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***HAZARDOUS WEATHER OUTLOOK, SPECIAL WEATHER STATEMENT, AND
SHORT TERM FORECAST***

NOTICE: This publication is available at: <http://www.nws.noaa.gov/directives/>.

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<signed>

February 26, 2007

Dean P. Gulezian
Director, NWS Eastern Region

Date

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1. **Introduction.** National Weather Service (NWS) field offices provide hazardous weather outlook and short-term forecast services to a variety of users. Previously issued guidance permitted hazardous weather information to be included in Hazardous Weather Outlooks (HWO) and Special Weather Statements (SPS) in the longer term; and in HWO, SPS, and Short Term Forecast (NOW) products in the near term. The duplicate information contained in the three products caused confusion for users and needless workload among NWS forecasters and customers. This Supplement provides standardized instructions for issuing Hazardous Weather Outlooks, Special Weather Statements, and Short Term Forecasts.

ERS 03-2006, “WFO/RFC/HPC Hydrometeorology Coordination,” provides information on effective hydrometeorological coordination between the National Center for Environmental Prediction - Hydrometeorological Prediction Center (HPC), and NWS Eastern Region (ER) River Forecast Centers (RFCs) and Weather Forecast Offices (WFOs).

Written instructions cannot address every operational situation. All personnel must exercise initiative and professional judgment to minimize risk to public safety and property in situations not explicitly covered by written instructions.

2. **Hazardous Weather Outlook (product category HWO).**

- 2.1 **Purpose.** The HWO is designed to alert customers to expected hazardous weather and its potential impact out to Day 7.
- 2.2 **Content.** The HWO will be used to convey hazardous weather, hydrologic, and nonprecipitation information expected out to Day 7. NWS ER WFOs will issue an HWO daily between 5 a.m. and 7 a.m. local time. HWOs will be updated to reflect changes in hazardous weather, maintain headline consistency with other information, or meet customer needs.

ER WFOs will headline all watches, and most advisories and warnings in the HWO. The HWO will **not** include the following headlines:

- Tornado Warning (TOR)
- Severe Thunderstorm Warning (SVR)
- Special Marine Warning (SMW)
- Flash Flood Warning (FFW)
- Flood Warning – Areal and River Forecast Point (FLW)
- Flood Advisory – All types (FLS)

If a watch, warning, or advisory is headlined in the HWO, then a “reference statement” will be included in the appropriate section advising customers to check other text products for additional information. The HWO will not duplicate information contained in other watch, warning, or advisory text products.

For example, the Day One section will include the following “reference statement” for a Winter Storm Warning effective during Day One in the Charleston, WV area:

PLEASE LISTEN TO NOAA WEATHER RADIO OR GO TO WEATHER.GOV ON THE INTERNET FOR MORE INFORMATION ABOUT THE FOLLOWING HAZARDS.

WINTER STORM WARNING

For persistent river flooding or large-scale areal flooding that is a threat to life or is forecast to increase significantly, ER WFOs will briefly mention the flood hazard in the HWO and advise customers to check the WFO home page or Advanced Hydrologic Prediction Service (AHPS) for more information.

The HWO will be used exclusively for flood potential information through Day 7 that was previously included in the Hydrologic Outlook (ESF) product.

ER WFOs will include severe weather outlook information in the HWO whenever they decide that a risk of severe convective weather (tornadoes, strong wind, large hail, localized flash flooding, etc.) will exist anywhere within their County Warning Area. Use of National Center for Environmental Prediction - Storm Prediction Center (SPC) guidance products, local forecast techniques, and coordination with the SPC and adjacent offices are all encouraged as part of the WFO decision-making process.

Marine hazards that do not affect the adjacent land areas, such as Small Craft Advisories, may be omitted from the HWO based upon local customer needs. These hazards are nearly daily occurrences in some areas and the HWO is often not disseminated offshore. Land-based hazards such as high surf and coastal flooding that do affect the coast will be included in the HWO.

- 2.2.1 Hazard Not Expected. ER WFOs will use one of the two phrases in NWSI 10-517, section 4.3.3.e, when no hazards are forecast in either the “Day One” period or the “Days Two through Seven” period:

“NO HAZARDOUS WEATHER IS EXPECTED AT THIS TIME” or
“THE PROBABILITY FOR WIDESPREAD HAZARDOUS WEATHER IS LOW”

HWOs will not contain these phrases when hazards are forecast. In addition, HWOs will not contain additional text describing nonhazardous weather when one of these phrases is used.

A negative statement for each individual hazard in either the “Day One” or the “Days Two through Seven” periods is not necessary and could detract from important hazards information. For example, “No severe thunderstorms are forecast. Heavy rain may cause flooding.” The first sentence may deter users from reading the second sentence and the customer may miss the important information about heavy rain.

- 2.2.2 Spotter Information Statement. When weather hazards are discussed in either the “Day One” or “Days Two through Seven” periods in the HWO, ER WFOs will include a spotter information statement following the “Days Two through Seven” section.

The spotter information statement is not required when both time sections state that no hazards are expected. In this case, ER WFOs may use the phrase “SPOTTER ACTIVATION IS NOT EXPECTED AT THIS TIME”.

- 2.3 Dissemination. The HWO will be accessible via WFO internet pages, similar to other watch, warning, and advisory products. It should be broadcast on NOAA Weather Radio All Hazards (NWR). NWR messages generated from the HWO may be modified prior to broadcast to eliminate “reference statements” and redundancy with other NWR messages.

- 2.4 Graphical HWO. ER WFOs should generate a web-based Graphical HWO (GHW) to provide probabilistic hazards. The GHW will highlight specific hazards using NONE, LOW, MEDIUM, HIGH, and EXTREME thresholds.

Hazards and thresholds for the GHW are available on the [GHW Resource Page](#).

3. Special Weather Statement (product category SPS).

- 3.1 Purpose. The SPS is designed to alert customers to a short term hazardous weather threat, occurring within 6 hours of product issuance, which may require a heightened level of awareness or action.

3.2 Content.

- 3.2.1 “Near-Severe” Thunderstorms. ER WFOs should issue Special Weather Statements for thunderstorms that approach, or are expected to approach, severe convective criteria. General criteria for “Near-Severe” Thunderstorms are considered to be one or a combination of the following events:

- Thunderstorm winds of 40* to 57 miles per hour (sustained or in gusts)
- Hail less than three-quarter inch in diameter
- Frequent to continuous lightning
- Funnel clouds or cold air funnels

* Lower value may be used at forecaster discretion

3.2.2 High-Impact, High Resolution Information. ER WFOs should issue Special Weather Statements for high-impact weather events to supplement information contained in other products and sources, providing high-resolution details when possible. Examples include, but are not limited to:

- Black Ice
- Heavy snow bands during a winter storm event
- Lake-effect snow bands that briefly reduce visibility
- Heavy rainfall that is not expected to cause flooding
- Heat Indices around heat advisory level for one hour

3.2.3 Other Information. ER WFOs may use the SPS in accordance with written agreements between the NWS and other government agencies (MOAs, MOUs, etc.).

3.3 Dissemination. The SPS will be accessible via WFO internet pages, similar to other watch, warning, and advisory products. It should also be broadcast on NOAA Weather Radio All Hazards (NWR).

4. Short Term Forecast (product category NOW).

4.1 Purpose. The NOW is designed to provide customers with detailed weather information occurring within 6 hours of product issuance.

4.2 Content. ER WFOs should issue Short Term Forecasts to discuss the evolution of convective and stratiform precipitation, winter weather, marine events, sea breezes, fog, winds, and temperature within their CWA. The NOW will not duplicate information contained in the SPS or other watch, warning, advisory text products.

4.3 Dissemination. The NOW will be accessible via WFO internet pages, similar to other watch, warning, and advisory products. It should also be broadcast on NOAA Weather Radio All Hazards (NWR).

5. Examples.

5.1 Hazardous Weather Outlook.

5.1.1 Severe Weather.

Example #1: This multi-segmented outlook issued by WFO Cleveland, Ohio describes the severe weather potential in the 12 to 18 hour timeframe.

FLUS41 KCLE 210858
HWOCLE

HAZARDOUS WEATHER OUTLOOK
NATIONAL WEATHER SERVICE CLEVELAND OH
458 AM EDT WED JUN 21 2006

LEZ142>144-162>164-OHZ003-006>009-017>019-220900-
MAUMEE BAY TO RENO BEACH OH-RENO BEACH TO THE ISLANDS OH-THE ISLANDS TO
VERMILION OH-MAUMEE BAY OH TO RENO BEACH OH BEYOND 5 NM OF SHORE-
RENO BEACH TO THE ISLANDS OH BEYOND 5 NM OF SHORE- THE ISLANDS TO VERMILION
OH BEYOND 5 NM OF SHORE-LUCAS-WOOD-OTTAWA-SANDUSKY-ERIE OH-HANCOCK-
SENECA-HURON-
458 AM EDT WED JUN 21 2006

...MODERATE RISK OF SEVERE THUNDERSTORMS TODAY AND TONIGHT...

THIS HAZARDOUS WEATHER OUTLOOK IS FOR PORTIONS OF LAKE ERIE...
NORTH CENTRAL OHIO AND NORTHWEST OHIO.

.DAY ONE...TODAY AND TONIGHT

THERE IS A MODERATE RISK OF SEVERE THUNDERSTORMS TODAY AND TONIGHT. A
WARM FRONT WILL LIFT NORTHEAST ACROSS THE AREA TODAY WHILE A COLD FRONT
WILL EXTEND JUST NORTH OF THE AREA TONIGHT.

THE MAIN THREAT FOR SEVERE WEATHER WILL BE FROM LATE AFTERNOON INTO EARLY
TONIGHT WHEN A THUNDERSTORM COMPLEX IS EXPECTED TO MOVE ACROSS THE AREA.
HOWEVER SCATTERED THUNDERSTORMS ARE EXPECTED THROUGHOUT THE DAY AND
THESE MAY ALSO BE SEVERE. DAMAGING WIND GUSTS AND LARGE HAIL APPEAR TO BE
THE PRIMARY SEVERE WEATHER THREAT BUT AN ISOLATED TORNADO IS ALSO
POSSIBLE.

.DAYS TWO THROUGH SEVEN...THURSDAY THROUGH TUESDAY

THERE IS A SLIGHT RISK OF SEVERE THUNDERSTORMS THURSDAY AS A COLD FRONT
SLOWLY SAGS SOUTHEAST THROUGH THE AREA.

.SPOTTER INFORMATION STATEMENT...

SPOTTER ACTIVATION WILL LIKELY BE NEEDED LATER THIS AFTERNOON AND EARLY
TONIGHT.

\$\$

LEZ145>149-165>169-OHZ010>014-020>023-027>033-036>038-047-089-PAZ001>003-220900-
VERMILION TO AVON POINT OH-AVON POINT TO WILLOWICK OH-WILLOWICK TO
GENEVA-ON-THE LAKE OH-GENEVA-ON-THE-LAKE TO CONNEAUT OH-CONNEAUT OH TO
RIPLEY NY-VERMILION TO AVON POINT OH BEYOND 5 NM OF SHORE-AVON POINT TO
WILLOWICK OH BEYOND 5 NM OF SHORE-WILLOWICK TO GENEVA-ON-THE-LAKE OH
BEYOND 5 NM OF SHORE-GENEVA-ON-THE-LAKE TO CONNEAUT OH BEYOND 5 NM OF
SHORE-CONNEAUT OH TO RIPLEY NY BEYOND 5 NM OF SHORE-LORAIN-CUYAHOGA-
LAKE-GEAUGA-ASHTABULA INLAND-MEDINA-SUMMIT-PORTAGE-TRUMBULL-WYANDOT-
CRAWFORD-RICHLAND-ASHLAND-WAYNE-STARK-MAHONING-MARION-MORROW-
HOLMES-KNOX-ASHTABULA LAKESHORE-NORTHERN ERIE-SOUTHERN ERIE-CRAWFORD
PA-
458 AM EDT WED JUN 21 2006

...SLIGHT RISK OF SEVERE THUNDERSTORMS TODAY AND TONIGHT...

THIS HAZARDOUS WEATHER OUTLOOK IS FOR PORTIONS OF LAKE ERIE...
NORTH CENTRAL OHIO...NORTHEAST OHIO...NORTHWEST OHIO AND
NORTHWEST PENNSYLVANIA.

.DAY ONE...TODAY AND TONIGHT

THERE IS A SLIGHT RISK OF SEVERE THUNDERSTORMS TODAY AND TONIGHT.
A WARM FRONT WILL LIFT NORTHEAST ACROSS THE AREA TODAY AND EARLY
TONIGHT...WHILE A COLD FRONT WILL EXTEND JUST NORTH OF THE AREA
TONIGHT.

THE MAIN THREAT FOR SEVERE WEATHER SHOULD BE THIS EVENING AND
EARLY TONIGHT WHEN A THUNDERSTORM COMPLEX IS EXPECTED TO MOVE ACROSS
THE AREA. HOWEVER THERE IS A CHANCE OF THUNDERSTORMS THROUGHOUT
THE DAY AND THESE MAY ALSO BE SEVERE. DAMAGING WIND GUSTS AND
LARGE HAIL APPEAR TO BE THE PRIMARY SEVERE WEATHER THREAT.

.DAYS TWO THROUGH SEVEN...THURSDAY THROUGH TUESDAY

THERE IS A SLIGHT RISK OF SEVERE THUNDERSTORMS THURSDAY AS A COLD
FRONT SLOWLY SAGS SOUTHEAST THROUGH THE AREA.

.SPOTTER INFORMATION STATEMENT...

SPOTTER ACTIVATION MAY BE NEEDED LATER THIS AFTERNOON AND EARLY
TONIGHT.

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Example #2: Situation – A Severe Thunderstorm Watch and Tornado Watch are in effect for the Wilmington, NC area. A Flash Flood Watch is also in effect for part of their area.

FLUS42 KILM 031953
HWOILM

HAZARDOUS WEATHER OUTLOOK
NATIONAL WEATHER SERVICE WILMINGTON NC
253 PM EST WED JAN 3 2007

AMZ250-252-NCZ087-096-097-099>101-041000-
SURF CITY TO CAPE FEAR NC OUT 20 NM-
CAPE FEAR NC TO LITTLE RIVER INLET SC OUT 20 NM-ROBESON-BLADEN-PENDER-
COLUMBUS-BRUNSWICK-NEW HANOVER-
253 PM EST WED JAN 3 2007

...SEVERE THUNDERSTORM WATCH UNTIL 7 PM EST...
...FLASH FLOOD WATCH THROUGH TONIGHT...

THIS HAZARDOUS WEATHER OUTLOOK IS FOR PORTIONS OF THE ADJACENT
COASTAL WATERS...SOUTHEAST NORTH CAROLINA AND NORTHEAST SOUTH
CAROLINA.

.DAY ONE...THIS AFTERNOON AND TONIGHT

PLEASE LISTEN TO NOAA WEATHER RADIO OR GO TO WEATHER.GOV ON THE
INTERNET FOR MORE INFORMATION ABOUT THE FOLLOWING HAZARDS.

SEVERE THUNDERSTORM WATCH
FLASH FLOOD WATCH

.DAYS TWO THROUGH SEVEN...THURSDAY THROUGH TUESDAY

NO HAZARDOUS WEATHER IS EXPECTED AT THIS TIME.

.SPOTTER INFORMATION STATEMENT...

SPOTTERS ARE ENCOURAGED TO REPORT SEVERE WEATHER.

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AMZ254-256-SCZ017-023-024-032>034-039-046-041000-
LITTLE RIVER INLET TO MURRELLS INLET SC OUT 20 NM-
MURRELLS INLET TO SOUTH SANTEE RIVER SC OUT 20 NM-MARLBORO-DARLINGTON-
DILLON-FLORENCE-MARION-HORRY-WILLIAMSBURG-GEORGETOWN-
253 PM EST WED JAN 3 2007

...TORNADO WATCH UNTIL 9 PM EST...

THIS HAZARDOUS WEATHER OUTLOOK IS FOR PORTIONS OF THE ADJACENT
COASTAL WATERS...SOUTHEAST NORTH CAROLINA AND NORTHEAST SOUTH
CAROLINA.

.DAY ONE...THIS AFTERNOON AND TONIGHT

PLEASE LISTEN TO NOAA WEATHER RADIO OR GO TO WEATHER.GOV ON THE INTERNET FOR MORE INFORMATION ABOUT THE FOLLOWING HAZARDS.

TORNADO WATCH

.DAYS TWO THROUGH SEVEN...THURSDAY THROUGH TUESDAY

NO HAZARDOUS WEATHER IS EXPECTED AT THIS TIME.

.SPOTTER INFORMATION STATEMENT...

SPOTTERS ARE ENCOURAGED TO REPORT SEVERE WEATHER.

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AMZ250-252-041000-
SURF CITY TO CAPE FEAR NC OUT 20 NM-
CAPE FEAR NC TO LITTLE RIVER INLET SC OUT 20 NM-
253 PM EST WED JAN 3 2007

...SEVERE THUNDERSTORM WATCH UNTIL 7 PM EST...

THIS HAZARDOUS WEATHER OUTLOOK IS FOR PORTIONS OF THE ADJACENT COASTAL WATERS...SOUTHEAST NORTH CAROLINA AND NORTHEAST SOUTH CAROLINA.

.DAY ONE...THIS AFTERNOON AND TONIGHT

PLEASE LISTEN TO NOAA WEATHER RADIO OR GO TO WEATHER.GOV ON THE INTERNET FOR MORE INFORMATION ABOUT THE FOLLOWING HAZARDS.

SEVERE THUNDERSTORM WATCH

.DAYS TWO THROUGH SEVEN...THURSDAY THROUGH TUESDAY

NO HAZARDOUS WEATHER IS EXPECTED AT THIS TIME.

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5.1.2 Winter Weather.

Example #3: This outlook issued by WFO Binghamton, New York describes the winter storm potential in the two to three day timeframe.

FLUS41 KBGM 260810
HWOBGM

HAZARDOUS WEATHER OUTLOOK
NATIONAL WEATHER SERVICE BINGHAMTON NY
310 AM EST TUE DEC 26 2006

NYZ009-015>018-022>025-036-037-044>046-055>057-062-PAZ038>040-043-044-047-048-072-270815-
NORTHERN ONEIDA-YATES-SENECA-SOUTHERN CAYUGA-ONONDAGA-STEUBEN-
SCHUYLER-CHEMUNG-TOMPKINS-MADISON-SOUTHERN ONEIDA-CORTLAND-
CHENANGO-OTSEGO-TIOGA-BROOME-DELAWARE-SULLIVAN-BRADFORD-
SUSQUEHANNA-NORTHERN WAYNE-WYOMING-LACKAWANNA-LUZERNE-PIKE-
SOUTHERN WAYNE-
310 AM EST TUE DEC 26 2006

...A WINTER STORM IS LIKELY WEDNESDAY NIGHT AND THURSDAY...

THIS HAZARDOUS WEATHER OUTLOOK IS FOR PORTIONS OF CENTRAL NEW YORK...SOUTHEASTERN NEW YORK AND NORTHEAST PENNSYLVANIA.

.DAY ONE...TODAY AND TONIGHT

NO HAZARDOUS WEATHER IS EXPECTED AT THIS TIME.

.DAYS TWO THROUGH SEVEN...WEDNESDAY THROUGH MONDAY

LOW PRESSURE WILL DEVELOP OVER THE GULF OF MEXICO TODAY. ALTHOUGH THE EXACT TRACK AND STRENGTH OF THIS STORM REMAINS UNCERTAIN, A POSITION OVER CENTRAL OR EASTERN PENNSYLVANIA IS EXPECTED BY THURSDAY AFTERNOON. THE EXACT TRACK OF THIS STORM WILL HAVE MAJOR IMPLICATIONS FOR PRECIPITATION TYPE AND AMOUNTS ACROSS CENTRAL NEW YORK AND NORTHEAST PENNSYLVANIA ON WEDNESDAY NIGHT AND THURSDAY.

AT THE PRESENT TIME, THE MOST LIKELY SCENARIO CALLS FOR RAIN TO SPREAD ACROSS THE REGION ON WEDNESDAY AFTERNOON. ON WEDNESDAY NIGHT, A MIX OF RAIN AND SNOW IS EXPECTED ACROSS UPSTATE NEW YORK, WITH THE POTENTIAL FOR MODERATE SNOW ACCUMULATIONS OVER THE HIGHER ELEVATIONS. THE PRECIPITATION SHOULD BE PRIMARILY IN THE FORM OF RAIN ACROSS NORTHEAST PENNSYLVANIA ON WEDNESDAY NIGHT.

AS THE LOW MOVES INTO NEW ENGLAND ON THURSDAY AFTERNOON, A COLDER NORTHWEST FLOW WILL DEVELOP, CHANGING ALL OF THE PRECIPITATION OVER TO SNOW. THE CHANGEOVER TO SNOW WOULD LIKELY OCCUR DURING THE EARLY MORNING HOURS ACROSS UPSTATE NEW YORK, AND DURING THE AFTERNOON ACROSS NORTHEAST PENNSYLVANIA. CURRENTLY, THE GREATEST SNOW ACCUMULATIONS APPEAR MOST LIKELY ON THURSDAY OVER PORTIONS OF THE FINGER LAKES AND CENTRAL SOUTHERN TIER OF NEW YORK, WITH POTENTIAL AMOUNTS OF 6 TO 10 INCHES.

TRAVEL MAY BECOME DIFFICULT ON WEDNESDAY NIGHT, AND THE HAZARDOUS DRIVING CONDITIONS WILL LIKELY WORSEN ON THURSDAY.

THE NATIONAL WEATHER SERVICE WILL CONTINUE TO MONITOR DEVELOPMENTS CLOSELY. STAY TUNED TO NOAA WEATHER RADIO FOR THE LATEST UPDATES.

.SPOTTER INFORMATION STATEMENT...

SPOTTER ACTIVATION MAY BE NEEDED WEDNESDAY NIGHT AND THURSDAY.
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Example #4: Situation – A storm system is approaching the WFO Burlington, VT area from the south. Models and Hydrometeorological Prediction Center (HPC) guidance indicate that the storm could produce heavy snow over an extended period. The WFO issued a Winter Storm Watch for parts of Vermont and New York, and the HWO was subsequently updated at 4:13 p.m. on Thursday December 22, 2005.

FLUS41 KBTW 222113
HWOBTW

HAZARDOUS WEATHER OUTLOOK
NATIONAL WEATHER SERVICE BURLINGTON VT
413 PM EST THU DEC 22 2005

NYZ026>031-034-035-087-VTZ001>012-016>019-230845-
NORTHERN ST. LAWRENCE-NORTHERN FRANKLIN-EASTERN CLINTON-
SOUTHEASTERN ST. LAWRENCE-SOUTHERN FRANKLIN-WESTERN CLINTON-
WESTERN ESSEX-EASTERN ESSEX-SOUTHWESTERN ST. LAWRENCE-GRAND ISLE-
WESTERN FRANKLIN-ORLEANS-ESSEX-WESTERN CHITTENDEN-LAMOILLE-
CALEDONIA-WASHINGTON-WESTERN ADDISON-ORANGE-WESTERN RUTLAND-
WINDSOR-EASTERN FRANKLIN-EASTERN CHITTENDEN-EASTERN ADDISON-
EASTERN RUTLAND-
413 PM EST THU DEC 22 2005

...WINTER STORM WATCH FRIDAY AFTERNOON THROUGH SATURDAY MORNING...

THIS HAZARDOUS WEATHER OUTLOOK IS FOR NORTHERN NEW YORK...AS WELL AS CENTRAL AND NORTHERN VERMONT.

.DAY ONE...TONIGHT

NO HAZARDOUS WEATHER IS EXPECTED AT THIS TIME.

.DAYS TWO THROUGH SEVEN...FRIDAY THROUGH WEDNESDAY

PLEASE LISTEN TO NOAA WEATHER RADIO OR GO TO WEATHER.GOV ON THE INTERNET FOR MORE INFORMATION ABOUT THE FOLLOWING HAZARDS.

WINTER STORM WATCH

.SPOTTER INFORMATION STATEMENT...

SPOTTERS ARE ENCOURAGED TO REPORT SNOWFALL AMOUNTS AND RATES.
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5.1.3 Multiple Hazards.

Example #5: Situation – A storm system moving through the Mid-Atlantic region is producing a wide variety of weather hazards in the WFO Mount Holly, NJ area: snow, sleet, and freezing rain in the Pocono Mountains; severe thunderstorms across southeastern Pennsylvania, southern New Jersey, and the Delmarva; and gale-force winds along the New Jersey and Delaware coasts. The WFO issued a multi-segmented HWO at 4:27 a.m. on Sunday December 24, 2006 highlighting the potential for winter, severe thunderstorm, and marine hazards.

FLUS41 KPHI 240927
HWOPHI

HAZARDOUS WEATHER OUTLOOK
NATIONAL WEATHER SERVICE MOUNT HOLLY NJ
427 AM EST SUN DEC 24 2006

NJZ001-PAZ054-055-250930-
SUSSEX-CARBON-MONROE-
427 AM EST SUN DEC 24 2006

...WINTER WEATHER ADVISORY THROUGH MONDAY MORNING...

THIS HAZARDOUS WEATHER OUTLOOK IS FOR PORTIONS OF THE POCONOS AND NORTHWESTERN NEW JERSEY.

.DAY ONE...TODAY AND TONIGHT

PLEASE LISTEN TO NOAA WEATHER RADIO OR GO TO WEATHER.GOV ON THE INTERNET FOR MORE INFORMATION ABOUT THE FOLLOWING HAZARDS.

WINTER WEATHER ADVISORY

.DAYS TWO THROUGH SEVEN...MONDAY THROUGH SATURDAY

PLEASE LISTEN TO NOAA WEATHER RADIO OR GO TO WEATHER.GOV ON THE INTERNET FOR MORE INFORMATION ABOUT THE FOLLOWING HAZARDS.

WINTER WEATHER ADVISORY

.SPOTTER INFORMATION STATEMENT...

SPOTTERS ARE ENCOURAGED TO REPORT SNOWFALL RATES AND AMOUNTS.

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DEZ001>004-MDZ008-012-015-019-020-NJZ007>010-012>027-PAZ060>062-067>071-250930-
NEW CASTLE-KENT DE-INLAND SUSSEX-DELAWARE BEACHES-CECIL-KENT MD-
QUEEN ANNE'S-TALBOT-CAROLINE-WARREN-MORRIS-HUNTERDON-
SOMERSET-MIDDLESEX-WESTERN MONMOUTH-EASTERN MONMOUTH-MERCER-SALEM-
GLOUCESTER-CAMDEN-NORTHWESTERN BURLINGTON-OCEAN-CUMBERLAND-
ATLANTIC-CAPE MAY-ATLANTIC COASTAL CAPE MAY-COASTAL ATLANTIC-
COASTAL OCEAN-SOUTHEASTERN BURLINGTON-BERKS-LEHIGH-
NORTHAMPTON-CHESTER-MONTGOMERY-BUCKS-DELAWARE-PHILADELPHIA-
427 AM EST SUN DEC 24 2006

THIS HAZARDOUS WEATHER OUTLOOK IS FOR PORTIONS OF EASTERN
PENNSYLVANIA, DELAWARE, THE NORTHERN MARYLAND EASTERN SHORE AND
NEW JERSEY, EXCLUDING THE FIVE NORTHEAST COUNTIES.

.DAY ONE...TODAY AND TONIGHT

AN INTENSIFYING LOW PRESSURE SYSTEM OVER THE SOUTHEAST WILL TRACK
NORTHEAST ALONG THE APPALACHIANS TODAY. AS THIS OCCURS...A WARM
FRONT WILL LIFT NORTH THROUGH THE AREA THIS MORNING...FOLLOWED BY THE
PASSAGE OF A COLD FRONT FROM THE WEST TONIGHT.

AS THE WARM FRONT LIFTS NORTH OF THE AREA...A LINE OF THUNDERSTORMS IS
EXPECTED TO DEVELOP AND TRACK ACROSS THE AREA THIS AFTERNOON AHEAD OF THE
COLD FRONT. THERE IS A SLIGHT RISK THAT SOME OF THESE THUNDERSTORMS COULD
BECOME SEVERE...WITH DAMAGING WIND GUSTS IN EXCESS OF 60 MPH AND PERHAPS AN
ISOLATED TORNADO.

IN ADDITION...LOCALLY HEAVY RAINFALL IS POSSIBLE TODAY. WIDESPREAD
RAINFALL AMOUNTS OF 1 TO 2 INCHES IS EXPECTED...WITH LOCALLY HIGHER
AMOUNTS POSSIBLE. THIS MUCH RAINFALL COULD RESULT IN FLOODING OF LOW
LYING...URBAN AND POOR DRAINAGE AREAS...ESPECIALLY NEAR THE TIME OF
HIGH TIDE ALONG THE COAST. PONDING OF WATER ON ROADWAYS IS ALSO LIKELY.

RESIDENTS...VISITORS...AND ANYONE TRAVELING THROUGH THE AREA TODAY AND
TONIGHT SHOULD MONITOR THIS DEVELOPING WEATHER SITUATION. STAY TUNED TO
NOAA WEATHER RADIO ALL HAZARDS...TV...OR YOUR LOCAL NEWS SOURCE FOR THE
LATEST WEATHER INFORMATION FROM THE NATIONAL WEATHER SERVICE. ADDITIONAL
INFORMATION IS ALSO AVAILABLE ON THE INTERNET AT WWW.WEATHER.GOV/PHI

.DAYS TWO THROUGH SEVEN...MONDAY THROUGH SATURDAY

NO HAZARDOUS WEATHER IS EXPECTED AT THIS TIME.

.SPOTTER INFORMATION STATEMENT...

SPOTTER ACTIVATION MAY BE NEEDED TODAY.

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ANZ430-431-450>455-250930-

DELAWARE BAY WATERS NORTH OF EAST POINT NJ TO SLAUGHTER BEACH DE-
DELAWARE BAY WATERS SOUTH OF EAST POINT NJ TO SLAUGHTER BEACH DE-
COASTAL WATERS FROM SANDY HOOK TO MANASQUAN INLET NJ OUT 20 NM-
COASTAL WATERS FROM MANASQUAN INLET TO LITTLE EGG INLET NJ OUT 20 NM-
COASTAL WATERS FROM LITTLE EGG INLET TO GREAT EGG INLET NJ OUT 20 NM-
COASTAL WATERS FROM GREAT EGG INLET TO CAPE MAY NJ OUT 20 NM-
COASTAL WATERS FROM CAPE MAY NJ TO CAPE HENLOPEN DE OUT 20 NM-
COASTAL WATERS FROM CAPE HENLOPEN TO FENWICK ISLAND DE OUT 20 NM-
427 AM EST SUN DEC 24 2006

...GALE WARNING THROUGH TONIGHT...

THIS HAZARDOUS WEATHER OUTLOOK IS FOR DELAWARE BAY AND COASTAL
WATERS FROM SANDY HOOK NJ TO FENWICK ISLAND DE OUT 20 NM.

.DAY ONE...TODAY AND TONIGHT

PLEASE LISTEN TO NOAA WEATHER RADIO OR GO TO WEATHER.GOV ON THE
INTERNET FOR MORE INFORMATION ABOUT THE FOLLOWING HAZARDS.

GALE WARNING

.DAYS TWO THROUGH SEVEN...MONDAY THROUGH SATURDAY

NO HAZARDOUS WEATHER IS EXPECTED AT THIS TIME.

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5.1.4 Hydrologic.

Example #6: This outlook issued by WFO Raleigh, North Carolina describes the flood potential in the two to three day timeframe.

FLUS42 KRAH 150921
HWORAH

HAZARDOUS WEATHER OUTLOOK
NATIONAL WEATHER SERVICE RALEIGH NC
421 AM EST WED NOV 15 2006

NCZ007>011-021>028-038>043-073>078-083>086-088-089-160930-
PERSON-GRANVILLE-VANCE-WARREN-HALIFAX-FORSYTH-GUILFORD-ALAMANCE-
ORANGE-DURHAM-FRANKLIN-NASH-EDGEcombe-DAVIDSON-RANDOLPH-CHATHAM-
WAKE-JOHNSTON-WILSON-STANLY-MONTGOMERY-MOORE-LEE-HARNETT-WAYNE-
ANSON-RICHMOND-SCOTLAND-HOKE-CUMBERLAND-SAMPSON-
421 AM EST WED NOV 15 2006

...HEAVY RAIN IS POSSIBLE AGAIN THURSDAY AND THURSDAY NIGHT...

THIS HAZARDOUS WEATHER OUTLOOK IS FOR PORTIONS OF CENTRAL NORTH CAROLINA.

.DAY ONE...TODAY AND TONIGHT

NO HAZARDOUS WEATHER IS EXPECTED AT THIS TIME.

.DAYS TWO THROUGH SEVEN...THURSDAY THROUGH TUESDAY

LOW PRESSURE OVER THE SOUTHERN PLAINS WILL MOVE NORTHEAST TO THE EASTERN GREAT LAKES THURSDAY NIGHT. A STRONG COLD FRONT ASSOCIATED WITH THE LOW WILL CROSS OUR AREA FROM WEST TO EAST THURSDAY INTO EARLY THURSDAY NIGHT.

SOME LIGHT RAIN MAY SPREAD INTO THE AREA TONIGHT WELL AHEAD OF THE APPROACHING FRONT. BUT HEAVIER AND MORE NUMEROUS SHOWERS, AND POSSIBLY EVEN SOME THUNDERSTORMS, COULD PRODUCE AREAS OF HEAVY RAIN ACROSS THE REGION THURSDAY AND EARLY THURSDAY NIGHT. AVERAGE RAINFALL IS FORECAST TO BE BETWEEN ONE AND TWO INCHES, BUT LOCALIZED AMOUNTS COULD APPROACH THREE INCHES, ESPECIALLY IF THUNDERSTORMS MATERIALIZE.

WITH A GOOD DEAL OF RAIN OVER THE PAST COUPLE OF WEEKS, SOILS ARE SATURATED AND STREAMS AND RIVERS ARE RUNNING QUITE HIGH.

IF HEAVY RAIN OCCURS THURSDAY AND EARLY THURSDAY NIGHT, RUNOFF WILL BE VERY RAPID AND WILL ALMOST DEFINITELY PRODUCE POOR-DRAINAGE FLOODING. IF THE HEAVY RAIN FALLS IN A RELATIVELY SHORT PERIOD OF TIME, STREAM FLOODING WILL ONCE AGAIN BE POSSIBLE.

IF YOU LIVE IN A LOCATION THAT IS PRONE TO FLOODING, BE SURE TO CHECK THE FORECAST FOR UPDATED INFORMATION AS WELL AS FOR THE POSSIBLE ISSUANCE FLOOD WATCHES OR WARNINGS. IT WOULD ALSO BE A GOOD IDEA TO CLEAR CATCH BASINS AND CULVERTS OF FALLEN LEAVES TO HELP REDUCE POOR-DRAINAGE FLOODING.

STAY TUNED TO NOAA WEATHER RADIO ALL HAZARDS...YOUR VOICE OF THE NATIONAL WEATHER SERVICE...FOR THE LATEST WEATHER INFORMATION.

.SPOTTER INFORMATION STATEMENT...

SPOTTER ACTIVATION MAY BE NEEDED THURSDAY AND EARLY THURSDAY NIGHT.

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Example #7: This updated multi-segmented outlook issued by WFO Sterling, Virginia describes the flood and marine-related high wind potential caused by remnants of a tropical system in the two to four day timeframe.

FLUS41 KLWX 301517
HWOLWX

HAZARDOUS WEATHER OUTLOOK
NATIONAL WEATHER SERVICE BALTIMORE MD/WASHINGTON DC
1117 AM EDT WED AUG 30 2006

DCZ001-MDZ003>007-009>011-013-014-016>018-501-502-
VAZ021-025>031-036>042-050>057-WVZ050>055-501>504-310915-
DISTRICT OF COLUMBIA-WASHINGTON-FREDERICK MD-CARROLL-NORTHERN
BALTIMORE-HARFORD-MONTGOMERY-HOWARD-SOUTHERN BALTIMORE-PRINCE
GEORGES-ANNE ARUNDEL-CHARLES-ST. MARYS-CALVERT-EXTREME WESTERN
ALLEGANY-CENTRAL AND EASTERN ALLEGANY-HIGHLAND-AUGUSTA-ROCKINGHAM-
SHENANDOAH-FREDERICK VA-PAGE-WARREN-CLARKE-NELSON-ALBEMARLE-GREENE-
MADISON-RAPPAHANNOCK-FAUQUIER-LOUDOUN-ORANGE-CULPEPER-PRINCE
WILLIAM/MANASSAS/MANASSAS PARK-FAIRFAX-ARLINGTON/FALLS
CHURCH/ALEXANDRIA-STAFFORD-SPOTSYLVANIA-KING GEORGE-HAMPSHIRE-MORGAN-
BERKELEY-JEFFERSON-PENDLETON-HARDY-WESTERN GRANT-EASTERN GRANT-WESTERN
MINERAL-EASTERN MINERAL-
1117 AM EDT WED AUG 30 2006

...HEAVY RAINFALL AND SIGNIFICANT FLOODING POSSIBLE LATE THIS WEEK...

THIS HAZARDOUS WEATHER OUTLOOK IS FOR MARYLAND WEST OF THE EASTERN SHORE
AND EAST OF GARRETT COUNTY...EASTERN WEST VIRGINIA...NORTHERN AND CENTRAL
VIRGINIA...AND WASHINGTON DC.

.DAY ONE...THIS AFTERNOON AND TONIGHT

NO HAZARDOUS WEATHER IS EXPECTED.

.DAYS TWO THROUGH SEVEN...THURSDAY THROUGH TUESDAY

THE REMNANTS OF TROPICAL STORM ERNESTO ARE EXPECTED TO AFFECT THE MID
ATLANTIC LATE THIS WEEK. WIDESPREAD HEAVY RAINFALL WILL RESULT IF ERNESTO
FOLLOWS ITS CURRENT FORECAST TRACK. PERIODS OF HEAVY RAIN COULD BEGIN AS
EARLY AS THURSDAY...AND CONTINUE THROUGH FRIDAY NIGHT.

TROPICAL SYSTEMS TEND TO BE VERY EFFICIENT RAIN MAKERS...AND HAVE BEEN
RESPONSIBLE FOR CATASTROPHIC FLOODING IN THE PAST IN PARTS OF OUR REGION.

RAINFALL TOTALS WILL DEPEND ON THE EXACT TRACK OF ERNESTO. RAINFALL AMOUNTS OF 5 TO 10 INCHES THROUGH FRIDAY NIGHT ARE POSSIBLE BASED ON THE CURRENT FORECAST TRACK. FLOODING OF SMALL STREAM AND CREEKS...URBAN AREAS AND MAIN STEM RIVERS SUCH AS THE POTOMAC AND RAPPAHANNOCK...WILL BE POSSIBLE IF THIS HEAVY RAINFALL MATERIALIZES.

PLEASE STAY TUNED TO NOAA WEATHER RADIO...WEATHER.GOV ON THE INTERNET AND LOCAL MEDIA...FOR THE LATEST UPDATES ON THIS POTENTIAL HAZARDOUS WEATHER EVENT. THE FORECAST TRACK OF ERNESTO COULD CHANGE ON LATER UPDATES SO IT WILL BE IMPORTANT TO BE AWARE OF LATER UPDATES.

.SPOTTER INFORMATION STATEMENT...

SPOTTER ACTIVATION MAY BE REQUIRED THURSDAY AND FRIDAY.

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ANZ530>537- 310915-
CHESAPEAKE BAY NORTH OF POOLES ISLAND MD-
CHESAPEAKE BAY FROM POOLES ISLAND TO SANDY POINT MD-
CHESAPEAKE BAY FROM SANDY POINT TO NORTH BEACH MD-
CHESAPEAKE BAY FROM NORTH BEACH TO DRUM POINT MD-
CHESAPEAKE BAY FROM DRUM POINT MD TO SMITH POINT VA-
TIDAL POTOMAC FROM KEY BRIDGE TO INDIAN HEAD MD-
TIDAL POTOMAC FROM INDIAN HEAD TO COBB ISLAND MD-
TIDAL POTOMAC FROM COBB ISLAND MD TO SMITH POINT VA-
1117 AM EDT WED AUG 30 2006

THIS HAZARDOUS WEATHER OUTLOOK IS FOR THE CHESAPEAKE BAY AND THE TIDAL POTOMAC RIVER.

.DAY ONE...THIS AFTERNOON AND TONIGHT

NO HAZARDOUS WEATHER IS EXPECTED.

.DAYS TWO THROUGH SEVEN...THURSDAY THROUGH TUESDAY

THE REMNANTS OF TROPICAL STORM ERNESTO MAY PRODUCE STRONG WINDS THURSDAY NIGHT AND FRIDAY.

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5.2 Special Weather Statement.

WWUS81 KPBF 221053
SPSPBZ

SPECIAL WEATHER STATEMENT
NATIONAL WEATHER SERVICE PITTSBURGH PA
643 AM EDT THU JUN 22 2006

OHZ049-221145-
HARRISON OH-
643 AM EDT THU JUN 22 2006

...THUNDERSTORMS CONTINUE TO DROP HEAVY RAINFALL ACROSS THE REGION...

AT 643 AM EDT NATIONAL WEATHER SERVICE DOPPLER RADAR IN PITTSBURGH
ESTIMATED RAINFALL AMOUNTS BETWEEN 2.00 AND 2.40 INCHES ACROSS
HARRISON COUNTY IN EAST CENTRAL OHIO.

SKYWARN OBSERVERS NEAR SCIO IN HARRISON COUNTY REPORTED CONNOTTON
CREEK BETWEEN SCIO AND BOWERSTOWN WAS NEAR BANKFULL BUT NO FLOODING
HAS BEEN REPORTED.

DO NOT DRIVE THROUGH FLOODED AREAS...THE WATER MAY BE HIGHER THAN
YOU THINK.

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WWUS82 KRAH 211815
SPSRAH

SPECIAL WEATHER STATEMENT
NATIONAL WEATHER SERVICE RALEIGH NC
212 PM EDT WED JUN 21 2006

NCZ075>077-086-088-211915-
CUMBERLAND-HARNETT-HOKE-LEE-MOORE-
212 PM EDT WED JUN 21 2006

...STRONG THUNDERSTORMS WILL MOVE ACROSS LEE...HARNETT...MOORE...
CUMBERLAND AND HOKE COUNTIES THROUGH 315 PM EDT...

AT 212 PM EDT...DOPPLER RADAR INDICATED AN AREA OF THUNDERSTORMS MOVING
ACROSS PORTIONS OF THE SANDHILLS WHICH INCLUDE CARTHAGE...SOUTHERN
PINES...LEMON SPRINGS...FAYETTEVILLE AND FORT BRAGG.

GUSTY WINDS OF 40 TO 50 MPH...VERY HEAVY RAIN AND DANGEROUS
CLOUD-TO-GROUND LIGHTNING CAN BE EXPECTED WITH THESE STORMS.

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5.3 Short Term Forecast.

FPUS72 KCHS 240342
NOWCHS

SHORT TERM FORECAST
NATIONAL WEATHER SERVICE CHARLESTON SC
1042 PM EST SAT DEC 23 2006

GAZ087-088-099>101-114>119-137>141-SCZ040-042>045-047>051-240715-
JENKINS-SCREVEN-CANDLER-BULLOCH-EFFINGHAM-TATTNALL-EVANS-INLAND BRYAN-
COASTAL BRYAN-INLAND CHATHAM-COASTAL CHATHAM-LONG-INLAND LIBERTY-
COASTAL LIBERTY-INLAND MCINTOSH-COASTAL MCINTOSH-ALLENDALE-HAMPTON-
INLAND COLLETON-DORCHESTER-BERKELEY-INLAND JASPER-BEAUFORT-COASTAL
COLLETON-CHARLESTON-COASTAL JASPER-
INCLUDING THE CITIES OF...MILLEN...SYLVANIA...METTER...
STATESBORO...SPRINGFIELD...REIDSVILLE...CLAXTON...PEMBROKE...
FORT MCALLISTER...SAVANNAH...TYBEE ISLAND...LUDOWICI...
HINESVILLE...HALFMOON LANDING...TOWNSEND...DARIEN...ALLENDALE...
HAMPTON...WALTERBORO...ST. GEORGE...SUMMERSVILLE...MONCK'S CORNER...
RIDGELAND...BEAUFORT...HILTON HEAD...EDISTO BEACH...CHARLESTON...JASPER
1042 PM EST SAT DEC 23 2006

.NOW...
PATCHY FOG WILL CONTINUE ACROSS SOUTHERN SOUTH CAROLINA AND SOUTHEAST
GEORGIA OVERNIGHT...WITH LOCALLY DENSE FOG IN A FEW AREAS. VISIBILITY IN THE
FOG WILL BE REDUCED TO LESS THAN 1 MILE THROUGH THE NIGHT...BUT WITH LOCAL
VISIBILITY DOWN TO NEAR OR LESS THAN 1/4 MILE.

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FPUS71 KCLE 212358
NOWCLE

SHORT TERM FORECAST
NATIONAL WEATHER SERVICE CLEVELAND OH
658 PM EST THU DEC 21 2006

OHZ011>014-021>023-032-033-089-220100-
CUYAHOGA-LAKE-GEAUGA-ASHTABULA INLAND-SUMMIT-PORTAGE-TRUMBULL-STARK-
MAHONING-ASHTABULA LAKESHORE-
INCLUDING THE CITIES OF...CLEVELAND...MENTOR...CHARDON...
JEFFERSON...AKRON...RAVENNA...WARREN...CANTON...YOUNGSTOWN...ASHTABULA
658 PM EST THU DEC 21 2006

.NOW...
RAIN MOVING THROUGH NORTH CENTRAL OHIO WILL CONTINUE TO MOVE EAST AND
MOVE INTO NORTHEAST OHIO FROM CLEVELAND TO CANTON AROUND 8PM AND FROM
ASHTABULA TO YOUNGSTOWN BY 10PM. RAINFALL WILL BE AROUND A TENTH OF AN
INCH OR LESS.

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