

### DNR Dam Safety/Floodplain Program



Michelle Staff NFIP Coordinator



### Be flood smart this spring Flood Safety Awareness Week -- March 18-22



### Floodplain Management Goals

- Reduce the loss of life and property caused by flooding;
- Reduce disaster relief costs caused by flooding;
- Minimize business interruptions and other economic disruptions;
- Minimize damage to public facilities in the floodplain.



Jefferson Co. 2008



Buffalo Co. 2016

### Know Your Flood Risk

- County wide map moderations
  - -Iron County
  - -Lafayette County
  - -Shawano County
  - Taylor County
  - -Florence County
  - -Kewaunee County (FEMA)
  - -Mariette County (FEMA)
  - -Ashland County (FEMA)

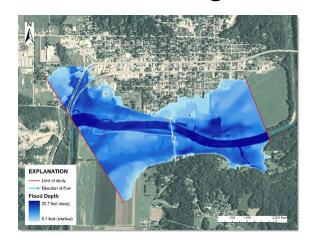
### Know Your Flood Risk

- Milwaukee Watershed Project
  - The Milwaukee River basin is located in portions of seven counties, contains (entirely or portions of) 13 cities, 32 towns, 24 villages and is home to about 1.3 million people.
- Southeast Fox Illinois River basin

 The Southeast Fox River basin is located in portions of seven counties, contains (entirely or portions of) 10 cities, 22 villages, 42 towns and is home to about 500,000 people.

### Coastal – Great Lakes

Flood Inundation Mapping Cedarburg Portage

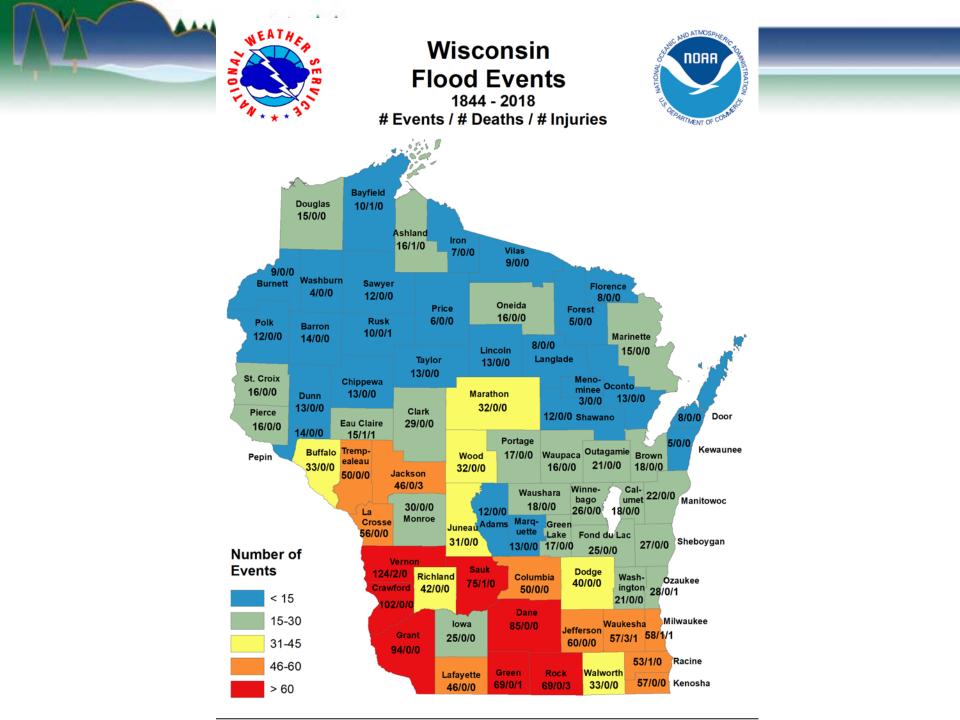


Future Funding Douglas Co wide Bayfield Co wide Others???? Lad sample Astronom

## 2017 Flooding Forces State of Emergency in Buffalo County



Flooding Forces State of Emergency in Buffalo County, Wisconsin. Video courtesy of WCCO | CBS Minnesota, https://www.youtube.com/watch? v=lxqbQS7VITo. Published on Aug 11, 2016.





First Floor Elevation

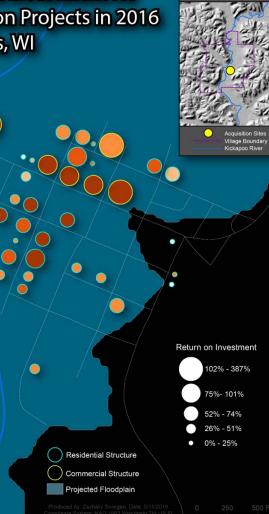
704.3 ft. - 705.7 ft 703.5 ft. - 704.2 ft

702.6 ft. - 703.4 ft 702.0 ft. - 702.5 ft

700.6 ft. - 701.9 ft

### **Return on Investment: Gays Mills**

Return on Investment for Acquisition Projects in 2016 Gays Mills, WI



Hillshade Elevation Profile

Gavs Mills, W

Estimated 277% overall return on investment
2018 flood not included
Saved nearly \$6 million in taxpayer money
As time passes, the ROI will continue to grow

From "Loss Avoidance Study: Property Acquisition and Structure Demolition in Gays Mills, Wisconsin, June 2018" by Zac Swingen.

# WE MANA

## Success: Gays Mills 2018



### **Community Resilience**

- Mitigation
  - -Flood Insurance
  - Education
  - -Flood Zoning/Building Codes
  - –Buys out
  - -Elevations
  - -Structural Mitigation (levees, dams, etc)
  - -Open Space (wetlands, natural areas, etc)
  - Planning

### Before the Flood

1:50

•□• ▼⊿ 🛔 100%

Tweet



Governor Tony Evers 🥑 @GovEvers

You don't have to live near water to experience flooding. That's why @WisconsinOCI is urging residents to protect their home and business. Learn more about your options and how to get covered at FloodSmart.gov. #Wisconsin #Insurance #EmergencyPrep

More than 20% of flood insurance claims come from outside high-risk areas.

OFFICE OF THE COMMISSIONER OF INSURANCE

5:27 PM · 14 Mar 19 · TweetDeck

3 Retweets 17 Likes

<

Tweet your reply



State of Wisconsin / OFFICE OF THE COMMISSIONER OF INSURANCE

Tony Evers, Governor Mark V. Afable, Commissioner

Wisconsin.gov

125 South Webster Street • P.O. Box 7873 Madison, Wisconsin 53707-7873 Phone: (608) 266-3585 • Fax: (608) 266-9395 oclinformation@wisconsin.gov oclwi.gov

PRESS RELEASE

FOR IMMEDIATE RELEASE March 5, 2019

For more information contact:

Olvla Hwang (608) 267-9460 or olvla.hwang@wisconsin.gov

#### Insurance Commission Urges Wisconsinites to Evaluate Flood Insurance Needs Before the Snow Melts

Madison, Wis. — The Wisconsin Office of the Commissioner of Insurance (OCI) is urging residents to evaluate their flood insurance coverage now as the National Weather Service predicts temperatures across Wisconsin will rise later this week. With rising temperatures comes the possibility of snowmelt-related flooding. The Federal Emergency Management Agency (FEMA)<sup>1</sup> noted late last month that Wisconsin's flood risk is above normal to well-above normal throughout March and April.

"I think it's fair to say that most Wisconsinites are ready for winter to be over," said Insurance Commissioner Mark Afable. "But while we're waiting for temperatures to rise, home and business owners should review their insurance policies to make sure they have appropriate coverage.

"If you purchase flood insurance, the policy does not go into effect for 30 days,"<sup>2</sup> explains Afable. "Consider flood insurance now as an important protection against this type of peril."

### Wisconsin Statistics

- 6,058 paid claims since 1978 for nearly \$103 million
- 241,000 improved parcels in the floodplain
- ~5% are covered by flood insurance
- 553 communities

### During the Flood

- Brown County Approximately 80-100 people evacuated. As the water recedes, the community is working on a re-entry plan for residents which includes building inspection.
- Columbia County Town of Columbus, one apartment complex with approximately 15 20 residents evacuated and 175 homes were checked with 40 residents evacuated.
- Trempealeau County Town of Dodge, approximately 12 homes evacuated.
- Ozaukee County Waubeka (unincorporated), approximately 50 people displaced from homes.

### 2019 Spring Flooding

al as which her



### After the Flood

- Inspect damages/conduct assessments
- Make SD determination before issuing permit using defendable costs and equalized assessed value
- Assure that structure meets current requirements
- Apply uniformly and consistently

#### LINCOLN COUNTY

Floodplain Development Permit
#

#### Minimum Floodplain Requirements

Any questions concerning these requirements should be directed to the Lincoln County Floodplain Administrator, 605-764-0101 or gis@lincolncountysd.org



DO NOT REMOVE THIS SIGN UNTIL PROJECT IS COMPLETED Anyone caught defacing or removing this sign shall be guilty of a misdemeanor »Community best practices:

- Develop written procedures.
- Identify target areas for SD using data available.
- Develop a plan to conduct inspections before owners start repair work.

### Definition of Substantial Improvement/Substantial Damage

Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50% of the equalized assessed value of the structure before the damage occurred.





## Initial Damage Assessment

### Press Release

Letters to homeowners in the floodplain
Notify County Board Supervisors
What is County policies on permitting?



#### Jefferson County

PLANNING AND ZONING DEPARTMENT COURTHOUSE, 320 S. MAIN ST. ROOM 201, JEFFERSON, WI 53549 PHONE 674-8638, <u>674</u>-7113, 674-7131 FAX 920-674-7525

- TO:
   All Floodplain Property Owners

   FROM:
   Robert Klotz, Director of Planning & Zoning Jefferson County Planning and Zoning Department

   RE:
   Flood Damage Reporting and Permitting Requirements
- DATE: DATE 2013

As a consequence of the recent flooding event, Jefferson County is required by the Federal Emergency Management Agency (FEMA), the Department of Natural Resources (DNR) and Section 14:7.1(1)(<u>bm</u>) of the Jefferson County Floodplain Ordinance to conduct substantial damage assessments on all floodplain residences and businesses. A structure is considered substantially damaged if the total cost to restore the structure to its pre-damaged condition equals or exceeds 50 percent of the structure's present equalized assessed value. You will be notified if your residences and/or business has or has not been substantially damaged. All residences/businesses having sustained substantial damage will be required to comply with state and local floodplain ordinances. 
 From:
 Laurie Miller

 Sent:
 Wednesday, June 25, 2008 3:06 PM

 To:
 County Board Members

 Cc:
 Rob Klotz

 Subject:
 Jefferson County Zoning Floodplain Notifications

 County Board Members.

The Jefferson County Zoning Department has sent out letters to property owners within the floodplain in the unincorporated areas of the county as required by DNR and FEMA. A copy of this letter was also mailed out to you to reference should you receive calls from your constituents who may have questions or concerns. If you have any questions regarding the correspondence, please to not hesitate to contact this office.

Laurie A. Miller Zoning Assistant Jefferson County Zoning & Sanitation Department (920) 674-7524

## In Office Procedures

FLOOD DAMAGE CALI				
Name of Property Owner: Frank	Holdeman			
Site Address: W7835 WH	and Rd. Fort			
Telephone Number: <u>130-961-</u>	2988			
Date of Telephone Call: 7/1/08				
Message: Ques the bog showed into his	Has previously spoke to ROB			
Donna, E-mail Lu				
<u>Coive</u> . <u>Coive</u> . <u>fholdeman@carcarecollision</u>	Info. to Convey:			
centers.com Lh	<ul> <li>Letter &amp; permit app. to be sent out 6/25/08</li> <li>Substantial damage inspections</li> <li>Substantial damage notifications</li> <li>Permitting</li> </ul>			

## **DNR** Notification

State of Wisconsin DEPARTMENT OF NATURAL RESOURCES 101 S. Webster Street Box 7921 Madison WI 53707-7921

Scott Walker, Governor Cathy Stepp, Secretary Telephone 608-266-2621 Toll Free 1-888-936-7463 TTY Access via relay - 711



December 1, 2016

Thad Kubisiak, County Manager Adams County 402 Main Street PO Box 102 Friendship, WI 53934

Subject: Procedures for Flood Damage Estimation for Wisconsin Communities

Dear Mr. Kubisiak,

Your community participates in the National Flood Insurance Program (NFIP), making federally-backed flood insurance and mortgages available to all residences and businesses. In return, your community has adopted and administers a floodplain zoning ordinance meeting NFIP and Wisconsin standards. These regulations require your building/land use permit official to issue a permit for the repair of all damaged buildings and facilities located within the identified floodplain, including flood protection measures which are required as a condition for allowing repairs. For example, your floodplain ordinance includes the requirement for 'substantially damaged' structures to comply with the standards of your floodplain zoning ordinance to protect them from future flood damage. Your continued participation in the NFIP requires that these provisions be properly enforced.

If you have not already done so, you will need to inspect each recently flooded building in the identified Special Flood Hazard Area (SFHA) on your Flood Insurance Rate Map (FIRM) or Flood Hazard Boundary Map (FHBM), whichever is more current. Substantial damage occurs when the total cost to repair a structure (including labor and materials) to its pre-damaged condition equals or exceeds 50% of the pre-damage equalized assessed value of the building. You will need to determine both the cost of repair (assigning local wage rates to donated labor and local market prices to donated materials) and compare the total of these two figures to the equalized assessed value of the building before any damage occurred (see attached WDNR fact sheet)

### Take Some Time to Get Your Tools Ready

Community FIRM and Floodway Map Parcel or Street Maps Cameras Inspection Tags Notepad Tape Measures Personal safety equipment

### Create a Form or Two.....

### July 2008

### inches or 1.5 feet of Water above First Floor

Date 7-21-08 Inspected by RK+MS

4 Subdisia

REMARKS: 100 yr. 184.2 Willin will, dev. 184.32 6-19-2003 2'619 got dev. at Day 790-781

1 First Cloor

myer fotosido

WAR 2' + above goods

- - tree Low

RSDE DAMAGE INSPECTION WORKSHEET Single/Multi-Family Site Built Residences

2.	Elevation of lowest floor:	Datum;
3.	NFIP Community Name:	
4.	Latitude: I	.ongitude:
	Owner's First Name:	
6.	Building Address AF742 Lamp Ri	City:
	State: Zip:	
7.	County:	
8.	Mailing Address:	City:
	State:Zip:	Phone #:
9,	Date of Construction:	Date Damage Occurred: (0/1/0/
	Cause Of Damage: (A) Fire ((B) Flood (C) Fire & W	
11	. Duration of Flooding: (A) hours	or (B)days
12	. Description Of Residential Site-Built Modular Struc	sture:
	(A) Quality of Construction:	
	(B) 1-story 1 ½-story 2-story More th	Good (5) Very Good (6) Excellent      Solar 2 stories Solar Bi lourd Solar lourd
	(C) Foundation (check one):	an 2 siones 2-siony bi-level split-level
	Stab-on-grade Basement (	Drawl space Piers Footings
	(D) Overall Dimensions of building foot print: Size (E) Walls (check one)	
	(1) Wood Frame (2) Masonry _	(3) Concrete Walts

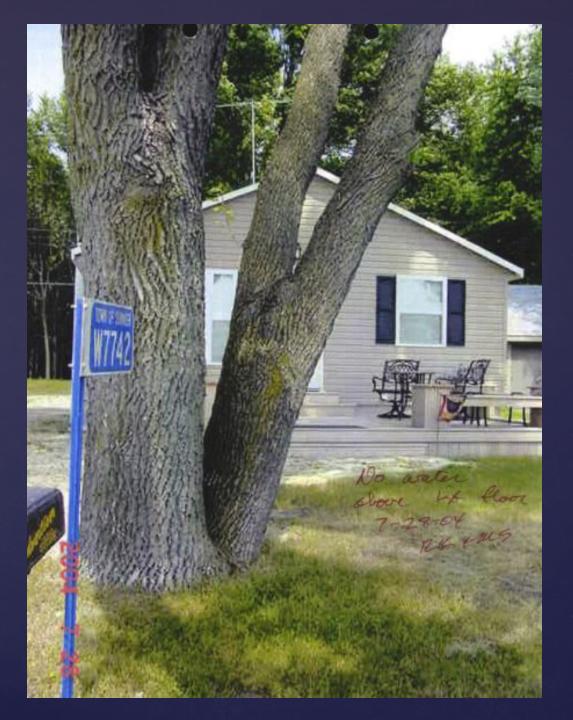
2007 - August

**RSDE DAMAGE INSPECTION WORKSHEET** Single/Multi-Family Site Built Residences

	1.	. Subdivision:	Parosi # Lot #
	2.	Elevation of lowest floor:	Dətum:
	3.	NFIP Community Name: Jefferse	N COUNTY, WES
		. Latitude:	
	5,	. Owner's First Name:	Last Name:
2000	6.	. Building Address:	City:
		State: Zip:	Phone #:
*	7.	. County Jefferson	
		8. Mailing Address:	
		State: Zip:	+ Phone #:
	9.	9. Date of Construction:	Date Damage Occurred: August 18,2007
	1	10. Cause Of Damage: (A) First (R) Flood (C) First	Wind (D) Seismic (E) Wind - September 6,2007
*		11. Duration of Flooding: (A) hour	
	.1	12. Description Of Residential Site-Built Modular Stu	ructure:
80 		(A) Quality of Construction:	
			. (4) Good (5) Very Good (6) Excellent than 2 stories 2-Story Bi-level Split-level
		(C) Foundation (check one):	ana zanita zony pravni oprovini
		Slab-on-grade Basement	Crawl space Piers Footings
		(D) Overall Dimensions of building foot print: Siz	
		(E) Walls (chock one)	
		(1) Wood Frame (2) Masonr (4) Exterior Finish (Type)	
		(5) Interior Finish (Type)	1 A A A A A A A A A A A A A A A A A A A
			I and a N'a water
		No Damage to 1	Report . No water all
		above 1st. floor-	Inspection 9/5/07 +9/6/07
		- 10 11 20	- A - Marcu
		1 tol hlog	1 Mpihely State
		ROB KLOTZ	Michelle Staff
			a second a

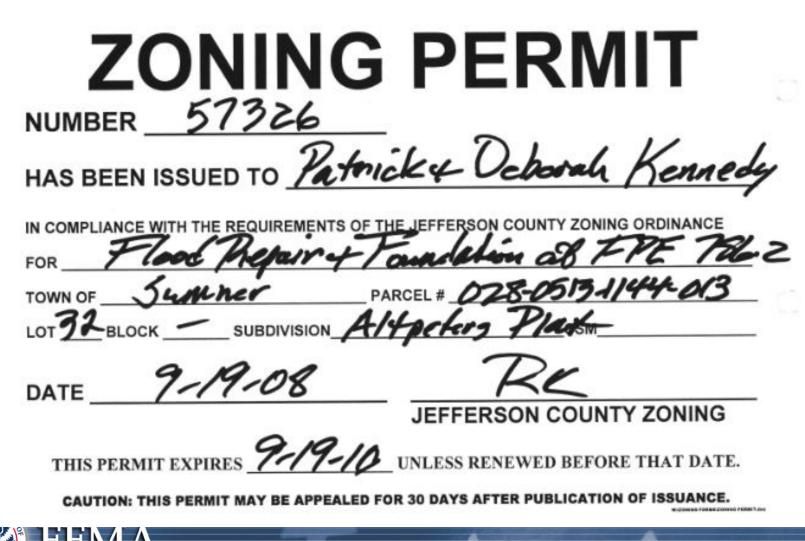
No water attend ist

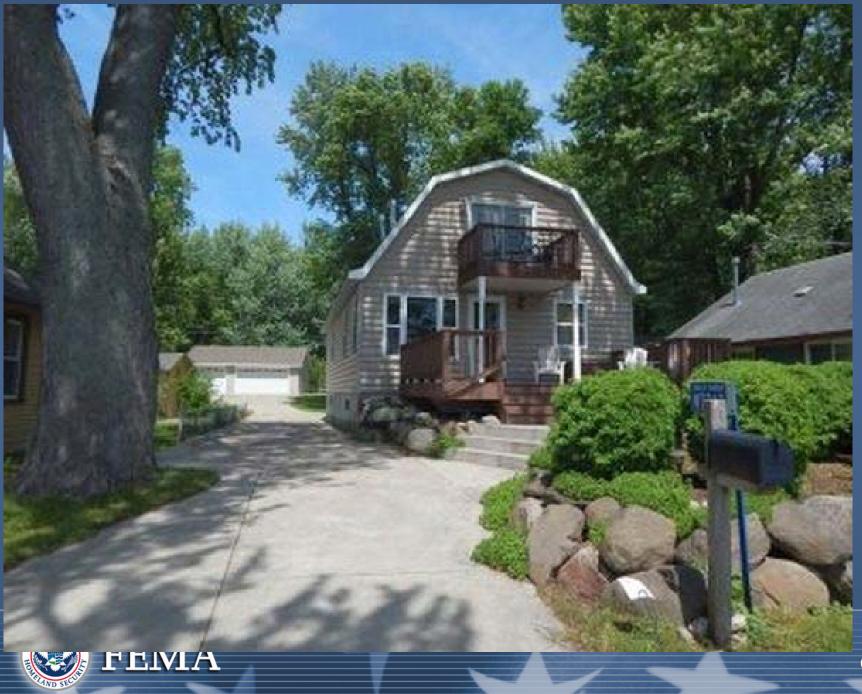
(5) Interior Flnish (Type)

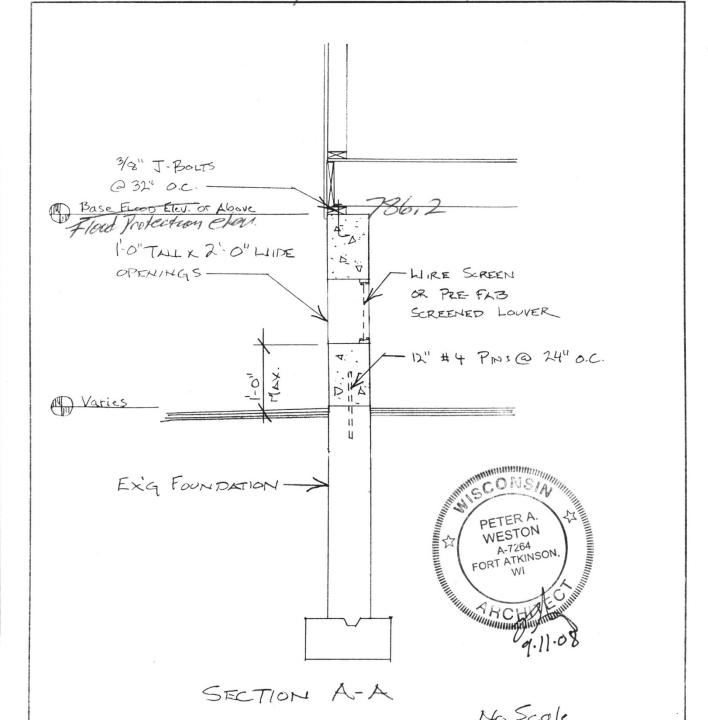




IT IS UNLAWFUL TO COMMENCE WORK BEFORE THIS PERMIT IS PLACED IN A CONSPICUOUS PLACE ON THE PREMISES. PERMIT EXPIRES TWO (2) YEARS FROM DATE OF ISSUE









## What is Needed for a Substantial Damage/Improvement Determination?

- Pre-Damage/Improvement Equalized Assessed Valuation of the Structure <u>excluding</u> the land value.
- 2. Total Estimated Cost of the Improvements or Repairs to the structure (Plan and specification fees along with permit fees are not counted toward the cost of the improvements).



### **Cost of the Repair/Improvements**

- Estimation process adopted by the community.(Substantial Damage Estimator, etc.)
- Signed contracts for the work
- Estimate from a professional estimator
- Estimate from the design Architect



What's Included in the Repair or Improvement Cost? **All Structural Elements All Interior Finish Elements All Utility and Service Equipment** Substantial Improvement/Substantial Damage: Items Included/Excluded Labor Items To Be Included Other

**FEMA** 

<ul> <li>Spread or continuous foundation footings and pilings</li> <li>Monolithic or other types of concrete slabs</li> <li>All walls, tie beams,</li> <li>Tiling, linoleum, s or carpet over subflooring</li> <li>Bathroom tiling a fixtures</li> <li>Wall finishes, including dry wall</li> </ul>	All Utility and Service Equipment, including	Other
<ul> <li>and trusses</li> <li>Wood or reinforced concrete decking or roofing</li> <li>Floors and cellings</li> <li>Attached decks and porches</li> <li>Interior partition walls</li> <li>Exterior wall finishes (e.g., brick, stucco, or siding) including painting, stucco, plaster, paneling, marble, or other decorative finishes</li> <li>Kitchen, utility, an bathroom cabine Built-in bookcase cabinets, and fun</li> <li>Hardware</li> <li>Ornamental work</li> <li>The statistic decorative moldings</li> <li>Windows and doors</li> <li>Re-shingling or retiling a roof</li> <li>Hardware</li> </ul>	<ul> <li>Repair or reconstruction of plumbing and electrical services</li> <li>Light fixtures and ceiling fans</li> <li>Security systems</li> <li>Built-in kitchen appliances</li> <li>Built-in washer/dryer</li> <li>Central vacuum systems</li> </ul>	<ul> <li>Labor and other costs associated with demolishing, removing, or altering building components</li> <li>Construction management/ supervision</li> <li>Overhead and profit</li> <li>Equivalent costs for:         <ul> <li>Donated materials</li> <li>Volunteered labor (including owners')</li> <li>Any improvements beyond pre-damaged condition</li> </ul> </li> </ul>

### **Calculate the Percentage**

Cost of the Repair/Improvement Equalized Assessed Valuation X 100 = Repair/Improvement Percentage

6.323

When.....

Repair/Improvement Percentage > or = 50%

You have a Substantially Damaged or Improved Structure.....



### FEMA P-784, Substantial Damage Estimator (SDE) Tool (2017)

FEMA developed the SDE tool to assist State and local officials in estimating Substantial Damage for residential and non-residential structures in accordance with the requirements of the National Flood Insurance Program (NFIP) as adopted by the communities. The tool can be used to assess flood, wind, wildfire, seismic, and other forms of damage. It helps communities provide timely Substantial Damage determinations so that reconstruction can begin quickly following a disaster.

Although the SDE data collection and reporting process remains relatively unchanged from previous versions of the tool, the SDE 3.0 release focuses on enhancing the three key areas of

performance, data accessibility, and usability. Updates to the tool's algorithms and some new embedded functionality create significant performance enhancements over previous versions. Users can now access the underlying database to run queries, perform bulk updates of data, or generate custom reports using their own databases and reporting tools. SDE 3.0 improves the user experience with dozens of enhancements that address user feedback.

FEMA P-784, Substantial Damage Estimator (SDE) User Manual and Field Workbook: Using the SDE Tool to Perform Substantial Damage Determinations (August 2017), and the FEMA *Substantial Damage Estimator Best Practices* (August 2017) document have been updated to reflect the enhanced tool.

Before installing the new version, export any existing SDE data that you want saved from previous SDE versions.





### Notification to the Owner

 What methods of delivering notices to homeowners?
 Hand delivery
 U.S. Mail Service
 Registered mail
 Provide outreach and assistance



### **Homeowner Protests**

How many times will you go back and forth on the determination with the homeowner?
Do you have procedures to deal with homeowners protests?
Do you have an appeals process?
How do you handle work without permits?



## Mitigating Flood Risk Through Floodplain Management

- Building Codes and Ordinances
- Review/Issue permits for Development in SFHA
- Require new construction to be elevated or flood resistant
- Prohibit new development in designated floodways that would increase flood heights
- Mitigating risk of substantially damaged or improved structures...



### FEMA Letter of Map Change (LOMC)

- Letters of Map Amendment (LOMAs) Typically, a LOMA is issued when the scale of the FIRM does not allow for small areas of natural high ground to be shown outside the SFHA
- Conditional Letter of Map Amendment (CLOMA)

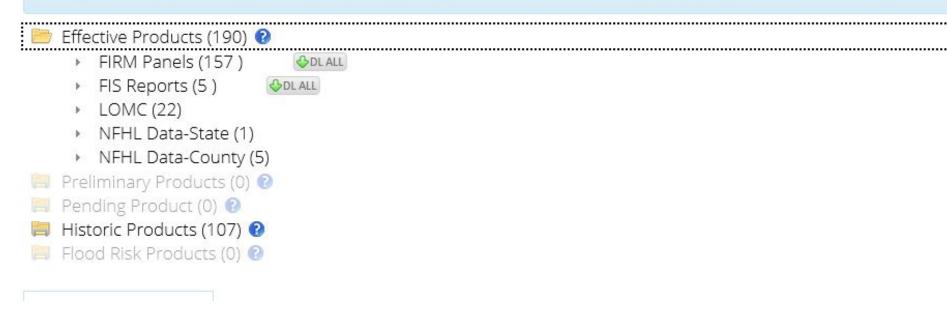
   A letter from FEMA stating a proposed structure that is not to be elevated by fill (natural grade) would not be inundated by the base flood if built as proposed

# Where can I find a LOMA?

#### Search Results for VERNON COUNTY ALL JURISDICTIONS

Click subscribe to receive email notifications when products are updated.

**Please Note:** Searching All Products by county displays all products for all communities within the county. You can refine your search results by specifying your specific jurisdiction location using the drop-down menus above.



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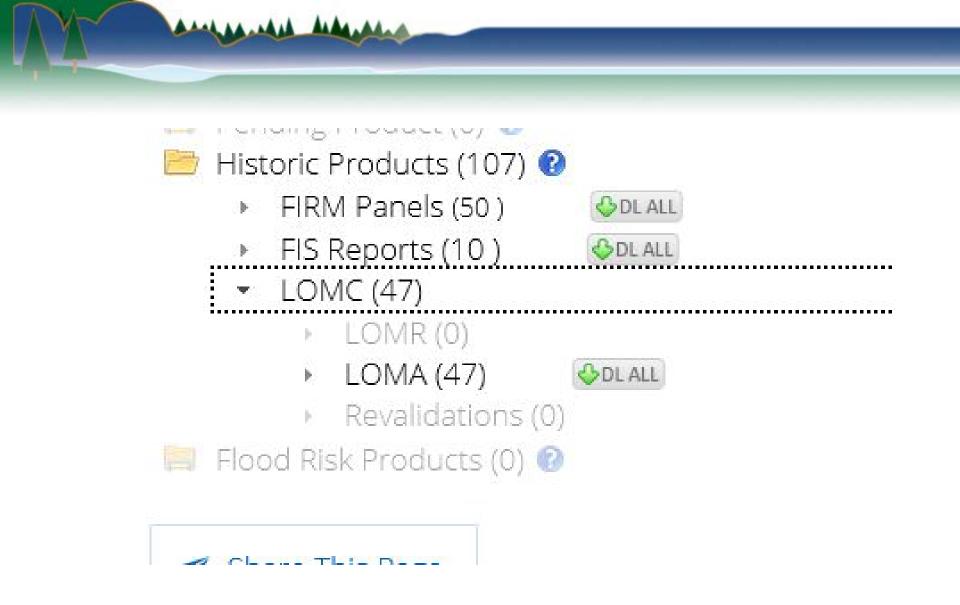


#### And sanded hearden

#### LOMC (22)

# ► LOMR (0) ▼ LOMA (16) Operation Show 100 ♥ entries Showing 1 to 16 of 16 entries Previous 1 Next

Product ID	<ul> <li>Effective Date</li> </ul>	\ominus Download
14-05-0733A-550450	11/12/2013	<b>⊘</b> DL
14-05-0837A-555556	11/14/2013	<b>♦</b> DL
13-05-1168A-550458	11/15/2012	<b>⊘</b> DL
15-05-1945A-550456	04/07/2015	<b>⊘</b> DL
16-05-2260A-550450	02/25/2016	<b>⊘</b> DL
13-05-2524A-550450	01/31/2013	<b>⊘</b> DL
16-05-4167A-550455	06/01/2016	<b>⊘</b> DL
16-05-4303A-550450	02/07/2017	<b>⇔</b> DL
16-05-4683A-555556	07/07/2016	<b>⊘</b> DL
14-05-5015A-550457	05/20/2014	<b>⇔</b> DL
14-05-5140A-555556	04/22/2014	(♦DL)
13-05-6261A-550450	07/18/2013	♦DL
14-05-7329A-550457	08/14/2014	<b>♦</b> DL



#### And sanded Askerson

### Letter of Map Amendment - LOMA

### Items to be Removed from the SFHA

- Structure
- Entire Lot
- Part of the Lot

For any map change letter other than a LOMA, a local official must sign the request.

# LOMA

 Limitations in the scale or topographic detail of the source maps used to prepare a FIRM may cause small elevated areas to be included in a Special Flood Hazard Area (SFHA).

 FEMA has established the LOMA process for properties on <u>naturally</u> high ground.

# LOMA (cont)

- FEMA does not charge a fee to review a LOMA request, but requesters are responsible for providing the required mapping and survey information specific to their property.
- For FEMA to remove a structure from the SFHA through the LOMA process, Federal regulations require the lowest ground touching the structure, or Lowest Adjacent Grade (LAG) elevation, to be at or above the Base Flood Elevation (BFE).

# LOMA

- The exception to this requirement is when the submitted property information shows that the structure is outside the SFHA. In this case, the property is referred to as "out as shown."
- BFEs for a certain SFHA have not yet been determined. FEMA will attempt to calculate the BFE when a LOMA application is submitted for properties of less than 50 lots or 5 acres.



How to Request a Letter of Map Amendment (LOMA) or Letter of Map Revision Based on Fill (LOMR-F)

#### What is a LOMA or a LOMR-F?

The Federal Emergency Management Agency (FEMA) applies rigorous standards to develop Flood Insurance Rate Maps (FIRMs) and uses the most accurate hazard information available. However, limitations in the scale or topographic detail of the source maps used to prepare a FIRM may cause small elevated areas to be included in a Special Flood Hazard Area (SFHA). SFHAs are high-risk areas subject to inundation by the base (1-percent-annual-chance) flood. They are also known as 1-percent-annual-chance floodplains, base floodplains, or 100-



#### For More Information

For general information, contact the FEMA Map Information eXchange by telephone, toll free, at 1-877-FEMA MAP (1-877-336-2627) and choose "Option 1"; by email at <u>FEMAMapSpecialist@riskmap</u>

cds.com; or by live chat at www.floodmaps.fema.gov/fhm /fmx\_main.html.

 The forms and other documents referenced in this flier are also available on the "Forms, Documents, and Software" portion of the FEMA website at

> https://www.fema.gov/formsdocuments-and-software.

# LOMA (cont)

"It is important to note that the issuance of a LOMA or LOMR-F does not mean the risk of flooding has been <u>eliminated</u>. Therefore, not having a flood insurance policy could have disastrous consequences, leaving you with no financial protection from future flood losses. FEMA recommends flood insurance coverage even if it is not required by law or a lender. The good news is that you may be eligible to pay much less for flood insurance coverage if your property is removed from the SFHA."



#### **Michelle Staff Floodplain Management Policy Coordinator** Wisconsin Department of Natural Resources Phone: 608-266-3093 FEMA



Michelle.Staff@Wisconsin.gov

