



FEMA Map Modernization





Introduction

Accurate information about risks is the first step in preventing and reducing losses.



Today, many of the Nation's flood maps reflect outdated data, severely limiting their usefulness.



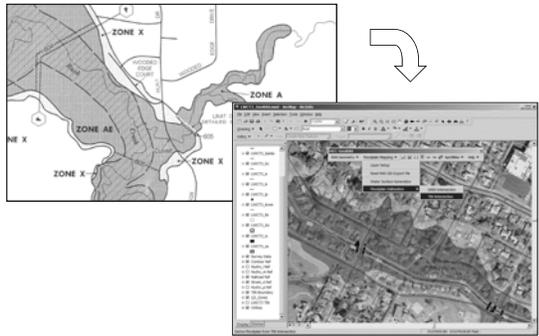


FEMA Map Modernization

- Nationwide ■ \$ 1 Billion Budget
- 5-Year Plan began in 2004



 **MapMod: Paper to Digital Maps**



 **FEMA Map Modernization**

Why Modernize?

- Up-to-date maps support a flood insurance program that is...
 - More closely aligned with actual risk
 - Encourage wise community-based floodplain management
 - Improve citizens' flood hazard awareness
- More timely updates of flood maps
- Easier access to the flood hazard data used to create the maps.
- Map Modernization is a cornerstone for helping community officials and citizens be better prepared for flood-related disasters.



 **Current Way of Doing Business...**







Map Modernization Current Style Digital DFIRM Product





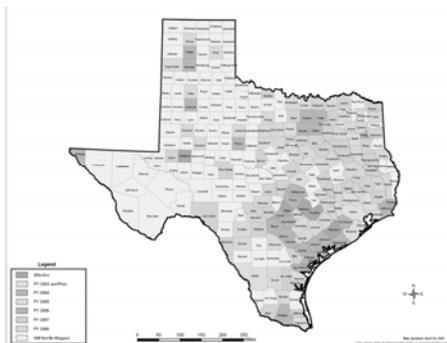
Flood Map Modernization Vision

- Network the nation using the MIP
- Leverage the use of Federal, State, & Local Resources
- Reduce processing time and costs for map updates
- Increase partners', stakeholders', and users' understanding of flood hazards and risks





Texas' Map Mod Counties





Map Modernization in Texas

| | Original | Current |
|---------------------------------|------------|------------|
| Number of Counties Mapped | 254 | 135 |
| Percentage | 100% | 53% |
| Population in Mapped Counties | 20,851,820 | 19,959,906 |
| Percentage | 100% | 96% |
| Area of Counties Mapped (sq mi) | 264,708 | 128,514 |
| Percentage | 100% | 49% |





Map Mod Roles – FEMA & Contractors

- FEMA Headquarters
 - Set National Policy
 - Budget Requests
 - LOMR Approval Signature
 - Congressional Liaison
- FEMA Region VI
 - Administrative Policy
 - Manage IDIQ Contract Task Orders
 - Manage RMC Task Order
 - Outreach Public Awareness





Map Mod Roles – FEMA & Contractors

- National Service Provider - NSP
 - Support FEMA Headquarters
 - Procedure Memos
 - G&S
 - Mapping Information Platform (MIP)
 - LOMR Processing
 - Library Data Storage
- Regional Management Center - RMC
 - Support Region VI
 - Issue Resolution (Engineering/GIS/Mapping)
 - Receipt of Study Data
 - Quality Assurance Audit
 - Coordinate Project Management
 - Post Preliminary Processing
 - MIP Training and Data Entry
 - Outreach and Public Awareness





Study Contractor Task Orders

- Scoping Task Order
 - Scoping Meeting
 - Base Map Ortho vs. Vector
 - Proposed Panel Scheme
 - Scoping Meeting Report
 - GIS Shape File Showing DFIRM Mapping Needs for the County
- DFIRM and Flood Insurance Study Task Order
 - Digital Flood Insurance Rate Map
 - Update Flood Insurance Study Text
 - Address mapping needs up to limit of budget
 - Update Community on study negotiated scope
 - Update Community on progress of study





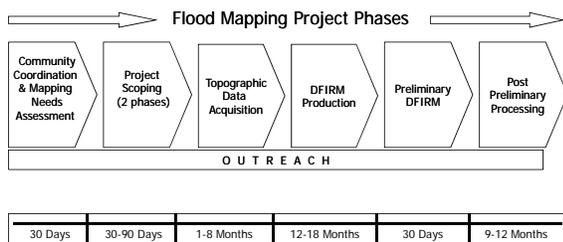
Purpose of the Re-Studies

- Update Flood Insurance Rate Maps (FIRMS) and Flood Data
- Produce GIS-based Digital FIRMs
- Provide Guidance For
 - Development in Flood Prone Areas
 - Emergency Response
 - Planning and Design throughout the County





Map Mod Study Process



Time frames given are approximate and will vary from study to study





Post-Preliminary Phase

- Communities receive DFIRMs and FIS Report
- CCO Meeting
- Notice of 90 day appeals period
- Two weeks later – Second notification stating the 90 day appeal period begun
- After appeals, a six month compliance period commences





Post-Preliminary Phase (cont.)

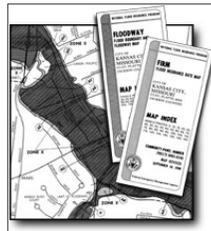
- During the 6 month compliance period, communities must adopt a new floodplain ordinance that recognizes the new maps
- If a community has not passed the ordinance within the 6 month compliance period, the community will be suspended from the program.
- Maps become effective at the end of the 6 month compliance period.





The Study Process

- Information Search
- Base Map and Terrain Data Acquisition
- Field Survey
- Hydrology
- Hydraulics
- Mapping
- Reporting (TSDN)
- Coordination /Outreach





Base Mapping

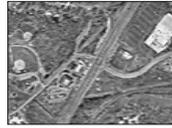
- Local Provided Planimetrics
- USDA National Agricultural Imagery Program (NAIP)
- USGS Contours Supplemented with Local Data



USGS DOQQ



USGS 7.5 Minute Quads



Local High Resolution Data





Terrain Information

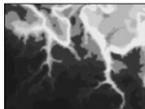
- Terrain Map Sources
 - Local Data – Effective FIRM's
 - USGS Contour Maps & 30 M DEMs



Local High Resolution Data



USGS 7.5 Minute Quads



USGS 30M DEM





Possible Mapping Products Available

- New Detailed Study
- Enhanced Approximate Study
- Redelineation of Existing Detailed Study
- Approximate Study (Zone A Refinement)
- Digital Conversion





Redelineation Streams

- Applies to Existing Detailed Study Streams (Zone AE)
- Vertical Datum Update from 1929 to 1988
- Flood Boundaries Mapped to the Best Available Topography



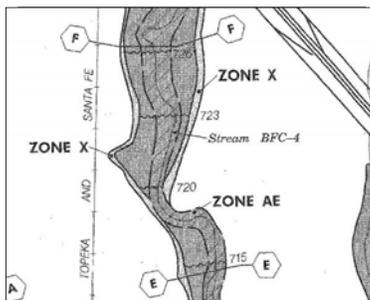


Zone AE Redelineation





Zone AE Redelineation





Approximate Study

- Zone A Refinement
- Automated H&H Procedures
- Boundaries Mapped to Best Analyze Topography





Sample of Existing Zone A



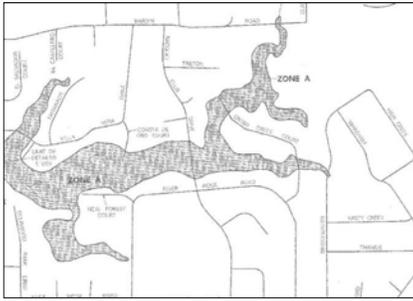


Zone A Refinement





Zone A Refinement



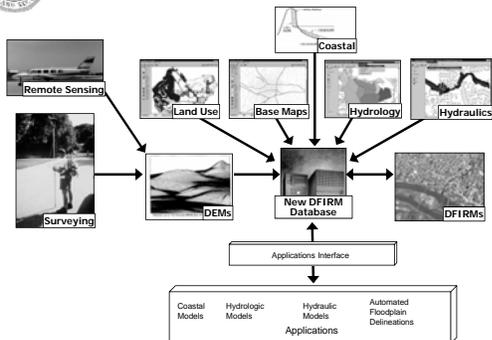


DFIRM Mapping



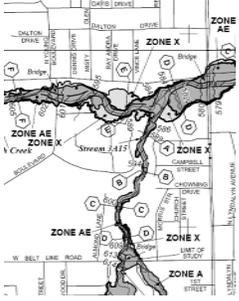


DFIRM Database





DFIRM – Vector vs. Ortho Based








FIS Report

- Countywide Flood Insurance Study
 - Text
 - Profiles
 - Data Tables







For More Information...



www.fema.gov



Half FEMA Re-Study Website & Hotline

Half Associates
Map Modernization Program Website

FEMA

Home Search By County Project Information FEMA.gov Halff.com

Mouse over any colored county

Purpose: To provide the community and other interested parties information on the various counties being studied by Half Associates, Inc. as a part of the FEMA Map Modernization Plan. For information regarding a study in your area, click on the applicable county above.

Background: Research indicates that nearly two thirds of the Federal Emergency Management Agency's (FEMA) flood insurance rate maps are more than ten years old. Because of this, FEMA has launched a five year national Map Modernization Plan, an effort to reduce the maps that predict where major floods are likely to occur. The updated maps of flood-prone areas will support sound floodplain planning who needs flood insurance, calculating flood

www.halff-femastudy.com
Hotline: 1(877) HALFF-TX
