



Aware

Aware is published by NOAA's National Weather Service to enhance communications between NWS and the Emergency Management Community and other government and Private Sector Partners.

June 2014

News and Updates: What to Do About All the EAS Activations?

By [Tim Schott](#), NWS Dissemination Services Meteorologist

A key limitation of the Emergency Alert System (EAS) is the length of time allowed for these alerts: EAS cuts off messages after 120 seconds. In addition to objecting to this limit, some NWS offices have received complaints from broadcasters, particularly after progressive or widespread weather events, about the problem of multiple requests for EAS activations, often with the same event code.



NWS is looking for a fresh perspective. We have initiated a national dialogue with broadcasters to better understand their concerns and requirements. EAS is not going away—it remains the official system for the President to provide information to the general public during national emergencies, but there are no plans for this FEMA system to be upgraded in the near future. We would greatly appreciate hearing how EMs and NWS staff address the issues mentioned above with their local broadcast community and with local and state Emergency Communications Committees. Email [Tim Schott@noaa.gov](mailto:Tim.Schott@noaa.gov).



FEMA's Regulatory Floodway and Flood maps for the Passaic River near the Beachwood Park area of Westwood, NJ

News and Updates: AHPS to be Enhanced by Web Mapping Service

By [Laurie Hogan](#), NWS Regional Hydrologist

Later this year, enhanced products for flood risk communication and impact decision support services will be rolling out across the regions courtesy of FEMA RiskMAP and the Advanced Hydrologic Prediction Service (AHPS) Integrated Working Team.

This AHPS update, slated for later this summer, will provide NWS Weather Forecast Offices with the ability to display FEMA's Regulatory Floodway and Flood maps for the 0.2 to 1 percent Annual Chance Floods on the AHPS web pages.

News and Updates: Extreme Storm Products Defined at Workshop

By [Victor Hom](#), Hydrologist, NWS Hydrologic Services Division

The U.S. Nuclear Regulatory Commission, U.S. Bureau of Reclamation, U.S. Army Corps of Engineers, and NWS jointly hosted the [Extreme Storm Events Workgroup Workshop](#) on May 15. The meeting defined the Extreme Storms products, which federal and state officials use for deterministic and risk informed infrastructure decisions.



The Workshop Organizing Committee.

This meeting was attended by about 25 state and federal agencies with interests in probabilistic flood hazard analyses and the Probable Maximum Precipitation for the Probable Maximum Flood determinations. The main takeaways include:

- ◆ Need for combined approaches
- ◆ Support for NOAA's Precipitation Frequency Analyses
- ◆ Importance of updating the Probable Maximum Precipitation

Decision Support: Joint U.S.-Canadian Oil Spill Exercise Tests Readiness

By [Ted Buehner](#), WCM, NWS Seattle, WA

Major oil spills can occur on any U.S. coastline with devastating after-effects. On June 4, NWS Seattle Incident Meteorologist (IMET) Andy Haner and Warning Coordination Meteorologist (WCM) Ted Buehner took part in an oil spill tabletop exercise at the Whatcom County Emergency Operations Center in Bellingham, WA. The exercise was sponsored by BP Oil, which has a pair of Alaskan oil terminals nearby at Cherry Point, WA, just 10 miles south of the Canadian border.

The Canadian Coast Guard-U.S. Coast Guard Joint Marine Pollution Contingency Plan exercise included about 80 invited participants such as the Environmental Protection Agency, Washington Department of Ecology, local jurisdictions such as Whatcom and San Juan counties, the Lummi Indian Nation, British Columbia Environment and Environment Canada (EC). The group was broken down into four categories based on level of involvement in the exercise: players, evaluators, observers and facilitators.

The exercise used the Joint Contingency Plan (JCP) established between the U.S., Canada and BP. The scenario involved the rupture of a 30-inch oil hose off loading Alaskan crude from a tanker, which dumps 20,000 barrels of oil into the water. Given pre-determined weather conditions, NOAA and EC modeling carried the spilled oil southwest into the U.S. San Juan Islands and Canada's southern Gulf Islands within a few days. The exercise explored the effectiveness of the contingency plan during the initial cross border response through questions designed to generate discussion of key topics and identify potential solutions and changes to the contingency plan. Recognizing the high visibility of this scenario in countries as well as internationally, the group tackled issues such as:

- ◆ Establishing Command Posts
- ◆ Developing a Common Operating Picture
- ◆ Identifying International Coast Guard Liaison Officers
- ◆ Setting up a Joint Information Center and Joint Unified Area Command
- ◆ Communicating to ensure consistent and accurate information was repeatedly provided

During the exercise, Andy and Ted highlighted NWS's ability to assist with these kinds of oil spill events and the use of IMETs. Ruth Yender of NOAA's Office of Response and Restoration in Seattle noted how NWS weather forecasts play a key role in oil spill modeling solutions and that the modeling is updated periodically throughout an event with fresh weather information and forecasts.



A look at all those gathered from both the U.S. and Canada for the Oil Spill Tabletop Exercise at the Whatcom Unified EOC in Bellingham, WA.

Decision Support: Oil Spill Exercise Tests NWS ICS Training

By [Alex Tardy](#), WCM, NWS San Diego, CA

Chevron Oil Company and U.S. Coast Guard sector San Diego held a 2-day full functional exercise simulating an oil spill a few miles off the coast of Oceanside, CA. A complete Incident Command Post was staged with Incident Command System procedures practiced during the 2 days.

The exercise was great live practice for three NWS staff members who had recently completed ICS 300 and 400 training: WCM Alex Tardy and Forecasters Cindy Palmer and Steve Harrison.

Alex provided a weather briefing at the Command and General Staff Meeting on Day 2, using actual weather to enhance the scripted weather scenario. The NOAA Office of Response and Restoration and Spatial Data Branch also attended to support the Environmental Response Management Application, which simulated the oil spill trajectories.

Over 100 other local, private and state partners took part including California Fish and Wildlife.



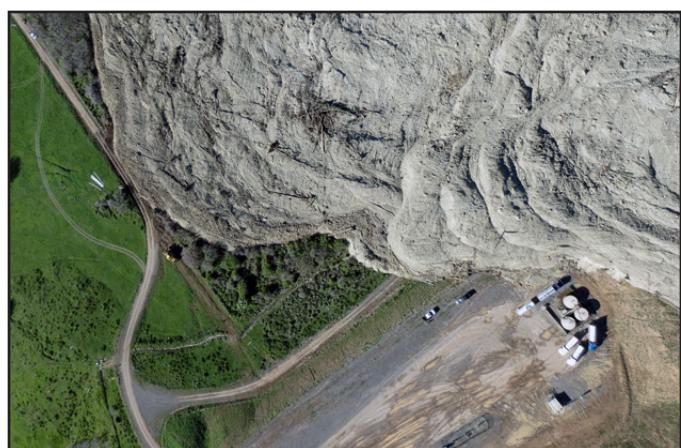
The Operations Section Chief briefs the Unified Command on the oil spill during the planning meeting.

Decision Support: NWS Tackles Massive Landslide in Western Colorado

By [Jim Pringle](#), WCM, NWS Grand Junction, CO

Shortly before 6 pm, MDT, on the evening of May 25, a landslide brought down about 30 million cubic meters of rock and soil from the Grand Mesa in Colorado. The slide, which occurred near the 10,000 foot level during the peak snowmelt period in western Colorado, traveled about 3 miles down the West Salt Creek drainage. Three ranchers are believed to be buried in the landslide, which deposited debris more than 100 feet deep along the slide path.

NWS Grand Junction supported the rescue effort by providing special spot forecasts for the landslide area at least twice daily through the first 11 days after the event occurred. NWS Service Hydrologist Aldis Strautins also provided technical assistance to EMs and other government officials at the site of the landslide.



The toe of the landslide impinged on farmland and gas wells. Photo by Mesa County, CO, staff.

As the rescue effort geared up, Aldis and WCM Jim Pringle served as information resource experts at the Emergency Operations Center, assisting the Incident Command Team (ICT). The NWS team held morning and afternoon weather forecast updates for the ICT. The NWS onsite team also offered tips on placing instrumentation, including a portable RAWS station and stream gauges.

Scientists consider the landslide area to be unstable, meaning another landslide could occur at any time. To further complicate matters, a small lake formed near the top of the slide behind a large slump block (landslide embankment dam), causing the water level behind the slump block to rise to potentially dangerous levels.

Aldis and Pringle preformatted flash flood warnings to ensure they could issue these products rapidly for three scenarios: additional landslides, a landslide

embankment dam breach, or heavy rainfall. Additionally, the NWS team coordinated with local officials on a preformatted Non-Weather Emergency Message in the landslide area should they need to issue an Evacuation Immediate warning message (EVI).

Finally, NWS Grand Junction worked with Mesa County EM Andy Martsolf on warning notification for residents in the landslide area and downstream. Pringle took part in two town hall meetings during which he discussed warning notifications for area residents. Subsequently, Mesa County distributed NOAA Weather Radios to residents living near the landslide area and placed receivers in a number of public facilities to help ensure local residents get flash flood warnings as quickly as possible.

Decision Support: Highway Personnel and Avalanche Forecasters

By [NWS Insider Staff](#), Silver Spring, MD

Relying on the Advanced Weather Interactive Processing System (AWIPS) digital forecast database, NWS forecasters in Anchorage, AK, will issue an experimental forecast product from November 2014–April 2015 that is key to providing decision support for avalanche forecasters and highway maintenance staff in an area south of Anchorage called Turnagain Arm.

Modeled after services provided by NWS Salt Lake City to its local avalanche forecasting partners, NWS Anchorage's Experimental Eastern Turnagain Arm Mountain Forecast provides temperature, precipitation and wind information to help the Chugach National Forest Avalanche Information Center staff issue daily avalanche forecasts. Plans are underway for a similar product for Thompson Pass, where a series of avalanches in late January blocked the only road to Valdez for nearly 2 weeks.

The Turnagain Arm is a waterway into the Gulf of Alaska, where mountains meet the ocean's edge, creating weather extremes. Situated in the world's northernmost rainforest, the community of Girdwood lies on the eastern edge of the Turnagain Arm and is home to Alyeska Resort, a ski area with an average snowfall of 650 inches at the mountain's peak. Nearby Turnagain Pass is a haven for snowmobilers, back-country skiers and other outdoor enthusiasts.

The Seward Highway along Turnagain Arm is a dangerous, winding stretch of road bordered by steep mountains on one side and the Alaska Railroad and Turnagain Arm on the other. The combination of heavy snowfall, rapidly-changing weather and steep terrain make this section of the highway prone to avalanches. Seward Highway is Alaska's only north-south corridor through south central Alaska so it is especially important for traffic logisticians to time road closures carefully.

Alaska Department of Transportation (DOT) staff plan to use artillery to clear snow prone to avalanches. The lead time before a snowstorm in mid-January helped the Alaska DOT plan artillery work at five locations along the Seward Highway, giving staff ample time to notify the public through roadside electronic message boards and the state's online Alaska 511 system.



*Clearing snow from the Seward Highway after an avalanche.
Photo by Terry Onslow, Alaska DOT*

Outreach Innovation: FEMA Grants Backs Tornado Safe Rooms

By [Jim Kramper](#), WCM, NWS St. Louis, MO

The construction of tornado safe rooms, primarily in schools and in some community centers, continues to spread across Missouri. The uptick in construction is due in part to a FEMA Mitigation Grant. The federal money pays 75 percent of the cost, with local authorities covering the remainder.

Two safe rooms are planned in the NWS St. Louis County Warning Area: one at the Orchard Farm School complex in St. Charles County and the other at Troy Buchanan High School in Lincoln County. The Orchard Farm

School District is planning a 7,700 -square-foot safe room to shelter as many as 1,200 people in part of its early childhood center. At Buchanan High School in Troy, the 12,600-square-foot safe room will be an addition to the high school and will also serve as a performing arts center and community meeting room. The shelter will hold about 1,800 people.

The safe room structures must be able to survive debris driven by 250 mph winds. Walls and the roof are made of precast concrete slabs and insulation, 14 inches thick. Any glass used for windows must be able to withstand a 2-by-4 propelled at it at high speed. All doors are steel and can be securely latched shut.

Since 2004 in Missouri, 58 safe rooms in schools or community centers have been built; an additional 86 are in the planning stages.



Gymnasium that is also a tornado safe room at the high school in Fair Grove, MO.

Outreach Innovation: NWS Works to Reduce Rip Current Fatalities

By [Alex Tardy](#), WCM, NWS San Diego, CA

NWS San Diego is working on ways to improve its rip current awareness program. To encourage participation, in May 2014, NWS San Diego Marine Program Leader Stephen Harrison, Observing Program Leader Noel Isla, and Meteorologist Intern Brett Albright visited the lifeguard agencies marine program at five southern California beach cities to award the lifeguards with certificates of appreciation.

The NWS Meteorological Development Lab (MDL) also presented two of the beach towns with awards for consistently reporting high quality rip current observations. The city manager at Huntington Beach and Fire Chief at Oceanside Beach attended the presentation to show support.

To further bolster its rip current program, WCM Alex Tardy visited 10 beach headquarters and EMs to distribute more than 120 rip current hazard metal signs supplied by a NOAA Sea Grant partnership.

The rip current observations are part of a joint project between the U.S. Lifesaving Association, NWS and the Sea Grant Rip Current Observation Project.

The observations are used daily by NWS forecasters to improve rip and surf forecasts. The information is also incorporated for more accurate prediction of high rip current activity days and as an aid when issuing High Surf Advisories and Beach Hazards Statements.

MDL uses the observations for its ongoing rip current prediction project and submits the reports daily to the publically available experimental Enhanced Data Display tool.



Award presentation to the City of Oceanside (starting in the back, from left to right): Steve Harrison, Bill Curtis, Darryl Hebert, Felipe Rodriguez, (front row from left to right): Emile Lagendijk, and Greg Trebbe.

Aware

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