

**WATER RESOURCES COMMITTEE  
WORK PLAN  
2015/2016**

**1. M3 Initiative: Measuring, Monitoring and Management**

The Council has a long history of working to improve the measurement, monitoring and management of western water resources and related data (see Position #320, October 16, 2009, and Position #326, October 29, 2010). Data collection, management, distribution and visualization are critical for sound decisionmaking, but related programs are often underappreciated and underfunded.

**2015/16:** The Council, in an attempt to better communicate the critical need for water data, will develop a “M3 Initiative,” revising and renewing 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 for the initiative. There are a number of items under this functional area, divided as outlined below. 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); Jim Schneider (NE); J.D. Strong (OK); Tom Byler (OR); Dr. Robert Mace (TX); Eric Millis (UT); and Sue Lowry (WY). Dr. Mace also represents the WSWC on the federal Advisory Committee on Water Information (ACWI), and Sue Lowry is also an ACWI member.

**Time Frame:** ongoing

**A. USGS COOPERATIVE STREAMGAGING**

**Work to Date:** The Council has consistently supported the fully-federally funded USGS National Streamflow Information Program (NSIP) and Cooperative Water Program (CWP), federal/state streamgaging program partnerships. The Council continues to urge the Congress to appropriate sufficient money to restore a 50-50% CWP funding match. As federal program costs have increased, western states have urged USGS to focus on basic data collection, as opposed to analysis and modeling studies.

**2015/16:** The Council, through the Committee, will continue working with the Interstate Council on Water Policy and other interested organizations to represent states’ interests in maintaining a viable and useful streamgaging network, focused on gathering basic water data and information. The Council will continue to pursue opportunities to support funding for USGS cooperative streamgaging and other important programs.

**Timeframe:** Ongoing

## **B. NRCS SNOW SURVEY AND WATER SUPPLY PROGRAMS**

**Work to Date:** The Council has consistently supported the snow survey program, and urged the Congress to appropriate sufficient money to maintain and modernize the current system. Recent cuts have led to serious declines in program capabilities, with abandoned snow courses and threatening maintenance of SNOTEL sites. Further, sustained reductions in resources threaten the continued viability of the program as it now exists, which could lead to the loss of critical long-term data essential for western water and emergency management.

**2015/16:** The Committee and Council will continue to pursue opportunities to support funding for the NRCS snow survey program and the related soil and climate analysis network (SCAN), as well as upgrading and modernizing the current snow survey and water supply forecasting system. The Council will also work with USDA, NRCS and the states to explore options for maintaining a sustainable system, including any state interest in funding specific SNOTEL sites, with a goal of helping NRCS ensure adequate funding is available for operation and maintenance.

**Timeframe:** Ongoing

## **C. LANDSAT 9 and NATIONAL LAND IMAGING PROGRAM**

**Work to Date:** More and more states are using remote sensing, particularly Landsat thermal infrared (TIR) band data, for water rights administration and to better monitor and manage water use, especially agricultural water use. In 2010, following several years of work, the President's budget request to Congress included funding for the thermal infrared sensor (TIRS) as part of LDCM, largely in response to the Council's efforts. On February 11, 2013 LDCM was launched from Vandenberg Air Force Base in California, and has begun sending its first earth images. The Council has been credited with ensuring LDCM/Landsat 8 included TIRS, enabling states to continue to advance the application of the science to western water management and uses. In August 2014, the California Department of Water Resources and WSWC also sponsored a workshop on water-related uses of remote sensing capabilities at the NASA/JPL facilities in Pasadena.

**2015/16:** The Committee will continue to work towards the timely and orderly development of future Landsat missions to ensure the continued availability of TIRS data. The Committee will also work with member states, local and federal agencies to promote the increased use of remote sensing data.

**Timeframe:** Ongoing

## **D. 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. California is experiencing an extreme continuing drought and other states are suffering as well.

Nevada Governor Brian Sandoval, WGA Chair, has led state efforts to identify best management practices, holding several forums and webinars, with support as appropriate from WSWC members. WSWC and WGA staff has also collaborated on related efforts, including a survey of western state drought planning and response, and a December 2014 workshop on drought related authorities of various federal agencies.

The Council supported congressional reauthorization of the National Integrated Drought Information System (NIDIS) to provide timely hydrologic and weather-related information for drought management and improve predictive capacity.

The Council has supports reauthorization of the Reclamation States Emergency Drought Response Act, to provide the Bureau of Reclamation with continuing drought planning, response and assistance capabilities.

Moreover, 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 #339, March 15, 2012). The Council also supports development of an improved western observing system for extreme precipitation events and research to better understand hydroclimate processes (Position #332, July 29, 2011). Since 2006, the Council has held a number of workshops related to climate adaptation and extreme events, including future drought and floods.

The Council and California Department of Water Resources (CDWR) hosted a July 2012 workshop on extreme weather events, a September 2012 NIDIS reauthorization workshop, an April 2013 workshop on improving drought prediction. In May 2014, the Council also 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 CDWR in San Diego.

**2015/16:** 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 the National Integrated Drought Information System (NIDIS), and other weather/climate monitoring and adaptation efforts (including RISAs work), as WGA seeks to coordinate federal and state efforts to address drought information needs and compile data on related impacts. The Council will also continue to assist California's DWR with its ongoing series of drought and extreme events workshops. The next in this series of workshops will be held in May 2015. The Council will work towards reauthorization of Reclamation's authorities, as well as evaluate drought related authorities of other federal agencies.

**Time Frame:** Ongoing

## **E: GROUNDWATER MONITORING**

**Work to date:** The Council supports USGS ground water measurement and monitoring, as expressed in Position #345 (October 12, 2012) regarding federal water and climate data collection and analysis programs. Moreover, groundwater measurement and monitoring are

important components of a number of western state water management programs. Further, the Council continues to track federal groundwater efforts related to both quantity and quality (in cooperation with the Water Quality Committee).

**2015/16:** The Council will consider development of an appropriate groundwater component for its M3 Initiative, as well as working collaboratively with other state and federal interests and non-governmental organizations. The Council will also promote the use of existing state information on groundwater resources.

**Subcommittee:** Jim Schneider (NE); Dr. Robert Mace (TX)

**Timeframe:** Ongoing

## **2 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.

**2015/16:** 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 #333, July 29, 2011). The Council will otherwise support efforts to secure adequate federal funding to meet growing western water needs, 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

## **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).

**2015/16:** 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.

**Subcommittee:** William Staudenmaier (AZ); James Eklund (CO); John Simpson (ID); Jim Schneider (NE); Todd Sando (ND); Robert Mace (TX); Eric Millis (UT); and Sue Lowry (WY).

**Timeframe:** Ongoing

#### **4. WRDA/CORPS POLICIES**

**Work to date:** The Council has in the past supported regular passage of a Water Resources Development Act (WRDA), and has addressed a number of specific policy issues, while not taking any position on specific project authorizations. The Council has raised concerns with the Corps' approach to identifying and regulating the use of "surplus waters" and Corps drought authorities from Corps projects. Similarly, the Council has worked to exclude irrigation water supply canals from any new safety levee safety program.

**2015/16:** The Council will continue to work with the Congress and Corps on WRDA and Corps-related issues, including the treatment of irrigation canals under the proposed new levee safety program. Further, the Council will continue to work to ensure that state water rights and prerogatives are protected, specifically as it relates to natural flows, Corps storage and other issues.

**Subcommittee:** Todd Sando, Michelle Klose, and Jennifer Verleger (ND); Tracy Streeter (KS); and Tim Davis (MT)

## **A. CORPS SURPLUS WATER RULEMAKING**

**Work to date:** A draft Corps surplus water rulemaking is pending. The Flood Control Act of 1944 specifically declared the policy of Congress to recognize the interests and rights of the Missouri River Basin States in determining the development of the watersheds within their borders and likewise their interests and rights in water use and control, and to preserve and protect to the fullest extent established and potential uses of the rivers' natural flows, those flows that would pass through the states in the absence of the Corps of Engineers dams. The federal government has long recognized the right to use water as determined under the laws of the various states. However, the Corps has indicated that all waters entering its Missouri River mainstem reservoirs are stored waters to be allocated and controlled by the federal agency and does not recognize the States' right to access natural flows, separate from the captured floodwaters stored within those reservoirs.

In October 2012, the Council adopted a resolution (#348) urging the Corps to recognize the legal rights of the States' to allocate water, wrote the Assistant Secretary of the Army for Civil Works regarding its concerns, and has met with Corps officials on different occasions, as well as discussed legislative clarifications with congressional staff. The Council has also surveyed its member states regarding their definition of stored waters and related storage rights.

**2015/16:** In consultation with the Legal Committee, the Committee will continue to work to address this issue and explore alternative solutions, including both administrative and congressional action.

## **5. WATER DATA EXCHANGE (WaDE)**

**Work to date:** This is a collaborative effort between the Western States Water Council (WSWC) and the Western States Federal Agency Support Team (WestFAST), continuing to build on efforts undertaken previously with the support of the Western Governors' Association (WGA), and the Department of Energy Labs. The Committee will lead the collaboration. 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 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.

A common 'schema' or format that can be used for sharing water availability and data has been completed. A common portal has been created, with a link on the WSWC website, and a beta version is being tested with data from Colorado, Utah and Wyoming. Sixteen states have been interviewed regarding their existing data systems. Moreover, a mapping tool has been created to allow states to review data, beginning with that gathered from the States by

Sandia National Lab. The states are evaluating the resources required for them to participate, and the WSWC has partnered with six states under an EPA Exchange Network grant to help states link up.

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.

**2015/16:** 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.

**Subcommittee:**

**Timeframe:** Ongoing

## **6. NATIONAL WATER AVAILABILITY AND USE ASSESSMENT**

**Work to date:** In 2010, the Council staff began 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, as well as present and future events and factors that may affect future water supplies, 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.

**2015/16:** 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 consider partnering with USGS on facilitating funding to states for water data.

**Subcommittee:**

**Timeframe:** Ongoing

## **7. BORDER WATER ISSUES**

**Work to date:** Many WSWC member states are involved with water management issues that cross international boundaries. In 1999, the WSWC was invited to participate in a U.S.-Mexico Border Drought Workshop sponsored by the WGA, International Boundaries Water Commission

(IBWC), and Mexican authorities. Also in 1999, the WSWC was asked to serve on an International Joint Commission (IJC) advisory committee reviewing water issues with Canada. Cross border issues are growing in importance, as illustrated by the current conflict over the waters of the Rio Grande between Texas and Mexico, *or the waters of the Milk River between Montana and Canada.*

Council staff will continue to participate and represent western state interests in international water forums. The Committee will identify and assess related needs and oversee WSWC activities. The Committee will coordinate its efforts with those of other organizations in order to avoid duplication.

**Subcommittee:** Jeanine Jones (CA); Gary Spackman (ID); Tim Davis (MT); Tom Blaine (NM); Todd Sando (ND); Herman Settemeyer (TX); and Maia Bellon (WA).

**Time Frame:** Ongoing