

moisture accounting model to determine the amount of runoff from rainfall. The MBRFC uses the NWS River Forecast System hydrologic model to create runoff forecasts based on snow. Snowmelt outlooks are produced using two major meteorological scenarios: (1) melt based on future probable temperatures and “normal” future precipitation for the season; and (2) melt based on future probable temperatures and no additional precipitation (rain or snow). The rainfall and snowmelt runoff forecasts are combined to form a flow forecast for a specific point of interest along a river. The accuracy and timing of these forecasts are very important, especially in flooding situations. Water supply forecasts are coordinated with the Natural Resources Conservation Service (NRCS) in Portland Oregon, and issued monthly January through May and/or June. Each February and March, spring snowmelt outlooks are made for those areas with historical and potential snow problems. In addition to daily, monthly, and seasonal forecasts, the MBRFC will make reservoir inflow fore-

casts upon request. Even in non-flood periods, efficient operation of water control structures, riverside industry, and navigation depends on the accurate and timely forecasts of changes in river stages, and thus has considerable economic impact

The MBRFC provides information in the form of streamflow and flood outlooks to several federal and state agencies and to the general public on its website (Figure 14b). Specifically, the MBRFC provides guidance tailored to the needs of the National Weather Service and other federal government agencies such as the division and district offices of the U.S. Army Corps of Engineers, the Natural Resources Conservation Service, the Bureau of Reclamation, and the U.S. Geological Survey. The MBRFC website also contains other hydrologic resources and educational materials.

This article was adapted from a MBRFC publication, which can be found at <http://www.crh.noaa.gov/mbrfc/compend.htm>.

6-Hour Flash Flood Guidance -- July 19, 2005

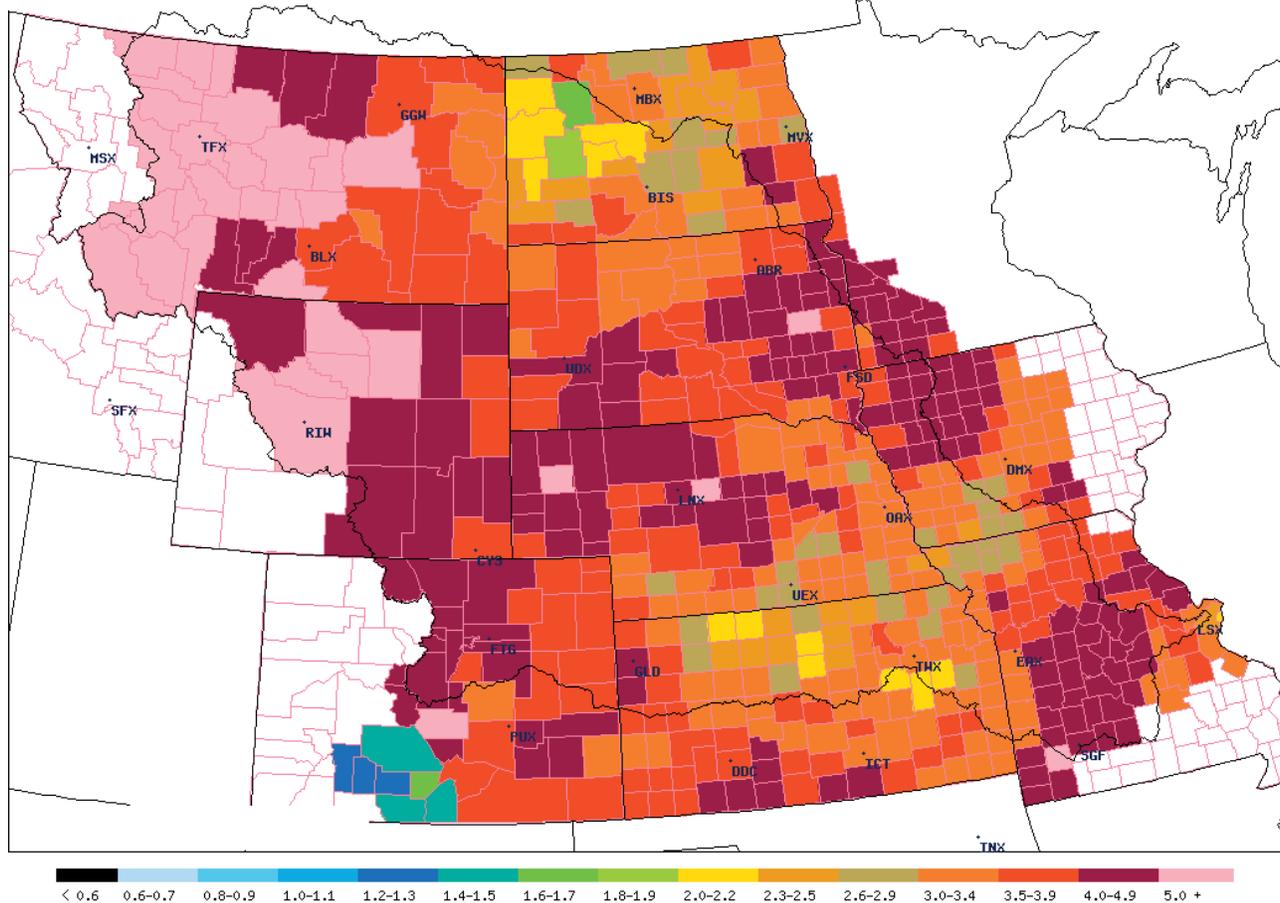


Figure 14b. This MBRFC product is a six-hour flash flood guidance map. The different colors represent 6-hour estimated rainfall totals in inches for all counties within the MBRFC region. Flash Flood Guidance products are issued twice a day by the MBRFC and then used by the Weather Forecast Offices when issuing flash flood watches and warnings to the public. This product can be found on the MBRFC website located at: http://www.crh.noaa.gov/mbrfc/wfo-ffg_files/ffg-6hr.htm

On the Web

<http://www.crh.noaa.gov/mbrfc/>

