State Engineer's Office
Steve	Tessler	USGS
Kent	Barr	NJGWS
Sandra	Eberts	U.S. Geological Survey
Kim	Menke	Ne Natural Resources
Drew	Dehoff	Susquehanna River Basin Commission
Karen	Rouse	Missouri DNR
Michele	Eddy	RTI International
Sarah	Kreitzer	OSMRE
Jason	Todd	USEPA

Sue	Lowry	Interstate Council on Water Policy
Jason	Gildea	USEPA
Mike	Eberle	USDA Forest Service
Christian	Ramos	BLM
Richard	Antoine	OSPO
Emily	Read	USGS

**Approval of agenda – additions/deletions:**

Agenda approved.

**Approval of previous meeting minutes:**

**WaDE: A State Agency Data-Sharing Platform Supporting Open Data Principles**

**Sara Larsen, WaDE Program Manager**

saralarsen@wswc.utah.gov

WaDE URL: <http://wade.westernstateswater.org/>

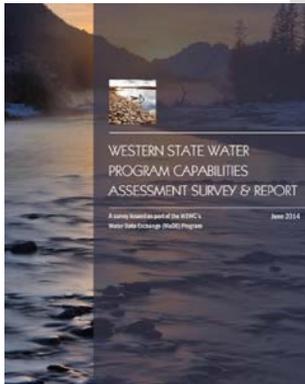


*"Without this forum we would all be reinventing every wheel. We would also miss out on the opportunity to refine and improve our own successes with ideas we garner from our sister states."*

*-Jack Stultz, Montana  
Department of  
Conservation and Natural  
Resources*

**ABOUT THE COUNCIL.** The Western States Water Council is an organization consisting of representatives appointed by the governors of eighteen western states. Since its creation, through adoption of a resolution at the Western Governors' Conference in 1965, the Council has striven to fulfill its chartered purposes. While the emphasis and focus of the Council has changed over the years, that essential principles remain: to foster cooperation among its member states and provide a forum for discussion of a broad spectrum of water resource challenges facing the West.

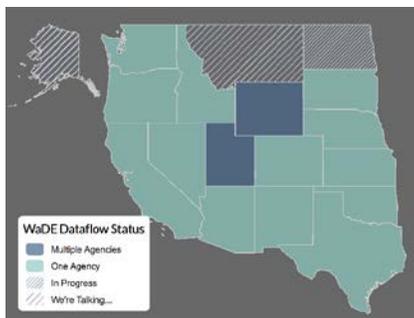
**COLLABORATION AND COOPERATION IS KEY.** As states carry out their traditional role regarding water allocation and management, the related challenges are increasing. With changing and ever-greater demands on limited water resources, complicated by an increasingly complex overlay of federal laws and regulations, the importance of cooperative efforts and exchanges by and among states has likewise been magnified.



**A FOCUS ON BASIC DATA.** As the Council works to develop water policy that addresses these challenges, the value and importance of basic hydrologic monitoring and planning data is clear. The Council has long-supported water data programs at federal and state levels, advocated for increased funding for essential water science and monitoring data programs, and encouraged greater data-sharing and transparency among its members.

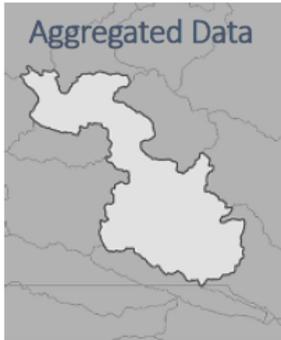
**A PRINCIPLES-BASED APPROACH.** The Council has sought to articulate its vision for sharing water data. These include:

- Making transparency, openness, discoverability, and accessibility the default for public water data, while also ensuring the highest levels of security and privacy for stakeholders where needed.
- Whenever possible, sharing data using developed standards and machine-readable formats, including thoroughly documented metadata, which will promote interoperability, regional analyses, and user flexibility.
- Taking a federated approach where data-producers maintain control over and responsibility for their information. This allows them the freedom to share what they wish (or not) at any point in time.



## Data Targeted by WaDE ([wade.westernstateswater.org](http://wade.westernstateswater.org))

- **GetCatalog:** A list of the datasets by year and by area hosted by the agency
- **GetSummary:** State-agency generated planning and administration datasets that are summarized/aggregated by a watershed or other delineation – estimated water supply, water use, return flows – and regulatory info. (i.e., components of a typical “water budget” – Inflow/Storage – ET/Evap/human use = outflow or basin yield)
- **GetDetail:** Site-specific, detailed water right, diversion, consumptive use, and return flow information
- **GetMethod:** Metadata and best management practices used to generate the information



### Water Supply Examples...

- Annual Streamflow estimates (dry, normal, wet water years)
- Annual Snowpack
- Reservoir Storage/Groundwater Availability

### Water Use Examples...

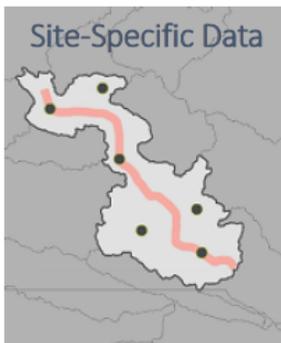
- Summary of Water Withdrawals by Beneficial Use Category
- Summary of Consumptive Use by Beneficial Use Category
- Agriculture - Crop Type Acreage Summary
- Agriculture - Irrigation Method Summary
- Public Water Supply – Population, GPCD

### Return Flow Examples

- Agricultural Returns
- Permitted Discharges

### Regulatory Examples in the Basin...

- Managed Groundwater Area
- Endangered Species Area
- Compact Area/Endangered Species Area



### Water Rights Data

- Owner
- Beneficial Use Category(ies)
- Legal Status
- Priority Data
- Amounts Allocated

### Diversion Data

- Location – Timestamp/Amount Withdrawn

### Consumptive Use Data

- Location – Timestamp/Amount Consumptively Used

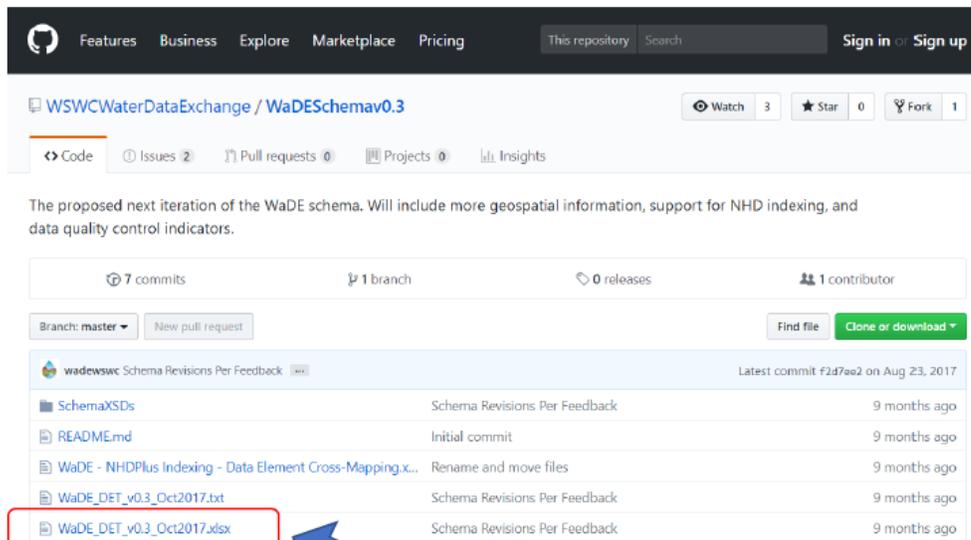
### Return Flow Data

- Location – Timestamp/Amount Returned to Stream

## Looking Forward...

- Working on getting our remaining member states into the WaDE portal
- Need more datasets... some states only have one primary dataset (e.g. only water rights data) in WaDE
- Need to work with states to achieve better coverage and water availability “metrics,”
- Need better and more metadata and data quality grading
- More agile development is needed. Faster turnaround on WaDE tech and components. Better architecture for more security, performance monitoring, ease of updates, and usage monitoring
- If you are a Techie Water Data Wonk (TTDW) and want to help with suggestions...

## WaDE Github Community (<https://github.com/WSWCWaterDataExchange>)



The proposed next iteration of the WaDE schema. Will include more geospatial information, support for NHD indexing, and data quality control indicators.

7 commits 1 branch 0 releases 1 contributor

Branch: master New pull request Find file Clone or download

File Name	Commit Message	Time
SchemaXSDs	Schema Revisions Per Feedback	9 months ago
README.md	Initial commit	9 months ago
WaDE - NHDPlus Indexing - Data Element Cross-Mapping.x...	Rename and move files	9 months ago
WaDE_DET_v0.3_Oct2017.txt	Schema Revisions Per Feedback	9 months ago
WaDE_DET_v0.3_Oct2017.xlsx	Schema Revisions Per Feedback	9 months ago

Download this file to view existing data elements and proposed changes in Orange.

## Planning to Add...

- Interoperability with CUAHSI portal
- NHD tie-in support (lat/long, MeasureID, etc.) for Open Water Data Initiative (NLDI) and National Water Model
- Interbasin transfer data
- Data quality grading and coverage/completeness
- Centroid support for summarized data
- More compact XML formatting
- Support for JSON, CSV downloads, etc.
- Better API documentation and “How to Make an Application” guidance

## NEED FROM YOU!

- What EASTERN state datatypes are we missing?
- What’s your preferred format for data?
- Architecture solutions for hosting distributed networks, while still maintaining states’ autonomy
- Should this be strictly Open Source? If so, what backend/frontend is your favorite?
- If not, what vendor options are out there for hosting that are performant, but not super expensive?

You can add these as “Issues” in the GitHub repo above or the next Streamflow Information Collaborative call.

## Info exchange – streamflow information related activities:

SIC members are asked to bring forth examples of realtime streamflow portals, including state-based portals.

**Next SIC Meetings:**

August Meeting—Tuesday, August 14, 2018 10:30am central <i>Dave Goodrich, USDA-ARS-SWRC, The USDA-ARS Experimental Watershed Network—Evolution, Lessons Learned, and Moving Forward</i>
September Meeting—Tuesday, September 11, 2018 10:30am central <i>Emily Read, USGS, Sara Larsen, Federated Data Systems in the Information Age</i>
October Meeting—Tuesday, October 9, 2018 10:30am central