

CECW-EH-Y

Technical Letter  
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**Engineering and Design**  
**HYDROLOGIC ASPECTS OF FLOOD WARNING - PREPAREDNESS PROGRAMS**

- 1. Purpose.** This ETL provides guidance for conducting hydrologic engineering analysis for flood warning-preparedness programs.
- 2. Applicability.** This guidance applies to HQUSACE elements and USACE Commands having civil works responsibilities.
- 3. General.** Procedures described herein are considered appropriate and usable for hydrologic engineering and planning studies involving flood warning - preparedness programs. General concepts of flood warning - preparedness programs, flood-threat recognition, warning dissemination, emergency response and plan management are described. Flood hazard analysis and evaluation of existing programs are also discussed. This ETL describes the components and terminology involved with flood warning - preparedness programs. It provides a guide for plan, design, and implementation of flood warning programs associated with flood damage reduction studies. Emphasis is on the hydrologic engineering analysis requirements of evaluating and implementing flood warning-emergency response programs. References and a glossary of terms, information on raingage location, examples of quantitative precipitation forecast, sample hardware, and system costs are included in Appendices A through E.

FOR THE DIRECTOR OF CIVIL WORKS:



5 APPENDIXES  
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