

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.

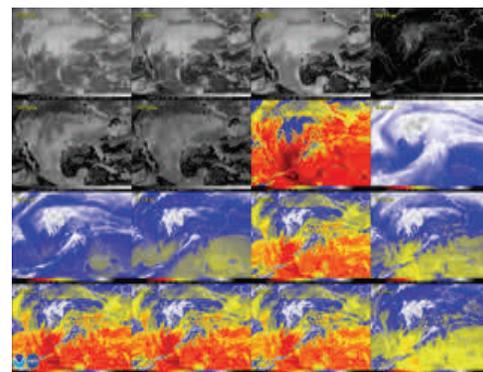


NOAA's GOES-16 Satellite Sends First Images to Earth

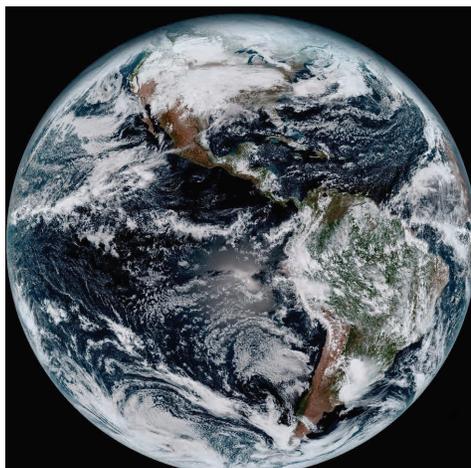
(NOAA 1/6/17)

GOES-16, the first spacecraft in the National Oceanic and Atmospheric Administration (NOAA) next-generation of geostationary satellites, has sent the first high-resolution images from its Advanced Baseline Imager (ABI) instrument. Included among them are a composite color full-disk visible image of the Western Hemisphere captured on January 15, 2017. Created using several of the ABI's 16 spectral channels, the full-disk image offers an example the satellite's advanced technology that was a cooperative development between NOAA and the National Aeronautics and Space Administration (NASA).

the continental United States every five minutes, and has the ability to target regional areas where severe weather, hurricanes, wildfires, volcanic eruptions or other high-impact environmental phenomena are occurring as often as every 30 seconds. The ABI covers the Earth five-times faster than the current generation GOES imagers and has four times greater spatial resolution, allowing meteorologists to see smaller features of the Earth's atmosphere and weather systems.



This 16-panel image shows the continental United States in the two visible, four near-infrared and 10 infrared channels on the Advanced Baseline Imager (ABI). These channels help forecasters distinguish between differences in the atmosphere like clouds, water vapor, smoke, ice and volcanic ash. *Credits: NOAA/NASA*



This composite color full-disk visible image of the Western Hemisphere was captured from NOAA GOES-16 satellite at 1:07 pm EST on Jan. 15, 2017. The image, taken from 22,300 miles above the surface, shows North and South America and the surrounding oceans. *Credits: NOAA*

The ABI can provide a full disk image of the Earth every 15 minutes, one of

“ Seeing these first images from GOES 16 is a foundational moment for the team of scientists and engineers who worked to bring the satellite to launch and are now poised to explore new weather forecasting possibilities with this data and imagery,” said Stephen Volz, Ph.D., NOAA's Assistant Administrator for Satellite and Information Services, Silver Spring, Maryland. “The incredibly sharp images are everything we hoped for based on our tests before launch. We look forward to exploiting these new images, along with our partners in the meteorology community, to make the most of this fantastic new satellite.”

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(Continued from page 1 NOAA/NASA)



GOES-16 captured this view of the moon as it looked above the surface of the Earth on January 15. Like earlier GOES satellites, GOES-16 will use the moon for calibration. *Credits: NOAA/NASA*

“The image is much more than a pretty picture, it is the future of weather observations and forecasting,” said Louis W. Uccellini, Ph.D., Director, NOAA’s National Weather Service, Silver Spring, Maryland. “High resolution imagery from GOES-16 will provide sharper and more detailed views of hazardous weather systems and reveal features that previous instruments might have missed, and the rapid refresh of these images will allow us to monitor and predict the evolution of these systems more accurately. As a result, forecasters can issue more accurate, timely, and reliable watches and warnings, and provide better information to emergency managers and other decision makers.”

Army Corps of Engineers Revises and Renews Nationwide Permits (COE 1/6/17)

The U.S. Army Corps of Engineers (USACE) announced today revised and renewed nationwide permits (NWP) necessary for work in streams, wetlands and other waters of the United States under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899. The new NWP will take effect March 19, 2017, and replace permits expiring on March 18, 2017

(Continued from page 2, COE Permits)

The 2017 nationwide permits have been published in today’s Federal Register at <https://www.federalregister.gov/documents/2017/01/06/2016-31355/issuance-and-reissuance-of-nationwide-permits>, and will be posted to the USACE Web site at <http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/NationwidePermits.aspx>.

“Our goal in developing and authorizing nationwide permits every five years is to update them, and provide clarity and certainty for the regulated public while protecting the aquatic environment. Our nationwide permits are an important tool in encouraging project proponents to avoid and minimize impacts to wetlands, streams, and other aquatic resources,” said Maj. Gen. Ed Jackson, Deputy Commanding General for Civil and Emergency Operations, USACE.

The updated permits streamline the requirements of the Clean Water Act, and are informed by extensive feedback from the public and other key stakeholders.



Highlights of the revised and new nationwide permits include:

- USACE reissued 50 existing permits and added two new ones.
- NWP 48 – The NWP 48 for Existing Commercial Shellfish Aquaculture Activities is revised to provide greater flexibility in its use. For example, NWP 48 now incorporates provisions that authorize activities that are consistent with other federal, state, tribal and local regulatory authorities. Incorporating these already authorized activities will reduce the number of activities that require review by individual USACE districts.
- NWP 53 – This new NWP covers the removal of low-head dams. The removal of these dams will restore rivers and streams, and will improve public safety by removing dams that can pose hazards to swimmers and to users of small recreational craft.



-NWP 54 – This new NWP covers the construction and maintenance of living shorelines, a technique to protect coastal property from erosion while providing some aquatic habitat and water quality benefits.

Additionally, NWP 26 has not been assigned since 2000, and NWP 47 was in effect for only one five-year cycle (2007 to 2012).

Additional information about the USACE Regulatory Program can be found at <http://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/>.

NATIONAL DROUGHT RESILIENCE PARTNERSHIP 2016 END OF YEAR REPORT

(excerpts from executive summary January 2017)

The five year Western drought and recent drought conditions in Northeastern and Southeastern United States underscore the continued importance of building national capabilities for long-term drought resilience. Federal agencies have focused on drought response for decades. Under the framework of the National Drought Resilience Partnership (NDRP), a greater emphasis has been placed on improving federal agency collaboration to ensure more efficient use of program dollars and agency expertise.

A broad cross section of stakeholder groups has supported and guided this collaboration. These groups helped shape six broad policy goals, and an associated Federal Action Plan with 27 specific deliverables. This partnership has



yielded products and program priorities that better meet the needs of rural and urban communities; the energy, agricultural and transportation sectors; infrastructure and water managers; business and industry; and ecosystems. As a

Drying Lake Mead—The Guzzler

result, 13 federal agencies and offices are cooperating in new ways under a shared strategy to deliver concrete results.

This 2016 Year End Report builds on the NDRP's August 2016 Progress Report. It is broken out into three sections: a summary of accomplishments on actions since August; updates on regional scale collaborations; and recommendations from stakeholders on priorities in the coming year.

Taken together, these two reports summarize the NDRP's results in 2016.

Recent Accomplishments include:

- Improvements in the quality and quantity of groundwater data for use by Federal, state, tribal and local agencies.
- Piloting the use of Light Detection and Ranging (LiDAR) to provide accurate data more quickly and at lower cost on current and projected future storage volumes for reservoirs, increasing the ability of decision makers to capitalize on unique drawdown situations or capture sedimentation resulting from floods or wildfires.
- Participation by 400 attendees in a webinar on the U.S. Forest Service response to drought and water challenges. Completion of a Community Assessment for Public Health Emergency Response (CASPER) in Mariposa County, CA, to assess populations vulnerable to drought.
- Launch of four prize competitions to incentivize new methods of water use innovation.
- Release of a new report, "*Water Marketing Activities within the Bureau of Reclamation*," highlighting how
- Reclamation has partnered with water users to enable water transactions.
- Release of a best practice guidance to assist water utilities, state governments and federal agencies improve water conservation and efficiency savings.

Regional Scale Collaboration:

- Profiles of successful regional partnerships in Washington, Montana and the Lower Colorado River Basin.
- Emerging collaboration efforts in the Southeast, Northeast, Midwest and Southwest that highlight opportunities for future NDRP engagement.

Partner Recommendations to NDRP agencies for 2017 and beyond include:

- Generate additional data and information on soil moisture, groundwater and consumptive use.
- Continue and expand efforts to assist decision makers in responding to drought impacts on critical infrastructure including energy, transportation and water infrastructure.
- Provide greater focus on the health effects of drought.
- Incorporate work on the connection between wildfire and drought as part of increasing resilience on federal lands.
- Publish a white paper that details the financial structure of market based tools and how they can be used to build drought resilient infrastructure.
- Continue to support regional work on water reuse, recycling and alternative sources of water.

EPA Launches New Program with \$1 Billion in Loans Available for



WestFAST Facilitates Follow-up Call with Representatives Working on the Southwest Oklahoma Water Action Plan. (WestFAST 1/11/17)

Roger Gorke, WestFAST Chair, Kicked off the discussion with basic information about the Western States Federal Agency Support Team (WestFAST) and the members interested in this project and its linkage to the President Obama's Presidential Memorandum for the National Drought Resilience Partnership (NDRP). Link <https://www.drought.gov/drought/what-nidis/national-drought-resilience-partnership>.



Lake Altus Credit—mapio.net

Julie Cunningham of the Oklahoma Water Resources Board (OWRB) discussed some of the main points of the Southwest Oklahoma Water Action Plan (SWOAP). The history of the plan goes to a need in Southwest Oklahoma with the growth that has taken place around Altus, OK and the surrounding area and the historic drought that took place there in the 2011 - 2016 period. JD Strong, former chair of the OWRB was also part of the audience when President Obama announced the NDRP and thought the Southwest Oklahoma project would fit well within this partnership program (Particularly goal 5).

The December call was held to bring in all the partners associated with the SWOAP and to see if there were any funds to help support the program. An assessment of projects that were easiest and least expensive were logged and reviewed. Key factors here were the interest in the Federal, State, and local partners willingness to work together and discuss issues and project funding.

Owen Mills (OWRB) outline some specific projects that were reviewed:

- Aquifer Storage and Recovery – State is actively developing regulatory framework to make this technology option available to our citizens.
- Marginal Quality Water (MQW) use (including produced

water) – state is promoting MQW use to help offset shortages of fresh water, to reach the Water for 2060 goal to level off fresh water demand.

-Non-potable Water reuse has been formalized and is increasingly being implemented in OK.

-Indirect and Direct potable water reuse – Working Group is currently developing regulatory framework

-Linked projects to the 2012 OCWP (Oklahoma Comprehensive Water Plan).

-Earthquake increases had created a larger produced water concern and it was recently discovered that not only disposal wells but also injection wells for the fracking process were causing problems. Could this water be cleaned up for reuse or diluted for reuse or discharge (40,000 -200,000 ppm salinity)?

-Stormwater recharge – to marginal Class III Blaine aquifer has been successful for crop irrigation purposes.

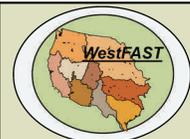
Many systems have problems and may use blending with water with higher salinity or high in nitrates, etc.



Coachella Valley, Southern California, infiltration basins. Credit:- Coachella Valley Water District

A

larger group discussion occurred where several items were discussed including discussions about technical help, methodologies, working groups that were organized, regulations that were followed, and was any immediate help needed to work with these issues? None were mentioned, but it was acknowledged that further help with all of these things are WestFAST oriented issues that could be helpful.



Water Infrastructure Projects (EPA 01/10/2017)

The U.S. Environmental Protection Agency (EPA) announced the availability of approximately \$1 billion in credit assistance for water infrastructure projects under the new Water Infrastructure Finance and Innovation Act (WIFIA) program.

EPA's WIFIA program will provide long-term, low-cost credit assistance in the form of direct loans and loan guarantees to creditworthy water projects. WIFIA provides another option for financing large infrastructure projects – generally at least \$20 million – in addition to the State Revolving Funds and bond market. WIFIA is available to state, local, and tribal governments; private entities; partnerships; and State Revolving Fund programs. EPA estimates that funds appropriated to the WIFIA program can be leveraged at a ratio greater than 50 to one, which means the \$17 million program budget could allow EPA to make approximately \$1 billion in loans and stimulate about \$2 billion in total infrastructure investment.

“The launch of the Water Infrastructure Finance and Innovation Act program marks a huge step forward for modernizing our nation’s aging water infrastructure,” said EPA Administrator Gina McCarthy. “WIFIA gives us a new opportunity to provide billions of dollars in low-interest loans to communities to build large infrastructure projects, significantly accelerating investments that benefit our nation’s public health and water security for generations to come.”



Some of the projects that WIFIA enables EPA to provide assistance for include:

Section of Roza irrigation canal gets facelift—
Capital Press, Salem, Oregon

- drinking water treatment and distribution projects
- wastewater conveyance and treatment projects
- enhanced energy efficiency projects at drinking water and wastewater facilities
- desalination, aquifer recharge, alternative water supply, and water recycling projects
- drought prevention, reduction, or mitigation projects

EPA will evaluate projects using criteria such as the extent to which the project is nationally or regionally significant, helps maintain or protect public health or the environment, protects against extreme weather, and serves regions with significant water resource challenges. EPA will make selections on a competitive basis.

EPA estimates that the U.S. needs about \$660 billion in investments for drinking water, wastewater, and storm-water infrastructure over the next 20 years.

For more information, visit www.epa.gov/wifia Also: press@epa.gov

Federal News (control click to links)

[1/5: TIME CHANGE: EPA, NMED, and City of Santa Fe to Celebrate New Toolkit to Manage Storm water Pollution](#)

[1/11: Stretching Water Supplies](#)

[1/12: USDA Announces \\$252 Million Available for Regional Conservation Partnership Program](#)

[1/12: Reporters: Accompany a USGS Field Crew as They Monitor Stream Flow and Flooding](#)

[1/13: Rolling on the \(Atmospheric\) River](#)

[1/13: NASA, NOAA to Announce 2016 Global Temperatures, Climate Conditions](#)

[1/13: \\$12.7 Million in Grants Awarded to Assist Small Drinking Water and Wastewater Systems](#)

[1/18: NASA, NOAA Data Show 2016 Warmest Year on Record Globally](#)

[1/18: Climate change to shift global pattern of mild weather](#)

[1/20: Reclamation Releases Draft Environmental Documents for the Proposed Reuse of Oil Field Water in Kern-Tulare Water District](#)

[1/20: Bureau of Reclamation Outlines Water Year 2017 Central Valley Project Water Supply Conditions](#)

[1/20: David Murillo Named Acting Commissioner for the Bureau of Reclamation](#)

[1/24: New Technique Quickly Predicts Salt Marsh Vulnerability](#)

[1/24: NASA Measures ‘Dust on Snow’ to Help Manage Colorado River Basin Water Supplies](#)

[1/25 Study Tracks ‘Memory’ of Soil Moisture](#)

[1/25: Reclamation Releases Final Environmental Documents for the Central California Irrigation District Water and Energy Efficiency Grant Project](#)

[1/25 Changes in Rainfall, Temperature Expected to Transform Coastal Wetlands This Century](#)

[1/27 Storms Filled 37 Percent of CA Snow-Water Deficit](#)



Continued Federal News:

[1/25 Changes in Rainfall, Temperature Expected to Transform Coastal Wetlands This Century](#)

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Cabinet Appointments:

(as of February 9, 2017)

Department of Interior

Ryan Zinke, Representative from Montana was offered the role of Secretary of the Interior in December. The nomination of a Secretary-designate is reviewed during hearings held by the members of the Energy and Natural Resources committee, then presented to the full Senate for a vote.

Since January 20, 2017 the acting Secretary of the Interior is Kevin Haugrud. The Bureau of Reclamation, Fish and Wildlife Service, U.S. Geological Survey, Bureau of Land Management, and National Park Service are in DOI.

Department of Agriculture

Sonny Perdue, former Governor of Georgia has been nominated as the United States Secretary of Agriculture (USDA) is the head of the USDA. The current Acting Secretary is Michael Young, who has held the office since the inauguration of Donald Trump on January 20, 2017. The position carries similar responsibilities to those of agriculture ministers in other governments. The department includes several organizations. The 297,000 mi² (770,000 km²) of national forests and grasslands are managed by the United States Forest Service. The Natural Resources Conservation Service is also under the USDA and works with public lands, water, and other resource management.

Department of Defense

Jim Mattis became the 26th defense secretary Jan. 20, 2017. During more than four decades in uniform, he commanded Marines at all levels, including in combat tours in Iraq and Afghanistan. Following his retirement from the U.S. Marine Corps in 2013, Secretary Mattis served as the Davies Family Distinguished Visiting Fellow at the Hoover Institution at Stanford University, specializing in the study of leadership, national security, strategy, innovation and the effective use of military force.

Department of Commerce

Wilbur Ross, CEO of multiple multinational companies has

been nominated as the United States Secretary of Commerce (DOC). The agency mission states "to foster, promote, and develop the foreign and domestic commerce". The National Oceanic and Atmospheric Administration (NOAA) is under the DOC. Benjamin Friedman, NOAA's Deputy Under Secretary for Operations, is performing the non-exclusive duties of the Under Secretary for Oceans and Atmosphere and Administrator, NOAA. No nominations have been announced for NOAA, but Scott Rayder is on the landing Team and former Chief of Staff for NOAA, under VADM Conrad Lautenbacher, in the Bush Administration.

Department of Energy

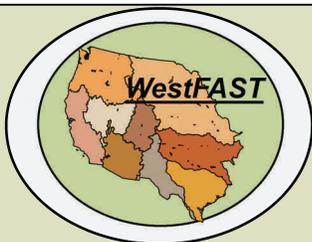
The Energy Department (DOE) nomination is Rick Perry, former Governor of Texas was nominated by President Trump in December 2016. DOE exists to ensure America's security and prosperity by addressing its energy, environmental and nuclear challenges through transformative science and technology solutions. In the election debates, Perry has advocated that the Department of Energy be abolished. The acting director of DOE is Grace Bochenek.

Environmental Protection Agency

Acting Administrator is Catherin McCabe, the EPA mission is to protect human health and the environment. President Trump has nominated Scott Pruitt, Oklahoma Attorney General. One of many issues raised with the nomination, is his views on climate. In hearings, before the Senate Environment and Public Works Committee "I do not believe that climate change is a hoax," Pruitt said in response to climate change questions from Sen. Ed Markey, D-Mass.

National Aeronautics and Space Administration

The National Aeronautics and Space Administration (NASA) is an independent agency of the executive branch of the United States federal government responsible for the civilian space program, aeronautics and aerospace research. No nominations have been announced, Chris Shank will serve on the landing team for NASA.



WestFAST News is published monthly. To get an Agency Announcement published or to get added to the WestFAST News distribution list contact:

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Check out the WestFAST Web Site: <http://www.westernstateswater.org/westfast>