

June 2019



# WestFAST News

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Chair – Kevin Werner; Vice Chair – Patrick Lambert; Federal Liaison – Deborah Lawler

## National Significant Wildland Fire Potential Outlook – May, June, July, August, & September 2019

NICC, NFIC 06/01/19. The significant wildland fire potential forecasts included in this outlook represent the cumulative forecasts of the ten Geographic Area Predictive Services units and the National Predictive Services unit.

Fire activity continued to be well below average during May as a cool, wet pattern redeveloped over the West during the second week of the month and persisted through month's end. High elevation locations in many areas received late season snowfall that further slowed snowpack melting rates. Middle and lower elevations continued to see the development of a robust, continuous grass crop. Drought continued to recede except across Washington State where it persisted and across the Southeast where a slight intensification was observed. Alaska gradually entered its fire season as fuels began to dry and as convective weather patterns developed. With high pressure becoming more entrenched over the eastern Interior as the month progressed, fire activity began to pick up. Entering June, the driest areas remain areas along the Mexican Border, Washington State, and the Southeast.

Greenup is peaking in many areas except across the Southwest where curing and drying has begun to occur already. Elsewhere, the process is progressing at an average or slower than average rate. The ongoing weather pattern has been mostly beneficial

to the fire environment, and long-range data does not suggest unusually long lasting hot and dry ridge events across the West in June. The intensity and duration of such events have accelerated the process in recent years. Also, mountain snowpack continues to melt off at a slower than average rate in most areas except along the Canadian Border. The developing grass crop is a concern, especially across portions of California.

As June progresses, the fine fuels will begin to cure and dry from south to north across the West. Lingering high elevation snowpack should be lost. Wildfire activity should begin to increase by late month as peak of the fire season begins to arrive as July and August approach. As is the case with the lower elevation fuels, the high elevation heavy fuels will also experience a delayed entry into the season except along the Canadian Border in Washington State where overall dryness will lead to an average start with a potential for above normal activity. Alaska will reach its peak in June and begin to wind down in July.

Looking ahead to August and September the fire potential and resulting activity should increase to Normal in most areas except along the West Coast where Above Normal significant large fire potential is expected due to fuel loading and preexisting dry conditions. A traditional winding down of the Western fire season is expected in Mid-September as fall moisture begins to arrive.

## [Rain-soaked U.S. had its 2nd-wettest month on record in May](#)

NOAA 06/06/19. Drenching rains and historic flooding last month ended with May 2019 as the second-wettest month in the U.S. that contributed to a record-wet, 12-month period.

Exceptionally stormy conditions brought more than 500 tornado reports in May — more than double the three-year average of 226.

Here are more highlights from NOAA's latest climate report:

### **Climate by the numbers - May 2019**

The average May temperature across the contiguous U.S. was 59.5 degrees F (0.70 degrees below the 20th-century average), which ranked in the bottom third of the 125-year record.

The average precipitation for May was 4.41 inches, 1.50 inches above average and ranked second wettest in the 125-year record. The wettest month on record remains May 2015, with 4.44 inches, according to scientists at NOAA's National Centers for Environmental Information.

Soggy conditions from June 2018 through May 2019 led to the wettest 12-month period on record in the U.S., with 37.68 inches, 7.73 inch above average.

### **Year to date and Meteorological Spring**

The average U.S. temperature for the year to date (January through May) was 43.4 degrees F (0.10 of a degree above the 20th-century average), which falls in the middle third of the year-to-date record. The average temperature for the contiguous U.S. during Meteorological Spring (March through May) was 50.9 degrees F (0.10 of a degree below

average), which also ranked in the middle third of the record.

### **Other notable stats**

**Tornado troubles:** May 2019 was the most active 30-day tornado period in the U.S. since 2011; more than 500 were reported.

**Early action in the tropics:** Subtropical Cyclone Andrea formed on May 20, making 2019 the fifth-consecutive year where a named storm developed in the North Atlantic Basin before the official start of the hurricane season on June 1.

**Snow still fell:** Duluth, Minnesota, had 10.6 inches of snow on May 9, breaking the city's snowstorm record for May. Denver, Colorado, had its snowiest May in 44 years and tallied 3.9 inches.

## [EPA Issues Guidance on Clean Water Act Water Quality Certification](#)

EPA 06/07/19. WASHINGTON – As directed by President Trump, today the U.S. Environmental Protection Agency (EPA) released guidance on Section 401 of the Clean Water Act (CWA) that provides recommendations to clarify and streamline the 401-certification process and to promote greater investment in and certainty for national infrastructure projects while continuing to protect local water quality.

Under Executive Order 13868, "*Promoting Energy Infrastructure and Economic Growth*," EPA was directed to issue guidance for federal permitting agencies and state and authorized tribal authorities to modernize previous guidance and clarify existing CWA Section 401 requirements.

EPA's "Clean Water Act Section 401 Certification Guidance for Federal Agencies, States, and Authorized Tribes" provides clarification and

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recommendations on CWA Section 401 certifications in the following specific areas:

- Statutory and regulatory timelines for review and action on a CWA Section 401 certification;
- The appropriate scope of CWA Section 401 certification conditions; and
- Information within the scope of a state or authorized tribe's CWA Section 401 review.

EPA's new guidance, which replaces EPA's prior interim guidance from 2010, also provides additional recommendations to federal agencies, states and authorized tribes to promote early collaboration and coordination through the 401-certification process. Executive Order 13868 also directed EPA to propose new rules modernizing the agency's CWA Section 401 implementing regulations by August 8, 2019. The agency intends to propose regulations that may help further clarify and streamline CWA Section 401 certifications. Since the Executive Order was issued on April 10, 2019, the agency has initiated formal consultations with its state, local, and tribal partners, as well as outreach with its federal partners on this rulemaking effort and invited written pre-proposal recommendations through a public docket. The agency is carefully reviewing the input received through these engagements and the docket prior to issuing a proposed rule.

## **Background**

Section 401 of the CWA provides states and authorized tribes with an important tool to help protect water quality within their borders in collaboration with federal agencies. The rules governing this authority have not been updated in nearly 50 years. In addition, evolving case law and EPA's outdated guidance have caused some confusion and resulted in delays in certain infrastructure projects with potentially significant national benefits.

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To read the guidance and to learn about the CWA Section 401 water quality certification process, please visit <https://www.epa.gov/cwa-401>.

## [NASA Explores Our Changing Freshwater World](#)

NASA 06/12/19. Water is so commonplace that we often take it for granted. But too much – or too little of it – makes headlines.

Catastrophic flooding in the U.S. Midwest this spring has caused billions of dollars in damage and wreaked havoc with crops, after rain tipped off a mass melting of snow. Seven years of California drought so debilitating that it led to water rationing came to a close after a wet and snowy winter capped off several years of slow rebound and replenished the vital mountain snowpack.

Half a world away, drought in eastern Australia so depleted the wheat crop that it had to be imported for the first time in 12 years. In eastern Africa and the Middle East, some of the most severe drought conditions on Earth are contributing to stressed crops across Somalia, Sudan, and Yemen.

Whether concerned with floods, droughts, or the status and quality of water supplies, addressing the water-related needs of humans on Earth starts with knowing where the water is. With unique views from space, NASA is at the forefront of studying and monitoring this most precious resource that is constantly on the move. Researchers use data from satellites, aircraft, and other efforts, to find out where and when water is available around the globe, how much, and how are those patterns changing. They then figure out how to best use that data and get it into the hands of the people who need it most.

Over the next few weeks, we'll be exploring areas of NASA research into Earth's freshwater and surveying how those advances help people solve real world problems.

NASA and its partners are using satellites to revolutionize our ability to track and understand the flow of freshwater around Earth – whether it is in the atmosphere, at the Earth’s surface, or underground. In the last two decades, freely available NASA datasets have been used for extensive research into the movement, distribution, and interaction of each part of the water cycle worldwide.

It’s a complex cycle: Evaporating from warm tropical oceans, freshwater condenses into clouds, circulating on the winds where a portion of it falls as rain or snow. On the ground, freshwater is stored in ice, snow, rivers and lakes. Or, it soaks into the ground, disappearing from view to infiltrate into soils and aquifers. Or, before it disappears from view, it can evaporate back to the atmosphere, where moisture is tightly related to Earth's energy flow, which in turn influences weather patterns that govern freshwater's distribution.

“Fresh water is critically important to humans, both in obvious ways and in unseen ways such as moving heat around Earth’s entire climate system,” said Jared Entin, terrestrial hydrology program manager in the Earth Science Division at NASA Headquarters, Washington. “With our current satellites, we are now making great progress in pinning down both the detail needed for local water decisions and the global view essential to better understanding our changing climate.”

Researchers funded by NASA have used satellite and airborne data to better inform existing tools for flooding, drought forecasts and famine relief efforts, and for planning and monitoring regional water supplies. These efforts are tackling some of the most pressing needs of people around the world.

These efforts are shaped by local geography and specific user needs to ensure they address freshwater data that are most valuable to communities. For this reason, NASA supports a number of water-management applications that are customized to support different regions. For

example, NASA's Western Water Applications Office works with various entities in the western U.S., including state governments, tribal nations, and private industries to track the impacts of drought on agriculture and general water supplies. Abroad, NASA partners with the U.S. Agency for International Development through the SERVIR program to provide satellite data, computing tools, and training to local partners that improve local flood forecasting in Africa and assess climate impacts on mountain snow packs in the Himalayas, among other efforts.

These programs are but a few examples of many NASA-supported projects. Hundreds of other researchers, government agencies, and non-profits develop their own water-management tools and applications using NASA's free and open datasets.

### **Water from Snow**

NASA is improving on existing and developing new remote sensing methods that can reveal how much water is stored in mountain and seasonal snowpack – one of the world's most vital sources of freshwater. More than a billion people, spanning multiple continents, rely on water from mountain snow for their water supplies that support drinking water, farming, and even hydroelectric power. Snowfall patterns shift over time, however, both year-to-year from natural variability and due to long-term climate effects. With persistent human demands, the ability to accurately measure how much water is in mountain snowpack becomes an even more critical capability

Through the Airborne Snow Observatory program, NASA and California's Department of Water Resources use instruments mounted on airplanes to create high resolution estimates of snow water content for priority watersheds in the Western U.S. The collected data helps determine the timing of the spring melt, which has downstream effects on hydroelectric power generation and planning for how much water can be held in reservoirs.

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NASA is also focused on the long-term development of tools to measure water in snow through an airborne field campaign called SnowEx. This type of field campaign connects detailed measurements of snow in the Colorado Rocky Mountains taken by researchers on the ground to remote sensing observations made by aircraft flying over the ground sites. The connections made from these highly detailed datasets will help scientists design future satellite missions that will make similar measurements from space.

Airborne snow measurements, as well as other programs, complement long-term regional observations from NASA satellites that create estimates for entire mountain ranges in the Western U.S. and around the world.

### **Water in the Sky**

When we think of water on Earth we may think of the ocean, rivers and lakes. But as water cycles around the planet, the atmosphere holds moisture, creating a reservoir in the sky that periodically condenses into rain and snow. NASA is part of a team from more than a dozen countries whose satellites are working together to deliver global rainfall data every half hour. Over land, rain has immediate impact as it soaks into the ground, which supports crops.

Rainfall data is one of the most essential tools for monitoring freshwater's movement around the planet, and goes into applications that touch people's everyday lives, including weather forecasting, crop monitoring, and flood prediction. For many parts of the world, especially developing countries and hard-to-reach terrain where ground measurements are sparse to non-existent, these global NASA datasets are sometimes the only consistent source of information on rainfall and soil moisture.

### **Water from Below**

NASA satellites monitoring Earth's gravity field have given scientists insight into the movement of

large masses such as ice and water – including water hidden underground. This global look at changes to the amount of water storied in aquifers, massive underground freshwater reservoirs, has revealed some concerning trends. Of the 37 largest aquifers on Earth, a third of them are being depleted by communities pumping the water faster than it recharges from rainfall. These water declines occur primarily where agriculture and aquifers coincide, and where human water demands can easily exacerbate conditions of periodic drought. Among those most stressed in the past decade are the Central Valley of California, the Indus Basin in northwestern India and Pakistan, and the Arabian Aquifer System in Saudi Arabia.

About 70% of all freshwater on Earth is used for irrigated agriculture. Underground aquifers are water sources that act like waiting bank savings accounts, providing a dependable supply and making agriculture possible in arid areas where significant rain events may only occur once a year and during droughts when surface water is scarce. We do not know the full extent of these underground water aquifers or when they may run dry, but understanding the change in available water that occurs both seasonally and throughout the satellite record helps decision-makers manage their resources.

In addition to witnessing the effects of agriculture, the satellite data show the effects of climate change, most notably in the decline of sea ice and ice sheets at the poles. They also observe the ups and downs of more natural variability that reflects a region's span of wet or dry years. As the global satellite record extends into the future, researchers and water managers will continue to monitor freshwater hidden below as climate patterns shift and human demands grow.

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## Meet the teams who won the Sub-seasonal Climate Forecast Rodeo — beating benchmark forecasts.

*Bureau of Reclamation and NOAA Office of Weather and Air Quality are bringing the winners in to share their forecast models and discuss how to further improve the three to six week forecast timeframes*

Reclamation/NOAA 06/12/19. WASHINGTON — The Bureau of Reclamation and National Oceanic and Atmospheric Administration Office of Weather and Air Quality are hosting a symposium with the winners of Reclamation's Sub-Seasonal Climate Forecast Rodeo I on June 17, 2019, from 1 p.m. to 5:30 p.m. EDT in Silver Spring, Maryland. The year-long real-time forecasting competition Rodeo I ended this past winter with three teams successfully meeting award criteria focused on predicting western United States temperature and precipitation for weeks 3 & 4 and weeks 5 & 6.

This symposium is open to the public. You may join in person or via a webinar. To learn more and register, please visit <https://www.usbr.gov/research/challenges/SCFRS-2019.html>.

Improved sub-seasonal forecasts of temperature and precipitation would enable water managers to better prepare for shifts in hydrologic regimes, such as the onset of drought or occurrence of wet weather extremes. The challenge of sub-seasonal forecasting is that it encompasses the time frame where initial state information becomes less important and slowly varying long term states become more important to prediction skill.

The representatives from the three winning teams will be present to share and discuss their forecast models. The three winning teams are:

- Team Salient - Ray Schmitt, Stephen Schmitt, and Eric Schmitt
- Team StillLearning - Lester Mackey, Judah Cohen, Jessica Hwang, Ernest Fraenkel, Paulo Orenstein
- Team lupoa13 - Anthony Lupo, Joseph Renken, Joshua Herman

Reclamation collaborated with the NOAA Earth System Research Laboratory in Boulder, Colorado, NOAA's Climate Prediction Center in College Park, Maryland, and California Department of Water Resources to design and judge this challenge. In addition, the U.S. Geological Survey and U.S. Army Corps of Engineers contributed subject matter experts to review and assist with competition design.

## EPA and USDA Launch Innovative Nutrient Financing Webinar Series to Help Improve America's Water Quality

EPA 06/12/19. WASHINGTON – As part of the U.S. Environmental Protection Agency's (EPA) ongoing efforts to promote creative problem solving and market-based approaches to reduce excess nutrients in our nation's waterways, EPA and the U.S. Department of Agriculture (USDA) are kicking off a webinar series to educate the public on financing opportunities that are available to improve water quality.

“Reducing excess nutrients and improving water quality is a priority for EPA and we are pleased to continue our collaboration with USDA on these important issues,” said EPA Assistant Administrator for Water David Ross. “These joint webinars build on our recent water quality trading policy and are intended to inform stakeholders about funding opportunities and ideas that can integrate point and

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non-point pollution reduction strategies to accelerate progress toward improving water quality across the country.”

“USDA is working through a multi-tiered partnership approach across the nation to support positive change for the future of water in our nation,” said USDA Under Secretary for Farm Production and Conservation Bill Northey. “In these webinars, we will offer technical and financial information that will have a positive benefit for water quality, agricultural production and people.”

On June 12, 2019, EPA and USDA will co-host the first of four webinars on financing opportunities that states, tribes and stakeholders can pursue to implement water quality improvements on a watershed- and landscape-scale. During the June 12 webinar, speakers will highlight financing opportunities from EPA and USDA for point source and non-point source nutrient reductions. Upcoming webinars will be held this summer to address additional innovative financing concepts for reducing excess nutrients, featuring case studies of successful approaches from across the country. Upcoming webinar topics will also include private sector financing solutions and storm water nutrient reduction.

Under the Trump Administration, EPA is focusing its attention on reducing nutrient losses through enhanced federal and state coordination and stakeholder engagement. In February 2019, the agency issued a water quality trading policy memorandum to promote lower cost nutrient reductions and water quality improvements using market-based and other collaborative mechanisms. The memo identified six Market Based Principles designed to encourage creativity and innovation in the development and implementation of programs that reduce pollutants in the nation’s waters, including a principle dedicated to encouraging innovative financing approaches to improve water quality.

## **Background:**

EPA’s February 2019 Water Quality Trading Memo is part of a series of actions that the agency and its federal partners are taking to support stakeholders in addressing excess nutrients in the nation’s waterways. In December 2018, EPA and USDA issued a letter to state co-regulators encouraging a reinvigoration of state, tribal and federal efforts to reduce excess nutrients in waterways, with a focus on market-based and other collaborative approaches. In February 2019, EPA signed a Memorandum of Understanding with the Water Research Foundation to develop affordable technologies to recycle nutrients from livestock manure. In May 2019, EPA hosted a roundtable with federal, state and local partners focused on identifying opportunities to reduce nutrient losses across the country. EPA also recently announced the availability of \$14 million to reduce excess nutrients in the Great Lakes, including for innovative water quality trading projects.

Registration is limited. EPA plans to post a recording of the webinar on the agency’s website shortly after. To register for the June 12 webinar and upcoming EPA-USDA nutrient financing webinars, visit

<https://www.epa.gov/waterfinancecenter/water-finance-webinars-and-forums#upcomingwebinar>.

For more information on EPA’s efforts to address excess nutrients, visit:

<https://www.epa.gov/nutrient-policy-data/collaborative-approaches-reducing-excess-nutrients>.

## **[NOAA upgrades the U.S. global weather forecast model](#)**

*Improved model will boost weather forecasts across the U.S.*

NOAA 06/12/19. NOAA’s flagship weather model — the Global Forecast System (GFS) — is undergoing a significant upgrade today to include a

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new dynamical core called the Finite-Volume Cubed-Sphere (FV3). This upgrade will drive global numerical weather prediction into the future with improved forecasts of severe weather, winter storms, and tropical cyclone intensity and track.

NOAA research scientists originally developed the FV3 as a tool to predict long-range weather patterns at time frames ranging from multiple decades to interannual, seasonal and subseasonal. In recent years, creators of the FV3 at NOAA's Geophysical Fluid Dynamics Laboratory expanded it to also become the engine for NOAA's next-generation operational GFS.

"In the past few years, NOAA has made several significant technological leaps into the future – from new satellites in orbit to this latest weather model upgrade," said Secretary of Commerce Wilbur Ross. "Through the use of this advanced model, the dedicated scientists, forecasters, and staff at NOAA will remain ever-alert for any threat to American lives and property."

The FV3-based GFS brings together the superior dynamics of global climate modeling with day-to-day reliability and speed of operational numerical weather prediction. Additional enhancements to the science that produce rain and snow in the GFS also contribute to the improved forecasting capability of this upgrade.

"The significant enhancements to the GFS, along with creating NOAA's new Earth Prediction Innovation Center, are positioning the U.S. to reclaim international leadership in the global earth-system modeling community," said Neil Jacobs, Ph.D., acting NOAA administrator.

The GFS upgrade underwent rigorous testing led by NOAA's National Centers for Environmental Prediction (NCEP) Environmental Modeling Center and NCEP Central Operations that included more than 100 scientists, modelers, programmers and technicians from around the country. With real-time evaluations for a year alongside the previous

version of the GFS, NOAA carefully documented the strengths of each. When tested against historic weather dating back an additional three years, the upgraded FV3-based GFS performed better across a wide range of weather phenomena.

The scientific and performance evaluation shows that the upgraded FV3-based GFS provides results equal to or better than the current global model in many measures. This upgrade establishes the foundation to further advancements in the future as we improve observation quality control, data assimilation, and the model physics.

"We are excited about the advancements enabled by the new GFS dynamical core and its prospects for the future," said Louis W. Uccellini, Ph.D., director, NOAA's National Weather Service. "Switching out the dynamical core will have significant impact on our ability to make more accurate 1-2 day forecasts and increase the level of accuracy for our 3-7 day forecasts. However, our job doesn't end there — we also have to improve the physics as well as the data assimilation system used to ingest data and initialize the model."

Uccellini explained that NOAA's work with the National Center for Atmospheric Research to build a common infrastructure between the operational and research communities will help advance the FV3-based GFS beyond changing the core. "This new dynamical core and our work with NCAR will accelerate the transition of research advances into operations to produce even more accurate forecasts in the future," added Uccellini.

Operating a new and sophisticated weather model requires robust computing capacity. In January 2018, NOAA augmented its weather and climate supercomputing systems to increase performance by nearly 50 percent and added 60 percent more storage capacity to collect and process weather, water and climate observations. This increased capacity enabled the parallel testing of the FV3-based GFS throughout the year.

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The retiring version of the model will no longer be used in operations but will continue to run in parallel through September 2019 to provide model users with data access and additional time to compare performance.

## [Arizona is Free of Short-term Drought Impacts After Almost 10 years](#)

*As of June 11, 2019, Arizona is finally free of short-term drought impacts.*

NIDIS 06/13/19. Arizona was previously in the midst of their longest duration of drought since the start of the United States Drought Monitor (USDM) in 2000. Beginning on August 18, 2009, some part of Arizona was in drought, as classified by the USDM (D1-D4), for 512 consecutive weeks. This state record for short-term drought, which lasted nearly 10 years (approximately 9 years and 10 months), finally came to an end with the release of the USDM map on June 11, 2019.

## [EPA Releases New Resource to Help States and Tribes Improve Water Quality Standard Public Hearings](#)

EPA 06/13/19. WASHINGTON – The U.S. Environmental Protection Agency (EPA) released a new resource to help states and tribes maximize participation, simplify implementation, and reduce costs associated with the public hearings they host for adopting new or revising existing water quality standards.

“Public participation is an important part of decision making on water quality standards,” said EPA Assistant Administrator for Water David Ross. “EPA’s new resource helps bring public engagement on water quality standards into the 21st century.”

The Clean Water Act requires states and authorized tribes to hold public hearings for the purposes of reviewing and adopting new or revised water quality standards (WQS). EPA’s new Modernizing Public Hearings for Water Quality Standard Decisions Consistent with 40 CFR 25.5 document outlines 12 suggestions for how states and tribes can incorporate technology into a public hearing in way that modernizes the process and is also consistent with meeting federal requirements. For example, the resource recommends using online public hearings via web conferencing. This approach facilitates greater public participation by saving participants’ time and money while also more effectively using public engagement resources (e.g., funding) of states and tribes.

The document also addresses potential environmental justice considerations. For example, the agency encourages states and tribes to meet the needs of their public by considering the public’s accessibility to, and acceptance of, computers and the internet before pursuing any specific approach.

The document does not impose any new requirements on states or tribes. It makes clear that states and tribes have the discretion to decide whether and to what extent to use technology in their WQS public hearings, as they deem appropriate.

To read the document, visit <https://www.epa.gov/wqs-tech/options-modernizing-public-hearings-water-quality-standard-decisions-consistent-40-cfr-255>.

## [The USDA Forest Service is Proposing Revisions to its National Environmental Policy Regulations](#)

USFS 06/21/19. The USDA Forest Service is proposing revisions to its National Environmental Policy Act (NEPA) regulations. These regulations are a key component of how the agency performs environmental analysis and makes decisions. NEPA

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requires agencies to analyze the environmental effects of their proposed actions prior to making decisions. This process helps the Forest Service in its mission to sustain the health, diversity, and productivity of the America's forests and grasslands to meet the needs of present and future generations.

The Forest Service released the proposed rule on June 13, 2019, initiating a 60-day public comment period and a 120-day Tribal consultation period. Information on the proposed rule, how to comment, and how to access webinars can be found at <https://www.fs.fed.us/emc/nepa/revisions/index.shtml>.

## Upcoming Meetings

### [WSWC Summer \(190th\) Meetings](#)

Leavenworth, WA  
Icicle Village Resort  
July 16-18, 2019

### [WSWC Fall \(191st\) Meetings](#)

Breckenridge, CO  
Beaver Run Resort & Conference Center  
October 16-18, 2019

## Upcoming Workshops

### [WSWC/NASA Technology Transfer for Water Management in the Western United States](#)

Irvine, CA  
Embassy Suites by Hilton – Irvine Orange County Airport  
August 7-9

### [Symposium on the Settlement of Indian Reserved Water Rights Claims](#)

Fanner, CA  
Harrah's Resort Southern California  
August 13-15, 2019

### [Water Information Management Systems \(WIMS\) Workshop](#)

Fort Collins, CO  
Hilton Fort Collins,  
Sept. 16-19, 2019

## Other Federal News

NIDIS 05/30/19. [Flash Drought: New Reports Examine the 2017 Northern Plains Drought.](#)

Reclamation 05/30/19. [Reclamation announces increased Green River flows from Flaming Gorge Dam and urges caution to those below](#)

WHITE HOUSE 06/02/19. [President Donald J. Trump Approves Oklahoma Disaster Declaration](#)

DOJ 06/03/19: [United States, State of Washington, and the Suquamish and Tulalip Tribes Announce Major Settlement Addressing Natural Resource Damages at Port Gardner Bay Area, Washington](#)

NOAA 06/03/19: [This Month in Climate History: June 3, 1921, Cloudburst over Pueblo, Colorado creates devastating consequences where Arkansas River and Fountain Creek meet.](#)

NOAA 06/04/19: [U.S. Drought Monitor Update for June 4, 2019](#)

DOI/F&WS 06/06/19: [\\$17+ Million in Grants Will Help States, Local Communities Keep Waters Clean, Economies Thriving](#)

NOAA 06/07/19. [NOAA Seeks Ideas from Industry, Academia to Improve Weather Prediction](#)

RECLAMATION 06/07/19: [Reclamation and DWR take steps to improve habitat for endangered salmon at Yolo Bypass](#)

WHITE HOUSE 06/08/19. [President Donald J. Trump Approves South Dakota Disaster Declaration](#)

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06/10: [Reclamation will conduct Maintenance and Rehabilitation Work at American Falls Dam](#)

NOAA 06/11/19. [NOAA 06/11/19: U.S. Drought Monitor Update for June 11, 2019](#)

NPS 06/11/19. [NPS 06/11/19. Boating Safety as Lake Powell Water Level Rises](#)

WHITE HOUSE 06/12/19. [President Donald J. Trump Approves North Dakota Disaster Declaration](#)

WHITE HOUSE 06/12/19. [President Donald J. Trump Approves Idaho Disaster Declaration](#)

DOE 06/13/19: [DOE Launches Wave Energy Water Desalination Prize Competition](#)

NPS 06/13/19. [Zion Warns of Swift Water Conditions](#)

RECLAMATION 06/13/19. [Updated Folsom Dam Water Control Manual signed](#)

WHITE HOUSE 06/14/19. [Executive Order on Evaluating and Improving the Utility of Federal Advisory Committees](#)

NPS 06/14/19. [Be Aware Of Swift Water Danger When Recreating In Rocky Mountain National Park](#)

EIA 06/17/19. [Mixed water supply conditions affect hydropower outlook in Pacific Northwest](#)

EIA 06/18/19. [NERC report highlights potential summer electricity issues for Texas and California](#)

NOAA 06/18/19. [U.S. Drought Monitor Update for June 18, 2019](#)

DOJ 06/18/19. [Environment and Natural Resources Division Releases Accomplishments Report for FY2018](#)

USACE 06/19/19. [U.S. Army Corps of Engineers Identifies Candidates for Further Development as Part of the Civil Works Public-Private Partnership \(P3\) Pilot Program](#)

DOI 06/19/19. [Secretary Bernhardt Announces \\$78 Million in Funding for Wetland Conservation Projects and National Wildlife Refuges](#)

DOE 06.20.19. [Water Security Grand Challenge](#)

RECLAMATION 06.20.19. [Bureau of Reclamation selects 18 projects to receive \\$9 million in WaterSMART grants to prepare and build resilience to drought. The drought resiliency grants will help communities in California, Colorado, Idaho, Nebraska, New Mexico, Oregon and Texas](#)

WHITE HOUSE 06.21.19. [President Donald J. Trump Approves Disaster Declaration for the Oglala Sioux Tribe](#)

WHITE HOUSE 06.21.19. [President Donald J. Trump Approves Kansas Disaster Declaration](#)

USACE 06/21/19. [U.S. Army Corps of Engineers Identifies Candidates for Further Development as Part of the Civil Works Public-Private Partnership \(P3\) Pilot Program](#)

RECLAMATION 06/21/19. [Reclamation hosts “Improvements to Water Governance” workshop for local water users.](#)

EIA 06/24/19. [Four states updated their renewable portfolio standards in the first half of 2019](#)

RECLAMATION 06/25/19. [Commissioner Burman takes action to improve Central Valley Project hydropower.](#) New directives support one of the Central Valley Project’s key resources.

EIA 06/26/19. [U.S. electricity generation from renewables surpassed coal in April.](#)

RECLAMATION 06/27/19. [Reclamation makes funding available for applied science grant projects to inform water management decisions](#)

RECLAMATION 06/27/19. [Bureau of Reclamation releases funding opportunity for water reclamation and reuse research studies.](#) Funding is available for communities to conduct research needed to explore the use of recycled or reclaimed water.

**The WESTERN STATES FEDERAL AGENCY SUPPORT TEAM (WestFAST) is a collaboration between 12 Federal agencies with water management responsibilities in the West, including: BLM, DOD, EPA, FWS, NASA, NOAA, NPS, NRCS, Reclamation, USACE, USFS, and USGS. WestFAST was established to support the Western States Water Council and the Western Governors’ Association in coordinating Federal efforts regarding water issues.**

RECLAMATION 06/27/19. [Reclamation launches forecast prize competition.](#) Forecast improvement is sought in the three-to-four and five-to-six-week forecasts to provide water managers more time to prepare for the onset of drought or wet weather extremes.

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