Topics

- Background
- Mapping
- Regulations/MD Model Ordinance
- Insurance

Know Your Risk  Insure Your Risk  Reduce Your Risk
National Flood Insurance Program (NFIP)

- Created in 1968
- Administered by FEMA
- Voluntary program
- Partnership between the Federal government and the community (County or municipality)
- Three main parts: mapping, regulations and insurance
MDE’s Role

- State Coordinating Office for the National Flood Insurance Program (NFIP)
  - Provide technical assistance on regulatory requirements
  - Assist communities with public outreach and floodplain management regulation updates
- Cooperating Technical Partner (CTP) with FEMA on flood mapping
- Regulate activities in the 100-year nontidal floodplain
  - Waterway Construction Permit
Community’s Role

- Agreed to adopt and enforce floodplain management regulations
  - Regulations based on Flood Insurance Rate Maps (FIRMs)
- Use FIRMs and Flood Insurance Study (FIS) for “development” review process
- As a participating community in the NFIP, flood insurance available to homeowners, business owners and renters
MD NFIP Numbers

- 142 participating communities
  - 8 with No Special Flood Hazard Area (NSFHA)
- 72,751 policies
  - 2,234 V-Zone
  - 45,594 A-Zone
- $16,369,917,500 total coverage

Data Source: FEMA Community Information System (CIS), 11/19/2014
Flood Insurance Rate Map (FIRM)

- Delineates flood risk based on different frequency flood events
  - Floods don’t follow map boundaries
- National standard is the 1% annual chance flood (also known as 100-year flood, or special flood hazard area)
  - Flood insurance rating
  - Local floodplain management & development review process
- Flood Insurance Study (FIS) key piece of information
## Flood Risk Zones

<table>
<thead>
<tr>
<th>Risk</th>
<th>Zone – Old FIRMs</th>
<th>Zone – New FIRMs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>C</td>
<td>X (unshaded)</td>
</tr>
<tr>
<td>Moderate</td>
<td>B</td>
<td>X (shaded)</td>
</tr>
<tr>
<td>High (Riverine/tidal)*</td>
<td>A, AH, AO, A1-A30</td>
<td>A, AH, AO, AE</td>
</tr>
<tr>
<td>High (Coastal)*</td>
<td>V, V1-V30</td>
<td>VE</td>
</tr>
</tbody>
</table>

*Mandatory purchase requirement for flood insurance, and regulatory requirements*
Limitations of FIRMs

- Doesn’t show where all flooding can occur
  - State can regulate beyond the FEMA-mapped floodplain
- Doesn’t take into account future conditions
  - Based on current and historical data
Map Modernization

- Modernize flood maps
- Meet GAO guidelines
- Competitive across country (10 Regions)
- Transition to digital products
Digital FIRM (DFIRM)

- Accessible in a variety of digital formats:
  - GIS layers
  - Google Earth
  - PDFs
  - Map viewers, etc.
- Website:
  FEMA Map Service Center (MSC)
  www.msc.fema.gov
Preliminary FIRM/FIS

- Draft map/study
- Could be used for regulatory purposes
- Websites:
  
  FEMA Risk Assessment, Mapping, and Planning Partners (RAMPP)
  www.rampp-team.com/md.htm
  
  Maryland DFIRM Outreach Program
  www.mdfloodmaps.com
### Maryland - Mapping Status

Please visit the Maryland FEMA Outreach Program website for more information on your county.

For more information concerning current coastal analysis and mapping projects that might affect your community, please visit [www.rampp-team.com/md.htm](http://www.rampp-team.com/md.htm)

**Watershed Projects**

To access the materials for the Conococheague-Cepuquan, Gunpowder-Patapsco, Lower Susquehanna, Middle Potomac-Annacostia-Occonee, Middle Potomac-Cabotin, or Monocacy Watershed projects, click [here](http://www.rampp-team.com/md.htm). Projects are listed in alphabetical order by watershed name.

#### Allegany County

- **Digital Flood Insurance Rate Map (DFIRM) Data**
- Preliminary Flood Map Release: 04/14/13
- Asbestos Panel:
- Letter of Find Determination: 10/09/13
- Final Effective Date: 04/09/13

**Meeting Dates**

- **CODA:** 08/13/13

**Contacts**

- Project Manager: Matthew Miller, 240-333-9074
- Project Engineer: Robert Topp, 240-333-9532

#### Anne Arundel County - Coastal

- **Digital Flood Insurance Rate Map (DFIRM) Data**
- Preliminary Flood Map Release: 03/10/13
- Asbestos Panel:
- Letter of Find Determination: 09/13/13
- Final Effective Date: 02/08/13

**Meeting Dates**

- **CODA:** 09/07/13
- **CODA:** 10/08/13
- **CODA:** 01/10/14
- **CODA:** 02/19/14
- **CODA:** 04/14/13

**Meeting Dates**

- **CODA:** 03/06/13
- **CODA:** 06/06/13
- **CODA:** 06/09/13

**Contacts**

- Project Manager: Matthew Miller, 240-333-9074
- Project Engineer: Robert Topp, 240-333-9532

#### Baltimore County - Physical Map Revision - Coastal Study

- Preliminary Interactive Flood Map Index
- Flood Insurance Study (Vol. 1)
- Flood Insurance Study (Vol. 2)
- Allegany County, Mapping Fact Sheet
- Ordinance Level Worksheet

**FEMA Region III**

**Maryland**

--- September 2014 ---

Preliminary maps dated October 1, 2014 and later will no longer be posted to this website. Maps can be accessed at FEMA's Map Service Center by clicking [here](http://www.rampp-team.com/md.htm).

Note: Map availability on the MSC could be delayed several days after the map's preliminary date.

--- Preliminary Flood Hazard Data ---

Preliminary data provide the public an early look at their home or community's projected risk to flood hazards. Preliminary data includes new or revised Flood Insurance Rate Maps (FIRMs), flood insurance study (FIS) reports, and FIRM Databases.

For more information, visit the Preliminary Flood Hazard Data webpage.
Flood Risk Application

This tool is designed to aid you in researching your flood risk in the state of Maryland. Content on this site is typically updated with a 30 days of any maps or data released by FEMA, so please check back as the status of your county may have changed. It is important to investigate your flood risk status and contact your insurance agent to make the necessary modifications to your coverage. A schedule for tentative county effective dates can be found here.

Email questions or comments to flood.maps@maryland.gov

How to use the application:
Find your address:
Enter an address into the "Find a place" box on this page to zoom to the closest match.
- or -
Select the county you are interested in from the "Zoom to county" drop down box.
- or -
Select the "XY" icon to enter State Plane Meter X and Y coordinates and zoom to location.
- or -
In or out icons or a scroll mouse may be used for zooming your view.
Flood Risk Map

This map is not the official regulatory FIRM or DFIRM. Its purpose is to assist with determining potential flood risk for the selected location.

X/Y: 3444330/105633 (State Plane Meters)
The selected location on the map is within Zone AE.
DFIRM Panel Number: undefined
Scheduled Preliminary Release Date: 5/2013
Effective/Current FIRM Panel Number: 24003251E
*Scheduled DFIRM Effective Date: 2/2015
*Dates are subject to change

For information about local floodplain regulations (e.g., local ordinances and building codes), or inquiries related to mandatory flood insurance purchase requirements, please contact your community's floodplain management office: 410-305-7730

Disclaimer:
The Mapping Services provided here are for reference only. The user of this information understands and acknowledges that the data may be inaccurate or contain errors or omissions and the user assumes full responsibility for any risks or damages resulting from any use of or reliance upon this data. MDE and their Agents or Affiliates do not guarantee the accuracy or reliability of the data generated from this service.

The user of this information should always consult official FEMA flood maps and certified elevation data if there is any doubt of a property's flood risk. Please consult with your local county, and/or community floodplain administrator for availability of official DFIRMs in your county.

Data Sources:
Preliminary and Effective Floodplain: FEMA
FIRM and DFIRM Grid: ESMA
High-Resolution Aerial Photography: MD Map
Map Projection: WGS 1984 Web Mercator Auxiliary Sphere

October 31, 2014

flood.maps@maryland.gov
Effective FIRM/FIS

- Effective map/study
- Shall be used for regulatory and insurance purposes
- Websites:
  - FEMA Map Service Center website
    www.msc.fema.gov
  - Maryland DFIRM Outreach Program website
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Risk MAP

- Risk Mapping, Assessment and Planning
Coastal Analysis

- New study throughout Region III (MD, DE, VA, PA)
- Affects all tidal and coastal floodplains
- New advisory line on FIRM
  - Limit of Moderate Wave Action (LiMWA)
- Non-regulatory products:
  - Flood Risk Map
  - Flood Risk Report
  - Flood Risk Database (CSLF, depth grids, etc.)
- Website:
  FEMA Region III Coastal Analysis & Mapping
  www.r3coastal.com
Coastal A Zone (CAZ)

Wave height ≥ 3 feet

Wave height 3.0–1.5 feet

Wave height < 1.5 feet

Limit of base flooding and waves

Flood level including wave effects

1% annual chance stillwater elevation

Sea level

Shoreline

Sand beach

Buildings

Overland wind fetch

Vegetated region

Unelevated building constructed before community entered the NFIP

Properly elevated building

BFE

LiMWA

X

Coastal A Zone (CAZ)
Limit of Moderate Wave Action (LiMWA)
Region III
Coastal Analysis and Mapping

About the Study

The Federal Emergency Management Agency (FEMA) Region III office has initiated a coastal analysis and mapping study to produce updated Digital Flood Insurance Rate Maps (DFHRMs) for coastal counties within Region III. The new coastal flood hazard analyses, initiated in the fall of 2009, will utilize updated 1% annual chance stillwater elevations obtained from a comprehensive storm surge study being concurrently performed by FEMA Region III.

The storm surge study is one of the most extensive coastal storm surge analyses to date, encompassing coastal floodplains in three states and including the largest estuary in the U.S. Ultimately, the study will update the coastal storm surge elevations within the states of Virginia, Maryland, Delaware, and Pennsylvania including the Atlantic Ocean, Chesapeake Bay and its tributaries, and the Delaware Bay. This study differs from the storm surge mapping performed as part of Hurricane Evacuation Studies in that the resulting stillwater elevations are based on probability of occurrence as opposed to Hurricane Category events. Emergency Managers should still utilize their hurricane evacuation studies and hurricane category storm surge maps for evacuation planning and decision-making purposes.

An updated coastal flood study is needed to obtain a better estimate of coastal flood hazards and risk for Region III. The current, or effective, Flood Insurance Rate Maps (FIRM)s are outdated primarily due to the age of data and methodologies used in producing the effective
Regulations

- Every community required to update their local floodplain management ordinance
- Minimum NFIP requirements in Code of Federal Regulations (CFR), 44 CFR 60.3
- MD Model Floodplain Management Ordinance exceeds minimum requirements
- State waterway regulations in Code of Maryland Regulations (COMAR), 26.17.04
- International Codes (IBC and IRC)
  - Enhancements in 2015
Model Ordinance Higher Standards

- Two foot freeboard requirement
- Subdivision access roads at or above BFE
- Electric panelboards elevated 3 feet above BFE
- Coastal A Zone provisions
  - V Zone standards
- Manufactured homes not allowed in floodways or V Zones
- Limit critical and essential facilities
  - Not allowed in V Zones, CAZs or floodways
- Limit accessory structures to 300 square feet
Flood Insurance

- Homeowners insurance may not cover flood damage.
- Can purchase even if outside high risk area.
- Mandatory purchase requirement for structures in mapped floodplain with federally-backed mortgage.
- Lots of variables affect the rate:
  - Flood zone, date of construction, building elevations, BFE, etc.
- Website:
  - National Flood Insurance Program (NFIP)
  - www.FloodSmart.gov
Questions?

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  Chief, Regulatory Services Division
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- Kevin G. Wagner, CFM
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