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Operations and Services
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AREA FORECAST DISCUSSION SPECIFICATIONS

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

OPR: W/ER1x1 (R. Dickman)
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SUMMARY OF REVISIONS: This Supplement replaces ERS 10-2004, "AREA FORECAST DISCUSSION GUIDELINES," dated July 1, 2004 and contains the following revisions:

- 1) Table 1 has been updated to reflect enhanced short term operations and current national policy.
- 2) Previously, forecasters had the option of including a previous AFD within the current AFD product. Effective with this supplement, all sections, including those that do not contain new or updated information will be carried forward into the latest available AFD issuance. No previous AFD discussions will be included in the current product. The AFD will now always contain the latest forecast discussion.
- 3) At a minimum, the AFD will be issued four times daily, regardless of the weather.
- 4) Adjusted formats to reflect time periods bracketed by "/"s.
- 5) Added a section on AFD issuance times.
- 6) Changed all ".FIRE WX..." references to "FIRE WEATHER".
- 7) Clarified section 3.8 wording on Watch/Warning/Advisory format to match National Policy and added example.
- 8) Changed Marine sections to be mandatory for coastal offices (from "optional").
- 9) Added ".SYNOPSIS", ".NEAR TERM", ".CLIMATE", ".EQUIPMENT", and ".TIDES/COASTAL FLOODING" as sections contained within the AFD.
- 10) Added "<single space line feed>" where necessary in Table 1 to better delineate spacing issues within the format.
- 11) Added internet links (<http://www.weather.gov/glossary/>
<http://www.srh.noaa.gov/fwd/glossarynation.html>) as Appendix B.
- 12) Updated examples as needed.
- 13) Changed the title of this Supplement from Area Forecast Guidelines to Area Forecast Discussion Specifications.

<signed Mickey J. Brown> for

April 18, 2007

Dean P. Gulezian
Director, NWS Eastern Region

Date

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1. **Purpose.** The purpose of this Supplement is to provide guidance to Eastern Region (ER) Weather Forecast Offices (WFOs) for composing Area Forecast Discussions (AFD). Forecasters should use the AFD product as an organizing and communications tool of the underlying scientific rationale in the forecast development process.
2. **Philosophy.** The AFD is intended to provide our customers and partners with the scientific reasoning forecasters used to develop forecasts and warnings, an understanding of the forecaster's confidence in the forecast, and a summary of watches, warnings and/or advisories in effect. The AFD facilitates coordination between adjacent WFOs, River Forecast Centers (RFCs), Center Weather Service Units (CWSUs) and National Centers for Environmental Prediction.

The format of the AFDs will be standardized and content limited to factual information pertaining to the current forecast and professional opinions only. Forecasters must keep in mind that their discussions are being widely read and must **refrain from editorial and casual comments, and personal opinions.** The AFD will not be solely a restatement of the forecast. Our customers/partners have come to rely on the AFD for insight into our forecasts. Moreover, in response to our customers/partners, we have encouraged our forecasters to express their confidence in the forecast and numerical model performance within the AFDs. As with all NWS products and services, forecasters are expected to apply sound judgment and common sense.

3. **Area Forecast Discussion Content.** All AFDs will consist of two primary standard sections: (1) a narrative description of the forecast and associated reasoning, and (2) a summary of all outlook/watch/warning/advisory issuances. The format of all AFDs will conform to Table 1 and not deviate from issuance to issuance. The AFD will always contain the most up-to date forecast discussion.

The discussions should focus on the most significant weather issues to affect a WFO's geographic area of responsibility during the seven day forecast period. Emphasis should be placed on those forecast periods where outlooks/watches/warnings/advisories are in effect, proposed, or are being considered. The discussions should also include significant changes from previous forecasts. The content of this product should be professional and remain focused on the science.

All mandatory sections listed below and in Table 1 will be included in each AFD issuance. All sections, including those that do not contain new or updated information will be carried forward into the latest available AFD issuance.

- 3.1 **Synopsis.** This section is mandatory, beginning with the string ".SYNOPSIS..." It will include only a BRIEF description or "sound bite" of the synoptic pattern and the location/movement of relevant weather systems. **This section should not be more than three sentences.** The description of weather from the resulting synoptic pattern should be described elsewhere to keep this section brief.
- 3.2 **Near Term.** This section is mandatory, beginning with the string ".NEAR TERM" followed by the period of time covered, i.e. /THROUGH 8 PM THIS EVENING/ followed by "...". Generally, discussion contained within this

section should not exceed 24 hours.

- 3.3 Short Term.** This section is mandatory, beginning with the string “.SHORT TERM” followed by the period of time covered, i.e. /TONIGHT THROUGH FRIDAY/, followed by “...”.

The period of time that is covered within this section is left to the discretion of the forecaster(s). This section will begin where the “.Near Term” section left off but not exceed day 3.5. The content of this section should focus on the most significant weather issues and forecast changes within the period and the scientific reasoning behind the forecast or the changes.

- 3.4 Long Term.** This section is mandatory, beginning with the string “.LONG TERM” followed by the period of time covered, i.e. /FRIDAY NIGHT THROUGH TUESDAY/, followed by “...”.

The period of time that is covered within this section begins where the Short Term section ends and goes out to the end of the forecast period - seven days. The content of this section should focus on the most significant weather issues and forecast changes within the period and the scientific reasoning behind the forecast and the changes.

- 3.5 Aviation.** This section is mandatory, beginning with the string “.AVIATION /aaZ bbbDAY THROUGH (cc) /... where aa = hour nearest AFD issuance, bbbDAY = Current day of week (in UTC), and cc = 5 days from AFD issuance time. For example, an AFD scheduled to be issued at 2029Z Tuesday will contain the following aviation header: .AVIATION /21Z TUESDAY THROUGH SUNDAY/...

The aviation section of the AFD should be written for the NWS aviation customers: Air Traffic Controllers, Center Weather Service Units (CWSU), Automated Flight Service Stations (AFSS), the Aviation Weather Center (AWC), pilots, and dispatchers.

A detailed aviation-related discussion should occur in the TAF valid period. This section of the AFD should discuss the scientific reasoning and uncertainties regarding expected aviation-related conditions including ceiling heights, visibility restrictions, winds, and convection. Forecasters should use the aviation discussion to describe details not permitted in a Terminal Aerodrome Forecast (TAF).

Aviation-related content should include:

- Simple semi-technical mesoscale description of what is driving the weather
- Timing (in Coordinated Universal Time, UTC) and degree of confidence with respect to:
 - Onset or dissipation of an event that has an impact on flight operations

- Wind shifts
- Confidence level as a percentage. Where might the TAF go wrong?
- References to conditional climatology, model forecasts, and satellite/radar data

Beyond the TAF valid period to Day 5, forecasters will use “sound bites” to briefly describe general outlook information describing weather that may have a significant impact on the aviation community. The aviation outlook requirement comes from several users: Air Traffic Control Towers and TRACON Management, and General Aviation pilots.

The outlook information will be in a separate paragraph. This information will be included if forecaster confidence is 30% or greater and at least half of the CWA will be affected. Forecasters should think of the outlook section in terms of pattern recognition (i.e., northwest flow behind a cold front in the winter means IFR conditions) rather than a detailed forecast.

Examples of “sound bites” include, but are not limited to:

DENSE FOG POSSIBLE <DAY>
STRONG WINDS POSSIBLE <DAY>
HEAVY SNOW OR FREEZING PRECIPITATION POSSIBLE <DAY>
PROLONGED IFR CONDITIONS POSSIBLE <DAY>
WIDESPREAD THUNDERSTORM IMPACTS POSSIBLE <DAY>
NO SIG WX EXPECTED

where <DAY> is the forecast period (e.g. WEDNESDAY, FRIDAY and FRIDAY NIGHT, etc.)

Offices are encouraged to refresh the aviation section as needed prior to scheduled TAF issuances.

3.6 Marine. This section is mandatory for offices that have a marine program, beginning with the string “.MARINE...”. This section should provide the underlying scientific rationale of the marine forecast within the coastal waters forecast domain.

3.7 Fire Weather. This section is optional, beginning with the string “.FIRE WEATHER...”

If included, the discussion should focus on the first 48 hours of the fire weather forecast with an emphasis on fire weather watch/red flag warning conditions.

3.8 Hydrology. This section is optional, beginning with the string “.HYDROLOGY...”. If included, the discussion should focus on hydrologic concerns within the first 5 days of the forecast. This may include Quantitative Precipitation Forecast (QPF) amounts, anticipated impacts on rivers, or flood potential.

3.9 Other. This section or series of sections is optional, and can begin with

additional discussions of important items. Section(s) will include one or more of the following: “.CLIMATE...”, “.EQUIPMENT...”, or “.TIDES/COASTAL FLOODING...”.

3.10 Watch/Warning/Advisory (W/W/A) Information. This section is mandatory, beginning with the string “.NNN WATCHES/WARNINGS/ADVISORIES...”

where NNN is the three letter identifier of the issuing office.

If a WFO’s County Warning and Forecast Area (CWFA) falls entirely within one state, the use of state identifications are not necessary.

If a WFO’s CWFA covers multiple states, begin a new line with the two-letter state identification followed by three dots (...) and the list of applicable watches, warnings and advisories.

If a WFO’s CWFA contains marine areas, the two-letter state identification will be changed to “MARINE”.

An example of the format:

```
FOR CWA'S THAT FALL WITHIN ONE STATE
      .NNN WATCHES/WARNINGS/ADVISORIES...
      NONE.
```

&&

```
OR FOR CWA'S WITH MULTIPLE STATES OR MARINE
      .OKX WATCHES/WARNINGS/ADVISORIES...
      NY...NONE.
      NJ...NONE.
      CT...NONE.
      MARINE...NONE.
```

&&

Watch/warning/advisory information should be provided in the following format:

- (1) type of watch/warning/advisory;
- (2) valid time of watch/warning/advisory in local time
- (3) zone code(s) where watch/warning/advisory is in effect;

```
.RAH WATCHES/WARNINGS/ADVISORIES...
FROST ADVISORY UNTIL 8 AM SUNDAY FOR NCZ007>011-021>028-
038>043-073>078-083>086-088-089.
```

```
.CAR WATCHES/WARNINGS/ADVISORIES...
ME...HIGH WIND WARNING UNTIL NOON THURSDAY FOR MEZ029-030.
...WIND ADVISORY UNTIL NOON THURSDAY FOR MEZ015>017-032.
MARINE...GALE WARNING UNTIL 6 PM THURSDAY FOR ANZ050.
```

3.11 Forecaster(s) Name/Initials/Forecaster ID. This section is optional. If used, the AFD may include either the last name(s), initials, or forecast ID number of the

author(s) of the AFD. This can be done in several forms:

- (1) MARSHALL
- (2) JCP
- (3) 12
- (4) SHORT TERM...FOSTER
LONG TERM...MIGNONE
MARINE/AVIATION...FITZSIMMONS

Figure 1 in [NWSI 10-503, WFO Public Weather Products Specification](#) indicates the location of the Forecaster ID will be at the end of the product. The prescribed national format does not allow for names to be dispersed within the body of the product.

3.12 Format Specifics. Each section of the AFD will be followed by a double ampersand “&&” and a line feed to indicate the end of the section. Topic dividers will not deviate from the format outlined in Table 1.

Table 1. Routine Area Forecast Discussion (AFD) Format

ZCZC CCCAFDNNN	
FXUS6i KNNN DDHHMM	
AREA FORECAST DISCUSSION	
NATIONAL WEATHER SERVICE XXXX XX	
255 AM EDT FRI APR 27 2007	
<single space line feed>	
(1).SYNOPSIS...	MANDATORY
<text>	
&&	
<single space line feed>	
(2).NEAR TERM /UNTIL 9 PM THIS EVENING/...	MANDATORY
<text>	
&&	
<single space line feed>	
(3).SHORT TERM /9 PM THIS EVENING THROUGH MONDAY/...	MANDATORY
<text>	
&&	
<single space line feed>	
(4).LONG TERM /MONDAY NIGHT THROUGH THURSDAY/...	MANDATORY
<text>	
&&	
<single space line feed>	
(5).AVIATION /aaZ bbbDAY THROUGH cc/...	MANDATORY
where aa = hour nearest AFD issuance	
AND bbbDAY = Current day of week (in UTC)	
AND cc = Day 5 from AFD issuance time	
<text>	
&&	
<single space line feed>	
(6).MARINE...	MANDATORY*
<text>	
&&	
<single space line feed>	
(7).FIRE WEATHER...	OPTIONAL
<text>	
&&	
<single space line feed>	
(8).HYDROLOGY...	OPTIONAL
<text>	
&&	
<single space line feed>	
(9).Other... where Other = section or series	OPTIONAL
of sections, entitled CLIMATE, EQUIPMENT, or	
TIDES/COASTAL FLOODING.	
<text>	
&&	
<single space line feed>	
.NNN WATCHES/WARNINGS/ADVISORIES...	MANDATORY**
NONE.	
OR	
.NNN WATCHES/WARNINGS/ADVISORIES...	MANDATORY***
ST..NONE. (where ST = two letter state ID)	
ST..NONE.	
MARINE...NONE.	
<single space line feed>	
\$\$	
<single space line feed>	
FORECASTER(S) NAME/INITIALS/ID	OPTIONAL

* (FOR OFFICES w/MARINE PROGRAM)
 ** (FOR CWFA's THAT FALL WITHIN ONE STATE)
 *** (FOR CWFA's WITH MULTIPLE STATES OR MARINE)

4. **Area Forecast Discussion Issuance Times.** The AFD will always contain the most up-to-date forecast discussion. At a minimum, the AFD will be issued four times daily, regardless of the weather. AFDs should be issued around 4 AM / 4 PM, prior to the release of significant forecast information, and/or near TAF issuance times.

5. **Contractions.** AFDs should be composed in plain language to the extent possible. Limited use of contractions is permitted (e.g., to avoid repetition of lengthy terms, commonly known/used contractions) as long as the contraction is contained in either the *United States Aeronautical Contractions Handbook 7340.1R* or the glossary. See Appendix B (Internet Links: <http://www.weather.gov/glossary/> <http://www.srh.noaa.gov/fwd/glossarynation.html>).

Appendix A

Area Forecast Discussion Examples

1. Synopsis Example:

.SYNOPSIS...

LOW PRESSURE WILL MOVE ALONG THE MAINE COAST TODAY...BEFORE EXITING THE REGION THROUGH NEW BRUNSWICK TONIGHT. A HIGH PRESSURE RIDGE WILL BUILD ACROSS NEW ENGLAND ON MONDAY UNDER BRISK NORTHWEST WINDS. THIS RIDGE WILL CREST ACROSS THE STATE ON TUESDAY.

&&

2. Near Term Example:

.NEAR TERM /UNTIL 9 PM THIS EVENING/...

NARROW COLD FRONTAL RAIN BAND CONTINUES TO DISSIPATE OVER FAR EASTERN LONG ISLAND AND CONNECTICUT. MESOSCALE ANALYSIS SHOWS SHARP PRESSURE RISES BEHIND THE FRONT. STRONG COLD ADVECTION WILL KEEP STRONG AND GUSTY WINDS IN PLACE FOR SEVERAL HOURS FOLLOWING THE FRONTAL PASSAGE. HOWEVER...THE RUC SHOWS VERTICAL WIND PROFILE SIGNIFICANTLY WEAKENS ONCE THE FRONT PUSHES THROUGH. THIS WILL MAKE IT HIGHLY UNLIKELY THAT HIGH WIND WARNING CRITERIA WILL LAST MORE THAN 2-3 HOURS AFTER PASSAGE OF THE FRONT. WIND GUSTS WILL LIKELY BE AROUND 45-50 MPH.

&&

3. Short Term Example:

.SHORT TERM /9 PM THIS EVENING THROUGH MONDAY/...

A COLD FRONT WILL BE ENTERING WESTERN PORTIONS OF CT AND MA BY 9 PM THIS EVENING. SHOWERS ASSOCIATED WITH THE FRONT WILL PUSH WEST TO EAST ACROSS THE CWA...EXITING THE CAPE AND NANTUCKET AROUND DAYBREAK. SKIES WILL BEGIN TO CLEAR BEHIND THE FRONT THIS MORNING...HOWEVER CLOUDS WILL REDEVELOP THIS AFTERNOON AS COLD AIR ALOFT COMBINES WITH FORCING FROM SHORT WAVE ROTATING THROUGH THE NORTHEAST. THERE MAY BE ENOUGH INSTABILITY AND LIFT TO TRIGGER A FEW LIGHT SHOWERS ACROSS THE INTERIOR THIS AFTERNOON...ESPECIALLY OVER THE HIGHER TERRAIN. COLD FRIDAY NIGHT AS WEAK HIGH PRESSURE BUILDS SOUTH AND ALLOWS STRONGER RADIATIONAL COOLING.

KEPT SATURDAY DRY FOR NOW...EXCEPT OVER FAR EASTERN CWA...WHERE I HAVE INTRODUCED A SLIGHT CHANCE OF SNOW. WHILE THE OPERATIONAL RUNS OF THE NAM/GFS/CANADIAN/ECMWF/UKMET ALL INDICATE SATURDAY WILL BE DRY...THEY HAVE TRENDED SLIGHTLY NORTHWARD WITH THE LOW TRACK. SHORTWAVE EVIDENT IN WATER VAPOR IMAGERY OVER TX AS OF 00 UTC DOES APPEAR TO BE SLIGHTLY FARTHER NORTH THAN PREVIOUS MODELS FORECAST. IN ADDITION JUST UNDER 1/2 OF BOTH THE LATEST GFS AND SREF MEMBERS INDICATE THAT THERE COULD BE SOME MEASURABLE PRECIPITATION ESPECIALLY OVER THE COASTAL WATERS AND FAR EASTERN PORTIONS OF THE CWA. WHILE I AM CURRENTLY IN THE CAMP OF THE OPERATIONAL MODELS AND THE MAJORITY OF THE ENSEMBLE MEMBERS OF THE GFS AND SREF...THIS SITUATION DOES BEAR WATCHING...ESPECIALLY IF THIS CONTINUED DRIFT IN FORECAST TRACK NORTHWARD CONTINUES.

&&

4. Long Term Example:

.LONG TERM /MONDAY NIGHT THROUGH THURSDAY/...

LATEST MED RANGE ENSEMBLE DATA CONTINUES TO INDICATE COOL AND DRY WEATHER MONDAY THRU WEDNESDAY...AS SURFACE RIDGE BUILDS OVR THE AREA. WE FOLLOWED HPC

GUIDANCE IN THIS PERIOD.

00Z ECMWF/GFS AND ITS ENSEMBLES CONTINUE TO INDICATE THE POTENTIAL OF A SIGNIFICANT PRECIP EVENT THU-SAT TIME FRAME...WITH PARENT LOW TRACKING INTO GREAT LAKES AND SECONDARY DEVELOPMENT SOUTH OF NEW ENGLAND. GIVEN THIS SCENARIO SUFFICIENT COLD AIR WILL BE IN PLACE ACROSS NEW ENGLAND AHEAD OF THIS SYSTEM FOR FROZEN PRECIP. CANADIAN GEM INDICATING SECONDARY DEVELOPMENT FARTHER NORTH...RESULTING IN A WARMER SOLUTION FAVORING RAIN. HPC LEANING TOWARD THE COLDER GFS/ECMWF SOLUTION...AND CURRENT FORECAST REFLECTS THIS THINKING.

&&

5. Aviation Example:

.AVIATION /07Z FRIDAY THROUGH TUESDAY/...
VFR UNTIL BAND OF RAIN/SNOW SHOWERS ASSOCIATED WITH APPROACHING COLD FRONT REACHES WESTERN SECTIONS AFTER 09Z...THEN EXITS EASTERN SECTIONS BY 14Z-15Z. SURFACE OBS AT 06Z SHOWED IFR IN SNOW ACROSS CENTRAL PA...BUT WITH THE LINE WEAKENING SOMEWHAT DUE TO DOWNSLOPE WSW FLOW AFTER EXITING THE APPALACHIANS WILL BE MORE OPTIMISTIC AND FORECAST BRIEF MVFR AT TERMINALS N OF NYC WHERE SNOW MORE LIKELY TO BE PART OF THE MIX. LIGHTNING STRIKES ALSO OCCURRING ATTM ACROSS CENTRAL PA...WITH 00Z ETA PROGGING MINIMAL SURFACE-BASED CAPE...STEEP H5-H8 LAPSE RATES AND H7 TEMPS OF -20C AS THE FRONT REACHES THE AREA THINK WE COULD SEE A FEW STRIKES TOO...HAVE NOT EXPLICITLY FORECAST THIS BUT HAVE MENTIONED CB IN CEILING FORECAST. GUSTY WESTERLY FLOW /20-25G35/ TAKES OVER FOLLOWING FRONTAL PASSAGE THIS MORNING...DROPPING OFF SLIGHTLY DURING THE AFTERNOON AND THEN MORE SO AFTER SUNSET WITH LOSS OF DAYTIME HEATING AND SOME RESULTANT MIXING.

STRONG WINDS POSSIBLE SATURDAY OTHERWISE NO SIG WX.

&&

6. Marine Example:

.MARINE...
COLD FRONT WILL PUSH THROUGH THE WATERS THIS MORNING...WITH A RELATIVELY WEAK S/SW FLOW THIS MORNING TURNING TO THE NW AND INCREASING AFTER FRONTAL PASSAGE. PRESSURE GRADIENT TIGHTENS BEHIND COLD FRONT TONIGHT AS LOW PRESSURE DEEPENS AS IT HEADS INTO THE CANADIAN MARITIMES. NAM/GFS FORECAST SOUNDINGS ARE SHOWING A WELL MIXED BOUNDARY LAYER UP TO 900 MB...BUT WINDS AT THIS LEVEL ONLY FORECAST TO BE 30-35 KT. COLLABORATED WITH SURROUNDING OFFICES TO DOWNGRAD GALE WARNING TO A SCA ON THE OCEAN WATERS BASED ON THESE SOUNDINGS...WITH ONLY OCCASIONAL MAX GUST TO 35 KT. SEAS WILL SLOWLY SUBSIDE MONDAY AS THE PRESSURE GRADIENT SLACKENS DURING THE DAY...ESPECIALLY BY EVENING AS HIGH PRESSURE BUILDS OVER THE WATERS FROM THE WEST. TRANQUIL CONDITIONS ON ALL WATERS MON NIGHT THROUGH EARLY WED AS HIGH MOVES ACROSS REGION. BY WED NIGHT...SW FLOW BEGINS TO INCREASE OUT AHEAD OF A SLOW MOVING FRONTAL SYSTEM AND RETURN FLOW FROM OFFSHORE HIGH.

&&

7. Fire Weather Example:

.FIRE WEATHER...
DRY AND WINDY CONDITIONS TO PERSIST ONE MORE DAY ACROSS INLAND COUNTIES. RUC SOUNDINGS INDICATE RAPID DRYING THIS MORNING...AS STRONG SOLAR HEATING WILL ALLOW MIXING OF VERY DRY AIR ABOVE SUBSIDENCE INVERSION TO THE SURFACE. NORTH WINDS AT 15 MPH WILL GUST UP TO 25 MPH DURING THE AFTERNOON. THESE CONDITIONS...IN ADDITION TO VERY DRY FINE FUELS AND LARGER FUELS...WILL LEAD

TO DANGEROUS FIRE WEATHER CONDITIONS. WILL RAISE RED FLAG WARNING FOR SOUTHEASTERN PENNSYLVANIA AND MOST INLAND COUNTIES OF NEW JERSEY AS RELATIVE HUMIDITIES ARE FORECAST TO DIP BELOW 35 PERCENT LATE MORNING IN EARNEST...WITH CRITICAL RELATIVE HUMIDITIES FOR 4 TO 6 HOURS. WILL EXCLUDE CAPE MAY AND ATLANTIC COUNTIES AS THE RH MAY DIP BELOW 35 PERCENT ACROSS WESTERN HALF OF THESE COUNTIES FOR DURATIONS OF UP TO 3 HOURS...BEFORE SEA BREEZE PASSAGE. THE RH TO GRADUALLY INCREASE EACH DAY AS HIGH PRESSURE RETREATS OFF THE ATLANTIC COAST...BRINGING A MORE ONSHORE FLOW. AT THIS TIME DO NOT ANTICIPATE RED FLAG EVENTS THE REST OF THE WEEK.

&&

8. Hydrology Example:

.HYDROLOGY...
WSR-88D SHOWING SHOWERS EXITING THE EASTERN ZONES EARLY THIS MORNING. RAINFALL GENERALLY A THIRD OF AN INCH WITH UP TO A HALF INCH ACROSS NORTHEASTERN NEW JERSEY AND INTO CONNECTICUT. LOCALIZED AMOUNTS OF 1 TO 1.5 INCHES ACROSS CONNECTICUT. DRY AFTER SHOWERS EXIT EAST UNTIL WEDNESDAY AFTERNOON WHEN A FEW HUNDREDTHS ARE POSSIBLE INTO THURSDAY.

&&

9. Other Example:

.TIDES/COASTAL FLOODING...
THE COASTAL FLOOD WARNING WAS ALLOWED TO EXPIRE AT 06Z AND WAS REPLACED BY A COASTAL FLOOD STATEMENT FOR THE OCEAN FRONT...DELAWARE BAY...AND THE TIDAL PORTION OF THE LOWER DELAWARE RIVER FOR TODAY FOR THE POSSIBILITY OF MINOR TIDAL FLOODING. ALTHOUGH ANOMALIES HAVE COME DOWN TO ABOUT A FOOT ABOVE NORMAL...THE MORNING HIGH TIDE IS STILL HIGH ENOUGH TO POSSIBLY PRODUCE MINOR TIDAL FLOODING. THE OCEAN FRONT HIGH TIDE IS THIS MORNING...DELAWARE BAY HIGH TIDE IS LATE MORNING AND EARLY AFTERNOON...AND HIGH TIDE ON THE TIDAL PORTION OF THE DELAWARE RIVER IS EARLY AND MID AFTERNOON.

MINOR TIDAL FLOODING MAY RECUR SUNDAY NIGHT...BUT IS LESS LIKELY. BY MONDAY...HIGH PRESSURE WILL HAVE TAKEN OVER AND RETURNED CONDITIONS TO A MORE NORMAL STATE.

&&

10. Complete Example:

FXUS61 KBOX 091934
AFDBOX

AREA FORECAST DISCUSSION
NATIONAL WEATHER SERVICE TAUNTON MA
330 PM EDT WED JUN 9 2006

.SYNOPSIS...
LOW PRESSURE WILL OFF THE MAINE COAST THIS AFTERNOON...BEFORE EXITING THE REGION THROUGH NEW BRUNSWICK TONIGHT. A HIGH PRESSURE RIDGE WILL BUILD ACROSS NEW ENGLAND ON THURSDAY UNDER BRISK NORTHWEST WINDS. THIS RIDGE WILL CREST ACROSS THE STATE ON THURSDAY AND FRIDAY.

&&

.NEAR TERM /UNTIL 7 PM THIS EVENING/...
A SEVERE THUNDERSTORM WATCH CONTINUES FOR CHESHIRE AND HILLSBOROUGH

COUNTIES NH UNTIL 7 PM.

MONITORING CONDITIONS CLOSELY FOR ANY DEVELOPMENT OF SEVERE STORMS AS AIRMASS IS JUICED WITH CAPES GREATER THAN 3000 J/KG...LIFTED INDICES BELOW -3 AND SO FORTH...BUT HAVE TO BREAK THROUGH A BIT OF A MID LEVEL CAP TO GET STORMS GOING. STARTING TO SEE STORMS DEVELOP ACROSS CENTRAL NEW YORK...AND A FEW ARE TRYING TO SNEAK INTO SOUTHERN NEW HAMPSHIRE. MESOSCALE ANALYSIS SHOWS SVR POTENTIAL FOR SOUTHERN NEW ENGLAND WILL BECOME VERY HIGH DURING NEXT 3-6 HOURS.

&&

.SHORT TERM /7 PM THIS EVENING THROUGH THURSDAY NIGHT/... BEYOND THE NEAR TERM...EXPECTING THE TRIGGER OF THIS CONVECTION... THE COLD FRONT...TO PUSH THROUGH THE REGION OVERNIGHT. ANY CONVECTION IS EXPECTED TO END FROM NORTH TO SOUTH AROUND MIDNIGHT... BUT SHOWERS WILL LINGER AS THE UPPER LEVEL SYSTEM ASSOCIATED WITH THIS FRONT WILL PUSH THROUGH THURSDAY MORNING. GFS TENDS TO HANG THE PRECIPITATION SHIELD BACK ACROSS THE REGION DURING MOST OF THURSDAY...WHILE THE ETA NOSES A RIDGE IN DURING THE AFTERNOON. HAVE LEANED THIS FORECAST TOWARD THE FASTER ETA...AS IT SEEMS TO BE HANDLING THIS AFTERNOONS CONVECTION AND FRONTAL POSITION FAIRLY WELL.

&&

.LONG TERM /FRIDAY THROUGH WEDNESDAY/... LARGE SLOW MOVING HIGH PRES WILL PRODUCE FAIR WEATHER OVER THE REGION THROUGH THE WEEKEND. NEXT SYS WILL APPROACH IN THE MON-TUE TIME FRAME. MODELS STILL AT ODDS OVER AMPLIFICATION OF LONG WAVE TROUGH IN THE EAST. WILL INCREASE CLOUDS MON WITH CHC POPS SHOWERS BY TUE.

FOLLOWED HPC TEMP GUIDANCE IN THE DAY 3-7 PERIOD. SPREAD IN ENSM MOS IS NOT VERY LARGE. GENERALLY SEASONABLE TEMPS FOLLOWING THE CURRENT 2 DAY STRETCH OF MID SUMMER HEAT.

&&

.AVIATION /03Z WEDNESDAY THROUGH SUNDAY/... MAINLY VFR EXCEPT FOR MVFR VISIBILITIES ON CAPE COD AND THE ISLANDS WITH HAZE. EXPECT CLOUDS TO DEVELOP IN THE 3-4KFT RANGE DURING THE REMAINDER OF THE AFTERNOON. AS THE FRONT APPROACHES WITH ITS PRECIPITATION SHIELD...WILL SEE SOME MVFR CEILINGS AND VISIBILITIES WITH SHOWERS...SCATTERED THUNDERSTORMS. EXPECT CEILINGS AS LOW AS 1500 FT AT KORH. EXPECT THE FRONT TO CLEAR THE COAST AROUND 12Z THURSDAY...WITH VFR VISIBILITIES AND SOME LEFTOVER MVFR CEILINGS BUT THOSE WILL INCREASE TO VFR. SKIES WILL BECOME PARTLY CLOUDY BY 16Z EXCEPT ON THE SOUTH COAST...CAPE AND ISLANDS WHERE CLOUDS WILL LINGER PAST 18Z.

NO SIG WX THROUGH SAT. POSSIBLE IFR CONDITIONS RETURNING SUN.

&&

.MARINE... IN THE SHORT TERM...WILL HANG ON TO A SMALL CRAFT FOR SEAS TONIGHT ON THE OUTER WATERS ON THE INCREASING SOUTHWEST FLOW. BUOY 018 EAST OF NANTUCKET REPORTING 4-5 FOOT SEAS. AS THE FRONT CLEARS THE COAST AND NORTHEAST WINDS KICK IN...COULD SEE A BIT OF A SURGE EARLY THURSDAY MORNING WITH SOME GUSTS TO 25 KT. EXPECT WINDS AND SEAS TO SUBSIDE AS LARGE HIGH PRESSURE FROM CENTRAL CANADA BUILDS INTO NEW ENGLAND BY MIDDAY THURSDAY.

IN THE LONGER TERM...WE ARE IN FOR A PROLONGED PERIOD OF LIGHT WINDS

NWS ERS 10-2004 MAY 9, 2007

AND CALM SEAS FRI INTO SUN AS HIGH PRESSURE BECOMES CENTERED OVER NEW ENGLAND. EXPECT LOCAL SEA BREEZES TO DEVELOP EACH AFTERNOON.

&&

.HYDROLOGY...

BASIN AVERAGE RAINFALL OF 0.25 TO 0.75 INCH IS EXPECTED FROM LATER TODAY INTO THU...WHICH SHOULD HAVE MINIMAL EFFECT ON RIVER AND STREAM LEVELS. HOWEVER WE DO EXPECT TO SEE LOCALLY HIGHER RAINFALL AMOUNTS OF 1 TO 2 INCHES IN THUNDERSTORMS WHICH MAY PRODUCE MINOR URBAN AND POOR DRAINAGE FLOODING.

&&

.BOX WATCHES/WARNINGS/ADVISORIES...

CT...NONE.

MA...NONE.

NH...NONE.

RI...NONE.

MARINE...SMALL CRAFT ADVISORY FOR SEAS THROUGH 8 PM FOR ANZ254-255.

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SYNOPSIS...TKI

NEAR TERM...STE/DVL

SHORT TERM...LAC/DVL

LONG TERM...TKI

AVIATION...STE

MARINE...DVL

HYDROLOGY...TKI

Appendix B

Area Forecast Discussion Glossary

See the following on-line sites for the AFD Glossary

<http://www.weather.gov/glossary/>

<http://www.srh.noaa.gov/fwd/glossarynation.html>