

WaDE Update

WSWC 2018 Summer Meeting
Newport, Oregon



- *Status of the Program*
 - *Outreach*
 - *Funding*
 - *Cloud Report*
- *WIMS 2019*

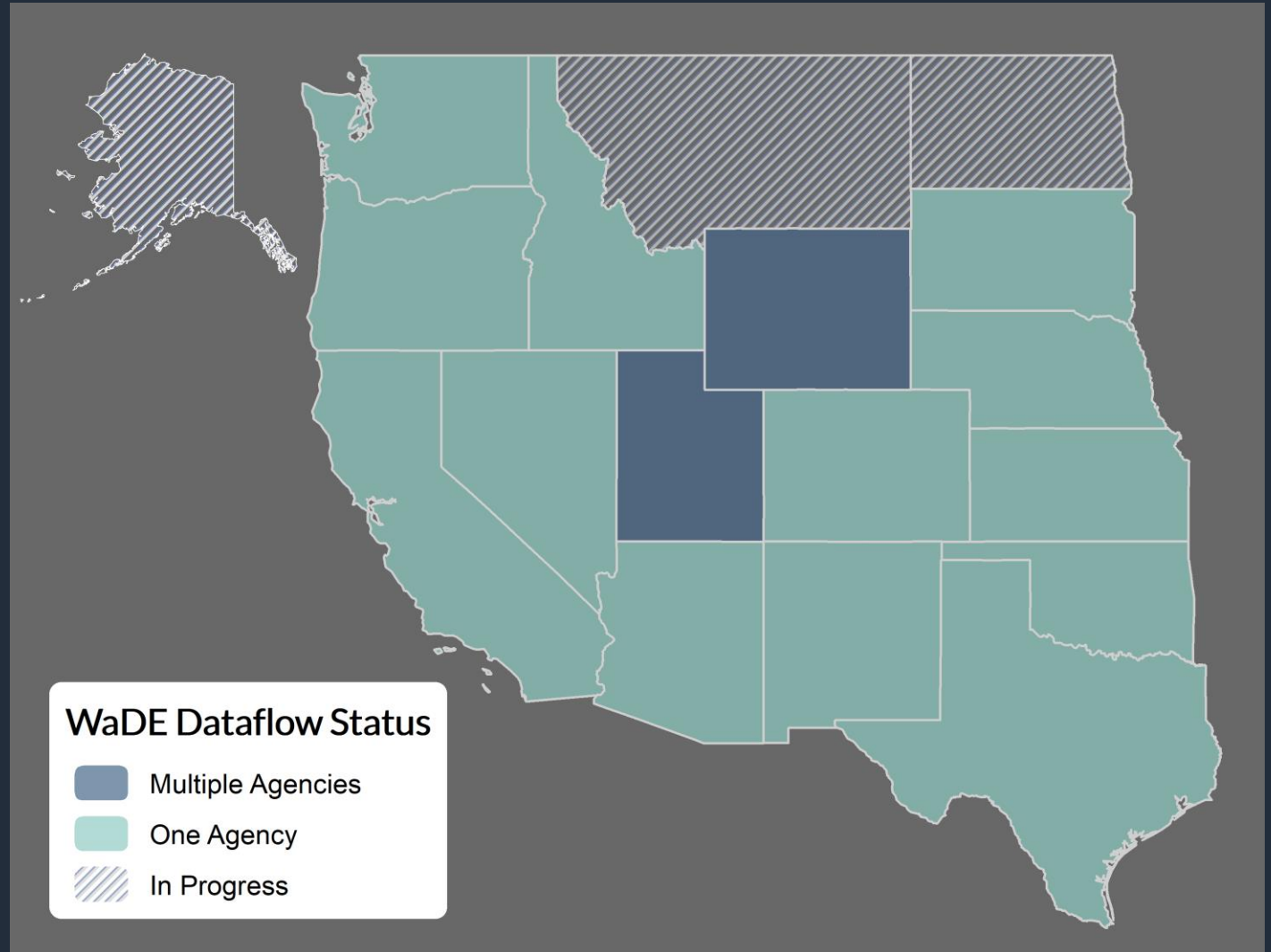
WaDE Program Status

AK, MT, and ND in
progress – 10/18

Working with Partners to
Finalize Data Exchange
Template – 10/18

Working with USGS Office of
Water Information Staff to
Develop Web Services –
12/18

Update with State
Partners – Early 2019



Outreach

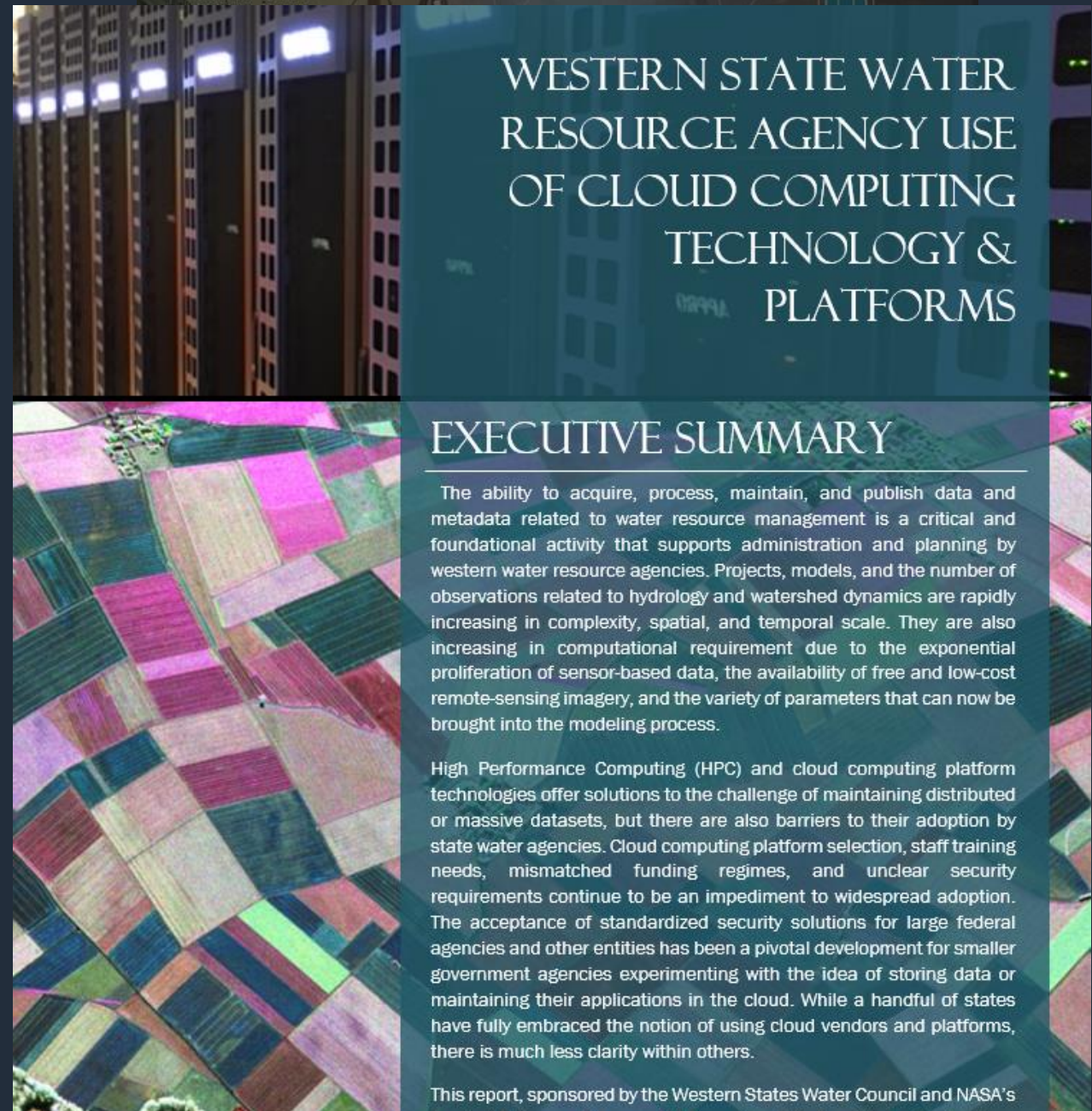
USGS Water Availability and Use
Program – WUDR Assistance

USGS Streamflow Collaborative
Workgroup Webinar

Aspen Institute –
Internet of Water

CA - AB1755 Open Water
Information Architecture (OWIA)

NASA's Applied Science Program
(ASP) and Western Water
Applications Office (WWAO)



Funding & Resources

EPA/Exchange Network funding support into 2019

Valuable in-kind support from the
USGS Office of Water Information Staff

WaDE implementation for water use data
can be funded via USGS WUDR grants

NASA ASP/WWAO Support for
Specialized Topics and WIMS

Restructuring work on WaDE, inc. new technical lead hire, funded by a
grant from the Water Foundation – a consortium of philanthropic orgs

** Includes assistance to states for updates to newer system

Continue to seek funding support for sensor-based observations
data gathering and publication

Cloud Survey Results

Sponsored by NASA's Applied Science Program (ASP) and Western Water Applications Office (WWAO)

All WSWC members contributed to the survey

Centralized IT Services Impacts

States' Current and Projected Use of Cloud Computing

WIMS Breakout Session Summaries on Cloud Topics and WWAO Engagement

State Policies regarding cloud platform usage

WESTERN STATE WATER RESOURCE AGENCY USE OF CLOUD COMPUTING TECHNOLOGY & PLATFORMS

EXECUTIVE SUMMARY

The ability to acquire, process, maintain, and publish data and metadata related to water resource management is a critical and foundational activity that supports administration and planning by western water resource agencies. Projects, models, and the number of observations related to hydrology and watershed dynamics are rapidly increasing in complexity, spatial, and temporal scale. They are also increasing in computational requirement due to the exponential proliferation of sensor-based data, the availability of free and low-cost remote-sensing imagery, and the variety of parameters that can now be brought into the modeling process.

High Performance Computing (HPC) and cloud computing platform technologies offer solutions to the challenge of maintaining distributed or massive datasets, but there are also barriers to their adoption by state water agencies. Cloud computing platform selection, staff training needs, mismatched funding regimes, and unclear security requirements continue to be an impediment to widespread adoption. The acceptance of standardized security solutions for large federal agencies and other entities has been a pivotal development for smaller government agencies experimenting with the idea of storing data or maintaining their applications in the cloud. While a handful of states have fully embraced the notion of using cloud vendors and platforms, there is much less clarity within others.

This report, sponsored by the Western States Water Council and NASA's

Next WIMS

Continued WIDS input

WIMS feedback survey

Evapotranspiration, water use
estimation, soil moisture,
snowpack/runoff topics

Location... Unknown

Date... January 2019

Any Questions?

