

OTTAWA COUNTY AND SANDUSKY COUNTY COMMUNITY CONSULTATION OFFICERS (CCO) MEETING

December 7, 2017





TODAY'S AGENDA

The Value of Updated Flood Maps for Your Community

Reviewing the Updated Flood Risk Data for Your County

Next Steps in the Map Adoption Process

Understanding Flood Insurance

Hazard Mitigation

Why Are We Here?

FEMA is here today to:

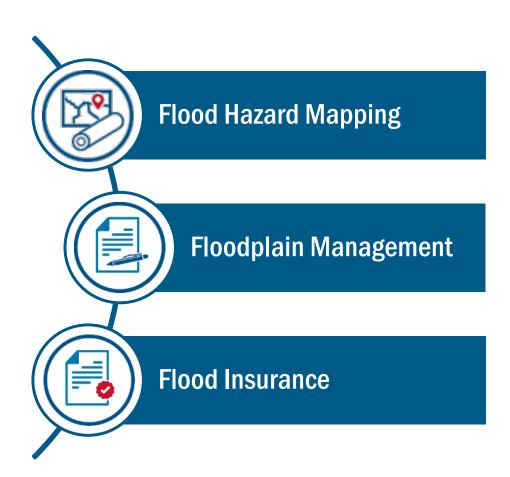
- Present new flood maps for Ottawa County and Sandusky County
- ▶ Help you assess your community's flood risk
- Explain how the maps inform risk assessment and the National Flood Insurance
 Program (NFIP)
- Review your role in the next steps of this mapping process
- Answer your questions





The National Flood Insurance Program

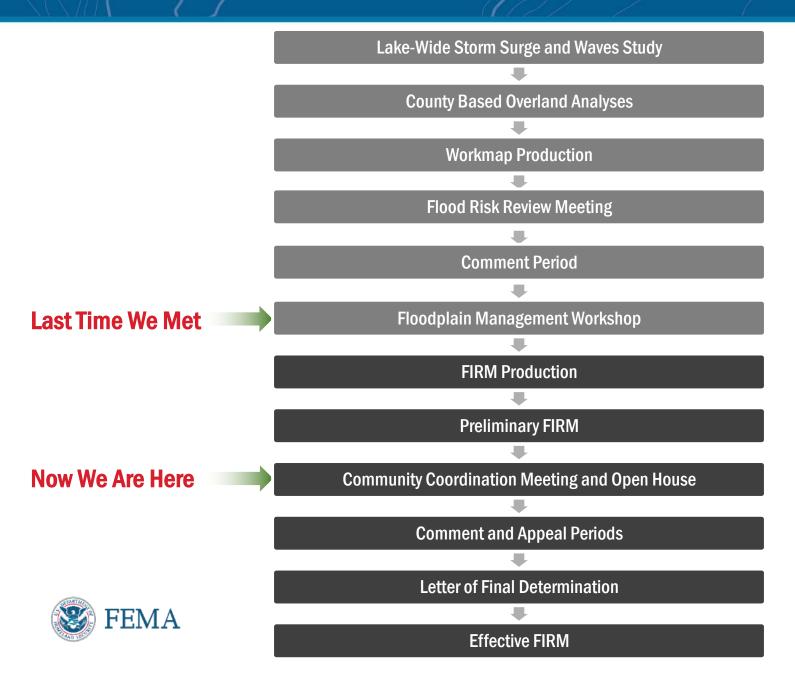
The National Flood
Insurance Program, or NFIP,
balances three related areas
that must support each
other.







The Status of this Study











Flood Maps are Used to Make Important Decisions



To Identify and Assess Flood Risk



To Establish
Rates for Flood
Insurance



To Guide Local Land Use Decisions



To Inform
Engineers
and Developers



To Prepare Emergency Managers





Why is FEMA Updating this Community's Flood Maps?

The Great Lakes Coastal Flood Study provides updated flood risk information across each of the Great Lakes, including Lake Erie, using uniform methodology, updated terrain data, and modern wave modeling techniques.

Many factors contribute to flood risk changes over time:

- ▶ Population growth & increased development
- ▶ Movement in rivers & coastline
- Changing weather patterns & updated rainfall data

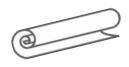






Your Role in this Process

As Local Officials, Floodplain Administrators, and Staff you can:



Provide technical review of preliminary data



Submit questions and comments to FEMA



Share new flood risk information with property owners and stakeholders



Identify mitigation needs and priorities



Update local plans, codes, and ordinances







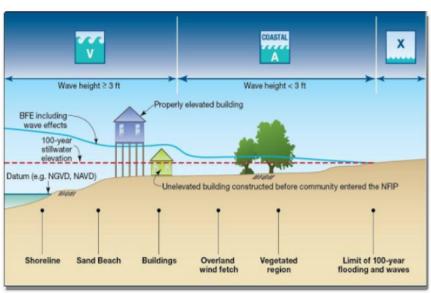




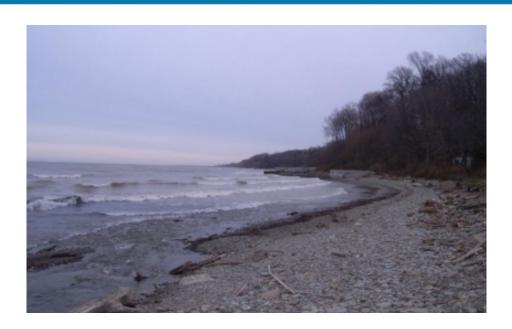
The Great Lakes Coastal Flood Study Approach

Regional Study Approach

- Water level and wave analysis
 - 155 storms from 1960-2009
- Greater consistency in assumptions
- Reduces number of boundary conditions







▶ Local/County Level Activities

- Mapping level tasks performed at county level
- Nearshore wave transformations
- Erosion
- Wave runup
- Overland wave propagation





The Great Lakes Coastal Flood Study in Ottawa County and Sandusky County

- Ottawa: 70 miles of coastline
 - Coastal Hazard Analysis
 - 73 Coastal Transects
- Sandusky: 39 miles of coastline
 - Coastal Hazard Analysis
 - 6 Coastal Transects

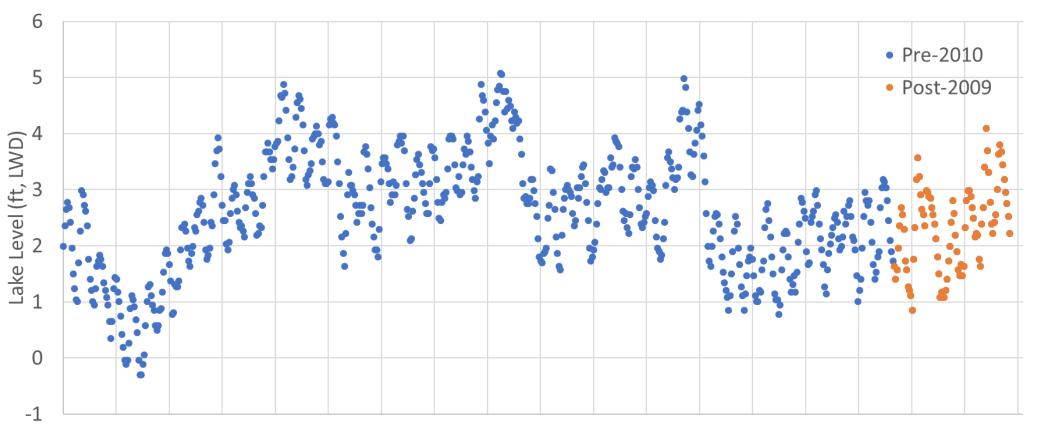
- Riverine-Coastal Special Flood Hazard Area integration
- Topography
 - 2012 U.S. Army
 Corp of Engineers
 Lake Erie LiDAR
 - 2006 OhioStatewideImagery Program(OSIP) LiDAR







Great Lakes Water Levels

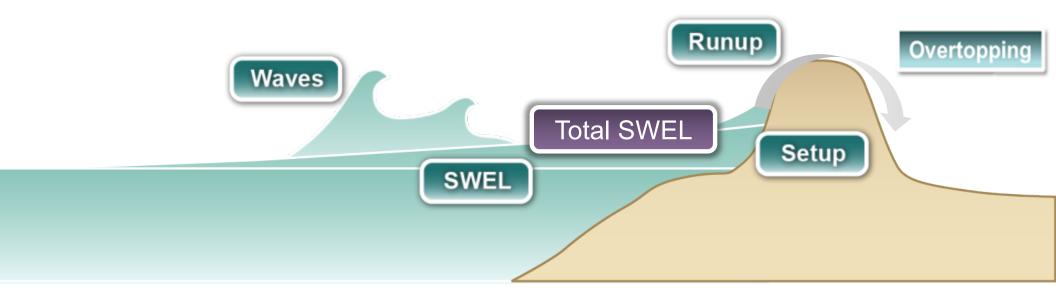








Measuring Coastal Base Flood Elevation

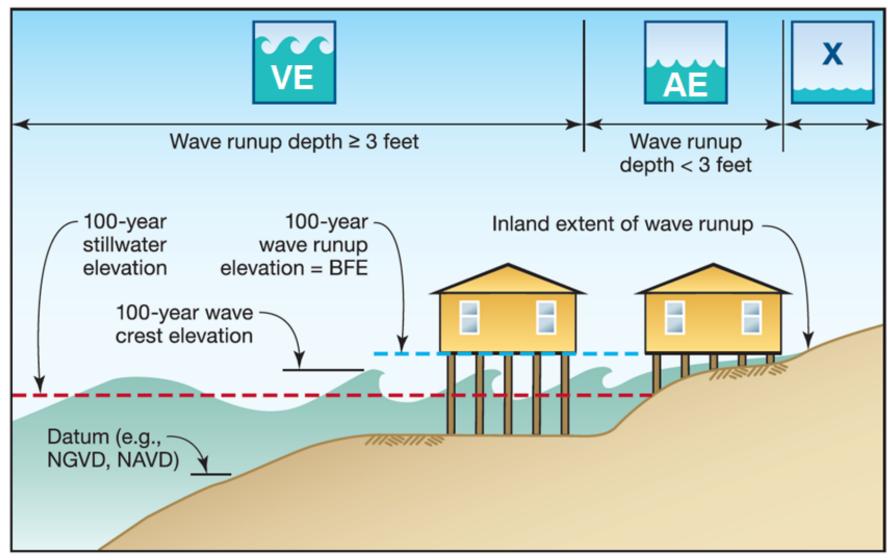


SWEL = Stillwater Elevation (storm surge level)
Total SWEL = Stillwater Elevation, inclusive of wave setup





Runup Mapping







Wave Runup Mapping

- Wave runup is very sensitive to shoreline characteristics
- Single Base Flood Elevation (BFE)
- Gutters perpendicular to the shore divide the BFEs
- Transitional zones capture changes in shoreline characteristics between transects

Wave runup mapping may have associated overtopping or AO zones







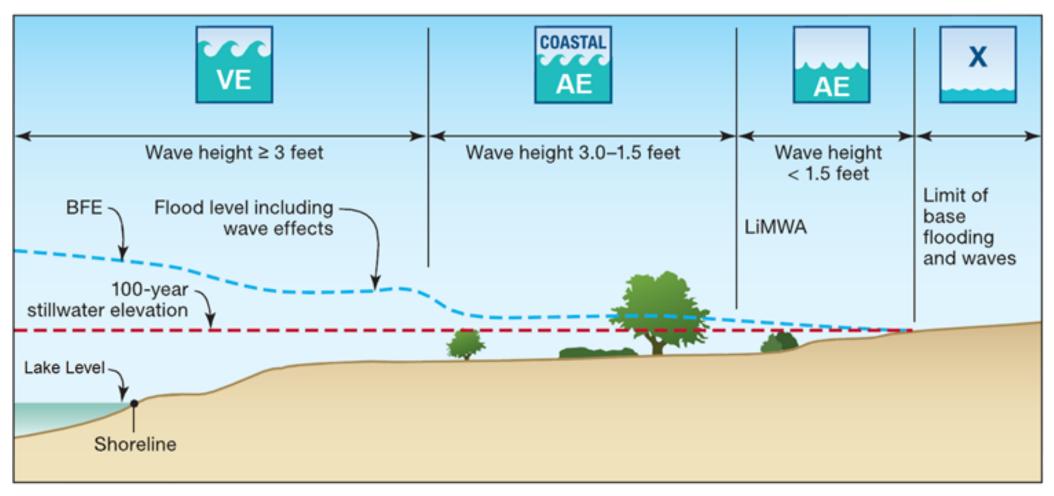
Wave Overtopping: Zone AO (Ottawa County)



- Overtopping rate considerations for establishing flood insurance rate zones
- **▶** Sheet Flow Considerations
 - Areas where AE not present beyond slope break
 - Duration of overtopping
 - Rainfall associated with event
 - Topography
 - Drainage landward of the overtopped barrier



Overland Mapping



LiMWA: Limit of Moderate Wave Action





Special Flood Hazard Area (SFHA) Zones

Zone VE (Ottawa County)

- Coastal high-hazard zone areas where wave action and/or high-velocity water can cause structural damage during the 1-percent-annual-chance flood
- Wave heights > 3ft
- Subdivided into elevation zones & BFEs are assigned

Zone AE

- Applied in areas subject to inundation by the 1-percent-annual-chance flood
- Wave heights < 3ft
- Subdivided into elevation zones & BFEs are assigned

Zone AO (Ottawa County)

Applied in areas of sheet-flow & shallow flooding



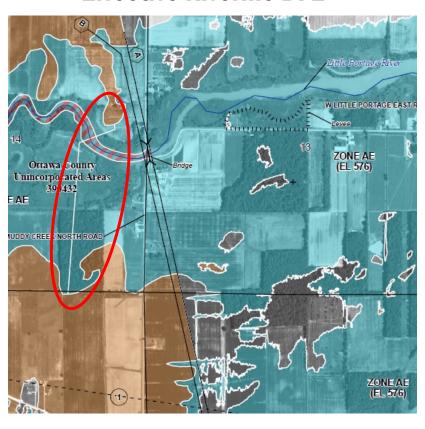


Scope of Work: Integrating Riverine and Coastal Data

Updated Coastal Stillwater BFE



Effective Riverine BFE

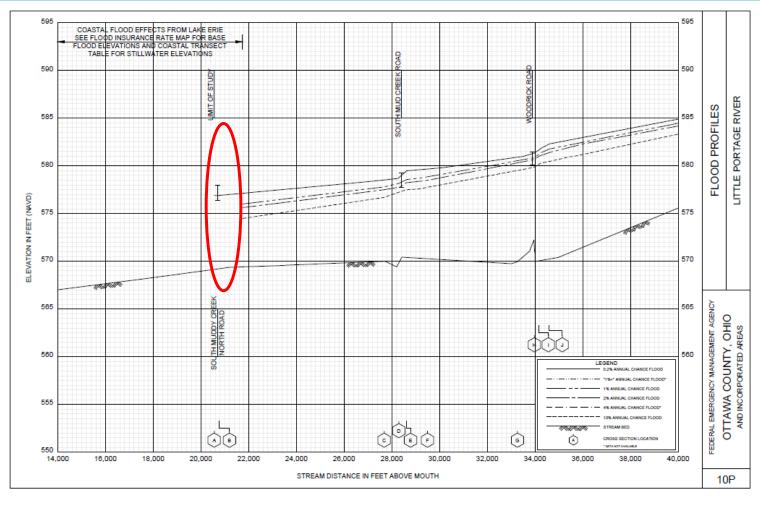


Limits of Coastal Flood Effects from Lake Erie are shown on FIRM (white line) and in the Flood Insurance Study (in Table 24: Floodway Data and in Flood Profiles)





Scope of Work: Riverine-Coastal SFHA Integration





CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SECOND)	WIDTH REDUCED FROM PRIOR STUDY (FEET) ³	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A B	20,562 20,768	135 134	731 697	2.9 3.1		*	575.7 ² 575.7 ²	575.7 575.7	0.0 0.0

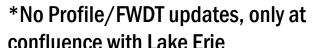


Scope of Work: Riverine-Coastal SFHA Integration

- Detailed Zone AE
- Ottawa County
 - Crane Creek 3P
 - Incorporated USGS study to create seamless boundary with Lucas County
 - Little Portage River 10P
 - Portage River 14P
 - Toussaint Creek 21P
- Sandusky County
 - Sandusky River
 - downstream of Cross Section A

- Approximate Zone A *
- Ottawa County
 - Packer Creek
- Sandusky County
 - Druckenmiller Ditch
 - Green Creek
 - Little Pickerel Creek
 - Muddy Creek
 - Pickerel Creek
 - Raccoon Creek
 - South Creek
 - Yellow Swale







What are "Changes Since Last FIRM"?

The "Changes Since Last FIRM" (CSLF) product compares the Effective Flood Insurance Rate Maps (FIRMs) to the new Preliminary FIRMs in GIS format.

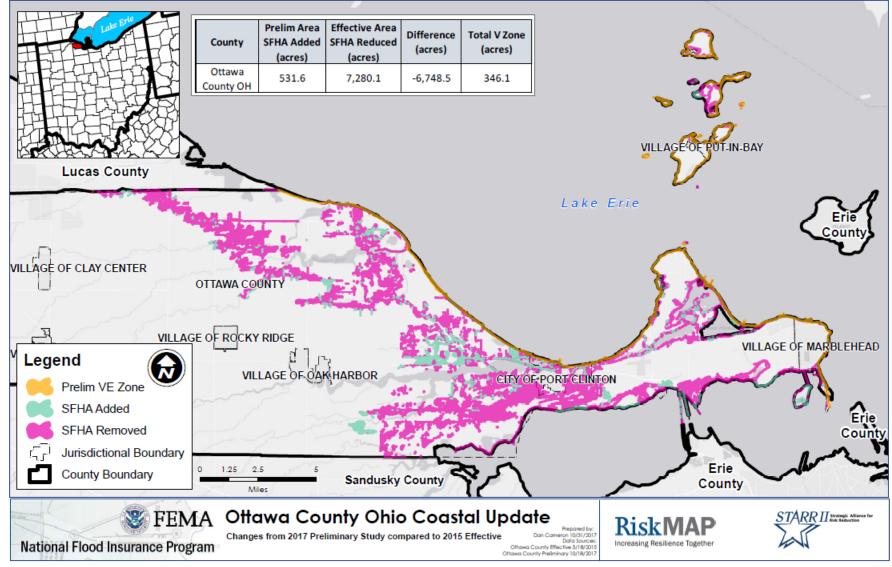
In these counties, as in all counties along the Great Lakes:

- Coastal VE Zone replaced Effective Zone AE (does not include Sandusky County)
 - Coastal High Hazard (Wave heights > 3ft)
- New Coastal AE Zones
 - Inland (behind shoreline) (Wave heights < 3ft)
- New Coastal AO Zones (does not include Sandusky County)
 - Shallow Ponding Depths 1-3ft
- Riverine AE & A Zones were integrated
 - Coastal Stillwater Backwater Elevations were remapped, where applicable





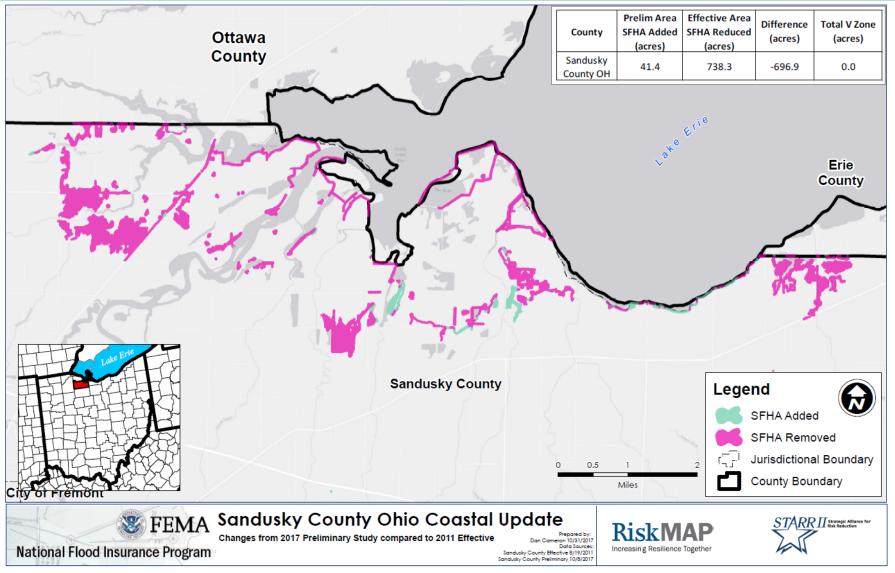
Changes Since Last FIRM in Ottawa County







Changes Since Last FIRM in Sandusky County







Summary of Letter of Map Changes (LOMCs)

SOMA-1

PRELIMINARY SUMMARY OF MAP ACTIONS

Community: OTTAWA COUNTY Community No: 39043

2A. LOMCs on Revised Panels

LOMC	Case No.	Date Issued	Project Identifier	Original Panel	Current Panel
LOMA	89-05-1167W	10/25/1989	7100 NORTH WILD FLOWER	3904320025A	39123C0055D
LOMA	93-05-1048A	10/13/1993	103 WEST ROSE LANE-E1/2 OF NW1/2 OF SECTION 1, T8, R18E	3904320125D	39123C0139D
LOMA	94-05-130A	03/22/1994	LOTS 8 & 9 - RIVER RUN SUBDIVISION	3904320050B	39123C0113D
LOMA	94-05-910A	08/16/1994	LOT 3 - LEMARIN CONDOMINIUM, SECTION 3	3904230200B	39123C0165D
LOMA	95-05-2034A	09/25/1995	518 N. S.R. #590	3904320050B	39123C0080D
LOMA	96-05-974A	02/21/1996	LOT 9 - SALEM MANOR, PLAT 2 IN SECTION 1	3904320050B	39123C0115D
LOMA	98-05-2072A	04/25/1996	LOT 27 - NORTHCOAST	3904320200B	39123C0170D
LOMA	98-05-3292A	08/07/1996	LOT 8 - SALEM MANOR, PLAT 2, SECTION 1	3904320050B	39123C0115D
LOMA	98-05-2882A	09/10/1996	TWO PARCELS IN SOUTHEAST QUARTER, SECTION 7	3904320125B	39123C0281D
LOMR-F	98-05-3210A	09/20/1996	LAKEFRONT VILLA CONDOMINIUMS, PHASE 1	3904320125B	39123C0140D
LOMA	98-05-4170A	10/10/1996	7102 N. ELLISTON-TROWBRIDGE ROAD	3904320025A	39123C0060D
LOMA	97-05-086A	11/21/1996	LOT 7 - RASMUSSEN SUBDIVISION	3904320200B	39123C0170D
LOMR-F	97-05-956A	02/07/1997	1650 S. FULTON STREET - E 1/2 OF E 1/2 OF SE 1/4 OF SECTION 7	3904320125B	39123C0281D
LOMR-F	98-05-1322A	02/11/1998	JOE WATERS 8.953 ACRES - SECTION 31	3904320125B	39123C0120D
LOMR-F	98-05-1412A	04/15/1998	THE ANCHORAGE SUBDIVISION - PORTIONS OF LOT 13, SECTION 4	3904320200B	39123C0165D
LOMA	98-05-3536A	05/06/1998	STALEYS LANDING - LOTS 1-5 & THE N.W. CORNER OF LOT 2, SECTION 3	3904320200B	39123C0165D
LOMA	98-05-3254A	05/15/1998	AN 8.750 ACRE PARCEL IN THE S.E. QUARTER OF SECTION 7	3904320125B	39123C0281D

10/17/2017

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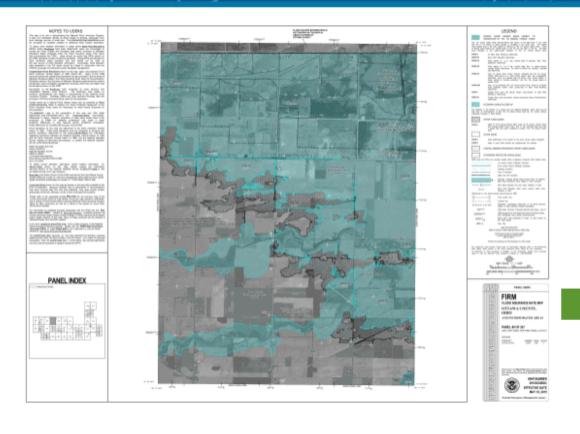
All LOMCs were addressed in the preliminary Summary of Map Actions (SOMA) and placed into one of four categories:

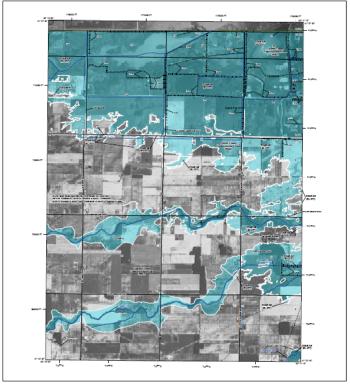
- 1. Incorporated
- 2. Not Incorporated (validated)
 - LOMCs on Revised Panels
 - LOMCs on Unrevised Panels
- 3. Superseded
- 4. To be Re-determined

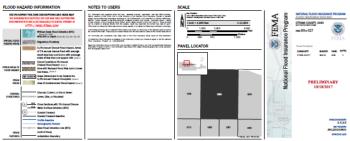
Be sure to review the prelim SOMA for completeness

If you note a LOMC missing from the list, submit the omission with your comments

NOTE: Format Changes to the FIRM











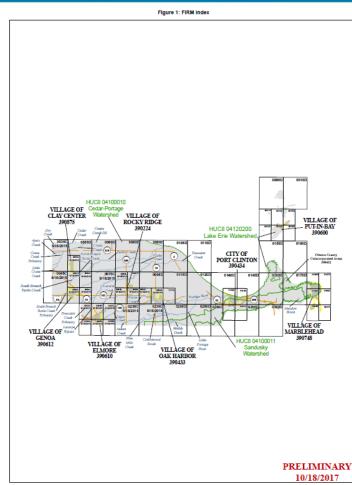
NOTE: Format Changes to the Flood Insurance Study (FIS)

FIRM Index integrated into the FIS

- Simplified significantly
 - FIRM Panel Index, Political Areas, & Watershed Boundaries
 - Panel dates/Panel-Not-Printed notes kept on Index
- 11x17 fold-out
- Map repositories and community dates are moved into FIS tables

Other additions to FIS:

- Summary Tables added
 - Hydrologic and Hydraulic Analysis
- FIRM "Map Legend" added to FIS
- FIRM "Notes to Users" moved to FIS











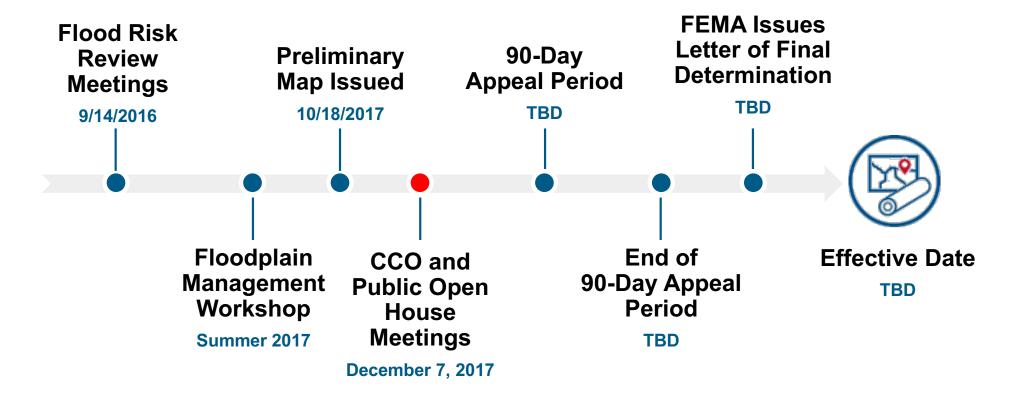








Timeline for Ashtabula County







4-Step Pre-Adoption Process









Inform the Community

Gather Comments and Additional Data

Appeal Process

LFD Issued





#1: Inform the Community – Open House

- Notifications to the Public
- Property Identification Mapping Assistance
- Comment Sheets Collected for Review
- Attendees Notified as Process Moves Forward







#2: Gather Community Comments

- Comment forms are available at the Open House
- Homeowners submit their comments to local community officials
- Local community officials forward comments to FEMA Region V Service Center







#3: Appeal Process

- Appeal Period is 90 days
- **▶ Publication of Notice in Federal Register**
 - Notification to communities by letter including two local newspaper publications
- All are welcome to submit information
 - FEMA recommends directing comments through local community officials to provide a consolidated picture
- Appeals should be submitted to STARR II or FEMA Region V
 - Additional instructions will be provided to Community CEO
- ► FEMA will evaluate all appeals and comments for resolution after the Appeal Period







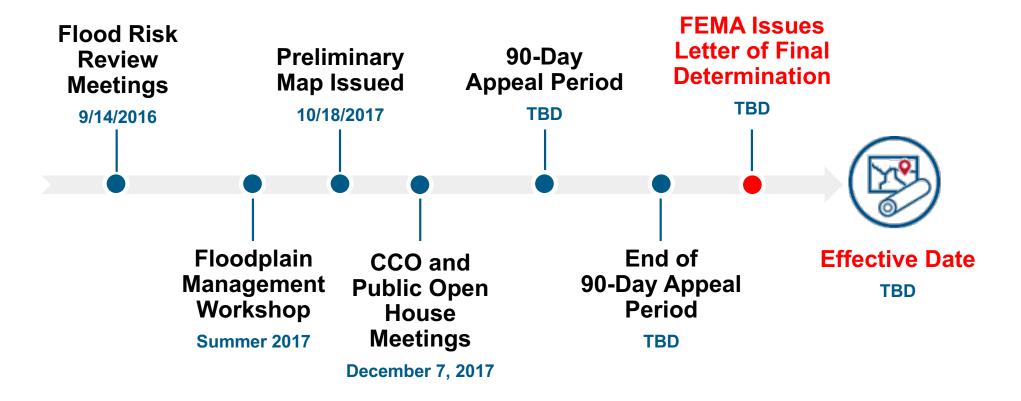
The Appeals Period: Appeals vs. Comments

- ▶ To be considered an appeal, a submittal must:
 - Include data that shows the proposed flood hazard information (e.g. new or modified Special Flood Hazard Area zones or boundaries, Base Flood Elevations, base flood depths, and/or floodway boundaries) is scientifically or technically incorrect;
 - Include the necessary revisions to the FIRM and/or FIS report (e.g. boundaries of revised floodplains);
 - Be received during the statutory 90-day appeal period
- ► The term comment is used for any submittal that does not meet the requirements for an appeal as outlined above



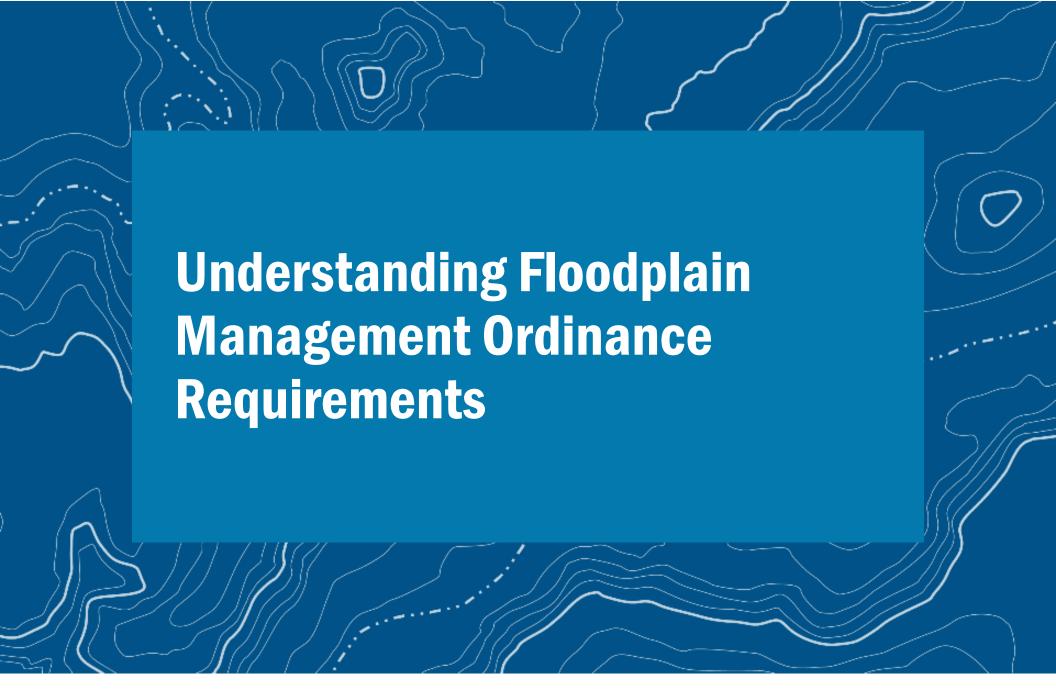


#4: Issuing the Letter of Final Determination













Participation in the National Flood Insurance Program

- **▶** NFIP is a voluntary program.
- Participation requires that communities adopt and enforce floodplain management regulations in the form of a community ordinance.
- At a minimum, the floodplain management regulations need to be based on the risk data provided by FEMA (the FIRM and FIS).
- Participation in the NFIP makes flood insurance available to the residents and businesses within your communities.
- Flood insurance is a requirement for federal loans (insured or otherwise) or other federal financial assistance to purchase, repair, improve or rehabilitate buildings within the SFHA.
- Many forms of disaster assistance are either a type of federal loan or other federal financial assistance.





Ordinance Adoption During Map Updates

- Timeline Prior to Effective Date:
 - 6 months prior: FEMA 6-month LFD Letter
 - 4 months prior: Draft Ordinance (suggested)
 - 3 months prior: FEMA 90-day Reminder Letter
 - 1 month prior: FEMA 30-day Reminder Letter
- Ordinance needs to be compliant prior to effective date of FIRM & FIS (or community may be suspended from NFIP)







Where to Find Minimum NFIP Requirements

- NFIP Minimum Floodplain Management Standards are found in Part 60 of Title 44, Code of Federal Regulations
- ▶ Coastal specific standards are found in Part 60.3(e)
- ▶ FEMA establishes the minimum requirements; however, states and local communities are encouraged to adopt more restrictive standards to better address their flood risk. When these higher standards are in place, they take precedent over the minimums.





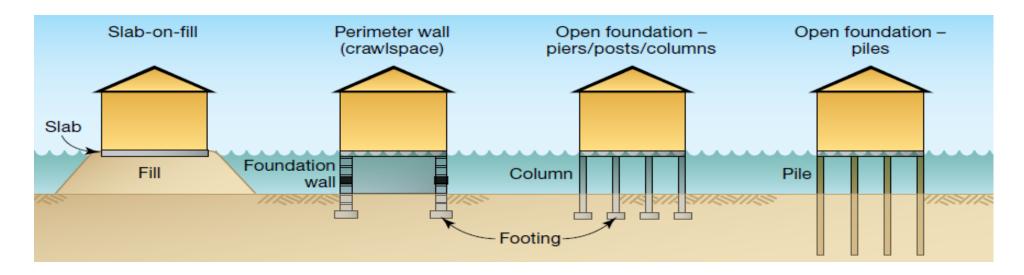
Differences in Development Requirements

A Zones

- Fill outside the floodway or which can be shown to not cause a rise to the BFE allowed.
- Fully-enclosed foundation wall (flood openings required) construction allowed.
- Lowest floor elevated to or above the base flood elevation (BFE).
- As-built lowest floor elevation required to be on file with permit records.

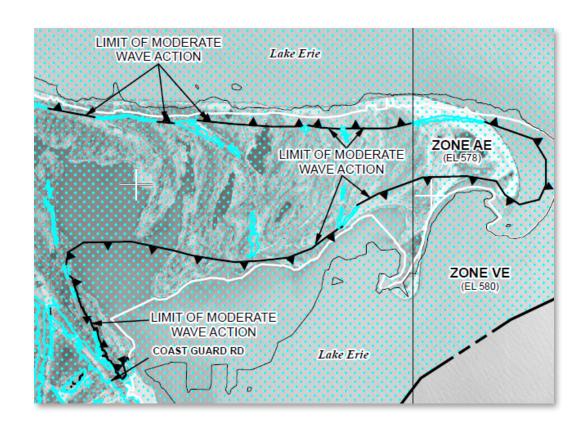
V Zones

- Fill not allowed for structural support of buildings.
- Open foundation on columns or piles free of obstructions or designed with break away walls.
- Bottom of lowest horizontal structural member to or above BFE.
- Professional Engineer or Architect shall certify the design, including wind loading, of the structure and be on file with the permit records.



LiMWA (Limit of Moderate Wave Action) on the Map

- ▶ At present, not a regulatory requirement
- Community Rating System (CRS) benefit for communities requiring VE Zone construction standards in areas defined by LiMWA or areas subject to waves greater than 1.5 feet
- Building codes may require construction to VE Zone standards when in a LiMWA













Flood Insurance Basic Concepts

 Structures built on or before December 31, 1974, or before the effective date of the initial FIRM of the community, whichever is later Structures built after **December 31, 1974**, OR on or after the effective date of the initial FIRM of the community, whichever is later.

Pre-FIRM

Post-FIRM





Flood Insurance Basic Concepts

▶ Pre-FIRM (subsidized) rates

- For structures built before the first maps of the community
- Do not reflect the structure's true risk negatively or positively
- Based on building type, occupancy
- Subsidies are being phased out, with some categories increasing more quickly

▶ Post-FIRM (actuarial) rates

- Uses the structure's elevation information to determine risk
- Based on elevation difference between BFE (Base Flood Elevation) and lowest floor
- For Post- and Pre-FIRM structures, if there is an elevation certificate





Effects of New Flood Zones on Flood Insurance

▶ A property owner's insurance needs may change with the new zones.

The new FIRM may:

- Map a property into the SFHA for the first time
 - Their lender may require them to get an insurance policy
- Create a zone change on an already mapped-in property
 - Moving from an "A" zone to a "V" zone
 - Rating will change the next policy year
- Not affect a property or an insurance policy at all





Insurance Rates in Zone VE

Subsidized Rate Class

- Structures are likely already shown in the SFHA (zone A, AE, A1-30, AH, or AO) on the prior FIRM, and
- In Standard Rated Policy
 - The rates may be somewhat higher than other rate classes and are receiving subsidy phase-out

Actuarial (Elevation Based) Rate Class

- Built after first FIRM or New construction in V zones
- Rates are higher across the board based on obstructions: lattice work, horizontal member, enclosures, etc.
- Built correctly without obstruction can be less costly





New Construction in Post-FIRM VE Zone

- Don't expect, or predict, "affordable" flood insurance to be available for new construction in Zone VE
- Hold design professionals and construction contractors to the highest standard in Zone VE
- Avoid it if possible





Insurance Rating and Product Possibilities

- Grandfathering (Standard)
 - Keeps lower rate zone and/or BFE
- **▶ Two Ways**
 - Continuous coverage (Pre & Post)
 - Coverage obtained prior and through a map change
 - Built-in-compliance
 - Post-FIRM ONLY
 - Built in compliance with the map at the time

- Newly Mapped Preferred Risk Policy
 - Must be Newly Mapped into SFHA from previous FIRM
 - Must have two or fewer losses from NFIP or disaster assistance
 - Bundled standard Preferred Risk Policy for the first year
 - Multiplier added after the first year





Insurance Rating and Product Possibilities

- Grandfathering (Standard)
- Exceptions
 - Can't have lapse in coverage
 - Building can't be altered/substantially improved

- Newly Mapped Preferred Risk Policy
- Exceptions
 - Can't be community's first FIRM
 - Multi-unit buildings insured under the RCBAP
 - Policy is first purchased more than 12 months after the effective date of the FIRM
 - Can't have lapse in coverage
 - Building can't be altered/substantially improved





Resources for Insurance

▶ FEMA.GOV



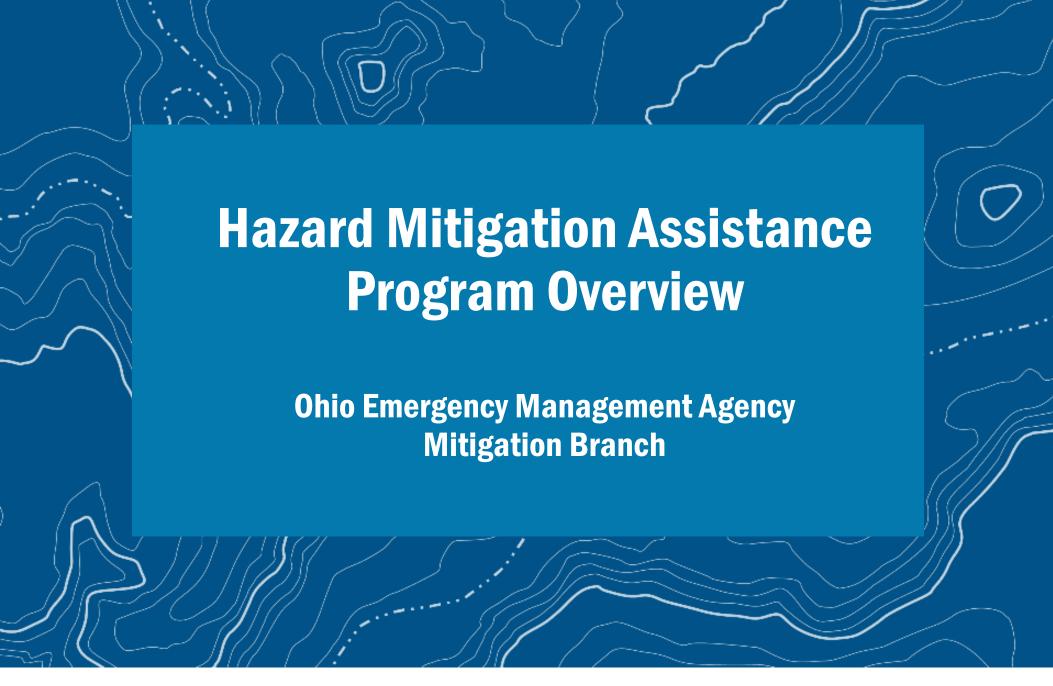
- Grandfathering
- Newly Mapped PRP
- **▶ Flood Insurance Reform**

Flood Insurance Manual

- https://www.fema.gov/flood-insurancemanual
 - General Rules
 - Newly Mapped
 - Rating
- ▶ Flood Insurance Rate Maps
 - www.msc.fema.gov











Ohio EMA Mitigation Branch

The mission of the Mitigation Branch is to integrate hazard mitigation principles in a variety of ways to make Ohio communities more sustainable and citizens more resilient in the face of future disaster events.



- Develop and maintain the SHMP
- Assist Ohio communities in local mitigation planning efforts
- Administer FEMAs Hazard Mitigation Assistance grant programs
- Chair the State Hazard Mitigation Team

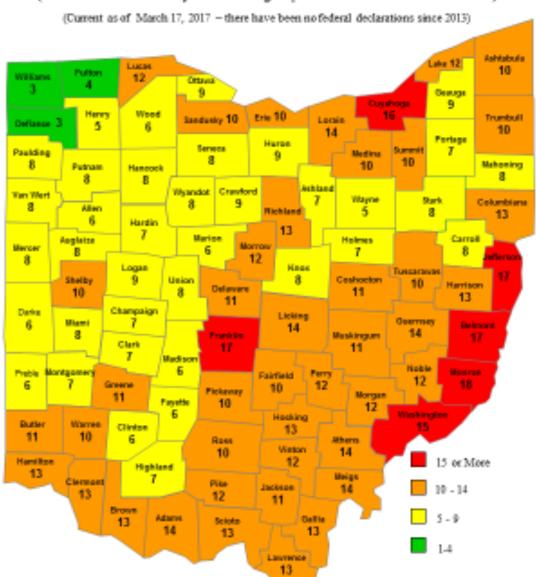




Ohio is Disaster Prone!

OHIO PRESIDENTIAL DISASTER DECLARATIONS

(Includes all FEMA Major and Emergency Declarations from 1964 - 2013)







What is Hazard Mitigation?

- Any sustained action taken to reduce long-term risk to people and property from hazards and their effects.
 - Acquisition/demolition
 - Elevation
 - Storm water infrastructure
 - Flood insurance
 - Tornado safe rooms
 - Building, zoning and floodplain management codes
 - Wetland and riparian area protection

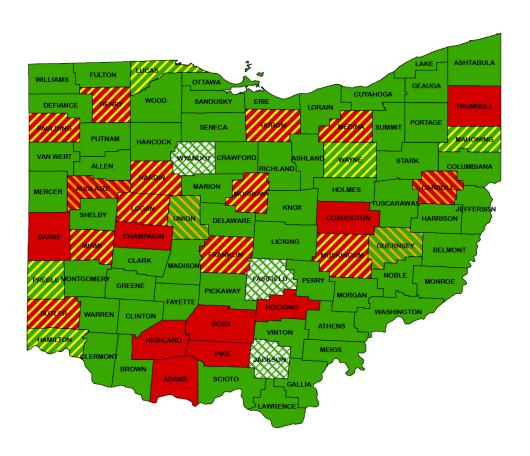




Current Local Hazard Mitigation Plan Status

- Foundation of mitigation
- Hazard Identification and Risk Assessment
- Identifies and evaluates mitigations actions
- Must be updated and approved by FEMA every 5 years

Local Hazard Mitigation Plan Status as of 11/22/17







Unified Hazard Mitigation Assistance

- ▶ Pre-disaster mitigation grant programs:
 - Pre-Disaster Mitigation (PDM)
 - Flood Mitigation Assistance (FMA)
- Post-disaster mitigation grant:
 - Hazard Mitigation Grant Program (HMGP)







Hazard Mitigation Assistance Guidance

Hazard Mitigation Grant Program, Pre-Disaster Mitigation Program, and Flood Mitigation Assistance Program February 27, 2015



Federal Emergency Management Agency Department of Homeland Security 500 C Street, S.W. Washington, DC 20472





FEMA Hazard Mitigation Assistance

- **Each program follows this basic process:**
 - Local governments apply for grants
 - State governments assist locals, review grants, and submit applications to FEMA
 - FEMA reviews grant applications and makes funding determinations; also provides technical assistance to states and locals





FEMA HMA Programs

- Cost effective
- **EHP review**
- ▶ 0 25% non-Federal cost share requirement
- ▶ Projects must be consistent with local and state mitigation plans
- ▶ Community must participate and be in good standing with NFIP





OEMA Mitigation Branch Contacts

Web: https://sharpp.dps.ohio.gov/ohiosharpp/

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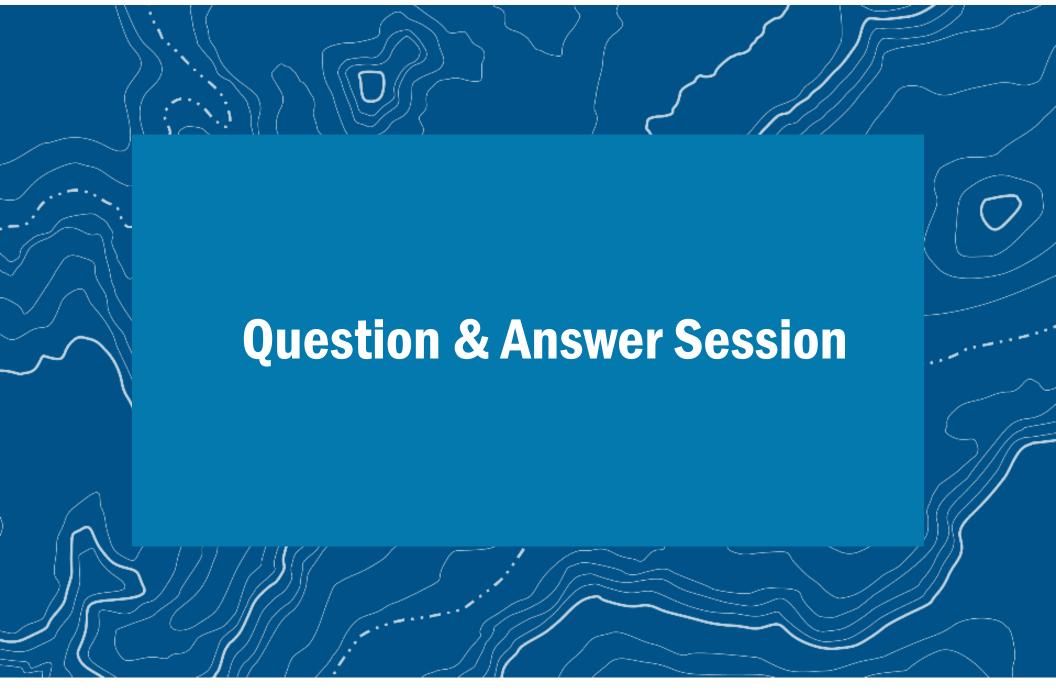
Jacob Hoover, AICP, CFM Mitigation Supervisor (614) 799-3538 jmhoover@dps.ohio.gov

Sharon Rolf Mitigation Specialist (614) 799-3530 srolf@dps.ohio.gov

Alex Strawser
Mitigation Intern
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Questions and Additional Information

Visit:

www.greatlakescoast.org

www.fema.gov/preliminaryfloodhazarddata

FEMA ArcGIS Online Preliminary Map Viewer

Contact:

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FEMA Region V

Ken Hinterlong

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