Hardwick, Vermont – River Corridor & Flood Resilience Overview

As of October 31, 2025

Context: Post-Flood Landscape

Hardwick experienced severe flooding in 2023 and 2024, with three federal disaster declarations in July 2023, December 2023, and July 2024. Impacts included structural damage, infrastructure failure, major erosion, and fluvial adjustments along the Lamoille River, Cooper Brook, Haynesville Brook, and other smaller water courses. Recovery and resilience efforts are extensive and ongoing.



Major River Dynamics: Lamoille River & Cooper Brook

Lamoille River (East Hardwick, Downtown Hardwick & Wolcott Street)

- Active channel migration is confirmed near Mill Street and behind Main Street buildings.
- Width increased from ~48 feet to 65+ feet between 2022 and 2024 near the Civic Standard (SLR observation), with incision and lateral migration evident.
- A scoping study is underway (EDA & CDBG-DR), paired with a retaining wall restoration (FEMA) in the Downtown Lamoille River Corridor (Originally envisioned as either a HMGP or BRIC).
- Future mitigation options will focus on a phased approach with corridor reconnection and removal of constrained structures.

Cooper Brook (Granite Street Historic District & Route 14 South)

- Severely undersized and disconnected from its historic floodplain.
- Multiple repeat inundation zones—Atkins Field, Fire Station parcel, and upstream residential properties.
- At least five floodplain restoration or flood bench concepts are in preliminary scoping phase (HED property at confluence, buyout locations on Route 14 S, Atkins Field, etc)

Modeling & Technical Work

- SLR International is conducting hydraulic/hydrologic modeling of both the Lamoille and Cooper Brook, funded through EDA and coordinated by LCPC. Delivery expected by late 2025.
- NRCS EWP funded 3 stream bank stabilization projects in 2023 and 5 projects in 2024. Local engineering had to be sourced due to NRCS staffing gaps the Horizon has been hired, has completed surveys and will be finishing engineering by the end of 2025.
- Jackson Dam Feasibility Study is also in process (SLR) and may influence upstream sediment dynamics.

- School Street Slope Stabilization is in the engineering phase (Mumley Engineering)
- Three temporary bridge replacements

Watershed Connection

- Watershed United is reviewing the possibility of hosting quarterly or yearly watershed conversations for the Lamoille River
- Streamwise has been planting bank stabilizing vegetation in the Upper Lamoille to East Hardwick
- **Ripple Effects Watershed Forum** presented four conversations in September. The series was a collaboration of partners from the area. Over 180 people attended. Participants included residents of Craftsbury, Glover, Huntington, Plainfield, Greensboro, Walden, Albany, Montpelier, Waterbury, Cabot, and other towns.
- Stream gauge planning is underway for both waterways in partnership with LCPC, USGS, and HED

Mitigation Projects in Motion

Understanding Hardwick's Five-Section Approach

As Hardwick continues to recover from the July and December 2023 and July 2024 flood events, we have adopted a five-section approach to guide response, recovery, and future resilience investments. This method recognizes that different areas of town face different risks and levels of engagement and allows us to better match our time, capacity, and available funding to each area's unique needs.

The five sections include:

- 1. East Hardwick Village Center
- 2. Granite Street Historic District and Cooper Brook Area
- 3. Vermont Route 14 South Corridor
- 4. Wolcott Street and Commercial District
- 5. North Main, Mill Street, and Core Downtown

This structure helps ensure that less vocal or more dispersed areas are not overlooked and resources are distributed in a way that reflects both the severity of flood impacts and the realities of community communication and capacity.

Town-wide initiatives:

- EDA grant for Flood Models of the Lamoille River and the Cooper Brook. SLR International Incorporated has been retained and the work has begun.
- The Hardwick Plan 2025 has been adopted and includes a Volunteer Amendment with four new local categories Emergency Volunteer Mobilization, Emergency Communications, Emergency Shelter, and the Supply and Support Center. This local management plan provides guidance to each component of the community, including businesses, farms, and residences.
- Neighbor to Neighbor Supply and Support Center is a sustainable and ready-to-go element of emergency response.

- The Town Flood Resilience Website pages at Hardwickvt.gov have been updated and have more information for the public.
- The Hardwick Unified Development Bylaws were updated in September 2024 and the Flood Hazard Area Overlay rules now match the requirements from the State of Vermont and FEMA and will be ready for the anticipated update to the Floodplain maps.
- Six bridges have engineering under way for permanent replacements/upgrades by 2026.
- Eleven damaged roads will have updated culverts by the end of 2025. Additional mitigation projects are ongoing on all roads in town.
- The expanded Emergency Alert notification system (TextMyGov) has been implemented.
- Review of all HED dams will occur with a Task Force

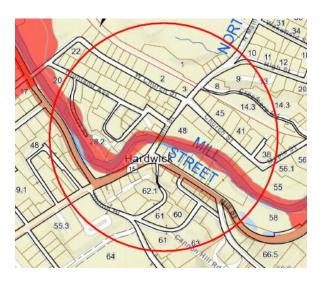
Section Specific Initiatives:

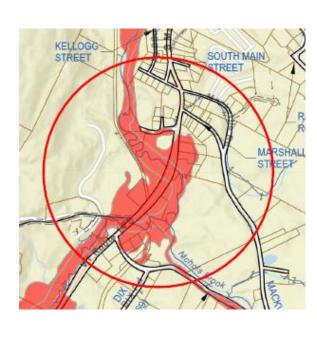
- 1. Downtown Hardwick (Lamoille River) Flood Resiliency Projects in Process:
 - Mill Street restoration project (EDA/NRCS)
 - EWP 2024 3 projects
 - Scoping study for the Downtown section (CBDG-DR)
 - 4 buyouts (2 complete), 1 awaiting closing
 - Restoration of the Retaining Wall next to the Village Diner (FEMA)



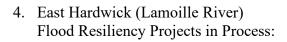


- 2. Route 14 (Cooper Brook) Flood Resiliency Projects in Process:
 - 1-2 elevations
 - 2 buyouts (Complete)
 - Restoration project after two buyouts finalized (NRCD)
 - 1 EWP 2024
 - 1-2 proposed EDA projects
 - 2 Lift Stations for the WWTF (FEMA) will be upgraded
 - 3 acre active floodplain purchase under consideration (FRCF funding).

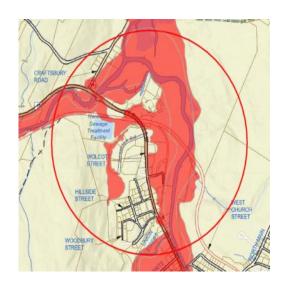




- 3. Wolcott Street Commercial (Lamoille River) Flood Resiliency Projects in Process:
 - Wastewater Treatment Facility Plant upgrades (FEMA)
 - Vermont River Conservancy downstream flood mitigation (Vermont Land Trust)
 - Jackson Dam Feasibility Study nearly complete (SLR) with CC NRCD
 - 7 buyouts (Sawmill Park Future concept for green space and flood storage) (3 complete)
 - 1-2 proposed EDA projects
 - Floodproofing Concept (CRDMF or FRCF)



- Better Connections Stormwater Overview
- 1 proposed EDA project
- 2 FRCF buyouts in 2025
- EWP 2023 1 historic property complete
- 1 FRCF buyout completed in 2023-2024
- School Street Bank Stabilization (FEMA funded) Engineering nearly done.





- 5. Granite Street Historic District (Cooper Brook and Lamoille River) Flood Resiliency Projects in Process:
 - Municipal Planning Grant in process flood mitigation and flood resiliency planning.
 - Fire Station removal from the Floodplain (FEMA & MTAP)
 - Future mitigation project at the Fire Station site.
 - Flood proofing concept in process
 CRDMF





• Restoration of an earlier flood mitigation project at the confluence of the Lamoille and Cooper Brook (CBDG-DR requested)

Planning, Zoning & Frameworks

- Hardwick Unified Development Bylaws updated (Sept 2024) with:
 - o Revised flood hazard area regulations more restrictive and responsive to on-the ground reality
 - o HOME Act-aligned zoning reforms (village centers, infill)
- Hardwick Unified Development Bylaw update for 2025 with:
 - o River Corridor rules in progress

Emergency Management System

- The Hardwick Plan (2025) replaces the LEMP and integrates volunteer-driven response systems.
- Includes a Flood Annex, checklists, and operational readiness tools.
- Supply & Support Center (at Police Station) supports regional disaster deployment with a fully operation and mobile Emergency Response trailer.
- TextMyGov emergency alerts and siren installation (Granite Street) expanding early warning.