WATER RESOURCES COMMITTEE
WORK PLAN
2016/2017

1. WATER AVAILABILITY & USE - WATER DATA EXCHANGE (WaDE)

Work to date: The Council continues to work with member states and federal agencies through the Western States Federal Agency Support Team (WestFAST) to build on efforts undertaken previously. A common WaDE portal has been created, with a link on the WSWC website, and a beta version is being tested with data from California, Colorado, Idaho, Kansas, Utah and Wyoming. Sixteen states have been interviewed regarding their existing data systems. Oklahoma and Oregon will soon provide data, and work in Nebraska, Nevada, South Dakota, Texas and Washington is in progress. Moreover, a mapping tool has been created to allow states to review data. Alaska, Arizona, New Mexico, North Dakota and Washington are evaluating the resources required for them to participate.

These data are important for a number of applications. Some examples include, but are certainly not limited to: (a) state and regional water planning; (b) local watershed and urban planning and development; (c) siting of electric power generation and other energy production facilities; and (d) enabling a better understanding of the links between energy, water quantity and water quality. WaDE is consistent with and will seek to integrate other national efforts, including the National Water Availability and Use Assessment (the Water Census), which is led by the U.S. Geological Survey (USGS), as well as federal open water data initiatives. WaDE will support these efforts by laying the groundwork for exchanging the core state data that may be used to support these studies, and in the future seek to incorporate into the WaDE portal available federal data.

Council staff are also working as part of a USGS Ad Hoc Group on a National Water Assessment to develop a strategic plan to improve the acquisition, storage and dissemination of data on existing surface and ground water supplies and uses, both consumptive and non-consumptive, identifying trends and common themes, including changing demographics, environmental policies, energy demands, and climate, etc. WaDE will better enable the western states to share water use, water allocation, and water planning data with one another and with the federal government. It will also seek to improve the sharing of Federal data that supports state water planning efforts.

Data collection, management, distribution and visualization are critical for sound decisionmaking, but related programs are often underappreciated and underfunded. The Council has a long history of working to support federal programs to maintain and improve the measurement, monitoring and management of western water resources and related data, including related Interior, NASA, NOAA and USDA programs (see Position #345, October 12, 2012, and Position #357, October 3, 2013).

2016/17: WSWC staff will continue working to help individual members states build their capacity to connect to WaDE. This will entail some site visits, as well as regular communication among members and state information technology staff to gather, input and manage data, testing the schema and refining products for presenting consumptive use and water availability information for decisionmaking. The Council will continue working with member states, USGS

and various federal agencies to gather and disseminate water resources data using WaDE and other resources. The Council will also partner with USGS on facilitating funding to states for water data. The Committee, through a Subcommittee and various work groups, will continue to gather information on state water availability and use data and summarize existing state capabilities. Work to help states to develop, disseminate, visualize and review data on water availability will continue. The WSWC is seeking other resources to assist states.

The Council will also communicate the critical need for federal water data related programs and will revise and renew its message to better bring attention to water data needs and develop strategies to meet those needs. Consistent reliable future funding will be one major focus. There are a number of items under this functional area. Part of this effort will be to highlight critical measuring and monitoring "tools," for any water management "toolbox," and communicating their value for enhancing our ability to wisely manage water resources.

Subcommittee: Jeanine Jones (CA); James Eklund (CO); David Barfield (KS); Tim Davis (MT); J.D. Strong (OK); Tom Byler (OR); Dr. Robert Mace (TX); and Eric Millis (UT). Dr. Mace also represents the WSWC on the federal Advisory Committee on Water Information (ACWI).

Timeframe: Ongoing

2. CDWR/WSWC S2S & IMIS WORKSHOPS

Work to date: The Western States Water Council (WSWC) and California Department of Water Resources (CDWR) entered into an agreement to assist in implementing Governor Jerry Brown's emergency drought proclamation regarding improving agricultural water use efficiency and water conservation, through scoping efforts to improve subseasonal to seasonal (S2S) forecasting skill (2 weeds to one year) and identifying and describing Irrigation Management Information Systems (IMIS) and weather station networks, looking towards possible expansion of the California Irrigation Management Information System (CIMIS) into interstate watersheds, beginning with the Colorado River System, but also the Klamath River, as well as the Truckee Carson and Walker Rivers (California-Nevada group).

With regard to S2S forecasting, two workshops were held in 2015. Two additional workshops were held in 2016, one in College Park, Maryland at NOAA headquarters on April 29, and a final workshop June 6-9, in San Diego, California. The Council coordinated the meetings and will provide a report and outreach publication to CDWR to include recommendations to NOAA on improvements regarding sub-seasonal to seasonal precipitation forecasting. Similarly, the Council coordinated an August 25-26 workshop on IMIS and is preparing a summary report.

A number of preliminary scoping and planning calls have been held to perform an initial assessment of potential partner networks. An initial workshop will be held in Southern California's Colorado River service area. Based on the outcome of the initial workshop, follow-up workshops will be scheduled in 2016.

2016/17: Seasonal Precipitation Forecasting Workshops: April 29, 2016 and June 6-9, 2016.

CIMIS Workshop: August 25-26, 2016. Summary reports and recommendations, deliverable in June and December.

3. ENERGY & WATER RESOURCES – INTEGRATED MANAGEMENT

Work to date: The increase in demands for water to meet energy needs is raising interest in the interrelationship between water and power resources, including transportation fuels, and opportunities to better understand the energy-water nexus and maximize efficiencies. The Council has addressed various aspects of energy issues as they relate to water resources as part of its regular meetings, including the demand for water resources created by new energy development. Hydraulic fracturing is a current issue and long standing practice with which the states have considerable experience. (See Water Quality Committee workplan.) The use of water produced by energy development has also been discussed.

Since 2009, the Council has worked with the WGA to look at present and future water needs related to renewable and traditional energy production, and related impacts on water supplies. The Council has also urged the Administration and Congress to support Department of Energy hosted energy-water programs conducted at national laboratories (Position #355, June 26, 2013).

In 2012, the Council completed a review of the water requirements for concentrated solar power development in the Southwest and related institutional issues and permitting requirements, which has been published by the National Renewable Energy Lab (NREL).

2016/17: The Council actively participates with the Western Electric Coordinating Council (WECC) and related State Provincial Steering Group and Environmental Data Work Group. As resources permit, the Council will continue to compile existing information through WaDE addressing water availability and anticipated demands for energy resources development (and the implications for water use in the West). Further, the Council will consider and evaluate any federal legislation and other potential collaborative efforts in addressing energy and water needs. The Council will evaluate as appropriate specific energy and water related issues as they arise, such as hydraulic fracturing and other practices. Lastly, WECC/WSWC collaboration will continue.

Timeframe: Ongoing

4. DROUGHT, NIDIS and EXTREME WEATHER EVENTS

Work to Date: Drought is a recurring natural phenomenon, the effects of which can be minimized through appropriate planning and preparedness activities. The Council has expressed its support for federal applied research and hydroclimate data collection programs to assist water agencies at all levels of government in adapting to weather extremes and climate variability and change (Position #379, April 17, 2015). The Council also supports development of an improved western observing system for extreme precipitation events and research to better understand hydroclimate processes (Position #366, July 18, 2014). Since 2006, the Council has held a number of workshops related to climate adaptation and extreme events, including future drought and floods.

In May 2014, the Council collaborated with the National Oceanic and Atmospheric Administration (NOAA) to prepare and present a congressional briefing on the importance of atmospheric research and monitoring programs. In June 2014, the Council held a Hydroclimate Monitoring & Data Workshop in cooperation with California Department of Water Resources (CDWR) in San Diego, followed by a series of workshops in 2015-2016 on seasonal precipitation forecasting.

2016/17: The Council's Executive Director has been asked to Co-Chair the National Integrated Drought Information System (NIDIS) Executive Council with NOAA. The Committee will continue working to improve preparedness and response to drought, floods and other extreme events in cooperation with member states, the WGA and WestFAST. The Council will also continue to support and advise WGA and NOAA with respect to NIDIS, and other weather/climate monitoring and adaptation efforts (including RISAs work). The Council will also continue to assist California's DWR in an ongoing series of workshops. The Council will work to evaluate proposed climate, drought and weather legislation and drought related authorities of federal agencies.

Time Frame: Ongoing

Subcommittee: ????

5. WESTERN WATER INFRASTRUCTURE PROJECTS AND PROGRAM FUNDING

Work to date: Many western states face overwhelming infrastructure financing needs, as well as declining budgets for ongoing services. The Council's origins are associated with challenges to augment and better manage the West's water supply. Augmenting the West's water supply continues to be a priority. The Council has in the past prepared reports on state water resources programs and project cost sharing and financing and analyzed state water use fees. In November 2010, the Council convened a symposium and summarized the proceeding in "Western Water Resources Infrastructure Strategies: Identifying, Prioritizing and Financing Needs." The latest in the series of symposia was held in November 2012 in Phoenix, Arizona. The Council also began compiling an updated summary of western state infrastructure financing authorities, funding sources, policies and programs. The Council has also supported expenditures from the Reclamation Fund for authorized project purposes, including specifically authorized rural water supply projects and authorized projects as part of negotiated Indian water rights settlements.

2016/17: The Council will continue to call on the Congress to ensure that revenues raised from the development of western resources, specifically revenues accruing to the Reclamation Fund, are appropriated and expended as intended for the development and management of western water resources (consistent with Position #367, July 18, 2014). The Council will otherwise support efforts to secure adequate federal funding to meet growing western water demands, and work to develop a strategy to communicate important infrastructure needs. The Council will focus on developing public-private partnerships to support this effort.

Time Frame: Ongoing