

**MINUTES
of the
188th COUNCIL MEETING
The Coeur d'Alene Resort
Coeur d'Alene, Idaho
October 26, 2018**

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MEMBERS AND ALTERNATES PRESENT

ALASKA	Joe Klein
ARIZONA	Einav Henenson
CALIFORNIA	Jeanine Jones
COLORADO	Amy Moyer
IDAHO	Jerry Rigby John Simpson Mat Weaver
KANSAS	Tracy Streeter Kenneth Titus
MONTANA	Jan Langel
NEBRASKA	Steve Goans
NEVADA	--
NEW MEXICO	Tom Blaine Greg Ridgley
NORTH DAKOTA	Jennifer Verleger
OKLAHOMA	Sara Gibson
OREGON	Tom Byler Racquel Rancier
SOUTH DAKOTA	Kent Woodmansey Garland Erbele
TEXAS	Jon Niermann Kathleen Ligon

UTAH

Alan Matheson
Eric Millis
Norm Johnson

WASHINGTON

Buck Smith
Mary Verner

WYOMING

Steve Wolff
Kevin Frederick

GUESTS

Tim McHale, U.S. Geological Survey, Denver, CO
Jama Hamel, U.S. Bureau of Reclamation, Boise, ID
Tim Petty, U.S. Geological Survey, Washington, DC
Vigil Moore, Idaho Department of Fish and Game, Boise, ID
Stephen Bartell, U.S. Department of Justice, Washington, DC
Ron Carlson, Recharge Development Corporation, Aberdeen, ID
Dave Tuthill, Recharge Development Corporation, Aberdeen, ID
Jordan Bunker, Southern Nevada Water Authority, Las Vegas, NV
Marcel Aillery, USDA's Economic Research Service, Washington, DC
Steven Wallander, USDA's Economic Research Service, Washington, DC
Adam Cline, USDA's National Agricultural Statistics Service, Washington, DC

WESTFAST

John D'Antonio, WestFAST Liaison, Murray, UT
Chris Carlson, U.S. Forest Service, Washington, DC
Roger Pierce, Former WestFAST Liaison, Denver, CO
Doug Curtis, Bureau of Land Management, Washington, DC
Patrick Lambert, U.S. Geological Survey, Salt Lake City, UT
Forrest Melton, National Aeronautics and Space Administration, Moffett Field, CA

STAFF

Tony Willardson
Michelle Bushman
Sara Larsen
Cheryl Redding

WELCOME AND INTRODUCTIONS

WSWC Chair Jeanine Jones welcomed those in attendance at the meeting.

APPROVAL OF MINUTES

The minutes of the meeting held in Newport, Oregon on August 3, 2018 were unanimously approved.

COMMITTEE REPORTS

A. Water Resources Committee

Tom Byler provided an update on proposed changes to positions #385, #386, and #387. All three positions were approved with the changes by the full committee.

B. Water Quality Committee

Kent Woodmansey discussed some changes to the new position on CWA §401 state certifications, and Pat Pfaltzgraff addressed some final changes to the new position on “waters of the U.S.” jurisdiction. Both positions were approved by the full committee. The State of Washington expressed concerns about some of the language in the position on “waters of the U.S.” jurisdiction, and abstained from the vote.

C. Legal Committee

Jennifer Verleger noted the proposed changes to Position #388 on Natural Flows. The full committee approved the position with the changes.

D. Executive Committee

Tracy Streeter discussed the proposed changes to Position #384, Vision on Water. The Executive Committee recommended this be made a permanent mission statement. The full committee approved the changes as well as making the Vision on Water a permanent mission statement.

WESTFAST REPORT

John D'Antonio thanked Roger Pierce for all his work as the WestFAST Liaison. All of the federal agency representatives in attendance introduced themselves. John talked about the value of WestFAST to both the federal agencies and WSWC. They are working to reinvigorate and prioritize the webinar series. Topics include: forecast informed operations; S2S precipitation forecasting; changing policies with how the Corps manages their reservoirs and improving their manuals; remote sensing; and other ideas. An infrastructure subcommittee will be more active

particularly with the WSWC symposium next year. They are also starting a new group to be the administrative arm for the federal government's recent initiatives.

Pat Lambert filled in for Kevin Werner. WestFAST is grateful to have John D'Antonio step into the role as the new liaison. WestFAST is trying to rotate through the different agencies to fill the liaison position, because there are benefits to having someone from each agency coordinate closely with the WSWC. We have several activities going forward in 2019, and underpinning those activities is a dedication to the core objectives of WestFAST. We are continuing to develop and create access to known, consistent points of contact, opening new lines of communication, and working on building solid relationships. During the Non-Federal Tribal Water Rights Workshop this week, we had Chris Carlson from USFS and Doug Curtis of BLM communicating with the states, listening to their concerns and desires for improved state-federal relationships over grazing water rights, and providing feedback on federal perspectives and opportunities to work together. At the workshop in Newport, Oregon, WestFAST enabled and supported the discussion on national and regional tools for mapping and defining perennial, ephemeral and intermittent streams. WestFAST also participated on the Council's WOTUS 2.0 conference calls. He pointed to the state-federal-local work in southern Oklahoma on the Altus project. The drought resiliency partnership has been very successful, and we hope to bring this same approach to other issues across the West. WestFAST has also helped with the partnership pilot project in the Upper Missouri, and participated in the Water Quality-Water Quantity Nexus workshop. These opportunities justify the continued existence of WestFAST.

We have a great turnout from our federal family at the Council's meetings. We are here to serve. We know you have your own contacts, but if you ever lack someone to contact, please contact the WestFAST leadership and the liaison. We continue to enjoy our collaboration with the WSWC and look forward to working with you into fiscal year 2019.

NASA'S WESTERN WATER APPLICATION OFFICE/ECOSTRESS

Forest Melton, Program Scientist, NASA Western Water Applications Office, provided an update on various NASA missions. The recent ECOSTRESS launch strapped an ISS tracker to the back of a SpaceX capsule, and it has been added to the space station. It will provide ET measurements and thermal measurements, evaporative stress measurements, and other data included in the National Drought monitor. It will help sustain and supplement the Landsat measurements. The tracker has a delay, and measurements are not at the same time every day.

The data collected will help with evapotranspiration for wildfire risk, volcanoes, urban heat islands, and water temperature. The mission (\$32M) is designed to be good for one year, although they are hoping to extend that 2-3. They are trying to determine if this is cost effective and a useful complement to Landsat, whether they need to increase the frequency, and would like feedback from the Council members that use this data.

The GRACE-FO mission successfully launched May 22, 2018. It extends the 15-year GRACE record. It measures speed/distance between two satellites to map gravitational pull and

measure total water storage and other variables. NASA Earth Science is about 10% of NASA's budget. He talked about ICESat-2 and other NASA missions.

The NASA Applied Sciences Program: Water Resources works to make the data useful. They have partnered with at least 11 western states and looks for ways to support their data needs. NASA globally observes water variable in the water cycle. They're looking for ways to expand capabilities and sustain resources over the long term. They're developing tools to produce maps of interest to water management agencies.

In California, some of their programs include the Snow Water Equivalent Airborne Snow Observatory, ET mapping in impacted basins with Western states, evaporative stress/drought intensity; Land fallowing; Evapotranspiration mapping for irrigation Management & SGMA; Seasonal forecasting of snow water resources and runoff. We are partner with NOAA, COE and others in using satellite date in improving the accuracy of forecasting for water supply.

He provided an update on WWAO activities. This regional program office is to put NASA research, observation and technology to work in support of Western US water management challenges. NASA is not an operational agency, so they need to transfer projects over to someone else, and WWAO helps with that transition (among other things). It is housed at NASA JPL. They've developed and maintain relationships with partners in western states to identify water resources needs. Most of these observations are done globally, and WWAO handles them locally.

WSWC/WWAO held a WIMS workshop in Jan 2018. They looked at ways to assess the needs of WSWC members and their highest priorities. They're getting a better feel for the time it takes for water use permitting, which opened NASA staff eyes. The data is freely and publicly available, but sometimes in obscure data formats that no one knows how to use. He mentioned they could not have done this without Sara Larsen's assistance.

Current WWAO projects include operational analysis and modeling with Airborne Snow Observatory (ASO) higher resolution soil moisture data and operational evapotranspiration for USDA NASS Navajo Nation Water resources, and drought monitoring SIMS for improved crop management.

They support partnerships with state and local agencies. Everything they do is needs driven. They held a worship in April 2018 to understand Colorado River Basin needs and priorities, and they have 13 use cases in the Colorado River Basin this year. If there are other needs, please reach out to me and or Stephanie Granger or Indrani Graczyk. Christine Lee over ECOSTRESS can also be contacted.

WESTERN ASSOCIATION OF FISH & WILDLIFE AGENCIES

Virgil Moore, Director, Idaho Department of Fish and Game, described the history of various fish and wildlife entities in Idaho. He talked about collaborative efforts on trout, sagegrouse, and prairie chicken. Most places in Idaho have an Endangered Species Act (ESA)

nexus. They use approved plans to help keep species off the ESA listing. They are crafted very carefully with their other partners. Many of the highest priority of species listed are aquatic.

State trust responsibilities versus federal responsibilities for wildlife raises very similar discussion on WOTUS in the wildlife agencies. The sage grouse decision a huge WGA/WAFWA success. This was a highly collaborative effort to bring science to the table for useful information to address the prioritized threats in management plans. There was strong leadership by the WGA governors and WAFWA. WAFWA worked with WGA on CHAT and gathered comprehensive data, management plans for Idaho's wildlife, peer reviewed science, state involvement in the status review; collaborative management (locally led from the bottom up); legal intervention or challenge as appropriate; defense of state sovereignty. WAFWA legislates, litigates, adjudicates, regulates, and collaborates. The area on the South Fork was biologically dead in the 1970s. Today it is biologically back due to collaborative efforts. Trying to maintain multiple values.

He talked about the importance of the Recovering America's Wildlife Act – H.R. 4647. Senator Risch has introduced a companion bill in the Senate. HR 4647 is still moving forward. It has actually been around for 2-1/2 years in one form or another. They need support for this kind of legislation. They get no funds from the Idaho general fund. They get money from license plates, and some other funding pots.

He told a story about the Teton Dam disaster, and a fish kill battle due to a closed headgate on a river that took nearly a decade to get over. It helped him to recognize the importance of working collaboratively.

AGRIMET: PAST, PRESENT & FUTURE

Jama Hamel, Agrimet Program Coordinator, U.S. Bureau of Reclamation, described the AgriMet network, a cooperative agricultural weather network with almost 300 stations across several western states, collecting local weather and evapotranspiration data. Originally established to provide information to assist with irrigation scheduling, the data have also been used for ground-truthing remote sensing and satellite data, input for weather forecast models, drought monitoring, long-term climate models, wastewater reuse and groundwater quality, power generation models, water rights issues and litigation. The network is increasingly important.

AgriMet started in 1983 with 3 stations. The stations are all self-contained. They have cellphone modems. They collect a data point every 15 minutes. These values are summarized daily. They prepare an estimated crop water use table.

Current projects: Upper Colorado River Commission; Irrigation Scheduler mobile; Anheuser-Bush Case Studies; Idaho Youth Challenge Academy, which is a FY19 pilot project that teaches kids to be technicians; Wastewater Land Application.

A daily email goes out to the Anheuser Busch growers in an effort to get the farmers to use the data. For them, the key is the weather data, but we include the other data to get them used to what is available. This will be rolled out more widely.

Jama described funding and the costs of running the stations (mostly calibration, maintenance and operation costs). Individual sponsors pay \$1,600 yearly per station. Big sponsors have contributed \$133,000, which has reduced the costs for others. Reclamation's budget for AgriMet is \$150,000.

WATER-RELATED PROGRAMS & ACTIVITIES - DEPART. OF THE INTERIOR

Tim Petty, Assistant Secretary for Water and Science, Department of the Interior, spoke to the Council and emphasized the importance of developing positive relationships at all levels. He noted a "water" subcabinet level working group has been loosely formed including: himself, EPA Assistant Administrator David Ross; R.D. James, Assistant Secretary of the Army (Civil Works); Timothy Gallaudet, Assistant Secretary of Commerce for Oceans and Atmosphere; Bill Northey, Under Secretary for Farm Production and Conservation (FPAC), U.S. Department of Agriculture; and Cathy Tripodi, Office of Energy Efficiency and Renewable Energy, Department of Energy. They plan to meet on a regular basis to discuss their key respective roles on water. Rather than reinvent the wheel, they hope to use programs and groups already engaged on water issues, and work more effectively together to address critical needs, such as infrastructure, storage, water reuse, aquifer recharge, produced water, drought contingency plans, open water data, streamgages, and Landsat technology.

STATE REPORTS

Utah: Eric Millis - We had a dry, hot summer. We had a lot of fires. In the beginning of October we received rain, which has helped. We've even received some snowpack. The governor had to declare a flood emergency warning in early October. Governor Herbert also declared a drought emergency. We hope this causes people to be more cautious with their use of water.

Alaska: Joe Klein - I'm filling in for Dave Schade. Large projects being evaluated in Alaska. EPA reversed its 402(c) decision on Pebble Mine, so that application process is ongoing; the area is also highly valued for salmon harvests. The LNG oil pipeline is being considered, a \$42 billion project. China is interested in helping move that along. A hydro project was just announced for the Bristol Bay area, which would be run off the river instead of an impoundment, so people are looking forward to the jobs and energy that would bring. The Sturgeon case – a US Supreme Court case dealing with state sovereignty—will be heard on its second appeal next month. The incumbent Governor dropped out of the race a week ago, so there will be a change.

Kansas: Tracy Streeter - We will have a new governor. It will change our membership on the WSWC. Tracy has decided to retire at the end of the year. We reached a monetary settlement with Colorado that absolves Colorado of non-compliance issues. Kansas will undertake some conservation projects. Other monies will be left to take care of issues that cross state lines. He provided an update on the dredging project on John Redmond Lake in 2016. Working on water injection dredging now. It stirs up the sediment on the bottom of the reservoir and then it passes down the river. We're talking to the Corps about how to sustain our reservoirs. We went from drought to flood this year – much in the same place. We had drought conditions on the Kansas River. The Corps could not let the water go downstream.

New Mexico: Tom Blaine - We have suffered significant consequences of drought, including a low reservoir. Interbasin transfers has been a topic with legislators, with considerable tension between M&I and agriculture. People need to be able to move the water around in order to meet all of these needs. Hoping legislative session can improve some of the laws to give opportunities for aquifer recovery and storage. If we can reduce the evaporative losses, that would be great. With Aamodt case in northern New Mexico, we've encountered an issue with Bureau of Reclamation on adequate funds to complete that project. We've been meeting with BOR and stakeholders, and some encouraging things have come out in the last week. This year the conservancy project permit wanted to file proof of beneficial use. Colorado reach out with an opportunity to do an extreme precipitation study. It cost the State of New Mexico about \$100k to cooperate, which would have been \$1M otherwise, so there were saving for both states. We're looking for economic ways to utilize produced water. Will have a new governor in January.

Arizona: Einav Henenson – We've been working on drought contingency planning on the lower Colorado River Basin. We appreciate all who have been working hard to finalize this effort, including the other six states. ADWR is required to get legislative approval before signing the DCP. We formed subcommittee steering groups to successfully implement and reached out to stakeholders, working toward conservation plans, access water plans, and tribal surplus. Trying to complete this before the end of the year. Hope to get authorization from legislators during the upcoming legislative session. She provided an update on Enterprise Data Management, a central data management program. They have a 1.5 score right now, and hope to get to a score of 3. Established an office of data management to move from separate silos to a data warehouse all the agencies can access, incorporating some of their datasets. We will be adding more datasets and ability to access info online. Looking forward to hosting the next meeting in Arizona next spring.

Nebraska: Steve Goans - Governor is running for re-election. There could be a change, but do not suspect so. Our budget relies on corn prices and other agriculture. Corn is up so the budget is up, but we've had 5-8% reductions over the past few years, so things have been tight, balancing between regulatory compliance and budget goals. There are no counties in the state under drought currently, which is the first time in a long time. Timely rains have come through. The Missouri River has been running very full, the upstream reservoirs are full, and they're hoping not to have a lot of flooding. They're working on setting up the ability to assume the CWA 404 program. They have to have legislation and permission. It is a couple of year process. On the CWA 401 issue, most projects applications are reviewed within 45-90 days. In the past he could only remember one time that it was longer, and that involved ESA issues. Nebraska is a groundwater state and they have to deal with quality. First groundwater management area approved in the nation. Project on groundwater management used Section 319. Antelope Creek was delisted. It was a flood control project with water quality aspects. Keystone Pipeline is basically approved.

Montana: Jan Langel - The Department of Environmental Quality will have a new director, being selected by the governor. Tom Livers has moved to the governor's office. We're working with our sister state and federal agency to show measurable improvements to water quality, focused on watersheds. Proposing rules for lead levels, so we are sampling and looking for ways to remediate. The Department of Natural Resources is pushing to get water settlement with Confederated Salish and Kootenai Tribe through Congress, working with other folks to get that done. There is a small

group that opposes the settlement. Water supply has been pretty good through the year. Over the last several months they have had emergency declarations for flood, fire, and drought. Short-handed due to budget cuts from the legislators, which has had some serious consequences for water programs. Legislature convenes this January.

Oregon: Raquel Rancier – In May the Governor introduced an Oregon environmental protection act for streams and lakes. Thanked all who attended the Newport meetings. Director Tom Byler was just reconfirmed by the Senate, but will need to see what happens after the election and who the governor will be. We faced drought across Oregon, and we're concerned about next year; the forecast for El Nino means not much rain for OR. The Klamath Basin litigation is focused on groundwater regulation for surface water rights for tribes. The state has been sued 11 times. We're figuring out the best solutions for groundwater regulation going forward, and looking at what other states are doing. We were interested in the presentation by Dividing the Waters and the groundwater bench book. The Bureau of Reclamation asked the state to step into a federal project as well as irrigation district boundary. Budget reductions are expected next year. Water has been a strong priority, so they hope not to take too much of a hit in terms of reductions. We're looking at questions related to transferring stored water, and secondary rights to use stored water. Currently you cannot “transfer” or “change” that use, to changed the point of stored water, because it's not considered a beneficial use. We updated our dam safety authorities from 1929. We've dealt with well drilling and construction issues.

Washington: Mary Verner – It has been a year of weather extremes. We had drought in the southwest area late in the summer. We have some proposed legislation to authorize us to issue advisories, rather than emergency declarations. We're seeking funding for drought preparedness and not just for drought response. We're also requesting the legislature to authorize funding so we can assess where to adjudicate next. The Yakima River Basin adjudication has been going on for 40 years. We would like to do a better job. The tribes are interested in adjudicating and has been positive about exercising jurisdiction in state court. We currently lack a good framework for water banking and markets. We have a trust water program for water rights, with relinquishment protection, used for mitigation purposes only, but it gives us the advantage of loophole to create private water banks. I may come to some of your states to try to understand how your programs work. Thanks to Idaho for the great meeting and location.

Colorado: Amy Moyer - Colorado had a dry, hot water year in 2018. It was second warmest in the period of record. A call was placed on the Yampa River northwest CO. The Spring Creek fire was third largest wildfire on record. We faced reservoir declines. We are hoping for good snowpack this winter. We're hoping for Congressional reauthorization and funding of the recovery programs on the Colorado River. We're working on a 13-year extension of the Platt River recovery program. Governor Hickenlooper is termed out, so we will have a new governor after the election. Our legislative session starts in January.

North Dakota: Jen Verleger - NAWS litigation has the final oral argument in the claims court in two weeks. We have some litigation over who owns minerals under navigable water bodies. The legislature tries to resolve this by giving them to the landowners. This will be headed to the Supreme Court. Two administrative cases have been filed, one over what is or is not a water course

that needs court clarification. The second deals with a water appropriations permit with an oil refinery. The opponents are suing everyone that issued a permit, but on the water side the lawsuit raises the issue of what it means to have intent to put water to beneficial use, and we don't have a lot of case law on that.

Wyoming: Steve Wolff – A bill to authorize a water banking program has been drafted, which generated lots of discussion, a workgroup meeting, and will be an interim topic for the Wyoming legislature. The Colorado River DCPs are getting closer, still need signatures and to authorize the agreement with congressional legislation. Trying to push that through in the lame duck session at the end of this year. Governor is termed out, so we'll have a new governor after the election. Both candidates are well informed on water issues.

FUTURE COUNCIL MEETINGS

The WSWC Spring (189th) Council Meetings will be held in Chandler, Arizona on March 19-22, 2019.

SUNSETTING POSITIONS FOR SUMMER 2018 MEETINGS

Tab XYZ of the briefing materials contains sunsetting positions that will be brought up at the 2019 Spring meetings.

OTHER MATTERS

There being no other matters, the meeting was adjourned.