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## NWS National School Outreach Hosts Virtual School Talks

By: NWS Staff

Did you know that the National Weather Service can visit your classroom via the Internet? The NWS National School Outreach team is ready to teach and answer your students' weather questions. Whether it is learning about weather basics, severe weather, the sun, space weather, or any other topic the teacher needs covered, the National Weather Service jumps into the classroom through Google Meet, Zoom, or Skype to help teach these topics to Elementary through High School students.

The majority of presentations are handled by Meteorologists from the National Weather Service, each with a passion for weather and education. The NWS makes every effort to have a meteorologist from your local NWS office attend the presentation. In addition to NWS meteorologists, special presentations may include physical scientists from the Space Weather Prediction Center or other meteorologists who work at the National Weather Center in Norman, Oklahoma.



All a classroom needs to participate is an internet connection and a webcam with a microphone. With this setup, your class, multiple classrooms across the school district, or even classrooms across the country can participate at once by joining the video chat at the agreed upon time.

To learn more about the type of presentations available to students, contact the NWS School Outreach team with questions, or to sign up for NWS virtual school talks, read the original story [here](#).

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## Caltrans District 8 Hosts Press Conference on Holiday Travel Weather

By: Alexander Tardy, Warning Coordination Meteorologist



Caltrans PIO Terri Kasinga leads the conference and introduces agency speakers. LA media attended the live press conference for winter travel safety.

On December 16, 2021, Caltrans District 8 gathered San Bernardino County partners at Cajon Pass along Interstate 15 for a live press conference to discuss winter weather travel and impacts. Presenters from the US Forest Service, County Supervisor, California Highway Patrol, Caltrans and San Bernardino County Fire and Public Works spoke to the media to highlight safe snow play in the mountains over the coming holidays, upcoming Pacific storms that would bring additional snowfall, and travel safety for chain control activities and distancing from snowplows. This conference held special emphasis on snowfall impacts and trash cleanup efforts. Warning Coordination Meteorologist Alex Tardy provided the weather outlook for the holiday weekend through New Years, including the potential for significant rainfall and high elevation snowfall. This was the third such safety and preparedness press conference held with Caltrans District 8 in the past few years.

Awareness of potential winter weather impacts is key for safe travel. On average, 150,000 vehicles pass through the eight lanes of interstate each day, and the highest elevation is 4200 feet MSL. Many state highways see heavy travel during the holiday season, and rockslides and snow impacts can occur during storms. The winter storm on Christmas Eve brought 3 to 6 inches of rain to the lower elevations of the southern California mountains. Because of a mild atmospheric river, a foot of heavy, wet snow occurred at 8000 feet on Mt. Baldy. Flooding, numerous rock slides, and mud flood flows occurred on the Apple and El Dorado fire scars in Oak Glen. The heavy rainfall, totaling 6 inches in less than 24 hours, caused severe road damage and closed Highway 18 in Waterman Canyon, where Caltrans is beginning a 4 million dollar project to repair. On Christmas night, at 6000 feet, a much colder storm brought 3 to 5 inches of fresh snowfall for mountain communities. A few days later, between December 27 and December 30, another atmospheric river brought significant precipitation with up to 40 inches of snow on Mt. Baldy, temporarily closing the access road. Snowfall and rime ice accumulation caused extensive tree damage and power outages during this period, emphasizing the need for long lead time outlooks.



Damage to highway 18 from Christmas Eve's heavy rainfall.

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## Experimental Intense Rainfall and Flash Flood Reports Webpage Available for Feedback

By: Monica Parker, NWS Aware Editor

The Experimental Intense Rainfall and Flash Flood Reports webpage is available and accepting comments through May 31, 2021. This webpage provides reports on intense rainfall and flash flood events across the United States and its territories, with hourly updates and a daily reset at 1200 Coordinated Universal Time (UTC). This tool is meant to verify intense rainfall and flash flood events and to enhance awareness of these events with external partners, media, and the general public in near real-time.

To access the experimental webpage, learn more, or comment, see the original Public Information Statement [here](#). No changes to communication systems are needed to view this page, so don't hesitate to send in feedback! Your comments will help improve the webpage and determine whether it is recommended for operational implementation.

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## Orange County, CA Debris Flow Task Force Hosts Community Preparedness Virtual Town Hall Event for Bond Fire Scar

By: Alexander Tardy, Warning Coordination Meteorologist



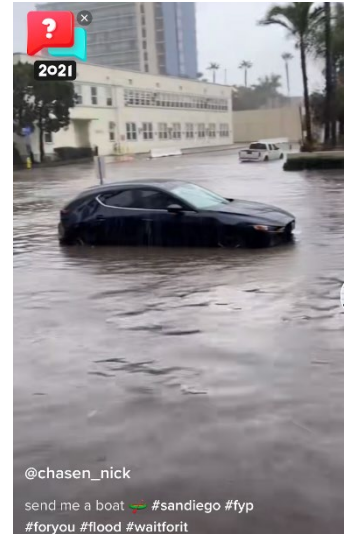
Since the Bond fire of December 2020, Silverado Canyon has seen lingering effects of post-wildfire mud and debris flows – most notably, the impact of a storm on March 10, 2021. In response to potential hazards, Orange County's Emergency Management and Public Works, along with the California Geological Survey, the County Supervisor office, and the National Weather Service, held a virtual town hall preparedness meeting for Silverado Canyon on December 8, 2021. Alex Tardy of NWS San Diego provided a full briefing on the NWS alerts, which provide flash flood warning notifications. The meeting was followed by over an hour of question and answer sessions.



Debris flows and mud inundated Wildcat Canyon and Silverado Canyon, resulting in rescues at homes surrounded by water flow. Video clip from Orange County Public works

Another storm on December 23-24, 2021 brought an additional 2.5 inches of heavy rain to the burn scar and Silverado Canyon from an atmospheric river. The impact of flood and mudflows was minor from this storm. Peak rainfall rates were 0.35 to 0.45 inches in 1 hour. The impacts of the 14<sup>th</sup> emphasize a continued need for outreach and preparedness.

The information presented at this event came at a timely point. On December 14, only a few days after this virtual town hall, the most significant post-wildfire mud and debris flow impact yet affected the community during an atmospheric river that produced as much as 1.1 inches of rain in 60 minutes and a total of 2 to 3 inches. The community described the flooding and mud as the worst they had seen in a



1-2 inches of rain in less than 6 hours caused rapid water rise and flooding in Mission Valley San Diego. The river level rose to 9.5 feet.

## NWS State College Recognized for Supporting NPS Flight 93 Memorial Events

By: John Banghoff, Meteorologist, and NWS State College Staff

The Flight 93 National Memorial in Shanksville, Pennsylvania commemorates the 40 heroes who rose up against terrorism on September 11, 2001. For the past several years, NWS State College has provided a combination of remote and on-site support for ceremonies leading up to, on, and after 9/11.



In those five years of ceremonies, inclement weather has affected the venue several times, requiring frequent communication with National Park Service (NPS) staff starting days in advance of the expected weather. With the impending retirement of NWS State College Meteorologist-in-Charge, Barbara Watson, at the end of the year, the NPS wanted to recognize the office for its support of Flight 93 Memorial events over the past five years and the strong relationship between the NPS and NWS.

On Monday, December 13, 2021, Western Pennsylvania Parks Superintendent Stephen M. Clark visited the National Weather Service office in State College to present a plaque as a token of appreciation for

“unwavering support, expertise, and dedication to the National Park Service and Flight 93 National Memorial.” Mr. Clark presented the plaque to Barb Watson along with an American flag, which flew at the Memorial site for 3 months in 2020, to the NWS State College office. The flag will be framed and prominently displayed along with the plaque in the NWS office as a symbol of the great relationship between the Flight 93 National Memorial and the NWS office in State College.





Attending the ceremony were those who provided support over the last few years (pictured left to right): **Craig Evanego**, SOO **Michael Jurewicz, Sr.**, WCM **Jonathan Guseman**, **John Banghoff**, MIC **Barbara Watson**, NPS Superintendent **Stephen Clark**, and ESA **Bruce Cromell**. At the conclusion of the ceremony, Stephen Clark gave each attendee a 20th Anniversary Flight 93 coin as a token of appreciation for their efforts.

The NWS in State College appreciates its relationship with the National Park Service and looks forward to supporting partners at the Flight 93 Memorial into 2022 and for many years to come.

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