

MINUTES
of the
WATER RESOURCES COMMITTEE
Crystal Gateway Marriott
Arlington, Virginia
April 3, 2014

Table of Contents

Welcome and Introductions	3
Approval of Minutes	4
Sunsetting Positions	4
WGA’s 2013 Water Resolutions/2014 Workplan	4
The Department of the Interior Principles and Requirements Update	5
National Drought Resiliency Partnership	7
The Future of Landsat and the National Land Imaging Program	8
The Environmental Data Exchange and WSWC’s Water Data Exchange (WaDE) Update	10
FY2014-2015 Draft Committee Work Plan.....	11
CDWR/WSWC Hydroclimate Monitoring & Data Workshop.....	11
Other Matters	11

**MINUTES
of the
WATER RESOURCES COMMITTEE
Crystal Gateway Marriott
Arlington, Virginia
April 3, 2014**

The Water Resources Committee meeting of the Western States Water Council was called to order by Committee Vice Chair Scott Verhines at 8:10 a.m. Those in attendance were as follows:

MEMBERS AND ALTERNATES PRESENT

ALASKA	--
ARIZONA	--
CALIFORNIA	--
COLORADO	James Eklund Dick Wolfe
IDAHO	Jerry Rigby John Simpson
KANSAS	David Barfield
MONTANA	John Tubbs
NEBRASKA	--
NEVADA	--
NEW MEXICO	Scott Verhines DL Sanders
NORTH DAKOTA	Todd Sando Jennifer Verleger
OKLAHOMA	J.D. Strong
OREGON	Phil Ward
SOUTH DAKOTA	Kent Woodmansey

TEXAS	Todd Chenoweth Robert Mace
UTAH	Walt Baker Eric Millis Norm Johnson
WASHINGTON	--
WYOMING	Pat Tyrrell Sue Lowry

WGA STAFF

Carlee Brown, Western Governors' Association, Denver, CO

WestFAST MEMBERS

Eric Stevens, WestFAST Liaison, SLC, UT
Tom Iseman, U.S. Department of the Interior, Washington, D.C.
Becky Fulkerson, Bureau of Reclamation, Washington, D.C.
Jennifer Gimbel, Bureau of Reclamation, Washington, D.C.
Roger Gorke, U.S. Environmental Protection Agency, Washington, D.C.
Dean Leach, U.S. Department of Defense, General Counsel's Office, Washington, D.C.
Ed Miller, U.S. Department of Defense, Installations & Environment, Washington, D.C.
Becky Patton, Department of Defense, Science & Technology, Washington, D.C.
Jean Thomas, U.S. Department of Agriculture, Forest Service, Washington, D.C.

GUESTS

Michelle Klose, North Dakota State Water Commission, Bismarck, ND
Bruno Bowles, Southern Nevada Water Authority, Las Vegas, NV
Dwane Young, U.S. Environmental Protection Agency, Washington, D.C.
Herman Settemeyer, Texas Commission on Environmental Quality, Austin, TX
Lauren Sturgeon, Oklahoma Water Resources Board, Oklahoma City, OK

STAFF

Tony Willardson, Executive Director
Sara Larsen, Water Data Exchange Program Manager (via phone)
Nathan Bracken, Assistant Director/General Counsel
Cheryl Redding, Office Manager

WELCOME AND INTRODUCTIONS

Scott Verhines, Committee Vice-Chair welcomed members to the meeting. Introductions were made around the room.

APPROVAL OF MINUTES

The minutes of the meeting held October 3, 2013 in Deadwood, South Dakota were moved for approval as presented. The motion was seconded by Dick Wolfe. There were no corrections or changes and the minutes were unanimously approved.

SUNSETTING POSITIONS

Tony reviewed each of the three proposed and one sunseting position.

- A. Bureau of Reclamation's Maintenance, Repair and Rehabilitation Needs**
- B. Reclamation's Safety of Dams Act of 1978**
- C. Transfer of Federal Water and Power Projects and Related Facilities**
- D. Position #329 – National Levee Safety Act of 2007 and the Interpretation of Levees and Water Supply Canals**

Scott Verhines moved all four positions be recommended to the Full Council for adoption. The motion was seconded by Phil Ward. All four positions were approved by unanimous vote.

WGA'S 2013 WATER RESOLUTIONS/2014 WORKPLAN

Carlee Brown, Policy Advisor at WGA for water issues, addressed the Governors' water resolutions passed at the WGA Winter meeting in December 2013.

WGA's focus is advocating that states are the primary resource managers for the water within their state boundaries, in particular the Clean Water Act (CWA) and surface water. State primacy in water management will be referenced a lot in the next year. WGA will focus on innovative water management, including transfers. Conservation and efficiency and state and federal collaboration are other themes.

The WGA will be writing a letter soon to the Congress on SNOTEL and snow surveys, using WGA's position as the basis.

With respect to WGA's Water Quality position, Carlee pointed out the section on the CWA, B.1. It focuses on the State Revolving Fund (SRF) and funding for rural water programs. It also touches on water data needs.

Carlee advised that if you see an issue in your state, you should work with your state's WGA Staff Council member. Alternatively please contact Carlee at WGA or Tony at WSWC.

WGA's work plan is being handled a little bit differently than in the past. WGA staff will be putting out a lot of different topics at their Staff Advisory Council (SAC) meeting coming up in April, and then decide which topics to focus on. Carlee believes that water will likely be at the top of the heap. Governor Sandoval of Nevada will be the new WGA Chair, and will be focusing on drought during his tenure, which will begin in June 2014. Governor Sandoval wants to bring in water, fire, agriculture, and anyone else with drought experience to create a Western Drought Center. This is very new – it was announced on April 2nd at 3 p.m.

The WGA will be working on state primacy, both in terms of the Clean Water Act and the Corps' surplus water rule. They are also trying to approach water data and what role WGA can play, and the importance of infrastructure.

Nathan asked Carlee to describe the process WGA used in getting the WGA policy resolutions passed. Carlee explained that WGA's policy focuses more on state authority, and loses some of the details. She noted that Tony and Nathan were very much involved in the process. There is a very iterative process they go through to determine which resolutions will be accepted. They try to make sure it is a bipartisan policy.

Tony added that the WSWC has a good working relationship with WGA. The WSWC has written letters, and then the WGA has followed up with similar letters. On occasion letters have been signed jointly by both Executive Directors.

Walt Baker raised a question about a paragraph on nutrients in the WGA policy. Walt suggested that the Water Quality Committee should look at this issue in a little more detail. Walt's concern was that non-point source pollution "should not be treated like other pollutants that have clear and consistent thresholds over a broad range of aquatic systems and conditions." Walt said the last part of a sentence is possibly inaccurate and not scientifically true. Carlee said she would make note of this.

The WGA Annual Meeting will be held June 9-11, in Colorado Springs, Colorado. Dr. Kathleen Sullivan, Under Secretary of Commerce for Oceans and Atmosphere and NOAA Administrator, will be working with WGA to develop a revised Memorandum of Understanding (MOU). The agenda will feature a few invitees for a water-focused roundtable. Governor Hickenlooper is very focused on water and wants to take his excitement about Colorado's state water planning effort to the rest of the West. Thus, water will feature prominently at the June meeting.

THE DEPARTMENT OF THE INTERIOR PRINCIPLES AND REQUIREMENTS UPDATE

Tom Iseman, Deputy Assistant Secretary of Interior addressed the Committee. He commented that the Principles and Requirements (P&Rs) process has been a fairly long process. The P&Rs were

finalized in the Spring of 2013. There are two significant changes. They will apply to a broader set of activities and agencies. The P&Rs will apply to activities of both water quality and water quantity. They are working on two subsequent steps, namely: (1) develop interagency guidelines about how they should be implemented across the federal government; and (2) agency-specific requirements.

The comments are close to being finalized. Because the P&Rs will apply to a broader set of agencies across the federal government, it is an ongoing interagency process and is being coordinated by the Council on Environmental Quality. The Bureau of Reclamation has been dealing with the P&Rs for 30 years now. They understand how these P&Rs affect their directions. Reclamation has played a leading role in the DOI to help other agencies understand this process and can hopefully help keep the process moving along.

There are activities within the BIA, the BLM, and other agencies that will be under the scope of the P&Rs. Tom noted that while John Tubbs was serving as Deputy Assistant Secretary, he helped to establish thresholds for when the P&Rs would apply, i.e., if it's less than \$10M one would not do the P&Rs, if it's between 10-20M, one would do a scaled approach, and if it's over \$20M, then the full P&Rs are performed. There are processes to deal with places where there are unequivalencies in satisfying the P&Rs. There are opportunities to seek exemptions. DOI will have some public involvement over the course of the year. The WSWC is one of the constituents we would like to reach out to during the process.

Questions

Sue Lowry: Will the P&Rs only apply if it's a more purely focused water resources project or will it apply if water development is not the primary focus, if the range is in the \$10M?

Tom Iseman: There is some agreement that we would look at more than just projects that are intended to only impact water resources. There are ways to work through this in agency-specific procedures. There may be a way to deal with it through those procedures.

John Tubbs: Is there a threshold for a percentage of the federal cost share?

Tom Iseman: It was taken out as there was a lot of confusion about how it would be applied. Let me get back to you with a better answer. There may be some language that remains.

Tony Willardson: The WSWC has not taken a position. We wrote a letter of comment. We may want to look at the percentage in the future. There may be more pressure for cost sharing. At what point does it become an obstacle for the P&Rs?

Tom Iseman: One of the purposes of the effort is to include a larger set of values.

Scott Verhines: If the Council or members want to have input or learn more, will you be reaching out to the Council?

Tom Iseman: Yes.

NATIONAL DROUGHT RESILIENCY PARTNERSHIP

Roger Gorke began by stating that Ann Mills was with the Council yesterday during the Roundtable, and he will likely echo much of what she said.

In 2013, there was a drought gripping a good portion of the Nation. The President called in the cabinet officials and wanted an “all hands on deck” approach. They activated a national disaster recovery framework. Through this process, they learned that drought is different from other disasters since you don’t know when it ends. There was a desire to get out front of the drought. This situation prompted the beginning of the National Drought Resiliency Partnership (NDRP).

We want to build resilience to be ready for drought. What can we learn about what’s happening in California? Through the NDRP process, we heard that the Feds need to get their act together. This is a big deal for the level of people who are meeting regularly trying to figure out how the federal agencies can align themselves to provide assistance to the states. The President met with the western governors and asked for state assistance in building resilience at the federal, state, and local levels.

There are regular calls and meetings now. In February 2014, many Governors met with the President. He pled with the Governors to step up and work with the Feds. They took that to heart. This led to a lot of discussion among the governors’ staff.

The drought outlook shows that this current drought is not going to get better any time soon. Thus the federal agencies are trying to figure out how to align ourselves best with the states. Some of our initial thinking is focused on how to deal with natural science and tools. How do we build infrastructure with more resilience? Another issue is federal lands. How do we make them more resilient and drought proof? The final area is a catch-all in terms of policy and regulatory flexibility, and how to raise this to the public’s attention?

The West of course is very familiar with the drought and processes. WestFAST is a very useful tool in this case. The NDRP mirrors the WestFAST organization in terms of having a point of contact from each agency. WestFAST is a model for how to work with feds more effectively. One of the groups WestFAST has now created deals with drought. There is a hotline for people to call, who don’t have a relationship with the federal family. It goes directly to Roger Gorke.

Nathan Bracken: You talked about the focus on short term projects.

Roger Gorke: We want to focus on the long term. We want to find out the needs. There are practices and stories of things that are already working, and we’re trying to get more of that done, on the ground. We are trying to align ourselves so we can be most effective.

Tony Willardson: Using some of the technology regarding atmospheric river events, some in California hope to take advantage of expected rainfall events. Is there an opportunity to be flexible in meeting some minimum flow standards?

Roger Gorke: The California State Water Resources Control Board has taken some good steps.

Tony Willardson: I think Ann mentioned making drought.gov more user friendly.

Roger Gorke: Yes, having a one-stop shop is very helpful.

John Tubbs: Investment in long term resilience is important. It seems that this partnership will be effective (or not effective) to the extent that state participation can influence federal investment. Are they talking at the federal level about SRF cuts, basic infrastructure financing, etc.? If this is a way to elevate the importance of these programs, this would be helpful. If it's not, it's going to be hard. This partnership will only be helpful if we elevate the importance of water infrastructure.

Roger Gorke: We went through this exercise in the 70s and 80s. How do we make the processes sustainable, and not just worry until the drought is over. How do we make the interaction between agencies sustainable? Dealing with the infrastructure is a big issue.

THE FUTURE OF LANDSAT AND THE NATIONAL LAND IMAGING PROGRAM

Tony addressed the Committee. As many of you know, the WSWC has been very much involved in sustaining the Landsat imager. Tony attended the launch of Landsat 8 last year.

It is unreasonable to expect to get 25 years out of the satellites going forward. Landsat 8's design life is only 5 years. NASA has only guaranteed the land imager's life at 3 years. We might be safe to guess it will last 8-10 years, but likely not 25 years.

NASA is to come up with a plan for a continuing program. Tony passed out language in a Senate Committee report. NASA is to coordinate with USGS on this work. The report specified that the overall Landsat mission be capped at \$650M.

Many want the current imaging database to continue to be maintained. The WSWC adopted a resolution at our meetings in Deadwood last fall in this regard. This position expresses a preference for building a clone of Landsat 8.

The satellites circle the earth every 16 days. Some would like to see two or even four satellites to shorten the return time. That is probably unlikely. If it takes a year or two before NASA determines what they can and can't do, the chances increase that we may have a substantial gap in the landsat imaging program.

John Tubbs: As NOAA noted yesterday, it is important that we provide documentation to USGS to document the value a satellite provides to the user community. We need to build a more credible base for OMB to justify why they are spending \$1B on this project. It will take our organization to make this a priority within the Administration. There is strong resistance at NASA about operational programs, which they will need to get beyond. This viewpoint seems to be the wrong perspective given climate change and other developments.

Tony Willardson: The Landsat working group that I participate in looked at the value of the data and the savings of dollars through analyzing the imagery. Google will be taking Landsat information for the globe, specifically the thermal data, and they have committed a petabyte of storage in the cloud. They will be able to publish information and make it more available. There are many potential cost savings

with Landsat data since you can measure consumptive use, not just the amount withdrawn by groundwater pumping. These savings alone could range from \$23 - \$73 million per year.

Jerry Rigby: Have we done any analysis of how much other states are using the imaging data? Idaho has used Landsat a lot. Question to John – are other states using it? Have we done an analysis or questionnaire to see what other states are doing with it?

Sue Lowry: Wyoming is in year two or three to look at their portion of this. There is some upfront cost. Wyoming's GIS process at the University of Wyoming has a flat rate for each Landsat scene. Those kinds of estimates are helpful, if we were to do a quick survey. We could produce some list prices of how much Wyoming is using.

Phil Ward: We are beginning to get into the game, but we're encountering some opposition from the user community who are concerned about how it's used. I would be interested in how you worked through the process in the user community.

Robert Mace: We are beginning to use Landsat images in Texas. We are in the early phases of analysis looking at using the technology to see how it works. We know it works in the drier parts of the state and are working to determine if it will work in the wetter parts of the state.

John Tubbs: Montana has employed METRIC in a few areas, including the Confederated Salish and Kootenai Tribes. METRIC is a patented process that Dr. Allen at the University of Idaho developed. Just having better management would move us further down the road. Other satellites are providing wind speed, etc. You need to have a reference evapotranspiration (ET) to begin with.

Tony Willardson: It is significant, and there are many calculations.

DL Sanders: It's great for estimating overall ET, but my question deals with enforcement. In New Mexico, we use ET for evaluation of crops. One of the issues we're going to have is with diversions. We use meters to track over diversions, and I don't know if Landsat could monitor in an enforcement situation. How does that work with diversions?

Tony Willardson: The cost savings we looked at were strictly for measuring groundwater pumping. There aren't as many commercial applications. California is currently using Landsat for the same things that John mentioned. It is being used for administration of water rights and ensuring fallowed lands are not irrigated.

John Tubbs: We have used it as evidence for 30 years. The evidence is already available.

Tony Willardson: For those who have a particular interest, appropriations requests are due in the next two days. Landsat is used in many of these programs for enforcement. As an example, in the Colorado River Basin, it could be used in determining intentionally created surplus water that may be stored in Lake Mead, or it could be used with other interstate agreements and decrees.

Walt Baker: My mind races with water quality applications.

Dwane Young: EPA has research and development ongoing with NASA to identify some applications. One is algal blooms, but nutrients are hard to monitor from space.

Scott Verhines: Don Cline asked the WSWC yesterday to provide information as to how the product is being used.

Tony Willardson: WSWC staff can work with the members to gather information on how the western states are using Landsat data. We can work up some numbers and show the extent to which it is being used. We can tell Brad Doorn tomorrow, and find out from him how we can provide this information.

THE ENVIRONMENTAL DATA EXCHANGE & WSWC'S WADE UPDATE

Dwane Young, Senior Data Advisor with the Environmental Protection Agency discussed the Exchange Network. The Exchange Network (EN) is collaboration between EPA, states, and tribes to develop standard approaches for sharing environmental information. The EN provides standard communication protocols and data standards to define how data can be shared.

The EN is intended to be a computer-to-computer way of exchanging data. Whereas, historically, it has typically been for state-to-EPA exchanges (i.e. water quality monitoring data, water permit data, RCRA hazardous waste data).

The Exchange Network is moving toward a 'publishing' model very similar to the way the WSWC's Water Data Exchange (WaDE) is designed. EPA is embracing a new vision on information called 'E-Enterprise' to streamline reporting, reduce that burden, and provide more transparency on environmental information.

As you may know, WaDE is partially funded through an Exchange Network Grant from EPA. WaDE has always envisioned incorporating other federal data (i.e. stream gaging, snow water equivalent, reservoir height, etc.) into its product.

The EN is moving into Phase 2. There's an opportunity to begin the discussion of how to enable a national data sharing network for sensor data. There are a lot of sensors. EPA's Office of Research and Development is trying to find ways to encourage lower cost sensors.

EPA has a role in the future thinking of data sharing, and USGS is always ahead of the game on data. Stay tuned. EPA is in a research phase right now. In 2015, EPA may be in a sharing format phase.

Sara Larsen (via phone), then presented info on WaDE using a powerpoint presentation. She pointed out that the WaDE project will better enable the states to share important water data with each other, the public and federal agencies. The goal is to improve the sharing of federal datasets with the states, which would facilitate their planning efforts.

With respect to the WaDE schema project progress since last October, Sara has finalized the schema and WaDE web services code. She is working to finalize online documentation to guide the process. Sara noted that the Executive Summary of the State Capabilities Assessment Report is included

under Tab H in the briefing materials. The final publication of the State Capabilities Assessment Report should be completed by May of 2014. Additionally, Sara will be working on getting the states deployed.

The EN grant will be coordinated through the Texas Commission on Environmental Quality (TCEQ). WaDE EN Partners are Texas, Oklahoma, Washington, Oregon, Idaho, and Utah. Three additional states that have volunteered to proceed with WaDE deployment, and these include: New Mexico, Nebraska, and Wyoming.

The WSWC would like to apply for another grant this fall. Sara is looking for a lead state to be the head agency, and for states which may need some funding.

FY 2014-2015 COMMITTEE WORK PLAN

Tony Willardson quickly reviewed the items included in the draft FY2014-2015 work plan, which is contained in the briefing book under Tab I. The items included are for purposes of discussion, as the work plan will be adopted at the Summer meetings in Helena, Montana. Tony encouraged anyone with thoughts, ideas or concerns about the work plan topics to please share them.

Scott Verhines commented on the infrastructure symposium held in November 2012. He found that symposium, which was held in Phoenix, to be very valuable. It enabled him to be able to articulate information to his state legislature.

NOAA CONGRESSIONAL BRIEFING REPORT

Tony Willardson noted that the WSWC printed materials for the NOAA congressional briefing which was to have been held last year, but was delayed. The briefing will take place May 7-8, 2014. They will be highlighting NOAA programs.

CDWR/WSWC HYDROCLIMATE MONITORING & DATA WORKSHOP

Under Tab H, there is a brief description of an upcoming workshop on hydroclimate monitoring systems and measurement needs. The WSWC will continue working with the California Department of Water Resources and will hold the workshop in San Diego on June 23-25, 2014.

OTHER MATTERS

Tony commented that the Advisory Committee on Water Information recommendations are contained under Tab W in the briefing materials. The Advisory Committee is presently being rechartered. A report on USGS water programs will be published and will go to the Committee.

There being no further matters, the meeting was adjourned.