

Disaster Preparedness



Making Yourself, Your Family, and Your Home
Ready for an Emergency

Who is MEMA?

- State Emergency Management Agency- conduit between Local and Federal Emergency Management
- 24/7 Watch Center (MJOC)
- Planning, Training and Exercising, Outreach and Community Preparedness, Private Sector Integration, State Emergency Operations Center
- Our Vision: To shape a resilient Maryland where communities thrive.

Family Emergency Plan

- Basic information on all household members
- Out-of-state contact
- Meeting places (local and regional)
- Work/school information
- Insurance information (flood, homeowners, renters, health, vehicle, etc.).



Disaster Supply Kit: Food

- At least a three-day supply of non-perishable foods that do not require refrigeration, cooking, a lot of water, or lengthy preparation. This can include ready-to-eat canned meats, fruits and vegetables, canned juices, peanut butter, jelly, trail mix
- Don't forget foods for family members with special needs such as infants or those on special diets/with allergies



Disaster Supply Kit: Water

- Store water in plastic containers such as soft drink bottles or buy one-gallon containers of water
- Store one gallon of water per-person per-day for a three-day period



Disaster Supply Kit: First Aid

- Sterile adhesive bandages
- Scissors
- Tweezers
- Needle
- Antiseptic
- Thermometer
- Cleanser/Soap
- Aspirin/pain reliever
- Assorted sterile gauze pads
- OTC Medications



Disaster Supply Kit: Tools and Supplies

- Paper cups, plates, and plastic utensils
- Battery operated radio and extra batteries
- Flashlight and extra batteries
- Non-electric can opener and utility knife
- Pliers
- Tape
- Signal flare
- Needles and thread
- Map of the area
- Aluminum foil



Disaster Supply Kit: Sanitation

- Toilet paper
- Soap
- Personal hygiene items
- Plastic garbage bags with ties
- Plastic bucket with tight lid
- Disinfectant
- Household chlorine bleach



Disaster Supply Kit: Clothing and Bedding

- One complete change of clothing and footwear per person
- Blankets/sleeping bags/pillows
- Sunglasses
- Sturdy shoes/work boots
- Rain gear



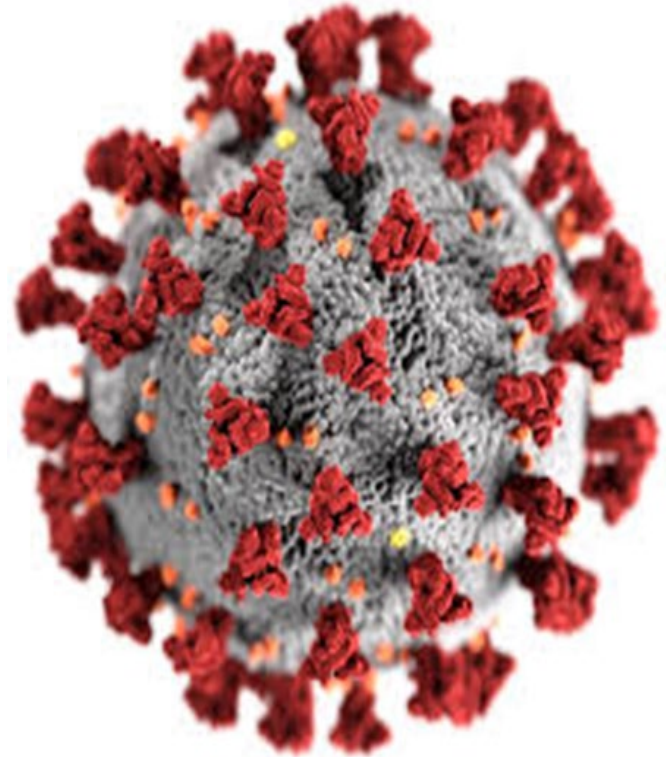
Disaster Supply Kit: Speciality Items

- Infant formula, bottles, diapers, wipes
- Prescription medications, insulin, denture needs, extra eyeglasses or contact lenses/supplies
- Pet food, leash, carrier, vaccination records
- Comfort items for children
- Important family documentation: birth certificated, marriage licenses, wills, bank account numbers, deeds, credit card numbers and companies, insurance policies, passports, Social Security cards. Keep these items in a watertight container



Supplies Needed in a COVID-19 Environment

- Masks
- Hand Sanitizer
- Hand Soap
- Disinfectant Spray/Wipes
- Thermometer
- OTC medications



Pet Preparedness



- Create a plan for sheltering during evacuations (public shelter, friends/family, boarding facility, hotel)
 - www.bringfido.com
 - www.dogvacay.com
 - www.petswelcome.com
- Develop buddy system
- Make sure your vehicle is large enough to transport all pets
- Get pets comfortable with crates prior to an event



Pet Emergency Supply Kit

- Food/water for at least 3 days
- Medicines and Medical records
- First Aid kit
- Collar with ID/rabies tag, harness, leash
- Crate or other pet carrier
- Sanitation supplies
- Picture of you and your pet together
- Familiar items



Maryland Prepares



PREPARE

Prepare Emergency Kits and Family Communications Plans



ALERTS

Get real-time alerts for emergencies, weather and traffic



I'M SAFE!

Send an I'M SAFE! message to let everyone know you are safe



NEWSROOM

Access current news and events

Plus many more useful emergency resources



Download the Maryland Prepares Mobile App today!

Know Your Zone

- Maryland's hurricane evacuation zone campaign
- Involves 19 jurisdictions around the state
- www.KnowYourZoneMD.com

Know Your Zone



It's as easy as A-B-C

For More Information:

www.mema.maryland.gov

www.fema.gov

www.ready.gov/are-you-ready-guide



Maryland

EMERGENCY MANAGEMENT
AGENCY

The mission of the Maryland Emergency Management Agency is to proactively reduce disaster risks and reliably manage consequences through collaborative work with Maryland's communities and partners.

Jessica Nusbaum

443-386-1287

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Understanding Your Insurance Coverage When it Comes to a Disaster

Kejuana Walton
Consumer Education & Advocacy Unit

Agenda

- ✓ What is the Maryland Insurance Administration
- ✓ How the Maryland Insurance Administration can help
- ✓ Do you have the right coverage to protect you
- ✓ What to Do After a Loss
- ✓ Get Prepared

What is the Maryland Insurance Administration?

The Maryland Insurance Administration (MIA) is the state agency that regulates the business of insurance in Maryland. The MIA:

- Licenses insurers and insurance producers (agents and brokers)
- Examines the business practices of licensees to ensure compliance
- Monitors solvency of insurers
- Reviews and approves insurance policy forms
- Reviews rates to be sure they are not inadequate, excessive or unfairly discriminatory
- Investigates consumer and provider complaints and allegations of fraud



Maryland
INSURANCE ADMINISTRATION

**EDUCATING &
PROTECTING
CONSUMERS**



How can the Maryland Insurance Administration help?

If you feel that your insurer or insurance producer acted improperly, you have the right to file a complaint. The MIA can investigate complaints that an insurer or insurance producer has:

- Denied or delayed payment of all or portions of a claim
- Improperly terminated your insurance policy
- Raised your insurance premiums without proper notice or in excess of what the law allows
- Made false statements to you in connection with the sale of insurance or the processing of insurance claims
- Overcharged you for services, including premium finance charges

Natural Disasters

Marylanders in recent years have sustained a significant amount of damage to their homes and personal property as a result of tornadoes, floods and hurricanes.

While you may not be able to control natural disasters, there are steps you can take to lessen the exposure to these types of losses and ensure that you have the appropriate insurance to cover potential damages.



Do you have the right automobile coverage?

When it comes to auto insurance coverage, **Comprehensive Coverage** provides you the coverage for property damage to your insured vehicle resulting from occurrences other than collision.



➤ Flooding

➤ Theft

➤ Vandalism



➤ Glass breakage not resulting from an accident

➤ A vehicle striking an animal

If you have only liability coverage, your insurer will not pay for the above types of damage or for damage to your vehicle from a collision.

Do you have the right homeowner coverage?

Review your policy to determine what is covered and what is excluded. Are the following covered under your current policy?

- windstorm damage
- debris or tree removal
- Water/Sewer Backup
- additional living expenses

Your Insurance Company
3535 Second Street
Company Town, USA 54321

Policy number XX-XXXXXX-XX
Policy period: 6 months
Effective date: January 1, 2015
Expiration date: July 1, 2015

1

Homeowners Insurance Policy <SAMPLE>

Named Insured	Address	Mortgagee	Address
John E. Doe	123 E. Main Street Insured Town, USA 12345	Bank of USA	1212 First Street Company Town, USA 54321

XYZ Insurance Company considers your claims history when determining whether to cancel or to non-renew your insurance policy.

2

Coverages & property	Liability limits
SECTION I	
A Dwelling	\$250,000
B Dwelling extension (garage)	\$25,000
C Personal property	\$125,000
D Loss of use	Actual loss sustained
SECTION II	
L Personal liability (each occurrence)	\$300,000
Damage to property of others	\$1,000
M Medical payments to others (each person)	\$2,000

Loss of settlement provisions (see policy)
A1: Replacement cost – Similar construction
B1: Limited replacement cost – Coverage B

7

Forms, options and endorsements	
Replacement cost coverage	xx-xxxx
Mold, fungus, wet rot, dry rot or bacteria	xx-xxxx
Ordinance or law coverage:	
10% of Coverage A	xx-xxxx
Earthquake excl. masonry veneer	xx-xxxx
Sewer, water backup coverage:	
\$10,000/\$500 deductible	xx-xxxx
Increase dwelling, up to \$50,000	Option XX
Jewelry and furs, \$5,000 each	Option YY

Inflation coverage index XXX.X

3
4
Deductibles
All peril \$2,000

In case of loss under this policy, the deductible will be applied per occurrence and will be deducted from the amount of loss. Other deductibles may apply – refer to your policy.

5
Policy premium \$1,000

Discounts applied

Home/Auto

Home protection (burglar and fire alarms, smoke detectors)

6
Claim record/Customer longevity

Your policy consists of this page, any endorsements and the policy form. Keep together.

When you purchase a homeowners insurance policy, renew your policy, or make any changes to your policy, the insurer will give you a document called a “Declarations Page.”

The declarations page identifies the kinds and amounts of coverage you have and how much it costs.

<https://insurance.maryland.gov/Consumer/Documents/publications/understandingdeclarationspage.pdf>



Maryland
INSURANCE ADMINISTRATION

200 St. Paul Place, Suite 2700
Baltimore, MD 21202
410-468-2000
800-492-6116
800-735-2258 TTY
www.insurance.maryland.gov

www.facebook.com/MdInsuranceAdmin
www.twitter.com/MD_Insurance
www.instagram.com/marylandinsuranceadmin

Be Prepared

- Create an inventory of all your possessions and keep it updated. The NAIC's checklist is available at:
https://www.naic.org/documents/index_d_isaster_section_inventory_checklist.pdf
- Photograph and/or video each room and the exterior of your home.
- Safeguard your records – insurance policies, inventory list.
- Keep handy your insurance producer's name, telephone number, and your policy number(s).
- Know how to shut off the gas, electricity and water. Be prepared to board up vulnerable places around the house.



Do you have enough insurance coverage?

- ✓ Make sure you have enough coverage to repair or rebuild your home in the event of a disaster.
- ✓ Ask your insurance producer or insurer about purchasing coverage to protect against inflation.
- ✓ Notify your insurance producer or insurer if you make improvements or additions to your home to ensure they are covered.
- ✓ Determine whether you need additional coverage for antiques, collectibles, jewelry, computers, or other expensive items that may not be included in basic contents coverage.

Do you have the right insurance coverage?

- ✓ Know the difference between ACV and RCV
- ✓ Actual Cash Value (ACV) is the cost to replace the damaged property with “like kind or quality” minus depreciation for age and use.
- ✓ Replacement Cost Value (RCV) is the cost to replace the damaged property with “like kind or quality”, at full cost without depreciation, less the amount of your deductible.
- ✓ **It’s important to remember you may not receive the full replacement cost until you actually repair or replace the damaged property.**

Insurance Preparedness Tips: Know what is **not** covered.

Most homeowners, renters, and condo insurance policies exclude the following from coverage:

- ✓ Mudslide
- ✓ Earth Movement
- ✓ Groundwater or seepage
- ✓ Flood



While some private insurers may offer some coverage for flooding as an endorsement to your homeowners, renters, or condominium policy, flood insurance can also be purchased from the National Flood Insurance Program (NFIP). For more information, contact your insurer, insurance producer, or go to the NFIP's website, www.floodsmart.gov.

Know what **you** will have to pay

✓ **Know what your deductibles are.**

Some policies have a separate percentage deductible for certain types of events, for example wind.

Some policies have a deductible based on the amount of insurance coverage on your home.

Example: If your dwelling is insured for \$100,000, and your policy has a 2% deductible for certain perils, your deductible would be \$2,000.

After A Loss



- ✓ Contact your insurer promptly after sustaining a loss.
- ✓ Take photographs and/or video of the damaged areas.
- ✓ Make only those repairs necessary to prevent any further damage. Do not make permanent repairs before talking to your insurer.
- ✓ Before you remove any damaged property from the premises, be sure an insurance adjuster or your insurance producer has seen the damage.

After A Loss

A red pencil is shown in the upper right corner, drawing a series of overlapping squares that recede into the distance. The pencil is angled downwards and to the left, with its tip touching the top-right corner of the first square. The squares are drawn with light red lines and are arranged in a perspective that suggests depth.

- ✓ Keep all receipts for emergency repairs and for temporary living expenses.
- ✓ As soon as possible, prepare a detailed inventory of all damaged or destroyed property. Give a copy to the insurance adjuster and keep a copy for yourself. It should include:
 - Description and quantity of items.
 - Date and place of purchase
 - Cost - estimate to replace.
- ✓ Be present when your insurance adjuster inspects your property.
- ✓ Be cautious in accepting a settlement offer or cashing a settlement check. Cashing a check may bar you from seeking additional compensation later on if it turns out that the settlement offer is inadequate. It is a good idea to confirm in writing that cashing the check will not bar you from seeking additional compensation later.

Reminder



- If your insurer denies any part of your claim, be sure they put the denial in writing and you keep a copy of all the paperwork.
- You can avoid bad repairs and workmanship by using licensed, reputable contractors. Be sure they secure the appropriate building permits.

Maryland Home Improvement Commission

1-888-218-5925 or 410-230-6309

www.dllr.state.md.us/license/mhic/

- Contact your insurer and claims adjuster any time you find additional damage not previously reported and inspected.
- Insurers consider loss history and claim frequency when making decisions on whether they will insure you, renew your policy and the cost of your policy.

Contact Information

Maryland Insurance Administration

1-800-492-6116 or 410-468-2000

www.insurance.maryland.gov

National Flood Insurance Program

1-800-427-4661

www.floodsmart.gov

Maryland Home Improvement Commission

1-888-218-5925

www.dllr.state.md.us/license/mhic/

Contact Information

Maryland Emergency Management Agency

1-877-636-2872

www.mema.maryland.gov/

Federal Emergency Management Agency

1-202-646-2500

www.fema.gov

Publications Available on MIA's Website

Check out the following publications for more information.

- An Insurance Preparedness Guide for Natural Disasters
- An Insurance Preparedness Guide For Post-Disaster Claims
- [Natural Disasters Preparedness Tips Guide](#)
- Consumer Advisory: [Contractors or Individuals that Offer to Help You with your Insurance Claim](#)
- Consumer Advisory: [Understanding the Difference Between Flood and Water Damage](#)
- Property Damage – What to Do After A Loss
- Weather Related Damage – Frequently Asked Questions about Insurance Coverage



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Floodplain Management/Mitigation Techniques, Flood Insurance and Resources

Virtual Government Agency Day
September 16, 2020

Kevin G. Wagner
Community Assistance Program Manager

National Flood Insurance Program

- Created by the National Flood Insurance Act of 1968 (Hurricane Betsy, 1965)
- Administered by FEMA/DHS
- Participation is **voluntary**
 - Adopt and enforce regulations
 - Eligible for flood insurance
- **Benefits** of participation:
 - Flood insurance
 - Grants and loans
 - Disaster assistance
 - Federally-backed mortgages
- **Partnership** between the Federal government and the “community” (County or municipal government)



National Flood Insurance Program

Answers to Questions About the NFIP

FEMA F-084 / March 2011



FEMA

Key Components of the NFIP

**Maps and
Data**



**Floodplain
Management &
Mitigation**

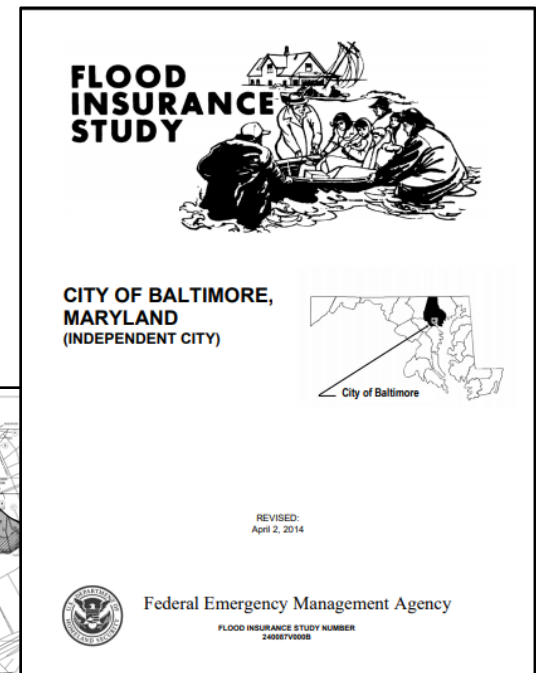
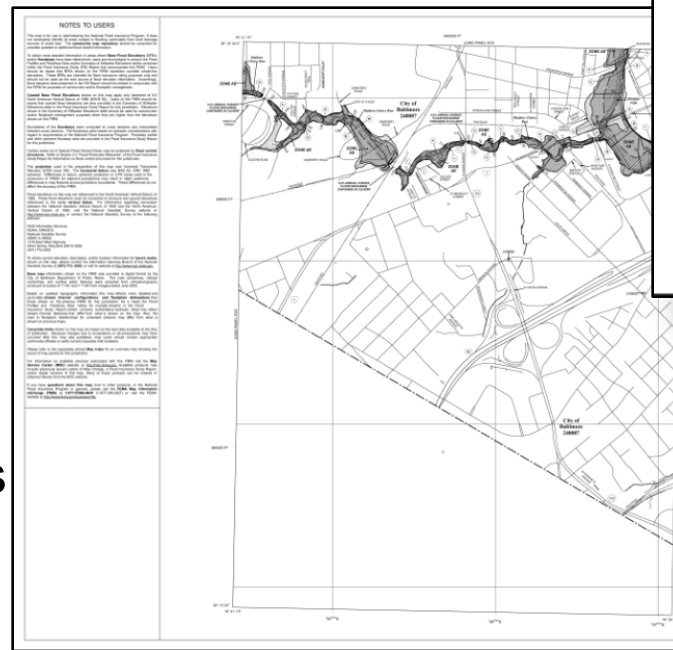
Flood Insurance



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Know Your Risk – Maps and Data

- Flood Insurance Study (FIS)
- Flood Insurance Rate Map (FIRM)
 - Digital FIRM (DFIRM)
- Community Identified Flood Risk:
 - Historic high water marks
 - 2050 and 2100 SLR projections
 - Other?



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Flood Insurance Rate Map (FIRM)

- Delineates flood risk based on different recurrence intervals (1% and 0.2% annual chance flood)
 - **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
 - Floodplain management & development review process



Maryland's Flood Risk Application

<https://mdfloodmaps.net/map/>

The screenshot displays the Maryland Flood Risk Application web interface. The browser address bar shows the URL mdfloodmaps.net/map/. The page header includes the Maryland logo, "DFIRM Outreach", and "Flood Risk Application". A navigation bar at the top right contains "MDE", "MDE Firm Outreach", and "Help".

The main map area shows an aerial view of a residential neighborhood with a large area highlighted in light blue, representing a 500-Year flood zone. The flood zone is bounded by a red line and labeled "500-Year" in several places. Specific elevation points are marked along the flood zone boundary, including "240 Feet", "268 Feet", "216 Feet", "208 Feet", "202 Feet", "192 Feet", "184 Feet", and "178 Feet". A search bar at the top of the map area contains the text "Find address or place".

On the left side, there is a "Layer List" panel with the following items:

- Effective Floodplain
- Effective Panels
- Effective Model
- Flood Lines
- Effective Floodplain
- Bridge and Culvert
- LIMWA
- Discharge Points
- Structure Footprint
- Tax Ditches
- Stream Buffers

At the bottom of the map, there is a scale bar for 300 feet and coordinates: -76.69539279 Degrees. The bottom right corner of the map area includes the text "powered by MD iMAP DoIT" and "MD iMAP".

FEMA Flood Map Service Center

- Access Products
 - FIRMs & FIS
 - LOMCs
 - DFIRM Database
 - Historic Products
 - Flood Risk Products
- Access Tools
 - Make a **FIRMette**
 - National Flood Hazard Layer (NFHL) Viewer
- Live Mapping Support
 - FEMA Map Information eXchange (FMIX)

FEMA Flood Map Service Center : Welcome!

Looking for a Flood Map? [?](#)

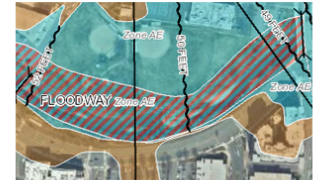
Enter an address, a place, or longitude/latitude coordinates:

Enter an address, a place, or longitude/latitude coordinate:

Search

Looking for more than just a current flood map?

Visit [Search All Products](#) to access the full range of flood risk products for your community.



About Flood Map Service Center

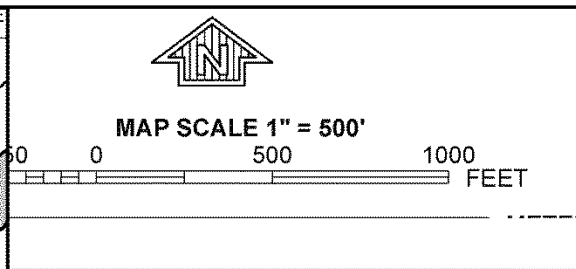
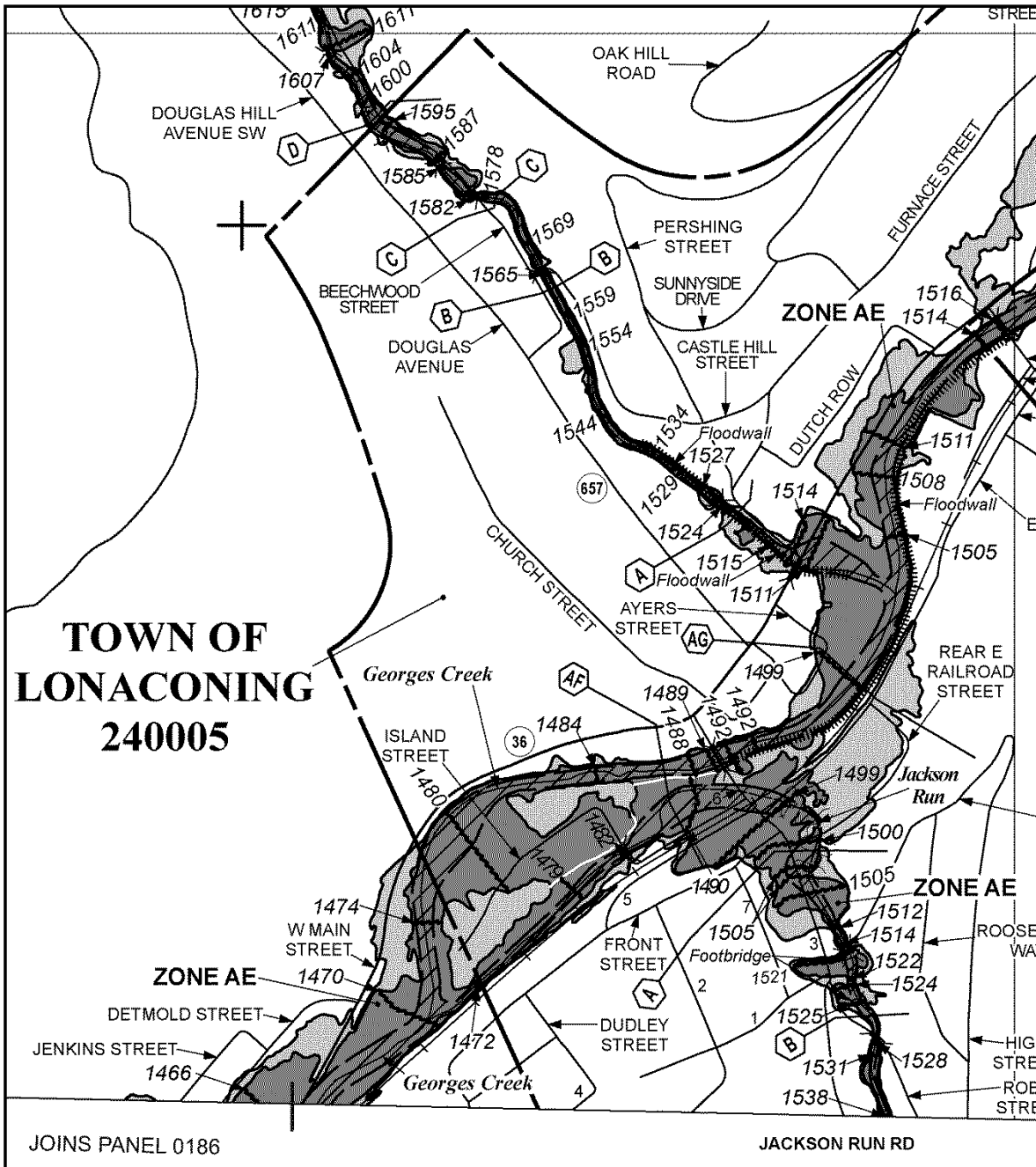
The FEMA Flood Map Service Center (MSC) is the official public source for flood hazard information produced in support of the National Flood Insurance Program (NFIP). Use the MSC to find your official flood map, access a range of other flood hazard products, and take advantage of tools for better understanding flood risk.

FEMA flood maps are continually updated through a variety of processes. Effective information that you download or print from this site may change or become superseded by new maps over time. For additional information, please see the [Flood Hazard Mapping Updates Overview Fact Sheet](#)

<https://msc.fema.gov>



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NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0178E

FIRM
FLOOD INSURANCE RATE MAP

**ALLEGANY COUNTY,
MARYLAND
AND INCORPORATED AREAS**

PANEL 178 OF 370

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
ALLEGANY COUNTY	240001	0178	E
LONACONING, TOWN OF	240005	0178	E

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.



MAP NUMBER
24001C0178E
EFFECTIVE DATE
APRIL 3, 2020

Federal Emergency Management Agency

JOINS PANEL 0186

JACKSON RUN RD

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

Flood Risk Zones

Risk	Zone	Recurrence Interval
Low	X (unshaded)	<0.2%
Moderate	X (shaded)	0.2%
High (Riverine/tidal)*	A, AH, AO, AE	1.0%
High (Coastal)*	VE	1.0%

***Mandatory purchase requirements for flood insurance, and regulatory requirements in high risk areas**



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Reduce Your Risk – Floodplain Management/Regulations

- Minimum NFIP requirements in the Code of Federal Regulations (CFR)
 - Title 44, Subchapter B, Parts 59-60, § 59.1 & § 60.3(a)-(e)
- State Laws, Regulations and Executive Orders
 - Annotated Code of Maryland, Environment Article
 - Code of Maryland Regulations (COMAR)
 - Climate Change and “Coast Smart” Construction Executive Order
- **Community’s Floodplain Management Ordinance**
 - Often based on Maryland Model Floodplain Management Ordinance
 - Higher Regulatory Standards? (ex. **Freeboard**)
- Building Codes/Maryland Building Performance Standards
 - International Codes (I-Codes):
 - *International Building Code (IBC), International Residential Code (IRC), etc.*
 - *ASCE 24: Flood Resistant Design and Construction*
 - *ASCE 7: Minimum Design Loads for Building and Other Structures*



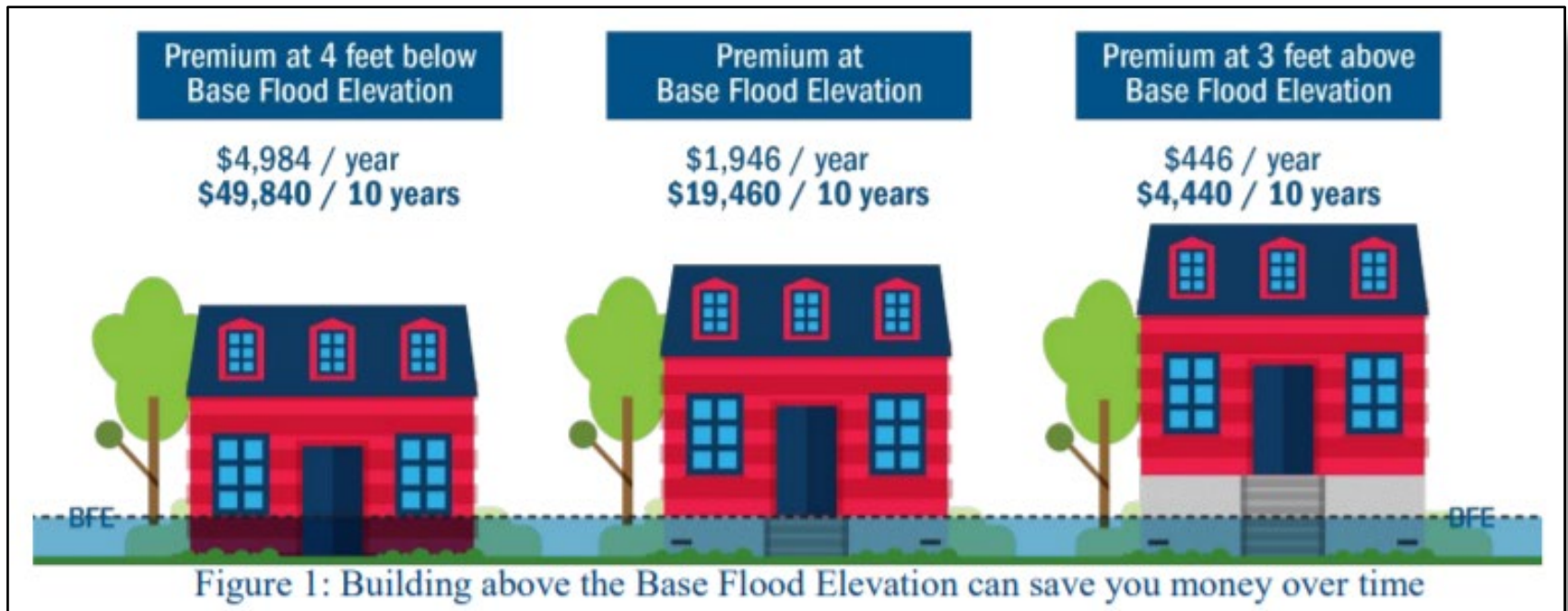
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Higher Regulatory Standards

- 2 feet of freeboard
- Flood protection setback
- 3 feet of freeboard or 500-year flood elevation for Critical and Essential facilities
- Declaration of Land Restriction (Non-conversion Agreement)
- Prohibition:
 - Manufactured homes in floodway and V Zone
 - Critical and essential facilities in Coastal A and V Zones and floodway
 - Floodproofing of new and substantially improved nonresidential buildings in Coastal A Zone



Freeboard



Source: [FEMA Build Back Safer and Stronger Fact Sheet](#)



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Zone AE – Crisfield



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Zone VE – Calvert Co.



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Reduce Your Risk – Flood Mitigation

- Use flood damage-resistant materials
- Install flood openings in enclosures
- Install backflow prevention valves
- Elevate HVAC and utilities
- Anchor fuel tanks, extend vent pipe (oil)
- Anchor accessory structures (ex. Sheds)
- **FRED – Floodproof, Relocate, Elevate, Demolish**
- **Purchase flood insurance!**



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Flood Damage-Resistant Materials

- **Acceptable:**
 - Cement board
 - Brick, tile
 - Marine grade plywood
 - Sprayed polyurethane foam insulation
- **Unacceptable:**
 - Gypsum board, greenboard
 - Carpeting
 - Oriented-strand board (OSB)
 - Fiberglass insulation
- **Fasteners and Connectors**
 - Stainless steel or hot-dip galvanized

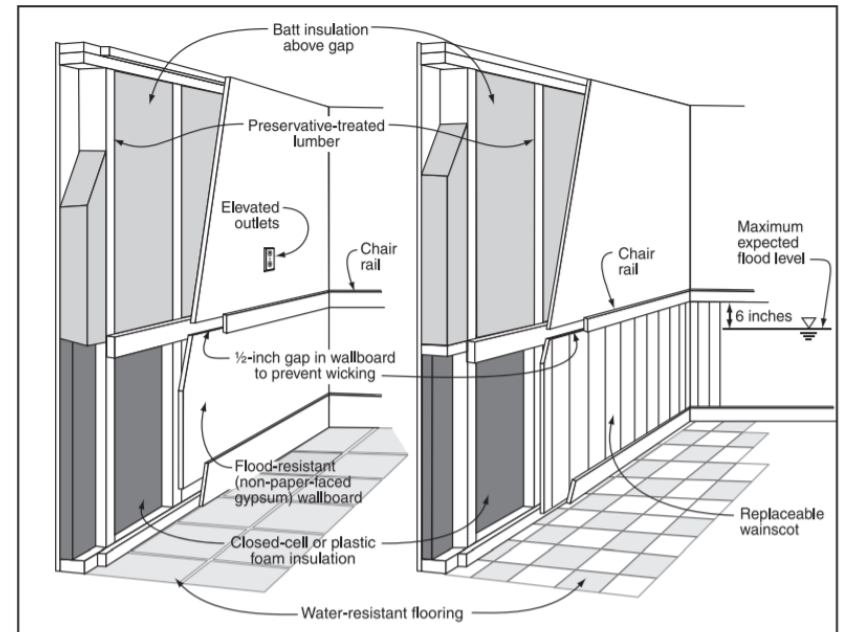


Figure 4. Partial wet floodproofing technique using flood damage-resistant materials for finished wall construction.



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Source: [NFIP Technical Bulletin 2, Flood Damage-Resistant Materials Requirement](#)

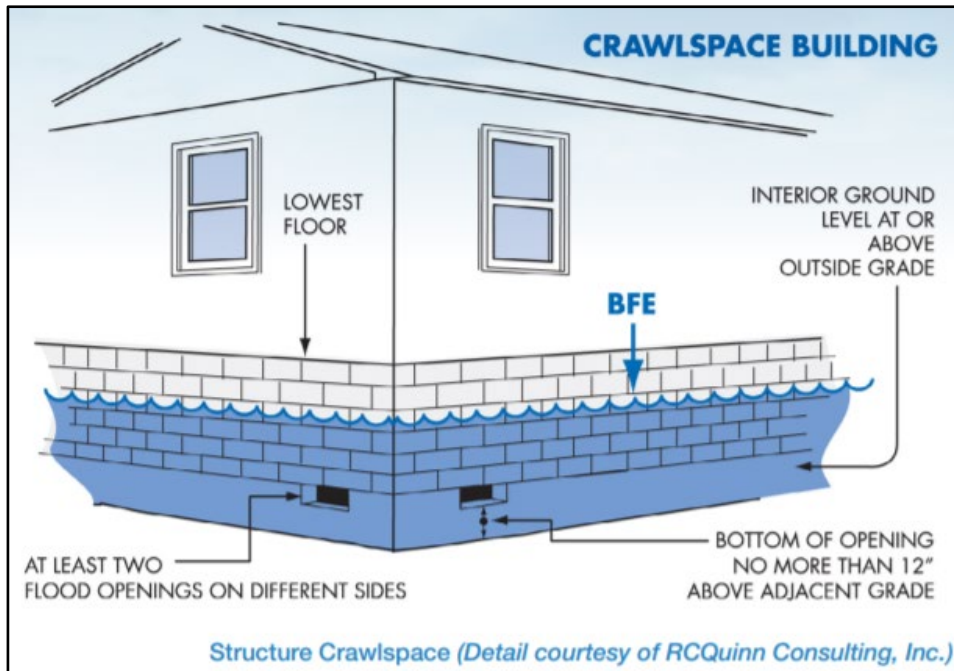
Flood Openings

- **Reduce hydrostatic pressure**
- Minimum requirements:
 - Bottom of opening must be within 12" of grade
 - 1 square inch of net open area for every square foot of enclosed area OR use engineered openings
 - On at least two different walls

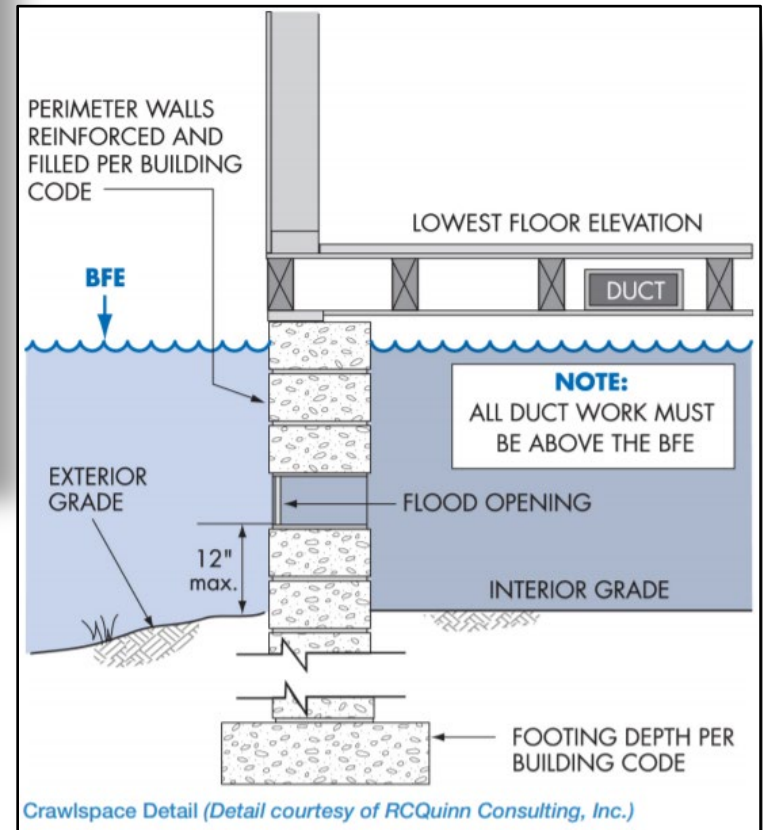


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Flood Openings



Source: [The American Surveyor, Taking the Mystery Out of Flood Openings, Vol. 10 No. 6](#)



Improper flood openings results in higher flood insurance!

Flood Openings Covered



Higher flood insurance!



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Subgrade Crawlspace = Basement



Higher flood insurance!



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Backflow Prevention Valve

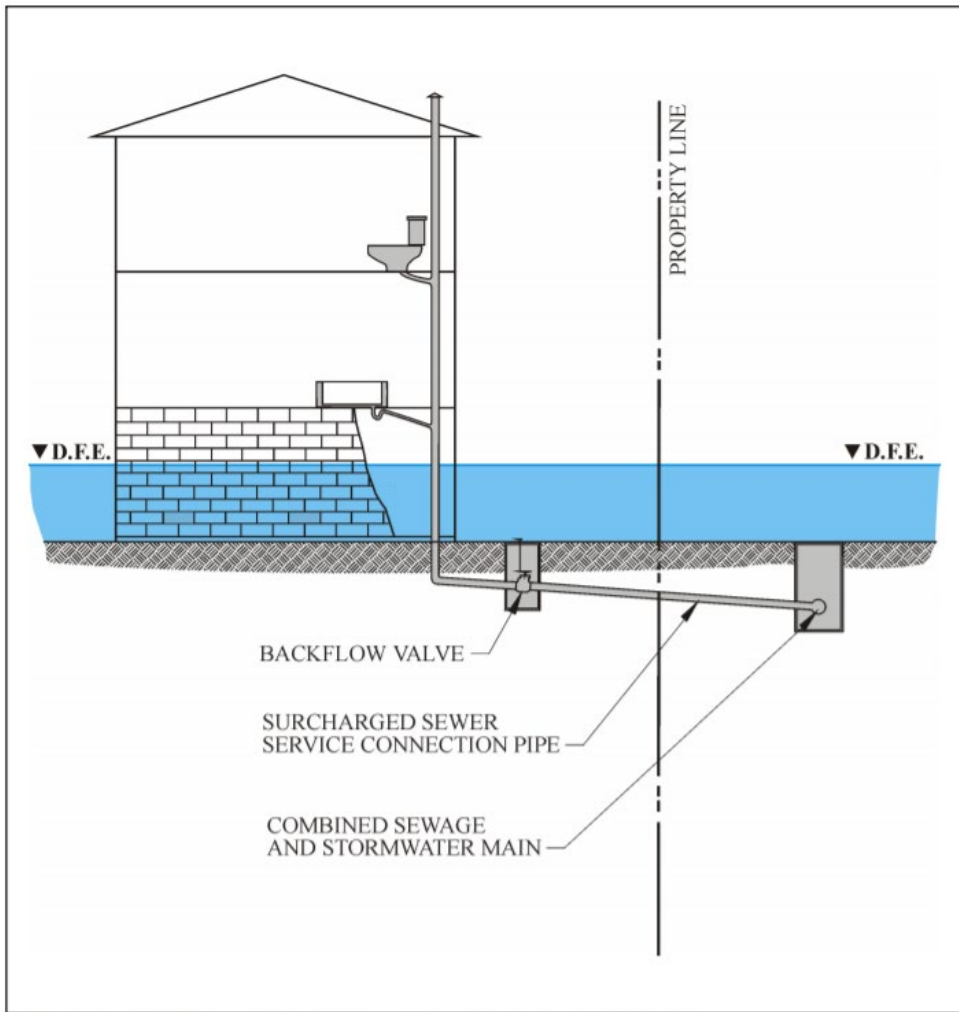


Figure 3.4.4A: Backflow conditions with non-return backflow valve installed

Source: [Protecting Building Utilities From Flood Damage, FEMA-348, November 1999](#)
(has been revised)



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HVAC Units & Flood Openings – Harford Co.



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HVAC Unit & Flood Openings – Dorchester Co.



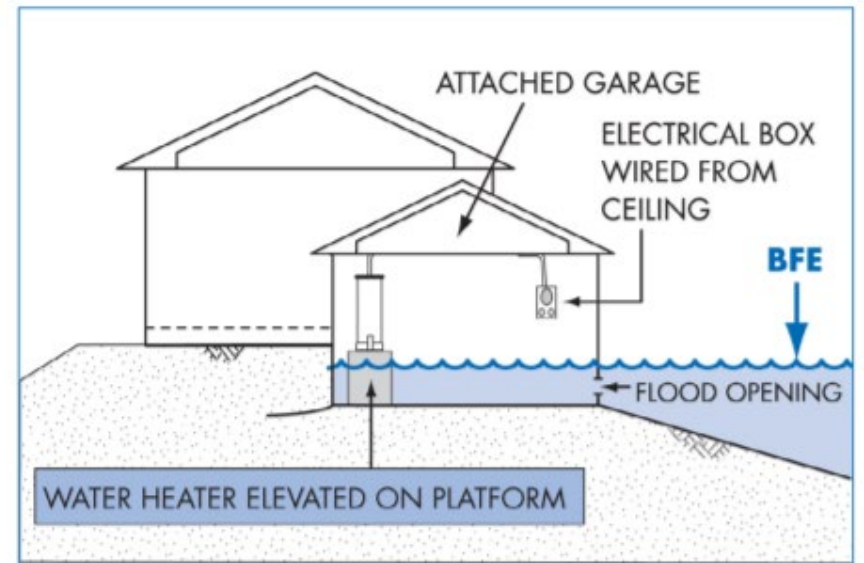
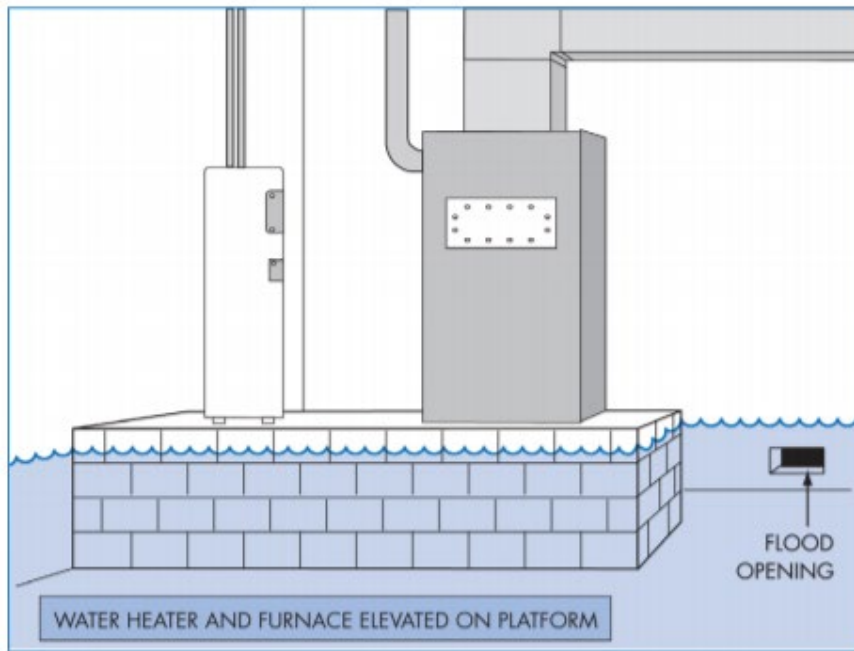
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HVAC Units and Electric Meter – Cecil Co.



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Elevate Utilities



Elevated Utilities (Detail courtesy of RCQuinn Consulting, Inc.)

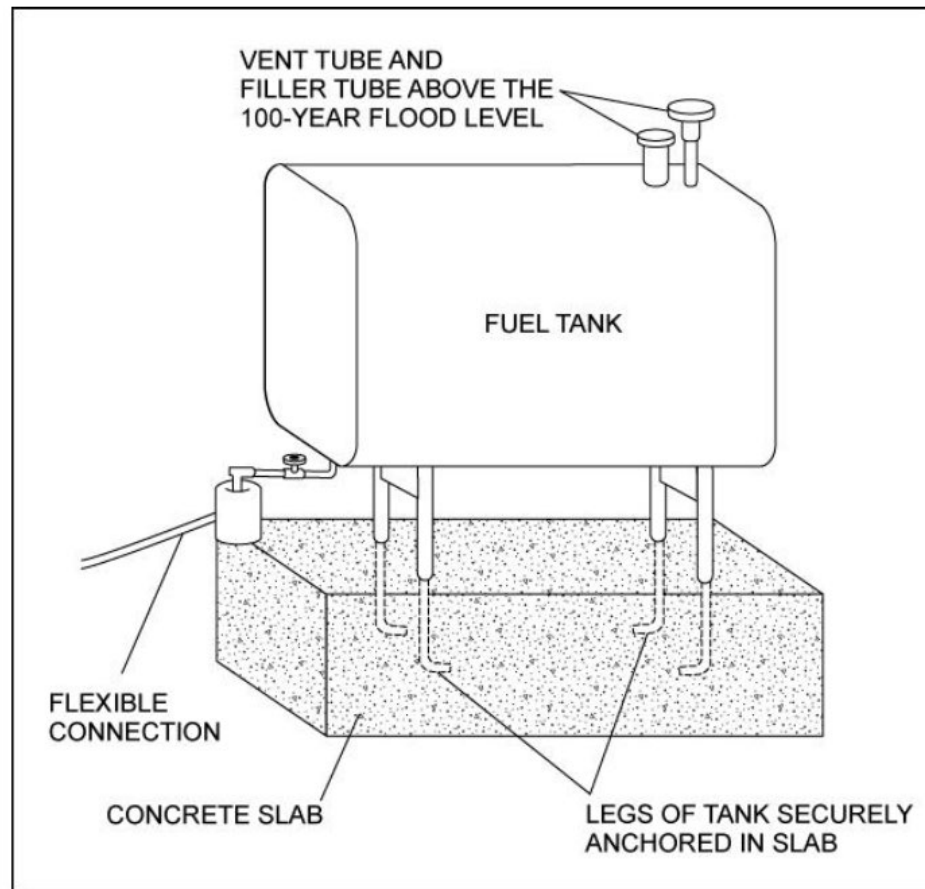
Non-elevated utilities results in higher flood insurance!

Source: [The American Surveyor, Taking the Mystery Out of Flood Openings, Vol. 10 No. 6](#)



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Anchoring Fuel Tanks



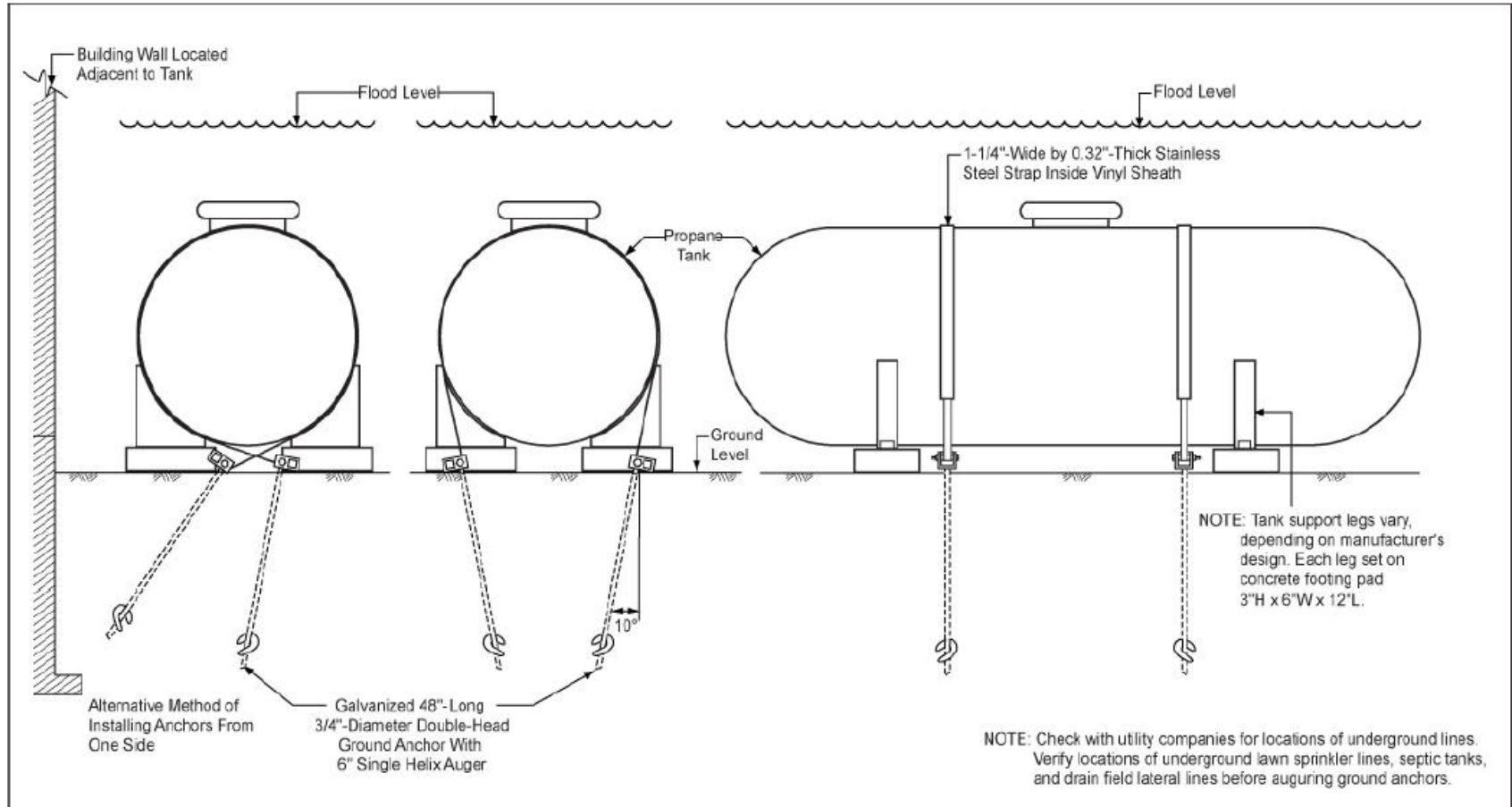
Anchoring a fuel tank.



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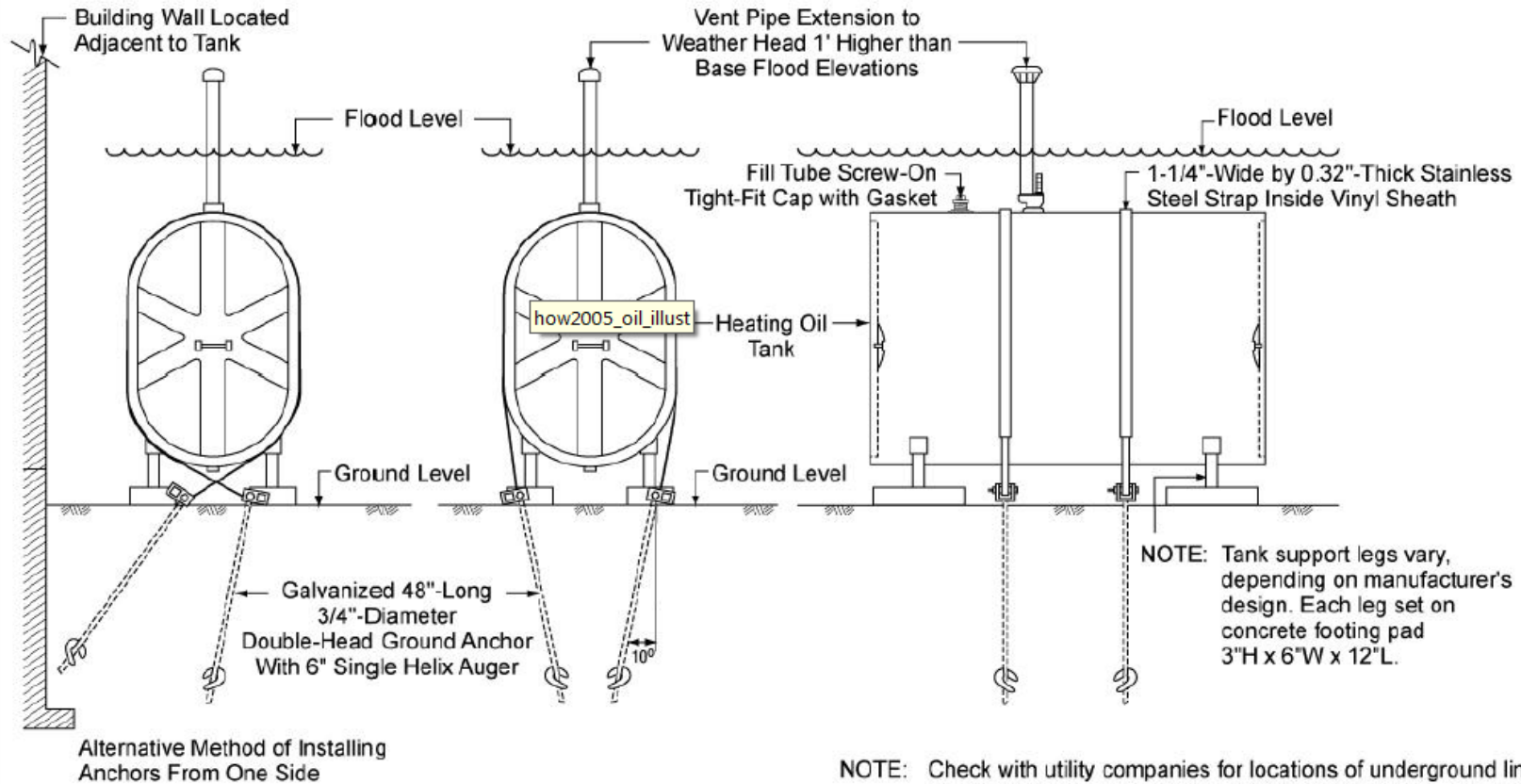
Source: FEMA Anchor Fuel Tanks Fact Sheet, April 2008

Anchoring a Propane Tank



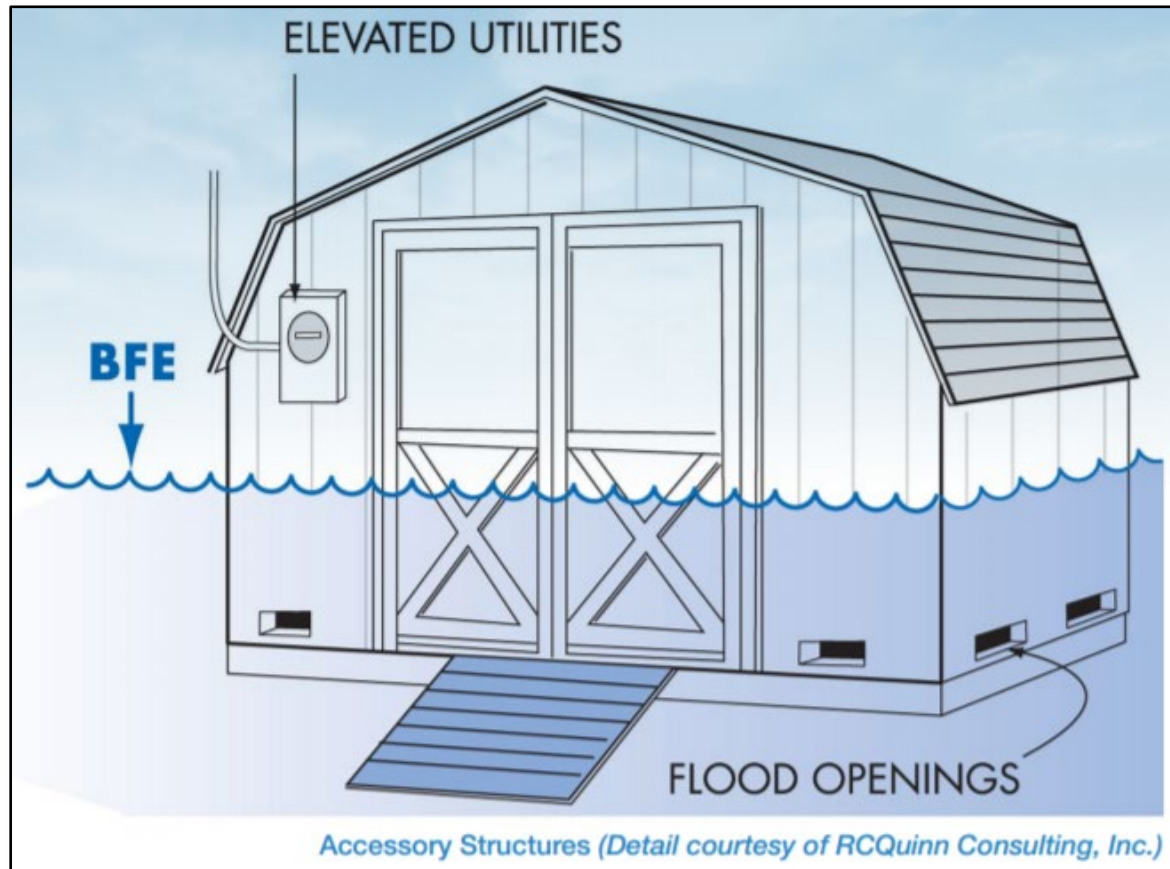
Anchoring an outside propane tank.

Anchoring a Heating Oil Tank



Anchoring an outside heating oil tank.

Accessory Structures



Source: [The American Surveyor, Taking the Mystery Out of Flood Openings,](#)
[Vol. 10 No. 6](#)



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Elevation Certificate

1. To ensure compliance with a community's regulations
 - Properly elevated
 - Adequate flood openings

2. Flood insurance rating
 - **Proper documentation required**

3. Support Letter Of Map Change (LOMC) requests

In Maryland, only a licensed surveyor can certify as-built information

U.S. DEPARTMENT OF HOMELAND SECURITY Federal Emergency Management Agency National Flood Insurance Program		OMB No. 1660-0008 Expiration Date: November 30, 2018	
ELEVATION CERTIFICATE Important: Follow the instructions on pages 1-9.			
Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agent/company, and (3) building owner.			
SECTION A – PROPERTY INFORMATION			FOR INSURANCE COMPANY USE
A1. Building Owner's Name		Policy Number:	
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.		Company NAIC Number:	
City		State	ZIP Code
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.)			
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.)			
A5. Latitude/Longitude: Lat. _____ Long. _____ Horizontal Datum: <input type="checkbox"/> NAD 1927 <input type="checkbox"/> NAD 1983			
A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance.			
A7. Building Diagram Number _____			
A8. For a building with a crawlspace or enclosure(s):			
a) Square footage of crawlspace or enclosure(s) _____ sq ft			
b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade _____			
c) Total net area of flood openings in A8.b _____ sq in			
d) Engineered flood openings? <input type="checkbox"/> Yes <input type="checkbox"/> No			
A9. For a building with an attached garage:			
a) Square footage of attached garage _____ sq ft			
b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade _____			
c) Total net area of flood openings in A9.b _____ sq in			
d) Engineered flood openings? <input type="checkbox"/> Yes <input type="checkbox"/> No			
SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFORMATION			
B1. NFIP Community Name & Community Number		B2. County Name	B3. State
B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	B7. FIRM Panel Effective/Revised Date
B8. Flood Zone(s)		B9. Base Flood Elevation(s) (Zone AO, use Base Flood Depth)	
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in item B9: <input type="checkbox"/> FIS Profile <input type="checkbox"/> FIRM <input type="checkbox"/> Community Determined <input type="checkbox"/> Other/Source: _____			
B11. Indicate elevation datum used for BFE in item B9: <input type="checkbox"/> NGVD 1929 <input type="checkbox"/> NAVD 1988 <input type="checkbox"/> Other/Source: _____			
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? <input type="checkbox"/> Yes <input type="checkbox"/> No Designation Date: _____ <input type="checkbox"/> CBRS <input type="checkbox"/> OPA			
FEMA Form 086-0-33 (7/15)		Replaces all previous editions.	
		Form Page 1 of 6	

Elevation Project – Crisfield



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Summary – Reduce Your Flood Risk

- **NO COST - \$**
 - Clean ditches and gutters
 - Elevate items off the floor
 - Elevate washer and dryer
- **LOW COST - \$\$**
 - Get an Elevation Certificate
 - Elevate HVAC unit
 - Anchor fuel tanks
- **MODERATE COST - \$\$\$**
 - Install a sump pump (with battery backup)
 - Fill in crawlspace to eliminate basement
 - Install flood openings
 - Elevate utilities
- **HIGH COST - \$\$\$\$**
 - Elevate home
 - Dry floodproof business



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FEMA Publications

- [Protect Your Home from Flooding: Low-Cost Projects You Can Do Yourself](#)
- [Mitigation for Homeowners Fact Sheet](#)
- [NFIP Technical Bulletins](#)
 - 12 bulletins that provide guidance for complying with the NFIP's building performance requirements
 - TB 1: [Openings in Foundation Walls and Walls of Enclosures](#)
 - TB 2: [Flood Damage-Resistant Materials Requirement](#)
- [Homeowner's Guide to Retrofitting](#)
- [Protecting Building Utility Systems From Flood Damage](#)



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Protect Your Home from Flooding: Low-Cost Projects You Can Do Yourself



- **OUTSIDE THE HOME**
 - Install a rain barrel
 - Elevate utilities and service equipment
 - Anchor outdoor fuel tanks
- **INSIDE THE HOME**
 - Protect your valuable possessions
 - Seal your foundation and basement walls
 - Install food vents
 - Install a sump pump
 - Prevent sewer backups
 - Use food-resistant building materials
 - Raise electrical system components
 - Protect utilities and service equipment
 - Anchor indoor fuel tanks
 - Install a flood alert system



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Websites

- **Maryland Department of the Environment (MDE)**
<https://mde.maryland.gov/programs/Water/FloodHazardMitigation/Pages/index.aspx>
<https://mdfloodmaps.net/>
- **Maryland Emergency Management Agency (MEMA)**
<https://mema.maryland.gov/Pages/resources-Floods.aspx>
<https://mema.maryland.gov/community/Pages/Mitigation.aspx>
- **Federal Emergency Management Agency (FEMA)/National Flood Insurance Program (NFIP)**
<https://www.fema.gov/national-flood-insurance-program>
<https://www.floodsmart.gov/>
<https://msc.fema.gov/portal/home>
- **Federal Alliance for Safe Homes (FLASH)**
<https://www.flash.org/>
<https://www.flash.org/hurricanestrong/>



Thank you!

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For the portion presented by
the American Red Cross,
please refer to the recording
of the webinar for the slides.

Questions?

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