FLASH FLOOD EARLY WARNING SYSTEM REFERENCE GUIDE

NOAA
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
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COMET

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Flash Flood Early Warning System Reference Guide 2010

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An online version of this document is available at:
http://www.meted.ucar.edu/hazwarnsys/haz_fflood.php.

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The guide is available from COMET on-line in PDF format at:
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Limited CDs and hard copies of the Guide may also be available to qualifying organizations through NOAA National Weather Service International Activities Office, 1325 East-West Highway Silver Spring, MD 20910.

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Foreword

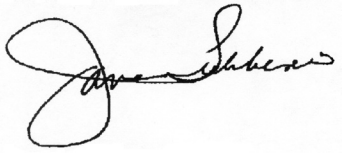
Hardly a day goes by without news of a devastating flash flood somewhere on our planet. While there are several types of floods, a flash flood is one of the most dangerous. They have enough destructive power to change the course of rivers, bury houses in mud, and sweep away or destroy whatever is in their path. Because flash floods can even occur when there is no rain in the immediate area, early warning systems and preparedness are critical to saving lives.

Few countries have implemented flash flood forecasting and warning systems because of their complexity and expense. Fortunately, new technological developments are making such systems more affordable and technically feasible. A variety of options now exist for building local, regional, and global systems capable of warning vulnerable populations about the imminent threat of flash floods.

The *Flash Flood Early Warning Systems Reference Guide* has been developed by NOAA's National Weather Service and The COMET® Program, in consultation with the World Meteorological Organization, as the second volume in a series of multi-hazard early warning reference guides. The guide provides recommendations and guidelines for the design and operation of flash flood early warning systems. Decision makers, both inside and outside the government, can use it to better understand flash floods and the elements that make up an effective, end-to-end flash flood early warning system. The best practices mentioned are based upon proven and effective methods already in use in flash-flood prone areas around the world.

This guide is intended to help national hydro-meteorological services in developing a concept of operations for a flash flood early warning system. It includes chapters on Flash Flood Science, Flash Flood Forecasting Methods, Monitoring Networks, Technology Infrastructure, Warning Dissemination and Notification, and Community-based Disaster Management, and several examples of Flash Flood Early Warning Systems.

NOAA hopes this Guide will encourage and assist countries and communities to develop early warning systems needed to save lives and protect property from the sudden threat of flash floods. We are committed to working with our partners around the world to continue to improve our understanding of flash floods and our ability to forecast, warn, prepare, and respond to these disasters.



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