RiskMAP
Increasing Resilience Together

DELTA COUNTY
Community Consultation Officers (CCO) Meeting

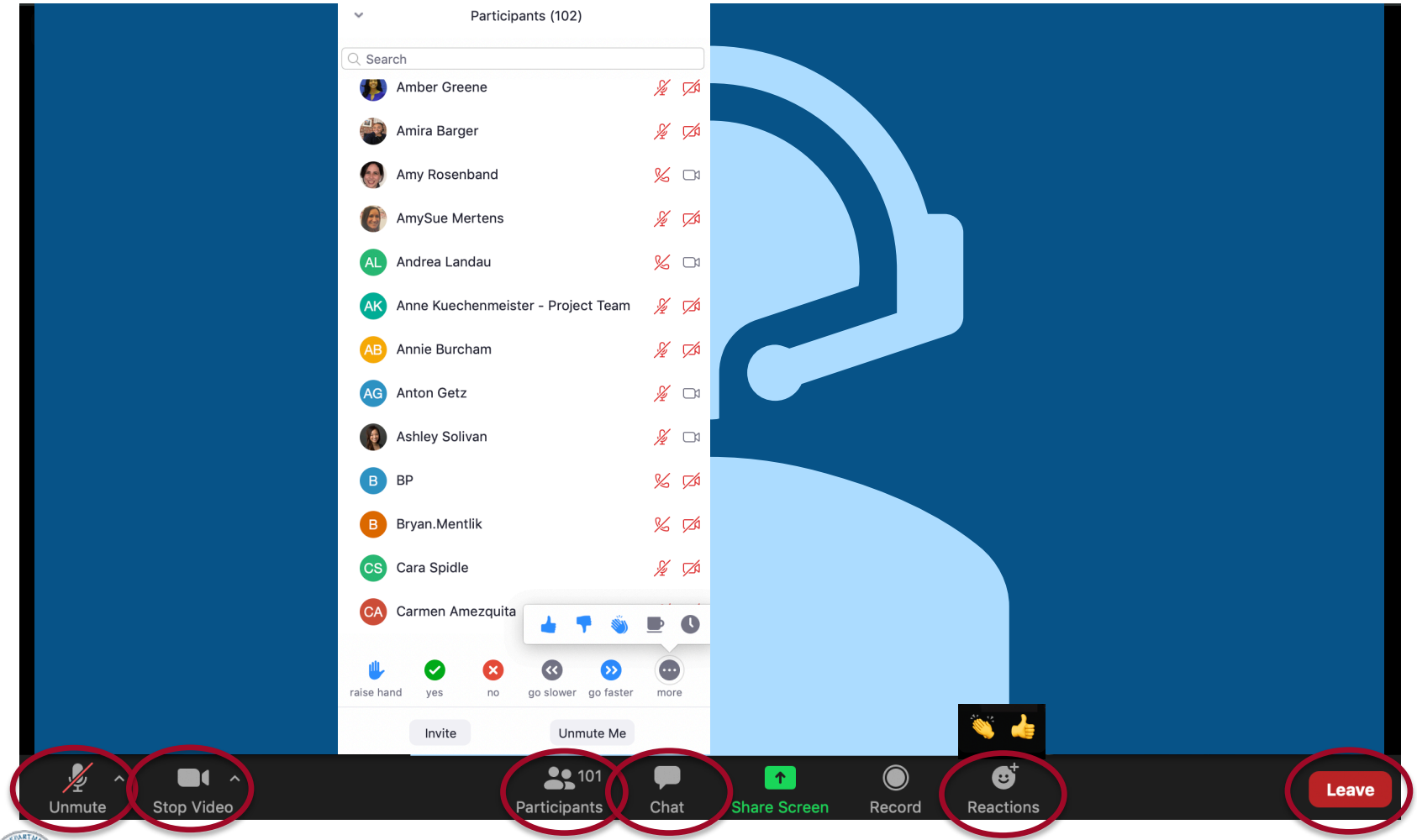
June 28, 2021

FEMA

Introductions

- **Risk MAP Project Team**
  - John Wethington – FEMA Regional Engineer
  - Mollie Rosario – FEMA NFIP Specialist
  - Lorena Reyes – FEMA Planning Specialist
  - Nicholas Bruscato – FEMA Region V Tribal Liaison
  - Tyler Bruce – STARR II Project Manager
  - Christine Gralher - STARR II Coastal Engineer
  - Matthew Stoffer – STARR II Riverine Engineer
- **Michigan Department of Environment, Great Lakes, and Energy (EGLE)**
  - Matthew Occhipinti – State NFIP Coordinator
  - Linda Hansen – Upper Peninsula NFIP Coordinator / Marquette District Engineer

Features of the Zoom Platform



FEMA

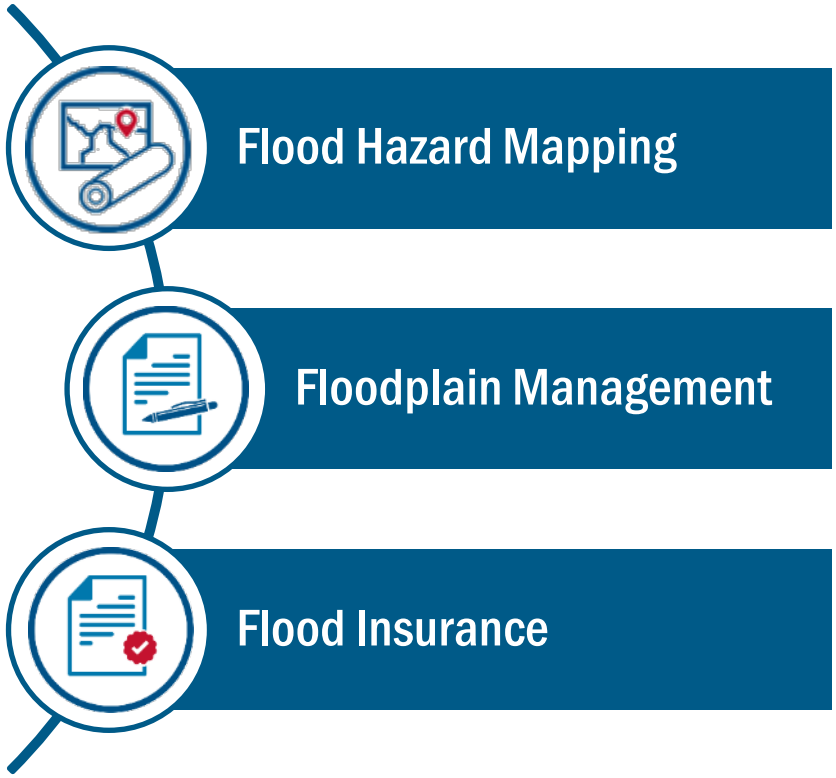
RiskMAP
Increasing Resilience Together

TODAY'S AGENDA

- Reviewing the Updated Flood Risk Data for Your County/Tribal Nation
- Next Steps in the Map Adoption Process
- Understanding Floodplain Management Ordinance Requirements
- Understanding Flood Insurance
- Hazard Mitigation Planning

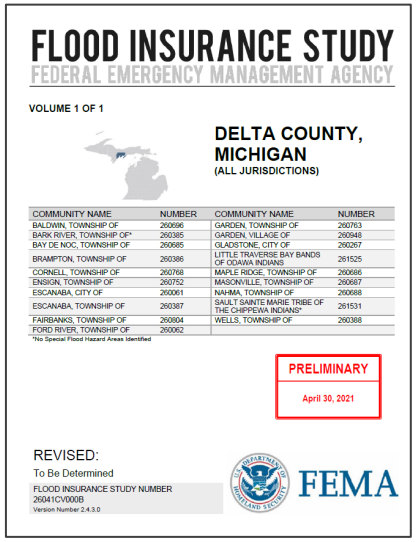
The National Flood Insurance Program

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



National Flood Insurance Program (NFIP) - Participation Status

- **Participating in the NFIP. Special Flood Hazard Areas (SFHA) have been identified:**
  - Township of Bay De Noc (260685)
  - Township of Brampton (260386)
  - Township of Cornell (260768)
  - Township of Ensign (260752)
  - City of Escanaba (260061)
  - Township of Escanaba (260387)
  - Township of Fairbanks (260804)
  - Township of Garden (260763)
  - City of Gladstone (260267)
  - Township of Masonville (260687)
  - Township of Nahma (260688)
  - Township of Wells (260388)
  - Village of Garden (260948)
- **Not currently participating in the NFIP. SFHA have been identified:**
  - Township of Baldwin (260696)
  - Little Traverse Bay Bands of Odawa Indians (261525)
  - Township of Maple Ridge (260686)
- **Not currently participating in the NFIP. SFHA have not been identified:**
  - Township of Bark River (260385)
  - Sault Sainte Marie Tribe of the Chippewa Indians (261531)



FLOOD INSURANCE STUDY

FEDERAL EMERGENCY MANAGEMENT AGENCY

VOLUME 1 OF 1

DELTA COUNTY, MICHIGAN

(ALL JURISDICTIONS)

COMMUNITY NAME	NUMBER	COMMUNITY NAME	NUMBER
BALDWIN, TOWNSHIP OF	260696	GARDEN, TOWNSHIP OF	260763
BARK RIVER, TOWNSHIP OF*	260385	GARDEN, VILLAGE OF	260948
BAY DE NOC, TOWNSHIP OF	260685	GLADSTONE, CITY OF	260267
BRAMPTON, TOWNSHIP OF	260386	LITTLE TRAVERSE BAY BANDS OF ODAWA INDIANS	261525
CORNELL, TOWNSHIP OF	260768	MAPLE RIDGE, TOWNSHIP OF	260686
ENSIGN, TOWNSHIP OF	260752	MASONVILLE, TOWNSHIP OF	260687
ESCANABA, CITY OF	260061	NAHMA, TOWNSHIP OF	260688
ESCANABA, TOWNSHIP OF	260387	SAULT SAINTE MARIE TRIBE OF THE CHIPPEWA INDIANS*	261531
FAIRBANKS, TOWNSHIP OF	260804	WELLS, TOWNSHIP OF	260388
FORD RIVER, TOWNSHIP OF	260062		

*No Special Flood Hazard Areas Identified

PRELIMINARY

April 30, 2021

REVISED:

To Be Determined

FLOOD INSURANCE STUDY NUMBER

26041CV000B

Version Number 2.4.3.0

FEMA

FEMA

RiskMAP

Increasing Resilience Together

The Status of this Study

FEMA

RiskMAP
Increasing Resilience Together

Reviewing the Updated Flood Risk Data for your County

FEMA

RiskMAP
Increasing Resilience Together

Why is FEMA Updating Your Flood Maps?

The Great Lakes Coastal Flood Study provides updated flood risk information for areas around each of the Great Lakes using uniform methodology, updated terrain data, and modern wave modeling techniques.

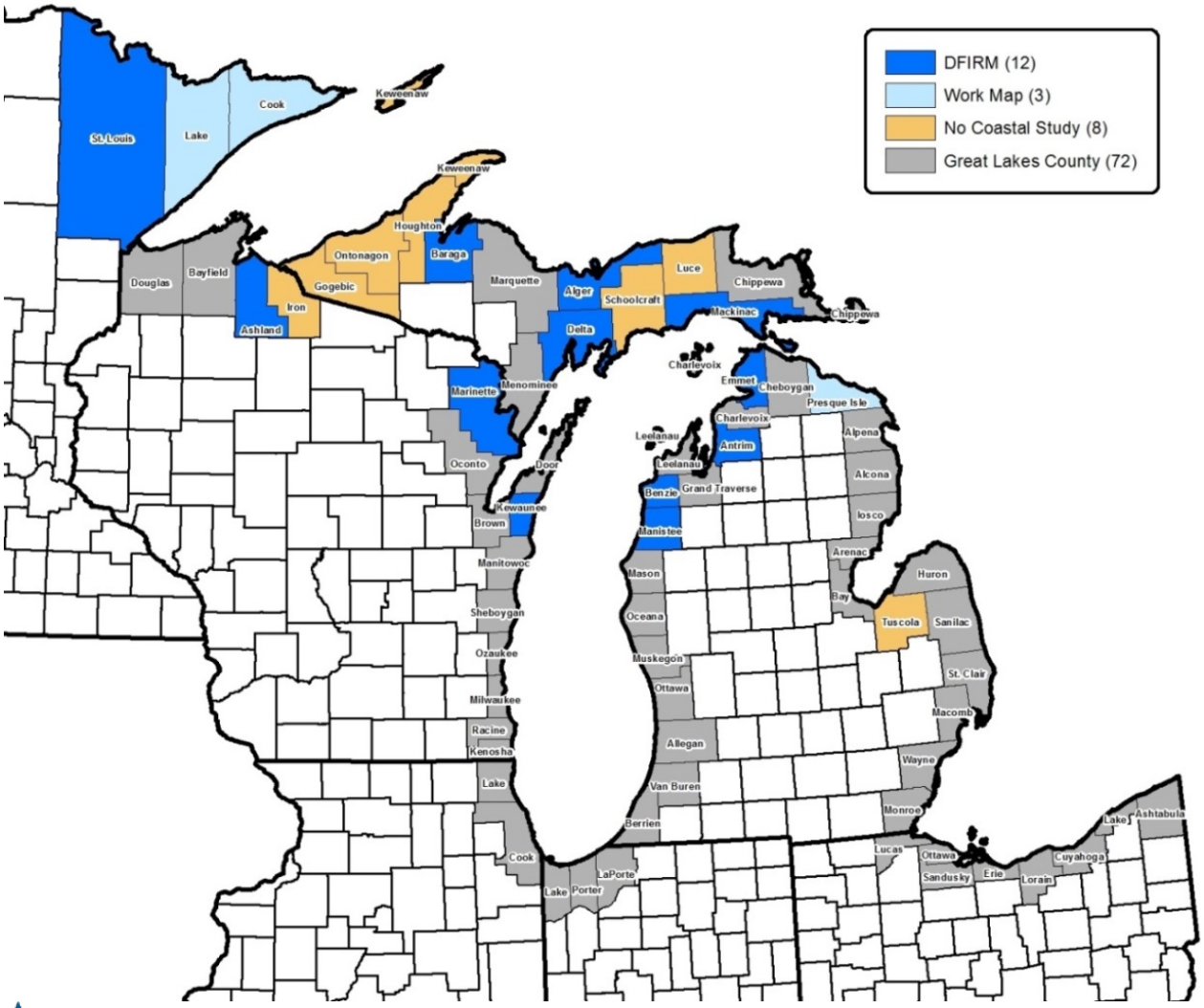
Many factors contribute to flood map revisions:

- Population growth & increased development
- Movement in rivers & shorelines
- Changing technology and improved modeling techniques and data

FEMA

RiskMAP
Increasing Resilience Together

Program Goals and Status

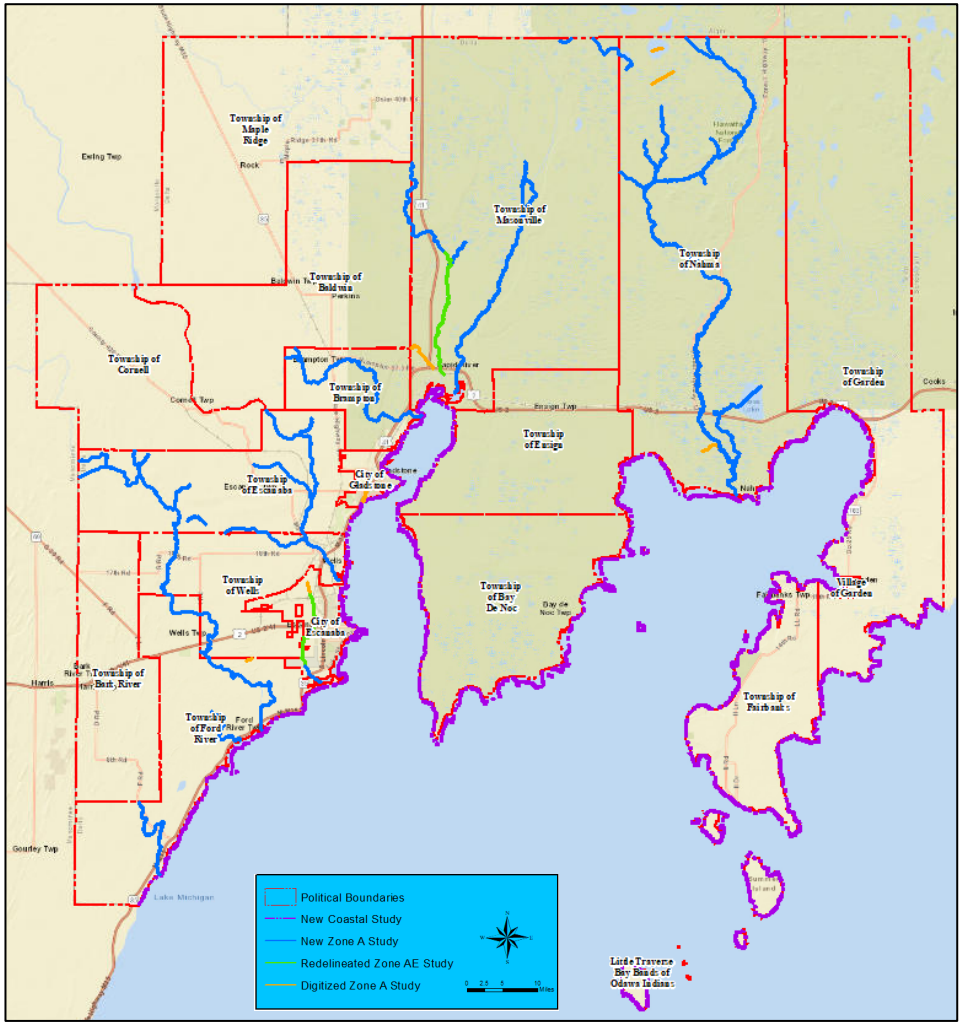


FEMA

RiskMAP
Increasing Resilience Together

Delta County Flood Risk

- **Scope of Work**
  - New Coastal analysis (Zone AE/VE/AH/AO) – 214 shoreline miles
  - New Zone A analysis (Zone A) – 170 stream miles
  - Redelineation of effective Zone (AE Studies) – 9 stream miles
    - Rapid River
    - Portage Creek
    - Willow Creek
  - Digitized Effective (Zone AE/A) – 11 stream miles



FEMA

RiskMAP
Increasing Resilience Together

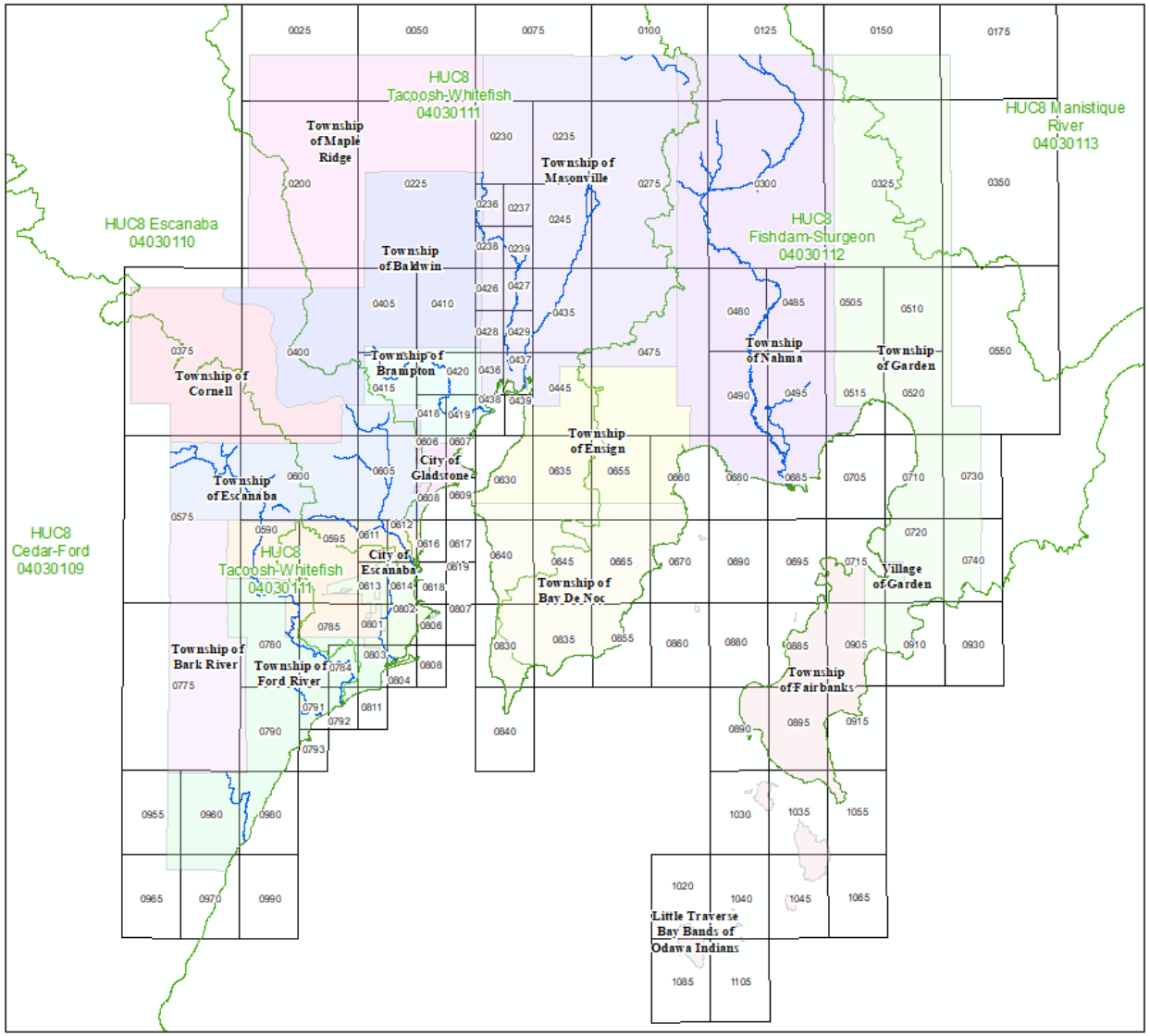
New Riverine Studies – Zone A

Cedar-Ford Watershed

- Bark River
- Camp Creek
- Camp Creek Unnamed Tributary
- Fivemile Creek
- Ford River
- Ford River Unnamed Tributary No. 1
- Ford River Unnamed Tributary No. 2
- Sunny Brook
- Twentyfour Mile Creek

Escanaba Watershed

- Bichler Creek
- Escanaba River
- Reno Creek
- Silver Creek



FEMA

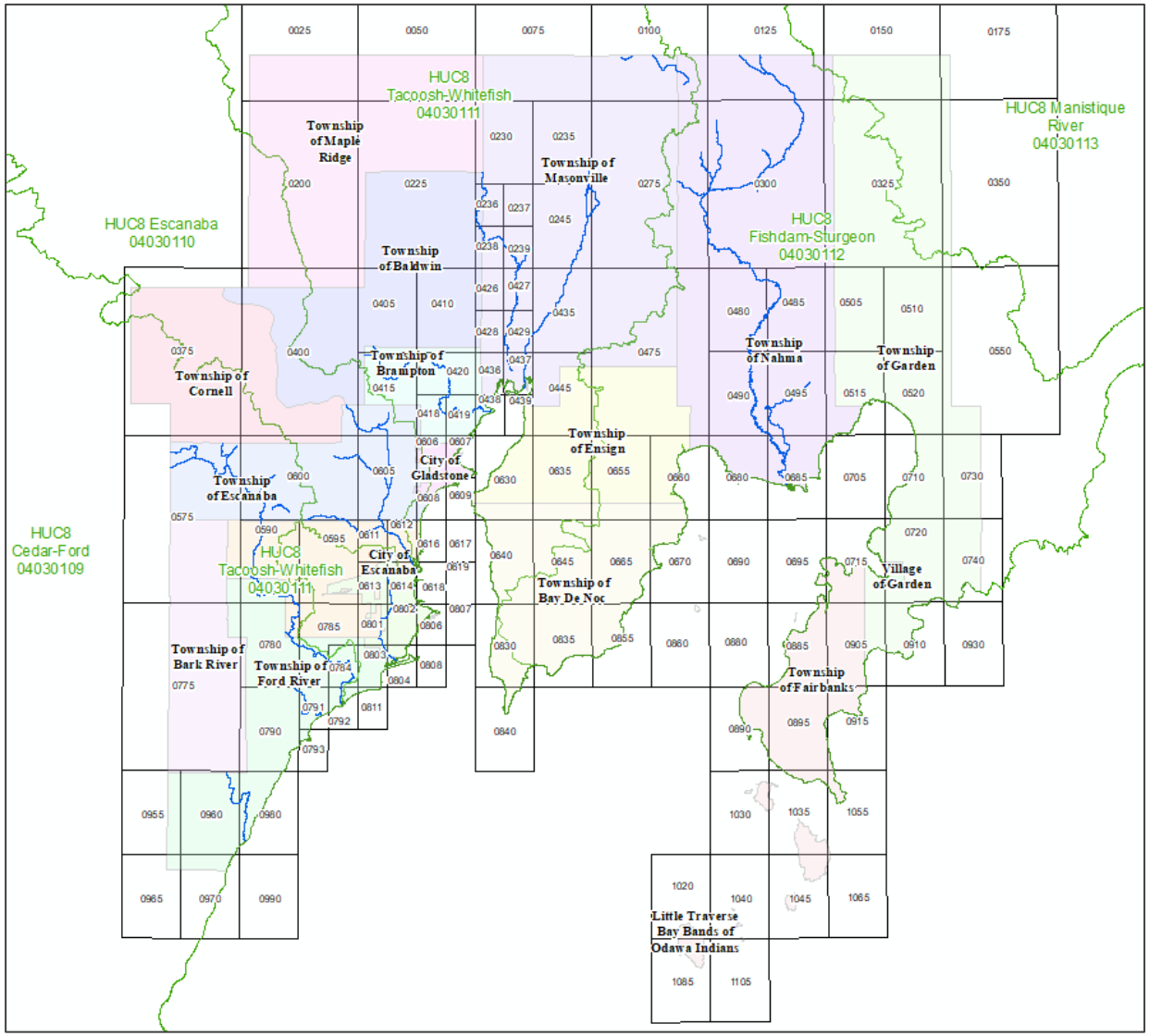
New Riverine Studies – Zone A

Fishdam-Sturgeon Watershed

- Black Creek
- Black Creek Unnamed Tributary
- Bull Run
- Little Black Creek
- Sturgeon River
- Sturgeon River Unnamed Tributary No. 1
- Sturgeon River Unnamed Tributary No. 2
- West Branch Sturgeon River

Tacoosh-Whitefish Watershed

- Days River
- Ferguson Creek
- Little West Branch Whitefish River
- Pole Creek
- Portage Creek
- Rapid River
- West Branch Days River
- Whitefish River
- Willow Creek



FEMA

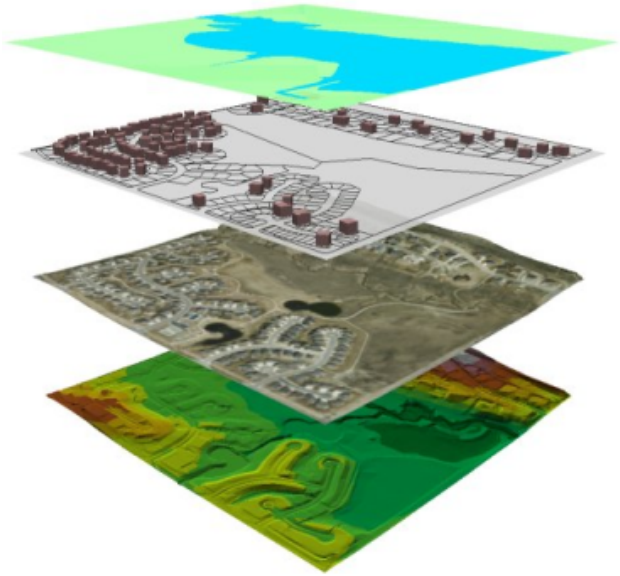
Coastal/Riverine Studies - Base Map & Topographic Data

Base Map

- Digital Orthophotography, 1-meter resolution dated 2018.
- From United States Department of Agriculture National Agriculture Imagery Program (USDA-NAIP)

Topography

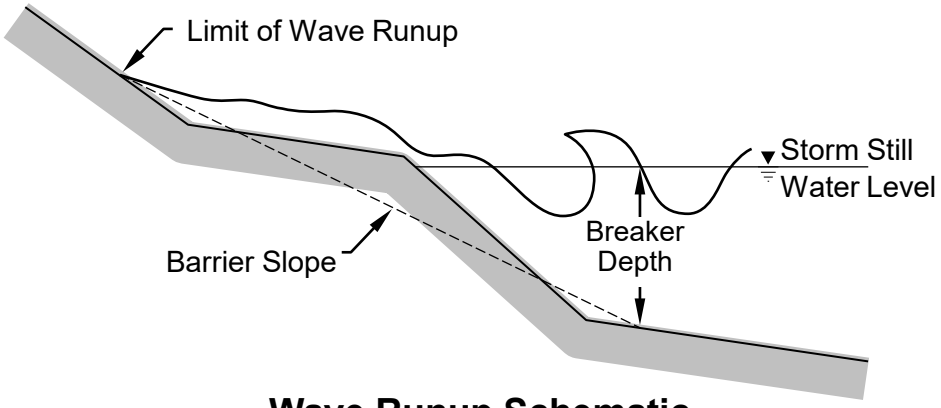
- Digital Terrain Model (DTM)
- Riverine
  - Developed by State of Michigan
  - Derived from 2015 Light Detection And Ranging (LiDAR) data captured by State of Michigan, Geodata Services Section
- Coastal
  - Developed by U.S. Army Corps of Engineers (USACE)
  - Derived from 2013 JALBTCX (Joint Airborne Lidar Bathymetry Technical Center of eXpertise) Seamless Bathymetry and Terrain for Lake Michigan



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
- Nearshore analysis
  - Modeling conducted by STARR in 2020
- Greater consistency in assumptions



Wave Runup Schematic

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

Local/County-Level Activities

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

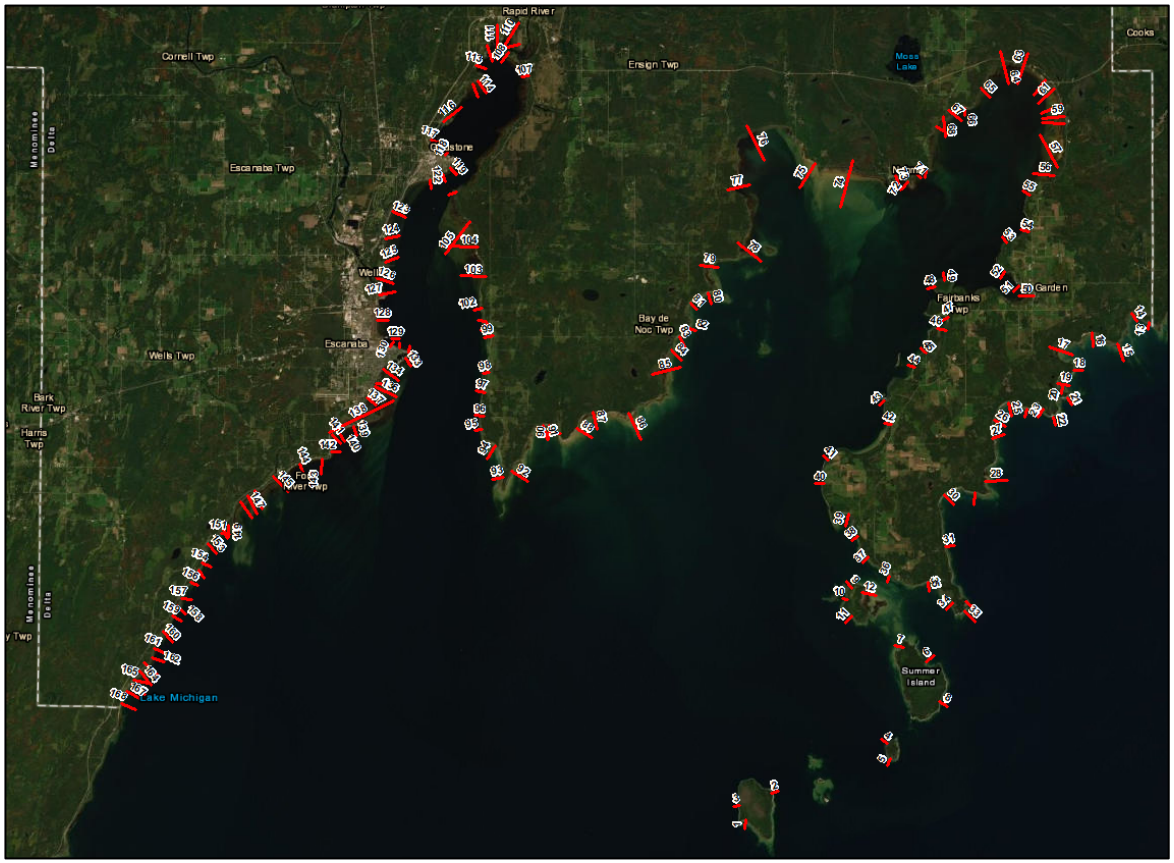
FEMA

RiskMAP
Increasing Resilience Together

The Great Lakes Coastal Flood Study in Delta County

Delta County Coastal Flood Hazard Analysis:

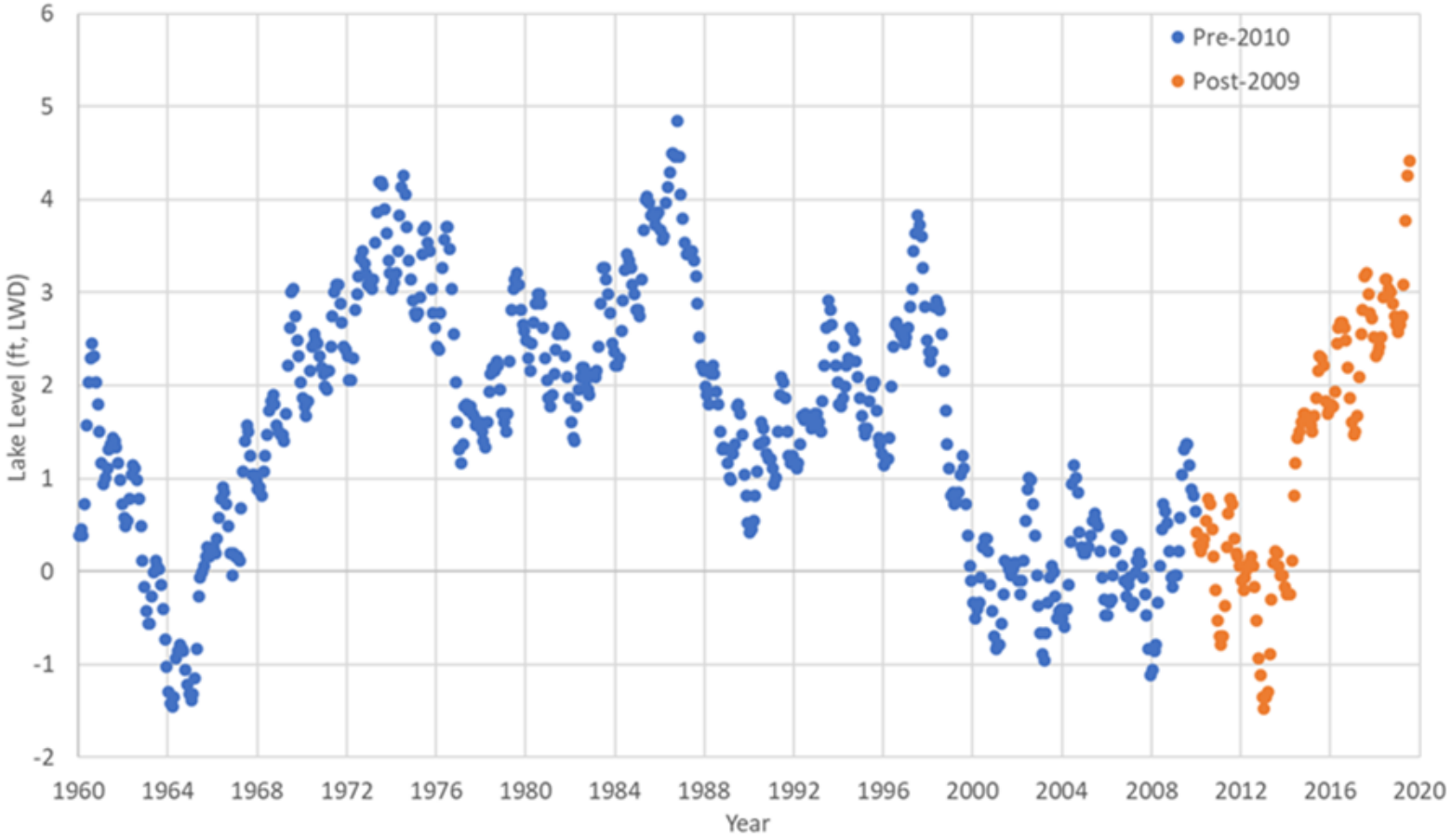
- 214 miles of coastline
- 168 coastal transects
- Transects placed at representative shoreline reaches based on:
  - Topography
  - Exposure
  - Shoreline material
  - Upland development
- Integration of riverine and coastal Special Flood Hazard Areas
- Topography
  - 2013 Joint Airborne LiDAR Bathymetry Technical Center of eXpertise (JALBTCX) Digital Elevation Model (DEM)



FEMA

RiskMAP
Increasing Resilience Together

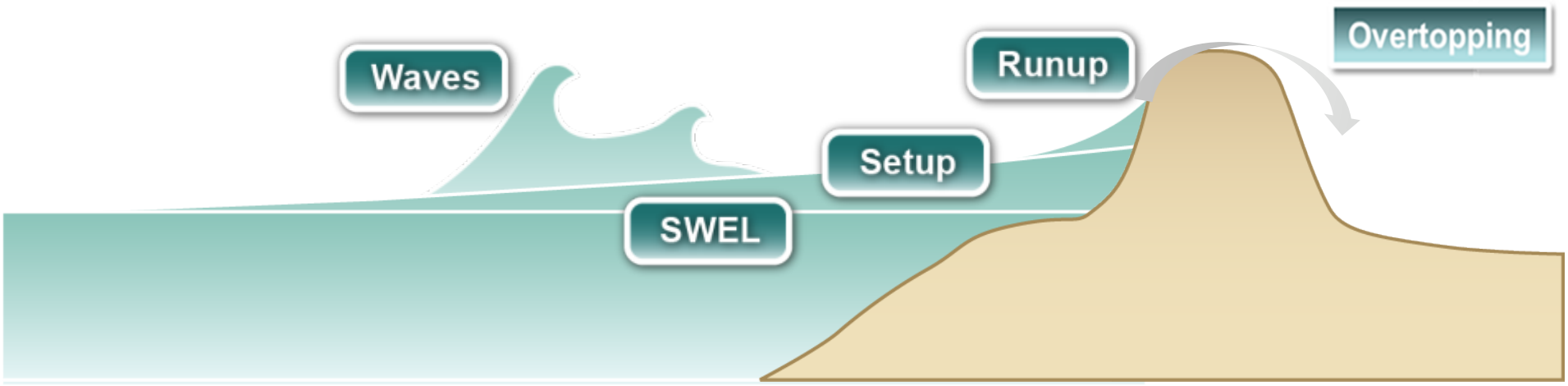
Lake Michigan Water Levels



FEMA

RiskMAP
Increasing Resilience Together

Measuring Coastal Base Flood Elevation



SWEL = Stillwater Elevation (storm surge level)

TWEL = Total Water Elevation (SWEL + wave effects)

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

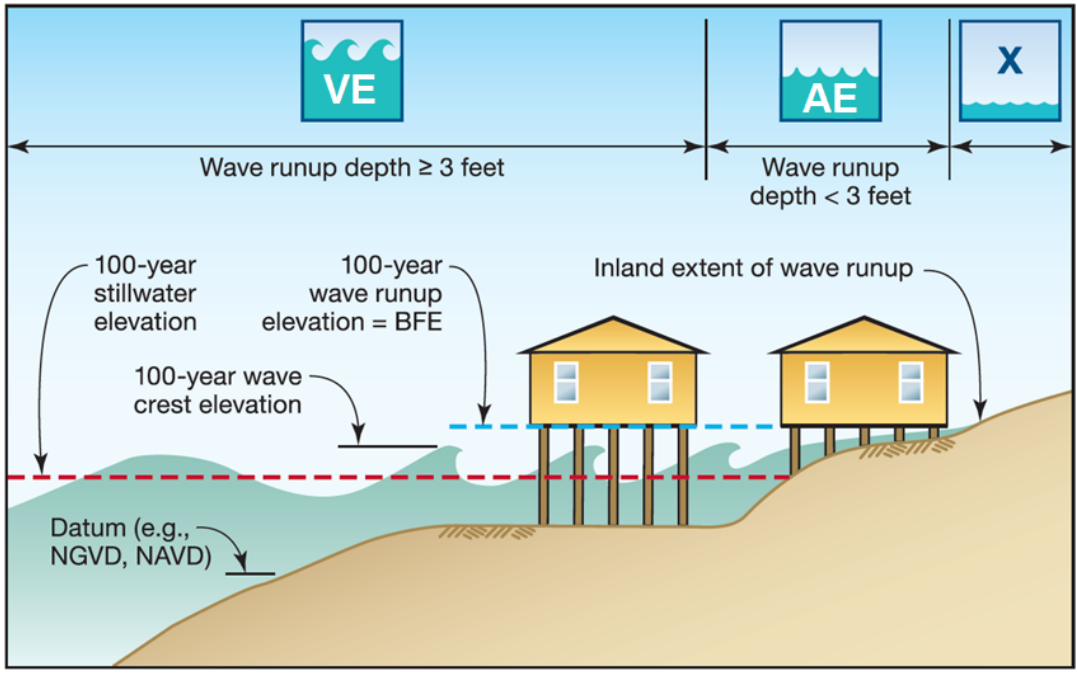
- Applied in areas subject to lower wave energy or inundation by the 1-percent-annual-chance flood
- Wave heights or wave runup < 3 feet
- Subdivided into elevation zones, and BFEs are assigned

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

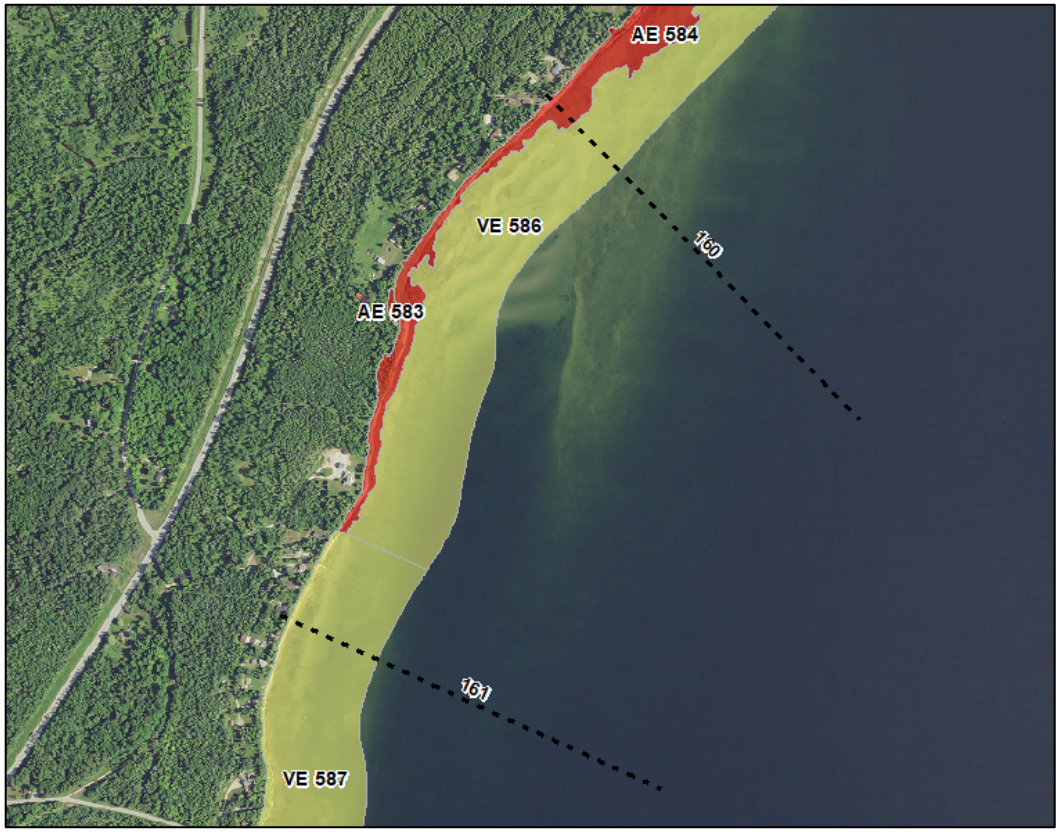


FEMA

RiskMAP
Increasing Resilience Together

Wave Runup Mapping

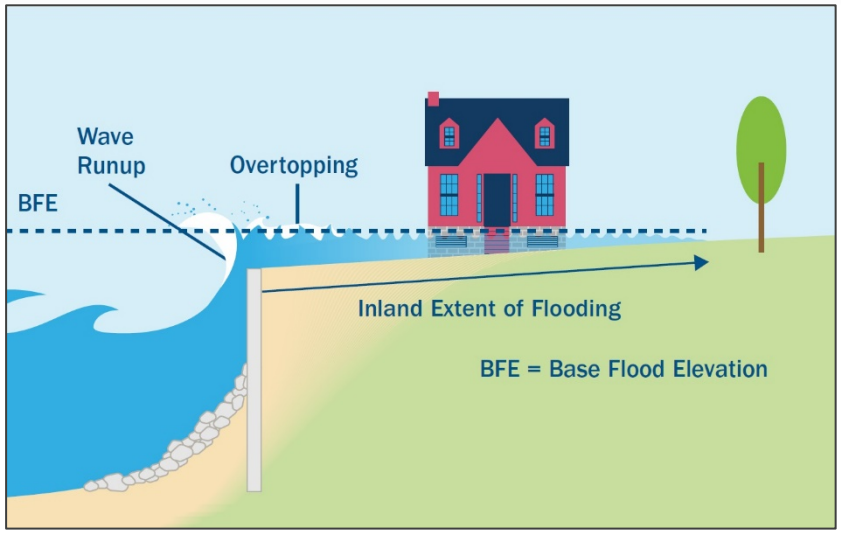
- Wave runup is very sensitive to shoreline characteristics, especially slope
- Single Base Flood Elevation (BFE)
- Gutters perpendicular to the shore divide the BFEs
- Runup is mapped to elevation associated with BFE, unless overtopping occurs
- VE transitions to AE where runup elevation (BFE) is less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



FEMA

RiskMAP
Increasing Resilience Together

Wave Overtopping



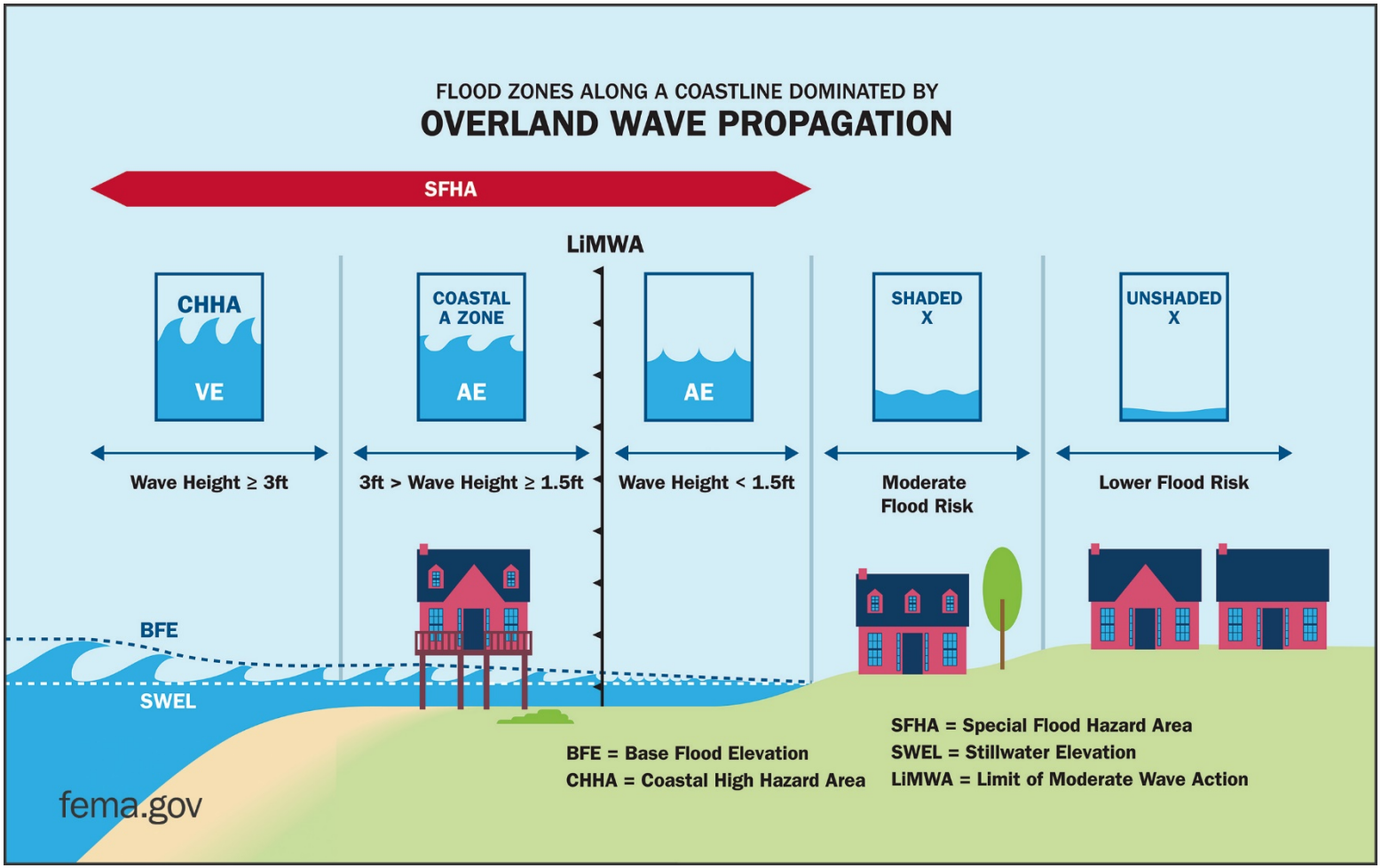
- Wave overtopping occurs when the wave runup elevation exceeds the barrier's crest elevation
- When overtopping occurs, the zone behind the barrier is designated as:
  - AE if the landward slope is positive
    - BFE established based on runup elevation
  - AO if the landward slope is negative
    - 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

FEMA

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

RiskMAP
Increasing Resilience Together

Overland Wave Propagation Mapping

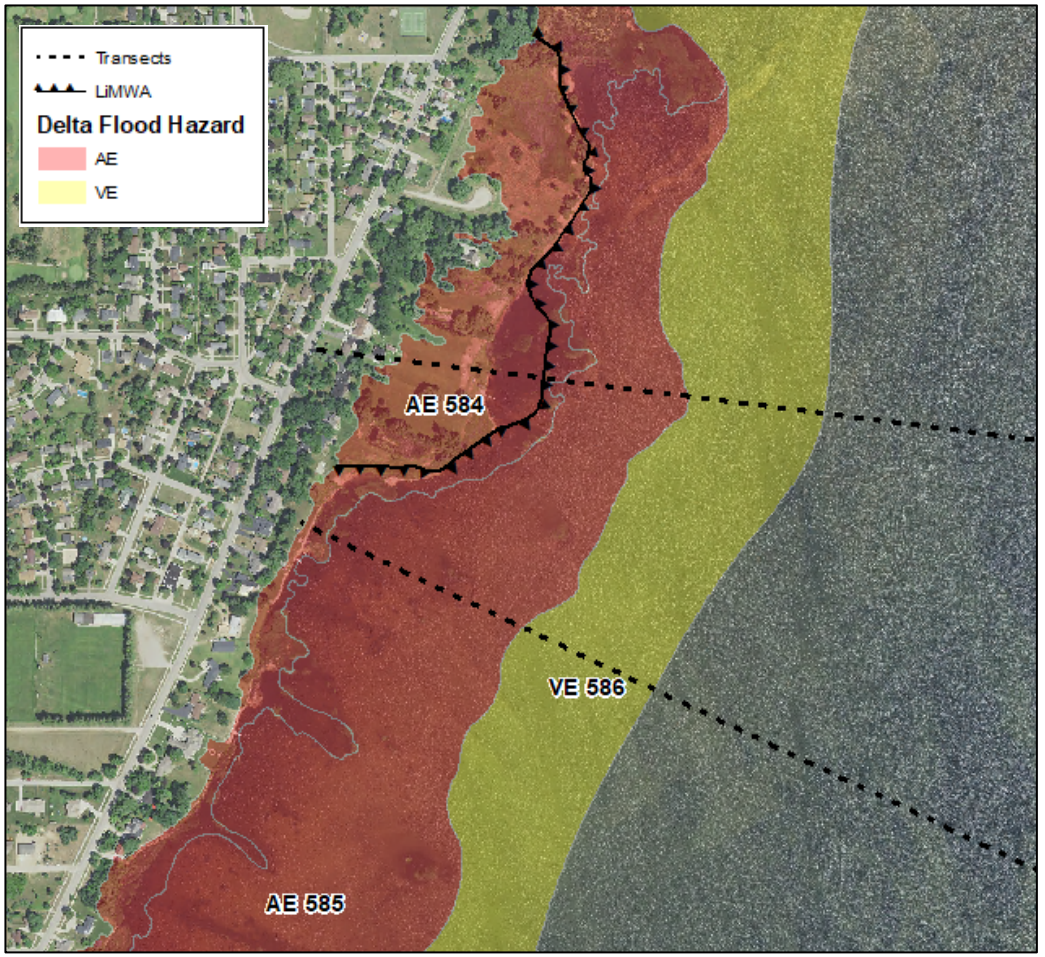


FEMA

RiskMAP
Increasing Resilience Together

Overland Wave Propagation Mapping

- Represents overland wave decay or regeneration over inundated inland areas
- BFEs are defined by the wave crest elevation
- Internal gutters are placed where BFEs change after moving onshore
- Transitional zones capture changes in shoreline characteristics between transects
- Landward extent of mapping defined by the 1-percent SWEL



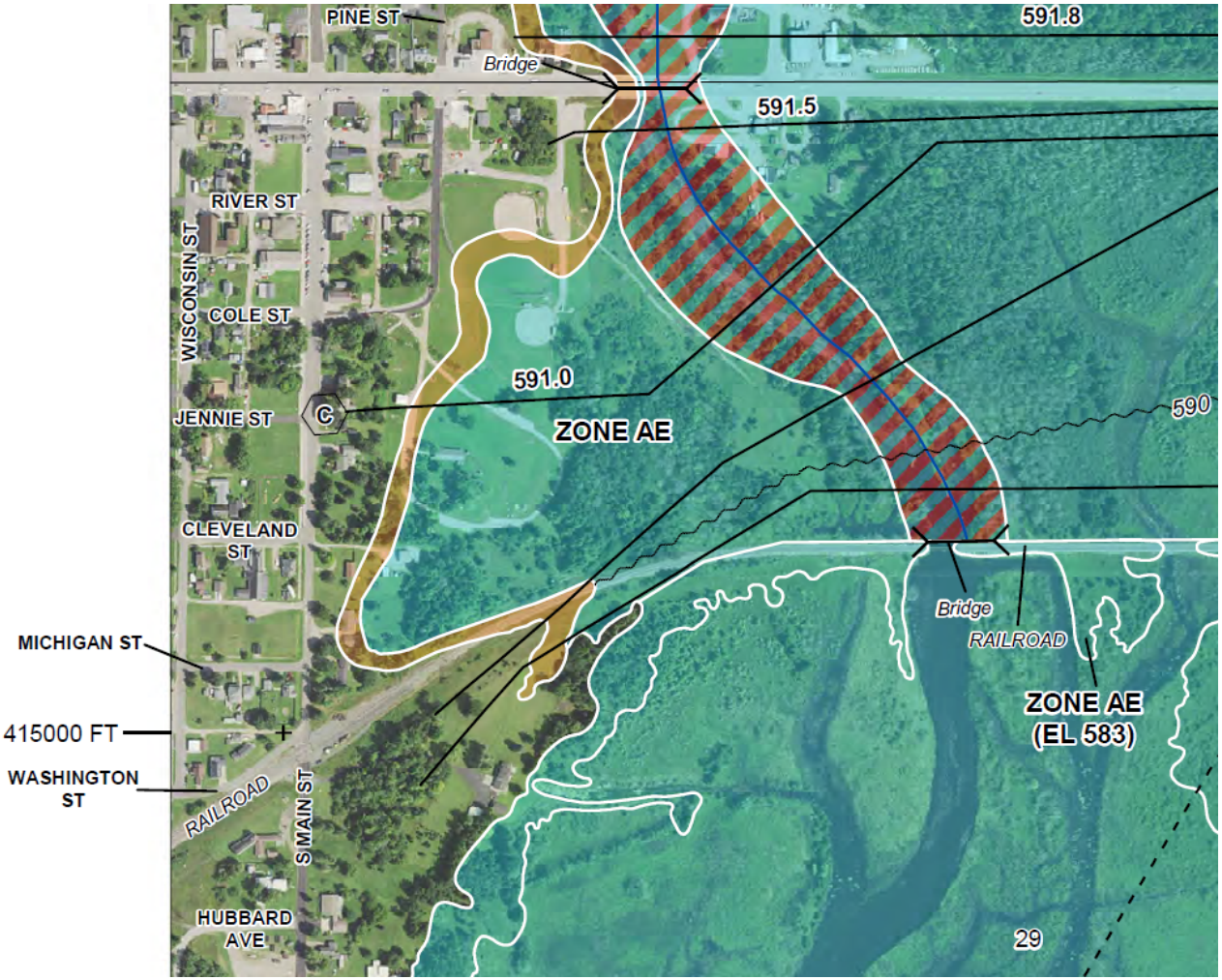
FEMA

RiskMAP
Increasing Resilience Together

Scope of Work: Riverine-Coastal SFHA Integration

DELTA COUNTY

- **Detailed Zone AE**
  - Rapid River
- **Approximate Zone A**
  - Bark River
  - Escanaba River
  - Ford River
  - Portage Creek
  - Sturgeon River
  - Days River
  - Sunny Brook
  - Whitefish River

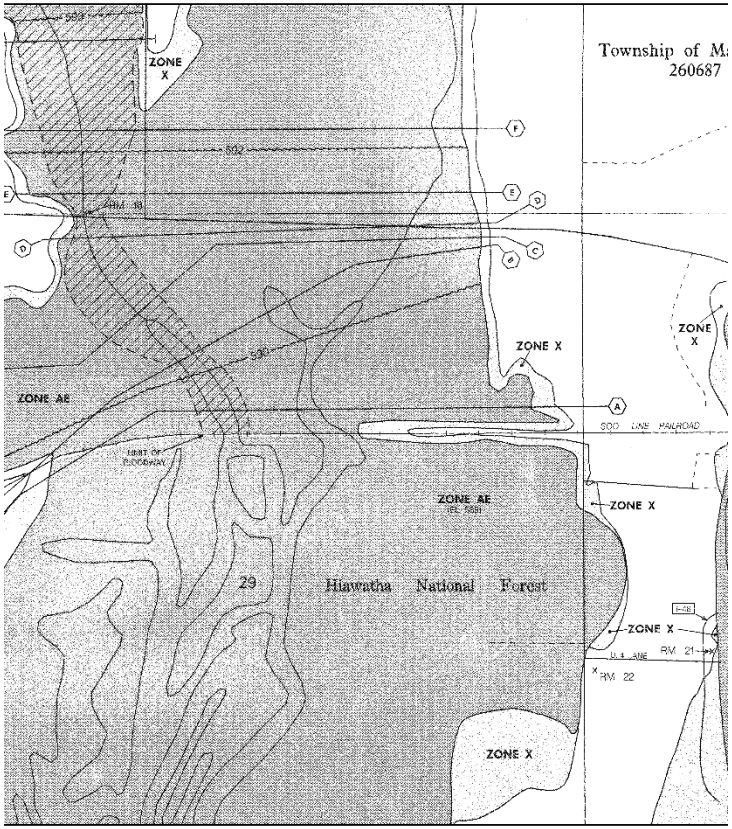


FEMA

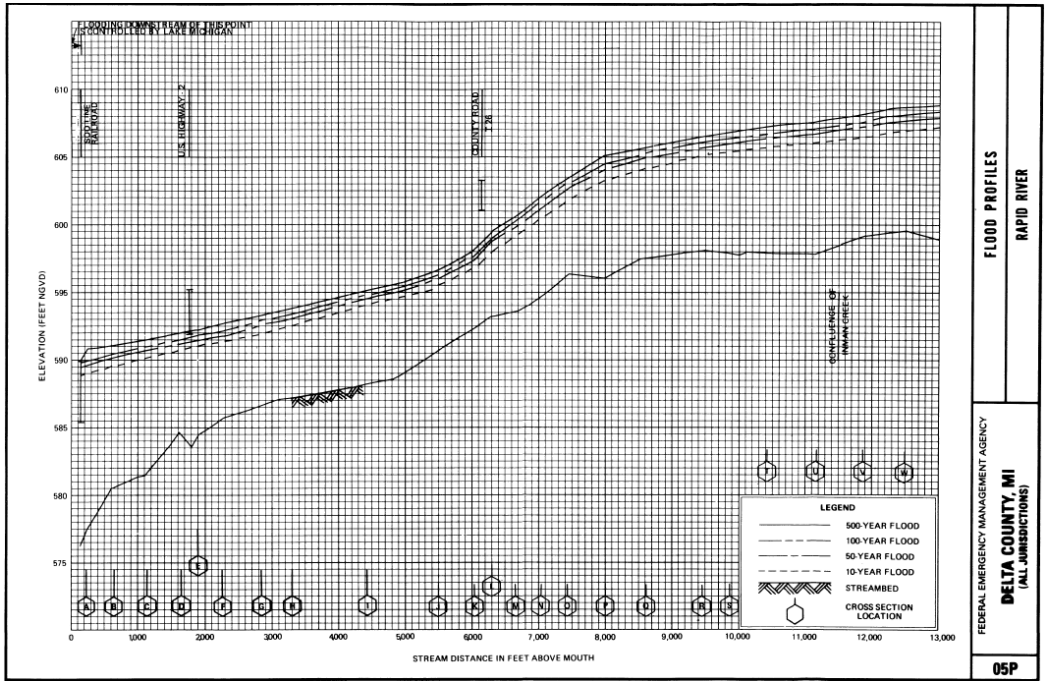
RiskMAP
Increasing Resilience Together

Scope of Work: Integrating Riverine and Coastal Data

Effective Rapid River Zone AE (FIRM panel 26041C0437C, Floodway Data Table and Flood Profile)



FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NGVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Rapid River								
A	230	300	1,775	1.86	589.9	584.9[2]	584.9	0.0
B	660	179	405	8.15	590.5	584.9[2]	584.9	0.0
C	1,130	399	1,016	3.25	591.0	588.4[2]	588.5	0.1
D	1,650	225	719	4.59	591.5	590.0[2]	590.1	0.1
E	1,910	292	717	4.60	591.8	591.2[2]	591.2	0.0
F	2,270	600	1,398	2.36	592.1	592.1[2]	592.1	0.0
G	2,820	800	1,870	1.76	592.9	592.9	592.9	0.0

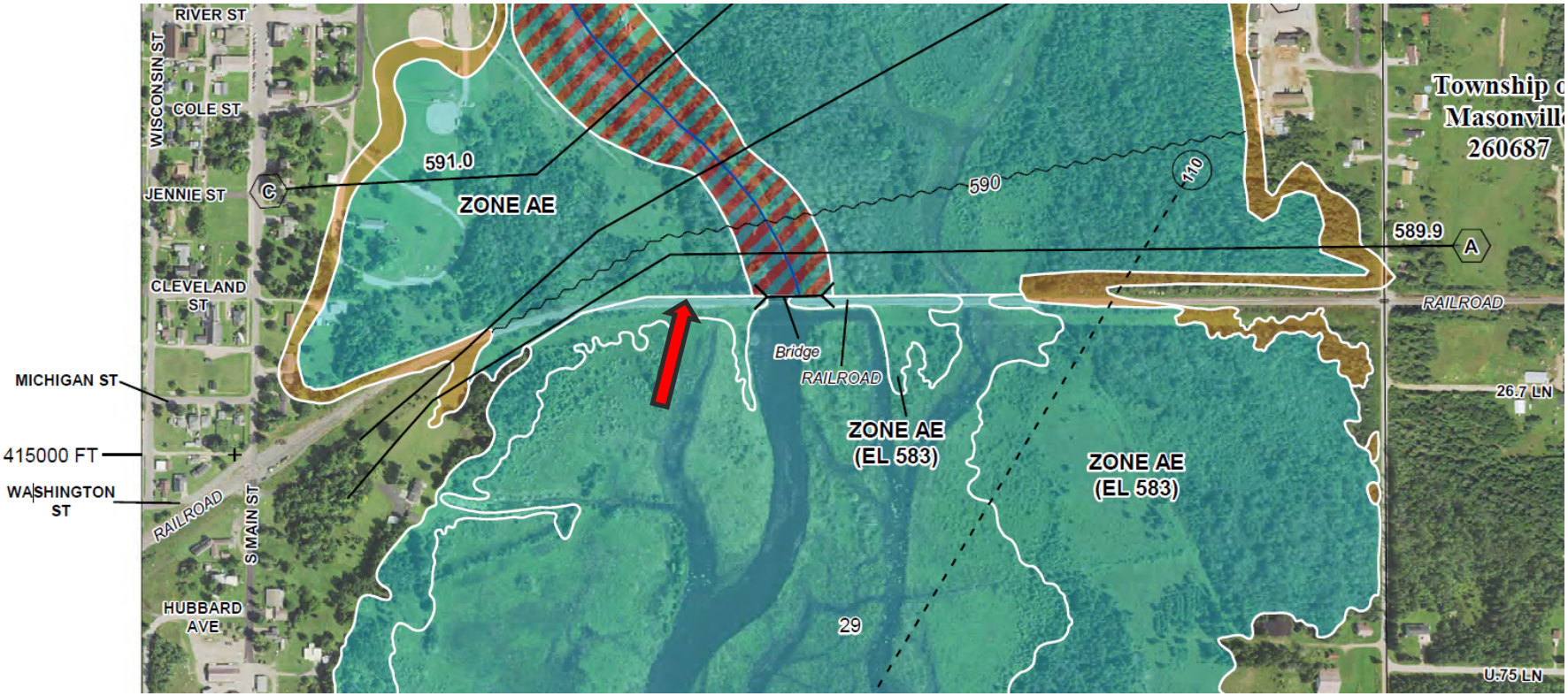


FEMA

RiskMAP
Increasing Resilience Together

Scope of Work: Integrating Riverine and Coastal Data

Updated Tie-In to Rapid River Zone AE (Preliminary FIRM 437D)
Tie-in occurs downstream of lettered cross section A



FEMA

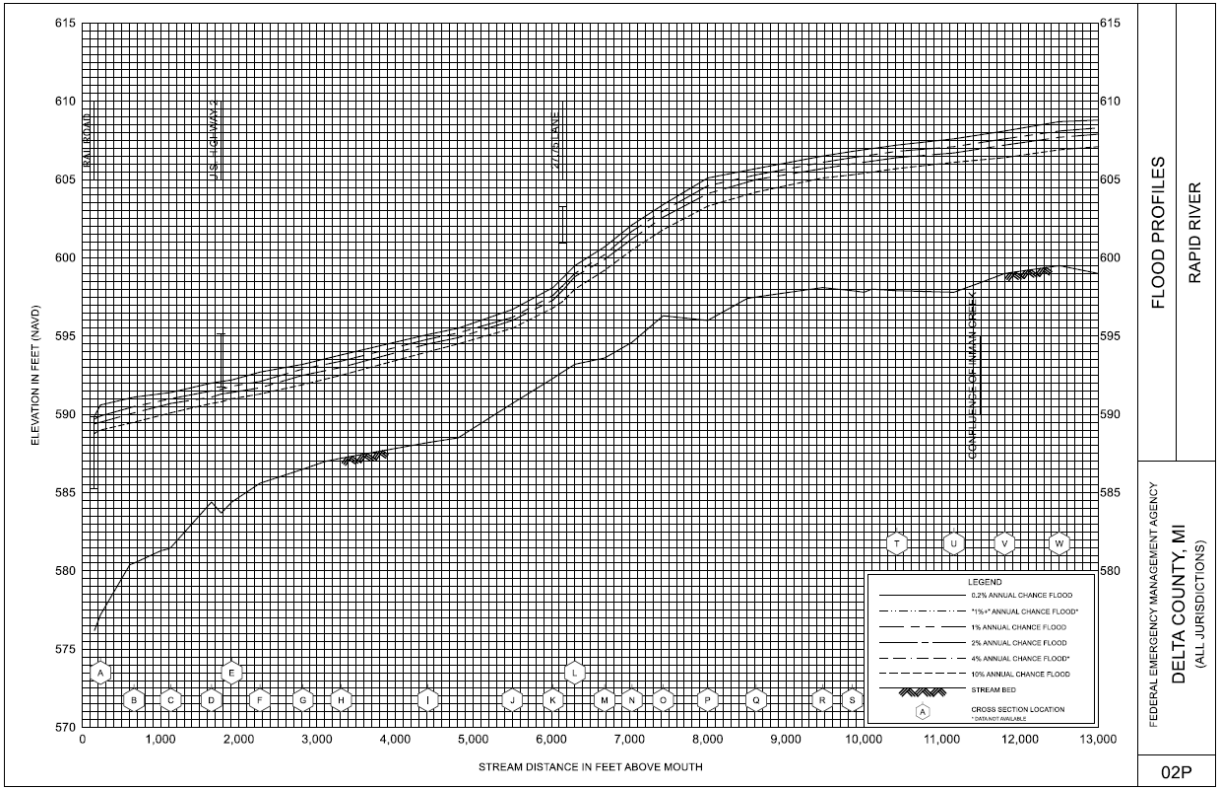
Limits of coastal flood effects from Lake Michigan are shown on the FIRM (white line)

RiskMAP
Increasing Resilience Together

Scope of Work: Integrating Riverine and Coastal Data

Updated Tie-In to Rapid River Zone AE (Preliminary Flood Profile and Floodway Data Table)

LOCATION		FLOODWAY				1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SECOND)	WIDTH REDUCED FROM PRIOR STUDY (FEET)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	230	300	1,775	1.86		589.9	584.9[2]	584.9	0.0
B	660	179	405	8.15		590.5	584.9[2]	584.9	0.0
C	1,130	399	1,016	3.25		591.0	588.4[2]	588.5	0.1
D	1,650	225	719	4.59		591.5	590.0[2]	590.1	0.1
E	1,910	292	717	4.60		591.8	591.2[2]	591.2	0.0
F	2,270	600	1,398	2.36		592.1	592.1[2]	592.1	0.0
G	2,820	800	1,870	1.76		592.9	592.9	592.9	0.0



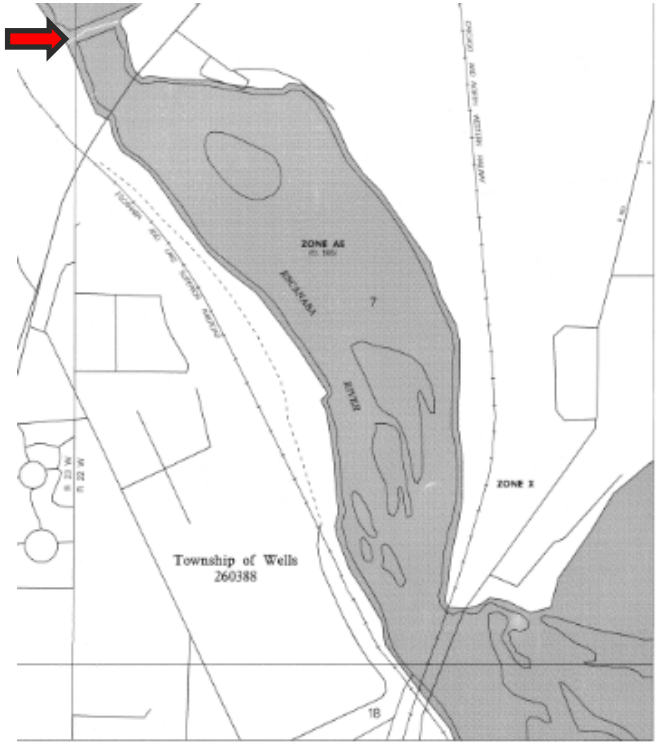
FEMA

RiskMAP
Increasing Resilience Together

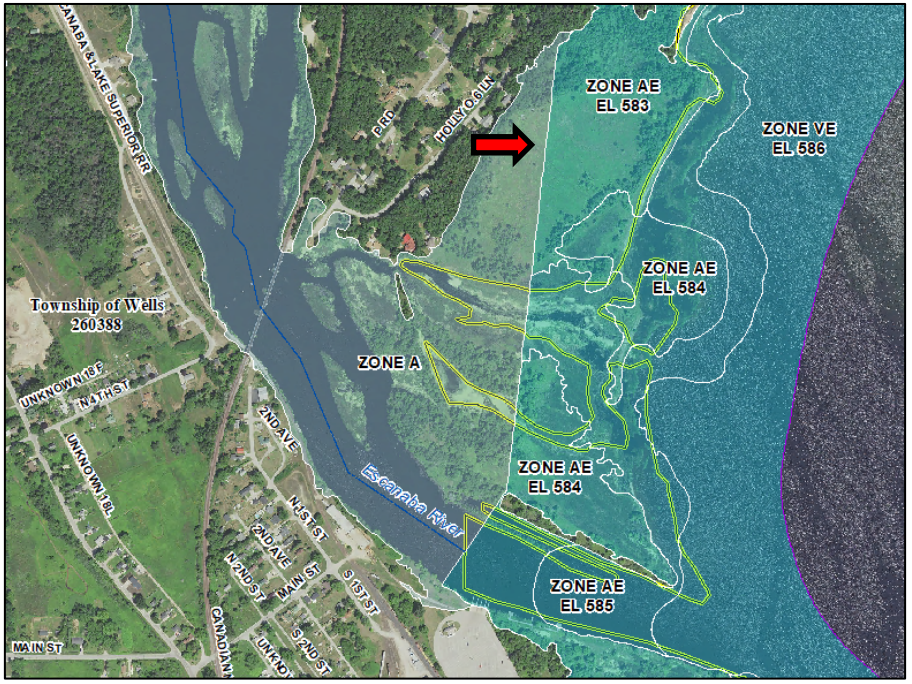
Scope of Work: Integrating Riverine and Coastal Data

Updated Tie-In to Escanaba River Zone A (Preliminary FIRM panels 612D, 614D, and 616D)

Effective Tie-In to Zone A



Updated Tie-In to Zone A



Limits of coastal flood effects from Lake Michigan are shown on the FIRM (white line)

FEMA

RiskMAP
Increasing Resilience Together

Summary of Letters of Map Change (LOMCs) for Delta County

SOMA-1

PRELIMINARY SUMMARY OF MAP ACTIONS

Community: GLADSTONE, CITY OF Community No: 260267

2A. LOMCs on Revised Panels

LOMC	Case No.	Date Issued	Project Identifier	Original Panel	Current Panel
LOMA	96-05-3098A	09/16/1996	LOT 14 - PLAT OF GLADSTONE, BLOCK 19	2602670001B	26041C0607D
LOMA	97-05-1672A	03/26/1997	426 MINNEAPOLIS AVE.	2602670001B	26041C0609D
LOMA	98-05-068A	10/21/1997	GLADSTONE PLAT - LOT 4, BLOCK 9 - 415 MICHIGAN AVENUE	2602670001B	26041C0607D
LOMR-F	98-05-2142A	04/08/1998	HARBOR POINT SUBDIVISION - LOTS 1-8	2602670001B	26041C0607D
LOMA	98-05-5028A	08/07/1998	GLADSTONE PLAT - LOT 12, BLOCK 10 - 410 MICHIGAN AVENUE	26041C0607C	26041C0607D
LOMA	05-05-0359A	12/02/2004	7792 NORTH .25 LANE -- PORTION OF SECTION 25, T40N, R23W	26041C0605C	26041C0605D
LOMA	11-05-6097A	06/01/2011	128 cliffs ave	26041C0607C	26041C0607D
LOMA	14-05-8961A	10/14/2014	PART OF GOVERNMENT LOT 2, SECTION 16, T40N, R22W -- 120 CLIFFS AVENUE	26041C0607C	26041C0607D
LOMA	15-05-4008A	04/23/2015	Lot 3, Harbor Point Subdivision - 3 Harbor Point Lane	26041C0607C	26041C0607D
LOMR-F	17-05-0888A	12/21/2016	GOVERNMENT LOT 4, SECTION 16, T40N, R22W -- 1100 NORTH LAKESHORE DRIVE	26041C0607C	26041C0607D
LOMA	17-05-5884A	11/22/2017	SECTION 16, T40N, R22W -- 1226 NORTH LAKE SHORE DRIVE	26041C0607C	26041C0607D

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 redetermined

Be sure to review the preliminary SOMA for completeness

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

FEMA

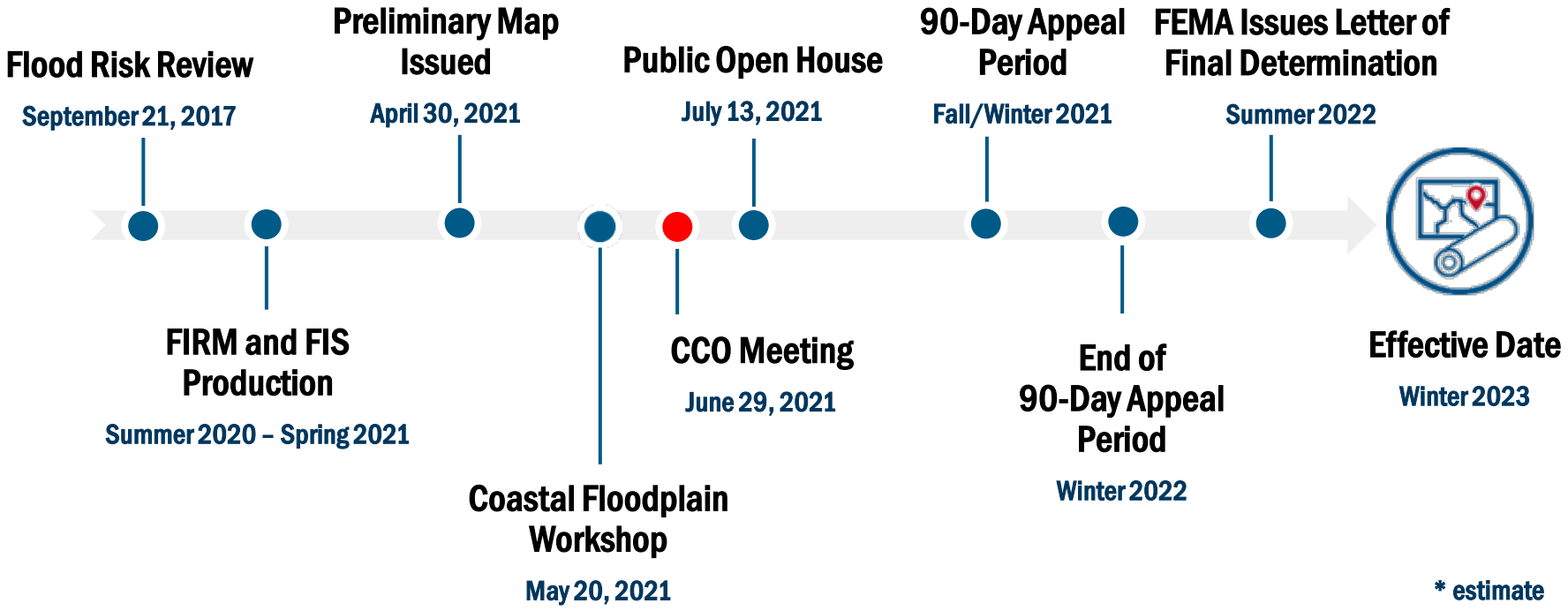
RiskMAP
Increasing Resilience Together

Next Steps in the Map Adoption Process

FEMA

RiskMAP
Increasing Resilience Together

Timeline for Delta Countywide Update



* estimate

FEMA

RiskMAP
Increasing Resilience Together

4-Step Pre-Adoption Process

Inform the Community

Gather Comments and Additional Data

Appeal Process

LFD Issued

FEMA

RiskMAP
Increasing Resilience Together

#1: Inform the Community – The Open House

- Viewing via digital map viewer
- Opportunity to share program information with property owners
- Comment sheets collected
- Attendees notified as process moves forward

The Open House will take place on July 13, 2021

FEMA

RiskMAP
Increasing Resilience Together

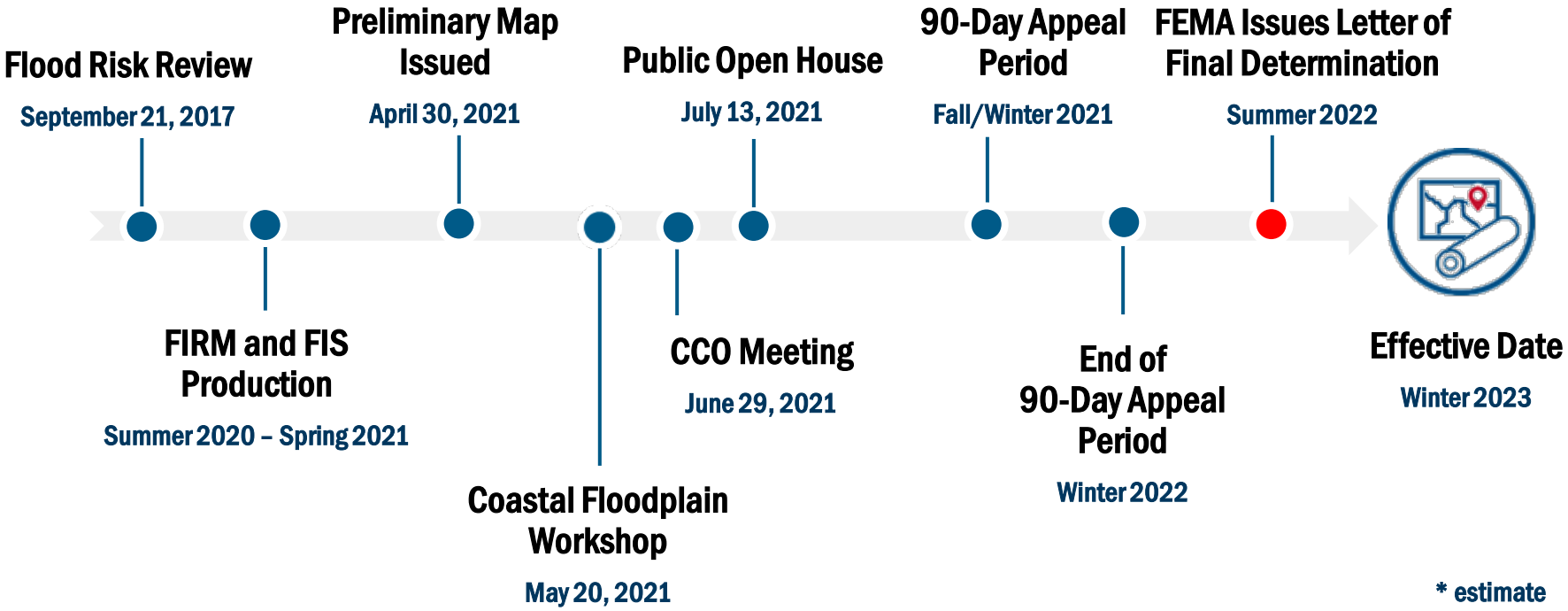
#2: Gather Community Comments

- Homeowners may choose to submit comments through community officials
- Tribal nations can submit comments directly to FEMA through John Wethington or Nick Bruscato
- FEMA requests that community officials forward the initial round of comments to FEMA no later than August 13, 2021

#3: Appeal Process

- **Appeal Period is 90 days**
- **Publication of notice in Federal Register**
  - Notification to communities by letter, including 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 5**
  - Additional instructions will be provided to community CEOs
- **FEMA will evaluate all appeals and comments for resolution after the appeal period**

#4: Issuing the Letter of Final Determination



* estimate

FEMA

RiskMAP
Increasing Resilience Together

The Appeal Period: Appeals vs. Comments

- **To be considered an appeal, a submission must:**
  - Be received during the statutory 90-day appeal period
  - Relate to new or modified BFEs, base flood depths, SFHA boundaries, SFHA zone designations, or floodways
  - Be based on data that show the new or modified BFEs, base flood depths, SFHA boundaries, SFHA zone designations, or floodways to be scientifically or technically incorrect
  - Be accompanied by all data, including H&H if necessary and/or other supporting technical data, that FEMA needs to revise the preliminary version of the FIS report and FIRMs
  - Be certified by a Registered Professional Engineer or Licensed Land Surveyor, as appropriate
- **The term comment is used for any submission that does not meet the requirements for an appeal as outlined above**

Understanding Floodplain Management Ordinance Requirements

FEMA

RiskMAP
Increasing Resilience Together

Participation in the National Flood Insurance Program

- The NFIP is a voluntary program.
- Participation requires that communities adopt and enforce floodplain management regulations.
- The floodplain management regulations need to be based on the risk data provided by FEMA (the FIRM and FIS report).
- Participation in the NFIP makes federal flood insurance available to insure buildings and personal property inside buildings within your communities.
- Federally regulated lenders require flood insurance coverage for buildings in the SFHA that secure loans; insurance is also required as a condition of receiving Federal financial assistance to purchase, repair, improve, or rehabilitate buildings within the SFHA.
- Most disaster assistance is in the form of a loan through the Small Business Administration (SBA)

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

Community must update its ordinance to reference the effective date of the FIRM and FIS report before the end of the 6-month period (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)
- In Michigan, pursuant to the Stille-DeRosset-Hale Single State Construction Code Act of 1972, the Michigan State Building Code applies throughout the state.
- With the community ordinance referencing the applicable FIRM and FIS, the Michigan Building Code meets NFIP minimum floodplain standards.
  - 2015 I-Codes checklist: https://www.fema.gov/sites/default/files/2020-08/fema_nfip-2015-i-codes-asce-24-checklist.pdf
  - 2018 I-Codes checklist: https://www.fema.gov/media-library-data/1516284132591-af5c54ba83e6a5e0d36aeaee2c45f8d0/NFIP_Checklist_2018_I-Code_Dec2017.pdf

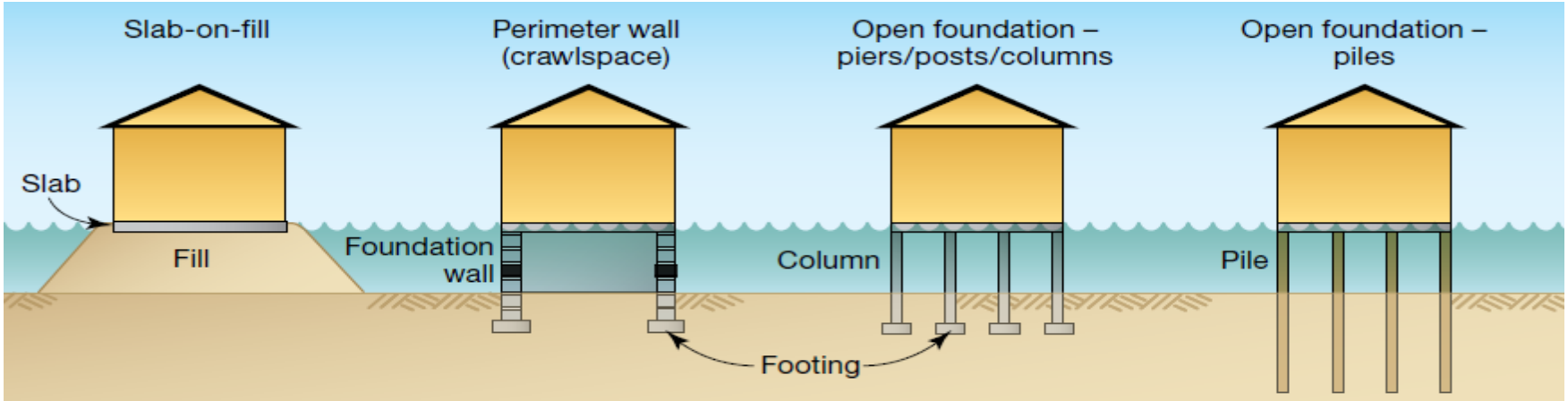
Differences in Development Requirements

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.

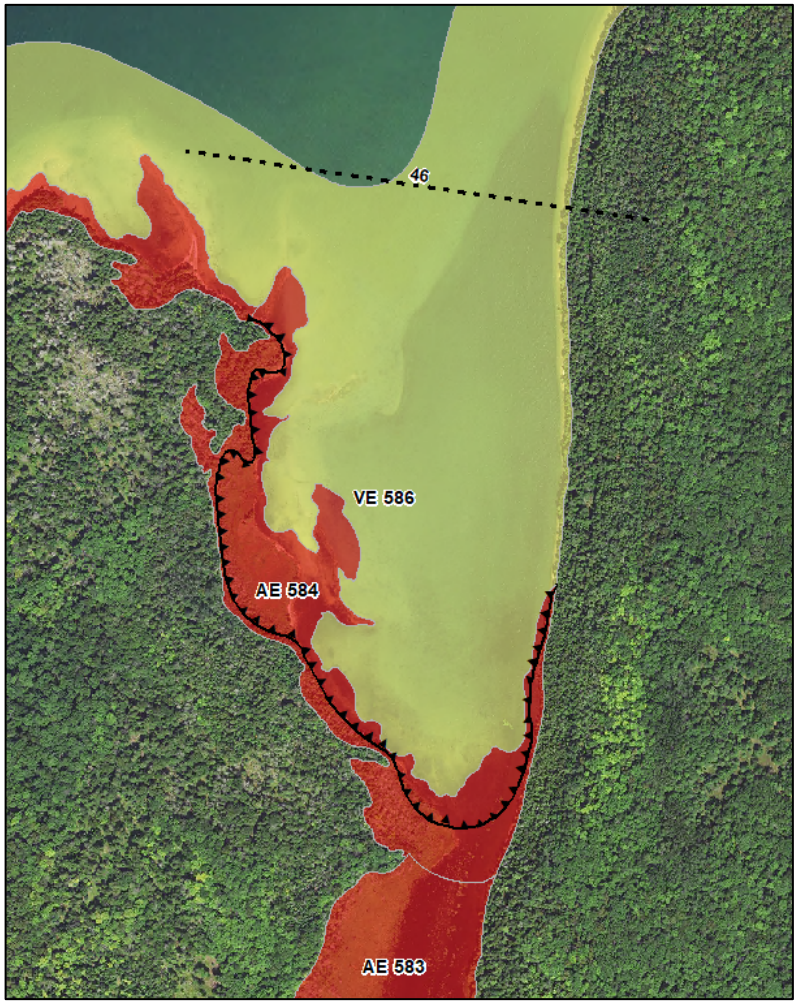
VE Zones (and AE Zones on the water side of a LiMWA)

- 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.



LiMWA (Limit of Moderate Wave Action) on the Map

- The Community Rating System (CRS) benefits communities requiring VE zone construction standards in areas defined by the LiMWA or areas subject to waves greater than 1.5 feet.
- Requirement to use 60.3(e) coastal high-hazard standards applies to lakeward of LiMWA line under the Michigan State Building Code through its reference to ASCE 24-14.



FEMA

RiskMAP
Increasing Resilience Together

Understanding Flood Insurance

FEMA

RiskMAP
Increasing Resilience Together

Flood Insurance 101

- 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
- Most homeowners, renters, and business insurance does not cover flooding
- Sold through private insurance companies and agents, or directly through the NFIP
- Claims are paid regardless of disaster declaration
- No payback requirement for verified claims

A property does not need to be near water to flood. In fact, more than 40% of all National Flood Insurance Program (NFIP) flood claims come from outside high-risk areas. Floods can be a result of storms, melting snow, hurricanes, broken water mains, and changes to land as the result of new construction, among other things.

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.

FEMA

RiskMAP
Increasing Resilience Together

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 and occupancy
- Subsidies are being phased out

Post-FIRM (actuarial) rates

- Uses the structure's elevation information to determine risk
- Based on the difference between the BFE and elevation of the lowest floor
- Required for Post-FIRM structures, and optional for Pre-FIRM structures with an elevation certificate

Effects of New Flood Zones on Flood Insurance

The NEW FIRM may:

- Map a property into the SFHA for the first time
  - Lender may require them to get an insurance policy
- Remove a property from the SFHA
  - Lender may drop the insurance requirement

Insurance Rating and Product Possibilities

Options Before October 1, 2021

- Significant changes are coming to rating methodology on October 1, 2021
- To maximize savings on flood insurance premiums consider purchasing flood insurance prior to October 1, 2021
- Visit Risk Rating 2.0 | FEMA.gov for more details

Newly Mapped (Zone A, AE, AO, and AH)

- If flood insurance is purchased within 1-year of being mapped in to the high-risk flood zone, discounted flood insurance is available
- The premium will increase by up to 15% every year until the full-risk rate is reached
- Must be newly mapped into an SFHA from zone on the previous FIRM

Benefits of maintaining Flood Insurance outside SFHA

- Recent floods have been greater than the high-risk flood areas depicted on FEMA FIRMs
- Standard Homeowner, Renter, and Business Policies do not cover flood damage
- Even though flood insurance isn't required for your property, flooding can happen to anyone.

Resources for Insurance

FloodSmart

- Buying a Policy
- Flood Mapping Change Information
- For general inquiries about the National Flood Insurance Program, contact the FEMA Mapping and Insurance eXchange (FMIX) center at 877-336-2627 or FloodSmart@FEMA.DHS.gov

- When your community's flood map is updated to reflect the current risks where you live, requirements for flood insurance coverage and the cost of your policy can change.
  https://www.floodsmart.gov/flood-map-zone/map-changes

- **FEMA**
  - James Sink, Regional Flood Insurance Liaison
    (312) 408-4421
    James.Sink@fema.dhs.gov

  - Mollie Rosario, NFIP Specialist
    (312) 408-4458
    Mollie.Rosario@fema.dhs.gov

- **Michigan Department of EGLE**
  - Matthew Occhipinti, State NFIP Coordinator
    (616) 204-1708
    OcchipintiM@michigan.gov

NFIP Floodplain Management and Insurance

Frank Shockey
Senior NFIP Specialist
FEMA Region V
312-408-5321
frank.shockey@fema.dhs.gov

James Sink
Regional Flood Insurance Liaison
FEMA Region V
312-408-4421
james.sink@fema.dhs.gov

Mollie Rosario
NFIP Specialist
FEMA Region V
312-408-4458
mollie.rosario@fema.dhs.gov

Matt Occhipinti
Michigan NFIP Coordinator
Michigan EGLE
616-204-1708
occhipintim@michigan.gov

Hazard Mitigation Planning

FEMA

RiskMAP
Increasing Resilience Together

Hazard Mitigation and Mitigation Planning

Any sustained action taken to reduce long-term risk to people and property from hazards and their effects

Benefits of Mitigation Planning:

- Increases public awareness and understanding of risk areas and vulnerabilities by engaging the whole community
- Provides eligibility for certain FEMA programs
- Builds partnerships with diverse stakeholders
- Identifies potential risk reduction measures
- Improves communication and sharing of risk data and related products at all levels of government and with the public

Hazard Mitigation Planning and Flood Risk Products

Flood Risk Products

- Provide credible data to help communities take action
- Help identify and prioritize areas for risk reduction action
- Help support education and outreach
- Visualize flood risk

FEMA

RiskMAP
Increasing Resilience Together

Mitigation Planning and Grants

FEMA ASSISTANCE PROGRAM	IS A LOCAL MITIGATION PLAN REQUIRED?
Hazard Mitigation Grant Program (HMGP) project grant	Yes
Flood Mitigation Assistance (FMA) project grant	Yes
Building Resilient Infrastructure and Communities (BRIC) project grant	Yes
Rehabilitation of High Hazard Potential Dam (HHPD) Grant Program	Yes

EMHSD Mitigation Contacts and More

Web: https://www.michigan.gov/msp/0,4643,7-123-72297_60152---,00.html
Phone: (517) 284-3745

Matt Schnepp
State Hazard Mitigation Officer
(517) 284-3950
schneppm1@Michigan.gov

Mike Sobocinski
State Hazard Mitigation Planner
(517) 881-2512
SobocinskiM@Michigan.gov

Want More Information?

Hazard Mitigation Planning: https://www.fema.gov/hazard-mitigation-planning

Hazard Mitigation Assistance: https://www.fema.gov/hazard-mitigation-assistance

Mitigation Planning Resources: https://www.fema.gov/hazard-mitigation-planning-resources

FEMA Engineering Library Data Requests

- Requests must be sent in writing to:

  FEMA Engineering Library
  3601 Eisenhower Ave., Ste. 500
  Alexandria, VA 22304-6426

Or Fax: (703) 202-4090

- Request must include:

  FIS Data Request Form
  Applicable Fees
  Payment Information Form

- Once the research has been completed, an information specialist will contact you to discuss the path forward.

FEMA

Federal Emergency Management Agency
Washington, D.C. 20472

Flood Insurance Study (FIS) Data Requests

The Federal Emergency Management Agency (FEMA) has identified seven categories into which requests for Flood Insurance Study (FIS) backup (i.e., technical and administrative support) are separated. These categories and their associated fees are below:

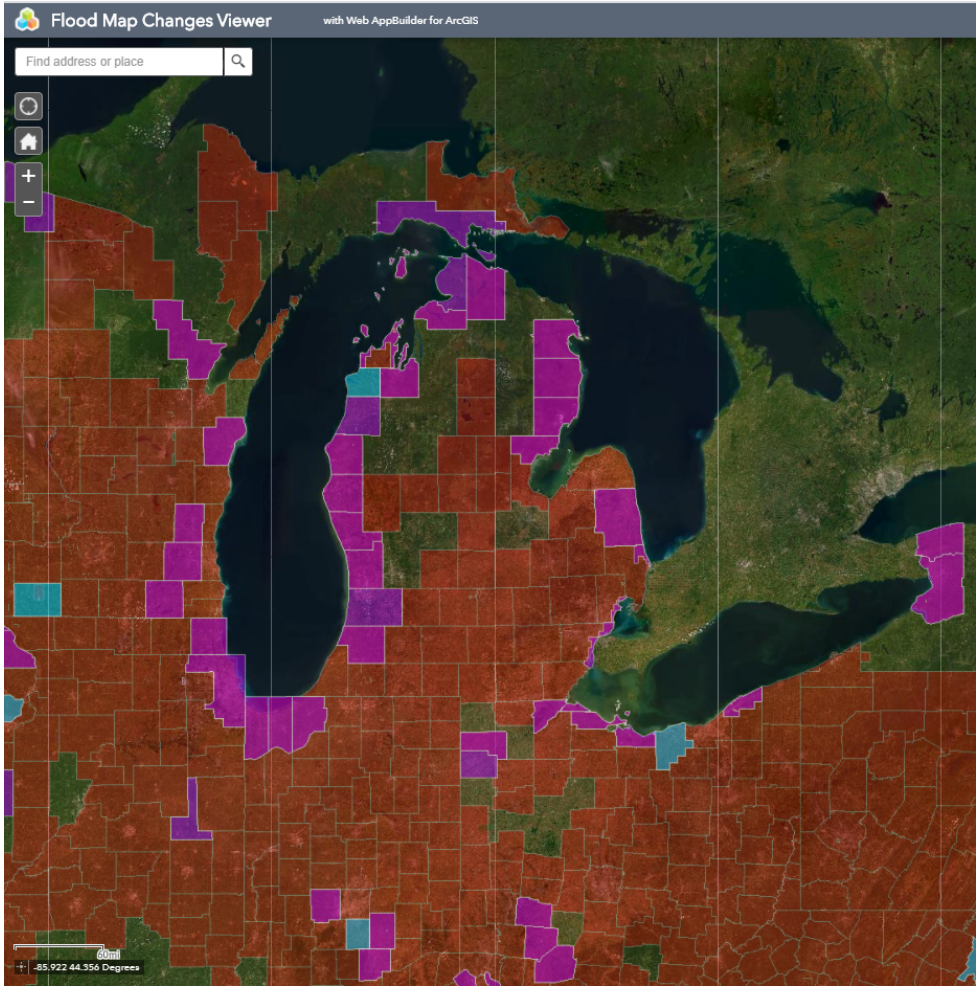
Requests for Flood Insurance Backup Data	Fee
1. Portable Document Format (PDF) or Diskettes of hydrologic and hydraulic backup data for current or historical FISs	$300, plus a $93 per-case surcharge fee to recover the cost of library maintenance and archiving. For larger requests that require more than 4 hours of research, additional hours will be charged at $40 per hour.
2. PDF or Mylar copies of topographic mapping developed during FIS process	$300, plus a $93 per-case surcharge fee to recover the cost of library maintenance and archiving. For larger requests that require more than 4 hours of research, additional hours will be charged at $40 per hour.
3. PDF of survey notes developed during FIS process	$300, plus a $93 per-case surcharge fee to recover the cost of library maintenance and archiving. For larger requests that require more than 4 hours of research, additional hours will be charged at $40 per hour.
4. PDF of individual Letters of Map Change (LOMCs)	$40 for first letter; $10 for each additional letter in the same request. Requesters will be notified about availability of the data and the fees associated with the requested data.
5. PDF of preliminary map panels	$35 for first panel; $2 for each additional panel in the same request. Requesters will be notified about availability of the data and the fees associated with the requested data.
6. DVDs of Digital Line Graph files, FIRM files or Digital LOMR attachment files	$150 per county or Digital LOMR attachment shape file. Requesters will be notified about availability of the data and the fees associated with the requested data.
7. Computer diskettes and user manuals for FEMA computer programs	$25 per copy. Requesters will be notified about availability of the data and the fees associated with the requested data.

As shown in the table above, for Categories 1-3, an initial fee of $300 is required to initiate the request and required before the requested data will be provided. If the data requested are available and the request is not cancelled, the final fee is calculated as a sum of the standard per-product charge plus a per-case surcharge of $93, to help recover library maintenance and archiving costs. The total costs of processing requests in Categories 1- 3 will vary based on the complexity of the research involved in retrieving the data and the volume and medium of the data to be reproduced and distributed. The initial flat fee will be applied against the total costs to process the request, and FEMA will invoice the requester for the balance plus the per-case surcharge before the data are provided. No data will be provided to a requester until all required fees have been paid.

For Categories 4- 7, there is no initial fee to initiate a request for data. Requesters will be notified about the availability of, and the fees associated with, the requested data.

Mapping Resources

- FEMA Flood Map Changes Viewer
  - www.msc.fema.gov/fmcv
- Preliminary Flood Hazard Data
  - www.fema.gov/view-your-communitys-preliminary-flood-hazard-data
- Steady State Program
  - www.msc.fema.gov



FEMA

RiskMAP
Increasing Resilience Together

Questions and Additional Information

Visit:

www.greatlakescoast.org

www.fema.gov/preliminaryfloodhazarddata

FEMA Region 5
Regional Engineer, Michigan
John Wethington
312-408-5485
John.Wethington@fema.dhs.gov

STARR II (Contractor)
Tyler Bruce
919-532-2355
Tyler.Bruce@stantec.com

NFIP Region 5 BSA Manager
Catrina Covino
260-417-9254
Catrina.Covino@fema.dhs.gov

FEMA Region 5
Mitigation Tribal Liaison
Nicholas Bruscato
312-408-8354
Nicholas.Bruscato@fema.dhs.gov

Question & Answer Session

FEMA

RiskMAP
Increasing Resilience Together

Next Step:
Open House
Tuesday July 13, 2021
5 PM – 7 PM EDT

FEMA

RiskMAP
Increasing Resilience Together