WATER RESOURCES COMMITTEE WORK PLAN 201<u>8</u>7/201<u>98</u>

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 "live" version has been released with fourteen states already sharing some data via WaDE. Alaska, Montana and North Dakota 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 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.

WaDE is consistent with and is seeking to collaborate with and 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 nonconsumptive, identifying trends and common themes, including changing demographics, environmental policies, energy demands, and climate, etc.

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 #385 October 9, 2015 and # 396 September 30, 2016).

2017/2018: WSWC staff will continue working to help individual members states build their capacity to connect to and share data through WaDE. 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); 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 with efforts to improve subseasonal to seasonal (S2S) forecasting skill (2 weeks 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 prepared a report on these meetings and an outreach publication with recommendations to NOAA on improvements regarding sub-seasonal to seasonal precipitation forecasting. Similarly, the Council coordinated an August 25-26 workshop on IMIS and prepared a summary report, completing our agreement with CDWR... The Council also coordinated an S2S workshop in San Diego in 2017 on May 17-19, and is preparing a report.

201<u>87</u>/201<u>98</u>: Future S2S workshops are anticipated, as is work to support federal efforts to improve our predictive capabilities and skill. (Position #399, April 14, 2017)

Subcommittee:

Timeframe:

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 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.

The Council has also urged the Administration and Congress to support Department of Energy hosted energy-water programs conducted at national laboratories (Position #395, July 15, 2016).

20187/20198: 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.

Subcommittee:

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 and #385 October 9, 2015). The Council also supports development of an improved western observing system for extreme precipitation events and research to better understand hydroclimate processes (Position #407366, Junely 2918, 20174). The Council's Executive Director serves as Co-Chair of the National Integrated Drought Information System (NIDIS) Executive Council with NOAA.

201<u>87</u>/201<u>98</u>: 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 work to evaluate proposed climate, drought and weather legislation and drought related authorities <u>and programs</u> of federal agencies.

Subcommittee:

Time Frame: Ongoing

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. The Council has also convened symposia and summarized the proceeding. The Council also began compiling an updated summary of western state infrastructure financing authorities, funding sources, policies and programs (which has not been completed). 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.

20187/20198: 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 #408367, Junely 2918, 20174). 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 include a focus on developing public-private partnerships to support this effort. The Council will sponsor a symposium on infrastructure needs, strategies, and federal and state programs, under the direction of the Executive Committee.

Time Frame: Ongoing

6. STATE GROUNDWATER RECHARGE PROJECT PROGRAMS & POLICIES

Work to Date: The Council has in the past addressed groundwater management programs and policies, including recharge and aquifer storage and recovery projects. The Council prepared a number of reports covering financial feasibility, legal and institutional issues, and water reuse for recharge (1990-2012). Much of the work is now dated, and many changes have taken place.

2017/2018: Working with the Legal Committee and the Council, the Committee will update past reports on state groundwater management programs and especially efforts to promote conjunctive use of surface and groundwater resources through artificial aquifer storage and recovery projects.