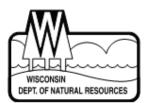


LOCAL OFFICIALS' MEETING

Sheboygan County- Milwaukee River Watershed and Coastal Study Map Update

SHEBOYGAN COUNTY, WISCONSIN October 4, 2022





Zoom Meeting Housekeeping

- Please enter the organization you belong to in the group chat or to Betsy Finlay so that we have a record of all stakeholders who attended
- If you were not on the original invite and would like to keep updated, please also include your e-mail with your organization in the chat to Betsy
- You are muted and video turned off upon entry
- If you wish to ask a question, raise your hand or type it in chat (to everyone or to Betsy Finlay)





Welcome & Introduction

- Risk MAP Project Team, Wisconsin Department of Natural Resources (WDNR)
 - Emily Szajna Project Lead
 - Brian Cunningham NFIP Coordinator
 - Betsy Finlay Program Coordinator
 - Chad Heimerl Floodplain Engineer
 - Chris Olds State Floodplain Engineer
 - Andrea Stern Regional Engineer
 - Tanya Lourigan Dam Safety/Floodplain Section Supervisor





Welcome & Introduction

- Federal Emergency Management Agency (FEMA)
 - Munib Ahmad Region V Engineer
 - Ken Hinterlong Region V Engineer
 - Frank Shockey Region V Senior NFIP Specialist
 - Cadence Peterson Region V Planner





Meeting Agenda

- RiskMAP Overview and Project History
- Great Lakes Coastal Study approach
- NFIP & Floodplain Management
 Overview
- Preliminary Products Review
- LOMCs & SOMA
- Next Steps/Map Adoption





What is Risk MAP?

FEMA's Risk Mapping, Assessment, and Planning (Risk MAP) program involves collaboration with State, Local, and Tribal entities to deliver quality data that increases <u>public</u> <u>awareness</u> and leads to <u>action that</u> <u>reduces risk</u> to life and property

- Deliver quality data
- Increase public awareness of flood risk
- Encourage local/regional actions that reduce risk





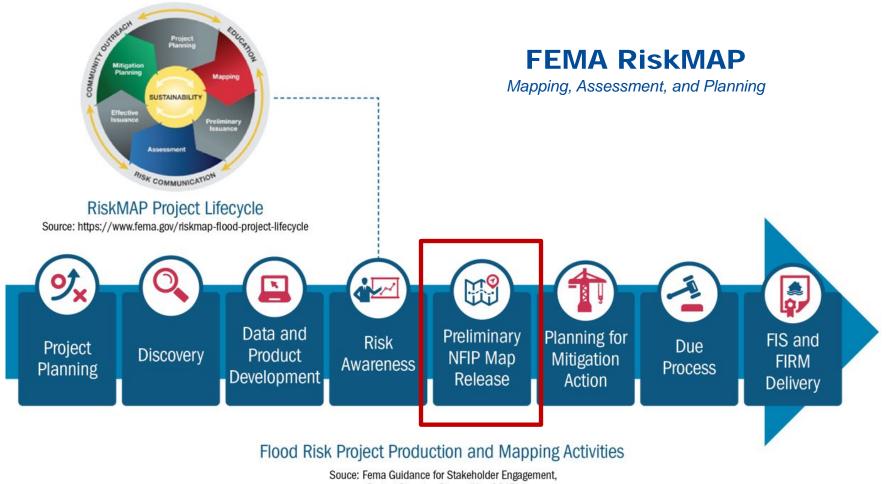


Risk MAP Project Benefits

- Flood risk products and flood hazard maps that are:
 - Developed by FEMA in collaboration with communities
 - Based on the best available data from the community and latest technologies
 - Conducted by watershed
 - Strengthened by partnerships
- Risk MAP tools and data can be used to:
 - Create or improve your Hazard Mitigation Plans
 - Make informed decisions about development, ordinances, and flood mitigation projects
 - Communicate with citizens about flood risk







Project Planning Phase (Nov 2015)





Increasing Resilience Together

Project History

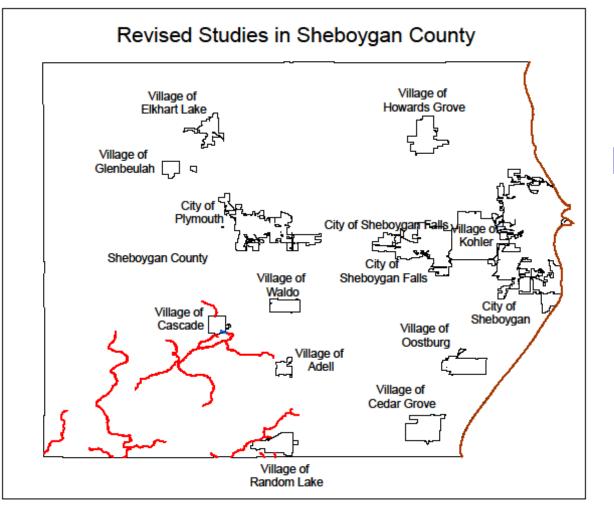
Milwaukee River Wate	ershed Great L	akes Coastal Study
2013	Project Planning	2010
February 2014	Discovery	February 2013
2014-2019	Data Development	2013-2018
August 2019	Flood Risk Review/Resilience	August 2017
<u>Sh</u>	eboygan Update	

Preliminary Map Release: June 22, 2022

- Download here: <u>https://www.fema.gov/preliminaryfloodhazarddata</u>
 - FEMA Flood Map Change Viewer: <u>https://msc.fema.gov/fmcv</u>
 - Local Officials Meeting/Public Open House October 4, 2022







Revised Studies







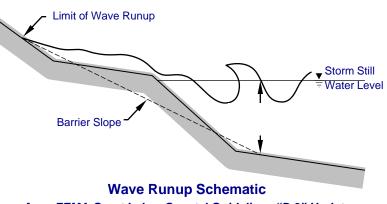
Increasing Resilience Together

The Great Lakes Coastal Flood Study Approach

Regional Study Approach

- · Lakewide water level and wave analysis
 - 150 storms from 1960 to 2009
 - Modeling conducted by STARR in 2016
- Greater consistency in assumptions
- Reduces number of boundary conditions





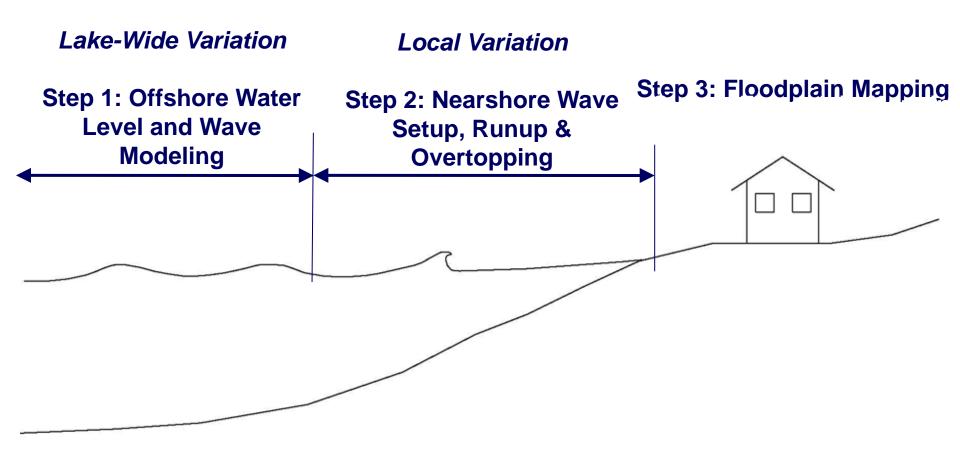
from FEMA Great Lakes Coastal Guidelines "D.3" Update

- Mapping tasks performed at the county level
- Nearshore wave transformations
- Episodic erosion
- Wave setup
- Runup and overtopping
- Overland wave propagation





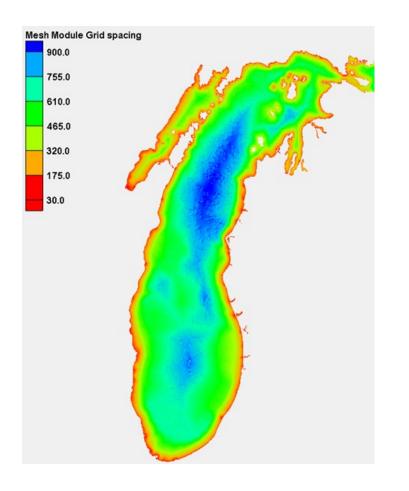
Coastal Flood Hazard Modeling Overview







Offshore Water Level and Wave Modeling ADCIRC+SWAN Mesh



 Resolution as Fine as 10 m Along Complex Shoreline Features including Jetties, Breakwaters, Inlets, and Natural Shoals





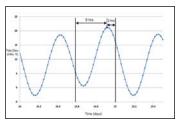


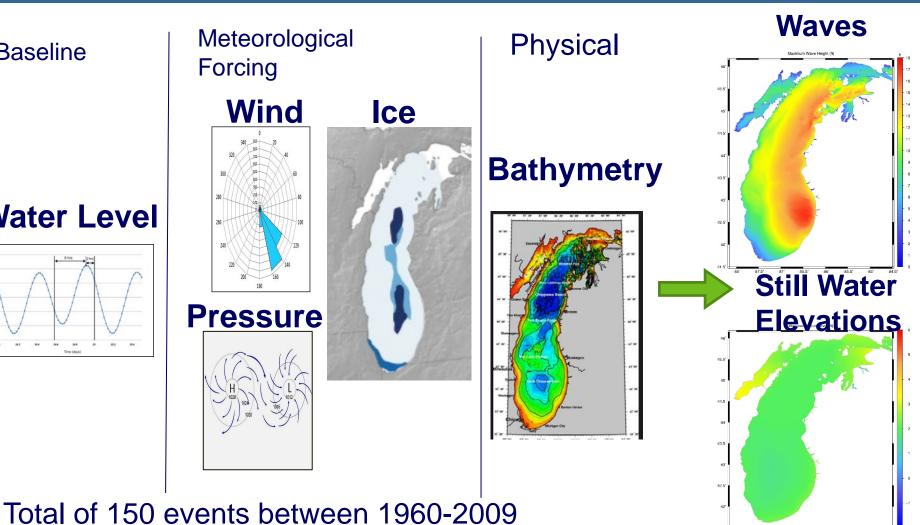
Increasing Resilience

Offshore Water Level and Wave Modeling Data inputs for lake-wide surface grid

Baseline

Water Level

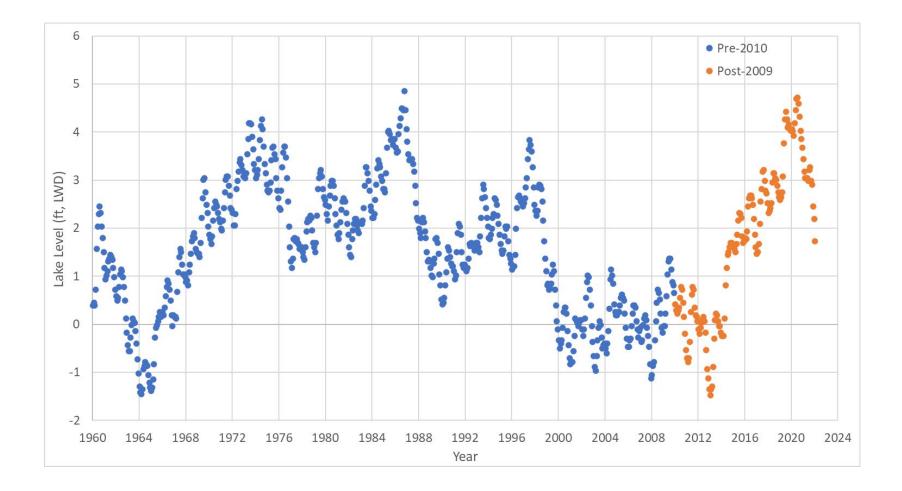








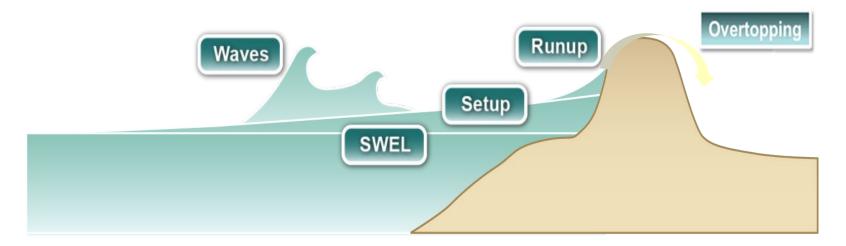
Lake Michigan Water Levels







Measuring Coastal Base Flood Elevation



SWEL = Stillwater Elevation (storm surge level) TWEL = Total Water Elevation (SWEL + wave effects)





Increasing Resilience Together

Special Flood Hazard Areas (SFHAs) -Coastal

Zone VE

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

Zone AE

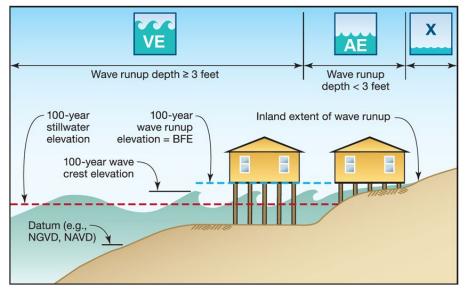
- Applied in areas subject to lower wave energy or inundation by the 1-percent-annual-chance flood
- Wave heights or wave runup < 3 feet
- Subdivided into elevation zones, and BFEs are assigned

Zone AO

- Applied in areas of sheet-flow and shallow flooding
- Given an associated depth instead of a BFE

Zone AH

- Applied in areas of ponding
- Assigned a BFE









Wave Runup Mapping

- Wave runup is very sensitive to shoreline characteristics, especially slope
- Single Base Flood Elevation (BFE)
- Gutters perpendicular to the shore divide the BFEs
- Runup is mapped to elevation associated with BFE, unless overtopping occurs
- VE transitions to AE where runup elevation (BFE) is less than 3 feet above ground elevations







Increasing Resilience Togethe

Wave Overtopping

- Wave overtopping occurs when the wave runup elevation exceeds the barrier's crest elevation
- When overtopping occurs, the zone behind the barrier is designated as:
 - AE if the landward slope is positive
 - BFE established based on runup elevation
 - AO if the landward slope is negative
 - Sheet flow depth established
 - AH if the landward slope is negative and flow is trapped behind a barrier
 - BFE established
- The overtopping rate determines VE splash zones and sheet flow depths





Photo: Green, M. Spencer. AP Photo. 2012. http://journalstar.com/ap/business/two-story-waves-on-great-lakeshalt-shipping/article_bcf2bb34-b528-52f5-8cd4-0c57e7ea8922.html





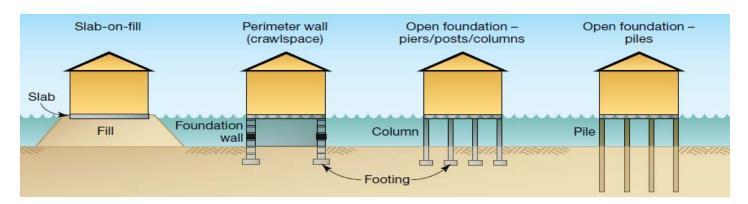
Differences in Development Requirements

A Zones

- Fill is allowed outside the floodway, or if it can be shown not to cause a rise in the BFE.
- Fully enclosed foundation walls (flood openings required) are allowed.
- The lowest floor must be elevated to or above the BFE.
- An as-built lowest floor elevation is required to be on file with the permit records.

VE Zones (and AE Zones on the water side of a LiMWA)

- Fill is not allowed for structural support of buildings.
- Only open foundations on columns or piles, free of obstructions, or breakaway walls are allowed below the BFE.
- Bottom of lowest horizontal structural member to or above BFE, with an as-built elevation on file.
- A Professional Engineer or Architect shall certify the design of the structure, including wind loading, and that must be on file with the permit records.







Increasing Resilience Togethe

The National Flood Insurance Program (NFIP)

- Created by the National Flood Insurance Act of 1968
- Participation is voluntary
 - Adopt and enforce regulations
 - Eligible for flood insurance
- Benefits of participation:
 - Flood insurance
 - Grants and loans
 - Disaster assistance
 - Federally-backed mortgages







NFIP Goals

- Reduce the loss of life and property caused by flooding
- Reduce rising disaster relief costs caused by flooding
- Maintain the natural and beneficial functions of the floodplains
- Minimize business interruptions and other economic disruptions
 Sparta, 1899: On the nigh



Sparta, 1899: On the night of June 11-12, an intense storm sent all local streams and rivers over their banks, washing out roads, bridges, and cultivated fields; there was no loss of life. [Wisconsin Centennial Story of Disasters and Other Unfortunate Events (Madison, 1948)]





Accomplishing NFIP Goals

- Publish maps identify risk
- Educate the public on their own risk
- Provide federally-backed flood insurance coverage
- Encourage development away from the flooding risks and minimize the damage potential to flooding through floodplain management





Trempealeau County





Basic NFIP Regulations

- Ensure that all proposed <u>development</u> is reasonable safe from flooding
- Ensure that the <u>lowest floor</u> of any <u>new</u> or <u>substantially</u>
 <u>damaged</u> or <u>improved structure</u> within the SFHA is elevated to or above the base flood elevation.
- Ensure that <u>development</u> within the Floodway does not increase flood heights.



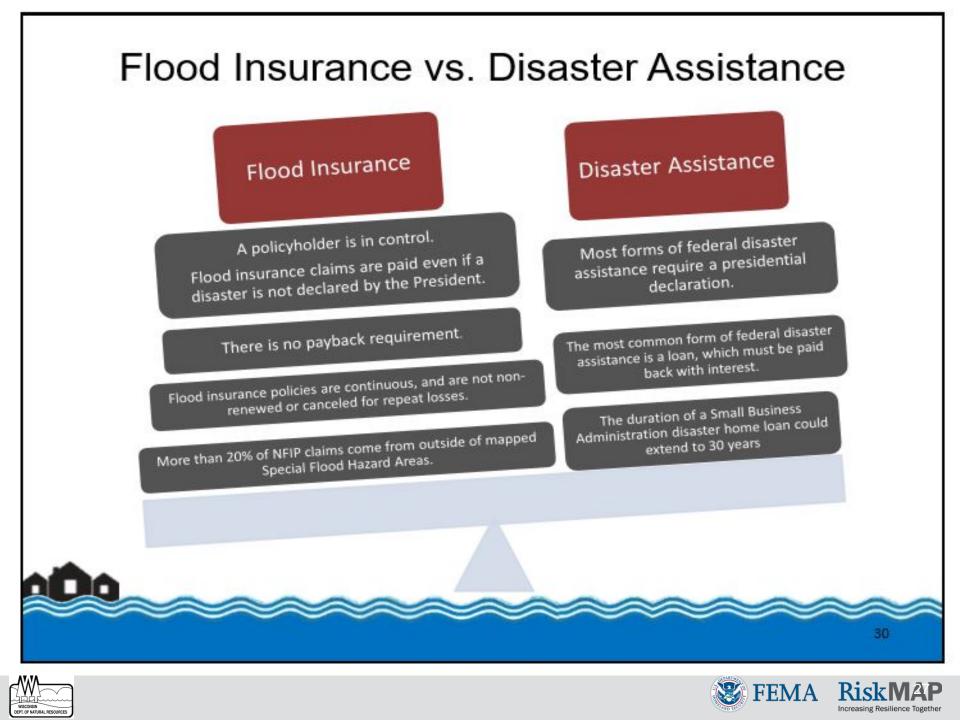
Sauk County 2008



Jefferson County 2008







Flood Insurance 101

- Homeowners insurance does not cover flooding
- Almost everyone in a participating community of the NFIP can buy flood insurance
- Available to homeowners, business owners, renters, condo unit owners, and condo associations
- Sold through private insurance companies and agents, or directly through the NFIP
- Claims are paid regardless of disaster declaration
- No payback requirement





Insurable by the NFIP

- Walled and roofed structures principally above ground
- Manufactured homes or travel trailers, if anchored to a permanent foundation
- Contents of structure (available to owners and renters)
- Building in the course of construction





Not Insurable by the NFIP

- Buildings completely over water
- Unanchored manufactured homes
- Motorized vehicles
- Gas and liquid storage tanks outside buildings
- Buildings principally below ground
- Machinery and equipment in the open
- Swimming pools, hot tubs, etc.





NFIP Limits of Coverage

How much flood insurance coverage is available?

Flood coverage limits for a standard flood policy are:

Coverage Type One to four-family structure One to four-family home contents Other residential structures Other residential contents Business structure Business contents Renter contents Coverage Limit \$250,000 \$100,000 \$500,000 \$100,000 \$500,000 \$500,000 \$100,000





FEMA is updating their flood insurance rates through a new pricing methodology called Risk Rating 2.0, starting Oct. 1, 2021.

What is changing:

- Reduce complexity
- Simplifying the quote process
- Increasing mitigation investment
- Assessing and reflecting more information on flood hazards
- Reflecting prior NFIP claims and factoring replacement cost value to calculate a premium
- More information: <u>https://www.fema.gov/flood-insurance/risk-rating</u>





Mandatory Purchase Requirement

Flood Disaster Prevention Act of 1973

- Flood insurance purchase is required to make, increase, extend or renew any loan secured by structure in SFHA
- Flood insurance required for term of loan

Flood Insurance Reform Act of 1994

- Established penalties for lender non-compliance
- Requires lenders to review revised FIRMs
- Requires notification and mandatory purchase if revised FIRM shows structure in SFHA
- If escrow account is established, requires escrow for flood insurance





Preliminary Products

FIRMs, FIS, and Database



VOLUME 1 OF 2



SHEBOYGAN COUNTY, WISCONSIN AND INCORPORATED AREAS

COMMUNITY NAME	NUMBER	COMMUNITY NAME	NUMBER
ADELL, VILLAGE OF	550075	OOSTBURG, VILLAGE OF	550427
CASCADE, VILLAGE OF	550425	PLYMOUTH, CITY OF	550428
CEDAR GROVE, VILLAGE OF'	550076	RANDOM LAKE, VILLAGE OF	550429
ELKHART LAKE, VILLAGE OF	550564	SHEBOYGAN, CITY OF	550430
GLENBEULAH, VILLAGE OF	550570	SHEBOYGAN COUNTY, UNINCORPORATED AREAS	550424
HOWARDS GROVE, VILLAGE OF	550608	SHEBOYGAN FALLS, CITY OF	550431
KOHLER, VILLAGE OF	550426	WALDO, VILLAGE OF	550432

No Special Flood Hazard Areas Identified

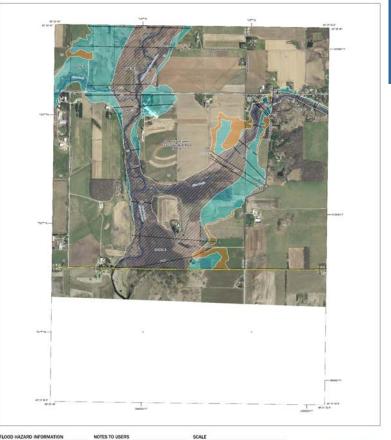
REVISED:

TBD

PRELIMINARY June 22, 2022

FLOOD INSURANCE STUDY NUMBER 55117CV001B Version Number 2.7.3.3





A series of an analysis of a series of a s











Preliminary SOMA

- A Summary of Map Actions (SOMA) documents previous Letters of Map Change (LOMC) actions that will be superseded, incorporated, or revalidated when the revised FIRM panels become effective:
 - Letters of Map Amendment (LOMAs)
 - Letter of Map Revision based on fill (LOMR-F)
 - Letters of Map Revision (LOMRs)

PRELIMINARY SUMMARY OF MAP ACTIONS

Community: CASCADE, VILLAGE OF

Community No: 550425

SOMA-1

To assist your community in maintaining the Flood Insurance Rate Map (FIRM), we have summarized below the effect of the enclosed revised FIRM panel(s) on previously issued Letter of Map Change (LOMC) actions (i.e., Letters of Map Revision (LOMRs), Letter of Map Revision based on Fill (LOMR-Fs), and Letters of Map Amendment (LOMAs)).

1. LOMCs Incorporated

The modifications effected by the LOMCs listed below have been reflected on the Preliminary copies of the revised FIRM panels. In addition, these LOMCs will remain in effect until the revised FIRM becomes effective.

LOMC	Case No.	Date Issued	Project Identifier	Original Panel	Current Panel
			NO CASES RECORDED		

2. LOMCs Not Incorporated

The modifications effected by the LOMCs listed below are either not located on revised FIRM panels, or have not been reflected on the Preliminary copies of the revised FIRM panels because of scale limitations or because the LOMC issued had determined that the lot(s) or structure(s) involved were outside the Special Flood Hazard Area, as shown on the FIRM. These LOMCs will be revalidated free of charge 1 day after the revised FIRM becomes effective through a single revalidation letter that reaffirms the validity of the previous LOMCs.

2A.LOMCs on Revised Panels

LOMC	Case No.	Date Issued	Project Identifier	Original Panel	Current Panel
LOMA	00-05-2096A	02/25/2000	205 CLARK STREET	5504250001B	55117C0292G
LOMR-F	04-05-2804A	04/23/2004	ORIGINAL PLAT , BLK 8, LOTS 2 & 3	5504250001B	55117C0292G

2B. LOMCs on Unrevised Panels

LOMC	Case No.	Date Issued	Project Identifier	Original Panel	Current Panel
			NO CASES RECORDED		





Letter of Map Change (LOMC)

Pag	e 1 of 5		Date: N	ovember 13, 2017	Case No.: 1	8-05-0718A	8	LOMA
			Federal Em	ergency Ma Washington, D.C		ent Agei	псу	
		DET		F MAP AME				
	COMM	UNITY AND MAP PANEL				OPERTY DESC	RIPTION	
SHEBOYGAN COUNTY, WISCONSIN		A parcel of land, as a Document No. 1958 County, Wisconsin						
		COMMUNITY NO: 5504	30					
AFFECTED NUMBER: 55117C0353F MAP PANEL DATE: 4/2/2009		ĺ						
FLOO	DING SO	URCE: FISHERMAN'S C	REEK	APPROXIMATE LATITUE SOURCE OF LAT & LON				4182
				DETERMINATION				
LOT	BLOCK		STREET	OUTCOME WHAT IS REMOVED FROM THE SFHA	FLOOD ZONE	1% ANNUAL CHANCE FLOOD ELEVATION (NAVD 88)	LOWEST ADJACENT GRADE ELEVATION (NAVD 88)	LOWEST LOT ELEVATION (NAVD 88)
-		-	28 Pawnee Parkway	Structure	X (shaded)	-	637.8 feet	
This descr the p (base Feder finance enclo	equaled o TIONAL CO DETERMINA document ibed above roperty(ies) flood). Thi rail mandate isal risk on ised.	provides the Federal Emerg. Using the information submisidance not located in the SF is document amends the effit of the SF of	ear (base flood). efer to the appropriate si ency Management Agen litted and the effective N FHA, an area inundated tothe NFIP map to reme nt does not apply. How olicy (PRP) is available for esently available. If there i	ection on Attachment 1 for cy's determination regard ational Flood Insurance P by the flood having a 1 we the subject property wever, the lender has the r buildings located outsid	r the additional of ing a request fi regram (NFIP) percent chance option to contin e the SFHA. Inf MA Determination this eLOMA. The	or a Letter of M map, we have do of being equated located on the el nue the flood ins formation about th a Letter that cause enclosed docume	led below.) lap Amendment If termined that the I or exceeded in flective NFIP map urance requirement e PRP and how or FEMA to rescind a nts provide additio	or the property structure(s) or any given year ; therefore, the to protect its me can apply is ind/or nal
inform (877)	the determ nation regar 336-2627 (ination the property owner sho ding this determination. If you I 377-FEMA MAP) or by letter as 1 Eisenhower Ave, Ste 500, A	idressed to the Federal Er lexandria, VA 22304-6426	nergency Management Ag	ency, Attn: North			

Letter of Map Amendment (LOMA)

 A letter from FEMA stating that an existing structure or parcel of land that has <u>not</u> been elevated by fill would not be inundated by the 1-percent-annual-chance flood.

Letter of Map Revision (LOMR)

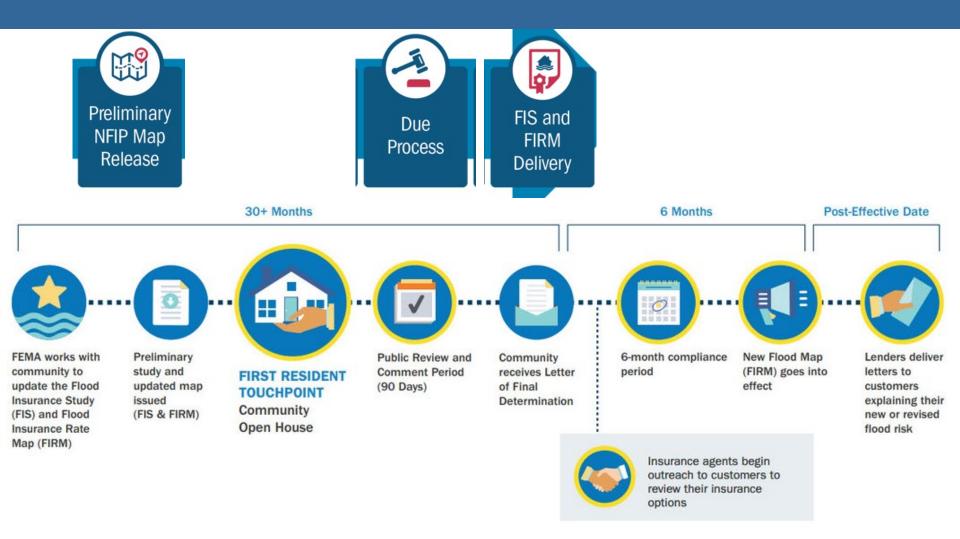
 A letter from FEMA officially revising the effective FIRM to show changes to floodplains, floodways, or flood elevations.







Next Steps









Due Process Phase







90-Day Appeal Period

- Community (or individuals via their community) may appeal areas:
 - Areas showing new or revised BFEs
 - Areas where there is a change in the Special Flood Hazard Areas (SFHA)
 - Areas showing new or revised SFHA (increase or decrease)
 - Areas showing new or revised regulatory Floodway boundaries (increase or decrease)





Requirements for Appeal

- Data believed to be better than those used in original analysis
 - Documentation for source of new data
 - Proof that new topo data meets FEMA accuracy standards
- Explanation of the error or misapplication of methodology
- Revised hydrologic and/or hydraulic analysis
- Revised flood profiles, floodway data tables and Summary of Discharges table
- Revised floodplain and floodway mapping





Comments

- All other challenges to the maps are considered comments.
 - Corporate limit revisions;
 - Road name errors and revisions;
 - Base map errors;
 - Requests that changes effected by a LOMA, LOMR-F, or LOMR be incorporated; and
 - Other possible omissions or potential improvements to the mapping.





Appeal and Comment Submission

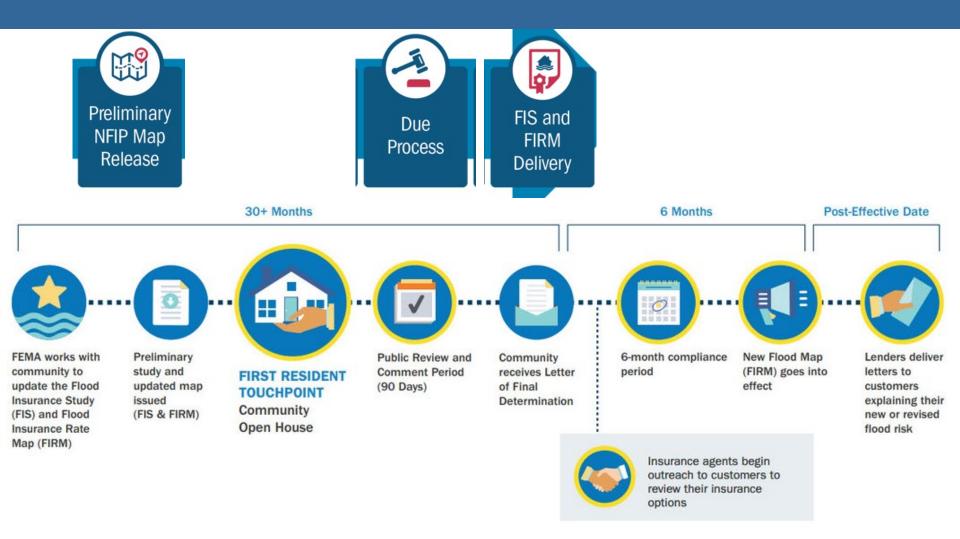








Next Steps

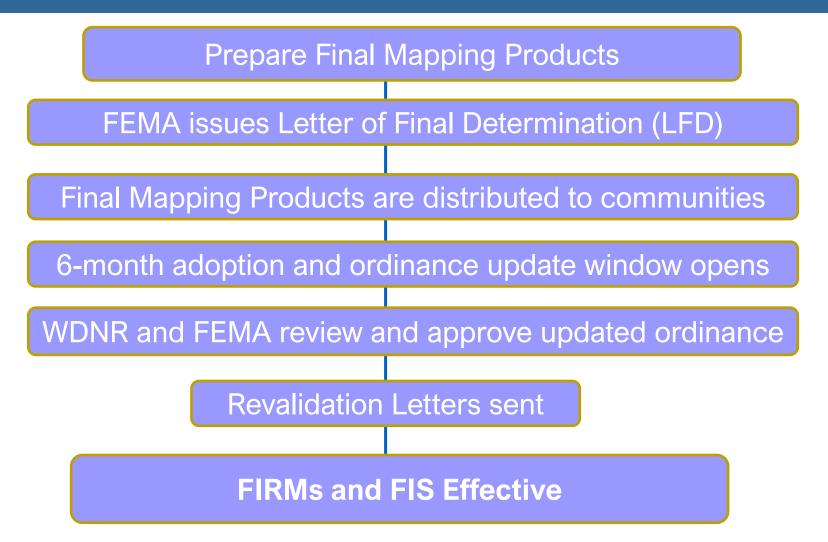








Final Delivery and Adoption







Letter of Final Determination

- Sent to CEO of Community
- Establishes effective date of FIS and FIRM
- Formal notification to community of need to update floodplain management regulations by the effective date
- Followed by two additional reminder letters





Adoption by Community

- Every community may have a different process to adopt ordinances or modify existing ordinances
- May require public notice and comment period
- May require a sub-committee approval prior to full board adoption
- May require two or more readings at board meetings prior to formal adoption





Ordinance Adoption

Wisconsin Model **Floodplain Ordinance**

WISCONSIN DEPARTMENT OF NATURAL RESOURCES

MODEL FLOODPLAIN ORDINANCE

FOR

WISCONSIN COMMUNITIES

Effective March 10, 2022

A cooperative effort of Wisconsin Department of Natural Resource and Federal Emergency Management Agency

ructional for the ordinance writer and can be deleted once the item is com hlights are places where the ordinance needs to be filled in with community specific informat ighlights are ordinance additions for communities that choose to implement Act 175 are ordinance additions for communities that have adopted a Flood Storage District (when app

ase replace this page with," Floodplain Ordinance for (Name of your Community tive: Insert date ordinance was adopted by the community

dnr.wisconsin.gov Search "Model Ordinance"

Adoption Step by Step Guide

Adopting an Ordinance: A Step-By-Step Guide

Adopting an Ordinance

Proposal to Governing Body 2. Notice of Public Hearing Two consecutive weeks at least a week before hearing. 3. Public Hearing 4. Decision by Governing Body

5. Ordinance Publication 6. Prepare for DNR Approval:

- Affidavit of Publication of Notice
- Certified Copy of Final Ordinance Text Affidavit of Publication of Enacted
- Ordinance

1. Ordinance/Amendment Proposal

Generally, ordinance proposals are drafted by the zoning administrator, planning and zoning staff, corporation counsel or a regional planning commission at the request of the local governing body.

2. Notice of Public Hearing Notice of public

Communities must provide notice of the public hearing to be conducted on the proposed ordinance/ amendment Publication of the notice of public hearing must meet the Class 2 legal requirements (under Ch. 985, Stats.) in order for the zoning ordinance or amendment to be valid. Posting notice of public hearing is permitted in lieu of publication only if the municipality is not required to have an official newspaper

3. Public Hearing



In cities and villages, the hearing may be held before the designated planning and zoning committee or before the municipal governing hody. In counties hearings on proposed zoning ordinances or amendments are held by the county zoning committee before consideration of an ordinance or amendment by the county board.

4. Decision of the Governing Body

In cities, two thirds of the members of the municipal governing body constitute a quorum except in cities with less than five aldermen, where a majority constitutes a quorum. In villages, a majority of the members constitute a quorum. In counties, a majority of the supervisors constitute a quorum and must be present for a legal vote on proposed zoning ordinances or amendments.

5. Publication of Adopted Ordinance Text

An adopted zoning ordinance or amendment must be published once in the municipality's official newspaper as a Class I Notice Posting. Posting is an option

if the municipality is not required to have an official newspaper published in the municipality that meets the requirements.

This is the last step, but to speed the

ordinance adoption process.

approval process up, submit the draft proposal to DNR before starting the

7. Approval by DNR

6 Ordinance/Amendment Annroval

For the DNR to approve an adopted ordinance, the community must submit the following documentation:

- An affidavit of publication from the newspaper and a copy of the published notice. This verifies that the notice of public hearing was published or posted correctly. If the notice was posted, a notarized affidavit by the local official (i.e. clerk) stating that the notice of public hearing was posted in three public places (with date and location) is sufficient proof.
- A certified copy of the adopted ordinance passed by the governing body. A notarized statement by the local official (i.e. clerk) affixed to the ordinance stating that the ordinance is a true and correct copy of what was adopted by the municipality.
- · An affidavit of publication from the newspaper and a copy of the notice of the enacted ordinance. If the enacted ordinance (or where to view enacted ordinance) was posted, a notarized affidavit by the local official (i.e., clerk) stating that it was posted in three public places (with date and location) is sufficient proof.

7 Wisconsin Department of Natural Resources

The DNR reviews ordinances for compliance with the minimum state standards Both the ordinance and adoption procedures are reviewed. When it is determined that all the requirements are met, a formal approval letter is sent to the adopting community

Eloodulain zoning ordinances and amendments do not become effective until approved by the DNR: thus formal approvals are issued each time the ordinance is amended. DNR approvals are required by FEMA for a community to maintain their flood insurance.

To minimize the time and expense associated with ordinance revisions, communities should submit a draft of the proposed language to DNRELOODPLAIN@wi.gov. Once. the DNR has reviewed the draft and the community has made any needed revisions, please follow the complete adoption process outlined in this guide. If you have questions regarding floodplain ordinance adoption, please contact DNR Floodplain staff at DNRFLOODPLAIN@wi.gov or 608-220-5633.

January 2019





Increasing Resilience Together

ve weeks, th ast publication at leas seven days prior to the



hearing (a Class 2 otice under ch. 985

Stats.) must appear in

Break Out Session

- Preliminary Viewer Demonstration
- Individual Questions
 - Maps
 - Floodplain Management
 - Insurance
 - Map Adoption







🐣 Flood Map Changes Viewer

with Web AppBuilder for A

Welcome to the Flood Map Changes Viewer!

The Flood Map Changes Viewer (FMCV) includes the following: <u>preliminary</u> <u>National Flood Hazard Layer</u>, <u>preliminary Changes Since Last FIRM (CSLF)</u>, the <u>Preliminary Map Comparison Tool</u>, and the <u>pending National Flood Hazard Layer</u>, and the <u>National Flood Hazard Layer (NFHL</u>). The consolidated FMCV provides a single location to access flood hazard data across several data life stages and facilitates a better understanding of potential changes coming to flood hazard risks. For more information on using the Preliminary Map Comparison Tool in the FMCV, please visit the <u>Preliminary Map Comparison Tool Tutorial</u> page.

Preliminary data are for review and guidance purposes only and cannot be used to rate flood insurance policies; they are not used to determine whether there is a mandatory flood insurance purchase requirement. By viewing preliminary data and maps, the user acknowledges that the information provided is preliminary and subject to change. Preliminary data, including new or revised FIRMs, FIS reports, and FIRM Databases, are not final and are presented on the MSC as the best data available for a particular area at this time. FEMA will remove the preliminary data for a particular area once effective data are available.

Questions? Contact the Map Specialists at the <u>FEMA Map Information eXchange</u> (<u>FMIX</u>).

Do not show this splash screen again.



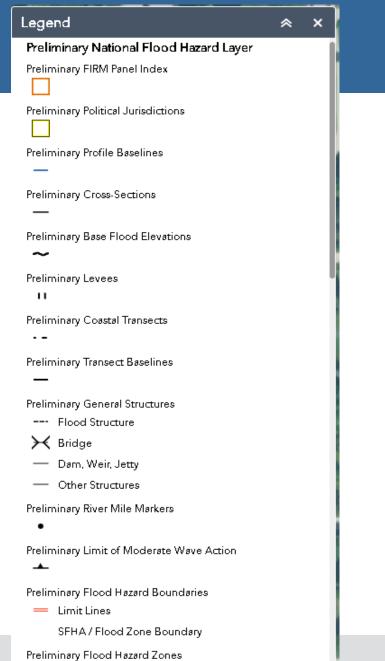
To print Map Changes report:

1) Click the pin tool below.









Layer List	≈ ×
Layers	0.⊒
▶	
Pending National Flood Hazard Layer	•••
🕨 🔽 Preliminary National Flood Hazard Layer	
Effective FIRM Panels	•••
National Flood Hazard Layer	
▶ Coastal Barrier Resources System Area (US F	WS)
FEMA	RiskN

Increasing Resilience Together



Preliminary Flood Hazard Zones 1% Annual Chance Flood Hazard

Layer List 🛛	×
Pending National Flood Hazard Layer	•••
Verliminary National Flood Hazard Layer	•••
🛛 🔽 Preliminary Data Availability	•••
Preliminary FIRM Panels	•••
🕨 🔽 Preliminary FIRM Panel Index	•••
▶ 🔽 Preliminary Political Jurisdictions	•••
🕨 🔽 Preliminary Profile Baselines	•••
Preliminary Water Lines	•••
▶ 🔽 Preliminary Cross-Sections	•••
▶ 🔽 Preliminary Base Flood Elevations	•••
🕨 🔽 Preliminary Levees	•••
Submittal Information	•••
🕨 🔽 Preliminary Coastal Transects	•••
▶ 🔽 Preliminary Transect Baselines	•••
🕨 🔽 Preliminary General Structures	•••
🕨 🔽 Preliminary River Mile Markers	•••
▶ Preliminary Water Areas	•••
Preliminary PLSS	•••
▶ 🔽 Preliminary Limit of Moderate Wave Action	













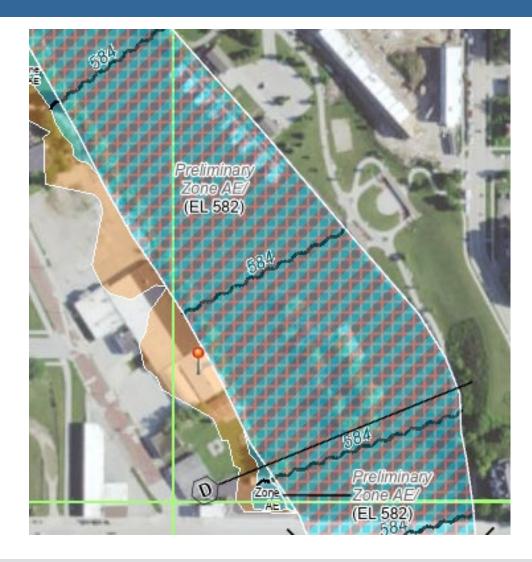


Geoprocessing		×
Input	Output	
To print Map Changes report: 1) Click the pin tool below. 2) Click a point on the map to select location. 3) Press Execute to receive a comparison report at 1 in =		
500ft scale for the selected location. The process may take up to one minute.*		
<u>Help</u>	Run	















Comparison Report

Comparison of Flood Hazard

Effective & Preliminary Flood Hazards



