

Regional Flash Flood Guidance Graphics

Part I - Mission Connection

- a. Product Description - Flash Flood Guidance (FFG) is the amount of rainfall in a given time period that will produce flooding on small streams. FFG is distributed via AWIPS in text products and lists FFG values for 1-, 3-, 6-, 12-, and 24-hour time periods for each county. The experimental Regional FFG Graphics are Internet web pages that show these FFG values in both graphical and tabular form. These graphic products are for the entire Southern Region (SR) area, the area of responsibility of each SR River Forecast Center (RFC), and each state in SR. In addition to having a state graphic for Texas, graphics of FFG for north, south, and west Texas are available.
- b. Purpose - These FFG Products are graphical representations of flash flood guidance values for the entire Southern Region. The graphical format color-codes the data allowing for more intuitive understanding of the values and areas of heightened concern.
- c. Audience - The target audience for these graphics products is wide ranging. Regional customers and partners such as the Army Corps of Engineers (COE), the US Geological Survey (USGS), Federal Emergency Management Agency (FEMA), state EMs, and river authorities have areas of responsibility that span states and often River Forecast Centers (RFCs). For these offices to view FFG over a large area, they must visit several websites. These new products cover large areas and these partners can easily see the FFG values over a large area. Local Emergency Managers (EM) and the general public may also use this product. Finally, the general public is part of the target audience.
- d. Presentation Format - The FFG Graphics are web-based graphics products that also include the FFG in text format.
- e. Feedback Method - We are always seeking to improve our services based on user feedback. Comments regarding the regional FFG graphics should be sent to the feedback email address on the webpage containing the product. A survey is available for users to fill out. Comments may also be provided to:

Lower Mississippi River Forecast Center
62300 Airport Road
Slidell, LA 70460
Attn: Dave Reed
dave.reed@noaa.gov

Experimental Feedback Period: April 7 through October 1, 2003.

Part II - Technical Description

- a. Format and Science Basis - Flash Flood Guidance (FFG) is the amount of rainfall in specified amount of time to produce flooding on small streams and rivers. FFG is computed in RFC hydrologic forecast models and is based on moisture content in the soil. FFG is computed for 1-, 3-, 6-, 12-, and 24-hour periods. FFG is prepared for each county in the RFC area of responsibility and disseminated through normal

```
NATIONAL WEATHER SERVICE
LOWER MISSISSIPPI RIVER FORECAST CENTER, SLIDELL LA
ISSUED 0924 AM CST THU APR 03 2003

FLASH FLOOD GUIDANCE FOR CWA.....NASHVILLE TN

INCHES OF RAINFALL FOR SPECIFIED DURATIONS REQUIRED TO PRODUCE

FLASH FLOODING IN ANY SMALL STREAM WITHIN FORECAST ZONES. LOWER

AMOUNTS MAY CAUSE FLASH FLOODING IN URBAN OR MOUNTAINOUS
AREAS.
.B SIL 030403 Z DH12/DC0304031524 /DUE/PPHCF/PPTCF/PPQCF
:IDENTIFIERS ARE STATE ID, Z FOR ZONE, NWS-MAR ZONE NUMBER.
:...STATE DURATION
:IDENT 1HR 3HR 6HR ZONE NAME
:=====
:.....TENNESSEE
:
TNZ075 1.5/ 2.5/ 2.8 :BEDFORD
TNZ077 1.8/ 2.4/ 2.7 :COFFEE
TNZ066 1.3/ 1.7/ 2.0 :CUMBERLAND
TNZ097 1.8/ 2.4/ 2.7 :FRANKLIN
TNZ095 1.5/ 2.4/ 2.7 :GILES
TNZ079 1.8/ 2.4/ 2.7 :GRUNDY
TNZ023 1.8/ 2.3/ 2.7 :HOUSTON
```

Figure 1. Sample FFG text product.

communications channels via the Advanced Weather Information Processing System (AWIPS) as a text product. A sample text product is shown in Figure 1.

Using these text products as input, ArcView Geographic Information System (GIS) software will prepare a region-wide graphic of county FFG for all of SR. FFG graphics will also be prepared for an RFC. Graphics for each state will

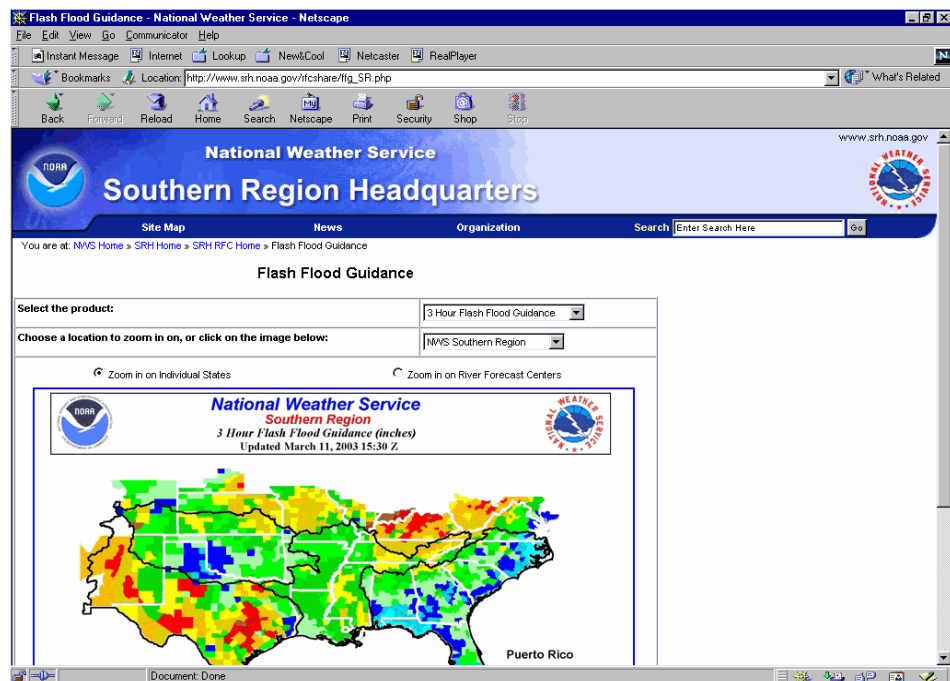


Figure 2. Webpage showing 3-hour FFG for Southern Region.

also be developed for users in need of more detail. Using standard Hypertext Markup Language (HTML), web browsers are then used to display these graphics. A sample of this product is shown in Figure 2.

- b. Product Availability - The FFG text products are routinely issued twice daily and updated more frequently as needed. The Regional FFG Graphics will be updated as new flash flood guidance becomes available and contain the most current FFG for the entire region.
- c. Additional Information - Please see the NWSRFS Users Manual Documentation at http://www.nws.noaa.gov/oh/hrl/nwsrfs/users_manual/htm/formats.htm