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.

April 2014

Decision Support: Innovative Solution to Dust Storms

By Glenn Lader, Meteorologist, NWS Tucson, AZ

Drought and dust are nationwide problems but particular issues for the Southwest, where innovative solutions are beginning to surface. On March 19, the NWS offices in Phoenix and Tucson partnered with the Arizona Department of Transportation to host a dust storm workshop.

Blowing Dust is a significant societal issue in Arizona spanning many different disciplines and is also the third deadliest weather related phenomenon in Arizona, after heat and flooding. The highly travelled stretch of Interstate 10 between Phoenix and Tucson is especially vulnerable to dust and has been the site of numerous fatal accidents in the past 5 years.

A dust storm safety video can be found online at pullasidestayalive.org

Some highlights of the workshop included Phoenix Warning Coordination Meteorologist (WCM) Ken Waters demonstrating a low-cost, home-built dust detection system he hopes to deploy into a network placed in critical dust areas for early notification of dust events to local NWS offices.

Nathan Allen of Biosphere 2 discussed an innovative dust mitigation technique through a holistic approach using cattle to bring vegetation back to plots of land without irrigation. Allen hopes to build consensus among the stakeholders and the community at large on this approach to dust mitigation.

This year's workshop marked what has now become an annual gathering of 65 attendees from more than two dozen federal, state and local agencies including public safety, emergency management, air quality, agriculture, academia and the research community collaborating on the many different issues of blowing dust.

Decision Support: State Emergency Alert System Meeting Identified Key Issues

By Chris Foltz, WCM, NWS Great Falls, MT

Jennifer Viets, Montana Department of Justice discussing AMBER Alert program in Montana

Alerting the public to weather emergencies is a priority for NWS and its partners. On April 2, NWS Great Falls, MT, hosted a meeting to discuss the state's Emergency Alert System (EAS). The day-long event drew 30 attendees from the NWS Montana offices; the Montana Broadcasters Association; and local, county and state Disaster and Emergency Services.

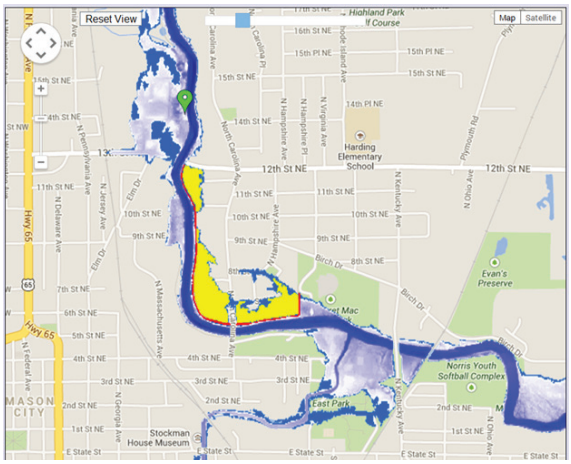
The morning was spent discussing the end-to-end path of an EAS message with a focus on identifying possible failure points. The group then turned to mitigation strategies. FEMA's Integrated Public Alert and Warning System (IPAWS) was a point of discussion throughout the day because Montana does not have a state point-of-contact. IPAWS would provide an alternative method for collaborative operating groups that want EAS alerting authority for non-weather emergency messages without having NWS directly involved.

The meeting included a conference call with Mike Szkil, NWS Headquarters Awareness Branch Chief, to delve further into HazCollect. Jennifer Viets, Montana Department of Justice AMBER Alert Coordinator gave a presenta-

tion on the sobering statistics with regard to child abductions and how critical EAS is for a successful recovery. Viets shared several recent AMBER alert success stories. The afternoon featured a planning sessions on the state's EAS plan, which has not been officially updated since 2005.

Decision Support: Inundation Mapping Enhances Decision Support

By Jeff Zogg, NWS Service Hydrologist, Des Moines, IA



With spring snowmelt on the way, on April 1, NWS added Flood Inundation Mapping Services for the Winnebago River at Mason City, IA. This addition reflects a partnership between the Iowa Flood Center, NWS Des Moines, NWS Central Region Headquarters, the NOAA Central Region Regional Collaboration Team and the Cerro Gordo County Emergency Management Agency.

The maps will help communicate the residual flood risks for areas behind the city's levee (yellow and red area on map) and Willow Creek, a tributary to the Winnebago River.

For other locations where Flood Inundation Mapping services are available, see the AHPS website.

Decision Support: NWS Partners with Fire Chief to Reduce Wildfires

By Alex Tardy, WCM, NWS San Diego, CA

The 9 am briefing gathers over 300 fire fighters and strike team leaders to hear the weather forecast and planning. Photo by Alex Tardy

Much of California is experiencing one of the worse drought conditions of this century and the warmest winter season on record for all of southern California. Fire behavior has been reported by veteran crews as extreme and persistent through the winter months. Due to three seasons of precipitation deficits coupled with just enough moisture for grasses to grow and cure, fire behavior analysts fear extreme wildfire growth and behavior in 2014. In the past 3 years, the mountains and foothills, which are most prone to severe wildfire potential, have received just 50 percent of normal precipitation.

To address this serious problem, the San Diego Fire Chiefs Association hosted the 12th annual San Diego County Wildland Preparedness Exercise in Alpine, CA, in early April. This exercise involved 32 agencies and over 300 individuals from state, county, city, tribal groups, the private sector and the military.

The drill included teams of fire fighters assigned to sections of the wildfire, and involved full hose laying and water use to simulate fire suppression during the multi-day period. Teams were able to request actual water drops from air support. Several full mobile unit command trailers were on site and equipped with communications such as 800 MHz and VHF, live weather monitoring and mapping software such as the Next Generation Incident Command System developed by the Massachusetts Institute of Technology.

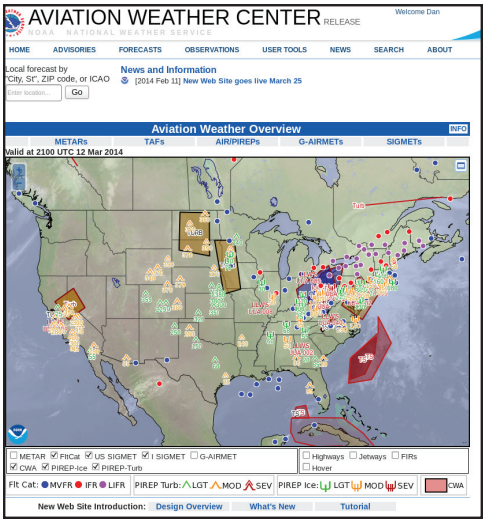
NWS San Diego staff were an integral part of the exercise conducted on private and tribal lands near scars of the mega wildfire, "Cedar," which scorched southern California in 2003. The area contained excessive fuel loading due to lack of fire activity since the 1970s.

The observed weather gave the firefighters a realistic practice when a weak Santa Ana wind developed on the last day of the exercise. In addition, temperatures reached the 80s on the third day of the event, bringing home the dangers of dehydration and other heat related impacts.

Outreach Innovation: Aviation Weather Center Upgrades Web Pages

By NWS Insider Staff, Silver Spring, MD

In late March, the NWS Aviation Weather Center rolled out a design refresh of its home page: www.AviationWeather.gov. This design refresh continues a phased effort to update the entire NWS web presence and to improve user access to information and services. This phase aims to improve content organization, navigation, look and feel, functionality, and usability of www.AviationWeather.gov, as well as to improve access from mobile devices. The upgrade echoes the NWS home page, weather.gov.



The refresh better organizes the menu and navigation structure, and web pages are unified under a consistent layout. AWC has preserved the legacy pages temporarily on the revamped site. The new sites offers:

- Consistent page layout
- Simplified URLs
- Elimination of pop-ups
- Consistent URL parameters
- Support for mobile devices
- OpenLayers GIS displays
- Plot decluttering through priority sourcing

The main page describes of improvements and provides tutorials on the new site. You can provide feedback directly to developers at http://new.aviationweather.gov/contact.

Caribbean/Atlantic and Pacific Tsunami Exercises Reach 200,000

By Christa VonHillebrandt, Manager, Caribbean Tsunami Warning Program

In conjunction with Tsunami Preparedness Week, almost 200,000 people across 31 Caribbean nations and 16 territories—four times more than in 2013—took part in two regional tsunami exercises in March.

On March 26, 2014, the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the U.S. National Tsunami Hazard Mitigation Program (NTWC) sponsored CARIBE WAVE and LANTEX. On March 27, the Pacific Region had its tsunami exercise, PACIFEX.

In the Atlantic, the scenario was a magnitude 8.5 earthquake off Portugal; in the Gulf of Mexico, the scenario was a submarine landslide triggering a magnitude 6.6 earthquake. In Alaska, the exercise involved a magnitude 9.1 earthquake and tsunami.

Evacuation exercise of school in Loiza, PR; part of CARIBE WAVE/LANTEX 2014 exercise on March 26, 2014

Participants included more than 1,400 local tsunami warning focal points, international, state, territorial and local EMs, schools, governmental agencies, businesses, health facilities, media and individuals. During the exercise, the Pacific Tsunami Warning Center, the NTWC and the Puerto Rico Seismic Network sent more than 31,500 emails to 2,000 CARIBE WAVE/LANTEX 14 subscribers. The event also was publicized on websites, in social media and text messages, via sirens and emergency alert radios. The exercise included drills, table top exercises, seminars, meetings and video and web posting, among other activities. PACIFEX was based on a hypothetical earthquake and tsunami worst case scenario for southern California. The exercise triggered simulated tsunami response activities in California communities from La Jolla in the south to Crescent City in the north. EMs conducted mock tsunami evacuations along with siren activations and public outreach activities throughout the region.

An Ounce of Flood Prevention After Super Storm Sandy

By George McKillop, Acting Chief, NWS Eastern Region Hydrologic Services Division

The northern coastal New Jersey borough of Manasquan experienced record flooding when the surge associated with Super Storm Sandy moved ashore on October 29, 2012. To help prevent future loss of life, NWS Mount Holly, NJ, unveiled a high water mark sign in Manasquan during NWS Flood Safety Awareness Week.

Some communities resist highlighting past flood events, but Manasquan subscribes to a different point of view. Manasquan officials know that living and vacationing near the ocean is normally a serene experience, but sometimes the water level goes up, and on rare occasions, deadly floods occur. High Water Mark signs in prominent places remind residents and visitors about the power of water and the need to stay prepared and informed.

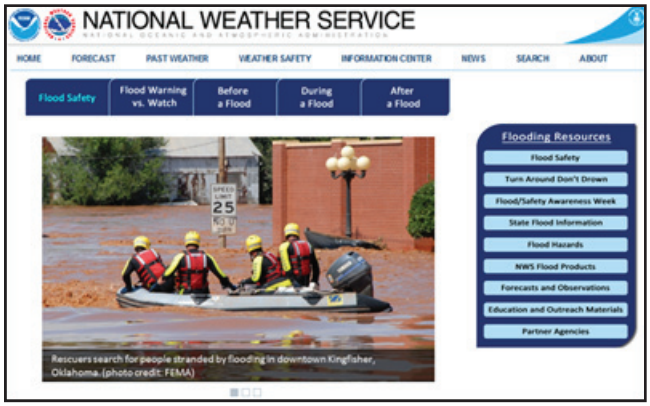
High Water Mark signs keep safety in the forefront.

This reality is especially evident at the Wood Real Estate Agency, where a High Water Mark sign indicating the maximum water level during Sandy makes customers aware of the natural cycles associated with living near the ocean.

Through the efforts of the Manasquan Office of Emergency Management Director Chris Tucker, the borough will post 25 high water mark signs in places such as bars, restaurants, stores and on utility poles. These signs will provide a reference point for future floods to help residents compare the forecast flood height with what occurred during Super Storm Sandy, helping them make informed decisions.

Outreach Innovation: Flood Safety Web Redesign Simplifies Site

By Katie Garrett, NWS Hydrologic Outreach, Training and Interagency Coordinator



Flood safety and preparedness information is now even easier to find on the NWS weather safety website. Safety information is online at www.weather.gov/safety. The floods page is the first of the NWS safety pages to be converted to the new layout. The other safety pages will soon follow suit.

The new webpage design features tabs at the top of the page that allow visitors to easily navigate the site. The tabs display information on what to do when in a specific hazardous weather situation and also provide a simple explanation for key weather messaging, such as the difference between a watch and a warning.

Each safety page also offers links to additional information about the specific weather hazard. The flood safety page links to forecast information, types flood hazards, and flooding information for each state. In addition, the flood site highlights the NWS Turn Around Don't Down campaign.

This new format, showcased in the flood safety site, offers the public one place to find safety information quickly and easily. The consistent format will take the work out of navigating NWS preparedness sites and also give each program room to customize elements to a specific topic.

Aware

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