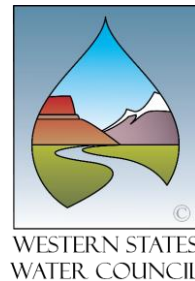


WSWC/Water Information Management Systems (WIMS) /USGS National Water Use Data Collaboration Workshop

Adel Abdallah and Mindi Dalton

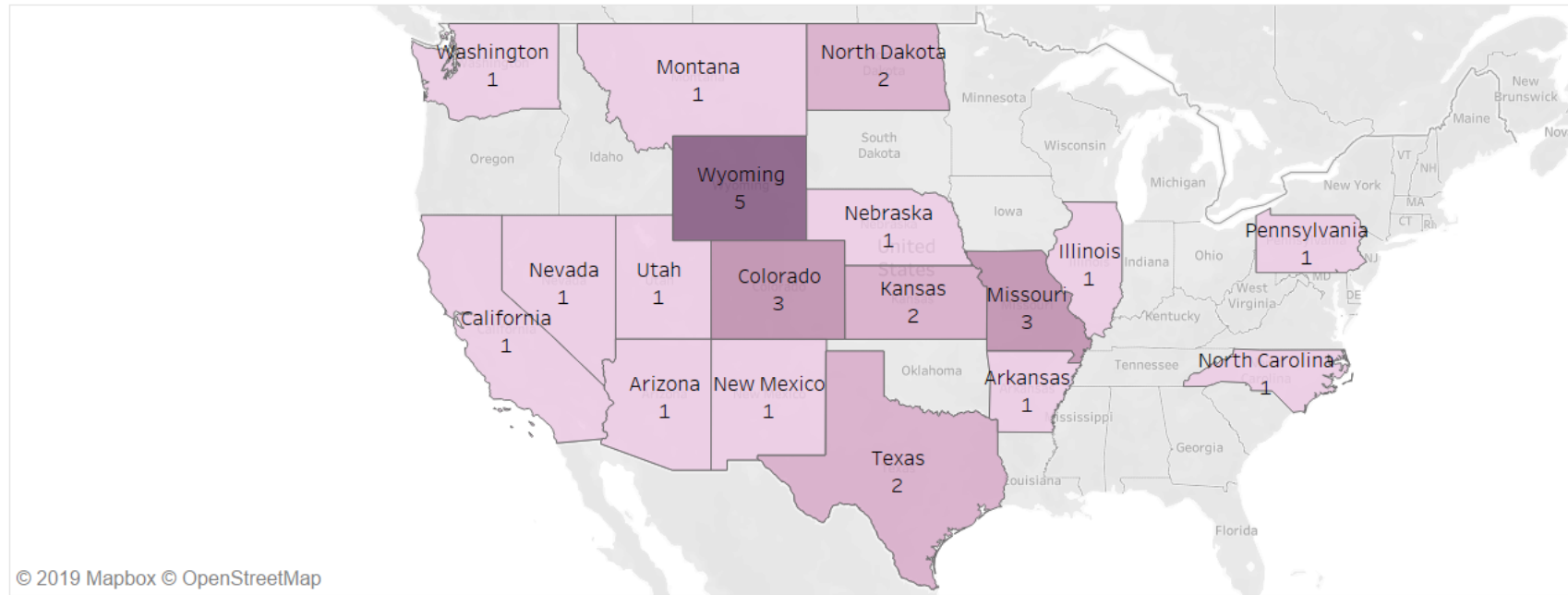


Workshop focus area

A forum for states and other attendees to exchange information on water use data science, state agency strategies for getting to high quality water use information, including online reporting automated data checking, and remote-sensing and IT solutions for sharing water data with federal agencies and the public.

1. Data Gaps
2. QA/QC and Data Standards
3. Data Access Challenges
4. Temporal / Spatial Scales for Water Use Data

States Represented



Federal Agencies, Universities, Companies, and Organizations attending

LI-COR Biosciences

Bureau of Reclamation

Interstate Council on Water Policy DocStar

Northern Arizona University

Kansas State University

U.S. Geological Survey

NASA Jet Propulsion Laboratory

Western States Water Council

U.S. Fish and Wildlife Service

NASA Western Water Applications Office

Internet of Water

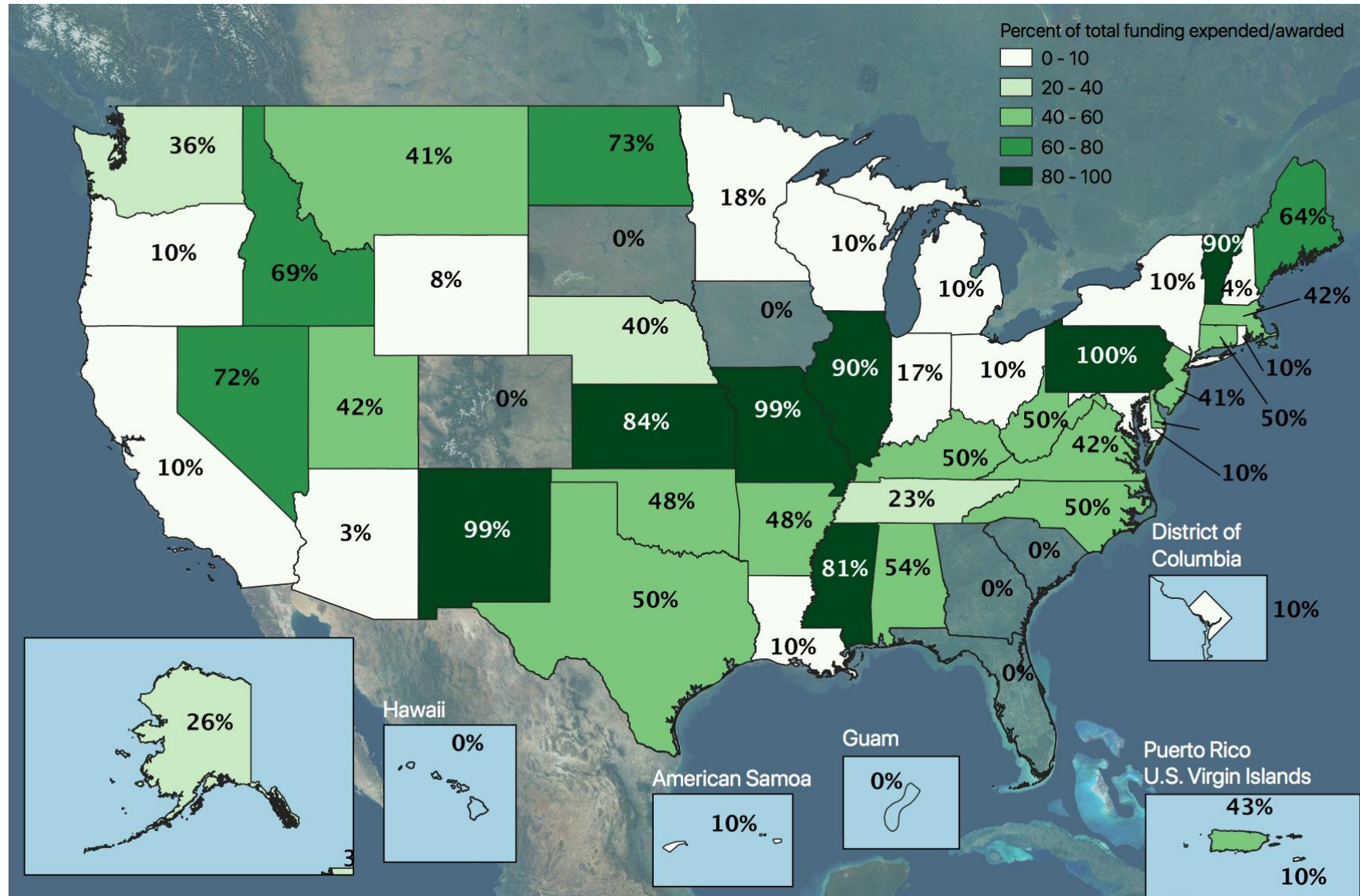
Key findings: water use estimate and data sharing depend on

1. **Human Resources** and structures of agencies
2. **IT/Technology:** software, database, friendly of use by staff and users (e.g., farmers). Data integrity (missing data) or data not connected with other relevant data
3. **Statutes/Laws:** required or voluntary reporting and data sharing.
4. **Procedures/Methods:** QA /QC. Manual vs automated reporting systems
5. **Budgets/Funding:** cost for used technology and running water planning/estimates programs.
6. **Space and Time:** lag time between water use and its reporting. HUC and political boundaries. Monthly or annual.

Next

- Post workshop survey
 - i. Feedback
 - ii. Identify technology solutions/costs by states
 - iii. Identify QA/QC methods used by states agencies
 - iv. Suggestions for future WIMS workshops
- Workshop summary report

Water-Use Data and Research (WUDR) Program Assistance to WSWC Member States



Water Use Estimation

Water Budget Estimation and Evaluation Project (WBEEP)

- Developed model strategies for daily HUC-12 estimates of thermoelectric, public supply, and irrigation withdrawal
- Inclusive of consumptive use

New Projects:

- Evaluating uncertainty in historical USGS water use data

Needs:

- Data
- Policy for water use data management
- Development of data services with State Water Resource agencies
- Continuous delivery of water use data



WUDR Overview

The USGS Water-Use Data and Research Program (WUDR) is authorized under the SECURE Water Act Section 9508

SECURE goals for WUDR

- Improve the availability, quality, compatibility, and delivery of water use data that is collected and/or estimated by States to support National water use assessments
- Integrate State water resource agency water-use or water-availability datasets into USGS databases

Support for USGS Strategic Goals and Priorities

- In addition, data and delivery improvements at the state level support USGS model development and daily delivery of water use Nationally

WUDR Competitive Awards Process

FY2016

- 18 proposals were awarded funding (~1.4M)

FY2017

- 15 proposals were awarded funding (~\$1.32M)

FY2018

- 7 proposals were awarded funding (~\$590k)

FY2019

- 7 proposals were awarded for funding (~\$579k)

FY19 WUDR Awards

- **Database Improvements**

- Alabama eWater Application Upgrade – Phase 1
- Consolidating the Display and Transferability of Water Use Measurement Data at IDWR
- Proposal to improve the availability, quality and transfer of water use data estimated and collected statewide by the Vermont Department of Environmental Conservation.
- Enhancements to the Water Use Estimation, Data Reporting and Analysis, and Data Availability Processes for the Nevada Division of Water Resources
- Water Use Data Exchange across Multiple Agencies (Pennsylvania Department of Environmental Protection, Susquehanna River Basin Commission, and Delaware River Basin Commission) in Pennsylvania

- **Methods Development**

- Real-time Flow Meter Readings to Improve Water Use Estimates for the Mississippi Delta
- Agricultural Water Use Reporting Assessments to Support New Jersey Department of Environmental Protection's New Jersey Water Tracking Data Model (NJWaTr) Water Use Database

WUDR Project Summary

- 47 projects over 4 years
- Over half focus on database improvements
- States with multiple-year awards (ID, IL, KS, ME, MO, MT, NM, ND, PA)
- Multiple projects support USGS water use model development

