



Workshop Goals: This Water Information Management System (WIMS) workshop focuses on water use reporting/permitting systems, IT-related water rights topics, use of cloud computing, an overview of advances and recent projects that use remote-sensing (with participation from NASA's WWAO office), and open water data platforms and trends. Future WIMS topics will also be discussed and prioritized.

Tuesday, January 16	
9:00am	Tour of JPL Facilities Meet at the Visitor's Center for the Tour!
11:30am	Lunch at JPL Cafeteria for Tour Attendees
1:00pm	WIMS Workshop Registration - Main Administration Bldg. (180-101)
1:15pm	<i>Welcoming Remarks</i> - Tony Willardson, WSWC Executive Director and Stephanie Granger, NASA-JPL
1:30pm	Water Rights/Adjudications Data Management Strategies - Moderator, Tony Willardson <i>How Oregon Uses the National Hydrologic Dataset (NHD) to Route Water Rights (Remote Presentation)</i> Kenneth Smith, Information Services Manager, Oregon Water Resources Department <i>Data Management Tools for Adjudications in Utah</i> Jim Reese, Technical Services, Utah Division of Water Rights <i>Survey123 and In-the-Field Water Survey Tools</i> Linda Davis, Water Resource Information Section Manager, Idaho Dept. of Water Resources <i>UAS Use in Adjudication Verification</i> Katherine Mellon, Professional Engineer, Nevada Division of Water Resources <i>Questions/Discussion</i>
3:00pm	<i>Refreshment Break</i>
3:30pm	Water Use/Permitting Data and Reporting Systems - Moderator, Tony Willardson <i>Improving Online Water Use Reporting in Utah</i> Jim Reese, Technical Services, Utah Division of Water Rights <i>Online Water Use Reporting in Arizona</i> Lisa Williams, Manager, Office of Data Management, Arizona Department of Water Resources <i>Nebraska DEQ Online Applications and Information Availability</i> Dennis Burling, Deputy Director Administration, Nebraska Dept. of Environmental Quality <i>Methods and Data for Projecting Water Demand in Texas</i> Yun Cho, Manager, Texas Water Development Board <i>Implementing the Sustainable Groundwater Management Act (SGMA) in CA</i> Steven Springhorn, Senior Engineering Geologist, California Department of Water Resources
5:15pm	<i>End of Day Discussion</i>

Wednesday, January 17

8:30am "Big Data" and the Cloud - Moderator, Forrest Melton

States' Use of Cloud Computing Survey and the WaDE Program

Sara Larsen, WaDE Program Manager, Western States Water Council

WWAO Program/Application Transition Challenge

Mark Davidson, WWAO Program/Application Transition, NASA

TWDB and the Cloud: Sunny Days and One Big Storm

Sam Hermitte, Interim Deputy Executive Administrator, Texas Water Development Board

Evapotranspiration Estimates and Tools

Ben Britton, Systems Programmer, Idaho Department of Water Resources

Questions/Discussion - Additional "Cloud" Questions

10:15am Refreshment Break

10:45am Advances in Remote Sensing of Water Resources - Moderator, Forrest Melton

CIMIS and NASA's SIMS: Applications of Satellite Data to Support Improved Irrigation Management in California

Forrest Melton, Senior Research Scientist, NASA ARC-CREST

NASA and DRI: The Open ET Project

Justin Huntington, Associate Research Professor, Desert Research Institute

Water Resource Applications with the Airborne Snow Observatory, MODIS, and VIIRS

Tom Painter, Principal Scientist, Jet Propulsion Laboratory, NASA

MODIS Snow Products and Estimating SWE in Wyoming's Mountain Ranges

Beth Callaway, River Basin Coordinator, Wyoming State Engineer's Office

InSAR Land Subsidence Monitoring

Tom Farr, Geologist, Jet Propulsion Laboratory, NASA

Remote Sensing for Water Quality Monitoring

Christine Lee, Research Scientist, Jet Propulsion Laboratory, NASA

NASA Soil Moisture Active Passive (SMAP) Satellite Observations and Applications (Remote Presentation)

John Bolten, Research Scientist, Goddard Space Flight Center, NASA

12:30pm Lunch Presentations

Improving S2S Precipitation Forecasting for Water Resource Management

Jeanine Jones, Interstate Resources Manager, California Department of Water Resources

Use of S2S Precipitation Predictions by Texas Water Development Board

Nelun Fernando, Hydrologist, Texas Water Development Board

2:00pm Brainstorming States' Remote-Sensing Needs and Applications

Interactive Discussion and Brainstorm Session with Stephanie Granger - NASA WWAO/JPL Office

2:50pm Refreshment Break

Wednesday, January 17 (continued)

3:15pm Federal Data Sources, Methods, and Applications - Moderator, Sara Larsen

Water Availability and Use Science Program (WAUSP) and WUDR Program Updates

Mindi Dalton, Deputy Director, WMA Office of Planning and Programming, U.S. Geological Survey

Open Water Data Initiative/Federal Data Resources

Drew Decker, National Map Liaison, U.S. Geological Survey

Data Standards and Formats for NASA Earth Science Data

Ed Armstrong, Senior Data Engineer, Jet Propulsion Laboratory, NASA

Agrimet Weather Station Network Update

Jama Hamel, Civil Engineer, U.S. Bureau of Reclamation

USBR Regional Water Information System (RWIS) and the Data Visualization Challenge

Allison Danner, Research Scientist, U.S. Bureau of Reclamation

NOAA-NIDIS DEWS Relationships, Data, and Visualization

Amanda Sheffield, Regional Drought Information Coordinator

5:15pm *End of Day Discussion*

Thursday, January 18

8:30am Data Access, Publication, Visualization, and Archiving - Moderator, Sara Larsen

Internet of Water: Sharing and Integrating Water Data for Sustainability

Lauren Patterson, Senior Water Policy Associate, Duke University

CUAHSI Water Data Services

Jerad Bales, Executive Director, Consortium of Universities for the Advancement of Hydrologic Science, Inc.

Impact of Soil Moisture Probe Data on Agricultural Water Use

Jonathan Aguilar, Assistant Professor, Kansas State University

UAV Use in Water Project O&M

Gary Darling, Operation Research Specialist, California Department of Water Resources

California Control Board Data-Sharing and Viz

Greg Gearheart, Deputy Director, Information Management and Analysis, California Water Resources Control Board

Introduction to the Groundwater Evaluation Toolbox

Brian Dunnigan & Colby Osborn, Olsson Associates

Questions/Discussion

10:30am *Refreshment Break*

11:00am Data Access, Publication, Visualization, and Archiving (continued) - Moderator, Sara Larsen

TWDB Data Visualization: Clear Information and Clear Benefits

Sam Hermitte, Interim Deputy Executive Administrator, Texas Water Development Board

WSWC's WaDE Program Status, Using the API, and Program Directions

Sara Larsen, WaDE Program Manager, Western States Water Council

OWIA (AB1755) and Western Water Data Archive

Gary Darling, Operation Research Specialist, California Department of Water Resources

Leveraging Open Source to Minimize Risks with the Development and Maintenance of your Data Management Infrastructure

Chris Bader, Manager Information Systems, North Dakota State Water Commission

12:15pm *End of Workshop Discussion - Next WIMS Workshop*

12:30pm *Adjourn*