



Hurricane Awareness

Participant Handouts

Version 1.0



FEMA

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This slide has a dark blue header with the FEMA logo on the left and the text "Hurricane Awareness" in white. On the right side of the header is a small image of the American flag. The main content area is white and features the title "Enabling Learning Objectives" in a bold, black, sans-serif font. Below the title are three numbered objectives: "1-1 Describe the course evaluation strategy", "1-2 State the course goal", and "1-3 Describe the course content". A small "1.2" is visible in the bottom right corner of the slide.

This slide has a dark blue header with the FEMA logo on the left and the text "Hurricane Awareness" in white. On the right side of the header is a small image of the American flag. The main content area is white and features the title "Welcome" in a bold, black, sans-serif font. Below the title is a bulleted list: "• Instructor introduction", "• Class structure and housekeeping:", "– Breaks", "– Restrooms", "– Emergency exits", "– Cell phones", and "• IACET CEUs and Other Professional CECs available". A small "1.3" is visible in the bottom right corner of the slide.

Hurricane Awareness

Introductions

- Name
- Agency
- What you hope to get out of the course

1.4

Hurricane Awareness

Continuing Education

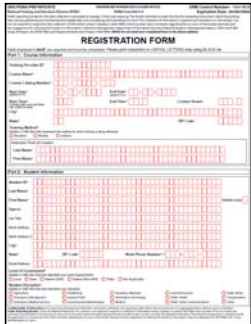
- International Association for Continuing Education and Training (IACET)
 - Participants who successfully complete this course will receive 0.1 CEUs for every eligible course contact hour.
- This course may also be eligible to provide the other professional continuing education credits.

1.5

Hurricane Awareness

Course Registration

- Training Provider ID: UH-NDPTC
- Course Catalogue #: AWR-XXX
- Course Name: Hurricane Awareness
- **Use capital letters**
- **No abbreviations**



1.6

Hurricane Awareness

Evaluation Strategy

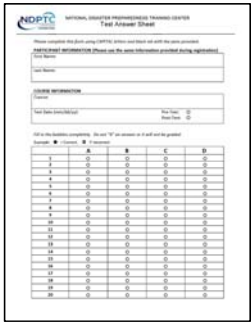
- Pre-test to assess current knowledge of course content
- Post-test administered at conclusion of course
- Pre- and post-test scores compared to measure performance
- Need a score of 70% or better on the post-test to successfully complete the course

1.7

Hurricane Awareness

Pre-Test

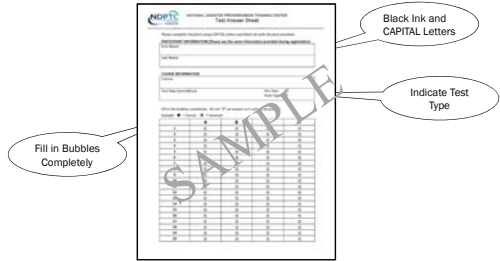
- Self-evaluation tool to assess your current knowledge
- Answer to the best of your ability





1.8

Hurricane Awareness

Test Answer Sheet





1.9

 Hurricane Awareness 

Pre-Test Answers

1.	2.	3.	4.
5.	6.	7.	8.
9.	10.	11.	12.
13.	14.	15.	16.
17.	18.	19.	20.



1-10

 Hurricane Awareness 

Course Goal

This course will prepare participants to describe the basics of hurricane science, forecasting, warning, and preparedness.

1-11

 Hurricane Awareness 

Learning Objectives

Upon successful completion of this course, participants will be able to:

1. summarize the structure and characteristics of tropical cyclones and associated hazards;
2. explain the hurricane forecasting process and the National Weather Service's hurricane advisory system; and

1-12

Hurricane Awareness

Learning Objectives (cont.)

3. demonstrate comprehension of the National Weather Service's hurricane advisory products.

1-13

Hurricane Awareness

Course Agenda

Module	Title	Duration
1	Welcome, Introduction, and Administration	50 minutes
2	Hurricane Structure and Hazards	30 minutes
-	Break	15 minutes
3	Hurricane Forecasting and Warning	30 minutes
4	Hurricane Advisory Products	60 minutes
-	Break	15 minutes
5	Evaluation and Conclusion	40 minutes

1-14

Hurricane Awareness

Summary

- Described course evaluation strategy
- Stated the course goal
- Described the course content

1-15

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- 2-1 Recognize conditions favorable for tropical cyclone development
- 2-2 Identify the structure and hazards of hurricanes
- 2-3 Explain the fundamentals of the Saffir-Simpson Hurricane Wind Scale

The slide number "2-2" is in the bottom right corner.This slide has a dark blue header with the FEMA logo and the text "Hurricane Awareness" on the left, and a small American flag graphic on the right. The main content area is white with the title "Definitions" in bold black text. Below the title are three bullet points:


- Tropical Cyclone (TC) – General term for tropical depressions, tropical storms, hurricanes, and typhoons
- Advisory – Official information issued by tropical cyclone warning centers describing tropical cyclone watches, warnings, locations, intensity and movement
- Wind shear – Winds blowing at different speeds or direction at different levels of the atmosphere; disrupts tropical cyclone development

The slide number "2-3" is in the bottom right corner.

Hurricane Awareness

Conditions for TC Formation

1. Warm ocean water (ideally 80°F or warmer)
2. Ample moisture in the lower and middle atmosphere
3. Low wind shear
4. Pre-existing disturbance (e.g., tropical wave)
5. Pre-existing disturbance must be at least 300 miles from the equator




(Source: COMET, 2010)

2-4

Hurricane Awareness

Stages of Development (1 of 5)

- 1 Tropical Disturbance
 - Cluster of thunderstorms in the tropics
 - Not yet a tropical cyclone



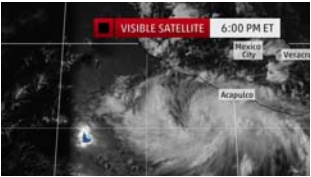
(Source: The Weather Channel, 2014)

2-5

Hurricane Awareness

Stages of Development (2 of 5)

- 2 Tropical Depression
 - Winds less than 39 mph
 - NHC/CPHC advisories
 - Assigned a number



(Source: The Weather Channel, 2014)

2-6

Hurricane Awareness

Stages of Development (3 of 5)

3 Tropical Storm

- Winds 39-73 mph
- Receives a name
- Rainfall/flooding primary threat

(Source: The Weather Channel, 2014)

2-7

Hurricane Awareness

Stages of Development (4 of 5)

4 Hurricane

- Winds 74 mph or higher
- Category 1-5 for wind damage potential
- Called typhoon in the western Pacific

(Source: The Weather Channel, 2014)

2-8

Hurricane Awareness

Stages of Development (5 of 5)

5 Post-tropical cyclone

- A former tropical cyclone
- Doesn't possess the structure of tropical cyclone
- Can still bring strong winds and heavy rain

(Source: NASA Earth Observatory, 2012)

2-9

Hurricane Awareness

Structure of a Hurricane

The image shows a satellite view of a hurricane's structure. At the center is the 'Eye', a clear, calm area. Surrounding it is the 'Eyewall', a thick, dark ring of clouds. Further out is the 'Rainband', a spiral of clouds and rain. The entire storm is surrounded by a vast area of lighter clouds.

(Source: Johns Hopkins University Applied Physics Laboratory, 2005)

2-10

Hurricane Awareness

Hurricane Hazards

The diagram shows a footprint with five toes, each representing a different hazard. The toes are labeled as follows:

- 1. Storm Surge
- 2. Inland Flooding
- 3. Winds
- 4. Waves and Rip Currents
- 5. Tornadoes

FIVE TOES OF THE HURRICANE FOOTPRINT

2-11

Hurricane Awareness

U.S. Hurricane Fatalities 1963-2012

The pie chart illustrates the distribution of U.S. hurricane fatalities from 1963 to 2012. The data is as follows:


Hazard	Percentage
Storm Surge	49%
Rain	27%
Wind	8%
Surf	6%
Offshore Tornadoes	3%
Other	1%

(Source: NOAA, 2014)

2-12

Hurricane Awareness

Storm Surge



(Source: COMET, 2015)


- Seawater pushed over normally dry land by strong winds around a tropical cyclone or coastal storm
- Primarily caused by strong onshore winds, not low pressure
- **Does not include impacts from waves or rainfall**

2-13

Hurricane Awareness

Factors Impacting Storm Surge

- Size of the storm
- Strength of storm winds
- Storm's forward speed
- Angle of approach to the coast
- Landfall location
- Coastal elevation
- Coastal geography (coastline shape)
- Slope of the ocean floor



(Source: UCAR/COMET Program, 2015)

...IT'S COMPLICATED!

2-14

Hurricane Awareness

What does storm surge look like?



(Source: Mark Sudduth, 2005)

2-15

Hurricane Awareness

Inland Flooding

- **3 of the 5 wettest TCs on record were tropical depressions or tropical storms, NOT hurricanes**
- Greatest 24-hour rainfall on record in the U.S. was from Tropical Storm Claudette (1979)
- Longer term flooding can persist for days/weeks along rivers and streams
- Depends on prior soil and stream conditions, storm speed, and interaction with mountains

2-16

Hurricane Awareness

Waves and Rip Currents

- **High winds from TCs cause dangerous waves**
- Waves breaking near shore can produce strong rip currents, fast-moving seaward-flowing channels of water
- High waves and dangerous rip currents can occur thousands of miles away from a hurricane
- 2009, 2013, 2014 – all deaths directly attributable to TCs in the U.S were from waves and rip currents

2-17

Hurricane Awareness

Tropical Cyclone Tornadoes

- Usually occur in **outer rainbands of the right-front quadrant** (relative to the storm motion)
- ~90% of TC tornadoes are weak (EF0 or EF1) but can be moderate to even strong
- Almost all landfalling hurricanes will spawn a tornado!

Relative TC Tornado Positions 1950-2007

(Source: Schultz and Cecil, 2009)

2-18

Hurricane Awareness

Saffir-Simpson Hurricane Wind Scale

- Based on **maximum winds only**
- Over 85% of all damages from hurricanes come from Category 3 or higher hurricanes
- Category 3 or higher is considered "major"
- Doesn't address possible damage from storm surge, rainfall, waves, or tornadoes

CATEGORY 4 HURRICANE
250x MORE DESTRUCTIVE
THAN A CATEGORY 1
HURRICANE

74-95 mph CATEGORY 1
96-110 mph CATEGORY 2
111-129 mph CATEGORY 3
130-156 mph CATEGORY 4
> 157 mph CATEGORY 5

↑
Damage

2-19

Hurricane Awareness

Extreme Tropical Cyclones

Costliest Tropical Cyclones since 1994

Rank	Hurricane	Damage	Category	Main Hazard
1	Katrina	\$108 B	Category 3	Storm Surge
2	Sandy	\$60 B	*Category 1	Storm Surge
3	Ike	\$30 B	Category 2	Storm Surge
...
6	Charley	\$15 B	Category 4	Wind

* Sandy made landfall as a post-tropical cyclone with Category 1 intensity winds over land.

Deadliest Tropical Cyclones since 1994

Rank	Hurricane	Deaths	Category	Main Hazard
1	Katrina	1200	Category 3	Storm Surge
2	Floyd	56	Category 2	Inland Flooding
3	Alison	41	Tropical Storm	Inland Flooding
4	Alberto	30	Tropical Storm	Inland Flooding
5	Ivan	25	Category 3	Storm Surge

(Source: <http://www.nhc.noaa.gov/pdf/mas-nhc-6.pdf>)

2-20

Hurricane Awareness

Summary

- Recognized conditions favorable for tropical cyclone development
- Identified the structure and hazards of hurricanes
- Described the Saffir-Simpson Hurricane Wind Scale

2-21



Hurricane Awareness

Enabling Learning Objectives

- 3-1 Describe the hurricane forecast process
- 3-2 Explain the concept of forecast uncertainty
- 3-3 Define National Weather Service watches, warnings, and advisories for tropical storms and hurricanes

3-2

Hurricane Awareness

Hurricane Forecast Process

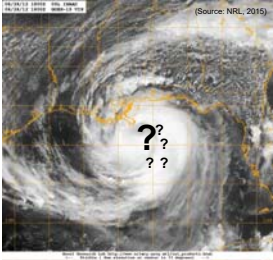
- 1. Analyze current TC position and intensity
 - Satellite
 - Buoys and ship reports
 - Aircraft reconnaissance (if available)
 - Doppler radar (if in range)
- 2. Analyze numerical forecast models
- 3. Make adjustments based on forecaster knowledge and to maintain consistency
- 4. Issue watches, warnings, and outlooks as needed

3-3

Hurricane Awareness

Analyzing Current TC Position

- Often difficult to find the exact center of a hurricane
- Small errors in pinpointing the center can lead to large errors in track forecasting



(Source: NRL, 2015)

Hurricane Isaac (2012)


3-4

Hurricane Awareness

Analyzing TC Conditions


- **Satellites**
- **Doppler Radar**
- **Hurricane Hunters**
 - Dropsondes measure temperature, humidity, pressure and winds from the aircraft to the ocean surface
- **Ocean Buoys**

Air Force




W-C130J

NOAA



P-3 Aircraft



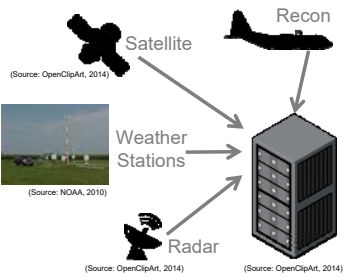
Gulfstream IV

3-5

Hurricane Awareness

Numerical Weather Models

Complex computer programs that ingest data and solve atmospheric equations to determine the future state of the atmosphere



(Source: OpenClipArt, 2014)

(Source: NOAA, 2010)


(Source: OpenClipArt, 2014)

(Source: OpenClipArt, 2014)

3-6

Hurricane Awareness

Numerical Weather Models (cont.)



Atlantic HURRICANE SANDY Model Tracks
Valid Time: 1800 UTC 26 October 2013


- Forecasters utilize guidance with knowledge of model biases, strengths, and weaknesses
 - Official forecast from NHC/CPHC considers models
- Untrained persons should not use direct model guidance!

(Source: UWM, 2015)

3-7

Hurricane Awareness

The Forecast Challenge (1 of 3)



Forecast to make landfall as a 45 mph Tropical Storm within 24 hours

Tropical Depression forms 85 miles south of Galveston, Texas

Tropical Storm Watches and Warnings Issued

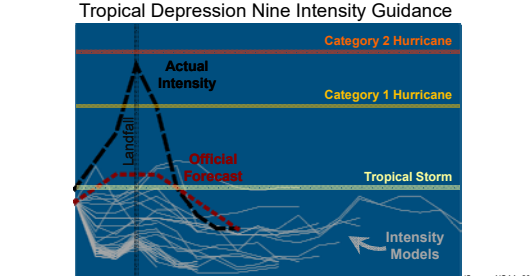
(Source: NOAA, 2015)

3-8

Hurricane Awareness

The Forecast Challenge (2 of 3)

Tropical Depression Nine Intensity Guidance



Category 2 Hurricane

Category 1 Hurricane

Tropical Storm

Actual Intensity

Official Forecast

Intensity Models

(Source: NOAA, 2007)

3-9

Hurricane Awareness

The Forecast Challenge (3 of 3)

85 mph Hurricane making landfall in southeastern Texas

18 Hours later...

Hurricane Warning Issued as Humberto is making landfall

(Source: NOAA, 2015)

3-10

Hurricane Awareness

Weather Forecast Office (WFO)

- Forecasts 24/7/365 for County Warning Area (CWA)
- Coordinates watches and warnings with NHC and CPHC
 - Issues Local Hurricane Statements
- Local education programs
- Works with local emergency managers and responders

Tampa, FL

(Source: NOAA, 2015)

Honolulu, HI

(Source: NOAA, 2015)

3-11

Hurricane Awareness

NHC/CPHC Outlooks and Watches

<p>TROPICAL WEATHER OUTLOOK</p> <p>Up to <u>5 days</u> before a storm</p>	<p>TROPICAL STORM WATCH</p> <p>Sustained tropical storm force winds (39 to 73 mph) are possible within <u>48 hours</u></p>	<p>HURRICANE WATCH</p> <p>74 mph or higher sustained winds are possible; <u>issued 48 hours before the onset of tropical storm force winds</u></p>
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3-12

Hurricane Awareness

NHC/CPHC Warnings

TROPICAL STORM WARNING

Sustained tropical storm force winds (39 to 73 mph) are *expected* within 36 hours

HURRICANE WARNING

74 mph or higher sustained winds are *expected*; issued 36 hours before the onset of tropical storm force winds

3-13

Hurricane Awareness

NHC/CPHC Track Forecast Cone

- Represents the most probable track of the TC center
- Does NOT indicate storm size
- Strong winds can fall outside of the cone boundary
- In roughly 1 out of every 3 forecasts the center moves outside of the cone

3-14

Hurricane Awareness

NHC/CPHC Track Forecast Cone (cont.)

Imaginary circles placed along the forecast track at 12, 24, 48, 72, 96, and 120 hours

The size of each circle represents the 5-year historical error for each forecast time

Errors are NOT storm specific!!!

3-15

Hurricane Awareness

Track Forecast Cone

Looks *can* be deceiving

Fatter cone means a slower moving storm, NOT higher error or less confidence

Skinnier cone means a faster moving storm, NOT less error or more confidence

(Source: NOAA, 2015)

(Source: NOAA, 2015)

3-16

Hurricane Awareness

Ways to Receive Updates/Info

- From the National Weather Service
 - NOAA All-Hazards Weather Radio
 - Weather.gov, Hurricanes.gov
 - iNWS / SMS (<http://inws.wrh.noaa.gov/>)
 - NWSchat (<https://nwschat.weather.gov>)
- From government and private organizations
 - Websites, mobile apps, email, social media, TV, emergency alert systems

3-17

Hurricane Awareness

Summary

- Described the hurricane forecast process
- Explained the concept of forecast uncertainty
- Defined National Weather Service watches, warnings, and advisories for tropical storms and hurricanes

3-18



Hurricane Awareness

Enabling Learning Objectives

- 4-1 Describe National Weather Service forecast and advisory products for hurricanes
- 4-2 Interrelate National Weather Service forecast and advisory products for hurricanes with preparedness activities

4-2

Hurricane Awareness

Tropical Weather Outlook

TROPICAL WEATHER OUTLOOK
 SWS NATIONAL HURRICANE CENTER MIAMI FL
 800 PM EDT FOR ADV 25 4104

For the North Atlantic...Caribbean Sea and the Gulf

1. A large area of disorganized cloudiness and thunderstorms is associated with a tropical wave located in the central Caribbean Sea. Upper-level winds are forecast to become a little more favorable for development on Saturday while the wave moves into the northwestern Caribbean Sea. However, land interaction will likely limit significant development as the disturbance moves across the Yucatan peninsula on Sunday. Environmental conditions are expected to be conducive for some gradual development once the system moves into the southwestern Gulf of Mexico by Monday.

* Formation chance through 48 hours...low...10 percent.
 * Formation chance through 5 days...medium...30 percent.

Forecaster Brennan

**Issued 4x per day
 (2am EDT, 8am EDT,
 2pm EDT, 8pm EDT)**

Discussion of significant areas of disturbed weather

Development odds for each disturbance out to 2 days and 5 days

4-3

Hurricane Awareness

Graphical Tropical Weather Outlook

Differences between 2-day and 5-day Graphical Outlooks

X marks current disturbance with 2-day development odds in parentheses

Hatched region indicates potential formation area

X marks current disturbance

(Source: both images: NOAA, 2015)

4.4

Hurricane Awareness

Hurricane Advisory Products

- Tropical cyclone advisories describe watches, warnings, locations, intensity, and movement.
- Weather advisories issued by local Weather Forecast Offices, on the other hand, describe local conditions.
- Tropical cyclone advisory products include the following:
 - Public Advisory
 - Forecast Advisory
 - Forecast Discussion
 - Tropical Cyclone Wind Speed Probabilities
- Full advisories issued at 5am, 11am, 5pm, and 11pm EDT

4.5

Hurricane Awareness

Tropical Cyclone Advisory Products

Public Advisory

Plain-speak language intended for "rip and read"

- Headline
- Center location
- Wind speed
- Motion
- Watches and warnings
- Track and intensity forecast
- Hazards (rainfall, tornadoes, storm surge, etc.)
- Recommended actions
- Only covers first 48 hr period

(Source: NOAA, 2014)

4.6

Hurricane Awareness

Advisory Product Activity

Time: 30 minutes

1. Break into groups of 5 to 7 participants
2. Answer questions and discussion prompts that are relevant to a historic tropical weather event

4-13

Hurricane Awareness

Wakulla County, Florida: Information

4-14

Hurricane Awareness

Tropical Weather Outlook (Group Handout, Pages 3-4)

2-Day Graphical Tropical Weather Outlook
National Hurricane Center, Miami, Florida

Go to [Eastern Pacific Outlook](#)

1:00 PM EDT FRI | Satellite Image: 0122 PM EDT | (Source: NOAA, 2015)

Current Disturbances and 2-Day Cyclone Formation Chance: ■ < 30% ■ 30-50% ■ > 50%

Tropical or Sub-Tropical Cyclone: ○ Depression ○ Storm ○ Hurricane

Post-Tropical Cyclone: x Remnants

4-15

Hurricane Awareness

Tropical Weather Outlook: Group Questions

- Has a storm been named?
- What environmental conditions allow a tropical cyclone to strengthen?
- What hazards have been forecasted?
- What is the probability of tropical depression formation?

4-16

Hurricane Awareness

Public Advisory (Group Handout, Pages 5-6)

The map displays the current location of Tropical Storm Lydia (marked with a red dot) and its forecast path (indicated by a black line with arrows) moving westward across the Gulf of Mexico. A white circle represents the forecast cone. The map also shows the potential track area (shaded in light blue) and various watches and warnings (shaded in yellow, orange, and red) along the Florida coast. A legend at the bottom provides details on the symbols and colors used.

Tropical Storm Lydia
 Issued: 11:00 AM EDT
 Forecast Position: 11:00 AM EDT
 Max Sustained Wind: 60 mph
 Movement: 10 mph
 Potential Track Area: Day 1 - 48h, Day 48h
 Watches: Hurricane, Trop. Storm
 Warnings: Hurricane, Trop. Storm

(Source: NOAA, 2015)

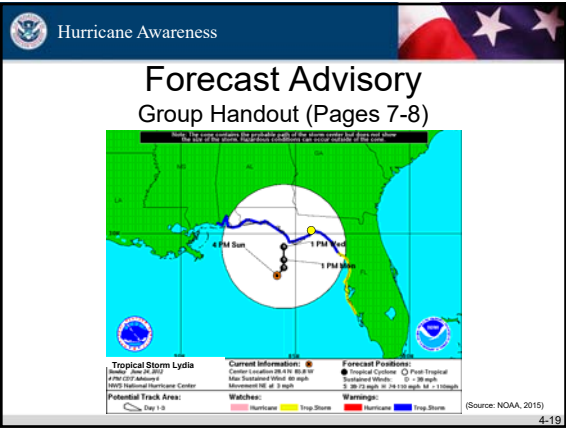
4-17

Hurricane Awareness

Public Advisory: Group Questions

- How much rain has been forecast?
- What is the probability of Lydia's center of circulation moving outside of the forecast cone?
- Is Lydia forecasted to strengthen?

4-18



4-19

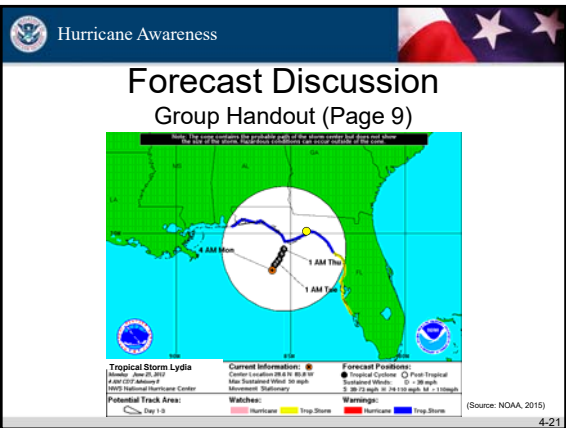
Hurricane Awareness

Forecast Advisory: Group Task

Prepare a public information statement for Tropical Storm Lydia for local media that addresses:

- Current extent of damaging winds
- Current speed and direction of movement

4-20



4-21

Hurricane Awareness

Forecast Discussion: Group Task

Prepare a public information statement for Tropical Storm Lydia for local media that addresses:

- Forecasted path uncertainty
- Appropriate preparedness actions

4-22

Hurricane Awareness

Wind Speed Probabilities Group Handout (Pages 10-12)

(Source: both images: NOAA, 2012)

4-23

Hurricane Awareness

Wind Speed Probabilities: Group Questions

- What is the probability of Lydia becoming a Category 2 hurricane within 48 hours?
- During what time period are 50-knot winds most likely in Wakulla/St. Marks, FL?

4-24

Hurricane Awareness

Tropical Storm Local Statement Group Handout (Page 13)

Tropical Storm Lydia
 Name: Lydia (2015)
 Entry: 07:45 AM EDT
 North Tropical Hurricane Center

Current Information:
 Center location: 28.0 N, 88.1 W
 Max Sustained Wind: 40 mph
 Movement: NE at 3 mph

Forecast Position:
 Tropical Center: 29.0 N, 87.0 W
 Sustained Wind: 30 mph
 30-70 mph: 24.0 N, 85.0 W - 11.0 N, 84.0 W

Potential Track Area: Day 1-5

Watches: Hurricane, Trop. Storm

Warnings: Hurricane, Trop. Storm

(Source: NOAA, 2015)

4-25

Hurricane Awareness

Tropical Storm Local Statement: Group Questions

- Where did Lydia make landfall?
- What is the primary hazard associated with Lydia?

4-26

Hurricane Awareness

TS Debbie Aftermath (1 of 3)

Sopchoppy River crested at 36.8 ft on Tuesday with record historic flooding

SOPCHOPPY RIVER NEAR SOPCHOPPY (SR MB)
 General Summary
 Flood Stage: 24 ft
 Peak: 36.8 ft
 Date: 7/23/12
 Discharge: 10,000 cfs

(Source: NOAA, 2015)

4-27

Hurricane Awareness

TS Debbie Aftermath (2 of 3)

Storm rainfall totals exceeded 28 inches in Wakulla County

(Source: NOAA, 2015)

4-28

Hurricane Awareness

TS Debbie Aftermath (3 of 3)

- First ever Flash Flood Emergency issued by NWS Tallahassee for Wakulla County
- 271 homes impacted, with water reaching second stories
- Two bridges damaged, numerous roads washed out
- 4 feet of storm surge at St. Marks
- Many roads overwashed with surge, including U.S. 98

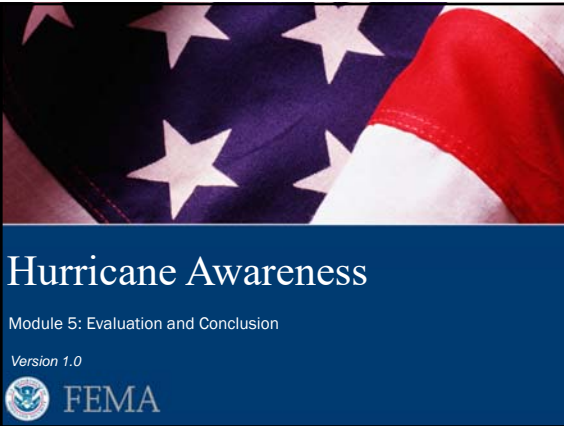
4-29

Hurricane Awareness

Summary

- Explained the purpose and function of National Weather Service forecast and advisory products for hurricanes
- Interrelated National Weather Service forecast and advisory products for hurricanes with preparedness activities

4-30



Hurricane Awareness

Enabling Learning Objectives

- 5-1 Identify additional resources and training opportunities
- 5-2 Complete a post-test
- 5-3 Provide feedback on a course evaluation form

5-2

Hurricane Awareness

Course Summary

This course prepared participants to describe the basics of hurricane science, forecasting, warning, and preparedness.

5-3

Hurricane Awareness

Additional Resources

- National Weather Service Homepage
<http://www.weather.gov/>
- National Weather Service Hurricane Safety
<http://www.nhc.noaa.gov/prepare/>
- Hurricane Preparedness
<http://www.ready.gov/hurricanes>
- COMET Program
<https://www.comet.ucar.edu/>
- HURREVAC
<http://www.hurrevac.com/>

5-4

Hurricane Awareness

Additional Resources (cont.)

Other FEMA hurricane course offerings:

- **IS-324.A:** Community Hurricane Preparedness
- **L-324:** Hurricane Preparedness for Decision Makers
- **L-320:** Hurricane Preparedness for Decision Makers
- **L-311/ G-363:** Hurricane Readiness for Coastal Communities
- **L-310:** Hurricane Readiness for Inland Communities
- **AWR-326:** Tornado Awareness
- **AWR-331:** Winter Weather Hazards: Science and Preparedness
- **AWR-332:** Hazardous Weather Preparedness for Campuses

5-5

Hurricane Awareness

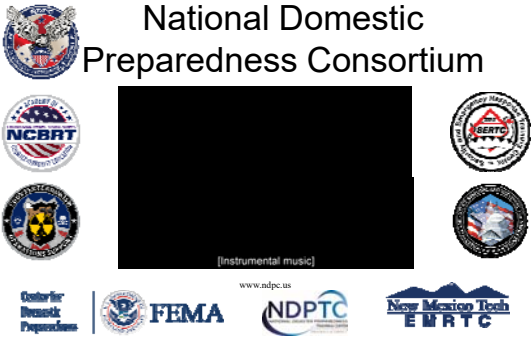
Discussion

Questions? Comments? Thoughts?

5-6

Hurricane Awareness

National Domestic Preparedness Consortium



[instrumental music]

www.ndpc.us

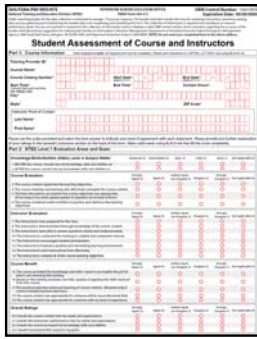
Center for Research Productions FEMA NDPTC New Mexico Tech ETRC

5-7

Hurricane Awareness

Course Evaluation

- Training Provider ID: UH-NDPTC
- Course Catalogue #: AWR-XXX
- Course Name: Hurricane Awareness

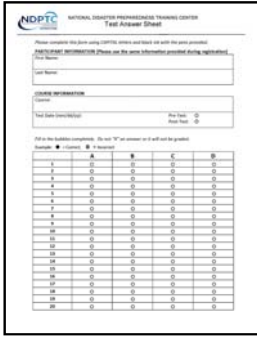


5-8

Hurricane Awareness

Post-Test

- Mark the "Post-Test" bubble
- After completion, bring all testing materials to instructors



5-9



Thank You!



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