WestFAST News

October 2015

WestFAST Principals meet in DC to Discuss Interagency and Federal/State Collaboration

WestFAST representative and Principals (WestFAST Agency water programs leaders) met in Washington DC on Thursday, October 30, 2015. The U.S. Environmental Protection Agency (EPA) hosted the event to discuss WestFAST activities and plans, and federal collaborative opportunities toward solutions to priority water-resource needs and issues.

State water resource leaders have been encouraged by improved working relationships with their federal partners in many areas but emphasize the critical need to continue to improve collaboration, specifically in the areas of water-resource rule and policy making and in coordination and integration of federal water data programs. WestFAST representatives and Principals focused their discussion on best collaboration practices and reviewed several recent cases of federal interagency and federal/state coordination. Reviewed activities included the U.S. Forest Service’s recent communications with the WSWC on potential future framework documents for forest water-resource stewardship. Progress in an inter-federal-agency effort to develop of a National Soil Moisture Monitoring Network was presented and collaboration activities that have led to the current success of that work were discussed. Patrick Lambert, WestFAST Federal Liaison, facilitated a subsequent discussion on pathways to applying lessons learned from previous and ongoing collaborations to future efforts.

Attending WestFAST Principals, or their representatives, included: McKinley-Ben Miller, Bureau of Land Management, Deputy Division Chief, Environmental Quality & Protection; Jennifer Gimbel, Department of the Interior Principal Deputy Assistant Secretary, Office of the Assistant Secretary, Water and Science; Mike Shapiro, Environmental Protection Agency Principal Deputy Assistant Administrator, Office of Water; Steve Guertin, U.S. Fish and Wildlife Service, Deputy Director for Policy Office of External Affairs; Brad Dorn, NASA Program Manager, Water Resources Program Science Mission Directorate, Earth Science Division; Peter Colohan National Oceanic and Atmospheric Administration Assistant Director for Environmental Information, Office of Science and Technology Policy; Dionne Thompson, Bureau of Reclamation, Acting Deputy Commissioner External and Intergovernmental Affairs, Ada Benavides, U.S. Army Corps of Engineers, Assistant Director of Civil Works and Senior Water Resources Policy Advisor; Rob Harper, U.S. Forest Service National Director: Water, Fish, Wildlife, Air, Rare Plants, Soils and Alaska Subsistence; Bill Guertal, U.S. Geological Survey, Deputy Associate Director for Water; Maureen Sullivan, Department of Defense, Deputy Assistant Secretary, Environment, Safety and Occupational Health; and Martin Lowenfish, Natural Resources Conservation Service, Conservation Initiatives Coordinator.

WestFAST Agencies Participate in WSWC October Kansas Meetings

The Fall (179th) WSWC meetings were held in Manhattan, Kansas on October 8-9, 2015. WestFAST agency representatives participated in all WSWC committee meetings, briefing WSWC members on a range of ongoing and future activities.

During the Water Resources Committee meeting, Steve Stockton, Director of Civil Works, Army Corps of Engineers (Corps) presented the Corps’ water resource priorities. Mr. Stockton discussed the Corps work to evaluate its water resource project portfolio, determining what to recapitalize or repurpose, and what non-constructed projects to deauthorize. Mr. Stockton also touched on the Corps’ water surplus rules which have been recently modified to avoid infringing on state and tribal water rights and to improve access to water at all Corps facilities. The rules are currently undergoing an interagency review process, to be followed by state/public comment.

Dionne Thompson, Deputy Commissioner for External and Intergovernmental Affairs, Bureau of Reclamation, provided an update by phone on Reclamation’s WaterSMART Drought Response Program for western states, tribes and water districts. Verlon Barnes, Missouri River Basin Coordinator with the Natural Resources Conservation Service, described key assistance programs to help farmers improve farming practices and protect the environment.
Patrick Lambert, WestFAST Liaison, reviewed some recent activities within the USGS National Water Census. The USGS received an appropriation in FY2015 to begin working with States to improve water use data collection, estimation, and reporting. Most of the states represented in the WSWC are receiving funding this fiscal year to develop action plans to improve their water-use data programs. These plans will be used for future funding opportunities through a competitive grants program. Mr. Lambert also briefed members on funding moves to several western states engaged in the National Groundwater Monitoring Network. The USGS has entered into cooperative agreements with Montana, Oregon, Texas and Utah, to date, in support of the development of this national monitoring network. Mr. Lambert briefed members on recent work by NASA with the California Department of Water Resources utilizing satellite radar data that can identify decreases in land-surface elevation (subsidence) resulting from groundwater level declines and aquifer/aquitard compaction. Mr. Lambert discussed the utility of this data to state water managers in determining the early effects of groundwater level declines due to pumping.

In the Water Quality Committee, Shaun McGrath, Region 8 Administrator, U.S. Environmental Protection Agency, answered questions on Clean Water Act rules and guidance, transparency and consistency; lessons learned on consultation with states; Tribal treatment as states (geographic boundaries and exercise of authorities); and prospects for Good Samaritan legislation to clean up abandoned mines. During the Full Council meeting, Mr. McGrath noted Waters of the United States rule changes, and recognized the WSWC’s comments to EPA on the rule. He addressed the recent Gold King Mine release and lessons learned, though internal and external reviews continue.

Anita Thompsons, Assistant Director, Watershed and Aquatic Resources, U.S. Forest Service, addressed withdrawal of the agency’s groundwater directive, lessons learned from the role out of the directive, and plans for future collaborative efforts in the development of framework document for water resources in national forests. Council members expressed their appreciation for the decision, and subsequent outreach incorporating states’ comments.

During the Full Council meeting Roger Gorke, WestFAST Chair, reported on the October 1st WestFAST Principals meeting focused on federal agencies’ efforts to better collaborate with WSWC and states in general. Roger reported that WestFAST is looking at larger watersheds with multiple issues where they can study and improve collaboration efforts with state and local partners, as a template for collaboration approaches in other areas.

**WestFAST Provides Federal Panel in WSWC Water Quality-Water Quantity Nexus Workshop**

On October 6-7, WestFAST representatives participated in a WSWC-sponsored Water Quality-Water Quantity Nexus Workshop in Manhattan, Kansas. The objective of the workshop was to provide understanding on: (1) how states water quantity and quality regulations interact with each other; (2) how states can protect water quality within the existing framework of the prior appropriations doctrine; and (3) the proper relationship between federal environmental protections and the states’ primary and exclusive authority over the allocating of water resources.

The workshop included a federal panel of WestFAST Agency representatives who shared experiences with the quality-quantity nexus from the U.S. Geological Survey, Forest Service, National Park Service, Environmental Protection Agency, and Bureau of Land Management. Patrick Lambert, USGS hydrologist and WestFAST Federal Liaison, reported out on selected USGS programs looking at the effects of water quality on water availability. Among other programs, Mr. Lambert discussed the USGS National Brackish Groundwater Assessment aimed at improving our understanding of the character of brackish groundwater to expand development of the resource and provide a scientific basis for making policy decisions.

Jean Thomas, Assistant Director for Water and Aquatic Resources, U.S. Forest Service, addressed the agency’s statutory authority to protect and secure favorable conditions of water flow to preserve resources for the nation. She talked about the challenges of managing highly complex projects, such as bypass flows for reservoir permits and mitigation of environmental concerns associated with a groundwater tunnel, while complying with federal and state environmental and water resource statutes and regulations, as well as policy considerations and public input.

Bob Boyd, Denver Chief, Branch of Assessment and Monitoring, Bureau of Land Management, talked about the importance of water as part of BLM’s management of public lands, from sediment transport and grazing permits, to watershed and wellhead protection, to reclamation from wildfire damage and unwise past management practices. He described MOUs with state agencies to share data and provide a framework for cooperation and collaboration. Roger Gorke, Senior Policy Advisor, Office of Water, Environmental Protection Agency and WestFAST Chair, noted the Clean Water Act §101(g) paragraph about federal cooperation with state and local agencies in developing comprehensive solutions to
polution in concert with water resource management. He talked about using positive examples of successful federal-state projects to make cooperation more systemic, enabling state and federal agencies to generate effective solutions to quality-quantity challenges aggravated by drought and land use changes.

Alan Ellsworth, Water Advisor, National Park Service, noted that the water quality-quantity nexus is a vital part of its whole system management of park lands, and suggested that, as states have water resource needs, they reach out to NPS and develop relationships so that NPS personnel know who to work with for each component of sate water resources.

The panel participated with other workshop attendees in breakout discussions to share challenges and solutions relative to quality-quantity issues in individual states and agencies. Summaries and highlights of the breakouts were followed by a group discussion about what can be done to improve communication, understanding and cooperation for better overall water management.

**Interior Department Delivers Gold King Mine Technical Assessment to Environmental Protection Agency (U.S. Bureau of Reclamation, 10/22)**

The Department of the Interior’s Bureau of Reclamation (BOR) delivered a report on its Gold King Mine technical evaluation to the Environmental Protection Agency today. EPA requested an independent review to assess the cause of the August 2015 Gold King Mine Blowout near Silverton, Colorado and provide recommendations to prevent future incidents from occurring.

The Bureau of Reclamation’s Technical Service Center in Lake-wood, Colorado conducted the independent assessment on behalf of Interior. The report was peer reviewed by the U.S. Geological Survey and the U.S. Army Corps of Engineers and produced in accord with Interior’s scientific integrity policy.

In the Executive Summary of the report, BOR stated that the “conditions and actions that led to the Gold King Mine incident are not isolated or unique, and in fact are surprisingly prevalent” and that the “standards of practice for reopening and remediating flooded inactive and abandoned mines are inconsistent from one agency to another.” The BOR concluded that the Gold King Mine release “was due to a series of events spanning several decades,” with the final events including an “inadequately designed closure of the mine portal in 2009 combined with a misinterpretation of the groundwater conditions when reopening the mine portal in 2014 and 2015.”

The BOR reports that a misinterpretation of the elevation of water inside of the mine led to the “development of a plan to open the mine in a manner that appeared to guard against blowout, but instead led directly to the failure.” Although a similar plan was successful in another location in 2011, the critical step considered but omitted at Gold King was the use of a drill rig to bore into the mine from above to directly determine the water level prior to excavating. The BOR report found that had this step been done, the excavation plan would have been revised, and the blowout would not have occurred.

The report further notes that the current practice for abandoned mine remediation focuses on environmental issues “with little appreciation for the engineering complexity,” understanding of dam-like hydraulic forces, downstream consequences of failure, analysis of geologic and hydrologic conditions, continued monitoring of structural performance, or understanding complex groundwater systems in interconnected mines. The report makes recommendations for EPA and others, particularly with regard to prudent engineering considerations, to preclude the occurrence of similar incidents.

The report, entitled ‘Technical Evaluation of the Gold King Mine Incident,’ can be viewed here.

**Strong El Niño sets the stage for 2015-2016 winter weather (NOAA, 10/15)**

Forecasters at NOAA’s Climate Prediction Center issued the U.S. Winter Outlook on October 15 favoring cooler and wetter weather in Southern Tier states with above-average temperatures most likely in the West and across the Northern Tier. This year’s El Niño, among the strongest on record, is expected to influence weather and climate patterns this winter by impacting the position of the Pacific jet stream.

“A strong El Niño is in place and should exert a strong influence over our weather this winter,” said Mike Halpert, deputy director, NOAA’s Climate Prediction Center. “While temperature and precipitation impacts associated with El Niño are favored, El Niño is not the only player. Cold-air outbreaks and snow storms will likely occur at times this winter. However, the frequency, number and intensity of these events cannot be predicted on a seasonal timescale.”

Other factors that often play a role in the winter weather include the Arctic Oscillation, which influences the number of arctic air masses that penetrate into the South and nor’easters on the East Coast, and the Madden-Julian Oscillation, which can impact the number of heavy rain storms in the Pacific Northwest.

The U.S. Drought Outlook shows some improvement is likely in central and southern California by the end of January, but not drought removal. Additional statewide relief is possible during February and March. Drought removal is likely across large parts of the Southwest, while improvement or removal is also likely in the southern Plains. However, drought is likely to persist in the Pacific Northwest and northern Rockies, with drought develop-
ment likely in Hawaii, parts of the northern Plains and in the northern Great Lakes region.

While it is good news that drought improvement is predicted for California, one season of above-average rain and snow is unlikely to remove four years of drought,” said Halpert. “California would need close to twice its normal rainfall to get out of drought and that’s unlikely.”

**WestFAST Webinar Series Discusses Stream Temperatures in the West—Series to Resume January**

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.

During the October 29th WestFAST Webinar, Mike Eberle, USDA Forest Service Surface Water Program leader, reviewed priority water resource issues and programs in the Forest Service and Daniel Isaak, USFS Research Fish Biologist presented on the activities and products of the USFS NorWest stream-temperature database and modeling program. The NorWest Program provides stream temperature data and geospatial map outputs from a regional temperature model for the Northwest. The temperature database was compiled from hundreds of biologists and hydrologists working for dozens of resource agencies and contains more than 50,000,000 hourly temperature recordings at more than 20,000 unique stream sites. These temperature data are being used with spatial statistical stream network models to develop an accurate and consistent set of climate scenarios for all streams. A recording of the October Webinar and information on other WestFAST Webinars can be found at the WestFAST webpage.

The WestFAST Webinar Series will resume after the holiday season in January 2016.

**Federal News**

**10/19:** Largest remaining freshwater wetlands in Washington metropolitan area to be restored

**10/20:** A Century of Induced Earthquakes in Oklahoma?

**10/21:** New Model Improves Predictions for How Climate Change Will Affect Fish Habitat

**Upcoming WSWC Meetings & Events**

- December, 4-5: Western Governors’ Winter Meeting, Las Vegas, Nevada.