

***NATIONAL WEATHER SERVICE WESTERN REGION SUPPLEMENT 1-2009  
APPLICABLE TO NWSI 10-1201  
MARCH 27, 2009***

***Operations and Services  
Drought Services, NWSPD 10-12  
WFO Drought Products Specifications, NWSI 10-1201***

***WESTERN REGION DROUGHT RELATED SERVICES AND SUPPORT***

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**OPR:** W/WR2x2 (A. Bair)

**Certified by:** W/WR2 (D. Brandon)

**Type of Issuance:** Initial

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***SUMMARY OF REVISIONS:*** This supplement supersedes Western Region Supplement 9-2002 titled Western Region Drought Related Services and Support, filed with NWSI 10-911, River Forecast Center Operations, and NWSI 10-921, WFO Operations.

Signed \_\_\_\_\_

03/04/09

Robert Tibi

Date

Regional Director, Western Region

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1. Description: This supplement defines Western Region’s policy on providing services and support during drought conditions.

2. Format and Procedures.

2.1 Role of the NWS During Drought Conditions: The role of the NWS during drought conditions is to provide pertinent hydrometeorological information and data to water managers, local, state, and federal agencies and the media. The NWS does not declare when droughts begin and end. Close coordination between the weather forecast offices (WFOs), the river forecast centers (RFCs), and Western Region Headquarters is imperative to ensure that consistent information is disseminated.

WFOs are responsible for providing additional information and data to customers during drought conditions and for attending state, county, city and user group meetings related to the drought. RFCs are responsible for providing any additional guidance or support that the WFOs may need to meet customer needs.

2.2 WFO Drought Plans: Each WR WFO will develop a drought plan to ensure that the office’s responsibilities outlined in this supplement are met. The drought plan will describe procedures to be followed during drought conditions to ensure that the office is prepared to provide the necessary service and support. Each state liaison office (SLO) will have a copy of the drought plan of each WFO in the state. Appendix 1 contains a list of items to include in a WFO drought plan.

Each MIC will designate a drought focal point (DFP). The service hydrologist, senior service hydrologist, hydrology focal point or climate focal point should serve as DFP. In some cases the meteorologist in charge (MIC) will serve as DFP (see section on Role of the SLO). The DFP is responsible for monitoring hydrometeorological conditions, coordinating with other NWS offices,

coordinating customer needs, and ensuring that the appropriate products are issued. The DFP is also responsible for developing and updating the office drought plan and ensuring the staff receives training regarding the drought plan. The plan should be filed with the hydrologic services manual (HSM), and referenced in the station duty manual (SDM).

2.3 Onset of Drought Related Services and Support: The WFOs will provide additional information and data to customers and attend drought-related meetings when:

- a. A drought has been declared (by the state, county, or other officials) in the hydrologic services area (HSA).
- b. Conditions are dry enough to cause elevated concern among the public, the media or other agencies with water resources interests.

The MIC, his/her designee, or DFP will attend meetings related to drought and provide briefings as needed. When the public, media, and other agencies no longer have concerns about dry conditions, the WFO may terminate their drought-related activities, after coordination with all involved parties.

2.4 Criteria for Initial Issuance of Drought Information Statements (DGTs):

Assessing drought in the west is difficult and complex due to diverse topography and climatology, and drought indicator tools used in other parts of the country are often not adequate in the west. The west includes deserts, coastal climates, artificial or man-made water systems such as reservoirs and water delivery canals, extensive crop irrigation systems, forests, and snowmelt runoff for water supply, which must be accounted for when assessing drought. This supplement defines alternative criteria for the issuance of initial DGT products in WR. The DGT product will initially be issued when:

- a. The Drought Monitor indicates a drought intensity at a level of D3 or worse in any portion of the HSA, or
- b. A less severe criterion is reached, if this is more appropriate for local partners and other users.

Drought-related information and links should be posted on the WFO's web page, especially when public concern over drought conditions is high. WR WFOs should routinely check the weekly U.S. Drought Monitor to assess drought conditions in their respective HSA. See Section 2.7 for more information on the Drought Monitor.

2.5 Role of the SLO Office: When drought conditions extend over multiple HSAs within a state, the MIC of SLO (or his/her designee) will be the voice of the NWS when coordinating with state agencies. The SLOs are defined in WR Supplement 8-2004. The SLO may issue drought-related products for the state, as described in the section above, on behalf of all the offices in the state. This will be done in coordination with all affected DFPs in the state and the supporting RFCs.

2.6 Coordination: WFOs are responsible for notifying the SLO, adjacent WFOs, supporting RFCs and Western Region's Hydrology and Climate Services Division (HCSD) when abnormally dry conditions exist or when a drought has been declared.

2.7 Drought Monitor: The drought monitor is a national product produced by partners from NOAA, USDA, regional climate centers, and the National Drought Mitigation Center. The NWS is one of many agencies providing input to this product. The WR HCSD will coordinate the contents of the Drought Monitor with affected WFOs. Offices are encouraged to provide input and data to the Drought Monitor based on local objective criteria (e.g. precipitation totals/normals, streamflows, groundwater, reservoir levels, soil moisture, etc.) and local impacts.

**APPENDIX 1**

**ITEMS TO INCLUDE IN A DROUGHT PLAN**

The drought plan outlines procedures to follow during drought conditions in a WFO's area of responsibility. The plan should include at a minimum:

Description of Local Characteristics of Abnormally Dry Conditions: Climate and water interests vary greatly across Western Region, and therefore each WFO is the expert on what is considered abnormally dry conditions in the HSA. For guideline purposes, conditions are considered abnormally dry in an area when less than 60% of normal precipitation has been observed during 1) a locally determined time period, 2) or the current water year, and/or 3) the water supply stands at less than 60% of normal (however, this may depend on previous years' conditions). Each WFO should further refine these thresholds to better reflect conditions in the HSA.

Products to be Issued During Drought Conditions: The plan should describe when to start and stop issuing drought-related products as described in this supplement, the frequency of issuance of these products, and the format and contents of the products. An example of a drought information statement (DGT) should be included as well.

Coordination: The plan should include who to coordinate with, and a list of typical agencies involved with drought assessment/response in the WFO's area.

RFC Support: The plan should describe what services are available from the supporting RFCs during abnormally dry conditions. Specific RFC services to support drought should be coordinated with the RFCs by the DFP.