Tools for Local Floodplain Managers

MAFSM Conference

Kevin G. Wagner, CFM
October 22, 2009
Agenda

• Going Digital
• FEMA Map Service Center
• FIRMette
• National Flood Hazard Layer (NFHL)
• Additional Resources
Going Digital

• Effective October 1, 2009, distribution of paper maps and studies ended

• Community still receives paper LOMCs

• FEMA Map Service Center
  www.msc.fema.gov

• What “rights” do you have?
Map Service Center (MSC)

- Register
- Product Catalog
- Digital Post Office
- Express Document Delivery (EDDIE)
- www.msc.fema.gov
FEMA's Digital Vision initiative, the FEMA MSC discontinued general distribution of paper mapping products. This affects Flood Insurance Rate Maps, Flood Hazard Boundary Maps, Flood Boundary and Floodway Maps, and Flood Insurance Study reports. Customers can continue to view these products free of charge and/or purchase them in digital formats. For more information, click [here](http://www.msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView?storeId=10001&catalogId=10001&langId=-1) to visit our Digital Vision page.

**FIRMette - Desktop (F-MIT)**

**Update.** The Map Service Center now has version 2.3 of the FIRMette - Desktop viewer (formerly F-MIT) available for download. This new version supports FIRMette creation for both color and black and white maps. You can download it [here](http://www.msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView?storeId=10001&catalogId=10001&langId=-1).

**MapViewer - Desktop (Beta)**

FEMA is developing a simple tool for viewing GIS flood data. A beta of this tool can be downloaded [here](http://www.msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView?storeId=10001&catalogId=10001&langId=-1).

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- **How to Order**
- **Need Assistance?**

**City of North Platte, Nebraska Letter of Map Revision Available**
Case Number: 07-07-0322P
Effective date: July 7, 2008
- and -
Case Number: 04-07-4439P
Effective date: May 4, 2006

**FIRMette Tutorial**

Learn how to create FIRMettes. They're free!

Click here to learn how to create a FIRMette.

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**View the NFHL Online using MapViewer - Web**

Order NFHL GIS Datasets by state on DVD

Use [Web Map Service](http://www.msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView?storeId=10001&catalogId=10001&langId=-1) in your own GIS application

Use [Web Map Service](http://www.msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView?storeId=10001&catalogId=10001&langId=-1) in Google Earth™

Got Comments?
Product Catalog

- FEMA Issued Flood Maps
  - Latest Available Flood Maps
  - Historic Flood Maps
- Flood Insurance Studies (FIS)
- DFRM Databases
- National Flood Hazard Layer (NFHL) Database
- Q3 Digital Flood Data and Coastal Barrier Resource Area (CBRA) Q3 Data
- Community Status Books (CSB)
- Flood Map Status Information System (FMSIS)
- Letters of Map Change (LOMC)
- National Flood Insurance Manual (NFIP)
- Documents
- Community Map Action List (CMAL)
Digital Post Office

- Download on-line products purchased through MSC
- Available for 30 days
Digital Post Office

The Digital Post Office is a tool for downloading online products that you have purchased from the FEMA Map Service Center. After an online product is purchased, it will remain in your Digital Post Office for 30 days.

There are 8 items in your Digital Post Office.

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Note: The items listed above include flood insurance rate maps for different counties within the HARFORD CO area.
Express Document Delivery (EDDDie)

• Items that can be downloaded:
  – Flood Insurance Rate Maps (FIRMs)
  – DFIRM Databases
  – Flood Insurance Studies (FISs)
  – Letter of Map Changes (LOMCs)

• Requires GetRight download manager

• “.grx” file
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FIRMette

• Official copy of a portion of FIRM
• F-MIT
  – Online
  – FIRMette - Desktop Viewer v2.3
• Tutorial available on website
• Be on lookout for LOMC
• Download as PDF or TIF image
Product Catalog

- FEMA Issued Flood Maps
  - Latest Available Flood Maps
  - Historic Flood Maps
- Flood Insurance Studies (FIS)
- DFRM Databases
- National Flood Hazard Layer (NFHL) Database
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- Letters of Map Change (LOMC)
- National Flood Insurance Manual (NFIP)
- Documents
- Community Map Aciton List (CMAL)
FEMA Issued Flood Maps

Use the following selection boxes to find your area of interest. If you want all maps for a particular jurisdiction click the "Get Kit" button which will appear to the right.

1. Select a State, District or Territory: MARYLAND

2. Select a County, Parish, etc: ANNE ARUNDEL COUNTY

3. Select a Community: ANNAPOLIS, CTY/ANNE ARUNDEL CO

FEMA ID

1. 24

2. 24003

3. 240009

To order state kits, please contact customer service at (800) 358-9616.

Get County Kit

Get Community Kit

* designates unincorporated areas
### FEMA Issued Flood Maps

**State:** MARYLAND

**County:** ANNE ARUNDEL COUNTY

**Community:** ANNAPOLIS, CTY/ANNE ARUNDEL CO

Index maps, if available, are now located at the top of the list below.

Click the View button to view a map or to make a FIRMette. To purchase a map, click the Buy button to show pricing information. If you would like all the maps for the community, then click the Get Community Kit link above. Please be aware that some maps may have been amended by Letter of Map Change (LOMC) since publication. These maps have a "plus" sign in the "Show LOMC" column. Please note, that only LOMCs issued from June 1, 1997 through March 31, 2009 are available for viewing. To determine if additional LOMCs have been issued for a map, contact your local government office responsible for floodplain management. Flood Boundary and Floodway Maps may also have been produced for this community. To view or order these, select the Flood Insurance Studies link on the catalog page.

A total of 1 items found. Displaying map item 1 through 1.

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* designates unincorporated areas
**FEMA Issued Flood Maps**

**State:** MARYLAND  
**County:** ANNE ARUNDEL COUNTY

**Community:** ANnapolis, CTY/ANNE ARUNDEL CO

Index maps, if available, are now located at the top of the list below.

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**LETTER OF MAP AMENDMENT**
**DETERMINATION DOCUMENT (REMOVAL)**

**COMMUNITY AND MAP PANEL INFORMATION**

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<th>LEGAL PROPERTY DESCRIPTION</th>
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**AFFECTED MAP PANEL**

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**FLOODING SOURCE:** SPA CREEK

**APPROXIMATE LATITUDE & LONGITUDE OF PROPERTY:** 38.969, -76.504

**SOURCE OF LAT & LONG:** PRECISION MAPPING STREETS 4.0 **DATUM:** NAD 83

**DETERMINATION**

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<th>SUBDIVISION</th>
<th>STREET</th>
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<th>FLOOD ZONE</th>
<th>1% ANNUAL CHANCE FLOOD ELEVATION (NGVD 29)</th>
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**Special Flood Hazard Area (SFHA)** - The SFHA is an area that would be inundated by the flood having a 1-percent chance of being equaled or exceeded in any given year.
• Establish relevancy of topic to audience.
• Get audience involvement.
• Establish relevancy of topic to audience.
• Get audience involvement.
• Establish relevancy of topic to audience.
• Get audience involvement.
This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov
National Flood Hazard Layer (NFHL)

- Web Map Service (WMS)
- Use in Google Earth or GIS
  - Google Earth: https://hazards.fema.gov/femaportal/wps/portal/NFHLWMSkmzdownload
  - GIS: https://hazards.fema.gov/femaportal/wps/portal/NFHLWMS
Examples of NFHL in Google Earth
Example of NFHL
Status of Digital Flood Hazard Data Coverage

Draws at high altitudes (see main folder).

This layer is not part of the National Flood Hazard Layer and is provided for reference only.

Status of Digital Flood Hazard Data Coverage Symbols

Effective digital flood hazard data available: Digital flood hazard data have been issued for the county and can be viewed through this service.

( Vertical red lines) Partial coverage of effective data available:

Preliminary maps issued: Preliminary flood hazard data have been provided to the county and its communities for comment, and are in the process of being reviewed and completed.

Preliminary data are not available for viewing through this service.

In the meantime, older Q3 flood data (see below) might be available through this service.

Older base flood data available: View the base flood from the Q3 Flood Data product. These data were produced in the mid-to-late 1990's and can provide a sense of flood risks for an area.

For areas for which there is no shading or for which older Q3 base flood data are available, there may be new digital flood hazard data in early phases of work, plans to develop new data, or no plans to develop data.

If you need flood hazard information for an area that is not available through this service please visit the FEMA Map Service Center. The Map Service Center allows visitors to view and purchase flood hazard maps and data.
Example of NFHL
Examples of NFHL in GIS
Examples of NFHL in GIS
Examples of NFHL in GIS
Examples of NFHL in GIS
Additional Resources

- Floodsmart.gov
- NFIP Bureau iService
- Technical Bulletins
Floodsmart.gov

- Official NFIP website
- Create flood risk profile
NFIP Bureau iService


- Bulletins & Manuals
  - W-08086: Openings in Foundation Walls and Walls of Enclosures
  - W-09008: Transition Period for Revised EC
  - W-09020: Revised EC and Floodproofing Certificate Approved
Attention NFIP students: New users seeking NFIP online training and those experiencing login difficulties will not be able to access the online training system. If you are a new user and are seeking online training, please contact H2O Partners at nfiptraininginfo@h2opartnersusa.com for assistance. Please continue to monitor this page for updates as to system availability. We apologize for any inconvenience.
NFIP iService

Home ~ Manuals & Bulletins ~ NFIP Training

NFIP Program Bulletins & Manuals

News

Flood Insurance Manual Effective October 1, 2009 is now available!
- Full Version (View Online | Zip 20,016 KB | TXT 630 KB)
- Producer Version (View Online | Zip 7,988 KB | TXT 348 KB)
- Specific Rating Guidelines (PDF | 346 KB)

WYO Program Bulletins

NFIP Manuals and Documents

Flood Insurance Manual
- Effective October 1, 2009 - Full Version (View Online | Zip 20,016 KB | TXT 630 KB)
- Effective October 1, 2009 - Producer Version (View Online | Zip 7,988 KB | TXT 348 KB)
- Effective October 1, 2009 - Specific Rating Guidelines (PDF | 346 KB)
- Effective October 1, 2009 - Leased Federal Properties Tab (PDF 26 KB)

Last Modified: Friday, 02 October 2009
Technical Bulletins

• Provide additional guidance (examples):
  – Flood-resistant materials
  – Floodproofing
  – Elevator installation
  – Below-grade parking

• 11 bulletins

http://www.fema.gov/plan/prevent/floodplain/techbul.shtm
Technical Bulletins (cont.)

• Recently updated Technical Bulletins:
  – TB1: Openings in Foundation Walls and Walls of Enclosures
  – TB2: Flood Damage-Resistant Materials Requirements
  – TB5: Free-of-Obstruction Requirements
  – TB9: Design and Construction Guidance for Breakaway Walls Below Elevated Coastal Buildings
TB-1: Openings in Foundation Walls and Walls of Enclosures

- Updated in August 2008
- Guidance document
- Does not replace the community floodplain management ordinance
- Follow instructions on Elevation Certificate (surveyors)
Websites

- Maryland Department of the Environment – www.mde.state.md.us
- FEMA – www.fema.gov
- Map Service Center – www.msc.fema.gov
- NFIP – www.floodsmart.gov
Maryland Department of the Environment
Wetlands & Waterways Program

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301-689-1495 (Frostburg)
kwagner@mde.state.md.us