

Examples of Flash Flood Products

The following examples of outlooks, warning, watch, and flash flood statements are based on content and formats that have been found to be effective in the United States. They are examples of one approach to establishing a warning product suite. Each NMHS must assess what works best for the culture and other unique aspects of that center's constituent base.

Alerting Users of the potential for Flash Flooding before rainfall begins

Hydrologic Outlook Products

A Hydrologic Outlook may be issued if forecast meteorological conditions indicate that a significantly heavy precipitation event and/or snowmelt may occur that would cause flooding or aggravate existing flooding. Outlooks are usually issued in the range of 36–72 hours in advance of the event.

- Mission Connection. Hydrologic outlooks help the NMHS meet its mission by providing long lead time information on the potential for flooding or other notable hydrologic events. This product gives users lead time to consider response options and execute mitigation activities, thus helping to protect life and property and enhance the national economy.
- ▶ **Issuance Criteria.** A hydrologic outlook identifying the possibility of a flood event is issued for the NMHS's hydrologic service area (HSA) on an as-needed basis when one of the following criteria is met:
 - A product needs to be issued to convey the possibility of flooding 24 hours or more into the future, but potentially in as little as 12 hours when near-term certainty is still low, or
 - A hydrologic outlook was previously issued indicating the possibility of flooding, but none materialized. In this case the new product would indicate there is no longer a possibility of flooding.
- **Issuance Time.** Hydrologic outlooks describing the possibility of a flood event are non-scheduled, event-driven products.
- **Valid Time.** A hydrologic outlook will be valid until a time/date specified in the product or until it is canceled or updated by another hydrologic outlook.
- **Product Expiration Time.** The product expiration time varies with the time horizon covered in the product. For hydrologic outlooks describing the possibility of a flood event, the product expiration time is typically 12 to 24 hours but may be several days.

- Content: Outlooks are generally free-form text products, that is, they are non-segmented, non-bulleted products written in a variety of formats tailored to their target audience. The following should be included in hydrologic outlooks describing the possibility of a flood event:
 - Headline defining the type of flooding being addressed (e.g., flash flooding, main stem river flooding, snow melt flooding)
 - Area covered
 - Possible timing of the event
 - Relevant factors (e.g., synoptic conditions, quantitative precipitation forecasts (QPF), or soil conditions)
 - Definition of an outlook (tailored to the specific situation)
 - A closing statement indicating when additional information will be provided.

EXAMPLE

FGUS73 KSGF 102135 ESFSGF MOC055-056-058-060>062-110400- HYDROLOGIC OUTLOOK NATIONAL WEATHER SERVICE SPRINGFIELD MO 335 PM CST FRI DEC 10 1999

...ANOTHER HEAVY RAINMAKER TO HIT THE OZARKS COULD PRODUCE FLOODING EARLY NEXT WEEK...

OVER THE PAST COUPLE OF WEEKS...SIGNIFICANT RAINFALL HAS FALLEN ACROSS THE OZARKS. AS A RESULT...MOST OF SOUTHWEST MISSOURI IS ALMOST BACK TO NORMAL RAINFALL...AND IN SOME CASES ABOVE NORMAL. THROUGH DECEMBER 10... SPRINGFIELD HAS RECEIVED 6.84 INCHES AND MANY AREAS OF THE OZARKS HAVE RECEIVED MORE THAN EIGHT INCHES. THE NORMAL RAINFALL FOR SPRINGFIELD IN DECEMBER IS 3.16 INCHES.

BEGINNING MONDAY AND EARLY TUESDAY...THE OZARKS WILL RECEIVE ANOTHER SOAKING RAIN. CURRENT WEATHER MODELS INDICATE A STORM TRACK ACROSS NORTHERN ARKANSAS AND SOUTHERN MISSOURI...BASICALLY THE SAME TRACK TAKEN BY THE RECENT STORMS. THIS MEANS ABUNDANT GULF MOISTURE WILL BE PULLED INTO THE STORM AND DEPOSIT UPWARDS OF ONE TO TWO INCHES ACROSS MOST SECTIONS OF SOUTHERN MISSOURI.

FLOODING MAY OCCUR BECAUSE THE GROUND IS SATURATED FROM RECENT RAINS. LOW WATER CROSSINGS AND SMALL STREAMS COULD SWELL TO SMALL RAGING STREAMS OF WATER. RIVERS...MAINLY ACROSS SOUTHERN MISSOURI... COULD RISE CLOSE TO OR ABOVE FLOOD STAGE BY NEXT TUESDAY.

THE HAZARDOUS WEATHER OUTLOOK PRODUCT WILL BE UPDATED WITH THE LATEST INFORMATION THROUGHOUT THE WEEKEND. ANOTHER SOURCE OF CURRENT WEATHER INFORMATION FOR SOUTHERN MISSOURI IS THROUGH OUR WEB PAGE AT: WWW.CRH.NOAA.GOV/SGF/.

Flash Flood Watch Products

Flash flood watches inform government agencies, the public, etc. of the possibility of flash flooding, typically within a 6 to 48 hour time frame before the event. This product is more specific than a hydrologic outlook product. At the same time, it is more general than a warning because a watch is based on model guidance (Quantitative Precipitation Forecast) for the occurrence of rainfall in the future and on estimated antecedent soil conditions, both of which have uncertainty in time and space. Areal flood watches may cover geopolitical areas, a river/stream basin, or any other type of definable area (e.g., a specific valley).

- Mission Connection. Flood watches help an NMHS meet its mission by providing advance notice and up-to-date information on the possibility of flooding. This allows users to begin monitoring hydrometeorological conditions more closely and elevate flood mitigation resources to a higher state of readiness, thus helping to protect life and property.
- **Issuance Guidelines.** Flash flood watches should be issued when one or more of the following conditions are met:
 - The chance that meteorological, soil, and/or hydrologic conditions will lead to rapidonset flooding within a 48-hour period is approximately 50 to 80 percent
 - The chance that meteorological, soil, and/or hydrologic conditions will lead to rapid-onset flooding more than 48 hours into the future is approximately 50 to 80 percent and the forecaster determines that a flood watch is the best way to convey this possibility
 - The chance that meteorological, soil, hydrologic, and/or burn area conditions will lead to debris flows within a 48-hour period is approximately 50 to 80 percent
 - A dam or levee may fail and threaten lives or property, but the threat is not deemed to be imminent
 - The effective time of a previously issued flood watch changes
 - The geographic area covered by a previously issued flood watch increases
 - An update to a previously issued flood watch is required
 - A cancelation of all or part of a previously issued flood watch is required
 - The expiration of a previously issued flood watch is to be announced. When the flood threat has ended, an expiration or cancelation segment should be issued for the flood watch rather than allowing the product to expire on its own.
- **Issuance Time.** Flash flood watches are non-scheduled, event-driven products.

- Valid Time. A flash flood watch should be valid from the time when the potential for flooding should start until the time when the potential for flooding should end, both as indicated in the headline, or until the product is canceled or has expired.
- **Product Expiration Time.** The product expiration time is generally set to be 6 to 8 hours after product issuance, but may be upwards of 12 to 24 hours for longer-fused potential flood situations. This time should be set to indicate when the next update will be issued or, when approaching the end of the watch period, match the product valid time contained in the headline. When announcing expiration or cancelation of a flash flood watch, the product expiration time should not be more than one half hour after the watch expiration or cancelation time.
- Replacing a Flash Flood Watch With a Flash Flood Warning. If it is decided to replace a flash flood watch with a flash flood warning, first issue a new flash flood warning, then cancel the flash flood watch in a separate flash flood statement. This ensures there is no coverage gap between the watch and the warning. Note: an areal flash flood watch may continue to be in effect if a flash flood warning is issued for a forecast point within the watch area.
- **Content.** Flash flood watch products use a segmented, bullet format (bullets are not used in cancelations/expirations). An optional general overview/synopsis section may be provided at the top of the product.
 - General Overview/Synopsis Section. This optional section, when included, contains at least one of the following items:
 - General Overview Headline One or more headlines summarizing the flash flood threat, potentially affected area, and expected time of development.
 - General Synopsis a brief, nontechnical description of the developing potential flash flood situation,

including associated hydrometeorological factors when appropriate. This synopsis

is free format and may consist of several paragraphs.

Segmented Watch Information Section. Information needed in an areal flood

watch product should be divided into one or more segments.

If multiple segments are needed, they should be provided in the following order:

- a. Cancelations (CAN)
- b. Expirations (EXP)
- c. New issuances (NEW)
- d. Extensions in time (EXT)
- e. Continuations (CON)

- Action lead-in phrase such as "THE NATIONAL WEATHER SERVICE IN <NMHS location> HAS ISSUED A" (for new issuance—NEW), "THE NATIONAL WEATHER SERVICE IN <NMHS location> HAS EXPANDED THE" (for expansions—EXA and EXB), "THE FLASH FLOOD WATCH IS NOW IN EFFECT FOR" (for extensions—EXT), or "THE FLASH FLOOD WATCH CONTINUES FOR" (for continuations—CON), followed by three to four bullets (asterisks *), with the following information (bullets may be more than six lines):
 - *First bullet FLASH FLOOD WATCH FOR PORTIONS OF, followed by a general term describing the geographic area covered, followed by INCLUDING THE FOLLOWING, followed by a list of geopolitical areas covered. In CON and EXT segments, only provide the geographic area.
 - *Second bullet a phrase integrating the event beginning (when appropriate) and event ending times.
 - *Third bullet the watch basis (e.g., synoptic conditions, soil conditions, river conditions, or quantitative precipitation forecasts).
 - *Fourth bullet (optional) the potential impacts to the areas under flood threat. Basin- or point-specific information may be integrated into these bullets.
- Statement defining the meaning of a watch, including: "A flash flood watch means that flash flooding is possible but not imminent in the watch area."
- Call-to-action (CTA) if included, the CTA should focus on avoiding flood dangers and not include instructions on how to escape from vehicles caught in flood waters.

EXAMPLE

Situation: A storm system with heavy rainfall is moving into southern California. Because it is difficult to predict where and if flash-flood-causing rainfall will occur, forecasters issue a flash flood watch for the night and next day over most of the county warning area.

WGUS66 KSGX 120342 FFASGX

URGENT - IMMEDIATE BROADCAST REQUESTED FLOOD WATCH NATIONAL WEATHER SERVICE SAN DIEGO CA 745 PM PST TUE FEB 11 2003

...FLASH FLOODING POSSIBLE OVER SOUTHERN CALIFORNIA UNTIL THURSDAY MORNING...

CAZ042-043-048-050-055>058-061-062-121200- /O.NEW.KSGX.

FF.A.0003.030212T0345Z-030213T1200Z/ /00000.0.ER.000000T0000Z.000000

T0000Z.00000T0000Z.OO/ ORANGE COUNTY COASTAL AREAS-SAN DIEGO COUNTY

COASTAL AREAS- SAN BERNARDINO AND RIVERSIDE COUNTY VALLEYS-THE INLAND

EMPIRE- SAN DIEGO COUNTY VALLEYS-SAN BERNARDINO COUNTY MOUNTAINS
RIVERSIDE COUNTY MOUNTAINS-SANTA ANY MOUNTAINS AND FOOTHILLS-SAN DIEGO

COUNTY MOUNTAINS-COACHELLA VALLEY-SAN DIEGO COUNTY DESERTS- 745 PM PST

TUE FEB 11 2003

...FLASH FLOOD WATCH IN EFFECT THROUGH THURSDAY MORNING...

THE NATIONAL WEATHER SERVICE IN SAN DIEGO HAS ISSUED A

- * FLASH FLOOD WATCH FOR A PORTION OF SOUTHERN CALIFORNIA... INCLUDING THE FOLLOWING AREAS...ORANGE COUNTY COASTAL AREAS...SAN DIEGO COUNTY COASTAL AREAS...SAN DIEGO COUNTY COASTAL AREAS...SAN BERNARDINO AND RIVERSIDE COUNTY VALLEYS...THE INLAND EMPIRE...SAN DIEGO COUNTY VALLEYS...SAN BERNARDINO COUNTY MOUNTAINS... RIVERSIDE COUNTY MOUNTAINS... SANTA ANY MOUNTAINS AND FOOTHILLS...SAN DIEGO COUNTY MOUNTAINS... COACHELLA VALLEY AND SAN DIEGO COUNTY DESERTS. * THROUGH THURSDAY MORNING.
- * A LARGE STORM SOUTHWEST OF SAN DIEGO WILL CONTINUE TO FEED MOISTURE INTO SOUTHERN CALIFORNIA TONIGHT AND WEDNESDAY. AS THE STORM MOVES NORTHEAST RAIN WILL INCREASE ACROSS THE AREA...WITH HEAVY RAIN LIKELY WEDNESDAY. RAINFALL RATES OF 1/2 INCH PER HOUR OR MORE WILL PRODUCE STREET FLOODING... AND MAY ALSO BRING SMALL CREEKS AND STREAMS TO BANKFULL.

A FLASH FLOOD WATCH MEANS THAT FLOODING IS POSSIBLE BUT NOT IMMINENT IN THE WATCH AREA.

THE HEAVY RAINS WILL INCREASE THE THREAT OF MUDSLIDES AND FLOODING IN AND BELOW THE BURN AREAS. RESIDENTS IN THESE AREAS SHOULD MAKE PREPARATIONS FOR FLOODING AND BE PREPARED TO MOVE TO HIGHER GROUND IF HEAVY RAINS DEVELOP. STAY TUNED TO NOAA WEATHER RADIO...COMMERCIAL MEDIA OR CABLE TELEVISION FOR WATCH UPDATES AND POSSIBLE WARNINGS.

Notes and Explanations:

(1) The forecaster wants the watch to start immediately because the storm system is already moving on shore, so the Event Beginning Date/Time (030212T0345Z) is the same as the product issuance date/time (7:45 p.m. on Tuesday, Feb 11, 2003). (2) Note how the highly variable topography in Southern California necessitates the use of more terrain-oriented zone names such as "San Bernardino County Mountains."

Flash Flood Warning Products

Flash flood warnings are issued when rapid-onset flooding is occurring, imminent, or likely. This product should be reserved for those short-term events that require immediate action to protect life and property, such as dangerous small stream or urban flooding and dam or levee failures. The geographic area covered may be all or a portion of one or more geopolitical areas, a river/stream basin, or any other type of definable area (e.g., a specific valley).

- **Mission Connection.** Flash flood warnings help the NMHS meet its mission by providing advance notification of dangerous, short-fused flood events. This allows users to take immediate mitigation actions such as evacuation to higher ground, thus helping to protect life and property.
- Issuance Guidelines. A flash flood warning should be issued in the following situations:
 - Flash flooding is reported
 - A dam or levee failure is imminent or occurring
 - A sudden failure of a naturally-caused stream obstruction (including debris slide, avalanche, or ice jam) is imminent or occurring
 - Precipitation capable of causing flash flooding is indicated by radar, rain gauges, and/or satellite
 - Precipitation, as indicated by radar, rain gauges, satellite, and/or other guidance, is capable of causing debris flows, particularly (but not only) in burn areas
 - Local monitoring and prediction tools indicate flash flooding is likely
 - A hydrologic model indicates flash flooding for locations on small streams
 - A previously issued flash flood warning needs to be extended in time
 - Flash flooding is imminent or occurring in a geographical area currently not under a valid flash flood warning, e.g. expansion of an existing warning.
 - Rapid rise in water level associated with an ice jam is expected to exceed flood stage
- **Issuance Time.** Flash flood warnings are non-scheduled, event-driven products.
- **Valid Time.** A flash flood warning will be valid from time of issuance until the time when flooding (requiring immediate actions to protect life and property) is expected to end or until the product is canceled. When determining the valid time or considering an appropriate time for warning cancelation, the ending time for the flooding should be the determining factor rather than the end of heavy precipitation.



If a reliable source has reported that flooding has ended in all of the warned area and a flash flood warning is still in effect, a flash flood statement should be issued canceling or expiring the warning rather than allowing the product to expire on its own.

- **Product Expiration Time.** The product expiration time is the same as the warning valid time (local time).
- **Content.** Flash flood warnings use a bullet format and include:
 - The action lead-in phrase "THE NATIONAL WEATHER SERVICE IN <NMHS location> HAS ISSUED A" (for new issuances) or "THE NATIONAL WEATHER SERVICE IN <NMHS location> HAS EXTENDED THE" (for extensions), followed by three to four bullets, delimited by asterisks (*) or some other commonly used bullet indicator, with the following information:

*First bullet - FLASH FLOOD WARN-ING FOR..., geographic areas

*Second bullet - UNTIL, followed by the event ending time.

*Third bullet - AT, followed by the time of the warning and the basis for the warning and expected impacts.

*Fourth bullet (optional) - pathcast, i.e., forecast timing of the flood with specific

Call-to-action statements should focus on avoiding flood dangers and not include instructions on how to escape from vehicles caught in flood waters.

locations to be affected (cities, streets, mile markers, and neighborhoods) and the most flood-prone areas. Basin- or point-specific information may be integrated into the bullets.

A call-to-action statement should follow the bullets.

If it is possible to provide hydrologic observations and/or forecasts for specific locations in the flash flood warning area, first issue a flash flood warning for the affected area(s) as described above and then include the point-specific information in a subsequently issued flash flood statement using the format for flash flood statements described later in this chapter.

EXAMPLE

Situation - radar shows thunderstorms with heavy rain moving northwest across central Long Island, NY. Forecasters, using the flash flood monitoring and prediction system (FFMP) note the likelihood of flash flooding in small streams in southwest Suffolk County and decide to issue a flash flood warning at 12:55 p.m. EDT (1655Z). The resulting product is the most common type of flash flood warning - a flash flood warning for an area (as opposed to a specific river or rivers).

WGUS51 KOKX 141655 FFWOKX NYC103-142000- /O.NEW.KOKX.

FF.W.0005.000814T1655Z-000814T2000Z/ /00000.0.ER.000000T0000Z.00000T0

000Z.00000T0000Z.OO/ BULLETIN - EAS ACTIVATION REQUESTED FLASH FLOOD

WARNING NATIONAL WEATHER SERVICE NEW YORK NY 1255 PM EDT MON AUG 14 2000

THE NATIONAL WEATHER SERVICE IN UPTON HAS ISSUED A

- * FLASH FLOOD WARNING FOR...
 SOUTHWEST SUFFOLK COUNTY IN SOUTHEASTERN NEW YORK STATE
- * UNTIL 400 PM EDT
- * AT 1254 PM NATIONAL WEATHER SERVICE DOPPLER RADAR INDICATED THUNDERSTORMS MOVING NORTHWEST TOWARD THE WARNED AREA. RAINFALL RATES FROM 2 TO 3 INCHES PER HOUR WILL CAUSE FLASH FLOODING OF LOW LYING AND POOR DRAINAGE AREAS. THE HEAVY RAINS SHOULD END BY 200 PM EDT AND IT WILL TAKE ANOTHER HOUR OR TWO FOR THE FLOODING TO DISSIPATE.

DO NOT DRIVE YOUR VEHICLE INTO AREAS WHERE THE WATER COVERS THE ROADWAY. MOVE TO HIGHER GROUND IMMEDIATELY.

REPORT SEVERE WEATHER TO THE NEAREST LAW ENFORCEMENT AGENCY. THEY WILL RELAY THE REPORT TO THE NATIONAL WEATHER SERVICE FORECAST OFFICE IN UPTON.

LAT...LON 4153 7264 4131 7255 4138 7190 4159 7198

Notes and Explanations:

- (1) In flash flood warnings, the Event Beginning Date/Time is always the same as the product issuance time, so in this case the former (000814T1655Z) corresponds to 12:55 p.m. EDT on Monday, August 14, 2000.
- (2) Note that even though the forecaster predicts the end of heavy rain by 2:00 p.m., she allows another two hours for the flash flooding to dissipate. Therefore, the Event Ending Date/Time is 000814T2000Z (4:00 p.m. on Monday, August 14 2000).

Flash Flood Statements

Flash flood statements provide supplemental information on active flash flood warning products, such as updated observations and impact information.

- Mission Connection. Flash flood statements help the NMHS meet its mission by providing updated information on dangerous, short-fused flood events. This allows mitigation activities for continuing or receding flash flood threats to be directed towards locations where high water presents a danger to life and property.
- Issuance Guidelines. If a reliable source has reported that flooding has ended in all of the warned area and a flash flood warning is still in effect, a flash flood statement should be issued canceling the warning rather than allowing the product to expire on its own. If a reliable source reports flooding details then a flash flood statement should be issued relaying those details and adding credence to a current warning product.
- ▶ **Issuance Criteria.** Flash flood statements will be issued for geographical areas to:
 - Announce cancelation or expiration of a flash flood warning; and/or
 - Provide additional information to supplement a continuing flash flood warning.
- **Issuance Time.** Flash flood statements are non-scheduled, event-driven products, issued when necessary according to the above issuance criteria.
- **Valid Time.** A flash flood warning referenced in a flash flood statement will continue to be valid until it expires or is canceled.
- **Product Expiration Time.** For flash flood statements providing supplemental information on (but not canceling) a flash flood warning, the product expiration time should be the same as product expiration time for the referenced flash flood warning. For flash flood statements announcing expiration or cancelation of a flash flood warning, the product expiration time is not more than ten minutes after the warning expiration or cancelation time.
- **Content.** The flash flood statement product should use a segmented, non-bulleted format. If more than one type of segment is needed (e.g., cancelation plus continuation) in a given product, they should be ordered as follows:
 - Cancelations (CAN)
 - Expirations (EXP)
 - Continuations (CON)

- All segments in flash flood statements should include the following:
 - Headline with indication of whether the flash flood warning continues to be in effect or is being canceled or allowed to expire, followed by the area covered by the flash flood warning. In exceedingly rare situations, when a severe threat to human life and catastrophic damage from a flash flood is imminent or ongoing, the forecaster should insert the headline "...FLASH FLOOD EMERGENCY FOR [GEOGRAPHIC AREA]..." Such headlines should only be used when reliable sources provide clear evidence that people have been placed in life-threatening situations by rapidly rising floodwaters.
 - Update on current/future hydrometeorological conditions and impacts.
 - Call-to-action statement (not included in CAN or EXP segments) that focuses on avoiding flood dangers and does not include instructions on how to escape from vehicles caught in flood waters

EXAMPLE 1 – Statement with update continuation information

Situation - 35 minutes after the flash flood warning was issued for Suffolk County, the forecaster issues a flash flood statement to provide updated information on the event.

WGUS71 KOKX 141730 FFSOKX FLASH FLOOD STATEMENT NATIONAL WEATHER SERVICE NEW YORK NY 130 PM EDT MON AUG 14 2000

NYC103-142000- /O.CON.KOKX.FF.W.0005.000000T0000Z-000814T2000Z/ /00000.0.ER.000000T0000Z.000000T0000Z.000/ SUFFOLK NY- 130 PM EDT MON AUG 14 2000

...THE FLASH FLOOD WARNING REMAINS IN EFFECT FOR SOUTHWEST SUFFOLK COUNTY IN SOUTHEASTERN NEW YORK STATE UNTIL 400 PM EDT...

AT 130 PM EDT...WEATHER SERVICE DOPPLER RADAR INDICATED A CLUSTER OF THUNDERSTORMS PRODUCING VERY HEAVY RAIN IN AN AREA FROM BRENTWOOD WEST TO DEER PARK AND NORTH TO ABOUT INTERSTATE 495. THUNDERSTORMS ARE MOVING NORTH TOWARDS HUNTINGTON STATION AND LLOYD POINT. RADAR ESTIMATES INDICATE 2 INCHES HAVE FALLEN. LAW ENFORCEMENT OFFICERS IN THE AREA REPORT SEVERAL ROADS ARE COVERED WITH WATER AND ARE TEMPORARILY IMPASSIBLE.

DO NOT DRIVE YOUR VEHICLE INTO AREAS WHERE THE WATER COVERS THE ROADWAY. MOVE TO HIGHER GROUND IMMEDIATELY.

REPORT SEVERE WEATHER TO THE NEAREST LAW ENFORCEMENT AGENCY. THEY WILL RELAY YOUR REPORT TO THE NATIONAL WEATHER SERVICE IN UPTON.

LAT...LON 4153 7264 4131 7255 4138 7190 4159 7198

EXAMPLE 2 – Flash Flood Cancelation Statement

Situation – A half hour before the flash flood warning was scheduled to expire, the forecaster issues a flash flood statement to cancel the warning and summarize reported impacts.

WGUS71 KOKX 141930 FFSOKX FLASH FLOOD STATEMENT NATIONAL WEATHER SERVICE NEW YORK NY 330 PM EDT MON AUG 14 2000

NYC103-141945- /O.CAN.KOKX.FF.W.0005.000000T0000Z-000814T2000Z/ /00000.0.ER.000000T0000Z.000000T0000Z.000/ SUFFOLK NY- 330 PM EDT MON AUG 14 2000

...THE FLASH FLOOD WARNING HAS BEEN CANCELED FOR SOUTHWEST SUFFOLK COUNTY IN NEW YORK...

NATIONAL WEATHER SERVICE DOPPLER RADAR INDICATES THAT THE THUNDERSTORMS HAVE MOVED WELL OUT OF THE AREA AND INTO THE LONG ISLAND SOUND. NO HEAVY RAINFALL HAS OCCURRED IN THE WARNING AREA FOR OVER AN HOUR. THE MOST SERIOUS FLOODING HAS OCCURRED ON JEFFERSON AVENUE NEAR THE BRENTWOOD COUNTRY CLUB WHERE SEVERAL HOMES WERE FLOODED AND A BRIDGE WAS DAMAGED. WATER WAS REPORTED OVER THE ROADWAY AT SEVERAL LOCATIONS IN DEER PARK AND HUNTINGTON STATION. FLOODING HAS SUBSIDED AND THE FLOOD THREAT NO LONGER EXISTS... BUT PONDING OF WATER ON ROADWAYS MAY CONTINUE AT A FEW LOCATIONS AS FLOOD WATERS RECEDE.

REMAIN CAUTIOUS WHEN DRIVING IN LOW LYING AREAS...AND REPORT ANY FLOODED ROADWAYS TO THE NEAREST LAW ENFORCEMENT AGENCY. THEY WILL RELAY YOUR REPORT TO THE NATIONAL WEATHER SERVICE FORECAST OFFICE IN UPTON.

LAT...LON 4153 7264 4131 7255 4138 7190 4159 7198