FEMA DFIRM Status
Digital Flood Insurance Rate Maps
MAFSM Conference

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Maryland Department of the Environment
Outreach Web Site

http://mdfloodmaps.com
http://mdfloodmaps.org
http://mdfloodmaps.net
<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
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<tbody>
<tr>
<td>Mike Herzberger, MES</td>
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**Demo: Flood Risk Application (Maps)**

- Existing FIRM Maps/ FIRMette
- Preliminary DFIRM’s
- Effective FIRM’s
- GIS Maps with Flood Overlays
Outreach Table / Web

**General Handouts and Information**
- FEMA Terms and Definitions
- Links to FEMA (i.e. FloodSmart)
- Map Adoption Process
- Grandfathering, etc.

**Floodplain Factsheet**
- County Schedule
- Project Enhancements
- Overview
DEMO: Flood Risk Application
(16 Different Scenarios)
Out on FIRM with Insurance
- Going In On DFIRM with Insurance
- 16 Different Handouts or Take Aways
DFIRM Outreach

The State of Maryland in conjunction with the Federal Emergency Management Agency (FEMA) has been systematically updating Flood Insurance Rate Maps (FIRMs) for communities over the past several years. This site is designed to guide homeowners/renters as well as communities through the process of determining their current flood risk as well as future flood risk based on the preliminary Digital Flood Insurance Rate Maps (DFIRMs).

The DFIRMs are digitally converted flood insurance rates maps that will be compatible with GIS (Geographic Information Systems). The improvements in spatial accuracy provided by the new base map, and the availability of electronic floodplain information should greatly enhance the ability to use the maps for planning, permitting, and insurance applications.

Reseaching Your Future Flood Risk

The DFIRMs are being released on a community by community basis. It is important to investigate your flood risk status and contact your insurance agent to make necessary modifications to your coverage while the maps are still preliminary. The digital files will be available when these maps become effective.

Using This Website

To use this website we recommend starting with your area of interest. If you are a homeowner, please visit the HomeOwners/Tenants section. If you are interested in an entire community, please visit the Communities section.

Technical Requirements

To use this website we recommend using a high-speed internet connection using Internet Explorer 7.0 or 8.0. Additionally, Adobe PDF Reader 9.0 and Adobe Flash Player 10.0 are required. The resolution of your monitor is also important; make sure your resolution is 1024 x 768 or above.
To begin researching your flood risk, follow the steps below:

- Use the 'Address Locator' tool or 'Zoom/Pan' tools above to find your location.
- Select the 'Determine Flood Status' tool above and then click a point on the map at the corner of your building closest to the floodplain.
- Need help navigating this portion of the site? Click here to access the help menu for the 'Flood Risk Application'.

DFIRM Status by County

- Effective
- Released
- Not Released
http://mdfloodmaps.net

5 Effective Now
11 Preliminary Now
3 Due Prelim in 2011
5 Due Prelim in 2012
(Coastal Due in 2012)
Ordinance Adoption

State Model Upgraded
Easily Integrates with Building Codes
Eliminated Outdated / Misleading Info
Integrated with Waterway Permit Process
More Clearly Enforceable
Linked to CFR Requirements
Added CRS Credits

MUST BE ADOPTED By Map Effective Date !!!
State Model Already Reviewed and Approved by FEMA – Older existing ordinances must be reviewed and evaluated individually with MANY others (Many won’t Pass)
Before Map MOD

• Where Were We Before Map MOD
  – Average Age of Map + 20 years
  – Average Age of Data on Map ~ 30 years
  – 40% floodplains were A-Zones with No Data
  – 70% models not available
  – 95% models difficult to reproduce (work maps)
  – (100% models not used for anything else (SHA))
What We Have on Completion

• 90% Studies Current / Reproducible / with the Entire Analysis Defined in GIS
• A-Zones upgraded to limited detail study with model and analysis in 2/3 of state
• Up to data Coastal Analysis and Maps
• Effective Ordinances that match maps
• Unlimited CRS Opportunities
Local Upgrades

- Regulate Ultimate Floodplain
- Considering 3 foot freeboard
- Used flood Protection Height + 1 foot freeboard to end up with a 2 foot freeboard
- Treat coastal A-Zone as V-Zone
- Engineered Openings Not Accepted
- Non-Conversion Agreements / Tied to property deeds
- Restricted Accessory Structures
Time to Act (Now)

• It’s Your (Community’s) floodplain
  – FEMA Provides MINIMUM Regulations
  – State Provided a Model Ordinance with Suggestions for Higher Standards
  – Opportunity to Fix (Deal with) Issues Specific to Local Needs
  – Take Hard Look at Your Ordinance and Consider Steps to Mitigate /Reduce FP Issues
- Tidal Analysis Started in 2009
- Tidal Surge Model Runs Recently Completed
- Calibrations with Isabel and Field data Underway
- WAFIS Analysis will Follow Field Calibrations
- Coastal Re-Mapping should be Available in 2011/2012
Note: DFIRM’s on NAIP Base
- New Horz & Vert Datums
- NAIP Imagery (free distribution)
- New Paneling Scheme
- Redelineations of Major Rivers and Tidal Limits
- State Permit Process will Adopt and Utilize FEMA Models
Map MOD Next Steps

- Complete Remaining Counties
- Integrate Coastal Studies when Completed
- Build Method to Distribute Models
- Incorporate into Permit Process
- Assist Communities with Outreach
Map MOD Progress to Date

- 200+ Detailed Miles Average per County (AE-zones)
- 150+ Miles of A-zones Average per Co. (with FP model)
- 300+ Hydrology Points per County
- 400 Structures Inventoried per County
- 600 Models in Production /14 Counties
- All Models Available are in a GIS Format
- Floodplain Boundaries Accurate GIS layer
Study Limitations

1. No Channel Surveys
2. Tidal Areas Are Re-Delineations
3. A-Zones Have A Model, But No Profiles, or BFE’s
4. Hydraulic Structures Not Survey Grade
5. Changes Since 2007/ 2008 Included ?
6. (LOMAR’s Still Necessary !)
7. Etc…
Data Sharing?
Next Steps: Data Sharing

1/2 Day FP Model
(Moved from)
U.S. Army Corps
State NFIP
County
State Highway
FEMA – Region III

1) NOTES:
INDEPENDENT SHA MODELING MATCHED HYDROLOGY AND HYDRAULICS

2) MODEL NOT (Just) Boundary
Questions?

Questions Or

Outstanding Issues!

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