April 2020

WestFAST News

682 East Vine Street / Suite 7 / Murray, UT 84107 / (801) 685-2555/ www.westernstateswater.org/westfast

Chair – Patrick Lambert; Federal Liaison Officer – Deborah Lawler

EPA Takes Step Toward Granting Wyoming Primacy for Certain Underground Injection Wells

EPA 04/01/20. Today, the U.S. Environmental Protection Agency (EPA) is asking for public input on the agency's intent to approve the State of Wyoming's request to have primary responsibility (primacy) for enforcing regulation of Class VI wells under the Underground Injection Control (UIC) Program. Once final, Wyoming will be the second state, along with North Dakota, that has received primacy for Class VI UIC wells under the Safe Drinking Water Act, which can be used for storage of carbon dioxide captured from industrial and energy related sources.

"Wyoming is a proven partner as we work together to ensure the safe and responsible protection of groundwater," said EPA Administrator Andrew Wheeler. "EPA supports Wyoming's leadership in protecting their natural resources and environment and we encourage other states to follow their example to implement and enforce this important program under the Safe Drinking Water Act."

"Wyoming is ready and capable of permitting many more carbon capture projects," said U.S. Senator John Barrasso, Chairman, Senate Committee on Environment and Public Works. "EPA's proposal will give Wyoming that important authority. Wyoming is blessed with an abundance of resources like coal, natural gas, and oil that power America's homes and businesses. Under the EPA's proposal, Washington will recognize Wyoming's expertise in capturing excess carbon and sequestering it underground. EPA's proposal is a great example of Washington supporting leadership by states to address a changing climate through innovative technologies, not crushing regulation. The development of carbon capture technologies is very promising and holds the key to significant carbon emissions reductions."

"This has been a long, sometimes winding, process to reach where we are today," said Wyoming Governor Mark Gordon. "Wyoming Department of Environmental Quality staff, the Legislature, the Trump Administration and others have worked very hard to move this forward. By gaining primacy, the State of Wyoming is in the best position to ensure that this activity is overseen correctly, the process is efficient and our natural resources are developed and protected."

After conducting a thorough review, EPA has determined that the State of Wyoming meets the requirements to implement and enforce a Class VI injection program. EPA is requesting public comments on the Agency's decision within 45 days after date of publication in the Federal Register. EPA requests that comments be sent via the Federal Register, docket number EPA-HQ-OW-2020-0123.

When It Comes to Water, You Have to Think Global

NASA 04/20/20, Aries Keck, NASA Earth Science Division.

Earth is a pale, blue dot when seen from space. Its blue color is due to our home planet being 71% covered in water. NASA monitors Earth's water from space, the skies, ground stations on land, ships sailing the seas and even with apps on mobile phones.

While Earth is so wet it looks blue from space, most of that water is saltwater. Only 2.5% of water on Earth is freshwater and nearly all of that water is frozen – locked up in polar ice caps, glaciers and other ice. The small amount of freshwater that remains is all that's available for all the ways we use water.

"All the water on Earth already exists. We can't make more," said Bradley Doorn, program manager for NASA Earth Applied Sciences' Water Resources program area. "We can only track it, predict it and protect it as it cycles around our world."

NASA tracks nearly every aspect of this water cycle - as precipitation falls from clouds; as groundwater; as water soaks into the soil; as it moves into rivers and lakes; as it's taken up by plants and used by animals and evaporates back into the atmosphere.

"Water is a precious resource on this planet, and one that NASA is at the cutting edge of monitoring," said Doorn.

The cyclical nature of freshwater moving around our world has led to the overarching science question that NASA is trying to answer about water on our world – where it is, when it is, and in what condition. To a finer and finer degree, NASA research scientists are determining how much and when freshwater is available worldwide. As these core science questions are being asked and answered, NASA is also looking toward developing and strengthening new and innovative ways data are used to track both the use and quality of the world's freshwater. In addition, as the world warms due to climate change, NASA scientists are investigating how the world's water cycle is affected by and has effects on the Earth's climate.

NASA's Earth Science Division studies freshwater using data collected in many ways, including satellites, airborne missions and even information collected by volunteers. NASA scientists study water, in nearly all its aspects on Earth, as precipitation, ice and snow, in groundwater reserves and in lakes and rivers, just to name a few. A few examples of the research focus NASA scientists take to studying water include ways to track water quality, determining water availability and predicting drought, measuring irrigation and water use for agriculture, and world-wide precipitation.

A pale, blue dot. A mosaic of 60 images make up this famous NASA Voyager 1 view of Earth.

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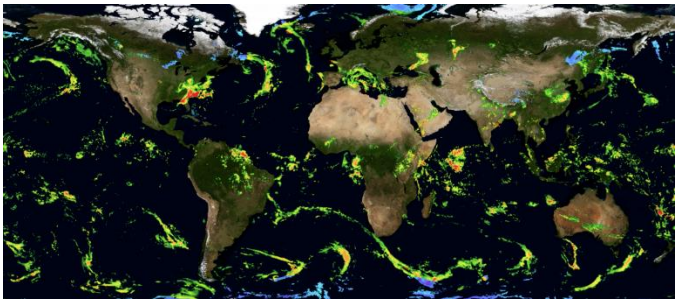
What Goes Up, Must Come Down

The amount of precipitation falling on Earth at any given time varies greatly from place to place, so having a satellite-level view provides more uniform observations around the globe because it includes data over the world's oceans and is more complete than most on-the-ground measurements.



NASA's IMERG data showing world-wide precipitation on April 20, 2020. Credits: NASA/GPM

In 2019 scientists released a worldwide precipitation data set that compiled more than 20 years of satellite and other data. It is based significantly on information collected by the joint NASA and Japan Aerospace Exploration Agency (JAXA) project the Global Precipitation Measurement mission (GPM) and an earlier, precursor NASA-JAXA satellite mission the Tropical Rainfall Measurement Mission (TRMM). This Integrated Multi-satellitE Retrievals for GPM (IMERG) also includes information from a constellation of other Earth-observing satellites, airborne campaigns and ground stations.

All told, the record compiles data from 1997 to the current day. These records include four-dimensional views of rain, snow, sleet and storms, how heavy the precipitation is and how it changes over time. While IMERG produces a higher accuracy product that takes time to process and prepare, a near-real-time summary of global precipitation is available every half-hour that is used for time-sensitive applications like weather forecasting and disaster recovery. This multiple-decade baseline of rain and snow data worldwide shows how precipitation may deviate from normal, informing models that predict crop yields, disease outbreaks and landslides.

Seeing Stressed Out Plants

One project currently working toward including IMERG data as a larger effort to monitor agriculture is led by Christopher Hain of NASA's Marshall Space Flight Center in Huntsville, Alabama. He and his team have built a world-wide global agricultural monitoring tool that provides early drought warnings by looking at "vegetation stress."

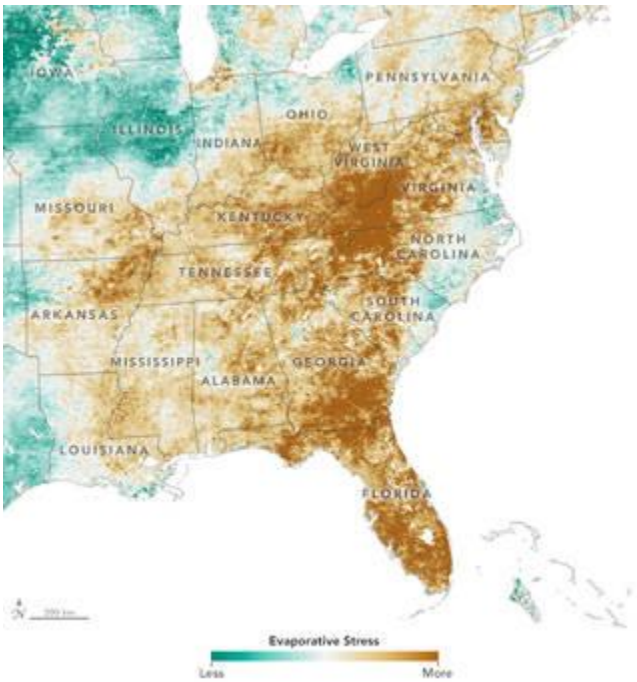
About 31% of all fresh surface water in the U.S. is used for agriculture irrigation, according to the U.S. Geological Survey, and plants go under stress when they don't have enough water. When a plant releases water from its leaves, in a process called "transpiration," it cools them. This allows farmers to track the temperature readings of a field over time as a way of determining the health of their crops. If a field is unusually warm, it shows the plants are under stress long before leaves fade and turn brown.

This plant stress is quantified in part by these temperature changes into the Evaporative Stress Index. It's used in many different products and is incorporated into the U.S. Drought Monitor, a map developed the U.S. Department of Agriculture (USDA). Updated on a weekly basis, it ranks drought conditions across the U.S. As part of a NASA Earth Applied Sciences-funded project, Hain's team is expanding the use of this data beyond the U.S. to a world-wide "Global Evaporative Stress Index."

In addition to the IMERG data, this index includes a plant temperature indicator taken from NASA's ECOsystem Spaceborne Thermal Radiometer on Space Station (ECOSTRESS) instrument, which was launched to the International Space Station in 2018. Also contributing to the index are land surface temperatures from many National Oceanic and Atmospheric Administration (NOAA) satellites, observations from the NASA's Terra and Aqua

satellites and the NASA/NOAA Suomi National Polar Orbiting Partnership (Suomi NPP) satellite.

This index of plant stress also includes data from the Landsat series of satellites; the longest continuous record of Earth science data from space. Begun in 1972, Landsat is a partnership between NASA and the U.S. Geological Survey (USGS) and Landsat data is used in NASA Earth Applied Sciences water projects as varied as measuring from the stress on vineyards in California to tracking scarce water resources in remote areas of the Navajo Nation.



The Evaporative Stress Index drought indicator captured a "flash drought" in the Eastern U.S. in 2019.
Credits: NASA's Earth Observatory

Managing Water in the West

In the drought-prone Western U.S., water is a particularly scarce resource, which is why in 2015 NASA's Earth Applied Sciences Water program area established the Western Water Applications Office (WWAO). It facilitates getting satellite and other NASA data into the hands of western state, local and federal water agencies.

"Managing water in the western United States is particularly challenging," says Indrani Graczyk, WWAO manager. "That's because most precipitation falls in winter and is stored in mountain snowpack, but must supply users throughout the long, dry summers.

One of many NASA programs that investigate the important connections between snow and water availability is the Airborne Snow Observatory. This multi-year NASA aircraft project began in April 2013 and was a collaboration between NASA's Jet Propulsion Laboratory (JPL) and the California Department of Water Resources. It created the first maps of the entire snowpack of two major mountain watersheds in California and Colorado, producing the most accurate measurements of how much water they hold, a boon to the millions of Americans relying on those water basins for their water supply.

The Airborne Snow Observatory project also made the first measurements of snow in the area created by surrounding mountains, known as a 'basin,' as well as on the mountains themselves. This understanding of precipitation in mountains provides data that are now being incorporated world-wide to help improve water management for the 1.5 billion people globally who rely on snow melt for water.

One of the two Twin Otter aircraft used by the Airborne Snow Observatory mission to study snowpack in the Western U.S.
Credits: NASA

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Data in the Palm of Your Hand

In addition to satellite and airborne missions, NASA is also using the power of citizen scientists to monitor the world's water resources. One example is NASA's Global Learning and Observations to benefit the Environment Program (GLOBE) program. Begun in 1995, this worldwide program and brings together students, teachers, scientists and citizens and through its GLOBE Observer mobile phone app, users can upload information about cloud cover, rainfall depth and other information which is then relayed to scientific teams who use it as part of their research in monitoring water resources worldwide.

Another hand-held scientific resource is CyAN, an android mobile phone application that's part of the multi-agency Cyanobacteria Assessment Network, (CyAN). The network began in 2015 with a goal developing a uniform and systematic approach for identifying potentially harmful algal blooms using satellite and other data. While individual algae are microscopic, under the right conditions they can multiply and "bloom" and release harmful toxins that can sicken people and pets, contaminate drinking water and force closures of boating and swimming sites.

These blooms can be large enough to be seen both with the naked eye, and from space via images from Earth-observing satellites. As part of this ongoing, long-term mission, a mobile phone application now combines satellite information with user-uploaded data about potentially harmful algal blooms of cyanobacteria.

Developed with the U.S. Environmental Protection Agency (EPA), the mobile phone app, includes NASA supercomputing power, and provides weekly reports on the color and other water quality information of more than 2,000 lakes across the U.S. Users can choose particular lake and see a color-coded index of water quality. The app also allows users to submit data, turning each user's report into a data source for water quality managers to review and confirm the data.

While CyAN is one hand-held way to track water quality, NASA remote sensing data is incorporated into other water quality resources, for example NASA is refining the Freshwater Health Index with the non-profit group Conservation International. This index views water as part of a system that also takes into account data on human population centers as well as, environmental and other data. In addition to creating resources like the index, NASA also trains people to use them. For example, the Earth Applied Sciences Capacity Building program area holds both in-person and remote training courses on the Freshwater Index, how to monitor harmful algal blooms and many more courses on how to access and interpret Earth observation data.

A number of NASA projects use mobile phone applications (apps) to put satellite data into the palm of your hand and allow intrepid citizen scientists to upload data.
Credits: NASA

Too Much and Too Little

While water quality is an issue, so is quantity. Having too much or too little water can be devastating. In addition to NASA's precipitation missions, two other key NASA satellite missions have broken new ground in monitoring the world's water.

The Soil Moisture Active Passive (SMAP) satellite, launched in 2015, measures the amount of water in the top two inches (5 centimeters) of soil. This near-

real-time data maps global soil moisture, providing links between Earth's water, energy and carbon cycles. For example, this data incorporated into a NASA software application called the Land Information System and with other resources, provides users with crucial information on soil saturation, drought forecasting and agriculture.

NASA also tracks water through the Gravity Recovery and Climate Experiment Follow-on (GRACE-FO) mission. A partnership between NASA and the German Aerospace Center, GRACE-FO is a successor to the GRACE mission, which made observations from 2002 to 2017.

The GRACE-FO mission consists of two twin satellites that follow each other in orbit around the Earth and are separated by only about 137 miles (220 km). By constantly measuring the distance between them, they track changes in Earth's gravity field, which is influenced by differences in mass, such as when passing near and then over a mountain range. While these changes would be imperceptible to us, the extremely precise measurements of distance between the two satellites reveal gravity changes worldwide.

The data are used to construct monthly maps of the Earth's average gravity field, offering details of how mass, is moving around the planet, which on the scale of monthly is mostly attributable to water movement. Thus GRACE-FO data is able to be used to uncover changes in underground water storage, the amount of water in large lakes and rivers, root-zone soil moisture, ice sheets and glaciers, and sea level caused by the addition of water to the ocean. These discoveries provide a unique view of Earth's climate and have far-reaching benefits to society.

A data visualization of the Western U.S. showing SMAP and IMERG data.
Credits: NASA / Science Visualization Studio

Water Data Everywhere

Despite all of our ways of tracking and monitoring the quality and quantity of water around our world, there is still much to learn about how to best watch the world's water, especially as climate change is shifting the water cycle and affecting water availability around the world.

NASA's satellite and modeling products provide a huge volume of valuable global water resources information, extending back for years across a broad range of areas (from local to global) and across many timescales (from hourly to decades), and while this information is used for ongoing scientific research, many of the resources are available in near-real-time which can make them useful for applications like responding to a hurricane or drought.

All NASA data are free, and openly available, allowing everyone to get access to the information - all with a goal of watching and protecting the water on our pale, blue planet.

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USDA Announces $15 Million for Conservation Innovation Grants

NRCS 04/28/20. The U.S. Department of Agriculture (USDA) announced today a $15 million investment to help support the adoption of innovative conservation approaches on agricultural lands. USDA's Natural Resources Conservation Service (NRCS) is accepting proposals through June 29, 2020, for national Conservation Innovation Grants (CIG). CIG projects inspire creative problem-solving solutions that boost production on farms, ranches and private forests and improve natural resources.

This year's priorities are water reuse, water quality, air quality, energy and wildlife habitat.

"Through Conservation Innovation Grants, we're able to co-invest with partners on the next generation of agricultural conservation solutions," NRCS Chief Matthew Lohr said. "Conservation Innovation Grants have helped spur new tools and technologies to conserve natural resources, build resilience in producers' operations and improve their bottom lines. This year will be the first time we are offering water reuse as a priority, and we're excited to see how these projects play a role in USDA's broader strategy for water reuse on agricultural land."

National CIG

CIG is a competitive grants program that supports development, testing and research of conservation technologies, practices, systems and approaches on private lands. Grantees must match the CIG investment at least one to one.

All U.S.-based non-Federal entities and individuals are eligible to apply. Complete funding announcement information can be accessed through the Conservation Innovation Grants webpage.

The National CIG program supports early pilot projects or demonstrations of promising conservation approaches and is distinct from the $25 million announced on March 12 for On-Farm Conservation Innovation Trials. On-Farm Trials is a separate CIG component created by the 2018 Farm Bill. It includes a Soil Health Demonstration Trial.

State NRCS CIG

State NRCS offices are also able to fund and hold their own CIG competitions in addition to the National CIG signup. Please visit NRCS state office websites for information about state CIG competitions.

More Information

NRCS's CIG program is identified in the federal government's National Water Reuse Action Plan as an opportunity to support development of innovative projects that focus on water reuse on private lands. Read this April 28 post on the USDA Blog for how USDA is working with the U.S. Environmental Protection Agency, National Oceanic and Atmospheric Administration, Department of Interior, Department of Energy and others to promote water reuse across sectors.

CIG applications must be submitted through Grants.gov offsite link image by 11:59 p.m. EDT on June 29, 2020. A webinar for potential applicants is scheduled for 3 p.m. EDT on May 13, 2020. Information on how to participate in the webinar is posted on the CIG website.

CIG also contributes to the Agriculture Innovation Agenda: a USDA initiative to align resources, programs, and research to position American agriculture to better meet future global demands. Specifically, USDA is working to stimulate innovation so that American agriculture can achieve the goal of increasing production by 40 percent while cutting the environmental footprint of U.S. agriculture in half by 2050.

For more information on CIG, visit nrcs.usda.gov or contact your local NRCS field office.

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Upcoming Meetings

Western Governors Association 2020 Annual Meeting
Medora, ND
June 29-July 2, 2020

Western Governors Association 2020 Winter Meeting
Coronado, CA
December 9-10, 2020

Western Governors 2021 Annual Meeting
Sunriver, OR
May 14-16, 2021

WSWC Summer (193rd) Meetings
Cody, WY
July 22-24, 2020

WSWC Fall (194th) Meetings
El Paso, TX
October 13-16, 2020

Upcoming Events

Annual Sub-seasonal-to-Seasonal (S2S) Workshop
San Diego, CA
~~May 18-20, 2020~~ *POSTPONED UNTIL 2021*

The Second Colorado River Basin Data and Modeling Roundtable: Webinar
May 27-28, 2020

Other Federal News

NRCS 04/01/20. [NE] Work Remotely with NRCS through Conservation Client Gateway

USACE 04/01/20. PUBLICATION NOTICE: Incidence of Zebra Mussel on U.S. Army Corps of Engineers Structures

USACE 04/01/20. PUBLICATION NOTICE: Guidelines for Minimizing Potable Water Loss Due to Water Distribution System Flushing

USACE 04/01/20. PUBLICATION NOTIFICATION: Thin Layer Placement of Sediments for Restoring Ecological Function to Submerging Salt Marshes: A Quantitative Review of Scientific Literature

NRCS 04/02/20. [CA] USDA Seeks Proposals for On-Farm Conservation and Soil Health Test Projects

NOAA 04/02/20. U.S. Drought Monitor Update for March 31, 2020

USACE 04/02/20. USACE Galveston District awards $16.9 million project for levee reconstruction, raises and repairs on the Port Arthur Coastal Storm Risk Management System

EPA 04/02/20. EPA settles with Eastern Oregon fuel distributor for fuel storage violations

White House 04/03/20. President Donald J. Trump Approves Oregon Disaster Declaration

NPS 04/03/20. Deanna Greco Selected as Superintendent of Black Canyon of the Gunnison National Park and Curecanti National Recreation Area

NPS 04/03/20. Ed Keable Named Superintendent of Grand Canyon National Park

NRCS 04/03/20. [OR] Funding available to help Klamath County farmers reduce wind erosion impacts during drought

NRCS 04/03/20. [CA] USDA Continues Conservation Planning and Programs for America's Farmers and Ranchers

NRCS 04/03/20. [NE] USDA Announces Sign-Up Period for Conservation Stewardship Program

USACE 04/06/20. Corps operates Sepulveda Dam during rain storms

NRCS 04/06/20. [NM] USDA Joint Chiefs' Extended Deadline 2020

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NRCS 04/06/20. [NM] USDA Announces May 29th Application Cutoff for CSP

NRCS 04/06/20. [TX] Texas Soil and Water Stewardship Week Highlights the Importance of Pollinators

EPA 04/07/20. EPA to Maintain WaterSense Program Specifications

NRCS 04/07/20. [ID] NRCS Idaho Releases April 2020 Water Supply Outlook Report

NRCS 04/07/20. [NV] NRCS, Partners Seek to Assist Bi-State Sage-Grouse Area Ranchers With Conservation Through Partnership Project

NRCS 04/07/20. [UT] USDA Offers Conservation Assistance to Landowners to Protect Wetlands, Agricultural Lands and Grasslands

USBR 04/07/20. Reclamation issues Record of Decision on long-term water transfer program

NRCS 04/08/20. [OR] USDA Announces May 29 Application Cutoff for Conservation Stewardship Program in Oregon

NRCS 04/08/20. [SD] NRCS holding sign-up for Regional Conservation Partnership Program (RCPP) in the James River Watershed and Prairie Pothole Working Lands Partnership

NOAA 04/08/20. Assessing the U.S. Climate in March 2020 - Two billion-dollar weather and climate disasters impact U.S. in first months of 2020

NASA 04/08/20. Raising a Glass in Wine Country to Better Water Management

NRCS 04/09/20. [KS] USDA Seeks Public Comment on More Revised Conservation Practice Standards

NOAA 04/09/20. U.S. Drought Monitor Update for April 7, 2020

NRCS 04/10/20. [NV] USDA Announces June 1 Application Cutoff for CSP

NRCS 04/13/20. [NM] USDA Grants Available to Spur Innovation Technologies in New Mexico

NRCS 04/13/20. [NE] USDA Stands Up New Team to Better Serve Beginning Farmers and Ranchers

NOAA 04/13/20. Assessing the Global Climate in March 2020 - March 2020 global temperature second warmest on record

NRCS 04/14/20. [ND] USDA Announces Joint Chiefs' Landscape Restoration Partnership Project Selection in North Dakota

NRCS 04/15/20. [SD] USDA Grants Available to Spur Innovation Technologies in South Dakota

NRCS 04/15/20. [SD] Growing Resilience: Assessing and Managing Fertility in Wet Fields

NRCS 04/15/20. [SD] New Opportunity: Prairie Pothole Water Quality and Wildlife Program

NRCS 04/15/20. [KS] USDA NRCS Kansas Announces FY 2020 Conservation Collaboration Grants or Agreements Funding Opportunity

NRCS 04/16/20. [NV] USDA Offers Conservation Assistance to Landowners to Protect Wetlands, Agricultural Lands and Grasslands

NRCS 04/16/20. [UT] USDA Invests More Than $13 million in Partner-Driven Projects that Protect Natural Resources in Utah

NRCS 04/16/20. [NM] USDA Invests More Than $3 Million in Partner-Driven Projects that Protect Natural Resources in New Mexico

NRCS 04/16/20. [SD] USDA Invests in Partner-Driven Projects that Protect Natural Resources in South Dakota

NRCS 04/16/20. USDA Invests More Than $200 Million in Partner-Driven Projects that Protect Natural Resources

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NRCS 04/16/20. [WA] USDA Invests in Clark CD "Poop Smart Clark" Conservation Project

NRCS 04/16/20. [OR] USDA Partnership Invests Nearly $15 Million in Partner-Driven Projects that Protect Natural Resources in Oregon

NRCS 04/16/20. [CA] USDA Invests More Than $15.4 Million in Partner-Driven Projects that Protect Natural Resources in California

NRCS 04/16/20. [NE] NRCS Announces $4.4 Million Award for On-Farm Conservation

NRCS 04/16/20. [KS] USDA Invests More Than $1.4 Million in Partner-Driven Projects that Protect Natural Resources in Kansas

NRCS 04/16/20. [TX] NRCS Invests More Than $1.1 million in Partner-Driven Comanche Springs Project in West Texas

NRCS 04/17/20. [WA] Partners in Conservation to Target Salmon Habitat in Whatcom County

NOAA 04/17/20. Extreme Wetness of 2019 Sets Records - A historic year for the Missouri River Basin

NRCS 04/20/20. USDA Extends Deadline to Submit Project Proposals for On-Farm Demonstrations and Alternative Funding Arrangements

NRCS 04/20/20. [UT] USDA Extends Deadline to Submit Project Proposals for On-Farm Demonstrations and Alternative Funding Arrangements

NRCS 04/20/20. [ND] North Dakota NRCS to Invest 1.9 Million in Working Wetlands in the Prairie Pothole Region

NRCS 04/20/20. [TX] USDA Extends Deadline to Submit Project Proposals for On-Farm Demonstrations and Alternative Funding Arrangements

NASA 04/20/20. When It Comes to Water, You Have to Think Global

NRCS 04/21/20. [OR] USDA Extends Deadline to Submit Project Proposals for On-Farm Demonstrations and Alternative Funding Arrangements

NRCS 04/21/20. [SD] USDA Extends Deadline to Submit Project Proposals for On-Farm Demonstrations and Alternative Funding Arrangements

NRCS 04/21/20. [NE] USDA Service Centers Open for Business by Phone Appointment Only

NOAA 04/21/20. Spring 2020 brings rare ozone "hole" to the Arctic

NRCS 04/22/20. [WA] USDA Announces May 29 Application Cutoff for CSP

NRCS 04/22/20. [WA] Funding Available for Water Quality and Salmon Habitat Improvement in Puget Sound

NRCS 04/22/20. [CA] USDA Extends Deadline to Submit Project Proposals for On-Farm Demonstrations and Alternative Funding Arrangements

NRCS 04/22/20. [SD] Conservation Tools Help Producers Make Positive Impacts on Changing Climate

NRCS 04/22/20. [SD] Growing Resilience - Cover Crops and Management Decisions

NRCS 04/22/20. [SD] Growing Resilience with Soil Health - Cover Crops and Prevent Plant Acres

BLM 04/22/20. Gerald Dixon selected as District Manager for the Elko District

USBR 04/22/20. Reclamation announces Kent Kofford as area manager for Provo Area Office

USBR 04/22/20. Reclamation awards $1.1 million to six tribes for water resource technical assistance

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USACE 04/22/20. PUBLICATION NOTICE: The Forefront : A Review of ERDC Publications, Spring 2020

NOAA 04/23/20. U.S. Drought Monitor Update for April 21, 2020

BLM 04/23/20. Comments Sought on Preliminary Assessment of Program to Reduce the Risk of Wildfires in East-Central Alaska

WHITE HOUSE 04/23/20. President Donald J. Trump Approves Washington Disaster Declaration

USBR 04/24/20. Reclamation seeks public comment on hatchery infrastructure improvements

USACE 04/24/20. Draft EA for flood-related repairs to several Salt Creek Dams in Nebraska available for public comment

NRCS 04/27/20. [ID] NRCS Idaho Announces June 5 Application Deadline for Conservation Stewardship Program

NOAA 04/27/20. Arthur John "A.J." Reiss, selected as director for NOAA's Ocean Prediction Center

USBR 04/27/20. Project Management Plan Developed for Arkansas Valley Conduit

EPA 04/27/20. EPA Announces $280 Million Water Infrastructure Loan to the City of Wichita

NASA 04/27/20. NASA's Swift Mission Tallied Water From Interstellar Comet Borisov

NRCS 04/28/20. [TX] Gulf Coast Water, Wildlife RCPP Conservation Stewardship Program Open for Texas Rice Producers

NOAA 04/28/20. U.S. Billion-Dollar Disasters in Seasonal Context - Climatology helps place frequency and type of disaster into historical perspective

NOAA 04/28/20. U.S. Drought Monitor Update for April 28, 2020

NOAA 04/28/20. Understanding climate: Antarctic sea ice extent

EPA 04/28/20. EPA issues summary of recent Safe Drinking Water Act orders to protect public health in Wyoming - Nine Administrative Orders issued to water systems since January 2020

EPA 04/28/20. Capital High School students in Helena, Montana, recognized during online ceremony as Grand Prize winner of EPA 'See a Bloom, Give it Room' high school video challenge - Students receive $6,000 for video raising awareness about harmful algal blooms.

NRCS 04/29/20. [WA] May 29 Deadline for CSP Funding in Spokane and Palouse River Watersheds

NRCS 04/29/20. [KS] USDA Announces May 29, 2020 Application Cutoff for CStP Classic

NRCS 04/29/20. [KS] USDA Grants Available to Increase Innovation Technologies in Kansas

USBR 04/29/20. Reclamation seeks public input on Del Puerto Canyon Reservoir project

EPA 04/29/20. EPA Recognizes University of Arizona and Arizona State University, Winners of Annual Campus RainWorks Challenge

NRCS 04/30/20. [WA] June 1 Deadline Set for Forestland Conservation Funding

NRCS 04/30/20. [CA] National Grant Funds Wildfire Mitigation and Soil Health Through California Resource Conservation Districts

NRCS 04/30/20. [ID] NRCS Announces Application Deadlines for Special EQIP Sign-Ups

NRCS 04/30/20. [UT] Utah NRCS Works to Protect Private Grasslands

NRCS 04/30/20. [TX] USDA NRCS Seeks Ag Producers to Serve as Mentors

NOAA 04/30/20. How humans can affect the strength of tropical cyclones

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.

USACE 04/30/20. PUBLICATION NOTICE: Analysis of Snow Water Equivalent Annual Maxima in the Upper Connecticut River Basin Using a Max-Stable Spatial Process Model

USDOI 04/30/20. Interior Announces $24.7 Million in Support for Habitat Conservation in Big Game Migration Corridors and Winter Range in the West

USBR 04/30/20. Water experiment to be conducted along the Colorado River while maintaining hydropower production this summer

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