

OCT 11 1983

L-54 (475)

Memorandum

To: Manager, Denver Service Center

From: Associate Director, Natural Resources

Subject: National Park Service Floodplain Management and Wetland Protection Guidelines

Effective at once, you are not required to follow the procedure, outlined in Section 7.C.2 of the subject August 23, 1982 revised guidelines, requiring the determination of probable maximum floods (PMF) in defining the area of hazardous flooding for flash floods.

As stated in the enclosed copy of the U.S. Geological Survey's September 7, 1983 technical memorandum, the concept of PMF is not compatible with the data-based, probabilistic description of flood hydrology.

We are presently working with the U.S. Geological Survey's Washington Office Water Resources Division in order to arrive at an acceptable procedure for determining the area of hydraulic flooding for flash floods. The existing guidelines will be revised to reflect the needed procedural change.

In the interim, U.S. Geological Survey estimations defining the area of hazardous flooding are acceptable.

(Signed) Dr. Richard H. Briceland

Enclosure

. 001, 470, 475-Brown, 475-Berte'(w/c enc.),  
479-Ft. Collins w/enc-Attn: Bill Werrill  
760 w/enc., 762 w/enc.,

USGS-Thomas J. Buchanan-Asst. Chief Hydrologist for Operations-Water Resources Division w/copy of NPS guidelines

USGS-Marshall E. Moss-Chief, Surface Water Branch, Water Resources Division w/copy of NPS guidelines.

FNP:BERTE':lt:343-4911:FLOODPLAIN



# United States Department of the Interior

GEOLOGICAL SURVEY  
RESTON, VA. 22092

In Reply Refer To:  
EGS-Mail Stop 415

September 7, 1983

**SURFACE WATER BRANCH TECHNICAL MEMORANDUM NO. 83.05**

**Subject: PROGRAMS & PLANS--Water Resources Division (WRD) Policy on  
Probable Maximum Floods**

Recently we have been asked by the National Parks Service (NPS) to reevaluate our policy concerning the estimation of probable maximum floods (PMF) as expressed in Surface Water Branch Technical Memorandum No. 77.03. NPS uses PMF as a criterion for management of flood plains in National Parks and would like us to delineate areas of PMF inundation.

While the various procedures for computing PMF's are useful in an engineering sense to the agencies that must protect life and property from extremely rare flood events, the concept of PMF is not compatible with the data-based probabilistic description of flood hydrology, which is the mainstay of WRD in flood hydrology. Thus, PMF is outside the scope of the WRD missions and projects requiring its estimation should not be accepted.

Although the preclusion of PMF determinations from our projects apparently may diminish our utility to NPS in the short run, we should endeavor to assist NPS in any way possible within the scope of our mission.

Marshall E. Moss  
Chief, Surface Water Branch

Attachment

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