

MAFSM 2010



Mitigation Plan Update:



An Opportunity to Mitigate
Repetitive Loss Properties Using
FEMA's National Tool (NT)

Hazard Mitigation Planning

- Disaster Mitigation Act of 2000
 - Signed into law on October 30, 2000
 - Amended the Stafford Act (section 322)
- Requires local governments to develop natural hazard mitigation plan and update every 5 years for mitigation funding eligibility
- Plan establishes eligibility for Hazard Mitigation Assistance (HMA) grant funding
 - HMGP, PDM, FMA, RFC, SRL

Hazard Mitigation Plan Update

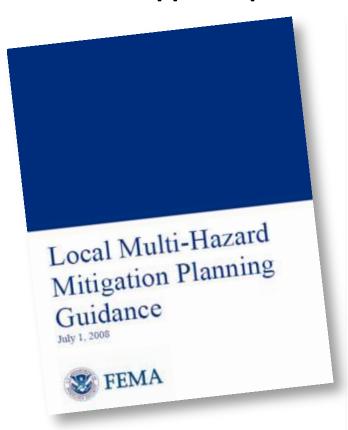
- A requirement (44CFR 201.6)
- Also an opportunity
 - Better risk assessment (uses HAZUS, addresses climate change)
 - Better planning process (involves special needs, uses social media for outreach)
 - Develop fundable mitigation actions

Maryland Hazard Mitigation Plans



Mitigation Planning Guidance

- Revised version is dated July 1, 2008
- Plan Review Crosswalk is used to check compliance and approve plans



LOCAL MITIGATION PLAN REVIEW CROSSWALK

INSTRUCTIONS FOR USING THE PLAN REVIEW CROSSWALK FOR REVIEW OF LOCAL MITIGATION PLANS

Attached is a Plan Review Crosswalk based on the Local Multi-Hazard Mitigation Planning Guidance, published by FEMA in July, 2008. This Plan Review Crosswalk is consistent with the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), as amended by Section 322 of the Disaster Mitigation Act of 2000 (P.L. 106-390), the National Flood Insurance Relief and 44 Code of Federal Reculations (CFR) Part 201 - Mitigation Planning, inclusive of all amendments through October 31, 2007.

SCORING SYSTEM

- N Needs Improvement: The plan does not meet the minimum for the requirement. Reviewer's comments must be provided.
- S Satisfactory: The plan meets the minimum for the requirement. Reviewer's comments are encouraged, but not required.

Each requirement includes separate elements. All elements of a requirement must be rated "Satisfactory" in order for the requirement to be fulfilled and receive a summary score of "Satisfactory." A "Needs Improvement" score on elements shaded in gray (recommended but not required) will not preclude the plan from passing.

When reviewing single jurisdiction plans, reviewers may want to put an N/A in the boxes for multi-jurisdictional plan requirements. When reviewing multi-jurisdictional plans, however, all elements apply. States that have additional requirements can add them in the appropriate sections of the Local Multi-Hazard Mitigation Planning Guidance or create a new section and modify this Plan Review Crosswalk to record the score for those requirements. Optional matrices for assisting in the review of sections on profiling hazards, assessing vulnerability, and identifying and analyzing mitigation actions are found at the end of the Plan Review Crosswalk.

The example below illustrates how to fill in the Plan Review Crosswalk.:

lement			sco	
	annex and page #)	Reviewer's Comments		5
Does the new or updated plan include an overall summary description of the jurisdiction's vulnerability to each hazard?	Section II, pp. 4-10	The plan describes the types of assets that are located within geographically defined hazard areas as well as those that would be affected by writer storms.		0.
Does the new or updated plan address the impact of each hazard on the jurisdiction?	Section II, pp. 10- 20	The plan does not address the impact of two of the five hazards addressed in the plan. Required Revisions: Include a description of the impact of floods and earthquakes on the assets. Recommended Revisions: This information can be presented in terms of dotar value or percentages of danage.	0	

New Requirements

- As of October 1, 2007, the planning requirements of the Flood Mitigation Assistance (FMA) grant program and the Hazard Mitigation Plan are identical
- Only one mitigation plan is required
- Therefore:
 - NFIP communities must address repetitively damaged (flooded) structures
 - NFIP communities must include a strategy for continued compliance with NFIP requirements

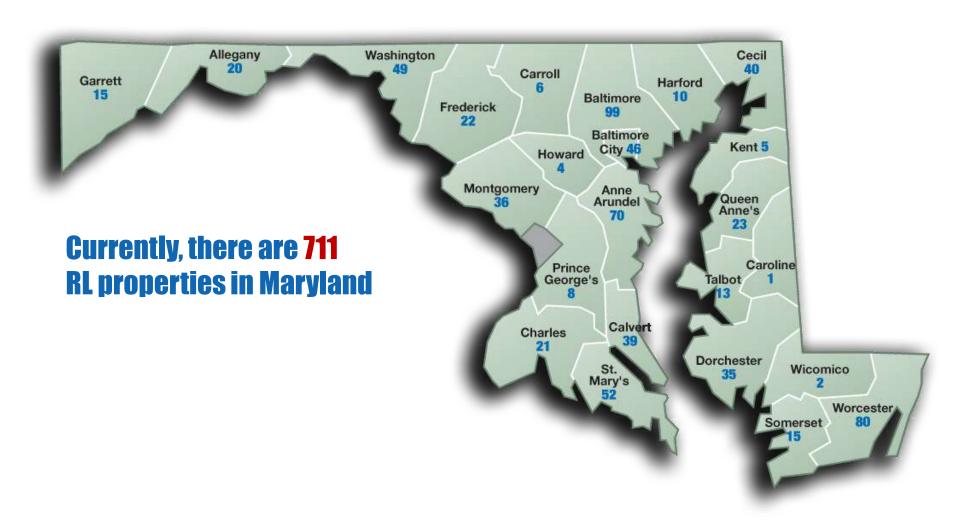
Repetitive Loss Properties

- A Repetitive Loss (RL) property is any insurable building for which the National Flood Insurance Program (NFIP) paid, since 1978
 - Two or more claims of more than \$1,000 each
 - Within any rolling 10-year period
- Over 112,540 RL properties nationwide

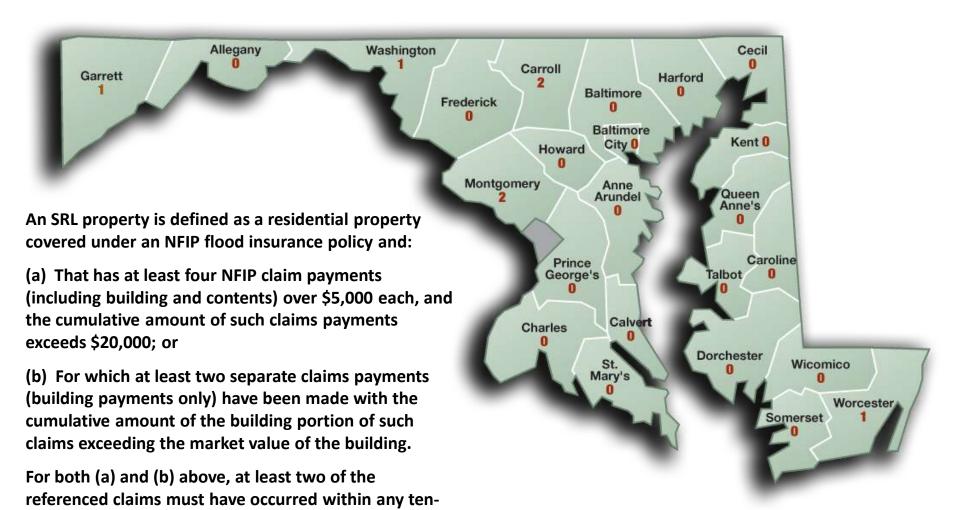
(Source: Congressional Research Services Report, 2005)



Repetitive Losses in MD



Severe Repetitive Losses in MD



year period, and must be greater than 10 days apart.

New Requirements

LOCAL MITIGATION PLAN REVIEW CROSSWALK

LOCAL MITIGATION PLAN REVIEW SUMMARY

The plan cannot be approved if the plan has not been formally adopted. Each requirement includes separate elements. All elements of the requirement must be rated "Satisfactory" in order for the requirement to be fulfilled and receive a score of "Satisfactory." Elements of each requirement are listed on the following pages of the Plan Review Crosswalk. A "Needs Improvement" score on elements shaded in gray (recommended but not required) will not preclude the plan from passing. Reviewer's comments must be provided for requirements receiving a "Needs Improvement" score

Prerequisite(s) (Check Applicable Box)	NOT MET	MET
Adoption by the Local Governing Body: §201.6(c)(5) OR		
Multi-Jurisdictional Plan Adoption: §201.6(c)(5) AND		
Multi-Jurisdictional Planning Participation: §201.6(a)(3)		
Planning Process	N	s
Documentation of the Planning Process: §201.6(b) and §201.6(c)(1)		
Risk Assessment	N	s
Identifying Hazards: §201.6(c)(2)(i)		
6. Profiling Hazards: §201.6(c)(2)(i)		
Assessing Vulnerability: Overview: §201.6(c)(2)(ii)		
Assessing Vulnerability: Addressing Repetitive Loss Properties. §201.6(c)(2)(ii)		
Infrastructure, and Critical Facilities: §201.6(c)(2)(ii)(B)		
10. Assessing Vulnerability: Estimating Potential Losses:		
§201.6(c)(2)(ii)(B)		
Assessing Vulnerability: Analyzing Development Trends: §201.6(c)(2)(ii)(C)		
12. Multi-Jurisdictional Risk Assessment: §201.6(c)(2)(iii)		

SCORING SYSTEM

Please check one of the following for each requirement.

- N Needs Improvement: The plan does not meet the minimum for the requirement. Reviewer's comments must be provided.
- S Satisfactory: The plan meets the minimum for the requirement. Reviewer's comments are encouraged, but not required.

Mitigation Strategy	N	s
13. Local Hazard Mitigation Goals: §201.6(c)(3)(i)		
 Identification and Analysis of Mitigation Actions: \$201.6(c)(3)(ii) 		
15. Identification and Analysis of Mitigation Actions: NFIP Compliance. §201.6(c)(3)(ii)		
§201.6(c)(3)(iii)		
17. Multi-Jurisdictional Mitigation Actions: §201.6(c)(3)(iv)		
Plan Maintenance Process	N	s
 Monitoring, Evaluating, and Updating the Plan: §201.6(c)(4)(ii) 		
 Incorporation into Existing Planning Mechanisms: §201.6(c)(4)(ii) 		
20. Continued Public Involvement: §201.6(c)(4)(iii)		
Additional State Requirements*	N	s
Insert State Requirement		
Insert State Requirement		
Insert State Requirement		
LOCAL MITIGATION PLAN APPROVAL STA	TUS	
PLAN NOT	APPROVE	D
See Reviewer'	s Comment	s
PLAN	APPROVE	D O

^{*}States that have additional requirements can add them in the appropriate sections of the Local Multi-Hazard Mitigation Planning Guidance or create a new section and modify this Plan Review Crosswalk to record the score for those requirements.

Plan Update Requirements

LOCAL MITIGATION PLAN REVIEW CROSSWALK

7. Assessing Vulnerability: Overview

Requirement §201.6(c)(2)(ii): [The risk assessment shall include a] description of the jurisdiction's vulnerability to the hazards described in paragraph (c)(2)(i) of this section. This description shall include an overall summary of each hazard and its impact on the community.

Element

- A. Does the new summary des each hazard?
- B. Does the new each hazard or

A. Does the new or updated plan describe vulnerability in terms of the types and numbers of *repetitive loss* properties located in the identified hazard areas?

SUMMARY SCORE

8. Assessing Vulnerability: Addressing Repetitive

Requirement §201.6(c)(2)(ii): [The risk and must also address National Flood Insurance Program (NFIP) insured structures that have been repetitively damaged floods.

	Location in the		SCC	ORE
Element	Plan (section or annex and page #)	Reviewer's Comments	N	S
A. Does the new or updated plan describe vulnerability in terms of the types and numbers of repetitive loss properties located in the identified hazard areas?		Note: This requirement becomes effective for all local plans approved after October 1, 2008.		
		SUMMARY SCORE		

9. Assessing Vulnerability: Identifying Structures

Requirement §201.6(c)(2)(ii)(A): The plan should describe vulnerability in terms of the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard area

	Location in the		SCO	ORE
Element	Plan (section or annex and page #)	Reviewer's Comments	N	s
A. Does the new or updated plan describe vulnerability in terms of the types and numbers of existing buildings, infrastructure, and critical facilities located in the identified hazard areas?		Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.		
B. Does the new or updated plan describe vulnerability in terms of the types and numbers of future buildings, infrastructure, and critical facilities located in the identified hazard areas?		Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.		
		SUMMARY SCORE		

Plan Update Requirements

LOCAL MITIGATION PLAN REVIEW CROSSWALK

15. Identification and Analysis of Mitigation Actions: National Flood Insurance Program (NFIP) Compliance

Requirement: §201.6(c)(3)(ii): [The mitigation strategy] must also address the jurisdiction's participation in the National Flood Insurance Program (NFIP), and continued compliance with NFIP requirements, as appropriate.

	Location in the		SCO	ORE
Element	Plan (section or annex and page #)	Reviewer's Comments	N	s
A. Does the new or updated plan describe the		Note: This requirement becomes effective for all local		
jurisdiction (s) participation in the NFIP?		mitigation plans approved after October 1, 2008.		l
B. Does the mitigation strategy identify, analyze and		Note: This requirement becomes effective for all local		
prioritize actions related to continued compliance		mitigation plans approved after October 1, 2008.		l
with the NFIP?				
	•	SUMMARY SCORE		

16. Implementation of Mitigation Actions

Requirement: §201.6(c)(3)(iii): [The mitigation strategy spring shall include] an action plan describing how the actions identified in section (c)(3)(ii) will be prioritized, implemented, and administered by the local juris according to a cost benefit review of the proposed projects a spring according to a cost benefit review of the proposed projects a spring according to a cost benefit review of the proposed projects a spring according to a cost benefit review of the proposed projects a spring according to a cost benefit review of the proposed projects as a cost benefit review of the cost benefit review of the proposed projects as a cost benefit review of the cost benefit review of the cost benefit review of the cost benefit review of

L	n in the		SCO	RE
Element a	on or age #)	Reviewer's Comments	N	s
Does the new or updated mitigation strategy include how the actions are prioritized? (For example, is there				
a discussion of the process and criteria used?)				_
B. Does the new or updated mitigation strategy address				
how the actions will be implicated including the responsible d				
potential resources and the each action? jurisdiction	n (s) part	icipation in the NFIP?		
C. Does the new or updated an emphasis on the use of B. Does the n	nitigation	strategy identify, analyze		
D. Does the updated plan ide or deferred mitigation actio	ictions re	lated to continued complia	unce	•
progress, and if activities a	FIP?	-		
deferred), does the update changes occurred?				
		SUMMARY SCORE		

Suggested Actions:

NFIP communities must include a strategy for continued compliance with NFIP requirements

Join the NFIP.
Participate in NFIP training offered by the State and/or FEMA (or in other training) that addresses flood hazard planning and management.
Establish mutual aid agreements with neighboring communities to address administering the NFIP following a major storm event.
Address NFIP monitoring and compliance activities.
Revise/adopt subdivision regulations, erosion control regulations, board of health regulations, etc. to improve floodplain management in the community.
Participate in Community Rating System (CRS) or undertake activities to increase the grade level of the community's CRS current participation.
Prepare, distribute or make available NFIP, insurance and building codes explanatory pamphlets or booklets.
Identify and become knowledgeable of non-compliant structures in the community.
Identify and become knowledgeable of submit to rate structures.
Identify cause of submit to rate structure and analyze how to prevent non-compliant structures in the future.
Inspect foundations at time of completion before framing to determine if lowest floor is at or above Base Flood Elevation (BFE).
Require use of elevation certificates.
Enhance local officials, builders, developers, local citizens and other stakeholders' knowledge of how to read and interpret the FIRM.
Work with elected officials, the state and FEMA to correct existing compliance issues and prevent any future NFIP compliance issues through continuous communications, training and education.

Additionally, a community may adopt more restrictive standards...

- to provide additional protection to lives and properties
- may qualify for participation in the Community Rating System (CRS)

Refer to publication *CRS Credit for Higher Regulatory Standards,* available on www.FEMA.gov

- Freeboard
 - -Defined as a factor of safety usually expressed in feet above a flood level i.e.: require elevations to be 2 feet above base flood elevation (BFE)
- Protection of critical facilities
 - -Meet 500-year floodplain standards
- Protection of floodplain storage capacity
 - -Prohibit fill in the 100-year floodplain
- Enclosure limits
 - -Prohibit all enclosures or limit the enclosure area
- Mandatory disclosure laws
 - -Require notification that property is located in 100-year floodplain
- More strict enforcement of building codes as it relates to the floodplain
 -As it relates to planning and zoning
- Adoption of international building codes
 - -More restrictive floodplain management standards
- Zoning requirements
 - -More restrictive floodplain management standards
- Higher floodway standards
 - -Designate 100-year floodplain as floodway
- Elevation certificate requirement for all new development
 - -Development in Zones B, C, and X

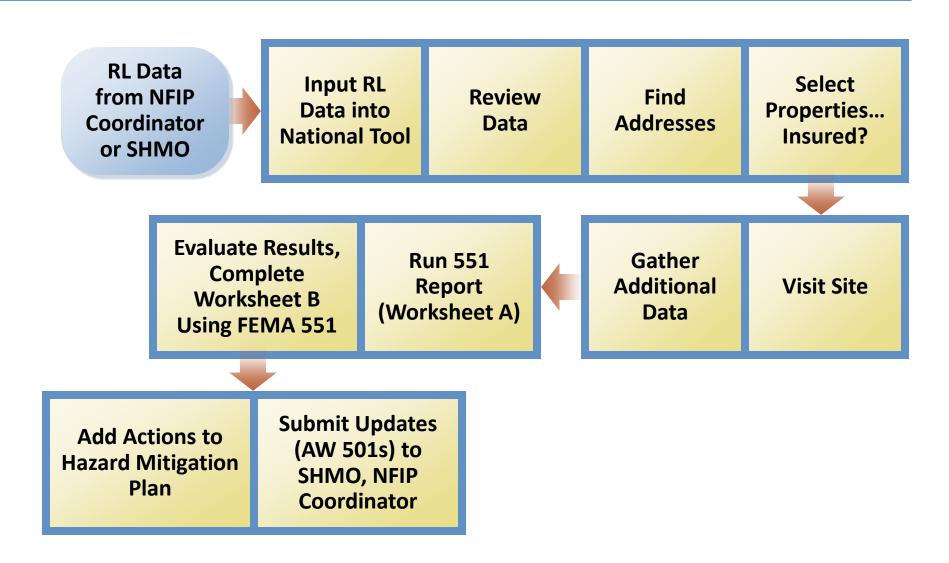


Hazard Mitigation Plan Update

While updating the hazard mitigation plan:

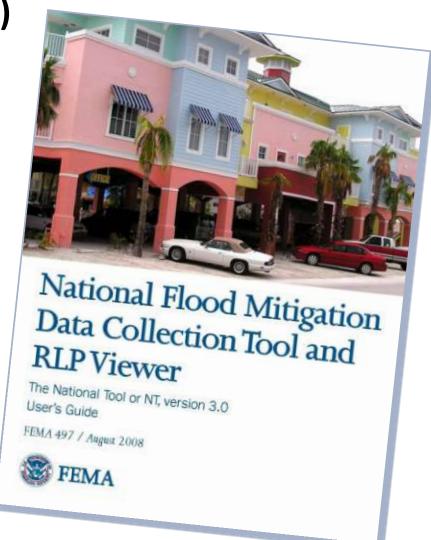
- Indicate the number of repetitive loss properties
 - If there are none, state this (do not just leave it out)
 - Indicate whether any of the repetitive loss properties have been removed (e.g., through an acquisition program)
- Include actions to address repetitive loss properties (e.g., acquisition, elevation)
 - Use the National Tool to identify the most appropriate mitigation action
- Include actions for continued compliance with the NFIP
 - Adopt higher regulatory standards for extra benefit
- Do not violate privacy of homeowners by publishing names, addresses, or insurance payment information in the plan

Process to Address RL Properties



National Flood Mitigation Data Collection Tool

(NT or National Tool)



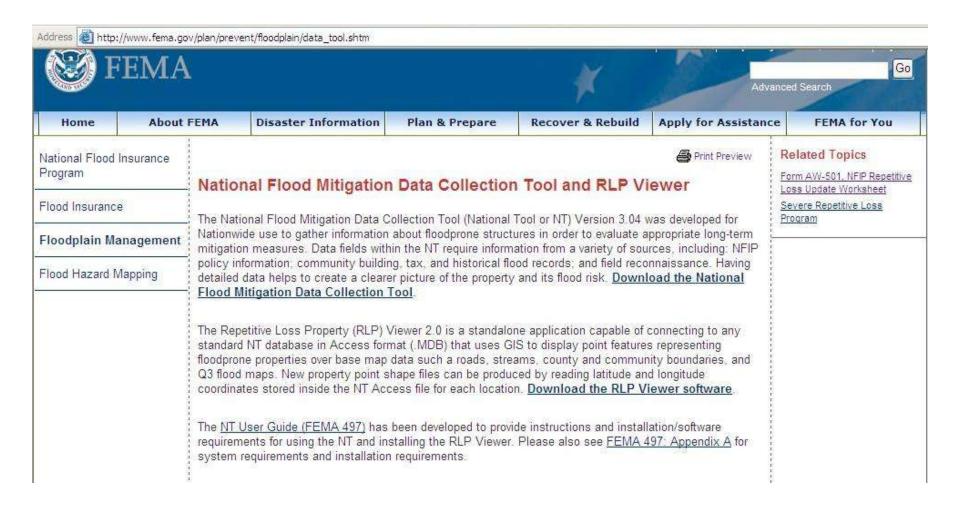
National Flood Mitigation Data Collection Tool

(NT or National Tool)

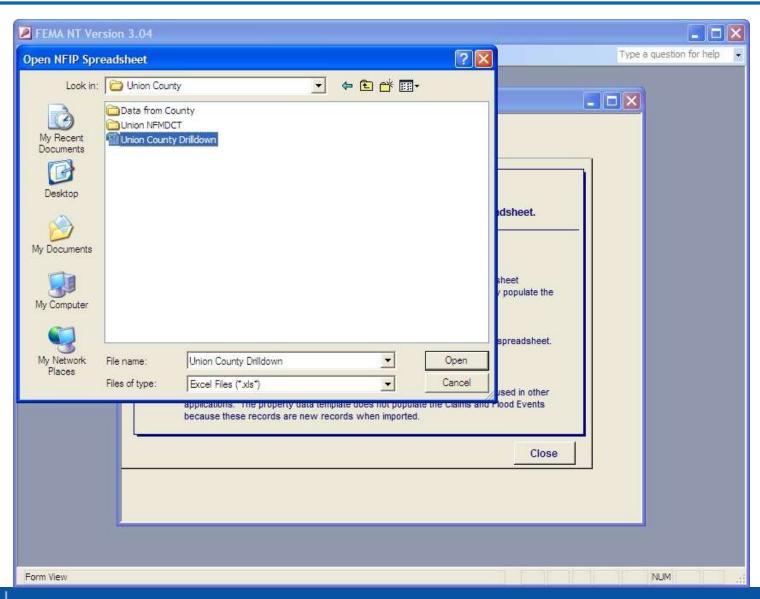
- Standardized method for gathering information on floodprone structures to determine appropriate, fundable mitigation measures
- Specific to floodprone properties, but can be used to gather information on flood risk, building construction, and building value for any structure
- Available for free download from FEMA's library

Where to find the NT?

http://www.fema.gov/plan/prevent/floodplain/data_tool.shtm



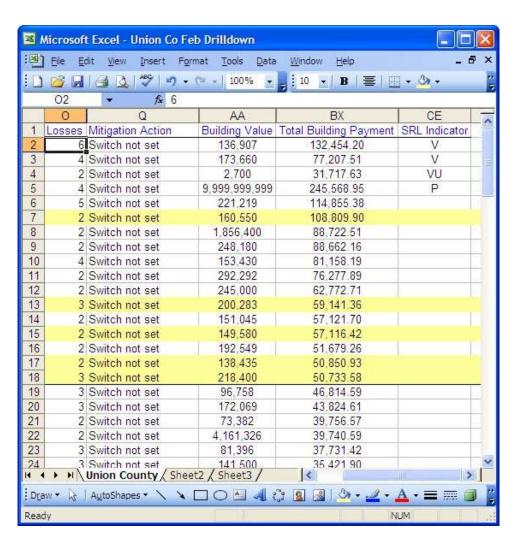
Receive NFIP RL Data & Import into NT



Review the RL Property



Decide Which Properties to Visit



Visit:

- Validated, ValidatedUninsured, and Pending SRLs
- RLs with over \$50k in Total Building Payments

Will not visit:

- Uninsured RL properties
- Total Number RLs to Visit = 12

Conduct Site Visit

Before you go:

- Enter FIRM Data into NT
- Enter Assessor Data into NT
- Print driving directions or program GPS from property to property
- If not taking laptop into field, print Field Forms from NT

Take with you:

- Map of area (even if using a GPS/Electronic Navigator)
- GPS Handheld unit to record Latitude & Longitude
- Digital camera, extra battery, and extra memory card
- Laptop with NT or hardcopy NT Field Forms

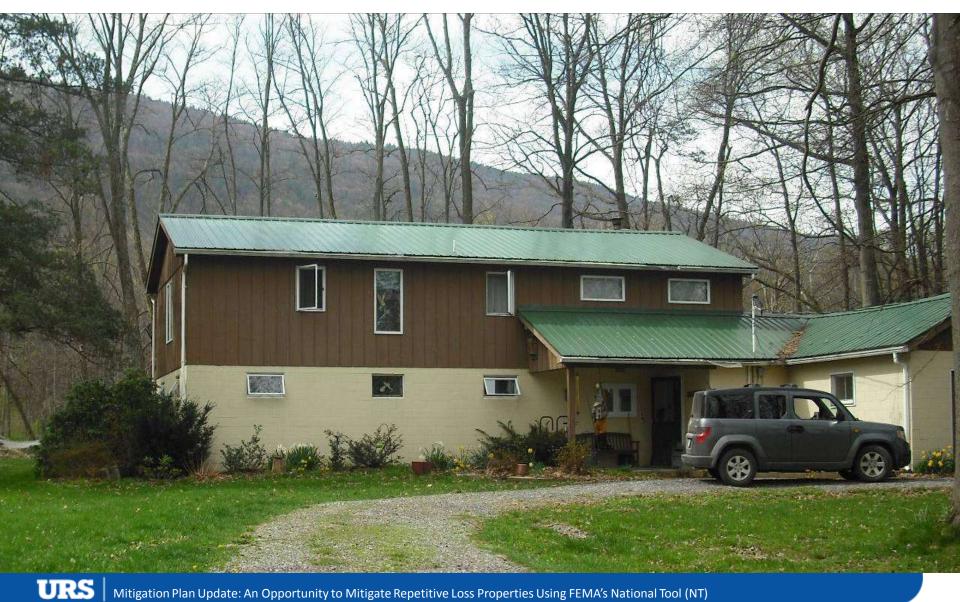
Site Visit Results



Site Visit Results



Site Visit Results



NT Reports AW-501

Federal Emergency Management Agency
National Flood Insurance Program

OMB #1660-0022 EXPIRES August 31, 2010

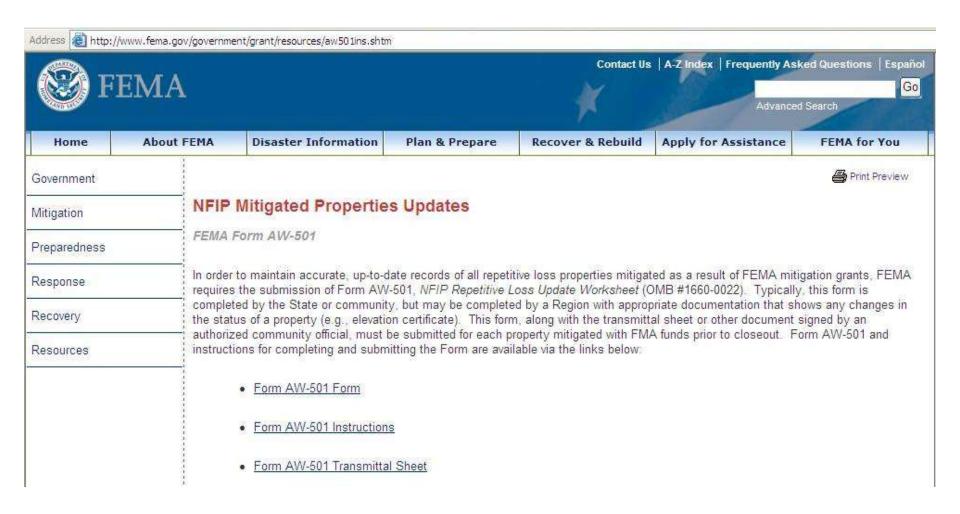
NFIP REPETITIVE LOSS UPDATE WORKSHEET (AW-501)

THE INFORMATION ON THIS FORM IS BASED ON CLAIMS ON OR BEFORE: 1/31/2010 REPETITIVE LOSS NUMBER: 0 Internal Use Only N/A FRR NFIP COMMUNITY NAME: WHITE DEER, TOWNSHIP OF CID#: 421034 LOCAL PROPERTY IDENTIFIER: Lat: 76.871372 Long: 41.076192 Local Lot/Parcel ID: CURRENT PROPERTY ADDRESS PREVIOUS PROPERTY ADDRESS/COMMUNITY ID # RTS 629 & OLD RT 15, ON RT 520 1 10 M S OF RTS 629 & OLD RR 15, ON RR 520 PA CID#: 421 LAST CLAIMANT: INSURED: YES NAMED INSURED: DATES OF 9/18/2004, 1/20/1996 TOTAL NUMBER OF LOSSES FOR PROPERTY: LOSSES: REQUESTED UPDATES MARK ALL UPDATES BELOW THAT APPLY (IMPORTANT - SEE INSTRUCTIONS) INFORMATION PROVIDED NOT SUFFICIENT TO IDENTIFY PROPERTY Choose this update if all attempts to locate the property fail. Please describe the steps you took to locate the property in the comments section below. 2. V COSMETIC CHANGES REQUIRED TO THE ADDRESS: 1234 Old Post Rd Update the address shown above and/or add your local BLUE TICK, PA 176677890 alternative property identifier such as a Tax Assessor #. ✓ PROPERTY NOT IN OUR COMMUNITY OR JURISDICTION: Choose this update if you have positively determined that the property shown is not located in your community. Please provide the correct NFIP community name and if known the NFIP Community ID Number. If available, please attach a map showing the property location. ASSIGN TO NFIP COMMUNITY NAME: BLUE TICK, TOWNSHIP OF NFIP COMMUNITY ID#: 421667 4. FLOOD PROTECTION PROVIDED Choose this update only if some type of structural intervention has occurred to the building, property or the source of flooding that protects the building from future events similar to those that occurred in the past. The correction must be supported by documentation such as an Elevation Certificate and the Mitigation action and funding information below must be provided. Mitigation Action 1.) Source of Primary Mitigation Funding 3.) Secondary Source of Funding 3.) 5. NO BUILDING ON PROPERTY Choose this update only if the property in question can be positively identified as the site of the previously flooded building and documentation is available to support that an insurable building no longer exists at this site. The correction must be supported by documentation such as a Demolition or Relocation Permit and the Mitigation information below must be provided. Mitigation Action 2.) Source of Primary Mitigation Funding 3.) Secondary Source of Funding 3.) DUPLICATE LISTING WITH RL NUMBER: COMBINE AS ONE LISTING. Choose this update to identify two or more separate listings that are for the same building. List all other RL numbers that are duplicates to this property. Please indicate which address shown is the correct address to use

7. HISTORIC BUILDING:

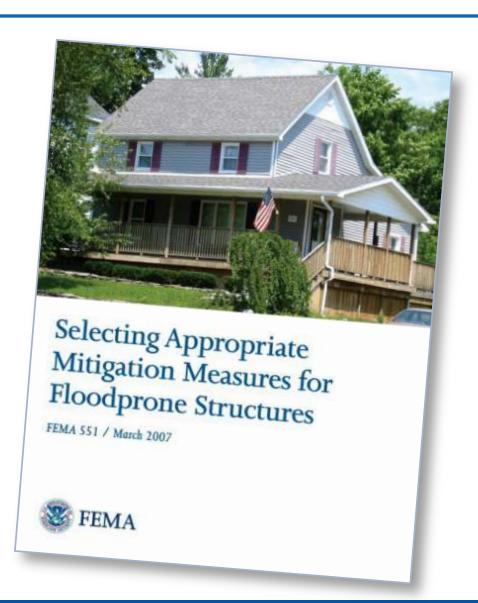
Update AW-501s

http://fema.gov/government/grant/resources/aw501ins.shtm



FEMA 551

Selecting Appropriate
Mitigation Measures
for Floodprone
Structures



NT Reports FEMA 551, Worksheet A

Date Property Visited:

Worksheet A: Technical Considerations Scorecard

10/13/2009

Legend

Property Owner Name: Property Address: 278 BERLIN RD. Repetitive Loss Property Locator Numb Prepared by: J Sparenberg	OXFORD, MD 216541373 eer:	<i>E</i>		NT Re	Mitigation Mitigation	measure is appr	e appropriate an opriate.	d requires additional	
Question	Response	Drainage Improve- ments	Barriers	Wet Flood- proofing	Dry Flood- proofing	Elevation	Relocation	Acquisition	Comments
1 What is to see a see a	₩ Wood Frame / Metal / Other	☑	✓						
What is the structure type? NT Reference - Limited Data View, Site Observations tab	Concrete / Masonry / Brick Faced								
	Manufactured Home								
What is the condition of the	☐ Good								
structure? NT Reference - Limited Data View, Site Observations tab	Fair	V	•	•	V	V	V	•	
	☐ Poor								

Date Prepared:

10/13/2009

NT Reports

FEMA 551, Worksheet B

Worksheet B: Appropriate Mitigation Measures

Date Prepared:	5/6/2010	Date Property Visited:	4/11/2010
Property Owne	r Name:		
Property Addre	DAN:	MIFFLINBURG, PA 17844	
Repetitive Los	s Property Locator Number:		
Prepared by:	Jen Sparenberg		

Decisio	n Factors - LOWEST	score is most appr	opriate - see Rever	se for Notes	
Mitigation Measures	Technical Considerations*	Relative Costs*	Human Intervention	Annual Maintenance	Total Score
Barriers	H (6 pts) M (4 pts) L (2 pts)	H (3 pts) M (2 pts) L (1 pt)	H (3 pts) M (2 pts) L (1 pt)	H (3 pts) M (2 pts) L (1 pt)	10 pts
Elevation	H ☐ (6 pts) M ☑ (4 pts) L ☐ (2 pts)	H (3 pts) M (2 pts) L (1 pt)	H (3 pts) M (2 pts) L (1 pt)	H (3 pts) M (2 pts) L (1 pt)	9pts
Relocation	H ☐ (6 pts) M ☑ (4 pts) L ☐ (2 pts)	H (3 pts) M (2 pts) L (1 pt)	H (3 pts) M (2 pts) L (1 pt)	H (3 pts) M (2 pts) L (1 pt)	9 pts
Acquistion	H (6 pts) M (4 pts) L (2 pts)	H (3 pts) M (2 pts) L (1 pt)	H (3 pts) M (2 pts) L (1 pt)	H (3 pts) M (2 pts) L (1 pt)	

Results of FEMA 551 for Union County, PA

Appropriate Mitigation Measures:

- Acquisition 9 properties
- Relocation 2 properties
- Elevation 2 properties

Next Steps

Selecting Appropriate Mitigation Measures for Floodprone Structures Information Packet This information packet includes the following documents: · Technical Considerations Scorecard (Worksheet A) · Appropriate Mitigation Measures (Worksheet B) Initial Consultation with Property Owner (Worksheet C) · Preliminary Cost Estimating Worksheet (Worksheet D) NT Basic Report Date Property Visited: Property Owner Name: _____ Property Address:_____ Repetitive Loss Property Locator Number: Prepared by:

Results of Case Study

- Valid addresses for RLs
- Found that some RLs were already mitigated (updated data can be submitted to NFIP coordinator)
- Developed mitigation actions that are technically feasible and cost-effective (using NT and FEMA 551)
- Clear path for Union County, PA to move forward with hazard mitigation

Key Points

Using the National Tool (NT)

- Helps meet the requirements for mitigation plan updates to address RL properties
- Provides a defensible methodology for identifying technically feasible mitigation actions
- Improves the accuracy of the RL database (which helps mitigate RL properties in the future)

Questions?

Link to NT:

http://www.fema.gov/plan/prevent/floodplain/data_tool.shtm

Link to AW-501 Form, Instructions & Transmittal Letter:

http://fema.gov/government/grant/resources/aw501ins.shtm

Presenters:

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