

PRODUCT DESCRIPTION DOCUMENT

2017 Updated to Include Changes to Hurricane/Typhoon Local Statement at Honolulu

Approved:
Andrew Stern
Director, Analyze, Forecast and Support Office

Date:

Hurricane/Typhoon Local Statement **Updated to include changes for 2017 for Honolulu**

Part I - Mission Connection

- a. Service Description – The Hurricane/Typhoon Local Statement (HLS) is issued by Weather Forecast Offices (WFOs) when their area is threatened by a tropical or subtropical cyclone. The HLS contains specific details for a WFO's county warning area on tropical cyclone wind watches/warnings in effect, meteorological hazard and impact information, meteorological conditions, and precautions necessary to protect life and property.

The following changes to the HLS were implemented for the 2015 hurricane season (for the Atlantic Hurricane basin only):

- 1) HLS became a non-segmented product - No Universal Geographical Code (UGC).
- 2) Valid Time Event Code (VTEC) was removed from the HLS.
- 3) HLS production was changed to cover land areas only.

In Pacific Region, WFO Honolulu will adopt these same changes to their HLS for the 2017 tropical cyclone season.

There will be no change in the HLS format for Western Region and for other WFOs in Pacific Region. Tropical cyclone watches and warnings for marine zones are issued in the Marine Weather Warning Product (MWW).

- b. Purpose – The HLS is an event-driven product to alert the public, media, and local decision makers of potential or actual storm effects due to tropical or subtropical cyclones. It is intended to provide information to assist in the preparation and implementation of necessary precautions for the protection of life and property, as well as to minimize the economic losses as a result of tropical cyclones.
- c. Audience – The target audiences for this product are the federal, state and local emergency management agencies, the general public, and the media.
- d. Presentation Format – text.
- e. Feedback Method – Feedback may be provided via electronic survey at:
<http://www.nws.noaa.gov/survey/nws-survey.php?code=HNLHLS>

Comments may also be sent to the Tropical Program Lead:

Jessica Schauer
National Weather Service
Tropical Program Leader, Marine, Tropical and Tsunami Services Branch
National Hurricane Center

11691 SW 17th Street
Miami, FL 33165
Telephone: 305-229-4476
Email: Jessica.Schauer@noaa.gov

Questions on this enhancement to the operational HLS may be addressed to:

National Weather Service
Attn: Wayne Presnell
Marine, Tropical and Tsunami Services Branch
1325 East-West Highway, Room 13178
Silver Spring, MD 20910-3280
wayne.presnell@noaa.gov
301-427-9390

No feedback was received during the comment period.

Part II - Technical Description

- a. Format & Science Basis - The product type line options are Hurricane (Name) Local Statement, Typhoon (Name) Local Statement, Tropical Storm (Name) Statement, Tropical Depression (Number) Statement, Subtropical Storm (Name) Local Statement. The HLS contains watch/warning information, hazard and impact information, and meteorological information in text format.

The HLS is issued in the following format:

- 1) Southern and Eastern Region (**operational in 2015**) – Non-segmented with no VTEC. Product contains sections on; new information, situational overview and potential impacts.
 - 2) Western and Pacific Region –
 - a. WFO Honolulu will issue HLSs in the same format as Southern and Eastern Region.
 - b. For Western Region and WFO Guam, the first portion will contain an Overview Block with one or more section headers. The Overview Block will be followed by segments providing VTEC. The phenomena codes associated with the HLS are: HU – hurricane, TY – typhoon and TR – tropical storm.
 - 3) America Samoa and Samoa – When tropical cyclones threaten the Samoas, the two local offices will coordinate with Regional Specialized Meteorological Center Nadi, the Central Pacific Hurricane Center, and with each other to determine the best integrated and internally consistent forecast of conditions expected in the area. In particular case the HLS will be a free formatted text product as the capabilities for a segmented VTEC product do not exist for those offices.
- b. Product Availability - When tropical cyclone watches or warnings are in effect the HLS will be disseminated at a minimum of every six hours though they can be issued more frequently depending upon the situation. Typically, the HLS becomes more frequent as the storm nears the coast. The product is made available via various means, such as: the

Internet, National Oceanic and Atmospheric Administration Port (NOAAPort), NOAA Weather Radio all Hazards, and the NOAA Weather Wire.

- c. Additional Information- A full description of other NWS Tropical Cyclone Program products is provided in NWS Instruction 10-601, which is available at: <http://www.nws.noaa.gov/directives/sym/pd01006001curr.pdf>

Example of a HLS from WFO Honolulu

WTHW80 PHFO 152206
HLSHFO
HIZ001>028-152215-

HURRICANE MADELINE Local Statement advisory number 20
National Weather Service Honolulu HI ep142016
602 am HST Thu Dec 15 2016

This product covers the Hawaiian Islands

...Dangerous Hurricane Madeline tracking westward towards
Hawaii...

New information

* Changes to Watches and Warnings:

- None

* Current Watches and Warnings:

- A Hurricane Warning remains in effect for Kona...south Big Island...Big Island north...east...Kohala and Big Island interior and Big Island summits
- A Tropical Storm Watch remains in effect for Molokai windward...Molokai leeward...Lanai Makai...Lanai Mauka...Kahoolawe...Maui windward west...Maui leeward west...Maui central valley...windward Haleakala...leeward Haleakala...Haleakala Summit

* Storm Information:

- About 440 miles east-southeast of Honolulu
- 19.2n 151.5w
- Storm intensity 90 mph
- Movement west or 260 degrees at 12 mph

Situation Overview

Hurricane Madeline will approach the state from the east with the Latest central pacific Hurricane center forecast bringing Madeline dangerously close to the Big Island this afternoon through early Friday.

Based on the current track...damaging winds and very heavy Rainfall is likely across the Big Island this afternoon into Friday. Any shift in the track to the north...could result in Tropical storm conditions spreading into Maui County on Friday.

In addition to the heavy rain and strong winds...large and Damaging surf is expected along east facing shores of the big Island and the island of Maui. Surf will continue to rise...building to dangerous levels today through Friday.

Now is the time to act! Everyone should bring their Hurricane Preparations to completion today.

The threat for flooding rain remains...particularly across the Big Island...with the threat and potential for numerous road closures... Overflowing of ditches...and inundation of low lying areas. Elsewhere...periods of heavy rain in squalls may cause flooding of some streets and other vulnerable locations.

There is a potential for life threatening surge along the immediate coast of the Big Island with a concern for locally hazardous surge possible in vulnerable locations along the immediate coast.

Large pounding waves and rough surf will also lead to significant coastal beach erosion...which will be a concern from today through Friday. A high risk of rip currents will also continue through the weekend.

Potential Impacts

* Wind:

Protect against dangerous wind having possible significant impacts across the Big Island. Potential impacts in this area include:

- Some damage to roofing and siding materials...along with damage to porches...awnings...carports and sheds. A few buildings experiencing window...door and garage door failures. Unsecured lightweight objects become dangerous projectiles.

- Several large trees snapped or uprooted...but with greater numbers in places where trees are shallow rooted. Several fences and roadway signs blown over.
- Some roads impassable from large debris...and more within urban or heavily wooded places. A few bridges...causeways and access routes impassable.
- Scattered power and communications outages...but more prevalent in areas with above ground lines.

Also...protect against hazardous wind having possible limited impacts Across Maui County.

Elsewhere across the Hawaiian Islands...little to no impact is anticipated.

* Flooding Rain:

Protect against life-threatening rainfall flooding having possible Extensive impacts across Maui County and the Big Island. Potential Impacts include:

- Major rainfall flooding may prompt many evacuations and rescues.
- Rivers and tributaries may rapidly overflow their banks in multiple places. Small streams...creeks...canals and ditches may become dangerous rivers. In mountain areas...destructive runoff may run quickly down valleys while increasing susceptibility to rockslides and mudslides. Flood control systems and barriers may become stressed.
- Flood waters can enter many structures within multiple communities...some structures becoming uninhabitable or washed away. Many places where flood waters may cover escape routes. streets and parking lots become rivers of moving water with underpasses submerged. Driving conditions become dangerous. many road and bridge closures with some weakened or washed out.

Protect against dangerous rainfall flooding having possible limited to significant impacts across Oahu.

* Surge:

Protect against life-threatening surge having possible significant Impacts across the immediate east facing coastal areas of the Big Island. Potential impacts in this area include:

- Areas of inundation with storm surge flooding accentuated by waves. Damage to several buildings...mainly near the coast.
- Sections of near-shore escape routes and secondary roads become weakened or washed out...especially in usually vulnerable low spots.
- Major beach erosion with heavy surf breaching dunes. Strong and

numerous rip currents.

- Moderate damage to marinas...docks...boardwalks and piers. several small craft broken away from moorings...especially in unprotected anchorages.

Also...protect against locally hazardous surge having possible limited Impacts across the island of Maui.

* Other Coastal Hazards:

A significant concern as Hurricane Madeline passes close to the Islands is the potential for significant beach erosion from high waves and life-threatening rip currents. The main window of concern is today through Friday for beach erosion and high waves with a high risk of rip currents lingering into the weekend.

* Tornadoes:

Protect against a tornado event having possible limited impacts Across Maui County and the Big Island Hawaiian Islands. Potential impacts include:

- The occurrence of isolated tornadoes can hinder the execution of emergency plans during tropical events.
- A few places may experience tornado damage...along with power and communications disruptions.
- Locations could realize roofs peeled off buildings...chimneys toppled...homes pushed off foundations or overturned...large tree tops and branches snapped off...shallow-rooted trees knocked over...moving vehicles blown off roads and small boats pulled from moorings.

Precautionary/Preparedness Actions

* Evacuations:

For those under evacuation orders...leave as soon as practical with a destination in mind. Gas up your vehicle well ahead of time. Be sure that you take all essential materials from your emergency supplies kit. Let others know where you are going and when you intend to arrive.

If evacuating the area...stick to prescribed evacuation routes. Look for additional traffic information on roadway smart signs and Listen to select radio channels for further travel instructions. Drivers should not use cell phones while operating vehicles.

For those not under evacuation orders...understand that there are inherent risks to evacuation (such as traffic congestion...

accidents and driving in bad weather)...so evacuate only if necessary. Help keep roadways open for those that are under evacuation orders.

If you are exceptionally vulnerable to wind or water hazards from tropical systems...consider voluntary evacuation...especially if being officially recommended. Relocate to a predetermined shelter or safe destination.

If evacuating away from the area or relocating to a nearby shelter...leave early before weather conditions become hazardous.

* Other Preparedness Information:

Now is the time to bring to completion all preparations to protect life and property in accordance with your emergency plan.

Outside preparations should be wrapped up as soon as possible before weather conditions completely deteriorate. Any remaining evacuations and relocations should be expedited before the onset of tropical storm force wind.

Failure to adequately shelter may result in serious injury or loss of life. Always heed the advice of local officials and comply with any orders that are issued. Remember...during the storm 9 1 1 emergency services may not be able to immediately respond if conditions are unsafe. This should be a big factor in your decision making.

Check-in with your emergency points of contact among family... friends and workmates. Inform them of your status and well-being. let them know how you intend to ride out the storm and when you plan to check-in again.

Keep cell phones well charged and handy. Also...cell phone chargers for automobiles can be helpful after the storm. Locate your chargers and keep them with your cell phone.

In emergencies it is best to remain calm. Stay informed and focused on the situation at hand. Exercise patience with those you encounter. be a good Samaritan and helpful to others.

If you are a visitor and still in the area...listen for the name of the city or town in which you are staying within local news updates. Be sure you know the name of the County or Parish in which it resides. Pay attention for instructions from local authorities.

Closely monitor NOAA Weather Radio or other local news outlets for official storm information. Be ready to adapt to possible changes to the forecast.

* Additional Sources of Information:

- For information on appropriate preparations see ready.gov
- For additional disaster preparedness information see redcross.org

Next Update

The next Local Statement will be issued by the National Weather Service in Honolulu HI around 12 pm HST...or sooner if conditions warrant.

\$\$

Forecaster Smith

Example of a HLS for the Atlantic Hurricane Basin

WTUS82 KMFL 230930

HLSMFL

FLZ063-066>075-168-172>174-231600-

Hurricane Wilma Local Statement Advisory Number 32

National Weather Service Miami FL AL242005

530 AM EDT Sun Oct 23 2005

This product covers mainland south Florida

****Extensive To Devastating Damage and Life-Threatening Conditions Expected As Hurricane Wilma Moves Northeast Across South Florida****

New Information

* Changes to watches and warnings:

- A hurricane watch has been upgraded to a hurricane warning for Miami-Dade...Broward...Palm Beach...Collier...Hendry...Glades and mainland Monroe counties

* Current Watches and Warnings:

- A Hurricane Warning Is In Effect For:
Miami-Dade...Broward...Palm Beach...Collier...Hendry...Glades and Mainland Monroe Counties

* Storm Information:

- About 405 mi SW of Naples FL
- 22.1N 86.6W
- Storm Intensity 100 MPH with higher gusts
- Moving Northeast at 3 MPH

Situation Overview

Extremely dangerous hurricane Wilma is expected to impact south Florida beginning this evening. The main concern is for life-threatening inundation in surge-prone areas of collier/mainland Monroe counties where there is a substantial risk of devastating impacts sometime between early Monday morning and Monday afternoon. Additionally, there is a risk for extensive damage from wind across mainland south Florida particularly between sunrise and Monday afternoon as Wilma crosses the peninsula.

There are also concerns with significant impacts from flooding rains as the hurricane moves across the area late tonight and Monday.

Isolated to scattered tornadoes capable of inflicting limited to locally significant damage are also possible starting this afternoon as outer rain bands begin to impact south Florida. As you work outside completing your preparations today, stay tuned to the latest information in case tornado watches and/or warnings become necessary.

Several counties have mandatory evacuation orders in place. Check with your local county officials for orders which may affect you.

Significant potential impacts

* Surge:

Prepare for life-threatening storm surge of up to 6-10 ft above ground and devastating damage in surge prone areas of collier and mainland Monroe counties. In these areas, potential impacts include:

- Widespread deep inundation within coastal flood zones from nearby sea, possibly reaching areas well away from the shoreline. powerful storm surge flooding capable of causing structural damage to buildings, with many washing away. Damage greatly compounded from considerable floating debris. Hardest hit locations may be uninhabitable for an extended period.
- Near-shore escape routes and secondary roads washed out or severely flooded. Flood control systems and barriers may become stressed.
- Extreme beach erosion. New inland cuts possible along with

local reshaping of the shoreline.

- Vast and substantial damage to marinas, docks, and piers. numerous small craft broken away from moorings with many lifted onshore and stranded.

Preparations should also be made for significant impacts from storm surge coastal flooding of up to 3-5 feet above ground along portions of far south Miami Dade adjacent to Florida bay.

Elsewhere, prepare for the potential of limited damage from localized storm surge flooding of 2 feet above ground or less across portions of the southeast Florida coast from Miami Dade to Palm Beach counties.

* Wind:

Prepare for extensive damage across all of south Florida. Potential impacts include:

- Considerable damage to roofing and siding materials of sturdy buildings, with some having window, door, and garage door failures leading to structural damage. Mobile homes severely damaged, with some destroyed. hardest hit locations may be uninhabitable for weeks.
- Many large trees snapped or uprooted along with fences and roadway signs blown over. Some roads impassable from large debris, and more within heavily wooded places.
- Several bridges, causeways, and access routes connecting barrier islands impassible.
- Power outages across large areas, with several places suffering extended outages.

* Flooding rain:

Prepare for significant flooding across much of mainland south Florida. In these areas, potential impacts include:

- The occurrence of moderate rainfall flooding can hinder emergency preparedness or response actions associated with other tropical event hazards. Attention and emergency resources may need to be partially diverted to meet an immediate flooding threat.
- Canals and ditches overflow.
- flood waters can enter some structures or weaken foundations. Several Places experience expanded areas of rapid inundation at underpasses, low-lying spots, and poor drainage areas. Some streets and parking lots take on moving water as storm drains and retention ponds overflow. Driving conditions become hazardous along with some road and bridge closures.
- Flood waters may prompt several evacuations and rescues.

As the threat evolves, stay tuned for potential flood watches and/or warnings.

* Tornadoes:

Prepare for significant damage from tornadoes in rain bands particularly across portions of Broward and Palm Beach counties with concerns beginning as early as this afternoon. In these areas, potential impacts include:

- The occurrence of scattered tornadoes that can hinder emergency preparedness or response actions associated with other tropical event hazards.
- Several places may experience tornado damage with a few spots of considerable damage, power loss, and communications failures.
- Hardest hit locations can realize roofs torn off frame houses, mobile homes demolished, boxcars overturned, large trees snapped or uprooted, vehicles lifted off the ground, and small boats tossed about. Dangerous projectiles add to the toll.

Prepare for isolated tornadoes and limited damage from tornadoes elsewhere across mainland south Florida.

Stay tuned in case tornado watches and/or warnings become necessary.

* Other coastal hazards:

There is a high risk for rip currents as well as the potential for significant beach erosion across all beaches of south Florida.

Precautionary/preparedness actions

* Evacuations:

Several counties have issued mandatory evacuation orders. Go to www.Floridadisaster.org for the latest evacuation information.

For those not under evacuation orders, understand that there are inherent risks to evacuation such as traffic accidents, congestion, and getting caught on the road during bad weather, so evacuate only if you must. This helps keep roadways open for those under evacuation orders.

* Other preparedness information:

Now is the time to rush to completion preparations for the protection of life and property.

Closely monitor NOAA weather radio or other local news outlets for official storm information. Listen for possible changes to the forecast.

* Additional sources of information:

For information on appropriate preparations see ready.gov/hurricanes.
For information on local evacuation shelters see

www.Floridadisaster.org/shelters

For information on creating an emergency plan see getagameplan.org.

For additional disaster preparedness information see redcross.org.

Next update

The next local statement will be issued by the national weather service in Miami around 1130 am EDT, or sooner if conditions warrant.

Example HLS Format for the Western Region and Pacific Region WFOs (except WFOs Honolulu)

WTPQ81 PGUM 192201
HLSPQ1

URGENT - IMMEDIATE BROADCAST REQUESTED
TROPICAL CYCLONE LOCAL STATEMENT
NATIONAL WEATHER SERVICE TIYAN GU
801 AM CHST FRI NOV 20 2015

...TYPHOON IN-FA MOVING OUT OF CHUUK STATE...

.NEW INFORMATION...
THE TYPHOON WARNING HAS BEEN CANCELED FOR ULUL IN CHUUK STATE.
TYPHOON CONDITIONS ARE NO LONGER EXPECTED.

.AREAS AFFECTED...
THIS LOCAL STATEMENT PROVIDES INFORMATION AND RECOMMENDED ACTIONS
FOR PEOPLE IN GUAM AND THE SURROUNDING WATERS OUT TO 40 NM...AND
ON ULUL IN CHUUK STATE.

.WATCHES/WARNINGS...
THE TYPHOON WARNING HAS BEEN CANCELED FOR ULUL IN CHUUK STATE.
TYPHOON CONDITIONS ARE NO LONGER EXPECTED.

A TROPICAL STORM WATCH REMAINS IN EFFECT FOR GUAM. TROPICAL STORM
CONDITIONS...INCLUDING DAMAGING WINDS OF 39 MPH OR MORE...ARE
POSSIBLE WITHIN 36 HOURS.

.STORM INFORMATION...
AT 700 AM CHST...2100 UTC...THE CENTER OF TYPHOON IN-FA WAS
LOCATED BY SATELLITE NEAR LATITUDE 10.0 DEGREES NORTH AND
LONGITUDE 148.9 DEGREES EAST. THIS IS ABOUT 110 MILES NORTH-
NORTHWEST OF ULUL...270 MILES NORTHWEST OF CHUUK...370 MILES
SOUTHEAST OF GUAM AND 415 MILES SOUTH-SOUTHEAST OF SAIPAN. IN-FA
WAS MOVING NORTHWEST AT 13 MPH WITH MAXIMUM SUSTAINED WINDS OF 85
MPH.

.SITUATION OVERVIEW...

TYPHOON IN-FA IS MOVING OUT OF CHUUK STATE INTO THE OPEN WATERS
SOUTHEAST OF THE MARIANAS. THE CURRENT FORECAST TRACK BRINGS IN-FA
ABOUT 140 MILES SOUTH-SOUTHWEST OF GUAM EARLY SATURDAY MORNING.

&&

...ULUL...

.PRECAUTIONARY/PREPAREDNESS ACTIONS...

THE TYPHOON WARNING HAS BEEN CANCELLED FOR ULUL IN CHUUK STATE.
DO NOT ATTEMPT ANY INTER-ISLAND TRAVEL UNTIL WINDS AND SEAS
SUBSIDE. LISTEN TO INSTRUCTIONS AND UPDATES FROM YOUR LOCAL
LEADERS.

...WIND INFORMATION...

THE HIGHEST WINDS ASSOCIATED WITH TROPICAL STORM IN-FA HAVE
PASSED TO THE NORTHWEST OF ULUL. SOUTHWEST WINDS OF 25 TO 35 MPH
THIS MORNING WILL STEADILY SUBSIDE TO BETWEEN 10 AND 20 MPH AND
SHIFT TO THE SOUTHEAST BY TONIGHT.

...STORM SURGE AND SURF INFORMATION...

COMBINED SEAS OF 10 TO 12 FEET AND HAZARDOUS SURF OF 11 TO 14 FEET
ALONG SOUTH AND WEST FACING SHORES THIS MORNING WILL GRADUALLY
SUBSIDE TODAY. HOWEVER...SURF WILL REMAIN HAZARDOUS THROUGH
SATURDAY. MINOR COASTAL INUNDATION IS POSSIBLE BEFORE NOON.

...OTHER STORM EFFECTS...

RAINFALL OF 1 TO 2 INCHES IS POSSIBLE THROUGH TONIGHT.

&&

GUZ001-PMZ151-200615-
/O.CON.PGUM.TR.A.0005.000000T0000Z-000000T0000Z/
GUAM-GUAM COASTAL WATERS-
801 AM CHST FRI NOV 20 2015

...TROPICAL STORM WATCH REMAINS IN EFFECT...

...PRECAUTIONARY/PREPAREDNESS ACTIONS...

STAY INFORMED AND LISTEN FOR POSSIBLE CHANGES TO THE FORECAST.
REVIEW YOUR DISASTER PREPAREDNESS PLAN...AS PREPARATIONS FOR THE
POSSIBILITY OF DAMAGING WINDS FROM TYPHOON IN-FA SHOULD BE MADE
TODAY.

&&

...WINDS AND SEAS...

TROPICAL STORM FORCE WINDS ARE POSSIBLE FOR SOUTHERN COASTAL
WATERS AS TYPHOON IN-FA PASSES SOUTH OF GUAM SATURDAY...AND THERE
IS STILL A THREAT FOR TROPICAL STORM FORCE WINDS OVER THE ISLAND
OF GUAM IF IN-FA DEVIATES TO THE NORTH AS IT APPROACHES. CLOSELY
MONITOR THE FORECAST FOR ANY SIGNIFICANT CHANGES.

SEAS OF 8 TO 10 FEET THIS MORNING WILL BUILD TO BETWEEN 12 AND 16
FEET BY SATURDAY AS TROPICAL STORM IN-FA PASSES TO THE SOUTH. SEAS
MAY REACH 20 FEET IN SOUTHERN GUAM WATERS.

...OTHER STORM EFFECTS...

RAINFALL OF 2 TO 4 INCHES IS POSSIBLE THROUGH SATURDAY EVENING.

&&

.NEXT UPDATE...

THE NEXT LOCAL STATEMENT WILL BE ISSUED BY THE NATIONAL WEATHER SERVICE AROUND 3 PM CHST...OR SOONER IF CONDITIONS WARRANT.

\$\$

WILLIAMS