

# Aware

Aware is published by NOAA's National Weather Service  
to enhance communications within the Agency  
and with the emergency management community.

Volume 3, July 2007

## Climate, Water, Weather

### Partners Weigh in on Wide Range of Issues

By Ron Gird, Outreach Program Manager  
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On June 20, NWS hosted about 50 constituents for its annual Partners Meeting in Silver Spring, MD. Attendees represented TV meteorologists, academia, private sector companies and government agencies. The meeting served as a forum for NWS to present information about planned service improvements to its enterprise partners and to solicit their feedback. Acting NWS Director Mary Glackin kicked off the event. Topics raised at the meeting included:

- Implementing Common Alerting Protocol into NWS products and services
- Need for NWS Partners to evaluate new experimental marine products
- Feasibility of adding hurricane graphical products to National Digital Forecast Database
- Including GOES-R and NPOESS satellite products in the requirements process for AWIPS II
- Enhancing the partnership with the emergency management community

On behalf of the partners, Jonathan Porter, Meteorologist/Programmer for AccuWeather, gave a presentation entitled, "Suggestions for Improvements in NWS Watch, Warning and Advisories."

NWS staff have developed a new Website to deliver news and information to its partners: [apps.weather.gov/partners/index.php](http://apps.weather.gov/partners/index.php). Visit this site to sign up for the NWS Partners mailing list, view presentations from past meetings and stay informed about changes to NWS information services.

NWS will hold its next NWS Partners meeting on January 24, 2008, as part of the American Meteorological Society meeting in New Orleans, LA. For registration information and an agenda for the next meeting, visit the NWS Partners Website this fall. ✱

### Top Leadership Changes at NWS

By Donna Ayres, Aware Editor  
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In June, Brig. Gen. David L. Johnson, USAF (Ret.), departed as NWS Director. General Johnson had served in that position since January 2004. Jack Hayes has been appointed to the NWS directorship effective September 2. Dr. Hayes previously held several executive positions in NOAA and most recently served at the World Meteorological Organization. Mary Glackin, NOAA's Assistant Administrator for

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Program Planning and Integration, is serving as Acting NWS Director until then. NWS Deputy Director John E. Jones, Jr., retired last month after 34 years of public service. Vickie Nadolski, Director of the NWS Western Region since 1999, is serving as Acting NWS Deputy Director until a permanent replacement is appointed.

As mentioned in the last issue of *Aware*, Office of Climate, Weather and Water Services (OCWWS) Director Dennis McCarthy retired the end of May. In early June, NWS welcomed James E. Hoke as Acting Director of OCWWS. Jim offers OCWWS his unique perspective and experience as Director of the Hydrometeorological Prediction Center. ✱

## Aviation

### Free Aviation Safety Tips Available in *The Front*

By Melody Magnus, Editor, The Front  
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The NWS Aviation Branch released a new edition of *The Front* in May. *The Front* offers aviation weather tips to pilots of private and commercial planes, balloons and other aircraft. NWS encourages pilots to download this free newsletter. Articles in the latest edition include:

- Crosswind Information Available at Fort Worth CWSU Website
- Getting to Know Your Automated Observing Station

To be notified when *The Front* is released, email [nws.postmaster@noaa.gov](mailto:nws.postmaster@noaa.gov). To download the May edition, go to [weather.gov/os/aviation/front.shtml](http://weather.gov/os/aviation/front.shtml). If you have article suggestions or comments, contact [Michael.Graf@noaa.gov](mailto:Michael.Graf@noaa.gov). ✱



## Disaster Management

### WFO Pocatello Assists in Regional HAZMAT Exercise

By Vernon Preston, WCM, NWS Pocatello, ID  
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On June 7, Incident Meteorologists (IMET) Jack Messick, Bob Survick and I took part in a regional Hazardous Materials (HAZMAT) exercise at the Union Pacific railroad yard in Pocatello, ID. A simulated accident with tanker cars and a disgruntled employee kept local and regional fire and response crews busy throughout the day-long exercise. NWS Pocatello IMETs gave a formal weather briefing to the command safety team in advance of the exercise and then provided simulated and real weather information during the event.

Due to rain in the area, wind direction had to be simulated. During the exercise, Messick and Survick conducted a formal review of office procedures for HAZMAT and similar events and made updates and corrections in their findings.

The IMETs used the Advanced Weather Interactive Processing System (AWIPS) computer Graphical Forecast Editor formatter system and the online spot-weather forecast request program to generate forecasts for the event. Based on feedback, they recommended that

the online spot-weather forecast request program have additional toggle links. This change would allow first responders to choose the type of event (Fire, HAZMAT, Search and Rescue, etc.) and then to choose from a preset list of weather forecast variables when requesting a spot forecast.

Everyone taking part in the simulated event said that they found it informative and useful. Local emergency crews expressed their appreciation for the forecast information during planning sessions as well as during the exercise. ✨

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## Forecast Office Staff Completes Hazmat Training

By Dan Bartholf, WCM, NWS Charleston, WV  
[Daniel.Bartholf@noaa.gov](mailto:Daniel.Bartholf@noaa.gov)

IMET Mark Pellerito and I recently completed the 40-hour HAZMAT technician training course with the Kentucky Area 9 HAZMAT/Weapons of Mass Destruction team. The course was held in Blaine, KY, and included lessons in identifying hazardous materials, levels of protection required and decontamination. We also took part in an exercise involving the possible leakage of phosgene, requiring the use of level A suits and self-contained breathing apparatus.

The Area 9 team covers 10 counties in eastern Kentucky from three locations. The training was conducted by Kentucky Emergency Management as well as members of the HAZMAT team. For more information on this HAZMAT training, contact me at the email above. ✨



*Dan Bartholf and Mark Pellerito suit up to be part of a HAZMAT program in Kentucky.*

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## NWS Participates in Major Federal and State Disaster Exercise

By Richard Okulski, WCM, NWS Memphis, TN  
[Richard.Okulski@noaa.gov](mailto:Richard.Okulski@noaa.gov)

NWS provides time critical, lifesaving weather information to key decision makers during weather and non-weather related disasters. This June, staff members from NWS Memphis had the opportunity to support federal, state and local emergency management and response agencies as they took part in a hazardous material spill and earthquake disaster exercise conducted once every 4 years.

The U.S. Coast Guard and Environmental Protection Agency simulated several HAZMAT spills in the Mississippi River related to a series of major earthquakes along the New Madrid seismic zone. I worked side by side with National Ocean Service employee Charlie Henry in support of these federal agencies. Charlie serves as a Regional Science Support Coordinator, the equivalent of an NWS IMET.

Forecasters Andrew Sniezak and Jonathan Howell worked side by side with state and local emergency managers in Memphis and Jackson, TN, as these responders worked through earthquake rescue, response and relief activities. These activities included simulated collapsed bridges, chemical fires and escaped zoo animals.

These exercises allowed the Memphis office to test amateur radio and satellite phone communications with emergency responders as well as portable laptop software needed for on-site weather support. NWS and our emergency management partners will integrate the lessons learned from this exercise into our office's emergency response plan should an actual major earthquake occur in the Mississippi River Valley. ✨

## Aware

NOAA's  
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Office of Climate, Water and  
Weather Services

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## Dissemination

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### HazCollect Overcomes Hardware Challenges, Launch Expected in Fall

*By Herb White, NWS Dissemination Services Manager  
and Steven Schofield, SAIC HazCollect Project Manager  
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NWS expects HazCollect to be available nationwide this fall through both the Disaster Management Interoperability Services (DMIS) Toolkit and the Disaster Management (DM) Open Platform for Emergency Networks (OPEN) Applications Program Interface. The NWS and the Department of Homeland Security (DHS) are now addressing the issues of program management responsibility transfer and IT consolidation. Due to a number of physical hardware moves and

resulting communications and staff changes this summer and early fall, the prudent course of action was to delay making HazCollect fully available.

NWS is also working with DHS to demonstrate the HazCollect interface needed for Commercial Off-the-Shelf and Government

Off-the-Shelf systems to interface with DM OPEN. To send Non-Weather Emergency Messages through HazCollect and other NWS systems, government and commercial incident management applications must interface with DM OPEN and be Common Alerting Protocol-enabled. DM OPEN enables secure data exchange for sharing emergency alerts or incident-related information through the use of standards-based messages. There is no charge for the use of these federal government interfaces.

Emergency managers may learn more about DMIS and DM OPEN by going to the DMIS Website at [www.dmi-services.org/](http://www.dmi-services.org/) and the DM OPEN Special Interest Group website at [www.emforum.org/OPEN/](http://www.emforum.org/OPEN/). Later this year, NWS will update [www.weather.gov/os/hazcollect/](http://www.weather.gov/os/hazcollect/) with information on how to register for HazCollect. ✨

**HAZ-Collect**   
*speeding emergency messages to the public*

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### EMWIN Establishes Test Broadcast on GOES 10

*By Bill Johnson, NWS Office of the Chief Information Officer  
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The last few months have been busy for the Emergency Managers Weather Information Network (EMWIN) service. EMWIN staff have been working on several exciting developments. The EMWIN team, in coordination with NWS International Affairs staff, has been preparing for Phase 2 of the EMWIN training for Caribbean nations. This project, part of the White House Third Border Initiative, supplies current generation EMWIN systems and training to the Met and Emergency Management Services for several Caribbean nations. The Phase 2 round of training began July 16 at NWS Headquarters in Maryland. Representatives from the Bahamas, Belize, Guyana, Haiti, Jamaica, Suriname and the Dominican Republic attended. If needed, NWS may hold additional training sessions.

EMWIN staff have excellent news regarding EMWIN-N test broadcasts. The NWS EMWIN team, working with the National Environmental Satellite and Data Information Service (NESDIS), have set a test broadcast on the GOES 10 satellite that will have the same modulation scheme, coding

and data rate as the EMWIN-N broadcast from GOES 13. This will enable vendors to test their receive system designs after adjusting for a frequency difference, which is needed to avoid interference with the GOES East and West broadcasts. Allowance must also be made for a difference in power; however, the signal-to-noise ratio should closely approximate that which will be available on GOES-13. The broadcast will be available at least until November 2007, and requests may be made for extensions in 6-month increments. Details for acquiring the broadcast from GOES 10 are available on the EMWIN Website. At least two vendors are known to be working on EMWIN-N receiver equipment. The availability of the GOES-10 test signal should aid in the development process.

In addition, GOES 13 (formerly GOES-N) was scheduled to be brought out of storage for a 30-day test on or about July 17. This will give prospective vendors an excellent opportunity to develop and test EMWIN-N receive systems. An EMWIN-N broadcast should be available for much of the 30-day test period. This will present vendors interested in producing EMWIN-N equipment an opportunity to test their systems under the most realistic conditions, with a broadcast directly from the satellite.

To keep abreast of new developments in the EMWIN transition, including details about acquiring the broadcast from GOES 10, please visit the NWS EMWIN Website at: [www.weather.gov/emwin/index.htm](http://www.weather.gov/emwin/index.htm). \*



GOES Satellite

## Flood Safety

### NWS and FEMA Release New Flood Safety Brochure

By Donna Ayres, Aware Editor  
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NWS, in partnership with the Federal Emergency Management Agency (FEMA), recently created a new flood safety publication entitled *Flood Preparation and Safety*. The tri-fold brochure was done in partnership with FEMA's FloodSmart initiative, whose Website, [www.floodsmart.gov](http://www.floodsmart.gov), is an official site of the National Flood Insurance Program. The new brochure highlights actions which should be taken before and during a flood as well as how to establish an emergency plan. The brochure is available for download at: [www.weather.gov/os/water/ahps/Ahps-resources.shtml](http://www.weather.gov/os/water/ahps/Ahps-resources.shtml) \*



### NWS Works with Partners for Improved Flood Forecasts

By David Nicosia, WCM, NWS Binghamton, NY  
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Recently, flood inundation mapping and new rain and river gauges were purchased with funding secured by New York State Senator Tom Libous and with guidance from both the Susquehanna River Basin Commission and NWS Binghamton. The flood mapping will help local emergency management officials coordinate flood evacuations. The new river and rain gauges will help improve river and flood forecasts provided by NWS Binghamton.

At a press conference held by Senator Libous, I highlighted the needs for these maps and discussed the importance of these new technologies for NWS river and flood forecasts and how

these resources will give local emergency management more time to respond. These purchases were part of an initiative spawned by the record floods that devastated the Binghamton area in June 2006. The press conference took place June 26, 2007, the anniversary of the June 2006 floods. ✱

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## New Turn Around Don't Drown Warning Sign DOT Compliant

By Larry Wenzel, NWS Hydrologic Services Branch  
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The Turn Around Don't Drown™ Campaign moved into the fast lane when the Department of Transportation's (DOT), Federal Highway Administration (FHWA) agreed to a new warning sign. The yellow Turn Around Don't Drown™ (TADD) warning sign is DOT compliant and can be placed officially on the nation's highways. The TADD Warning Sign should be put up at locations where:

- Incidence of flooding is high
- Onset of flooding is rapid
- Flooding occurs in isolated locations

This sign serves as a valuable, lifesaving complement to the jointly developed FHWA-sanctioned fluorescent pink TADD Incident Sign. For details on producing these signs, go to: [www.weather.gov/os/water/tadd/road\\_signs.shtml](http://www.weather.gov/os/water/tadd/road_signs.shtml). NWS encourages local agencies to order and deploy these new Warning Signs. ✱



## Marine and Tropical News

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### Marine and Coastal Weather Services Releases New Products

Therese Pierce, Branch Chief, Marine and Coastal Services Branch Chief  
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The last several months have seen a lot of activity in the Marine and Tropical Cyclone Programs. On May 31, two marine National Digital Forecast Database (NDFD) elements became operational: Significant Wave Heights, issued by NWS Weather Forecast Offices, and Tropical Cyclone Wind Speed Probability Forecasts.

Additionally, two new products became effective on June 1: Tropical Cyclone Extreme Wind Warning and Coded Tropical Cyclone Watch Warning.

The NWS Ocean Prediction Center and Tropical Prediction Center, Tropical Analysis and Forecasting Branch issued an experimental Significant Gridded Wave Heights into AWIPS. In late July and August, two more products will become experimental: the Tropical Cyclone Hazards Graphic and Marine Weather Warning.

The Marine and Coastal Weather Services Branch also coordinated an usually large number of marine zone changes that will take effect this fall. These changes will affect marine zones

for WFOs Monterey CA, Caribou ME, Portland ME, Melbourne FL, Anchorage AK and all 11 Great Lakes NWS offices. In addition to changes in the Great Lakes marine zones, NWS will begin offering a segmented Great Lakes Open Lakes forecast on October 2, 2007.

Finally, the Branch helped coordinate several changes in the Tsunami Program. Puerto Rico and the Virgin Islands were incorporated into the West Coast/Alaska Tsunami Warning Center's Area of Responsibility on June 14, and the greater Caribbean, Indian Ocean and the South China Sea were incorporated into the Pacific Tsunami Warning Center's Area of Responsibility on June 27. More information on these changes is provided in the following articles. ✱

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## Two Marine NDFD Elements Become Operational

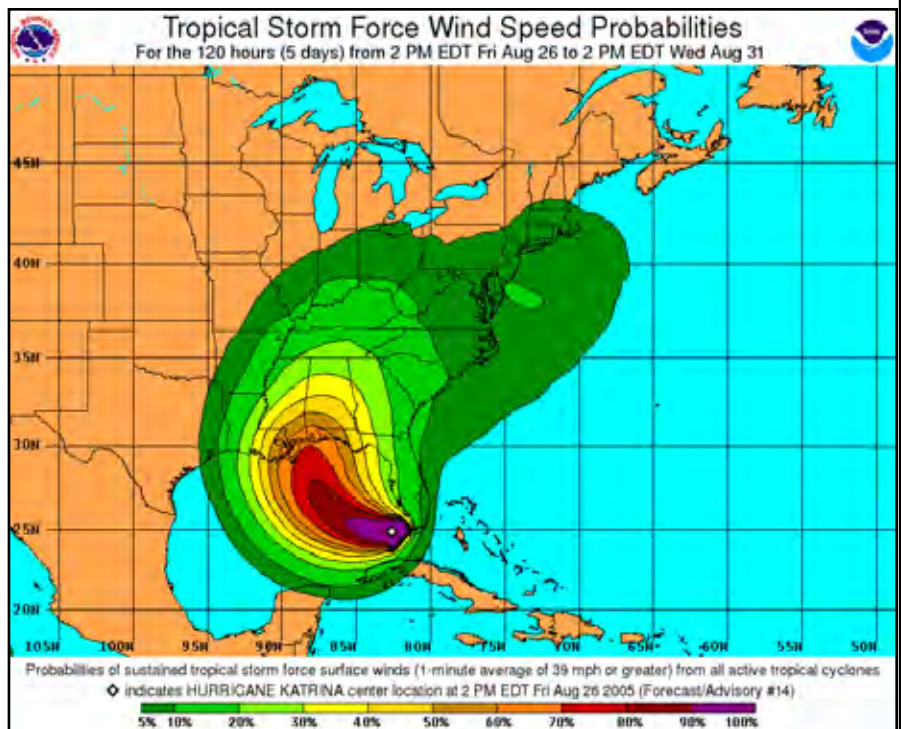
By Mark Tew, NWS Marine Services Program Leader  
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On May 31, NWS declared two NDFD marine elements operational. The first, Significant Wave Heights, is available for the contiguous U.S. (CONUS), 16 pre-determined CONUS subsectors, Puerto Rico, the Virgin Islands, Hawaii and Guam.

The second NDFD marine element, Tropical Cyclone Surface Wind Speed Probability Forecast, provides gridded forecasts for tropical cyclone surface wind speed probabilities. The element is available through 120 hours at 6 hourly intervals with a 5 kilometer spatial resolution. These forecasts are provided for three wind speed thresholds: 34, 50 and 64 knots. The two types of wind speed probabilities provided are cumulative and incremental.

Definitions of these probabilities are available on the National Hurricane Center Website at: [www.nhc.noaa.gov/aboutnhcprobs.shtml](http://www.nhc.noaa.gov/aboutnhcprobs.shtml)

The status of NDFD element is online at: [www.weather.gov/ndfd/resources/NDFD\\_element\\_status.pdf](http://www.weather.gov/ndfd/resources/NDFD_element_status.pdf). ✱



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## New Experimental Marine Weather Warning Bulletin Available This Summer

By Mark Tew, NWS Marine Services Program Leader  
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In August 2007, seven WFOs will start issuing experimental Marine Weather Warning (MWW) bulletins. The MWW is intended to better inform mariners of adverse marine weather hazards and serve as a dedicated long duration marine Watch, Warning and Advisory product.

Currently, marine warnings and advisories are issued through headlines and Valid Time Event Code (VTEC) strings contained in the Coastal Waters Forecasts (CWF), the Nearshore

Marine Forecasts (NSH) and the Great Lakes Open Lake Forecast (GLF). The MWW provides the marine community with vital marine hazard information with more specificity. The MWW is patterned after the Winter Storm Warning and the Non-Precipitation Warning bulletins. Products included in the new MWW are:

- Hurricane/Tropical Storm Watch/Warning
- Hurricane Force Wind Watch/Warning
- Storm Watch/Warning
- Gale Watch/Warning
- Hazardous Seas Watch/Warning
- Heavy Freezing Spray Watch/Warning
- Small Craft Advisory
- Low Water Advisory
- Low Visibility (i.e., fog, volcanic ash, smoke)

The seven offices issuing this new product include:

- Buffalo, NY
- Caribou, ME
- Detroit/Pontiac, MI
- Honolulu, HI
- Medford, OR
- Mobile, AL
- Tampa Bay, FL

NWS will conduct an operational test and evaluation (OT&E) in August and September. If the OT&E is successful ( $\geq 95\%$  error free products), after considering user input received during the experimental period, NWS will determine whether to approve the product as operational. The goal is to implement the MWW at most coastal and Great Lakes WFOs by fall 2008.

If successful, this project will serve as a prototype for the transfer of field software development into the AWIPS baseline. The MWW formatter was developed by the Science and Operations Officer at WFO Detroit. For more information on the MWW, go to: [products.weather.gov/PDD/MWW\\_PDD.pdf](http://products.weather.gov/PDD/MWW_PDD.pdf). ✱

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## **New Experimental Tropical Cyclone Graphics Available This Hurricane Season**

*By Timothy Schott, NWS Tropical Cyclone Program Meteorologist  
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Starting July 16, NWS forecasters in eight coastal offices began providing experimental tropical cyclone hazard graphics to assess projected impacts of a tropical cyclone in their area of responsibility. This multi-year development effort involves the use of gridded data from the National Centers. WFOs providing the experimental Tropical Cyclone Hazards Graphics include:

- Jacksonville, Melbourne and Miami, FL
- Morehead City and Wilmington, NC
- Charleston, SC
- Corpus Christi, TX
- Wakefield, VA



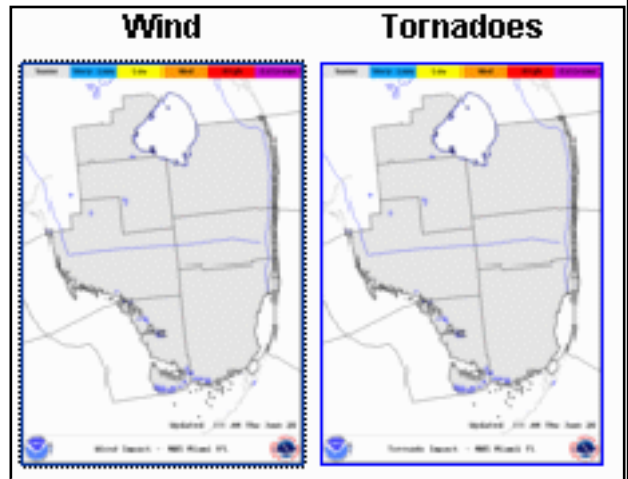
This tropical cyclone graphics will depict four hazards:

- Wind
- Tornadoes
- Coastal flooding
- Inland flooding

Staff at participating WFOs will generate these experimental products when the National Hurricane Center issues a tropical cyclone watch or warning for the WFO's area of responsibility. These four graphics, along with a description, static examples, WFO-specific definitions and a link to a user survey, are posted online at: [www.weather.gov/os/tropical/](http://www.weather.gov/os/tropical/)

Please check the Website when tropical cyclones are forecast to impact the Corpus Christi, TX, area or the Eastern Seaboard from NWS Miami, FL, northward through NWS Wakefield, VA.

The NWS issued a Public Information Statement on July 6. This statement is online at [www.weather.gov/os/notif.htm](http://www.weather.gov/os/notif.htm). ❄



*Two of the four hazards included in the new suite of tropical cyclone graphics are depicted above.*

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## Format and Zone Changes Due This Fall for Great Lakes Marine Services

By Richard May, NWS Marine Services Program Meteorologist  
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On October 2, 2007, the five NWS offices issuing Great Lakes Open Lake Forecasts (GLF) will change the product from a non-segmented format to a segmented one. The offices affected are NWS Marquette, Chicago, Detroit, Cleveland and Buffalo.

The segmented GLF will allow these WFOs to be more area-specific in their Open Lake Forecasts. For example, NWS will replace the current GLF divisions, such as NORTH HALF, with smaller, more precise open lake marine zones grouped in segments by similar weather conditions. This arrangement is similar in format to the Great Lakes Nearshore Marine Forecast, another segmented product.

Examples of the current Open Lake Forecast and the new format, effective October 2, are posted at: [www.weather.gov/os/notification/resources/glf.pdf](http://www.weather.gov/os/notification/resources/glf.pdf).

Also effective October 2, as part of the change to the segmented format, all 11 WFOs providing Great Lakes marine services will make changes to marine zone boundaries, marine zone names, Universal Geographic Codes (UGC) and UGC formats. These WFOs are Duluth, Marquette, North Central Lower Michigan (Gaylord), Detroit, Green Bay, Milwaukee, Chicago, Northern Indiana, Grand Rapids, Cleveland and Buffalo. The products affected by these changes to marine zone boundaries, marine zone names, UGC and UGC formats are:

- Great Lake Open Lake Forecast (GLF)
- Nearshore Marine Forecast (NSH)
- Coded Port Forecast (CPF)
- Hazardous Weather Outlook (HWO)
- Watch County Notification (WCN)
- Special Marine Warning (SMW)
- Marine Weather Statement (MWS)

For more information about these format and zone changes, see Service Change Notices 07-38 and 07-39 posted online at: [www.nws.noaa.gov/om/notif.htm](http://www.nws.noaa.gov/om/notif.htm). ❄

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## NWS Supports Homeland Security Maritime Operation

By Roger Erickson, WCM, NWS Lake Charles, LA  
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On June 21, the U.S. Coast Guard and Calcasieu Parish Sheriff's Office conducted a multi-agency maritime law enforcement operation along the Intracoastal Waterway in southwest Louisiana. Ten boats and K-9 explosive units were used in this operation, involving more than 50 law officers.

WFO Lake Charles provided detailed hour-by-hour forecasts to this interagency group via the "Spot Request" link on its Fire Weather Website. In all, 27 vessels were stopped on the Intracoastal Waterway between Lake Charles and Cameron, LA. After checking for illegal aliens, terrorists and criminals, one arrest was made. ❄

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## NWS Backs Coast Guard After Barge Collision Offshore

By Roger Erickson, WCM, NWS Lake Charles, LA  
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NWS supported U.S. Coast Guard operations for a barge collision near the Cameron, LA, jetties on June 7. From June 8-24, NWS Lake Charles prepared and disseminated nearly 40 spot forecasts to assist the Coast Guard. Lake Charles staff prepared specialized forecasts two or three times a day, depending on the recovery work scheduled. When daily thunderstorms started to develop, staff called the Coast Guard to warn them of the lightning and high wind and seas dangers.

Lt. Bryan Markland of the Marine Safety Unit for the Coast Guard in Port Arthur, TX, acknowledged the WFO's efforts: "Your accurate, twice-daily spot forecasts have been an incredible help during the last few weeks since this operation started. Thank you very much for your outstanding support of Coast Guard operations. Once again you have proven the Lake Charles Weather Office is committed to quality, timely and accurate products that provide critical support to operations in the marine environment. Please pass my sincere appreciation to all on your team." ❄

## Severe Weather/Lightning

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## New Website Developed for Texas Severe Weather Awareness Week

By Brian LaMarre, WCM, NWS Lubbock, TX  
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Following the 2006 Annual Texas Governor's Division of Emergency Management (GDEM) Conference in San Antonio, TX, Warning Coordination Meteorologists (WCM) serving Texas counties met to discuss new ways to provide severe weather awareness and preparedness information to partners. NWS Lubbock staff volunteered to lead the state effort in developing an All-Hazards Website, which was showcased, in March, during the Texas Severe Weather Awareness Week.

The NWS Lubbock Web services team, consisting of forecasters Mark Conder and Gary Skwira, developed a "one-stop-shop" online resource for awareness and preparedness information. The Texas GDEM recognized the team's efforts in developing the Website for

Texas residents and visitors and links to it from the GDEM Severe Weather Awareness Week page.

The Website represents an extensive collaborative effort among 13 NWS offices in Texas, New Mexico, Oklahoma and Louisiana, all of which provide services for counties in Texas. You can access the Texas Severe Weather Awareness Week Website at: [www.weather.gov/lubbock/safety/swaw/](http://www.weather.gov/lubbock/safety/swaw/) \*

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## Partnerships with Local Emergency Management and Media Help Promote Texas Weather Safety

By Brian LaMarre, WCM, NWS Lubbock, TX  
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Severe weather awareness and preparedness information is essential for effective public response. The NWS Lubbock office partnered with the City of Lubbock's Director of Emergency Management to promote preparedness information before and during the severe weather season across West Texas. Through this partnership, I teamed with Lubbock Director of Emergency Management Kevin Overstreet to develop a series of outreach campaigns for the public.

The first campaign included a 30-minute media special hosted by the Lubbock City Council's Chief of Staff, which aired on public-access television throughout spring 2007. The second campaign promoted the importance of NOAA Weather Radio All Hazards for receiving severe weather warnings from the National Weather Service—day or night.

One segment of this campaign involved the development of a professional commercial funded by a grant obtained by the city of Lubbock. The commercial was filmed in the NWS Lubbock operations center and aired during the prime time programming on Lubbock's four TV affiliates. As mentioned in the commercial, "*It only takes one storm to change your life forever!*" You can view the commercial from the NWS Lubbock Website at: [www.srh.noaa.gov/lub/images/nwr/video/nwr\\_promo\\_2007.wmv](http://www.srh.noaa.gov/lub/images/nwr/video/nwr_promo_2007.wmv) . \*

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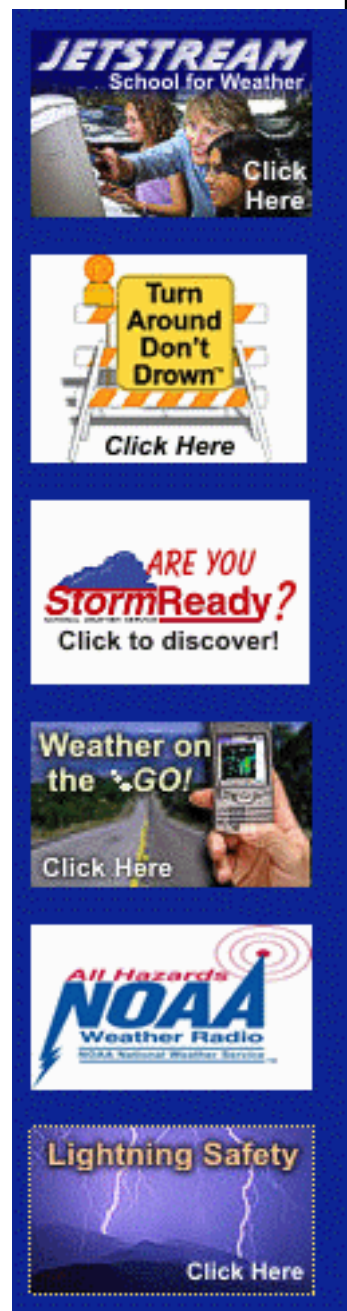
## Lightning Safety Targets Kids in 2007

By Melody Magnus, Aware Editor  
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The 2007 Lightning Safety Campaign is targeting kids with an engaging new mascot, Leon the Safety Lion. Leon is offering simple messages to kids through two posters: the first targeting soccer and other outdoor games and the second aimed at pools and other water sports. The campaign is also offering Leon stickers, a coloring sheet and Public Safety Announcements featuring Leon. The character was developed by the Lightning Safety Alliance in conjunction with NWS and its broad-based Lightning Safety Team.

With the lightning season only just beginning in most of the country, there have already been 19 deaths this year and many times that number of injuries. All the fatalities took place outdoors. Many of the injuries occurred indoors while on a corded phone (cell phones are considered safe) or computer, connected to other electronic devices or while taking showers, washing dishes or otherwise coming in contact with plumbing. According to the National Lightning Safety Institute, 9 of 10 people struck by lightning survive, but a fourth of them suffer long-term trauma. Injuries vary from severe burns to cardiac-related problems, brain damage and organ failure.

Initial reaction to the new lightning mascot has been enthusiastic. The National Fire Protection Association was so impressed that it has proposed a "play date" with its mascot "Sparky" to enhance public awareness of both dangers.





Leon the Lightning Lion offers safety tips via pool and soccer posters, stickers and Public Service Announcements.

Lightning Safety Week is the last full week of June, the start of the peak summer outdoor season when so many victims are struck. The campaign continues all year with continuous outreach efforts geared toward reducing the number of victims.

Limited copies of all of these public outreach tools are available for NWS Warning Coordination Meteorologists. You can find your closest WCM at the following link: [www.stormready.noaa.gov/contact.htm](http://www.stormready.noaa.gov/contact.htm). ❄

## Lightning Safety Gains Audience by Setting Up Awareness Booth on Monument Circle

By Joseph Nield, Meteorologist, NWS Indianapolis, IN  
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To highlight Lightning Safety Awareness Week, WFO Indianapolis meteorologists Sally Pavlow, Jason Puma and I recently staffed a Lightning Safety Awareness booth on downtown Indianapolis's famed Monument Circle. We strategically placed our booth in front of the local WIBC radio studio.

We handed out lightning safety literature, posters and magnets, as well as golf tees stamped with the message "Lightning Kills! Play It Safe!" and the weather.gov Web address. Hundreds passed by the booth, especially during midday when many downtown workers were out enjoying lunch on the sunny day. Many passersby stopped to ask questions, take literature and posters, and share their lightning or other weather-related stories with the meteorologists.

During the popular noon news hour, WIBC sent a reporter out to the sidewalk to discuss lightning safety with me. This event was a first for us; we were extremely pleased with how well received we were by the public, Indianapolis city government and WIBC. ❄

## StormReady/TsunamiReady

### St. Louis's Busch Stadium Declared StormReady Supporter

By James Kramper, WCM, NWS St. Louis, MO  
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Busch Stadium, home of the 2006 World Series Champion St. Louis Cardinals, was declared a StormReady Supporter during an on field ceremony June 18. Making the presentation to Joe Abernathy, Vice President, Stadium Operations, were NWS St. Louis Meteorologist-In-Charge Steve Thomas and myself, the NWS St. Louis WCM. StormReady Supporters are local entities that promote the principles and guidelines of the StormReady program into their severe weather safety and awareness plans.

Busch Stadium is the first venue in Major League Baseball to achieve StormReady Supporter status. The push to become StormReady started after a severe thunderstorm hit the stadium right before the opening pitch of the July 19, 2006, game. A reported 35 people suffered minor injuries from the storm.



Busch Stadium in St. Louis, MO, becomes a StormReady Supporter in June 2007. Pictured from left are MIC Steve Thomas, WCM Jim Kramper, Cardinals Fredbird and Vice President of Stadium Operations Joe Abernathy.

Although the Cardinals already had a strong emergency operations plan in place, they recognized the need for even better preparation. Before the start of the 2007 season, the Cardinals worked with the NWS St. Louis staff to make improvements, leading to the StormReady Supporter designation. ✱

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## StormReady Continues to Get Smarter, Larger

By Melody Magnus, Aware Editor  
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Florida Emergency Managers enrolled two more universities into the StormReady program this spring: Florida State University in Tallahassee and Eckerd College in St. Petersburg. Florida has the highest lightning strike rate in the nation and some of the most dangerous weather, with hurricanes and thunderstorms regularly occurring. State Emergency Managers have recognized the need for increased safety by working to become the largest state to have every county StormReady, an enormous accomplishment. South Carolina is close behind with just one county left to go. Delaware, Hawaii and Guam have 100 percent of counties StormReady. Hawaii and Guam are also 100 percent TsunamiReady status.

In all, the StormReady program gained another 33 sites just since April 1. Idaho enrolled a record 14 sites since April, bringing its record setting total to 139 StormReady locations, the most in any state. The Idaho total includes the NOAA Air Resources Laboratory, Field Research Division, which joined this spring.

The StormReady program had more than 1,200 sites by July 2007. For more information or to see if your community is StormReady or TsunamiReady, go to [www.noaa.stormready.gov](http://www.noaa.stormready.gov). ✱



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## Online Summer Awareness Resources

For severe weather and hurricane awareness brochures, booklets and state awareness event links, go to [www.weather.gov/os/severeweather/index.shtml](http://www.weather.gov/os/severeweather/index.shtml) and [www.weather.gov/os/hurricane/index.shtml](http://www.weather.gov/os/hurricane/index.shtml). ✱

### Climate, Water and Weather Links

Aviation Weather:	<a href="http://www.aviationweather.gov/">www.aviationweather.gov/</a>
Brochures/Booklets/Posters:	<a href="http://www.weather.gov/os/brochures.shtml">www.weather.gov/os/brochures.shtml</a>
Education/Outreach:	<a href="http://www.weather.gov/os/edures.shtml">www.weather.gov/os/edures.shtml</a>
Flooding/Water:	<a href="http://www.floodsafety.noaa.gov/">www.floodsafety.noaa.gov/</a>
Hurricane Awareness:	<a href="http://www.weather.gov/om/hurricane/index.shtml">www.weather.gov/om/hurricane/index.shtml</a>
Lightning Safety:	<a href="http://www.lightningsafety.noaa.gov/">www.lightningsafety.noaa.gov/</a>
Marine Weather:	<a href="http://www.weather.gov/os/marine/home.htm">www.weather.gov/os/marine/home.htm</a>
MIC/WCM/SOO/DOH List:	<a href="http://www.weather.gov/os/wcm-soo.pdf">www.weather.gov/os/wcm-soo.pdf</a>
Natural Hazards Statistics:	<a href="http://www.weather.gov/os/hazstats.shtml">www.weather.gov/os/hazstats.shtml</a>
National Digital Forecast Database:	<a href="http://www.weather.gov/ndfd/">www.weather.gov/ndfd/</a>
NOAA Weather Radio Information:	<a href="http://www.weather.gov/nwr/">www.weather.gov/nwr/</a>
Past Weather/Climate:	<a href="http://lwf.ncdc.noaa.gov/oa/ncdc.html">lwf.ncdc.noaa.gov/oa/ncdc.html</a>
Rip Current Awareness:	<a href="http://www.ripcurrents.noaa.gov/">www.ripcurrents.noaa.gov/</a>
StormReady Home Page:	<a href="http://www.stormready.noaa.gov/">www.stormready.noaa.gov/</a>
Severe Weather Safety:	<a href="http://weather.gov/os/severeweather/index.shtml">weather.gov/os/severeweather/index.shtml</a>
Tsunami Information:	<a href="http://www.tsunami.gov">www.tsunami.gov</a>