Western States Federal Agency Support Team (WestFAST) is a collaboration between 13 Federal agencies with water management responsibilities in the West. WestFAST was established to support the Western States Water Council (WSWC) and the Western Governors' Association (WGA) in coordinating Federal efforts regarding water issues.

Membership:

Becky Fulkerson, (Chair)
Reclamation rfulkerson@usbr.gov

Roger Gorke, (Vice Chair), EPA
Gorke.roger@epa.gov

Jean Thomas, Forest Service
jathomas02@fs.fed.us

Dionne Thompson, Reclamation
dethompson@usbr.gov

John D'Antonio, USACE
John.R.D'Antonio@usace.army.mil

Pixie Hamilton, USGS
pahamilt@usgs.gov

Larisa Ford, BLM
laford@blm.gov

Andrew Hautzinger, FWS
Andrew_Hautzinger@fws.gov

Mike Strobel, NRCS
michael.strobel@por.usda.gov

Roger Pulwarty, NOAA
roger.pulwarty@noaa.gov

Brad Doorn, NASA
bradley.doorn@nasa.gov

Craig Zamuda, DOE
Craig.Zamuda@Hq.Doe.Gov

Marc Kodack, DOD
marc.d.kodack.civ@mail.mil

Ed Harvey, NPS
forrest_harvey@nps.gov

Patrick Lambert, Federal Liaison
patlambert@wswc.utah.gov

WestFAST

WestFAST News

May 2015

U.S. Environmental Protection Agency and the U.S. Army Clean Water Rule Finalized *(EPA, 5/27)*

In an historic step for the protection of clean water, the U.S. Environmental Protection Agency and the U.S. Army finalized the Clean Water Rule on May 27 to clearly protect from pollution and degradation of the streams and wetlands that form the foundation of the nation's water resources.

The rule ensures that waters protected under the Clean Water Act are more precisely defined and predictably determined. "For the water in the rivers and lakes in our communities that flow to our drinking water to be clean, the streams and wetlands that feed them need to be clean too," said EPA Administrator Gina McCarthy. "Protecting our water sources is a critical component of adapting to climate change impacts like drought, sea level rise, stronger storms, and warmer temperatures – which is why EPA and the Army have finalized the Clean Water Rule to protect these important waters, so we can strengthen our economy and provide certainty to American businesses."

"Today's rule marks the beginning of a new era in the history of the Clean Water Act," said Assistant Secretary for the Army (Civil Works) Jo-Ellen Darcy. "This is a generational rule and completes another chapter in history of the Clean Water Act. This rule responds to the public's demand for greater clarity, consistency, and predictability when making jurisdictional determinations. The result will be better public service nationwide."

Protection for many of the nation's streams and wetlands has been confusing, complex, and time-consuming as the result of Supreme Court decisions in 2001 and 2006. EPA and the Army have taking this action to provide clarity on protections under the Clean Water Act after receiving requests for over a decade from members of Congress, state and local officials, industry, agriculture, environmental groups, scientists, and the public for a rulemaking.

In developing the rule, the agencies held more than 400 meetings with stakeholders across the country, reviewed over one million public comments, and listened carefully to perspectives from all sides. EPA and the Army also utilized the latest science, including a report summarizing more than 1,200 peer-reviewed, published scientific studies which showed that small streams and wetlands play an integral role in the health of larger downstream water bodies.

Specifically, the Clean Water Rule:

- Clearly defines and protects tributaries that impact the health of downstream waters. The Clean Water Act protects navigable waterways and their tributaries. The rule says that a tributary must show physical features of flowing water – a bed, bank, and ordinary high water mark – to warrant protection.
- Provides certainty in how far safeguards extend to nearby waters. The rule protects waters that are next to rivers and lakes and their tributaries. The rule sets boundaries on covering nearby waters for the first time that are physical and measurable.
- Protects the nation's regional water treasures. Science shows that specific water features can function like a system and impact the health of downstream waters. The rule protects prairie potholes, Carolina and Delmarva bays, pocosins, western vernal pools in California, and Texas coastal prairie wetlands when they impact downstream waters.
- Focuses on streams, not ditches. The rule limits protection to ditches that are constructed out of streams or function like streams and can carry pollution downstream. So ditches that are not constructed in streams and that flow only when it rains are not covered.
- Maintains the status of waters within Municipal Separate Storm Sewer Systems. The rule does not change how those waters are treated and encourages the use of green infrastructure.
- Reduces the use of case-specific analysis of waters. Previously, almost any water could be put through a lengthy case-specific analysis, even if it would not be subject to the Clean Water Act. The rule significantly limits the use of case-specific analysis by creating clarity and certainty on protected waters and limiting the number of similarly situated water features.

The rule protects clean water necessary for farming, ranching, and forestry and provides

greater clarity and certainty to farmers about coverage of the Clean Water Act. Farms across America depend on clean and reliable water for livestock, crops, and irrigation. The final rule specifically recognizes the vital role that U.S. agriculture serves in providing food, fuel, and fiber at home and around the world. The rule does not create any new permitting requirements for America's farmers. Activities like planting, harvesting, and moving livestock have long been exempt from Clean Water Act regulation, and the Clean Water Rule preserves those exemptions.

The Clean Water Rule will be effective 60 days after publication in the Federal Register.

More information on the Clean Water Rule can be found at this link. Read comments by EPA Administrator Gina McCarthy and Assistant Secretary of the Army for Civil Works Jo-Ellen Darcy on the need for the new rule at this link.

WestFAST Agencies Participate in WSWC & CDWR Precipitation Forecasting Workshop

The WSWC and the California Department of Water Resources cosponsored a workshop on May 27-29 to develop a Western vision for improving precipitation forecasting at timescales beyond the two -week weather forecast time domain. Improved forecasts of precipitation at longer timescales can be used for many purposes, such as interstate compact or water rights administration, planning for local water agency supply deliveries, or flood season preparedness.

Presenters in the workshop included: Jon Gottschalck, National Oceanic and Atmospheric Administration (NOAA), Climate Prediction Center; Grant Cooper, National Weather Service, Western Region; and Mike Anderson, California State Climatologist; and WSWC members Jeanine Jones (CA), J.D. Strong (OK), and Tim Davis (MT). Representatives from NASA and the U.S. Geological Survey also attended and participated.

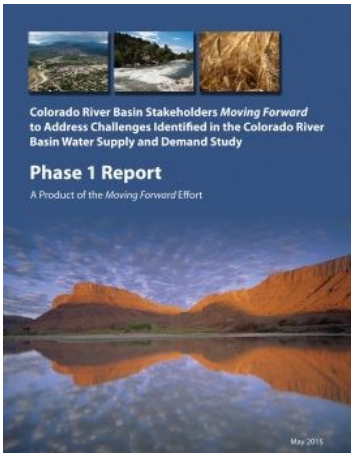
A workshop summary report will be prepared, with the intent of using the report to inform a dialog with NOAA's Climate Prediction Center on taking advantage of prediction skill that may be available at a regional (Western) scale to improve the outlooks now issued at a national scale.

Reclamation Releases Collaborative "Moving Forward" Report Addressing Future Colorado River Basin Water Supply and Demand Challenges *(USBR, May 29)*

On May 29th, the Bureau of Reclamation and stakeholders throughout the Colorado River Basin (Basin) released a report that documents opportunities and potential actions to address the future water supply and demand imbalances projected in the 2012 Colorado River Basin Water Supply and Demand Study.

The Moving Forward Phase 1 Report is part of the Colorado River Basin Study Moving Forward effort launched in May of 2013. The Moving Forward program is an effort by the Department of the Interior (DOI) and stakeholders throughout the Basin to respond in a coordinated and collaborative manner in identifying and implementing actions that address projected water supply and demand imbalances, have broad-based support, and provide a wide range of benefits.

In Moving Forward Phase 1, funded jointly by Reclamation and the seven Colorado River Basin States, over 100 stakeholders spanning all water use sectors engaged in three workgroups focused on water use efficiency (urban and agricultural) and environmental and recreational flows. The Phase 1 Report includes chapters contributed by each workgroup.



Click the above cover to view the Phase 1 Report

'The impacts of the ongoing drought are widespread and are currently being addressed at the local and regional levels. Looking ahead to the longer-term challenges facing the Basin documented in the 2012 Study, it is clear that these challenges must be tackled collaboratively involving all sectors of use," Lower Colorado Regional Director Terry Fulp said. "The Phase 1 Report is a critical first step towards this level of collaboration."

Twenty-five opportunities were identified by the workgroups. Similar components resulting from each workgroup's individual set of findings include opportunities related to funding and incentives, data and tools, outreach and partnerships, coordination and integration, infrastructure improvements, and flexible water management.

Building from the Phase 1 Report, Phase 2 of the Moving Forward effort will be underway later this year and includes the selection and implementation of several pilot projects.

NOAA Identifies Tactics and Strategies to Improve Drought Science, Forecasts and Data *(NOAA, May 11)*

After soliciting feedback from more than 100 stakeholders and employees, NOAA released a service assessment on May 11, 2015, that identifies tactics and strategies the agency can take to better provide California decision makers with the scientific data and tools they need to lessen the impacts of extreme drought.

The NOAA California Drought Service Assessment contains more than three dozen findings and recommendations which may lead to improved or more tailored data products and tools, such as weather forecasts, streamflow forecasts, seasonal predictions, and climate models. The report also examines NOAA's coastal stewardship mandates and ecosystem research services, noting best practices and identifying areas for partnerships and collaboration, as well as research questions NOAA scientists should consider pursuing.

WestFAST News

May 2015

"As the nation prepares for more weather and climate extremes, unprecedented actions to safeguard water--such as those seen in California--will become more commonplace. NOAA must stay ahead by developing new tools and refining existing ones to meet new demands," said Vice Admiral Michael Devany, NOAA's deputy under secretary for operations and executive sponsor of the report.

He added, "This report's findings underscore NOAA's important role in providing businesses and communities with the environmental intelligence--or timely, reliable and actionable information--to remain resilient to extreme events. The feedback outlined in this report will help NOAA serve communities and businesses in California as they continue to grapple with the worst drought in its history."

Since its onset in 2011, the California drought has taken a heavy toll on the economy and the natural environment. A study last year by the University of California Davis projected 2014's economic cost of the drought to be $2.2 billion, with a total loss of 17,100 seasonal and part-time jobs. The state's agriculture, fisheries and coastal ecosystems, and water resources sectors have been particularly hard-hit, thus providing a framework for this report. Top findings include:

- Improve seasonal prediction: The annual snowpack in the Central and Northern Sierra Nevadas Mountains provide the vast majority of water for California. Even a "low confidence" seasonal forecast for the total precipitation in those areas could go a long way in answering the most enduring question: "How much water will we get this year?"
- Build "full natural flow" water resources modeling: In a state where almost every drop of water is accounted for as it makes its way to the sea, a science-based modeling and forecast capability--one that links surface water and groundwater--is needed to enable water managers and users to better track the state of water resources.
- Enhance NOAA internal coordination of drought services: Most stakeholders accessed NOAA's drought-related services through local National Weather Service (NWS) field offices (e.g., Weather Forecast Office or River Forecast Center). NWS field offices often rely on products and services including data, seasonal prediction, and research capabilities that reside in national centers, labs, and extramural partners.
- Design environmental monitoring projects on sub-regional: There is need for NOAA to continue developing projects that improve our understanding of environmental changes, particularly at a watershed-scale. NOAA's successful Russian River Habitat Blueprint project is an example of where forecasting talent and fisheries management expertise infuses with that of local scientists and organizations to implement stewardship goals that promote sustainable use of water resources.

NOAA has a lengthy history of assessing its forecast and warning services in the wake of major weather events. This history dates to a tornado outbreak in Dallas, Texas, in 1957, where it was found that citizens "knew little or nothing of personal safety rules regarding an encounter with a tornado." Since then, service assessments have been conducted for major floods, hurricanes, winter storms, heat waves, wildfire outbreaks, and even a space weather event. However, this is the first time a service assessment on drought has been conducted.

An implementation plan to track the progress of these recommendations will follow in the months ahead. This service assessment was led by WestFAST member Kevin Werner, NOAA's Western Regional Climate Services Director, with guidance and support from NOAA's National Integrated Drought Information System (NIDIS). Nine employees representing each NOAA line office and headquarters, as well as California State Climatologist Michael Anderson, were part of the assessment team and co-authored the report.

USGS/U.S. Forest Service Dam Removal Study Reveals River Resiliency *(USGS, May 1)*

More than 1,000 dams have been removed across the United States because of safety concerns, sediment buildup, inefficiency or having otherwise outlived usefulness. A paper published May 1st in *Science* finds that rivers are resilient and respond relatively quickly after a dam is removed.

"The apparent success of dam removal as a means of river restoration is reflected in the increasing number of dams coming down, more than 1,000 in the last 40 years," said lead author of the study Jim O'Connor, geologist with the U.S. Geological Survey. "Rivers quickly erode sediment accumulated in former reservoirs and redistribute it downstream, commonly returning the river to conditions similar to those prior to impoundment."

Dam removal and the resulting river ecosystem restoration is being studied by scientists from several universities and government agencies, including the USGS and U.S. Forest Service, as part of a national effort to document the effects of removing dams. Studies show that most river channels stabilize within months or years, not decades, particularly when dams are removed rapidly.

"In many cases, fish and other biological aspects of river ecosystems also respond quickly to dam removal," said co-author of the study Jeff Duda, an ecologist with USGS. "When given the chance, salmon and other migratory fish will move upstream and utilize newly opened habitat."

The increase in the number of dam removals, both nationally and internationally, has spurred the effort to understand the consequences and help guide future dam removals.

"As existing dams age and outlive usefulness, dam removal is becoming more common, particularly where it can benefit riverine ecosystems," said Gordon Grant, Forest Service hydrologist. "But it can be a complicated decision with significant economic and

ecologic consequences. Better understanding of outcomes enables better decisions about which dams might be good candidates for removal and what the river might look like as a result."

Sponsored by the USGS John Wesley Powell Center for Analysis and Synthesis, a working group of 22 scientists compiled a database of research and studies involving more than 125 dam removals. Researchers have determined common patterns and controls affecting how rivers and their ecosystems respond to dam removal. Important factors include the size of the dam, the volume and type of sediment accumulated in the reservoir, and overall watershed characteristics and history.

WestFAST June Special Topics Webinar Look at Reclamations Water Operations in the Upper Colorado River System

WestFAST representatives collaborate among themselves to improve efficiency in carrying out their agencies' water-related missions. In this role, WestFAST initiated a "Special Topics" Webinar Series to present, and allow discussion on a range of WestFAST federal agency water-resource activities with the objective of improving awareness of and collaboration in water programs. The scheduled WestFAST June 25th webinar will examine U.S. Bureau of Reclamations water operations in the Upper Colorado Basin including water release scheduling and operation of the major Colorado River Storage Project dams and reservoirs, and how they work with other federal and local agencies in this area.

The June briefing to WestFAST from Reclamation's Upper Colorado Region, Resources Management Division staff will include discussion on how Reclamation engages with state and local water users and other federal agencies in their water delivery. For further information on this webinar and future webinars in the series , and to access information and presentations from past webinars, go to this link.

Federal News

5/4: **BLM Leaders Tour Drought Areas and Check in on Fire Season**

5/6: **EPA Provides Training to Help Communities Prepare for Climate Change**

5/8: **Reclamation Issues Snowmelt Forecast for North Platte**

5/8: **Snake River Flows Increasing to Benefit Native Fish**

5/8: **Reclamation Releases Draft Environmental Documents for Proposed Warren Act Contract to Santa Clara Valley Water District**

5/11: **The Chemistry of Waters that Follow from Fracking: A Case Study**

5/18: **Atmospheric Release of BPA May Reach Nearby Waterways**

5/19: **NOAA announces $9 million in grants to improve coastal community resilience**

5/20: **Secretary Jewell Announces $50 Million to Help Conserve Water in Drought-Stricken West**

5/21: **Reclamation Issues Snowmelt Forecast for Bighorn River Basin**

5/26: **National Water Center opens on University of Alabama campus in Tuscaloosa**

5/28: **EPA announces $1.6 billion in Clean Water Act funds to upgrade Sacramento's regional wastewater treatment plant**

State News

5/12: **Drought Forum Webinar: Managing Forest Health for Water Resources**

5/13: **Drought Update: Washington Gov. Inslee declares statewide drought emergency**

Upcoming WSWC Meetings & Events

- **June 24-26, 2015, WGA Annual Meeting**, Lake Tahoe, Nevada
- **July 8-10, 2015, Summer (178th) Council Meeting and WSWC 50th Anniversary,** Lake Tahoe, Nevada
- **August 25-27, 2015, WSWC/NARF Symposium on the Settlement of Indian Reserved Water Rights Claims,** Reno, Nevada

WestFAST News is published monthly. To get an Agency Announcement published or to get added to the WestFAST News distribution list contact:
Patrick M. Lambert, WestFAST Federal Liaison
Email: patlambert@wswc.utah.gov
Phone: 801-685-2555
Check out the WestFAST Web Site: http://www.westernstateswater.org/westfast