

***NATIONAL WEATHER SERVICE WESTERN REGION SUPPLEMENT 1-2004
APPLICABLE TO INSTRUCTION 10-922
JANUARY 30, 2007***

***Operations and Services
Hydrologic Services, NWSPD 10-9
Weather Forecast Office Hydrologic Products Specifications, NWSI 10-922
WFO PUBLIC HYDROLOGIC PRODUCTS***

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Type of Issuance: Routine

SUMMARY OF REVISIONS: This supplement supersedes Western Region Supplement 1-2004 to Instructions 10-922, dated March 17, 2005. Revisions include:

1. Added Product 'Flood Advisory for River Forecast Point' to Table 2.
2. Changed 'Flash Statement - Advisory' to read 'Areal Flood Advisory.'

Signed

01/09/07

Vickie Nadolski

Date

Director, Western Region

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1. Description: The purpose of this supplement is to clarify NWSI 10-922 in Western Region, and to establish regional policy related to the headers, UGC coding, issuance criteria, contents and format of the WFO public hydrologic products. It also re-instates the use of the Flash Flood Statement (FFS) in Western Region.

2. Format and Procedures.

2.1 WFO Public Hydrologic Product Ids and MND Headers: All product Ids described in NWSI 10-922 may be used in Western Region WFO public hydrologic products including the Flash Flood Statement (FFS). This is a new policy. Prior to this supplement, the Flash Flood Statement (FFS) was not used in Western Region.

A table is provided in this supplement describing which product ID and associated MND headers should be used for each type of WFO public hydrologic product and the issuance criteria for those products. The MND header may not be changed. A phrase describing the type of product should be included in the headline of the product. Examples of product headers and headlines are provided in Appendix A.

2.2 Universal Geographic Code (UGC): Weather Forecast Office hydrologic products will contain a UGC (reference NWSI 10-1702). Hydrologic products and UGC type (county or zone) are listed in NWSI 10-922. Table 1 below specifies UGCs that Western Region WFOs will use.

Table 1

<u>Product Name</u>	<u>PIL</u>	<u>UGC Type</u>
Hydrologic Outlook	ESF	county or zone code
Flood Watch	FFA	county or zone code
Flash Flood Warning	FFW	county code
Flash Flood Statement	FFS	county code
Flood Warning	FLW	county or zone code
Flood Statement	FLS	county or zone code
Hydrologic Statement	RVS	county or zone code
Hydrologic Summary	RVA	county code
Daily River and Lake Summary	RVD	county or zone code
Hydrometeorological Data Products	RRx*	county code
Hydrometeorological Data Summary	HYx*	county code

* UGC for this product is not mandatory; but if included, use the code listed

2.3 Product Issuance Criteria: Products are issued according to the issuance criteria stated in NWSI 10-922, and in this supplement.

According to NWSI 10-903 “Geographic Areas of Responsibility”, each WFO provides site-specific hydrologic products and other hydrologic services for its HSA. HSAs are coincident with county warning and forecast areas (CWFA) as much as possible, but may deviate from the CWFA to accommodate natural hydrologic boundaries and partner/customer requirements where necessary. Site-specific hydrologic forecast and warning products are provided for the HSA while areal hydrologic products such as flood watches are provided for the CWFA. CWFAs are described in NWSI 10-504, “Zone Boundaries, UGCs Maps”.

“Areal” products are defined as products which are issued for a defined area such as a portion of a state, a county or portion of a county, a group of counties or an area along a river or stream.

Table 2 below clarifies which products are issued by HSA and which by CWFA.

<u>Product Name</u>	<u>PIL</u>	<u>UGC Type</u>
Flood Watch and Flash Flood Watch	FFA	CWFA, except when it is Flood Watch for a River Forecast Point (HSA)
Flash Flood Warning	FFW	CWFA
Flash Flood Statement	FFS	CWFA
Flood Warning for River Forecast Point	FLW	HSA
Flood Statement for River Forecast Point	FLS	HSA
Areal Flood Warning	FLW	CWFA
Areal Flood Statement	FLS	CWFA
Areal Flood Advisory	FLS	CWFA

The RVD product shall only be issued for daily river forecast points, i.e. points for which the RFC provides daily year-round, non-automated forecast guidance.

2.4 Product Content and Format: Product content and format are described in NWSI 10-922. Products shall only include information available to the forecasters at the time of product preparation, therefore it is expected that some products will be issued without some of the contents described in NWSI 10-922. For example, if the category of flooding is not known (minor, moderate, or major), that information should not be included in the product.

APPENDIX A

HEADER EXAMPLES

A. Hydrologic Outlooks - ESF:

*FGUS76 KPQR 132231
ESFPQR
ORC003-005-007-009-027-039-041-043-047-051-053-057-067-071-WAC011-
015-049-059-069-312300-*

*HYDROLOGIC OUTLOOK
NATIONAL WEATHER SERVICE PORTLAND OR
330 PM PDT FRI AUG 13 2004*

...WATER SUPPLY SUMMARY...

B. Flood Watch - FFA:

*WGUS66 KSGX 071041
FFASGX
CAZ055-080400-*

*URGENT - IMMEDIATE BROADCAST REQUESTED
FLOOD WATCH
NATIONAL WEATHER SERVICE SAN DIEGO CA
340 AM PDT WED JUL 7 2004*

*...FLASH FLOODING POSSIBLE IN THE SAN DIEGO COUNTY MOUNTAINS
UNTIL 9PM...*

C. Flash Flood Warning - FFW:

*WGUS55 KTWC 140151
FFWTWC
AZC003-140300-*

*BULLETIN - EAS ACTIVATION REQUESTED
FLASH FLOOD WARNING
NATIONAL WEATHER SERVICE TUCSON AZ
650 PM MST FRI AUG 13 2004*

THE NATIONAL WEATHER SERVICE IN TUCSON HAS ISSUED A

* FLASH FLOOD WARNING FOR

D. Flood Warning - FLW:

*WGUS46 KSTO 102212
FLWSTO
CAC103-112200-*

*BULLETIN - IMMEDIATE BROADCAST REQUESTED
FLOOD WARNING
NATIONAL WEATHER SERVICE SACRAMENTO CA
255 PM PDT SAT JUL 10 2004*

*...THE NATIONAL WEATHER SERVICE IN SACRAMENTO HAS ISSUED A
FLOOD WARNING FOR THE SACRAMENTO RIVER AT TEHEMA BRIDGE...*

E. Flash Flood Statement - FFS:

*WGUS76 KSGX 120203
FFSSGX*

*FLASH FLOOD STATEMENT
NATIONAL WEATHER SERVICE SAN DIEGO CA
700 PM PDT SAT SEP 11 2004*

*CAC065-120230-
RIVERSIDE COUNTY-
INCLUDING RIVERSIDE
700 PM PDT SAT SEP 11 2004*

F. Flood Statement - FLS:

*WGUS86 KLOX 080400
FLSLOX
CAC103-080430-*

*FLOOD STATEMENT
NATIONAL WEATHER SERVICE LOS ANGELES/OXNARD CA
900 PM PDT WED JUL 7 2004*

*...THE FLOOD WARNING FOR THE SACRAMENTO RIVER AT TEHEMA
BRIDGE HAS BEEN ALLOWED TO EXPIRE...*

G. Hydrologic Statements - RVS:

*FGUS85 KSLC 141430
RVSSLC
UTC035-151430-*

*HYDROLOGIC STATEMENT
NATIONAL WEATHER SERVICE SALT LAKE CITY UT
830 AM PST SUN MAR 14 2004*

...RIVER STATEMENT...

H. Hydrologic Summary - RVA:

*SRUS45 KSLC 141830
RVASLC
UTC035-192300-*

*HYDROLOGIC SUMMARY
NATIONAL WEATHER SERVICE SALT LAKE CITY UT
1130 AM MDT OCT 14 2004*

I. Daily River and Lake Summary - RVD:

*FGUS55 KBO1 051514
RVDBOI
IDCALL-OR001-025-045-061500-*

*DAILY RIVER AND LAKE SUMMARY
NATIONAL WEATHER SERVICE BOISE ID
914 AM MDT WED MAY 5 2004*

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ID	MND Header	Type of Product	Issuance Criteria	WMO Header
ESF	Hydrologic Outlook	Spring Flood Potential Outlook Flood Potential Outlook Water Supply Outlook Water Supply Summary Drought Summary	.Possibility of flooding beyond 36 hours .Water supply information . Information on dry conditions . Possibility of flooding has ended, and no FFA, FLW or FFW was issued	FGUS75, FGUS76
FFA	Flood Watch	Flood Watch Flash Flood Watch	. Flooding possible but not certain over next 48 hours . Areal extent or effective time of FFA changes . Dam/levee failure possible but not imminent . Cancellation or expiration of a FFA . Additional information to supplement FFA	WGUS65, WGUS66
FFW	Flash Flood Warning	Flash Flood Warning (initial issuance)	. Flash flooding defined as short fused (6 hours or less), life threatening flooding. . Flash flooding reported . Precipitation capable of producing flash flooding is detected by radar, rain gages, and/or satellite . Areal extent or effective time of previous FFW changes . Dam/levee failure imminent or occurring . Local tools indicate flash flooding is likely	WGUS55, WGUS56
FLW	Flood Warning	Flood Warning (initial issuance) Urban and/or Small Stream Flood Warning (initial issuance)	. Local tools and/or RFC guidance indicate flooding is likely or flooding is reported for official river forecast points, or for other parts of rivers or small streams. . Areal extent or effective time of previous FLW changes . Flood category increases (e.g. minor to moderate)	WGUS45, WGUS46
FFS	Flash Flood Statement	Flash Flood Warning (follow-up/ended/canceled)	.Cancellation or expiration of a FFW .Additional information to supplement FFW	WGUS85, WGUS86
FLS	Flood Statement	Flood Warning (follow-up/ended/ canceled) Flood Advisory Urban and/or Small Stream Flood Advisory	. Cancellation or expiration of a FLW . Additional information to supplement FLW . Advisories are issued for minor, non-threatening flooding which is expected to cause little or no damage.	WGUS85, WGUS86
RVS	Hydrologic Statement	River Statement River Recreational Statement River Ice Statement River Summary	. All other public hydrology products not related to flooding	FGUS85, FGUS86
RVA	Hydrologic Summary	Hydrologic Summary River Recreational Statement River Summary	.Provides observations and other information not in RVS or RVD	SRUS45, SRUS46
RVD	Daily River and Lake Summary	Daily River and Lake Summary	. Product issued daily for daily river forecast points (RFC provides guidance for those points every day of the year) in SHEF code	FGUS55, FGUS56

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ID	MND Header	Type of Product	Issuance Criteria	WMO Header
RR1	Hydrometeorological Data Report #1	Local Hydrometeorological Data	.SHEF encoded product containing local hydrometeorological data	SRUS55, SRUS56
RR2	Hydrometeorological Data Report #2	Precipitation Data	.SHEF encoded product containing local hydrometeorological data .SHEF encoded product containing precipitation data	SRUS55, SRUS56
RR3	Hydrometeorological Data Report #3	Cooperative Observer Data	.SHEF encoded product containing cooperative observation data	SRUS55, SRUS56
RR4	Hydrometeorological Data Report #4	Cooperative Observer Special Reports	.SHEF encoded product containing cooperative observation data	SRUS55, SRUS56
RR5	Hydrometeorological Data Report #5	Hourly Hydrometeorological Data	.SHEF encoded product containing hourly hydrometeorological data .SHEF encoded data from flood warning systems	SRUS55, SRUS56
RR6	Hydrometeorological Data Report #6	ASOS Precipitation Report	.SHEF encoded ASOS precipitation report for commissioned ASOS sites	SRUS65, SRUS66
RR7	Hydrometeorological Data Report #7	ASOS Hourly Precipitation Report	.SHEF encoded ASOS hourly precipitation report for commissioned ASOS sites	SRUS75, SRUS76
RR8	Hydrometeorological Data Report #8	Data provided by Water Resource Agencies	.SHEF encoded product containing water resource data	SRUS85, SRUS86
RR9	Hydrometeorological Data Report #9	Local Hydrometeorological Data	.SHEF encoded product containing local hydrometeorological data	SRUS85, SRUS86
RRM	Miscellaneous Hydrologic Data Report	Local Hydrometeorological Data, SHEF or tabular format	.SHEF or tabular format of local hydrometeorological data	SRUS45, SRUS46
RRA	Automated Data Report	Automated river and rain gage data	.Automated river gage data .Automated rain gage data	SRUS85, SRUS86
HYD	Daily Hydrometeorological Data Summary	Quality controlled Weekly Hydrometeorological Data	.Quality controlled data that is issued daily .Quality controlled data that is issued two or more times a week on a regular schedule	SXUS55, SXUS56
HYW	Weekly Hydrometeorological Data Summary	Quality controlled Weekly Hydrometeorological Data	.Quality controlled data that is issued weekly	CSUC45, CSUS46
HYM	Monthly Hydrometeorological Data Summary	Quality controlled Monthly Hydrometeorological Data	.Quality controlled data that is issued monthly	CWUS45, CWUS46