Hazard Mitigation Assistance

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Hazard Mitigation

...huh?

Hazard Mitigation is:

Any sustained action taken to reduce or eliminate long-term risk to people and property due to natural or man-made disasters.

...so basically, **removing the vulnerability**.

State Planning

VERMONT STRONGER

Vermont's 2018 State Hazard Mitigation Plan

A SAFE AND RESILIENT VERMONT

in the face of climate change and natural disasters.

MISSION: To protect life, property, natural resources and quality of life in Vermont by reducing our vulnerability to climate change and natural disasters.

The Plan

- Planning Process
- State & Local Capabilities
- Vermont Profile & Hazard Assessment
- Mitigation Strategy
- Maintenance and Implementation

PEOPLE
19
Steering Committee
5
66
Working Groups
3
33
Focus Groups
7
MEETINGS

Capabilities Assessment

FUNDING

TOOLS & DATA

TECHNICAL ASSISTANCE

REGULATIONS

Capabilities Assessment

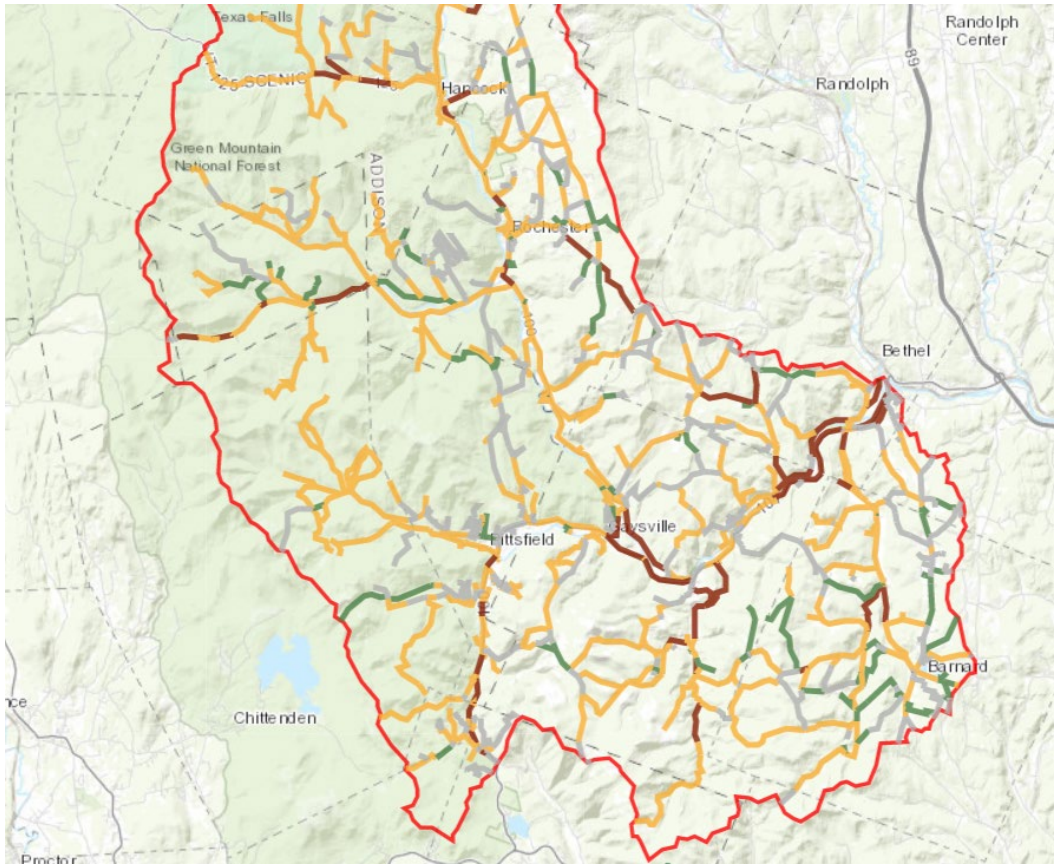
Capability	Description	Type	Category	Improvement Opportunity
FEMA - Pre-Disaster Mitigation (PDM) Grants	Annual funding providing baseline support for mitigating natural hazards and planning. Relies on annual allocations from Congress and requires a 25% local match.	Federal	Funding	Funding for engineering to develop strong applications is lacking, but phased projects are not eligible. The 3-year Period of Performance (POP) for PDM begins when the application period opens, which is often many months before projects are awarded, significantly reducing the time in which the scope of work can be achieved. Management Costs under PDM are not released until awards are made, despite significant work being requested pre-award. The State should improve outreach to towns and RPCs to encourage application development and submission.
FEMA - Flood Mitigation Assistance (FMA) Grants	Annual funding providing baseline support for mitigating flood hazards. Funding is through the National Flood Insurance Program (NFIP) and only available to towns participating in NFIP. Requires a 25% local match.	Federal	Funding	PDM 2017 supported Technical Assistance applications, previously identified as an area for improvement. Technical Assistance should continue to be supported and expanded. Syncing the NFIP and HMA SRL/RL lists to ensure that those properties most at-risk to flooding can access FMA funds.
FEMA - Hazard Mitigation Grant Program (HMGP)	Available following a disaster at 15% of the total Public Assistance funding allocated in a disaster. Requires a 25% match. Up to 7% of funding is available for planning.	Federal	Funding	HMGP is only available following a disaster, but could better serve affected communities as a block-style grant program (similar to FEMA's Project Impact in 1999). The time between application submittal and award needs to be reduced in order to prevent towns from being deterred from the program by wait times - recommended changes include streamlining the EHP/SHPO and programmatic review processes; developing a single, complete Request for Information (RFI); and increasing the number of technical assistance trainings offered at the Regional- and State-level. Post-disaster outreach to affected towns needs to be improved.
FEMA NFIP - Increased Cost of Compliance	Following a flood, a damaged home or business may be required to meet certain building requirements to reduce future flood damage before you repair or rebuild. The ICC is available to cover the costs of meeting those requirements for policy holders. Eligible projects include elevation, relocation, demolition or flood-proofing.	Federal	Funding	Up to $30,000 is available through ICC, but the funding can only be used during the demolition phase of an acquisition/demolition project. Eligiblity should be expanded to allow funds to help offset the local match for an acquistion/demolition, which will significantly increase the number of property owners interested in participating in a buyout.
FEMA - 5% Initiative (HMGP)	Up to 5% of HMGP funding is available to fund mitigation activities that do not meet the required BCA threshold using a FEMA-approved methodology.	Federal	Funding	The 5% Initiative under HMGP is specifically tailored to those projects whose cost-effectiveness is difficult to determine under the FEMA BCA process, but VEM and its subapplicants have been largely unsuccessful in having 5% projects awarded.
FEMA - Advance Assistance (HMGP)	Up to 25% of HMGP funding is available to provide States with resources to develop mitigation strategies and obtain data to prioritize, select and develop complete HMGP applications.	Federal	Funding	VEM needs to create a retainer contract with a list of qualified contractors to more rapidly access and deploy Advance Assistance funds across the State following a Declaration, which will improve application quality and overall interest in the program.
FEMA - Public Assistance Program (406 Mitigation)	406 funding provides discretionary authority to fund mitigation measures in conjunction with the repair of the disaster-damaged facilities.	Federal	Funding	Improving coordination of Vermont's real mitigation needs with FEMA Public Assistance field staff in the immediate post-disaster timeframe. Better accessing these funds will have the added benefit of increasing the HMGP allocation, which will further promote mitigation and reduce vulnerability.
HUD - Community Development Block Grant-Disaster Relief (CDBG-DR)	Flexible grants available following a disaster to help cities, counties, and States recover from declared disasters. Funding can be used as local match for FEMA grants.	Federal	Funding	Only available following a disaster.
HUD - Community Development Block Grant (CDBG)	Flexible program that provides communities with resources to address a wide range of unique community development needs. Funding can be used as local match for FEMA grants.	Federal	Funding	Need to make the use of CDBG funds to match federally-funded mitigation projects a more formal agreement between the State funding agencies, to ensure and promote continued success.
FEMA - Community Rating System (CRS)	Voluntary incentive program that encourages community floodplain management activities that exceed the minimum NFIP requirements.	Federal	Incentive	The incentive program is designed to accommodate more populous areas than the average Vermont town, with limited town capacity to undergo the necessary application and maintenance requirements; a "light" version should be offered for more rural areas, which still incentivize proactive mitigation, but which do not penalize.
EPA - Brownfields Grant Funding	Funding for Brownfields assessment, cleanup, revolving loans, and environmental job training.	Federal	Funding	Need to develop a way to combine clean-up efforts through EPA Brownfields & mitigation project; many grant programs will not fund Brownfields until after cleaned.

Improved State Capabilities

ANR Project | Statewide River Corridors Risk Assessment & Hazard Mitigation Prioritization

VTrans Project | Methods & Tools for Transportation Resilience Planning

BGS Project | State Facility Inventory & Assessment



https://vtrans.vermont.gov/planning/transportation-resilience

Vermont Hazards

Hazard Impacts

Table 15: Hazard Assessment							
Hazard Impacts	Probability	Potential Impact					Score:
		Infrastructure	Life	Economy	Environment	Average:	
Fluvial Erosion	4	4	3	4	4	3.75	15
Inundation Flooding	4	4	3	4	2	3.25	13
Ice	3	3	3	3	2	2	8.25
Snow	4	1	3	2	1	1.75	7
Wind	4	2	2	1	1	1.5	6
Heat	3	1	3	2	2	2	6
Cold	3	1	3	2	2	2	6
Drought	3	1	2	2	3	2	6
Landslides	3	3	2	1	2	2	6
Wildfire	2	3	3	3	2	2.75	5.5
Earthquake	2	3	3	3	2	2.75	5.5
Invasive Species	2	1	1	2	3	1.75	3.5
Infectious Disease Outbreak	2	1	3	2	1	1.75	3.5
Hail	3	1	1	1	1	1	3

Score = Probability x Average Potential Impact

Mitigation Strategy – Goals

Protect, restore and enhance Vermont's natural resources to promote healthy, resilient ecosystems.

Enhance the resilience of our built environment - our towns, infrastructure, buildings, and cultural assets.

Develop and implement plans and policies that create resilient natural systems and built environments.

Create a common understanding of – and coordinated approach to – mitigation planning and action.

VERMONT STRONGER

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in the face of climate change and natural disasters.

PEOPLE

19 Steering Committee → 5

66 Working Groups → 3

33 Focus Groups → 7

MEETINGS

PRIORITIES

24

- Built Environment
- Natural Systems
- Planning & Policy
- Outreach & Education

97

ACTIONS

Priority Actions

- Develop a cross-sector buyout program
- Inventory and protect critical headwater and floodplain storage areas
- Collaborate across flood resilience, water quality and habitat connectivity programs and funding
- Audit State programs to assess and improve their support of mitigation goals
- Coordinate State programs to promote development, sharing and maintenance of hazard related data and mapping
- Review and revise existing Emergency Relief & Assistance Fund (ERAF)

Implementation

- 5 year implementation process
- Partnering with the Resilient Vermont Network
- Implementation working groups around actions

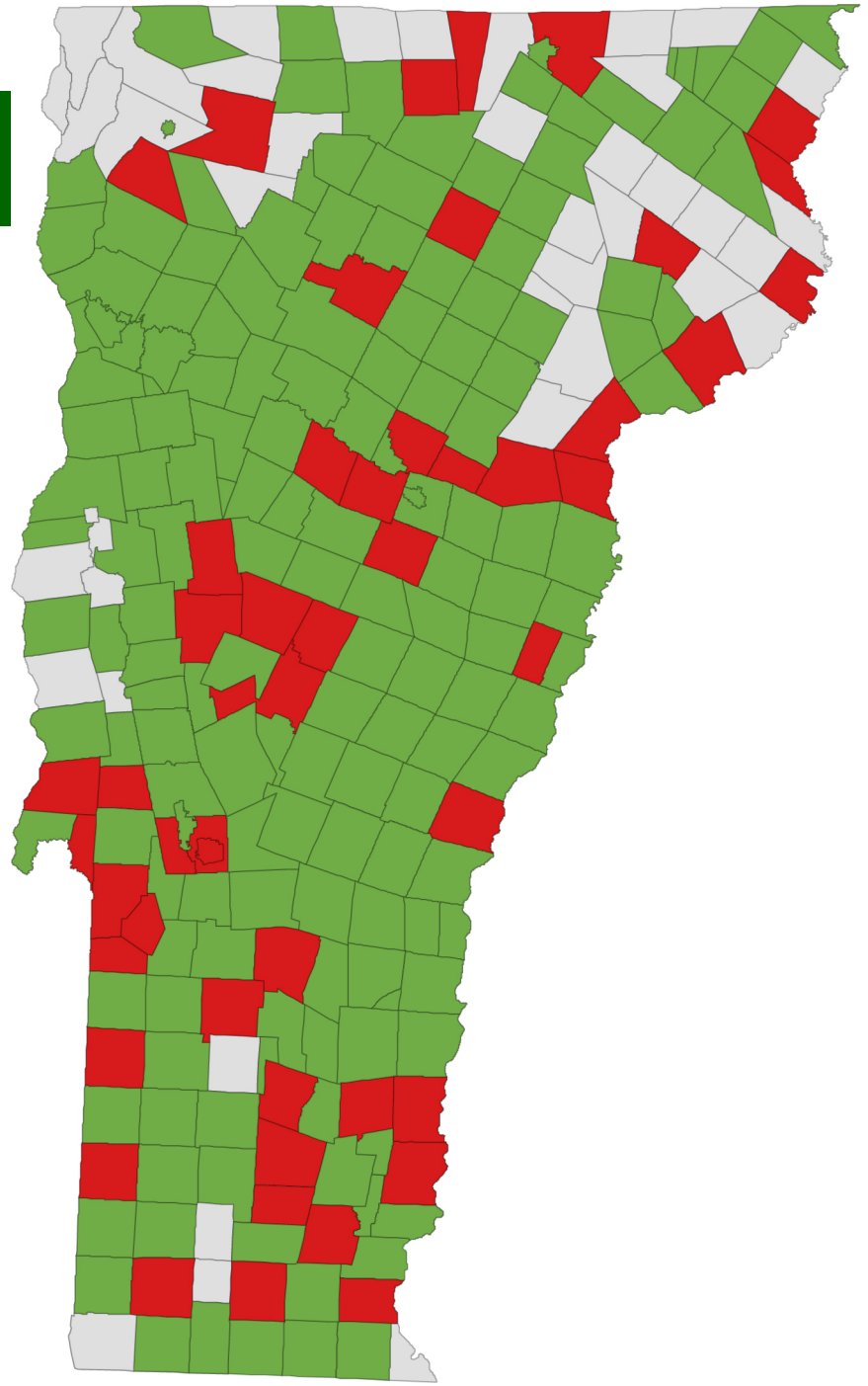
VERMONT STRONGER

CENTER FOR Global Resilience & Security at NORWICH UNIVERSITY

Local Planning

Local Hazard Mitigation Plans

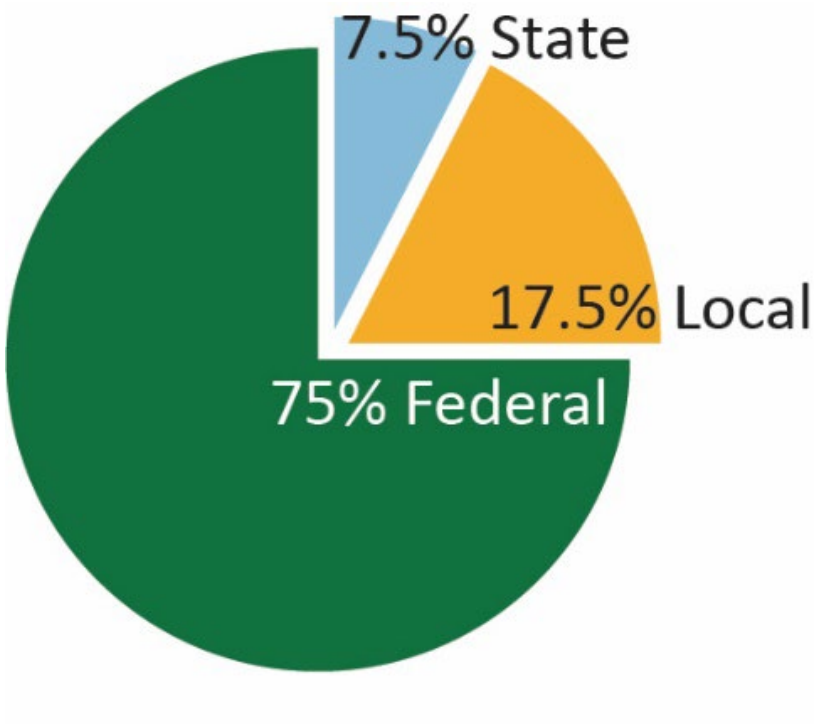
- FEMA Approved (67.9%)
- Expired (16.1%)
- Never Approved (16.1%)



Why Plan?

- Community Resilience
- Hazard Mitigation Assistance (HMA) Grants
- Emergency Relief & Assistance Fund (ERAF) Incentive

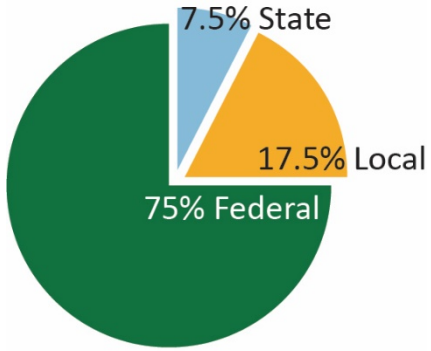
Public Assistance Following a Disaster



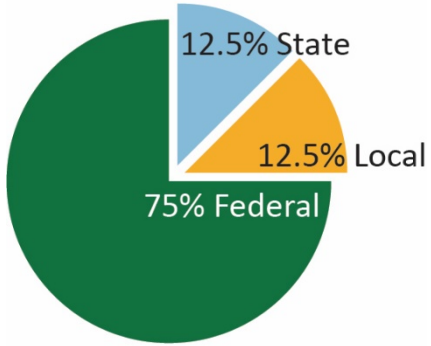
Emergency Relief & Assistance Fund (ERAF) Criteria

Public Assistance Funding Post-Disaster:

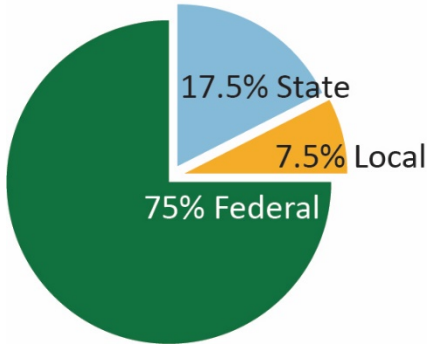
- No Action/Not Meeting All Criteria



- National Flood Insurance Program
- Road and Bridge Standards
- Local Emergency Management Plan
- **Local Hazard Mitigation Plan**



- River Corridor Protection [or]
- Community Rating System



Emergency Relief & Assistance Fund (ERAF) Criteria

Reimbursement Rates to Municipalities (Dec. 2018)

- No Action/Not Meeting All Criteria — **38% receive 7.5%**

- Road and Bridge Standards **94%**
- Local Emergency Management Plan **95%**
- National Flood Insurance Program **90%**
- Local Hazard Mitigation Plan **68%**

— **39% receive 12.5%**

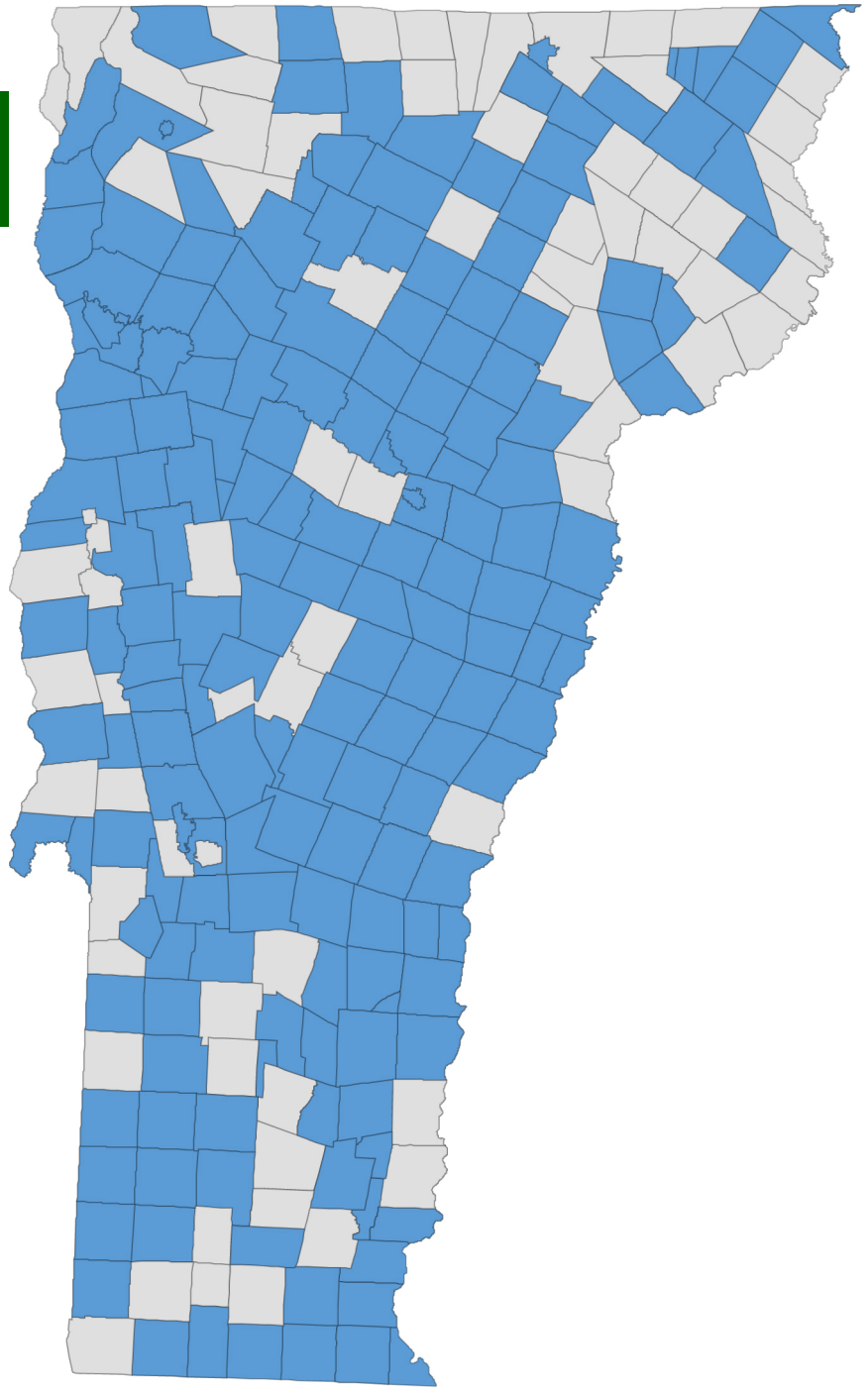
- River Corridor Protection [or]
- Community Rating System

— **23% receive 17.5%**

ERAF Eligibility

Local Hazard Mitigation Plans:

- Drafted or FEMA Approved (75.4%)
- Never Approved or Expired (24.6%)



ERAF & LHMP Status

FloodReady.Vermont.gov

Community Risk Assessment => Community Reports

Emergency Relief and Assistance Fund (ERAF) - State Post-Disaster Funding

Flood Hazard Mitigation Actions	Action Dates		Responsible	ERAF Status
1. 2013 Road and Bridge Standards	05/06/2013		Municipality	Yes
2. Local Emergency Management Plan	04/15/2019		Municipality	Yes
3. National Flood Insurance Program	04/15/1982		Municipality	Yes
4. Local Hazard Mitigation Plan	03/14/2018		Municipality	Yes
5. River Corridor Protection				No
ERAF Rate for Actions 1 - 4:12.5%,	Actions 1 - 5: 17.5%	**ERAF Rate for:**	Municipality	**12.5%**

Funding LHMPs

LHMP Development Funding

- 25% Match Commitment from the Community

- Resources:
  - Application Development
  - Template Request for Proposals (RFP)
  - In-Kind Match Tracking Forms

- Application Under Development
  - **Match Forms Due: January 3, 2020**

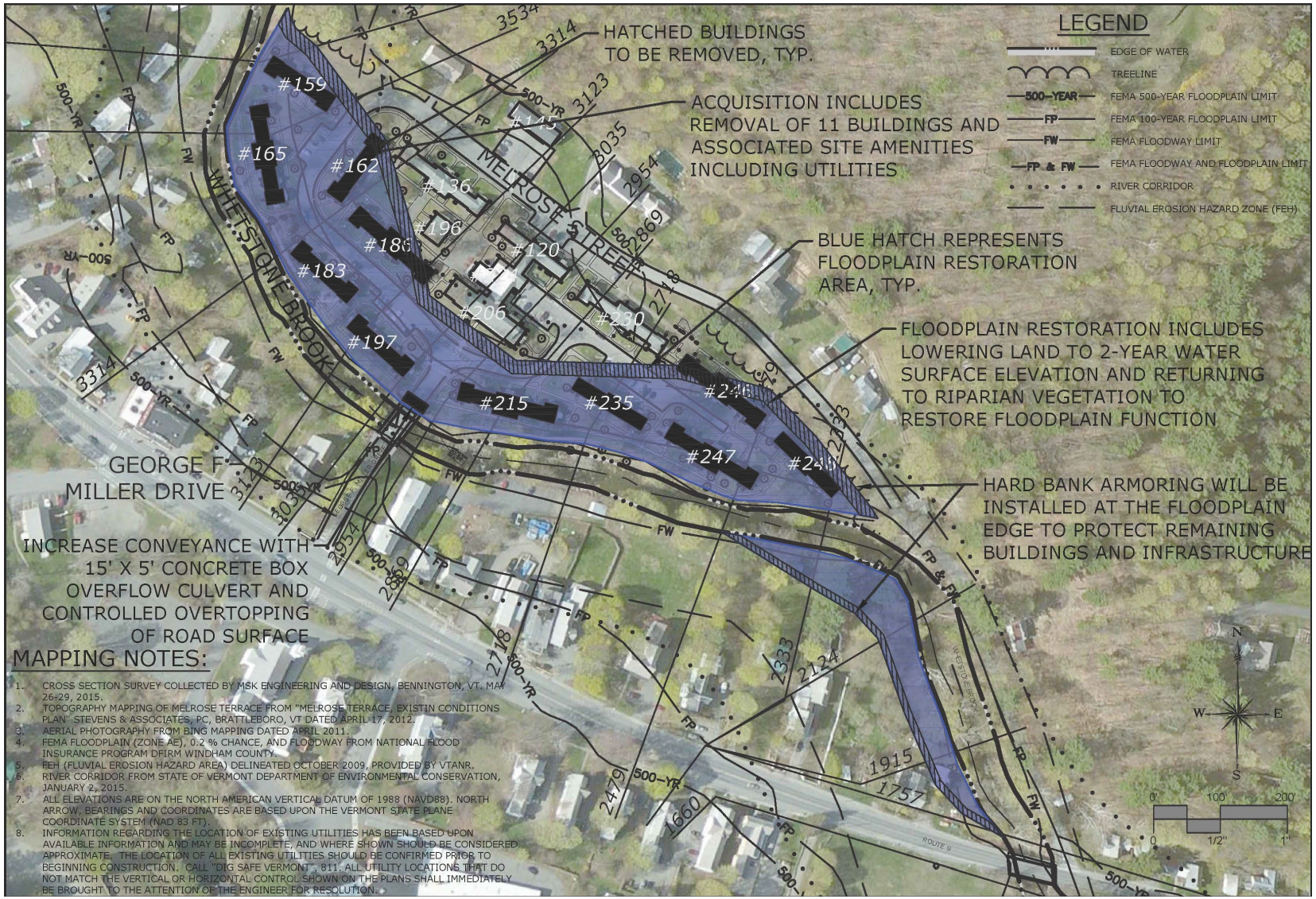
Questions?

Mitigation Projects

…crack open those plans!

Buyouts

Floodplain Restoration



Floodplain Restoration in Action!

Flood-Proofing:

Other Project Ideas:

- Culvert Upsizing
- Road Relocation
- Floodplain Restoration
- Streambank Reinforcement
- Structural Elevation
- Generators for Critical Facilities
- Planning
- 5% Initiative

Mitigation Funding

Funding Sources:

- **Hazard Mitigation Grant Program (HMGP)**
  - Funding based on disaster declarations
  - 15% of public assistance allocation
  - Next round of applications due late Winter/early Spring 2020
- **Pre-Disaster Mitigation (PDM)**
  - Annual competitive funding cycle with changing priorities
  - **Applications due to the State: Wednesday, January 8, 2020**
- **Flood Mitigation Assistance (FMA)**
  - Annual competitive funding cycle for municipalities participating in NFIP
  - **Applications due to the State: Wednesday, January 8, 2020**

Pre-Disaster Mitigation

- **PDM 2019 Priorities:**
  1. $4m for mitigation projects (per subapplicant)
  2. $200k for advance assistance (project scoping)*
  3. $10m for resilient infrastructure (per subapplicant)
  4. Funding available for local hazard mitigation planning

Flood Mitigation Assistance

- **FMA 2019:**
  1. Community flood mitigation activities
     - up to $10m per subapplicant
  2. Advanced Assistance for project development
     - up to $200k

Additional Info:

- 75% Federal share, 25% local match
- Available to municipalities and state agencies (and non-profits under HMGP)
- Generally available for public and private properties
- Benefit Cost Analysis (BCA) typically required

Brandon, A Success Story:

- Process from town perspective
- ERAF 17.5%
- Buyouts (Newton Rd)
- Long-term plan for flood resilience

Brandon, A Success Story:

Overflow culvert

Questions?

Contact:

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- **vem.vermont.gov/plans/SHMP**