Hardwick Projects after 2023 and 2024 flooding events October 30, 2024

HMGP pre-application submitted to VEM after July 2023 to make the former Inn by the River location more flood resilient and to stability the riverbank. Possible RIVER help. Submitted for EWP after July 2024. In July 2024, Hays Service Station/Jiffy Mart and the Town of Hardwick lost 100 feet of property, 3 vehicles were swept downstream, and 3 in-ground fuel tanks are now on the river edge. A 10,000 gallon tank is in place and filled with concrete. The propane tank was removed on Thursday, July 11, 2024 as it was in imminent



danger of falling into the Lamoille River. The continued erosion at this location is a threat to both the Hays Service Station but also the Hardwick downtown and the correlating Routes 14/15/16. This has been elevated to a State-level emergency. Temporary Bank Stabilization was done on July 24 -25 by the State of Vermont at the request of the Town. July – 2024 - Pre-application was invited to apply for funding to stabilize the entire section and create more flood resiliency on the former Inn by the River location. October 2024 – RIVER grant through NVDA will probably be utilized for BCA and early engineering.

HMGP pre-application submitted to VEM after July 2024 to protect and create a comprehensive approach to the riverbanks in the center of town from above the North Main Street Bridge to the Cottage Street Bridge. Possible RIVER help. NRCS **Emergency Watershed Protection (EWP)** applied for 10+ properties after July 2024. In July 2024, the parking area for the Hardwick Inn/Mike's Service Station/Civic Standard all lost considerable retaining wall sections. Mike's Service Station is in danger of being demolished by the Lamoille River in the next heavy rain event. This would be a threat to these structures



and to Hardwick downtown and the correlating Routes 14/15/16. UPDATE: 65 Brush Street lost a corner of the building in the aftermath of Debby on August 10, 2024. The 41 Brush Street property (FEMA buyout – at FEMA) is also threatening to collapse. Buffalo Mountain Market has also lost stream bank. UPDATE: Mike's Service Station was temporarily stabilized. 65 Brush Street has lost more of the bank and has been reviewed by the State Geologist. 41 Brush Street has returned from FEMA with funding - will be ready to be demolished after 8/1/25 (no bat review could be done due to the condition of the structure so demolition will need to fall outside of the breeding time frame due to the funding source).

HMGP pre-application submitted to VEM after July 2023 to utilize the Town-owned property below the Cottage Street Bridge for floodplain restoration/flood mitigation project. The Lamoille River is one component of the flooding issue. Flood Benches and floodplain restoration etc. on the property below the intersection of Cooper Brook and the Lamoille River may alleviate some of the

pressure at that junction. This project was identified in several Lamoille River studies. October 2024 - RIVER grant through NVDA will probably be utilized for BCA and early engineering.

- Storm water system near Yellow Barn, LVRT and Lamoille Valley Ford needs to be repaired and upgraded. Area is an important component in flood mitigation efforts for the Wastewater Treatment Facility plant and the Wolcott Street Commercial district. Possible FMA grant? October 2024 - A section of the storm water swale near the LVRT and the Wastewater Treatment Facility was upgraded and repaired.
- Wastewater Treatment Facility Plant Damaged by flooding in July 2023 and July 2024. Substantially Damaged in 2023. The facility and its components will need to be elevated or removed from the floodplain. Critical Structure per FEMA rules. The Feasibility Study, BCA and Alternatives study are done and will be forwarded to FEMA for funding discussions. Area could be used for future flood storage if removed from site.
- Fire Station Damaged by flooding in July 2023 and July 2024. Substantially Damaged in 2023. The facility will need to be elevated or removed from the floodplain. Critical Structure per FEMA rules. Standard Operating Procedure is now to remove fire equipment and trucks in weather events. MTAP grant through NVDA is in place. Grant funds a scoping study and feasibility study for removing the Station from the floodplain. Vermont Integrated Architects have been retained to complete the work by spring of 2025. Area could be used for future floodplain restoration after removal.

Storm water/flood mitigation assistance for Granite Street



Historic district install backflow prevention devices for water in all homes, create more resilient yard and catch basins. At intersection of Cooper and Lamoille this section is more likely to be flooded. This area of Hardwick received higher amounts of

flooding. Neighborhood focused response - Sump pump was purchased by one resident (\$1200) and



utilized by several homes. A complete review of this historic residential section was on the list after 2023 but needs to be prioritized. Atkins Field would like to be included in the discussion. August 12, 2024 – hosted the first community meeting (20+ people in attendance). Concerns include dry floodproofing the old granite basements, creating a plan for avoiding the movement of water into the Demers house at the end, floodplain restoration on the Atkins Field property, a generator for the sump pumps, road blockage to prevent traffic during flood, repair/restoration of the old clean water project at the intersection of Cottage Street and Lower Cherry Street. A BRIC grant from FEMA may be applicable. Pre-application submitted. UPDATE 10/24 – seeking funding for 10+ structures to be floodproofed, elevated land removed from Atkins Field, restoration of the storm water garden on Cottage Street, future removal of debris near Brook Street bridge.

- Extensive debris clean-up in process
 - 1. Haynesville Brook on VT Route 15 East near Fisher's Folly Bridge nearly done in October 2024
 - 2. Along the Lamoille River after the Jackson Dam in process in October 2024
- 11 Damaged Roads/Culverts All roads have been graded and top-dressed and are open to travel. Mitigation funds from FEMA will help with fortifying culverts with headers and wing walls.
 - 1. Kate Brook Road (several new culverts)
 - 2. Belfry Road asphalt damaged
 - 3. Bunker Hill Road (bottom and close to 787)
 - 4. Smith Farm Road (Fixed shoulder 8/24)
 - 5. Dutton Road (culvert upsized) (9/24)
 - 6. Nichols Pond Road (culvert upsized) (9/24)
 - 7. Stage House Road (2 culverts upsized) (9/24)
 - 8. Sawmill Lane lost gravel in process
 - 9. Wright Farm Road/Yellow Barn parking (State repaired apron 7/24)
 - 10. Stannard Mtn Road is partially owned by Hardwick road & river edge (Repaired 7/24)
 - 11. Tucker Brook (3 culverts added 9/24)
- 6 bridges were damaged
 - 1. Tucker Brook (From 2023 Temporary held in 2024) Needs to be upgraded.
 - 2. Carey Road box culvert/bridge Damaged Temporary Fix (2024) Needs to be upgraded.
 - 3. Riverside Farms bridge is gone. Permanent Bridge in place September 23, 2024
 - 4. Fisher's Folly bridge is damaged. No access. Temporary done. Needs to be upgraded.
 - 5. Hardwick Farm Road bridge damaged (incl. temporary bridge) (– Engineering proposals received for permanent Temporary done. *Needs to be upgraded.*
 - 6. E. Main Street, East Hardwick Bridge was removed in the spring (Damaged in 2023) RFP for engineering proposals being generated. *Needs to be upgraded.*
 - 10 buyouts arranged after July 2023 flooding
 4 through FRCF already purchased by the town of Hardwick,
 houses demolished & seeded and mulched.
 - 1. 223 Mill Street
 - 2. 2832 Craftsbury Road
 - 3. 387 Carey Road
 - School Street in East Hardwick

4. So 6 through FEMA

- 1. 161 VT Route 14 South Cooper Brook FEMA \$ allocated
- 2. 115 VT Route 14 South Cooper Brook FEMA \$ allocated
- 3. 24 Sawmill Lane Lamoille River FEMA \$ allocated
- 4. 444 Wolcott Street Lamoille River FEMA \$ allocated
- 5. 41 Brush Street Lamoille River FEMA \$ allocated
- 6. 5 Sawmill Lane Flooded on first floor (Lamoille River) Still at FEMA
- Select Board voted (7/18/24) to re-open the buyout requests 12 have been received October 2024. 2 on Haynesville Brook, 2 on the Lamoille River in East Hardwick, 3 in the downtown Hardwick on the Lamoille River, 1 on Cooper Brook, and 4 on the lower Wolcott Street area. All have flooded on multiple occasions. Several will not continue the process if the town is able to install flood mitigation and protection for their properties.
- Vermont Fish and Wildlife is interested in owning 2 of the parcels on Haynesville Brook. Still in discussion. One property is in the EWP program – house is now in danger of being swept away in a larger rain event.

7 properties have requested elevation assistance – 3 on the Lamoille River and 4 on Cooper Brook. Funding source has been located from the State of Vermont. Planning and access to this funding has begun. State of Vermont has issued a pre-award letter with funding for elevations. List of potential properties is being generated.



 Dry and wet floodproofing assistance for the Wolcott Street commercial district. From Choice Realty down to the intersection of Route 14/15.

Businesses and Multi-units

- 1. House of Pizza (Pre-app to floodproof)
- 2. Paul Davis Restoration (2 buildings) (Pre-app to floodproof)
- 3. Walgreens and Tops (Pre-app to floodproof)
- 4. Caja Madera/Dona's/Wildcat Busing (Pre-app to floodproof)
- Wolcott Street 3 backflow storm water valves need to be installed to prevent water back-up from the Lamoille River – Total project cost approximately \$15,000.
- Overarching watershed study has been requested for Cooper Brook from the NRCS Watershed and Flood Prevention and Operations Program (WFPO). Flood modeling will occur on first 1.5 mile stretch to intersection with Lamoille River – should be completed by 2025.
- Possible flood hazard mitigation concepts for additional 10 parcels not owned by Town at this time.
 - 1. 3 on Cooper Brook (Floodplain restoration).
 - 2. 6 adjacent and on Lamoille River park & floodplain restoration? (Caledonia County NRCS would like to oversee). Patterned after Northfield's successful floodplain restoration.
 - 3. 2 on Lamoille River in center of Town. (Floodplain restoration)
- Pre-application Hazard Mitigation Grant Generator in the EOC at the Police Station (Have conceptual designs and quotes).
- Long-Term Community Recovery Plan was in initial phases after 2023 flooding. Will be even more important with the 2024 flooding.
- VCRD working with Neighbor to Neighbor and the Town to create a local partner's version to the LEMP. Work in process. Five categories under consideration. Draft version will be available in early 2025.
- Create and store a supply center that is ready to go cleaning kits, dehumidifiers, sump pumps, fans, safety suits, masks, protective glasses, etc. Hazen has offered a location for a shipping container for storage. Possible regional approach – serve as Hub for local towns. July 2024 supply center was utilized by Walden, Wolcott, Stannard, Greensboro, and Woodbury. In process August 1, 2024
- EDA grant for Flood Modeling and Economic Development. Money has been received and a completed project will be available by the end of 2025.

- Identification of possible River Corridor Easement properties in conjunction with Emily & VT River Conservancy
- Stream gauges Funding has been requested to install stream gauges in the Hardwick area. Currently, they are only in Johnson. The installation will assist with flood predictions.
- Jackson Dam A feasibility study will be conducted on the Hardwick Lake and Jackson Dam area. The study will focus on the flood resilience aspects for upstream and downstream