#### Avoiding Flood Damage in Sunderland, Vermont

**Sunderland** now has an updated flood hazard map and a new river corridor map for the Batten Kill, Fayville Branch, and Roaring Branch. Before the new Digital Flood Insurance Rate Map becomes effective (tentatively in January 2013) the community will need to update its flood hazard bylaws to reference the new maps so it can participate in the National Flood Insurance Program.

Flooding in Vermont is natural, predictable, and avoidable. When new public or private investments are placed in the floodplain they are vulnerable to damage, and these same encroachments may increase the risk of damage to other properties already in or near the hazard area. The FEMA Flood Insurance Rate Maps (DFIRM) identify Special Flood Hazard Areas expected to be inundated by the base flood. The VT DEC River Corridor or Fluvial Erosion Hazard Maps identify the areas required to protect the stream's equilibrium and maintain floodplain functions. In Vermont most damage due to flooding is due to the physical erosive power of moving water.

On the Digital Flood Insurance Rate Map the Special Flood Hazard Area has been developed through an automated Zone A method using the best available topographic data. In many places new topography (with 2' contours) has been used for the mapping. Across the county, updated detailed studies, with new hydrology and hydraulics, were made for reaches of the Batten Kill, Hoosic River, Furnace Brook, Walloomsac River, West Branch of the Batten Kill, and the Winhall River.

Sunderland, Vermont	
First Flood Hazard Boundary Maps	2/1/1974
Joined National Flood Insurance Program	9/10/1975
Current Flood Insurance Rate Map	11/01/85
E-911 Structures in Special Flood Hazard Area	4
E-911 Structures in SFHA in Bennington County	841
Policies in force (6/13/12)	8
Property insured	\$2,443,300
E-911 Structures in River Corridor / Fluvial Erosion Hazard Corridor	23
Percentage of Structures in Sunderland currently in a mapped hazard zone	4 %
Maximum percentage of structures in Sunderland in a mapped hazard zone that may have flood insurance	35%
Sunderland Town Plan adopted	6/10/2010
Basic Emergency Operations Plan	4/7/2009
Phase 2 Stream Geomorphic Assessment Batten Kill Watershed: Roaring & Fayville Branches Towns of Sunderland & Arlington	1/2009
Pre-Disaster Hazard Mitigation Plan	

#### Flood Insurance Rate Maps (FIRM) and River Corridor/Fluvial Erosion Hazard Maps

**FIRM panels** (z-fold paper maps) can be viewed at the Sunderland Town Office or found online at the FEMA Map Service Center: <u>www.msc.fema.gov</u> (877) 336-2627

## Preliminary Digital FIRM (flat paper panels, pdf images and computer files) can be found

- 1. Sunderland Town Office (paper panels)
- 2. Sunderland website: http://www.sunderlandvt.org/flood-plain-update/
- 3. VT ANR: http://www.vtwaterquality.org/rivers/htm/rv\_DFIRMs\_Benn.htm
- 4. Vermont ANR Natural Resource Atlas http://maps.vermont.gov/imf/sites/ANR\_NATRESViewer/jsp/launch.jsp

## River Corridor/Fluvial Erosion Hazard Maps for Sunderland are available.

## Flood Insurance Information: <u>www.floodsmart.gov</u>

#### River Corridor Map and Special Flood Hazard Area



# Flood Map Update - The Process

- Scoping Meeting w/ Community Officials, 11/2/2006
- Scoping Report, 2/2007
- Community Information Meeting Arlington 6/23/2010
- Preliminary Digital Flood Insurance Rate Map (12/15/10, 1/14/11, 9/24/11)
- Phase 2 Stream Geomorphic Assessment Batten Kill Watershed: Roaring & Fayville Branches Towns of Sunderland & Arlington, Bennington County, Vermont January 2009, South Mountain Research and Consulting <u>https://anrnode.anr.state.vt.us/SGA/finalReports.aspx</u>
- River Corridor / Fluvial Erosion Hazard Map is available for the Batten Kill, Fayville Branch, and Roaring Branch
- Final Community Coordination Meetings (1/10/11, 2/9/11)
- Community Review of DFIRM and FIS to be completed before the end of the 90-day Appeal Period initiated 1/27/2012
- Community officials schedule flood hazard bylaw update process
- Model bylaws, and local data available from VT DEC <u>http://www.vtwaterquality.org/rivers/htm/rv\_floodhazard.htm</u>
- Planning Commission begins work on draft flood hazard area bylaws
- Draft bylaws should be sent to VT DEC for review/NFIP checklist (need 30 days)
- Planning Commission modifies draft, warns hearing and reports text to Selectboard
- Selectboard warns hearing and adopts bylaw
- Final bylaw and Clerk's Certificate sent to VT DEC
- VT DEC completes final checklist and sends to FEMA
- Fall Outreach meetings regarding flood insurance and grandfathering zones.
- Thanksgiving 2012 working deadline for adoption of updated flood hazard regulations
- DFIRM effective date 1/17/2013 (tentative)

# **Contacts and Resources**

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*Living in Harmony with Streams: A Citizen's Handbook to How Streams Work* <u>http://www.vtwaterquality.org/rivers/docs/rv\_streamguide.pdf</u>

*Protecting River Corridors in Vermont*, Kline, M, and B. Cahoon, Journal of the American Water Resources Association 2010 46(2) 227-236

**Preparing for the Next Flood: Vermont Floodplain Management** 9/2009 Vermont Law School Land Use Institute <u>http://www.vermontlaw.edu/Academics/Environmental Law Center/Institutes and Initiatives/Land Use Institute/Publications.htm</u>

NFIP Floodplain Management Requirements: A Study Guide and Desk Reference for Local Officials www.floods.org/Certification/FEMA 480 TOC.asp

