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NATIONAL WEATHER SERVICE MANUAL 10-923 FEBRUARY 9, 2004

> **Operations and Services Hydrologic Services Program, NWSPD 10-9**

WEATHER FORECAST OFFICE HYDROLOGIC PRODUCT EXAMPLES

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

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**SUMMARY OF REVISIONS:** This directive supersedes NWS Manual 10-923, dated November 6, 2002. The following revisions were made to this manual:

- (1) Reorganized the sequence of product examples in the flood watch, flood warning, and flood statement sections to parallel how information is presented in NWS Instruction 10-922.
- (2) Modified the examples of flood watch, flood warning, and flood statement products to follow the generic formats provided in NWS Instruction 10-922.
- (3) Expanded the flood watch section to include examples of products extending and expanding flood watches and products covering different types of zone areas.
- (4) Modified the second flash flood warning example (dam failure situation) to illustrate how the fourth pathcast bullet could be applied in this product.
- (5) Expanded the flood statement section to provide examples of products terminating a flood warning for forecast points and an areal flood warning. Examples of follow-ups to flood watches were transferred to the flood watch section.
- (6) Inserted a separate section to cover miscellaneous advisories issued under the flood statement product.

Signed Gregory A. Mandt Director, Office of Climate, Water, and Weather Services January 30, 2004

Date

# Weather Forecast Office Hydrologic Product Examples

Ta	<u>Page</u>
1.	Introduction
2.	Hydrologic Outlook (ESF)32.1 Example #1 - Potential Snowmelt Flooding32.2 Example #2 - Potential Flooding from Excessive Rainfall42.3 Example #3 - AHPS Probabilistic Outlook5
3.	Flood Watch (FFA)63.1Example #1 - Flood Watch for Flash Flooding63.2Example #2 - Flood Watch for Flash Flooding: Extension in Time73.3Example #3 - Flood Watch for Flash Flooding: Expansion into a New Area73.4Example #4 - Flood Watch for Flash Flooding (Short and Long Zone Names)83.5Example #5 - Flood Watch for Flash Flooding (Long Zone Names)93.6Example #6 - Flood Watch for Mainstem River and Tributary Flooding103.7Example #7 - Flood Watch (Long Zone Names)113.8Example #8 - Flood Watch: Follow-up123.9Example #9 - Flood Watch: Follow-up (Long Zone Names)123.10Example #10 - Flood Watch: Termination13
4.	Flash Flood Warning (FFW)144.1 Example #1 - Flash Flood Warning: Excessive Rainfall144.2 Example #2 - Flash Flood Warning: Dam Failure14
5.	Flash Flood Statement (FFS)155.1 Example #1 - Flash Flood Warning: Follow-up155.2 Example #2 - Flash Flood Warning: Termination16
6.	Flood Warning (FLW)166.1 Example #1 - Flood Warning for Forecast Points166.2 Example #2 - Flood Warning for Forecast Points (Segmented)176.3 Example #3 - Areal Flood Warning186.4 Example #4 - Areal Flood Warning: Extension In Time18
	Flood Statement (FLS)197.1 Example #1 - Flood Warning for a Forecast Point: Follow-up197.2 Example #2 - Flood Warning for Forecast Points: Termination207.3 Example #3 - Areal Flood Warning: Follow-up207.4 Example #4 - Areal Flood Warning: Termination21
8.	Flood Statement (FLS) - Miscellaneous Advisories218.1Example #1 - Urban and Small Stream Flood Advisory218.2Example #2 - Advisory for Elevated Streamflow22

9.	Hydrologic Statement (RVS)
	9.1 Example #1 - Information on Elevated Stream Levels for a River Forecast Point 23
	9.2 Example #2 - SHEF Encoded
10	. Hydrologic Summary (RVA)
	10.1 Example #1 - Report River Conditions for Multiple Forecast Points
	10.2 Example #2 - Report for Rivers and Creeks in Hydrologic Services Area
11	. River and Lake Forecast Product (RVD)
	11.1 Example #1 - Lake Sites (in SHEF)
	11.2 Example #2 - River and Lake Sites
12	. Hydrometeorological Data Summary (HYx)
	12.1 Example #1 - Daily Summary (HYD)
	12.2 Example #2 - Monthly Summary (HYM)

1. <u>Introduction</u>. This directive provides examples of weather forecast office (WFO) hydrologic products described in NWS Instruction 10-922. Some WFO hydrologic products issued under a given Advanced Weather Information Processing System (AWIPS) identifier have more than one application, and some are used for multiple purposes. Therefore, more than one example is provided for each product. Minor variations may exist in regional implementation of NWS Instruction 10-922, so these examples should not be taken as the only prescribed formats.

# 2. <u>Hydrologic Outlook (ESF)</u>.

# 2.1 <u>Example #1 - Potential Snowmelt Flooding</u>.

FGUS73 KBIS 221358 ESFBIS NDZ001>005-009>013-017>023-025-031>037-040>048-050>051-231200-

HYDROLOGIC OUTLOOK NATIONAL WEATHER SERVICE BISMARCK ND 800 AM CST FRI MAR 22 2002

... SNOWMELT FLOOD OUTLOOK NUMBER 2...

THIS SNOWMELT OUTLOOK IS FOR RIVER BASINS IN WEST AND CENTRAL NORTH DAKOTA AND INCLUDES THE SOURIS RIVER DRAINAGE...THE MISSOURI RIVER DRAINAGE AND THE JAMES RIVER DRAINAGE.

BECAUSE OF THE LACK OF SIGNIFICANT AMOUNTS OF SNOW ON THE GROUND, THERE IS LITTLE POTENTIAL FOR FLOODING DURING THIS SNOWMELT SEASON EVEN IF NORMAL PRECIPITATION FOR THE NEXT TWO WEEKS IS ADDED TO THE CURRENT SNOW CONDITIONS. RIVER LEVELS AT ALL FORECAST POINTS ARE EXPECTED TO REMAIN BELOW FLOOD STAGE.

ABOVE NORMAL SPRING PRECIPITATION AND ICE JAMS WOULD INCREASE THE FLOOD THREAT DURING SPRING THAW. BELOW NORMAL PRECIPITATION OR A GRADUAL MELT WOULD DECREASE THE FLOOD THREAT.

SUMMARY OF NORTH DAKOTA'S WINTER CONDITIONS... THE PAST WINTER BROUGHT ABOVE NORMAL TEMPERATURES AND BELOW NORMAL PRECIPITATION. FALL MOISTURE (SEPTEMBER-NOVEMBER 2001) WAS ALSO WELL BELOW NORMAL IN NORTH DAKOTA. THIS HAS CREATED BELOW NORMAL SOIL MOISTURE CONDITIONS. FROST DEPTHS AVERAGE 18 TO 24 INCHES. MARCH TEMPERATURES HAVE BEEN MUCH BELOW NORMAL WITH ABOVE NORMAL SNOWFALL.

THE 6-10 DAY FORECAST FOR NORTH DAKOTA CALLS FOR ABOVE NORMAL TEMPERATURES AND NORMAL PRECIPITATION.

THE 30-DAY AND 90-DAY OUTLOOKS INDICATE NO DEVIATION FROM NORMAL FOR PRECIPITATION OR TEMPERATURE.

CURRENT SNOW CONDITIONS... THERE IS GENERALLY 3 TO 6 INCHES OF SNOW COVER ACROSS WEST AND CENTRAL NORTH DAKOTA. MUCH OF THIS FELL IN THE LAST SEVERAL DAYS. WATER EQUIVALENTS WERE GENERALLY ONE HALF INCH OR LESS.

BASIN SNOWPACK IN THE MOUNTAINS OF MONTANA AND WYOMING WAS GENERALLY 50% TO 70% OF AVERAGE.

CURRENT RIVER CONDITIONS... RIVERS AND STREAMS IN NORTH DAKOTA HAVE NEAR NORMAL TO SLIGHTLY ABOVE NORMAL FLOWS WITH MOST RIVERS FROZEN. ALL FORECAST POINTS ARE CURRENTLY BELOW FLOOD STAGE.

THIS IS THE LAST SCHEDULED OUTLOOK FOR THE SEASON.

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# 2.2 Example #2 - Potential Flooding From Excessive Rainfall.

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 http://www.crh.noaa.gov/sgf/

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### 2.3 <u>Example #3 - AHPS Probabilistic Outlook</u>.

FGUS73 KGRR 231917 ESFGRR MIC005-015-025-035-037-045-057-065-067-073-075-077-081-085-105-107-117-121-123-127-133-139-159-221200-

HYDROLOGIC OUTLOOK NATIONAL WEATHER SERVICE GRAND RAPIDS MI 316 PM EDT TUE SEP 23 2003

...ADVANCED HYDROLOGIC PREDICTION SERVICE PROBABILISTIC OUTLOOK FOR THE GRAND...KALAMAZOO...AND ST JOSEPH RIVER BASINS...

THE GRAND RAPIDS OFFICE OF THE NATIONAL WEATHER SERVICE HAS IMPLEMENTED THE ADVANCED HYDROLOGIC PREDICTION SERVICES (AHPS) FOR ALL LOCATIONS IN THE GRAND...KALAMAZOO AND ST JOSEPH RIVER BASINS. AHPS ENABLES THE NATIONAL WEATHER SERVICE TO PROVIDE LONG-RANGE PROBABILISTIC RIVER OUTLOOKS. THIS SERVICE IS ALSO AVAILABLE ON THE INTERNET.

IN THE TABLE BELOW...THE 90 THROUGH 10 PERCENT COLUMNS INDICATE THE CHANCE THE RIVER COULD RISE ABOVE THE LISTED STAGE LEVELS IN THE NEXT 90 DAYS. EXAMPLE: THE RED CEDAR RIVER AT WILLIAMSTON HAS A FLOOD STAGE OF 9 FEET. IN THE NEXT 90 DAYS THERE IS A 20 PERCENT CHANCE THE RED CEDAR RIVER NEAR WILLIAMSTON WILL RISE ABOVE 5.5 FEET.

CHANCE OF EXCEEDING STAGES AT SPECIFIC LOCATIONS VALID SEPTEMBER 24, 2003 - DECEMBER 18, 2003

LOCATION	FS(FT)	90%	80%	70%	60%	50%	40%	30%	20%
RED CEDAR RIVER									
WILLIAMSTON	7	2.7	3.5	3.9	4.1	4.6	4.9	5.0	5.5
EAST LANSING	7	3.4	3.5	3.9	4.0	4.2	4.3	4.4	4.6
LOOKING GLASS RI	VER								
EAGLE	6	1.1	1.5	1.8	2.1	2.2	2.5	2.9	3.0
MAPLE RIVER									
MAPLE RAPIDS	9.5	2.7	3.5	4.3	4.6	5.1	5.6	6.8	7.3
FLAT RIVER									
SMYRNA	6	3.7	3.8	4.0	4.2	4.4	4.6	4.9	5.2
KALAMAZOO RIVER									
MARSHALL	8	4.0	4.1	4.2	4.2	4.3	4.5	4.5	4.7
COMSTOCK	9	3.9	4.2	4.3	4.5	4.6	4.8	4.9	5.2
FENNVILLE	12	6.8	7.5	8.5	9.3	9.7	10.0	10.4	10.7
NEW RICHMOND	9								
ST JOSEPH RIVER									
BURLINGTON	6.5	3.0	3.2	3.3	3.5	3.5	3.7	3.8	4.0
PORTAGE RIVER									
VICKSBURG	5	3.3	3.5	3.8	4.0	4.0	4.2	4.3	4.4
	•	- / -		- / -			. –		

THIS LONG-RANGE PROBABILISTIC OUTLOOK CONTAINS NUMBERS THAT ARE CALCULATED USING MULTIPLE SCENARIOS FROM 30 OR MORE YEARS OF

CLIMATOLOGICAL DATA. THESE NUMBERS ALSO TAKE INTO ACCOUNT CURRENT CONDITIONS OF THE RIVER...SNOW COVER AND SOIL MOISTURE...AS WELL AS 30 TO 90 DAY LONG-RANGE OUTLOOKS OF TEMPERATURE AND PRECIPITATION. BY PROVIDING THE COMPLETE RANGE OF PROBABILISTIC NUMBERS...THE LEVEL OF RISK ASSOCIATED WITH LONG-RANGE PLANNING DECISIONS CAN BE DETERMINED. THESE PROBABILISTIC NUMBERS ARE PART OF AHPS.

ADDITIONAL SUPPORTIVE DATA AND EXPLANATION ARE AVAILABLE ON THE INTERNET AT: <u>WWW.CRH.NOAA.GOV/GRR/</u> (ALL LOWER CASE).

LONG-RANGE PROBABILISTIC OUTLOOKS ARE ISSUED EACH MONTH...NEAR THE END OF THE MONTH...THROUGHOUT THE YEAR.

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# 3. Flood Watch (FFA).

#### 3.1 Example #1 - Flood Watch for Flash Flooding.

WGUS43 KFGF 190900 FFASGF MOZ066-077-088-093-094-101-102-192200-

URGENT - IMMEDIATE BROADCAST REQUESTED FLOOD WATCH NATIONAL WEATHER SERVICE SPRINGFIELD MO 300 AM CST WED MAR 19 2003

...THE NATIONAL WEATHER SERVICE IN SPRINGFIELD HAS ISSUED A FLOOD WATCH FOR FLASH FLOODING IN SOUTHWESTERN MISSOURI EFFECTIVE UNTIL 4 PM CDT THURSDAY. THE WATCH INCLUDES THE FOLLOWING MISSOURI COUNTIES...

BARRY...BARTON...JASPER...LAWRENCE...MCDONALD...NEWTON...VERNON

A STRONG STORM SYSTEM WILL MOVE NORTHEAST ACROSS THE CENTRAL PLAINS WILL CONTINUE TO PUMP MOISTURE NORTHWARD FROM THE GULF OF MEXICO. A LARGE BAND OF RAIN AND THUNDERSTORMS WILL CONTINUE TO ROTATE NORTHWESTWARD AROUND THIS UPPER LOW. MODERATE TO HEAVY RAIN AND OCCASIONAL THUNDERSTORMS ASSOCIATED WITH THIS BAND WILL CONTINUE OVER THE WATCH AREA MUCH OF TODAY. WIDESPREAD RAINFALL AMOUNTS OF 1 TO 2 INCHES ARE LIKELY IN THE WATCH AREA TODAY...WITH LOCALLY HEAVIER AMOUNTS OF 3 OR MORE INCHES POSSIBLE.

A FLOOD WATCH MEANS THAT FLOODING IS POSSIBLE BUT NOT IMMINENT IN THE WATCH AREA. PERSONS IN SOUTHEASTERN MISSOURI SHOULD BE AWARE OF THE POSSIBILITY FOR HEAVY RAINFALL AND FLASH FLOODING...CHECK YOUR PREPAREDNESS REQUIREMENTS...ESPECIALLY IF YOU HAVE INTERESTS ALONG RIVERS IN THE AREA. KEEP INFORMED...AND BE READY FOR ACTION IF FLOODING IS OBSERVED OR IF A FLASH FLOOD WARNING IS ISSUED.

STAY TUNED TO NOAA WEATHER RADIO...COMMERCIAL MEDIA OR YOU CABLE TELEVISION PROVIDER FOR WATCH UPDATES AND POSSIBLE WARNINGS.

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J. DOE

### 3.2 Example #2 - Flood Watch for Flash Flooding: Extension in Time.

WGUS43 KFGF 191700 FFASGF MOZ066-077-088-093-094-101-102-200600-

URGENT - IMMEDIATE BROADCAST REQUESTED FLOOD WATCH NATIONAL WEATHER SERVICE SPRINGFIELD MO 1100 AM CST WED MAR 19 2003

...FLASH FLOODING POSSIBLE IN SOUTHEASTERN MISSOURI UNTIL MIDNIGHT TOMORROW...

...THE NATIONAL WEATHER SERVICE IN SPRINGFIELD HAS EXTENDED THE FLOOD WATCH FOR FLASH FLOODING IN SOUTHWESTERN MISSOURI UNTIL 12 AM CST MIDNIGHT FRIDAY MORNING. THE WATCH INCLUDES THE FOLLOWING MISSOURI COUNTIES...

BARRY...BARTON...JASPER...LAWRENCE...MCDONALD...NEWTON...VERNON

A STRONG STORM SYSTEM MOVING NORTHEAST ACROSS THE CENTRAL PLAINS CONTINUES TO PUMP MOISTURE NORTHWARD FROM THE GULF OF MEXICO. RAIN AND THUNDERSTORMS ROTATING AROUND THIS LOW ARE BEGINNING TO FORM TO THE SOUTH...BUT HEAVY RAIN IS NOW EXPECTED TO CONTINUE INTO TONIGHT. WIDESPREAD RAINFALL AMOUNTS OF 1 TO 2 INCHES ARE LIKELY IN THE WATCH AREA...WITH LOCALLY HEAVIER AMOUNTS OF 3 OR MORE INCHES STILL POSSIBLE.

A FLOOD WATCH MEANS THAT FLOODING IS POSSIBLE BUT NOT IMMINENT IN THE WATCH AREA. PERSONS IN SOUTHWESTERN MISSOURI SHOULD BE AWARE OF THE POSSIBILITY FOR HEAVY RAINFALL AND FLASH FLOODING...CHECK YOUR PREPAREDNESS REQUIREMENTS...ESPECIALLY IF YOU HAVE INTERESTS ALONG RIVERS IN THE AREA. KEEP INFORMED...AND BE READY FOR ACTION IF FLOODING IS OBSERVED OR IF A FLASH FLOOD WARNING IS ISSUED.

STAY TUNED TO NOAA WEATHER RADIO...COMMERCIAL MEDIA OR YOU CABLE TELEVISION PROVIDER FOR WATCH UPDATES AND POSSIBLE WARNINGS.

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J. DOE

#### 3.3 Example #3 - Flood Watch for Flash Flooding: Expansion into a New Area.

WGUS43 KFGF 191900 FFASGF KSZ073-097-101-MOZ066-077-088-093-094-101-102-200600-

URGENT - IMMEDIATE BROADCAST REQUESTED FLOOD WATCH NATIONAL WEATHER SERVICE SPRINGFIELD MO 100 PM CST WED MAR 19 2003

...FLASH FLOODING POSSIBLE IN SOUTHEASTERN MISSOURI AND SOUTHWESTERN KANSAS UNTIL MIDNIGHT TOMORROW...

...THE NATIONAL WEATHER SERVICE IN SPRINGFIELD HAS EXPANDED THE FLOOD WATCH FOR FLASH FLOODING TO INCLUDE COUNTIES IN FAR SOUTHEASTERN KANSAS. THE WATCH INCLUDES THE FOLLOWING COUNTIES... IN MISSOURI...

BARRY...BARTON...JASPER...LAWRENCE...MCDONALD...NEWTON...VERNON

IN KANSAS...

BOURBON...CHEROKEE...CRAWFORD

RAIN AND THUNDERSTORMS ROTATING AROUND A LARGE UPPER LEVEL LOW TO THE WEST ARE APPROACHING THE WATCH AREA. WIDESPREAD RAINFALL AMOUNTS OF 1 TO 2 INCHES ARE LIKELY...WITH LOCALLY HEAVIER AMOUNTS OF 3 OR MORE INCHES POSSIBLE.

A FLOOD WATCH MEANS THAT FLOODING IS POSSIBLE BUT NOT IMMINENT IN THE WATCH AREA. PERSONS IN SOUTHWESTERN MISSOURI AND SOUTHEASTERN KANSAS SHOULD BE AWARE OF THE POSSIBILITY FOR HEAVY RAINFALL AND FLASH FLOODING...CHECK YOUR PREPAREDNESS REQUIREMENTS...ESPECIALLY IF YOU HAVE INTERESTS ALONG RIVERS IN THE AREA. KEEP INFORMED...AND BE READY FOR ACTION IF FLOODING IS OBSERVED OR IF A FLASH FLOOD WARNING IS ISSUED.

STAY TUNED TO NOAA WEATHER RADIO...COMMERCIAL MEDIA OR YOUR CABLE TELEVISION PROVIDER FOR WATCH UPDATES AND POSSIBLE WARNINGS.

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J. DOE

### 3.4 <u>Example #4 - Flood Watch for Flash Flooding (Short and Long Zone Names)</u>.

WGUS65 KABQ 281555 FFAABQ NMZ006-012-013-018>021-282200-

URGENT - IMMEDIATE BROADCAST REQUESTED FLOOD WATCH NATIONAL WEATHER SERVICE ALBUQUERQUE NM 954 AM MDT SAT OCT 28 2000

...FLASH FLOODING POSSIBLE IN THE EAST CENTRAL PLAINS AND SOUTHEAST NEW MEXICO TODAY...

...THE NATIONAL WEATHER SERVICE IN ALBUQUERQUE HAS ISSUED A FLOOD WATCH FOR FLASH FLOODING IN THE EAST CENTRAL PLAINS AND SOUTHEAST AREAS OF NEW MEXICO EFFECTIVE UNTIL 400 PM CDT SATURDAY. THE WATCH INCLUDES THE FOLLOWING NEW MEXICO AREAS...

HARDING COUNTY...CONCHAS LAKE/GUADALUPE COUNTY...QUAY COUNTY... DE BACA COUNTY...CHAVES COUNTY PLAINS...ROOSEVELT COUNTY...CURRY COUNTY

A WELL DEFINED LINE OF STRONG THUNDERSTORMS IS MOVING SLOWLY EASTWARD ACROSS PARTS OF EASTERN NEW MEXICO. THE LINE CURRENTLY EXTENDS FROM WESTERN CHAVES TO NORTHEAST DE BACA INTO EASTERN SAN MIGUEL AND HARDING COUNTIES. THE LINE OF THUNDERSTORMS WILL GRADUALLY MOVE EASTWARD AS THE UPPER LEVEL STORM SYSTEM BEGINS TO MOVE INTO NORTHEAST NEW MEXICO LATER TODAY. SOUTHERLY WINDS...AT THE SURFACE AND ALOFT...ARE CREATING AN ENVIRONMENT FAVORABLE FOR TRAINING OF THUNDERSTORMS OVER THE EASTERN PORTIONS OF NEW MEXICO. SOME OF THE STRONGER STORMS COULD PRODUCE RAINFALL RATES BETWEEN 1 TO 2 INCHES AN HOUR.

ONCE THE UPPER LEVEL SYSTEM BEGINS TO MOVE TO THE NORTHEAST THE SHOWERS AND THUNDERSTORMS ARE LIKELY TO MOVE RAPIDLY EASTWARD INTO THE TEXAS PANHANDLE.

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

STAY TUNED TO NOAA WEATHER RADIO...COMMERCIAL MEDIA OR YOU CABLE TELEVISION PROVIDER FOR WATCH UPDATES AND POSSIBLE WARNINGS.

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#### 3.5 Example #5 - Flood Watch for Flash Flooding (Long Zone Names).

WGUS66 KSGX 120342 FFASGX CAZ042-043-048-050-055>058-061-062-121200-

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 WEDNESDAY MORNING...

...THE NATIONAL WEATHER SERVICE IN SAN DIEGO HAS ISSUED A FLOOD WATCH FOR FLASH FLOODING IN SAN DIEGO AND ORANGE COUNTIES...THE INLAND EMPIRE...THE COACHELLA VALLEY AND THE MOUNTAINS AND DESERTS OF SAN BERNARDINO AND RIVERSIDE COUNTIES EFFECTIVE UNTIL 400 AM PST WEDNESDAY. THE WATCH INCLUDES THE FOLLOWING AREAS...

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

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 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 YOU CABLE TELEVISION PROVIDER FOR WATCH UPDATES AND POSSIBLE WARNINGS.

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J. DOE

#### 3.6 <u>Example #6 - Flood Watch for Mainstem River and Tributary Flooding</u>.

WGUS61 KRNK 270653 FFARNK NCZ003>006-019-020-VAZ022>024-032>035-043>047-058-059-271600-

URGENT - IMMEDIATE BROADCAST REQUESTED FLOOD WATCH NATIONAL WEATHER SERVICE BLACKSBURG VA 252 AM EDT TUE MAY 27 2003

...FLOODING POSSIBLE ALONG RIVERS AND CREEKS IN SOUTHWESTERN VIRGINIA AND NORTHWEST NORTH CAROLINA UNTIL TOMORROW MORNING...

...THE NATIONAL WEATHER SERVICE IN BLACKSBURG HAS ISSUED A FLOOD WATCH FOR PARTS OF SOUTHWESTERN VIRGINIA AND NORTHWEST NORTH CAROLINA EFFECTIVE UNTIL 400 AM EDT WEDNESDAY. THE WATCH INCLUDES THE FOLLOWING COUNTIES...

IN NORTHEAST NORTH CAROLINA...

CASWELL...ROCKINGHAM...STOKES...SURRY...WILKES...YADKIN

IN SOUTHWESTERN VIRGINIA...

AMHERST...APPOMATTOX...BEDFORD...BOTETOURT...BUCKINGHAM...CAMPBELL... CHARLOTTE...FRANKLIN...HALIFAX...HENRY...PATRICK...PITTSYLVANIA... ROANOKE...ROCKBRIDGE

LOW PRESSURE OVER THE CAROLINAS WILL STRENGTHEN AND MOVE EAST THIS AFTERNOON AS A POTENT UPPER DISTURBANCE OVER KENTUCKY MOVES OVER THE SOUTHERN APPALACHIANS. AS A RESULT RAIN IS EXPECTED TO REDEVELOP AND BECOME HEAVY AT TIMES ALONG AND EAST OF THE BLUE RIDGE LATER THIS MORNING AND THIS AFTERNOON.

LOWER PORTIONS OF THE DAN AND ROANOKE RIVERS ARE ALREADY IN OR NEAR FLOOD DUE TO HEAVY RAINFALL SUNDAY...AND ADDITIONAL RAINFALL COULD EASILY CAUSE SHARP RISES ON THESE RIVERS. AREA CREEKS AND STREAMS ARE ALSO RUNNING HIGH AND COULD FLOOD WITH MORE HEAVY RAIN.

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

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# 3.7 Example #7 - Flood Watch (Long Zone Names).

WGUS66 KPQR 220131 FFAPQR ORZ001>004-006>008-WAZ021-220700-

URGENT - IMMEDIATE BROADCAST REQUESTED FLOOD WATCH NATIONAL WEATHER SERVICE PORTLAND OR 530 PM PST FRI MAR 21 2003

...THE NATIONAL WEATHER SERVICE IN PORTLAND HAS ISSUED A FLOOD WATCH FOR THE WILLAMETTE TRIBUTARIES DRAINING THE NORTHWEST OREGON COAST RANGE AND THE COASTAL RIVERS AND STREAMS OF SOUTHWEST WASHINGTON AND NORTHWEST OREGON EFFECTIVE UNTIL 11 PM PST SATURDAY. THE WATCH INCLUDES THE FOLLOWING AREAS...

NORTH OREGON COAST... CENTRAL OREGON COAST... COAST RANGE OF NORTHWEST OREGON... CENTRAL COAST RANGE OF WESTERN OREGON... GREATER PORTLAND METRO AREA... CENTRAL WILLAMETTE VALLEY... SOUTH WILLAMETTE VALLEY AND SOUTH WASHINGTON COAST

RAIN CONTINUES TO FALL THIS EVENING OVER THE COAST AND COAST RANGE OF SOUTHWEST WASHINGTON AND NORTHWEST OREGON...AND WILL CONTINUE TO BE HEAVY AT TIMES TONIGHT. SEVERAL OF THE RIVERS AND STREAMS DRAINING THE COAST RANGE IN NORTHWEST OREGON AND SOUTHWEST WASHINGTON MAY RISE TO FLOOD STAGE TONIGHT OR SATURDAY. ALONG THE COASTAL SLOPES THE STREAMS MOST AT RISK FOR FLOODING INCLUDE THE NEHALEM...WILSON... SILETTE AND SIUSLAW RIVERS. STREAMS AT RISK FOR FLOODING DRAINING THE EAST SLOPES OF THE COAST RANGE INTO THE WILLAMETTE RIVER INCLUDE THE LUCKIAMUTE...MARYS AND UPPER TULATIN RIVERS.

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

STAY TUNED TO NOAA WEATHER RADIO...COMMERCIAL MEDIA OR YOUR CABLE TELEVISION PROVIDER FOR WATCH UPDATES AND POSSIBLE WARNINGS. STAGE FORECASTS FOR RIVERS IN THE WATCH AREA SHOULD BE MONITORED. THESE STAGE FORECASTS ARE BASED ON OBSERVED AND FORECAST RAINFALL AND TEMPERATURES. IF ACTUAL RAINFALL AND TEMPERATURES VARY FROM THE FORECAST VALUES...THE RIVER STAGE WILL VARY ACCORDINGLY. RIVER FORECASTS ALSO INCLUDE CURRENT AND PLANNED RESERVOIR RELEASES. FOR THE LATEST RIVER STAGES AND FORECASTS...VISIT OUR WEB PAGE AT HTTP://WWW.WRH.NOAA.GOV/PORTLAND/PUBLIC HYDRO (LOWER CASE).

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J. DOE

# 3.8 Example #8 - Flood Watch: Follow-up.

WGUS61 KRNK 271605 FFARNK NCZ003>006-019-020-VAZ022>024-032>035-043>047-058-059-272100-

URGENT - IMMEDIATE BROADCAST REQUESTED FLOOD WATCH NATIONAL WEATHER SERVICE BLACKSBURG VA NOON EDT TUE MAY 27 2003

...FLOOD THREAT CONTINUES IN SOUTHWESTERN VIRGINIA AND NORTHWEST NORTH CAROLINA UNTIL TOMORROW MORNING...

...A FLOOD WATCH FOR PARTS OF SOUTHWESTERN VIRGINIA AND NORTHWEST NORTH CAROLINA REMAINS IN EFFECT UNTIL 400 AM EDT WEDNESDAY MORNING. THE WATCH INCLUDES THE FOLLOWING COUNTIES...

IN NORTHWEST NORTH CAROLINA...

CASWELL...ROCKINGHAM...STOKES...SURRY...WILKES AND YADKIN.

IN SOUTHWESTERN VIRGINIA...

AMHERST...APPOMATTOX...BEDFORD...BOTETOURT...BUCKINGHAM...CAMPBELL... CHARLOTTE...FRANKLIN...HALIFAX...HENRY...PATRICK...PITTSYLVANIA... ROANOKE AND ROCKBRIDGE

LOW PRESSURE OVER THE CAROLINAS WILL STRENGTHEN AND MOVE EAST THIS AFTERNOON AS A POTENT UPPER DISTURBANCE OVER KENTUCKY MOVES OVER THE SOUTHERN APPALACHIANS. AS A RESULT RAIN MAY BECOME HEAVY AT TIMES ALONG AND EAST OF THE BLUE RIDGE.

LOWER PORTIONS OF THE DAN AND ROANOKE RIVERS ARE ALREADY IN OR NEAR FLOOD DUE TO HEAVY RAINFALL SUNDAY...AND ADDITIONAL RAINFALL COULD EASILY CAUSE SHARP RISES ON THESE RIVERS. AREA CREEKS AND STREAMS ARE ALSO RUNNING HIGH AND COULD FLOOD WITH MORE HEAVY RAIN.

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

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#### 3.9 <u>Example #9 - Flood Watch: Follow-up (Long Zone Names)</u>.

WGUS66 KPQR 230705 FFAPQR ORZ001>004-006>008-WAZ021-221300-

URGENT - IMMEDIATE BROADCAST REQUESTED FLOOD WATCH NATIONAL WEATHER SERVICE PORTLAND OR 1100 PM PST FRI MAR 21 2003

...A FLOOD WATCH FOR THE WILLAMETTE TRIBUTARIES DRAINING THE NORTHWEST OREGON COAST RANGE AND THE COASTAL RIVERS AND STREAMS OF SOUTHWEST WASHINGTON AND NORTHWEST OREGON REMAINS IN EFFECT UNTIL 1100 PM PST SATURDAY. THE WATCH INCLUDES THE FOLLOWING AREAS... NORTH OREGON COAST... CENTRAL OREGON COAST... COAST RANGE OF NORTHWEST OREGON... CENTRAL COAST RANGE OF WESTERN OREGON... GREATER PORTLAND METRO AREA... CENTRAL WILLAMETTE VALLEY... SOUTH WILLAMETTE VALLEY AND SOUTH WASHINGTON COAST

MODERATE RAIN CONTINUES TO FALL THIS EVENING OVER THE WATCH AREA WITH A FEW HEAVIER AREAS ON THE COASTAL SLOPES. SO FAR ALL MAJOR RIVERS AND STREAMS DRAINING THE COAST RANGE IN NORTHWEST OREGON AND SOUTHWEST WASHINGTON ARE BELOW FLOOD STAGE...BUT STILL SHOULD BE MONITORED CLOSELY FOR THE POSSIBILITY OF FLOODING SHOULD RAINFALL EXCEED THE CURRENTLY FORECAST VALUES.

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

STAY TUNED TO NOAA WEATHER RADIO...COMMERCIAL MEDIA OR YOUR CABLE TELEVISION PROVIDER FOR WATCH UPDATES AND POSSIBLE WARNINGS. THE LATEST RIVER STAGES AND FORECASTS CAN BE MONITORED AT HTTP://WWW.WRH.NOAA.GOV/PORTLAND/PUBLIC HYDRO (LOWER CASE).

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J. DOE

# 3.10 <u>Example #10 - Flood Watch: Termination</u>.

WGUS66 KPQR 230700 FFAPQR ORZ001>004-006>008-WAZ021-230730-

URGENT - IMMEDIATE BROADCAST REQUESTED FLOOD WATCH NATIONAL WEATHER SERVICE PORTLAND OR 1100 PM PST SAT MAR 22 2003

...THE FLOOD WATCH FOR THE WILLAMETTE TRIBUTARIES DRAINING THE NORTHWEST OREGON COAST RANGE AND THE COASTAL RIVERS AND STREAMS OF SOUTHWEST WASHINGTON AND NORTHWEST OREGON HAS BEEN ALLOWED TO EXPIRE...

MODERATE TO HEAVY RAIN FELL OVERNIGHT IN THE COAST AND COAST RANGE OF SOUTHWEST WASHINGTON AND NORTHWEST OREGON...BUT REMAINED WITHIN THE RANGE OF FORECAST VALUES. THIS ALLOWED ALL RIVERS AND STREAMS IN THE WATCH AREA TO REMAIN BELOW FLOOD STAGE. RIVERS WILL STILL BE AT HIGH LEVELS FOR THE NEXT FEW DAYS BUT GRADUALLY RECEDE UNTIL THE NEXT STORM ARRIVES THIS TUESDAY.

THE LATEST STAGES AND FORECASTS FOR RIVERS AND STREAMS CAN BE FOUND AT OUR WEB PAGE AT <u>HTTP://WWW.WRH.NOAA.GOV/PORTLAND/PUBLIC\_HYDRO</u> (LOWER CASE).

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J. DOE

# 4. Flash Flood Warning (FFW).

# 4.1 <u>Example #1 - Flash Flood Warning: Excessive Rainfall.</u>

WGUS51 KOKX 141656 FFWOKX NYC103-141800-

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 200 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.

DO NOT DRIVE YOUR VEHICLE INTO AREAS WHERE THE WATER COVERS THE ROADWAY. VEHICLES CAUGHT IN RISING WATER SHOULD BE ABANDONED. MOVE TO HIGHER GROUND IMMEDIATELY!

REPORT SEVERE WEATHER 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

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#### 4.2 Example #2 - Flash Flood Warning: Dam Failure.

WGUS53 KGLD 221608 FFWGLD COC125-KSC023-NEC057-087-230015-

BULLETIN - EAS ACTIVATION REQUESTED FLASH FLOOD WARNING NATIONAL WEATHER SERVICE GOODLAND KS 1008 AM MDT MON APR 22 2002

THE NATIONAL WEATHER SERVICE IN GOODLAND HAS ISSUED A

\* FLASH FLOOD WARNING FOR THE FOLLOWING LOCATIONS DOWNSTREAM OF BONNY DAM

IN NORTHEAST COLORADO SOUTHEASTERN YUMA COUNTY...INCLUDING THE TOWN OF HALE

IN NORTHWEST KANSAS CHEYENNE COUNTY...INCLUDING THE TOWN OF ST FRANCIS IN SOUTHWEST NEBRASKA SOUTHEASTERN DUNDY COUNTY...INCLUDING THE TOWN OF BENKELMAN WESTERN HITCHCOCK COUNTY...INCLUDING THE TOWN OF STRATTON

- \* UNTIL 615 PM MDT (715 PM CDT)
- \* AT 10 AM MDT (11 AM CDT) NATIONAL WEATHER SERVICE AND THE UNITED STATES BUREAU OF RECLAMATION REPORTS THAT FLASH FLOODING IS DEVELOPING FROM WATER ERODING BONNY DAM...AND IS RESULTING IN THE FAILURE OF THE STRUCTURE.
- \* THE ESTIMATED TIME FOR THE LEADING EDGE OF THE FLOOD WAVE TO REACH HALE IS 22 MINUTES...1030 AM MDT...ST. FRANCIS 2 HOURS 40 MINUTES...1248 PM MDT...BENKELMAN 5 HOURS 30 MINUTES...338 PM MDT AND STRATTON NEARLY 8 HOURS...6 PM MDT.

MOVE TO ESCAPE FLOOD WATERS AND DO NOT STAY IN AREAS SUBJECT TO FLOODING WHEN WATER BEGINS RISING. THIS IS A VERY DANGEROUS SITUATION DOWNSTREAM OF BONNY DAM! ALL PEOPLE LIVING ALONG OR LOCATED NEAR THE SOUTH FORK REPUBLICAN AND REPUBLICAN RIVERS SHOULD BEGIN EVACUATION...AND MOVE TO HIGHER GROUND IMMEDIATELY!

LAT...LON 3868 10233 3871 10187 3909 10187 3904 10209 3903 10234

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# 5. Flash Flood Statement (FFS).

#### 5.1 <u>Example #1 - Flash Flood Warning: Follow-up</u>.

WGUS73 KLSX 240730 FFSLSX ILC005-051-117-121-135-241130-

FLASH FLOOD STATEMENT NATIONAL WEATHER SERVICE ST LOUIS MO 230 AM CDT THU AUG 24 2000

...THE FLASH FLOOD WARNING REMAINS IN EFFECT FOR MACOUPIN...BOND... MONTGOMERY...FAYETTE AND MARION COUNTIES IN ILLINOIS UNTIL 630 AM CDT...

FLASH FLOODING CAN BE EXPECTED ACROSS PARTS OF THESE AREAS FOR THE REST OF TONIGHT...AS ADDITIONAL THUNDERSTORMS WILL CONTINUE TO PRODUCE MODERATE TO HEAVY RAIN.

AT 227 AM CDT...WEATHER SERVICE DOPPLER RADAR INDICATED THUNDERSTORMS PRODUCING VERY HEAVY RAIN IN AN AREA FROM NEAR LITCHFIELD ILLINOIS TO JUST EAST OF SALEM ILLINOIS. THUNDERSTORMS HAVE BEEN DEVELOPING WEST OF THE LITCHFIELD AREA AND MOVE SLOWLY SOUTHEAST TOWARD SALEM OVER THE PAST SEVERAL HOURS. RADAR ESTIMATES INDICATE 3 TO 5 INCHES OF RAIN HAS FALLEN. LAW ENFORCEMENT OFFICERS IN THE AREA REPORT SEVERAL ROADS ARE COVERED WITH WATER AND ARE CURRENTLY IMPASSIBLE.

IF FLASH FLOODING IS OBSERVED OR IMMINENT...MOVE QUICKLY TO HIGHER GROUND! NEVER DRIVE INTO AN AREA WHERE WATER COVERS THE ROAD. TURN AROUND...DON'T DROWN!

# 5.2 <u>Example #2 - Flash Flood Warning: Termination</u>.

WGUS72 KILM 302300-FFSILM NCC019-129-302330-

FLASH FLOOD STATEMENT NATIONAL WEATHER SERVICE WILMINGTON NC 700 PM EDT THU AUG 30 2001

... THE FLASH FLOOD WARNING HAS EXPIRED FOR NEW HANOVER AND BRUNSWICK COUNTIES IN NORTH CAROLINA...

NATIONAL WEATHER SERVICE RADAR INDICATED THE HEAVIEST RAINFALL WAS MOVING OFF THE COAST...SO THE FLASH FLOOD THREAT NO LONGER EXISTS. SOME MINOR PONDING OF WATER MAY CONTINUE AS LIGHT RAIN PERSISTS THIS EVENING.

REMAIN CAUTIOUS WHEN DRIVING IN LOW LYING AREAS...AND REPORT ANY MINOR FLOODING TO THE NEAREST LAW ENFORCEMENT AGENCY. THEY WILL RELAY YOUR REPORT TO THE NATIONAL WEATHER SERVICE IN WILMINGTON.

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# 6. <u>Flood Warning (FLW)</u>.

### 6.1 <u>Example #1 - Flood Warning for Forecast Points</u>.

WGUS42 KMHX 061600 FLWMHX NCC049-107-117-147-070300-

BULLETIN - IMMEDIATE BROADCAST REQUESTED FLOOD WARNING NATIONAL WEATHER SERVICE NEWPORT/MOREHEAD CITY NC 1159 AM EDT FRI APR 6 2001

...THE NATIONAL WEATHER SERVICE IN NEWPORT HAS ISSUED A FLOOD WARNING FOR THE FOLLOWING RIVERS IN NORTH CAROLINA...NEUSE...ROANOKE AND TAR RIVERS...

NEUSE RIVER AT KINSTON... MINOR FLOODING IS OCCURRING MINOR FLOODING IS EXPECTED TO CONTINUE A STAGE OF 14.2 FEET WAS MEASURED AT 9 AM FRIDAY FLOOD STAGE IS 14.0 FEET FORECAST MAXIMUM STAGE IS 15.0 FEET AT 8 PM WEDNESDAY AT 14 FEET...WATER WILL BEGIN TO OVERFLOW INTO LOWLANDS ADJACENT TO THE NEUSE RIVER.

TAR RIVER AT GREENVILLE... MINOR FLOODING IS OCCURRING MINOR FLOODING IS EXPECTED TO CONTINUE A STAGE OF 14.9 FEET WAS MEASURED AT 11 AM FRIDAY FLOOD STAGE IS 13.0 FEET FORECAST MAXIMUM STAGE IS 16.0 FEET AT 8 AM SUNDAY THE RIVER WILL FALL BELOW FLOOD STAGE AT 6 AM TUESDAY AT 16 FEET...WIDESPREAD LOW LAND FLOODING ADJACENT TO THE TAR RIVER OCCURS. FARMLAND WILL BEGIN TO FLOOD ACROSS PITT COUNTY. ROANOKE RIVER NEAR WILLIAMSTON... MINOR FLOODING IS OCCURRING MINOR FLOODING IS EXPECTED TO CONTINUE A STAGE OF 10.2 FEET WAS MEASURED AT 8 AM FRIDAY FLOOD STAGE IS 10.0 FEET FORECAST MAXIMUM STAGE IS 10.6 FEET AT 8 PM MONDAY AT 10 FEET...MINOR LOWLAND FLOODING ADJACENT TO THE ROANOKE RIVER WILL BEGIN.

NEVER DRIVE CARS OR TRUCKS THROUGH FLOODED AREAS. THE WATER MAY BE TOO DEEP TO ALLOW FOR SAFE PASSAGE.

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### 6.2 Example #2 - Flood Warning for Forecast Points (Segmented).

WGUS46 KPQR 051759 FLWPQR BULLETIN - IMMEDIATE BROADCAST REQUESTED FLOOD WARNING NATIONAL WEATHER SERVICE PORTLAND OR 1000 AM PST TUE DEC 05 2000 ... THE NATIONAL WEATHER SERVICE IN PORTLAND HAS ISSUED A FLOOD WARNING FOR THE FOLLOWING RIVERS... COWLITZ RIVER IN COWLITZ COUNTY COLUMBIA RIVER IN COWLITZ AND COLUMBIA COUNTIES WAC015-070000-COWLITZ RIVER AT CASTLE ROCK MOST RECENT READING: 46.8 FT / 59000 CFS AT 8 AM MONDAY ---> 48.0 FT / 65000 CFS FLOOD STAGE FORECAST / REMARKS: THIS RIVER IS EXPECTED TO RISE THROUGH THE NIGHT...REACHING FLOOD STAGE AROUND 2 AM THURSDAY. IT WILL CONTINUE TO RISE THROUGH THE MORNING HOURS AND CREST NEAR 51.5 FT LATE MORNING THURSDAY AND REMAIN ABOVE FLOOD STAGE THROUGH THE DAY. ABOVE 51 FEET... EXPECT FLOODING OF BUILDINGS AND RESIDENTIAL AREAS WEST OF THE RIVER IN THE VICINITY OF CASTLE ROCK. ALSO... EXPECT WIDESPREAD FLOODING OF LOW LYING PASTURE AND FARMLAND. ŚŚ WAC015-070000-COWLITZ RIVER AT KELSO MOST RECENT READING: 20.2 FT / 90000 CFS AT 9 AM MONDAY FLOOD STAGE ---> 21.5 FT / 100000 CFS FORECAST / REMARKS: THIS RIVER IS EXPECTED TO RISE THROUGH THE NIGHT...REACHING FLOOD STAGE AROUND 6 AM THURSDAY. IT WILL CONTINUE TO RISE THROUGH THE MORNING HOURS AND CREST NEAR 25.0 FT EARLY AFTERNOON THURSDAY AND REMAIN ABOVE FLOOD STAGE THROUGH THE DAY. ABOVE 24.5 FEET...FLOODING OF A FEW RESIDENTIAL AREAS IN THE KELSO VICINITY BEGINS. ALSO... EXPECT WIDESPREAD FLOODING OF PASTURE LAND AND LOW LYING ROADS.

ORC009-WAC015-070000-COLUMBIA RIVER AT LONGVIEW MOST RECENT READING: 9.8 FT AT 8 AM MONDAY FLOOD STAGE ---> 12.0 FT

FORECAST / REMARKS: THIS RIVER IS EXPECTED TO CREST NEAR 12.0 FEET AROUND 7 PM THIS EVENING...AND AT 12.5 FEET AROUND 6 AM THURSDAY...CORRESPONDING WITH HIGH TIDES AT LONGVIEW. ABOVE 12 FEET...EXPECT MINOR FLOODING OF UN-LEVEED LOW LYING FARMLAND NEAR THE COLUMBIA.

RIVER STAGE FORECASTS ARE BASED ON OBSERVED AND FORECAST RAINFALL AND TEMPERATURES. IF ACTUAL RAINFALL AND TEMPERATURES VARY FROM THE FORECAST VALUES...THE RIVER STAGE WILL VARY ACCORDINGLY. NATIONAL WEATHER SERVICE RIVER FORECASTS INCLUDE CURRENT AND PLANNED RESERVOIR RELEASES. FOR THE LATEST RIVER STAGES AND FORECASTS VISIT OUR WEB PAGE AT: http://www.wrh.noaa.gov/portland/public hydro/

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#### 6.3 <u>Example #3 - Areal Flood Warning</u>.

WGUS41 KILN 241202 FLWILN OHC001-241800-

BULLETIN - IMMEDIATE BROADCAST REQUESTED FLOOD WARNING NATIONAL WEATHER SERVICE WILMINGTON OH 802 AM EDT THU AUG 24 2000

...THE NATIONAL WEATHER SERVICE IN WILMINGTON HAS ISSUED A FLOOD WARNING FOR SMALL STREAMS IN ADAMS COUNTY EFFECTIVE UNTIL 8 PM THURSDAY EVENING...

AT 8 AM EDT...WEATHER SERVICE DOPPLER RADAR INDICATED THAT OVER 3 INCHES OF RAIN HAD FALLEN OVER PARTS OF THE COUNTY. AN ADDITIONAL ONE OR TWO INCHES ARE POSSIBLE THROUGHOUT THE DAY. AS A RESULT... HIGH WATER LEVELS CAN BE EXPECTED INTO THE EVENING HOURS. SOME LOCATIONS IN THE WARNING AREA INCLUDE WEST UNION AND BLUE CREEK.

IF FLOODING IS OBSERVED...ACT QUICKLY! MOVE TO HIGHER GROUND. DO NOT STAY IN AREAS SUBJECT TO FLOODING WHEN WATER BEGINS RISING.

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#### 6.4 <u>Example #4 - Areal Flood Warning: Extension In Time</u>.

WGUS46 KOTX 061803 FLWOTX WAC051-070600-

BULLETIN - IMMEDIATE BROADCAST REQUESTED FLOOD WARNING NATIONAL WEATHER SERVICE SPOKANE WA 1102 AM PDT THU JUN 6 2002

...THE NATIONAL WEATHER SERVICE IN SPOKANE HAS EXTENDED THE FLOOD WARNING FOR THE PEND OREILLE RIVER IN PEND OREILLE COUNTY UNTIL 9 PM PDT FRIDAY EVENING... ON THE PEND OREILLE RIVER BELOW ALBENI FALLS DAM...THE MOST RECENT READING WAS 92,800 CFS AT 10 AM THURSDAY. THE FLOOD FLOW IS 100,000 CFS. THE OUTFLOW FROM ALBENI FALLS DAM IS FORECAST TO REMAIN BETWEEN 92000 AND 96000 CFS THROUGH FRIDAY.

THOUGH THE RIVER IS CURRENTLY BELOW THE FLOOD FLOW...MINOR FLOODING CONTINUES ALONG THE RIVER DOWNSTREAM FROM NEWPORT TO THE CANADIAN BORDER. SEVERAL STRUCTURES ARE FLOODED AND SOME SAND BAGGING OPERATIONS ARE OCCURRING. ANY RAINFALL THROUGH FRIDAY WILL ADD TO THE EXISTING HIGH FLOW.

BOATERS AND PERSONS WITH INTERESTS ALONG THE PEND OREILLE RIVER ARE URGED TO USE EXTREME CAUTION WHEN NEAR OR ON THE RIVER. STAY TUNED TO FURTHER DEVELOPMENTS BY LISTENING TO NOAA WEATHER RADIO OR YOUR LOCAL TV OR RADIO STATIONS.

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#### 7. Flood Statement (FLS).

# 7.1 Example #1 - Flood Warning for a Forecast Point: Follow-up.

WGUS84 KBMX 211120 FLSBHM ALC021-037-051-117-121-220000-

FLOOD STATEMENT NATIONAL WEATHER SERVICE BIRMINGHAM AL 720 AM CDT WED MAY 21 2003

... THE FLOOD WARNING FOR THE COOSA RIVER REMAINS IN EFFECT...

COOSA RIVER AT CHILDERSBURG... MINOR FLOODING IS OCCURRING LATEST STAGE: 402.0 FEET AT 6 AM CDT WEDNESDAY FLOOD STAGE: 402 FEET FORECAST: CREST NEAR 404 FEET EARLY THURSDAY AFTERNOON THE RIVER WILL FALL BELOW FLOOD STAGE FRIDAY AFTERNOON AT 403 FEET...FLOODING OF LOW LYING AREAS CAN BE EXPECTED AT 404 FEET...FLOODING OF SOME LOW LYING ROADS IN THE AREA BEGINS...AND THE YARDS OF SOME HOMES NEAR THE RIVER BECOME FLOODED.

HEAVY RAINFALL OF 3 TO 5 INCHES HAS OCCURRED SINCE SATURDAY OVER THE COOSA RIVER DRAINAGE BASIN...AND A FLOOD WARNING IS NOW IN EFFECT FOR THE COOSA RIVER AT CHILDERSBURG.

ALL PERSONS WITH INTERESTS ALONG THIS RIVER SHOULD MONITOR THE LATEST FORECASTS...AND BE PREPARED TO TAKE NECESSARY PRECAUTIONS TO PROTECT LIFE AND PROPERTY FROM RISING RIVER LEVELS.

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J. DOE

# 7.2 Example #2 - Flood Warning for Forecast Points: Termination.

WGUS83 KDVN 031535 FLSDVN IAC057-111-ILC067-071-031830-FLOOD STATEMENT NATIONAL WEATHER SERVICE QUAD CITIES IA IL 1035 AM CDT FRI MAY 03 2002 ... THE FLOOD WARNING FOR GLADSTONE AND BURLINGTON ON THE MISSISSIPPI RIVER HAS BEEN ALLOWED TO EXPIRE... MISSISSIPPI RIVER NEAR GLADSTONE... A STAGE OF 9.9 FEET WAS MEASURED AT 9 AM CDT. FLOOD STAGE IS 10.0 FT. THE RIVER CRESTED 11.19 FT AT 5 AM APRIL 30TH. THE RIVER FELL BELOW FLOOD STAGE AT 8 AM THIS MORNING AND WILL CONTINUE TO FALL. MISSISSIPPI RIVER AT BURLINGTON... A STAGE OF 15.0 FEET WAS MEASURED AT 9 AM CDT. FLOOD STAGE IS 15.0 FT. THE RIVER CRESTED 16.10 FT AT 6 PM APRIL 29TH. THE RIVER IS CURRENTLY FALLING BELOW THE FLOOD STAGE AND WILL CONTINUE TO FALL. THIS WILL BE THE LAST STATEMENT FOR THESE LOCATIONS FOR THIS EVENT. HOWEVER...REMAIN ALERT FOR HIGH WATER ALONG THE MISSISSIPPI RIVER. YOU CAN FIND ADDITIONAL INFORMATION AT OUR WEB SITE: http://www.crh.noaa.gov/dvn/ 8.8 IN TABLE FORMAT... OBSERVATIONS AND OFFICIAL NWS FORECASTS... IN FEET. OBSERVED SAT SUN MON SITE TIME 05/04 05/05 05/06 ID LOCATION FS STG DAY 7 AM 7 AM 7 AM

GLADSTONE10.09.9FRI9 AM9.59.08.6GLDI2BURLINGTON15.015.0FRI9 AM14.614.213.9BRLI4

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#### 7.3 <u>Example #3 - Areal Flood Warning: Follow-up.</u>

WGUS81 KILN 241202 FLSILN OHC001-250000-

MISSISSIPPI RIVER

FLOOD STATEMENT NATIONAL WEATHER SERVICE WILMINGTON OH 205 PM EDT THU AUG 24 2000

...THE FLOOD WARNING FOR SMALL STREAMS IN ADAMS COUNTY REMAINS IN EFFECT UNTIL 8 PM EDT THIS EVENING...

AT 2 PM EDT...WEATHER SERVICE DOPPLER RADAR INDICATES A SECONDAREA OF HEAVY RAINFALL APPROACHING THE COUNTY AND SURROUNDING AREAS. AN ADDITIONAL ONE TO TWO INCHES OF RAIN IS POSSIBLE OVER PARTS OF ADAMS COUNTY...CAUSING SMALL STREAMS TO RISE AGAIN AFTER THIS MORNING'S FLOODS. WEST UNION AND BLUE CREEKS REMAIN SPECIAL AREAS OF CONCERN.

IF FLOODING IS OBSERVED...ACT QUICKLY! MOVE TO HIGHER GROUND TO ESCAPE FLOOD WATERS. DO NOT STAY IN AREAS SUBJECT TO FLOODING WHEN WATER BEGINS RISING. NEVER DRIVE CARS OR TRUCKS THROUGH FLOODED AREAS. THE WATER MAY BE TOO DEEP TO ALLOW FOR SAFE PASSAGE.

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#### 7.4 Example #4 - Areal Flood Warning: Termination.

WGUS83 KJKL 241425 FLSJKL KYC051-109-241500-

FLOOD STATEMENT NATIONAL WEATHER SERVICE JACKSON KY 1024 AM EDT THU AUG 24 2000

...THE FLOOD WARNING FOR CLAY AND JACKSON COUNTIES HAS BEEN CANCELED...

WEATHER SERVICE RADAR INDICATES THAT THE HEAVY RAIN PRODUCING THUNDERSTORMS EARLIER THIS MORNING IN CLAY AND JACKSON COUNTIES HAVE WEAKENED AND MOVED EAST OF THE AREA. THE SHERIFFS DEPARTMENT REPORTS THAT ROADS ONCE CLOSED BY HIGH WATER NEAR SEXTONS CREEK... BURNING SPRINGS AND WILD CAT KENTUCKY ARE NOW OPEN. SCATTERED LIGHT SHOWERS ARE STILL EXPECTED TODAY...BUT AT THIS TIME THEY ARE NOT EXPECTED TO CAUSE ANY PROBLEMS.

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# 8. Flood Statement (FLS) - Miscellaneous Advisories.

#### 8.1 <u>Example #1 - Urban and Small Stream Flood Advisory</u>.

WGUS84 KSJT 281256 FLSSJT TXC441-281500-

FLOOD STATEMENT NATIONAL WEATHER SERVICE SAN ANGELO TX 755 AM CDT TUE MAY 28 2002

...THE NATIONAL WEATHER SERVICE IN SAN ANGELO HAS ISSUED AN URBAN AND SMALL STREAM FLOOD ADVISORY FOR TAYLOR COUNTY AND THE CITY OF ABILENE EFFECTIVE UNTIL 10 AM CDT TUESDAY...

AT 750 AM CDT...WEATHER SERVICE DOPPLER RADAR INDICATED THUNDERSTORMS WITH LOCALLY HEAVY RAINFALL ACROSS CENTRAL AND NORTHERN TAYLOR COUNTY. RAINFALL BETWEEN 1 TO 2 INCHES HAS FALLEN IN ABILENE SINCE 7 AM WITH ANOTHER ONE HALF INCH POSSIBLE THROUGH MID MORNING.

LOW LYING AND POOR DRAINAGE AREAS ACROSS THE CITY OF ABILENE MAY BECOME FLOODED AND IMPASSABLE. MOTORISTS ACROSS ABILENE SHOULD USE EXTREME CAUTION WHEN TRAVELING ACROSS THE CITY. DO NOT ATTEMPT TO CROSS AREAS WHERE WATER OF UNKNOWN DEPTH COVERS THE ROAD.

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# 8.2 <u>Example #2 - Advisory for Elevated Streamflow.</u>

WGUS81 KCAR 212111 FLSCAR MEC003-222100-

FLOOD STATEMENT NATIONAL WEATHER SERVICE CARIBOU ME 515 PM EDT MON APR 21 2003

... ICE JAMS PERSIST ON THE AROOSTOOK AND SAINT JOHN RIVERS...

TWO ICE JAMS WERE OBSERVED ON THE AROOSTOOK RIVER...AND ONE ICE JAM WAS REPORTED ON THE SAINT JOHN RIVER IN NORTHEAST AROOSTOOK COUNTY MONDAY.

ON THE AROOSTOOK RIVER...THE FIRST JAM WAS DOWNSTREAM OF THE VILLAGE OF CROUSEVILLE ON STATE ROUTE 164 BETWEEN THE TOWNS OF WASHBURN AND PRESQUE ISLE. THIS JAM APPEARED TO HAVE BROKEN IN HALF OVER THE PAST 24 HOURS...SENDING THE DOWNSTREAM FLOW OF ICE SOUTHEAST THROUGH THE TOWN OF PRESQUE ISLE LATE MONDAY AFTERNOON. THIS JAM...COMBINED WITH THE SNOWMELT RUNOFF...IS CAUSING THE RIVER TO BACKUP INTO LOW LYING AREAS OF THE FLOODPLAIN...BUT DOES NOT SEEM TO BE THREATENING ANY ROADS OR PROPERTY AT THIS TIME.

ON THE AROOSTOOK RIVER...NEAR THE TOWN OF FORT FAIRFIELD...AN ICE JAM HAS FORMED IN THE RUSSELL FLATS AREA APPROXIMATELY TWO MILES DOWNSTREAM OF THE FORT FAIRFIELD BRIDGE...WHERE THE AROOSTOOK RIVER FLOWS INTO NEW BRUNSWICK. THIS JAM IS CAUSING THE RIVER TO RISE BEHIND THE JAM...BUT DOES NOT SEEM TO BE THREATENING AT THIS TIME.

ON THE SAINT JOHN RIVER...A RIVER SPOTTER HAS REPORTED AN ICE JAM FIVE TO SIX MILES DOWNSTREAM OF THE INTERNATIONAL BRIDGE IN VAN BUREN...WHERE THE ICE FLOE HAS RUN INTO THE STILL STRONG SHEET OF RIVER ICE. THIS RIVER SPOTTER ALSO NOTED THAT DOWNSTREAM OF THIS JAM THE SAINT JOHN RIVER APPEARED TO BE FREE OF ICE.

RIVER ICE IS VERY UNPREDICTABLE...AND MAY MOVE AND JAM WITH LITTLE NOTICE. ANY ICE JAM CAN CAUSE FLOODING...AS THE ICE DAMS THE RIVER... CAUSING THE RIVER AT OR BEHIND THE JAM TO ELEVATE. STAY CLEAR OF LOW LYING AREAS NEAR ICE AFFECTED RIVERS AND MONITOR CONDITIONS CLOSELY.

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J. DOE

# 9. <u>Hydrologic Statement (RVS)</u>.

# 9.1 Example #1 - Information on Elevated Stream Levels for a River Forecast Point.

FGUS84 KFWD 110117 RVSFTW TXC119-223-120100-

HYDROLOGIC STATEMENT NATIONAL WEATHER SERVICE FORT WORTH TX 817 PM CDT WED APR 10 2002

THIS STATEMENT UPDATES INFORMATION FOR THE FOLLOWING LOCATIONS ON THE SULPHUR RIVER...COOPER

FOR THE SOUTH SULPHUR RIVER NEAR COOPER...THE STAGE AT 715 PM WEDNESDAY WAS 15.7 FEET. FLOOD STAGE IS 16.0 FEET. THE RIVER IS FORECAST TO HOLD AROUND 15.7 FEET...JUST BELOW FLOOD STAGE FOR THE NEXT SEVERAL DAYS. IF THE RIVER REACHES OR EXCEEDS 16.0 FEET...MINOR OUT OF BANK FLOODING WILL OCCUR AND A FEW RURAL ROADS WILL BEGIN TO FLOOD. MINOR FLOODING WILL ALSO OCCUR TO FARM AND RANCH LAND ADJACENT TO THE RIVER.

& &

	FLD	OB	SERVE	D	FORE	CAST 7	РM
LOCATION	STG	STG	DAY	TIME	THU	FRI	SAT
SULPHUR RIVER							
COOPER	16	15.7	WED	7 PM	15.7	15.6	15.5

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# 9.2 <u>Example #2 - SHEF Encoded.</u>

FGUS83 KLMK 171530 RVSSDF INZ089>090-KYZ035-040-049-180300-

HYDROLOGIC STATEMENT NATIONAL WEATHER SERVICE LOUISVILLE KY 1130 AM EDT TUE APR 17 2001

.B SDF 0417 DH12/DC0104171400/HT/DRH+24/HTIFF/DRH+48/HTIFF/DRH+72/HTIFF

:	STATION	FLOOD	7AM	24-HR		7am	
: ID	NAME	STAGE	STAGE	CHANGE	FOR	ECASTS	
:					FRI	SAT	SUN
:OHIO	RIVER						
MKLK2	:MARKLAND LOCK	51.0:	25.4/:	-3.9:	23.7 /	25.1 /	26.0 /
.END							
.B SDF	0417 DH12/DC010	4171400/	HP/DRH+2	4/HPIFF/DR	H+48/HP	IFF/DRH·	+72/HPIFF
:	STATION	FLOOD	7AM	24 <b>-</b> HR		7AM	
: ID	NAME	STAGE	STAGE	CHANGE	FOR	ECASTS	
:					FRI	SAT	SUN
:OHIO	RIVER						
MLUK2:	MCALPINE UPPER	23.0:	12.5/:	-0.1:	12.5 /	12.5 /	12.5 /
.END							

.B SDF 0417 DH12/DC0104171400/HT/DRH+24/HTIFF/DRH+48/HTIFF/DRH+72/HTIFF

FLOOD 7AM 24-HR 7AM STATION : : ID NAME STAGE STAGE CHANGE FORECASTS FRI SAT SUN :OHIO RIVER 28.4/: -4.3: 23.0 / 24.3 / 25.0 / MLPK2: MCALPINE LOCK 55.0: 18.0/: 0.5: 18.0 / 22.4 / 20.2 / CNNI3: CANNELTON LOCK 42.0: .END : .B SDF 0417 DH12/DC0104170707/HP/DRH+24/HPIFF/DRH+48/HPIFF/DRH+72/HPIFF : KENTUCKY RIVER FODK2: FORDHOLE LOCK 26.0: 10.0/: -0.1: 11.1 / 11.3 / 11.4 / HIBK2: HIGH BRIDGE LOCK 30.0: 9.9/: 0.2: 9.2 / 9.5 / 9.9 / 8.0 / 8.1 / 8.2 / FFTK2: FRANKFORT LOCK 31.0: 7.8/: 0.0: • .END

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# 10. Hydrologic Summary (RVA).

# 10.1 Example #1 - Report River Conditions for Multiple Forecast Points.

SRUS45 KTWC 281706 RVATUS

HYDROLOGIC SUMMARY NATIONAL WEATHER SERVICE TUCSON AZ 1003 AM MST TUE MAY 28 2002

...MORNING REPORT FOR USGS GAGES IN THE UPPER GILA BASIN...

	FLOOD	STAGE	FLOW	24 HO	UR TIME
	STAGE	/FT/	/CFS/	TREND	/MST/
GILA R. NR VIRDEN NM	11	2.1	22	0.0	06 AM TUE
SAN FRANCISCO R. AT CLIFTON	123	9.8	20	0.1	05 AM TUE
GILA R. NR SOLOMON 8NE	17	5.4	56	0.0	05 AM TUE

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### 10.2 Example #2 - Report for Rivers and Creeks in Hydrologic Services Area.

SRUS43 KDDC 201351 RVADDC

HYDROLOGIC SUMMARY NATIONAL WEATHER SERVICE DODGE CITY KS 850 AM CDT MON MAY 20 2002

LOCATION	FS	STAGE HEIGHT	24-HR CHANGE	POOL HEIGHT	24-HR CHANGE
ARKANSAS RIVER					
COOLIDGE 1S	8	2.45	0.00		
SYRACUSE	10	3.11	0.00		
GARDEN CITY	10	5.04	0.01		

М

DODGE CITY KINSLEY	11 12	5.82 3.75		
BUCKNER CREEK BURDETT 6W	16	3.73	0.00	
CIMARRON RIVER ELKHART 8N FORGAN 8N	8 7	4.01 2.44		
CROOKED CREEK ENGLEWOOD	5	1.64	М	
MEDICINE LODGE RIVER KIOWA 2NE	10	1.36	-0.06	
PAWNEE RIVER BURDETT 7WNW ROZEL 1N	23 31	2.53 5.86	0.00	
SALINE RIVER WAKEENEY 5N	13	2.07	-0.01	
S.FK NINNESCAH RIVER PRATT 1E	8	2.78	-0.02	
SMOKY HILL RIVER ARNOLD 12N	7	0.69	-0.01	
CEDAR BLUFF RSVR SCHOENCHEN 3W SCHOENCHEN 2E	11 11	2.55 2.23	-0.02 M	2143.21
WALNUT CREEK ALEXANDER 4W RUSH CENTER 7W BAZINE 5NW NEKOMA 5SW OTIS 2SSW			$\begin{array}{c} 0.01 \\ 0.00 \\ -0.03 \\ -0.04 \\ 0.00 \end{array}$	

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# 11. <u>River and Lake Forecast Product (RVD)</u>.

# 11.1 <u>Example #1 - Lake Sites (in SHEF)</u>.

FGUS54 KLUB 081306 RVDLBB TXC045-075-169-263-091300-

DAILY RIVER AND LAKE SUMMARY NATIONAL WEATHER SERVICE LUBBOCK TX 805 AM CDT FRI JUN 08 2001

```
.B LUB 0608 DC0106080805 DH12/HP/
:
:RESERVOIR/LAKE SITES
                                         7 a m
:
       STATION
                            NORMAL
                                         POOL
                                                    24-HR:
:
ΙD
      NAME
                             POOL
                                          ELEV.
                                                    CHANGE
                                                    -0.03:
MKZT2 :MCKENZIE LAKE
                             3100:
                                        3031.69/:
CWRT2 :WHITE RIVER LAKE3100:LHPT2 :LAKE ALAN HENRY2220:
                                        2354.38/:
                                                    -0.02:
                                       2206.35/:
                                                   -0.07:
:
.END
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# 11.2 Example #2 - River and Lake Sites.

FGUS51 KLWX 011706 RVDWBC MDC001>002-009-DCC001-021700-DAILY RIVER AND LAKE SUMMARY NATIONAL WEATHER SERVICE BALTIMORE - WASHINGTON 1206 PM EST THU MAR 01 2001 .B WBC 0301 DC01030112 DH12/HG/DRH+24/HGIFF/DRH+48/HGIFF/DRH+72/HGIFF STATION FLOOD 7AM 24-HR 7AM : STAGE STAGE CHANGE FORECASTS : ID NAME FRI SAT SUN • :POTOMAC RIVER 

 HPFW2 :HARPERS FERRY
 18.0
 : 11.44/:
 0.22:
 11.40
 /11.32
 /9.75/

 LITM2 :LITTLE FALLS
 10.0
 : 3.71/:
 0.04:
 3.70
 / 3.60
 /M

 : .END : .B WBC 0301 DH12/HP :FULLWATEROBSERVED24-H:IDLAKE NAMEPOOLELEV.DAY TIMECHANKERV2:JOHN H. KERR320:295.6 :THU 7 AM-0.2 24-HR DAY TIME CHANGE : .END

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# 12. Hydrometeorological Data Summary (HYx).

# 12.1 Example #1 - Daily Summary (HYD).

SXUS52 KCHS 301437 HYDCHS GAZ087-088-099>101-114>119-137>141-SCZ040-042>045-047>050-011400-CHARLESTON AREA TEMPERATURES AND PRECIPITATION NATIONAL WEATHER SERVICE CHARLESTON SC 1036 AM EDT TUE APR 30 2002

.B CHS 0430 E DH07	7/TX/TN/TA	/PPP,	/TSIRZ	X/TSIRZN	/TSIRZ			
:MAXHIGH TEMPEN :CURCURRENT TEN :			-				-	-
:		AIR	TEMP			SOIL	TEMP	
:STATION		MAX	MIN	I CUR	PCPN	MAX	MIN	CUR
:								
SOUTH COASTAL								
:CHARLESTON ARPT	:CHS	92/	56/	63/	0.01/	77/	68/	
:CHARLESTON CITY	:CHLS1	92/	64/	64/	0.03/	79/	66/	
:FORT MOULTRIE	:SULS1	93/	60/	62/	0.00/	/	/	
:EDIST BEACH PARK	:EDIS1	95/	61/	61/	0.00/	/	/	
:BEAUFORT								
:SUMMERVILLE	:SMVS1	93/	52/	52/	0.00/	/	/	
:ST GEORGE								
:WALTERBORO	:WTRS1	92/	50/	58/	0.02/	/	/	
:ALLENDALE	:ALDS1	92/	49/	49/	0.00/	83/	70/	
:JAMESTOWN	:JAMS1	91/	55/	57/	0.02/	/	/	
:								
:SOUTHEAST GEOR	RGIA							
:SAVANNAH ARPT	:SAV	93/	56/	66/	0.00/	/	/	74
:SPRINGFIELD	:SRFG1	93/	57/	57/	0.11/	/	/	
:CLYO	:CYOG1	88/	50/	51/	0.01/	82/	73/	
:EDEN								
:BROOKLET								
:ROCKY FORD	:RCFG1	91/	53/	53/	M /	/	/	
: .END								

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# 12.2 Example #2 - Monthly Summary (HYM).

CSUS56 KSFO 051725 HYMSFO

MONTHLY PRECIPITATION FOR SF BAY AREA AND CENTRAL COAST NATIONAL WEATHER SERVICE SAN FRANCISCO CA 925 AM PST FRI APR 5 2002

.B MTR	0331	Ρ	DH24/PPM
ANGC1	3.69		:ANGWIN PACIFIC UNION COLLEGE
BISC1	4.62		BIG SUR STATE PARK
FORC1	3.32		:FORT ROSS
HLDC1	3.46		:HEALDSBURG FIRE DEPT
KICC1	0.58		:KING CITY
MHMC1	3.86		:MOUNT HAMILTON
NSHC1	2.63		:NAPA STATE HOSPITAL
PANC1	0.90		:PANOCHE 2W
PRSC1	0.80		:PRIEST VALLEY
SFOC1	2.27		:SAN FRANCISCO DOWNTOWN
SCRC1	3.52		:SANTA CRUZ
STSC1	2.43		:SANTA ROSA
WVIC1	1.51		:WATSONVILLE WATERWORKS
.END			

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