

MINUTES
of the
WATER RESOURCES COMMITTEE
Doubletree Hotel – Washington, DC – Crystal City
Arlington, Virginia
April 5, 2022

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MEMBERS AND ALTERNATES PRESENT

ALASKA	--
ARIZONA	Tom Buschaztke Amanda Long-Rodriguez
CALIFORNIA	<i>Jeanine Jones</i>
COLORADO	<i>Jeremy Neustifter</i>
IDAHO	Jerry Rigby John Simpson
KANSAS	Earl Lewis Kenny Titus
MONTANA	--
NEBRASKA	<i>Tom Riley</i> <i>Jesse Bradley</i>
NEVADA	Micheline Fairbank Jennifer Carr <i>Adam Sullivan</i>
NEW MEXICO	<i>John Rhoderick</i>
NORTH DAKOTA	Andrea Travnicek Jen Verleger
OKLAHOMA	Julie Cunningham Sara Gibson
OREGON	--

SOUTH DAKOTA

Nakaila Steen

TEXAS

Kathy Alexander
Jeff Walker

UTAH

Candice Hasenyager
Norman Johnson
Todd Stonely

WASHINGTON

Mary Verner

WYOMING

Jeff Cowley

GUESTS

Elizabeth Ossowski, National Integrated Drought Information System
Shelly Lemon, New Mexico Environment Department
Joenne McGerr, Washington Department of Ecology
Lauren Driscoll, Washington Department of Ecology

WESTFAST

Heather Hofman, Federal Liaison
Roger Gorke, Environmental Protection Agency
Mary Lou Soscia, Environmental Protection Agency
James Ray, Environmental Protection Agency
Fred Leutner, Environmental Protection Agency
Rachel Esralew, U.S. Fish and Wildlife Service
Travis Yonts, Bureau of Reclamation

STAFF

Tony Willardson
Michelle Bushman
Adel Abdallah
Ryan James
Cheryl Redding

WELCOME AND INTRODUCTIONS

Andrea Travnicek, Vice Chair of the Water Resources Committee, called the meeting to order, and remarked that Mary Verner, Chair was attending remotely. Self-introductions were made around the room.

APPROVAL OF MINUTES

The minutes of the meeting held in Deadwood, South Dakota on September 14, 2021 were moved for approval, seconded and approved with no changes.

SUNSETTING POLICIES

Position #432 – supporting Rural Water Infrastructure Needs and Projects

Mary Verner offered a motion for the Water Resources Committee to approve the position as marked up in the briefing materials under Tab C, to be presented for approval by the Full Council. The motion was seconded and unanimously passed.

Position #433 – supporting Renewable Hydropower Development

A motion to approve Position #433 as revised was offered and seconded. The motion passed unanimously. Both of these positions will be brought before the Full Council for approval tomorrow.

WSWC MEMBER STATES DROUGHT/WATER SUPPLY OUTLOOK ROUNDTABLE

Elizabeth Ossowski, with National Oceanic and Atmospheric Administration's National Integrated Drought Information System (NIDIS) used a [powerpoint presentation](#). As many of you know, the Western States Water Council and the Interstate Council on Water Policy both sit on the NIDIS Executive Council.

Elizabeth summarized the current state of the drought. We are looking at an outlook for the next three months with drought persisting across the western United States. The most recent U.S. Drought Monitor is showing about 50% of the country being in drought, ranging from moderate drought to exceptional drought. The seasonal drought outlook looks very familiar to those of us in the West who saw basically the same map this time last year.

Many of you are familiar with the NIDIS program, which is a \$13.5 million dollar annual program that was started in 2006. The program invests in five areas: (1) drought predictions and forecasting; (2) interdisciplinary research and applications; (3) drought planning and preparedness; (4) drought observations and monitoring; and (5) drought communication and outreach. About half of our annual appropriation goes to research. I want to flag that the NIDIS program, since its existence since 2006, is starting to get closer to the ultimate vision that Congress had when it created our program of developing a national drought reporting system.

West of the Mississippi, we have a national drought early warning information system serving all of the states, with the exception of Alaska, Hawaii, and the Pacific Islands. East of the Mississippi, we are beginning to think through how we fill in some of the gaps to realize that vision of a national drought early warning system.

One of the main features of the NIDIS program has been developing an initiative that can be seen in each of our regional drought early warning systems. Since 2015, the NIDIS Drought and Wildland Fire Nexus (NDAWN) has convened eight regional and subregional workshops, presented to fire practitioners at eight conferences, and interviewed 15 fire weather forecasters on the impacts of drought on wildfire planning, behavior, and post-wildfire response. Fire managers and planners emphasized a need for increased engagement across agencies and the public on the topic of drought and wildfire. Many of the impacts identified are already present in the absence of drought. However, drought amplifies these impacts, and some can transmute into entirely new impacts, both in intensity and consequences. We're working with wildland fire managers to not only understand their knowledge gaps and needs for additional tools and resources, but to understand drought conditions and forecasts in order to make decisions, plan and understand fire behavior, and also to invest in research and fire weather research, which NOAA and the NIDIS program are invested in.

Over the last two years we have stepped into the role of communicating authoritative and timely drought information with our federal agency partners in addition to state agencies. These communications include a webinar nearly every other week. We are working with USDA, state partners, and academic institutions such as the Desert Research Institute to disseminate information on current conditions, forecasts, output impacts, and relevant research. We have developed drought alert emails. One can go to our website, type in a zip code, and receive alerts whenever drought conditions worsen, or whenever there's drought diminution in your community. Similarly, we provide drought status updates. These are very regular emails going out to thousands of subscribers in each region in which we have a drought early warning system.

We have found these materials to be incredibly effective, not only for coordinating the decision-making side of the spectrum, but also the media. We have designed some meetings with stakeholders, and others specifically for members of the media as well, to address items from the federal level to the local level on current conditions.

NIDIS was happy to host a Southwest Drought Forum in 2021. Many thanks to Tony and the Western States Water Council for helping to serve on the planning committee for the event. Some outcomes and things that we heard during the multi-day forum will help shape the agenda to not only move the NIDIS program forward, but also to have a dialogue as a Nation and as a region in the Southwest on long term drought and aridification concerns and needs. We heard loud and clear during this two day event that we need to better address water scarcity and underserved and overburdened communities. That was a repetitive theme. Other major points include: (a) integrating land use planning and cascading hazards information into drought and climate planning responses; (b) considering the vulnerability of small businesses and small communities and drought resilience and response measures, as many may not have access to staff to apply for federal

funding, or small businesses may not have a chance to adapt their business, particularly for such areas as outdoor recreation; (c) investing in research on drought and aridification in the Southwestern U.S., including social science; (d) strengthening financing and research for implementing nature-based drought solutions; and (e) supporting improvements to subseasonal to seasonal (S2S) forecasting for drought decision-making. A report on that event will be coming out shortly and we will share it with Tony and the Western States Water Council, and of course, with the Nation through our portal.

The U.S. Drought portal was overhauled last year. We continue to make improvements to the site. Suffice it to say, the site offers not only historical drought information from Paleo climate records that are 2,000 years old to “by sector” drought information, where one can see economic information available at the federal and the state levels on, for instance, how the outdoor recreation industry is impacted.

NIDIS has a partnership that addresses an interest of the Western States Water Council for improvements in drought prediction and forecasting. We are partnering with the NOAA’s Climate Prediction Center to develop state of the art objectives and probabilistic drought outlooks. We aim to co-develop this for stakeholders to have outlooks covering a long, consistent set of historical predictions, allowing for the establishment of skill and confidence levels and a robust framework for testing future movements. This will be about a \$3 million investment.

A slide shows a snapshot of the measurable impacts of the NIDIS program. Over the last few years, we have gained a social media presence that is quite robust. We are able to spread the word on some of the drought conditions, forecasts, and outlooks we observe at any given time to make sure that we are delivering the drought early warning promise that is so central to our mission.

In terms of our strategic look ahead, we are in the midst of a strategic planning process which will wrap up in the next few weeks. A draft has been shared with Tony Willardson and Sue Lowry, and with many of our other NIDIS executive council members. We will be building out the National Drought Early Warning System and making some critical investments in additional localized drought information resources, investing in understanding drought and climate change in the southwestern United States, specifically, and better understanding the cost of drought events.

In coming days, you’ll be hearing from folks across the federal family on the various collaboration mechanisms that are available to the federal agencies to convene and to work with the a whole of government approach on drought events. NIDIS supports each one of the entities in various ways. Largely, we serve as a drought early warning component of the collaboration on drought. We are proud to contribute to the tribal drought team on the Water Subcabinet and the Interagency Drought Relief Working Group. This group will be hearing from some of the principals during your WestFAST meeting.

Cara McCarthy, Acting Director of the the USDA’s National Water and Climate Center (NWCC), thanked Elizabeth and remarked that they love the drought.gov website. In fact, Cara

has been talking to the folks that helped develop the website so maybe one day the NWCC can have a site as good as drought.gov.

NWCC is in the midst of putting out the April 1 Water Supply Outlook across the states. Cara used [powerpoint slides](#) to depict the percent of snow water equivalent in the West. These maps paint a pretty bleak picture. Another map shows the snow water equivalent conditions as a percent of the period of record. Basinwide, you can see conditions are below average to much below average. A number of the records for our streamflow sites go back over 100 years. The percentages look lower when you look at the period of record. The preliminary forecast for Lake Powell right now for April to July is 4.4 million acre-feet, which is 72% of the 1991 to 2020 median.

The NWCC is a \$9.5 million program right now. We are small and scrappy and dedicated. With about 900 SNOTEL sites and about 40 SNOTEL light sites, which are also automated, we can calculate the snow water equivalent at given sites. We have over 1,000 manually operated snow courses that we do ourselves, along with help from the U.S. Forest Service. In addition, we have about 200 soil moisture measuring sites in our Soil Climate Analysis Network (SCAN).

Our budget has been flat for about 10 years. Given increased fuel costs, it is going to be rough this year to get to the sites and to maintain them. We're doing what we can with what we have, and we appreciate all the support and work of our partners.

Lastly, I would say that remote sensing has been amazing. We strongly support it though the ground truthing is still needed. Thus, it is still super important to maintain our individual sites and connect to remote sensing modeling.

Roger Gorke of the Environmental Protection Agency spoke. I didn't prepare a presentation, but I'm going to borrow from one of Elizabeth's slides (#13) on Federal Collaboration on Drought. The slide indicates that there are at least six federal groups that are working on drought. That might worry somebody from the state perspective or an outside perspective, but the good news is that folks like Elizabeth and myself and Chris Carlson, from the Forest Service are on, if not all of these, most of these groups. So you have a common thread with people that are involved and actively engaged in these groups. Thus, there isn't the potential for these groups being silent silos that don't talk to each other. This provides some specific areas of focus that each of these groups can do.

For example, you are all very well aware of what NOAA does in terms of forecasting and research and planning. You're all aware of what WestFAST does with collaboration across the federal family. The Interagency Working Group on Drought from the White House is focusing on some of the short-term drought response work. You saw that through the actions that Secretary Vilsack and Holland announced last year.

Given the upcoming meeting with the Water Subcabinet, you'll hear what they're doing from the principals' level. They are principals throughout all of these groups and regardless of

what “hat” they’re wearing or which group they are representing, they’re always working as the Water Subcabinet.

The National Drought Resiliency Partnership (NDRP), as you probably know, is meant to pick up where NIDIS leaves off in terms of building resilience, and more on the implementation front for long-term drought resilience. A status report should be released in the coming weeks. An action plan should guide the next several years, five years or so, of work from the federal perspective. The action plan isn’t articulating everything that the federal government is doing on drought. It is a subset of benefits and there would be value added from interagency collaboration. There are four areas of collaboration: (1) data; (2) advancing efficient water use; (3) drought planning; and (4) the economics of drought.

In a nutshell, there’s a lot of federal collaboration going on with respect to drought. I think what would be of the most value is to continue to hear from the states, particularly the western states on what could and should we be doing that can help support you and the tribes that are within your state and your local communities to build more long-term drought resilience, particularly with the unprecedented amount of funding that is now available. Later on you will hear that EPA and other agencies have to be able to fund water infrastructure, and hopefully make that infrastructure climate resilient, and also build infrastructure that can support long-term drought resilience.

SUBSEASONAL TO SEASONAL (S2S) FORECASTING

Tony Willardson reported on behalf of Jeanine Jones that under Tab M, there is an announcement of a meeting being held in San Diego on the topic of subseasonal to seasonal precipitation forecasting on May 17-19.

A separate meeting on Snowmelt Runoff Forecasting is tentatively scheduled for June 1 in Salt Lake City, Utah.

Jeanine is also working with NOAA and NASA to set up meetings in Washington, D.C. at the end of June to discuss some of what California has been funding as far as pilot projects for moving the technology forward to see if we can get weather forecasts from 10 to 15 days to eventually months and even seasonal forecasts, to help us better prepare for drought and for many other decisions.

DRAFT FY2022-2023 COMMITTEE WORK PLAN

Andrea Travnicek referred Council members to see Tab I, and asked members to please review the workplan. Let us know if there is anything you would like to include or change.

SUNSETTING POSITIONS FOR 2022 SPRING MEETINGS

The sunsetting positions for the 2022 Summer meetings are listed on the agenda and are as follows:

Position #434 – Preservation of Radio Frequencies for Weather forecasting and Water Management

Position #435 – Resiliency of Our Nation to the Impacts of Extreme Weather Events

Position #436 – Regarding Hydraulic Fracturing

Position #437 – Supporting Water Research Department of Energy National Laboratories

Please take a look at the positions in preparation for the Summer meetings.

OTHER MATTERS

There being no other matters, the meeting was adjourned at 5:33 p.m.