

PROIORITY PROJECTS FROM THE MERRIMACK VALLEY REGION									
Category of Action	Description of Action	Hazard Addressed	Responsible Group	Priority	Timeframe	Cost	Resources/ Funding	Year Added	2024 Project Update
BOXFORD									
Planning/ Structural	Replace culverts across Town that are contributing to localized flooding, and preventing normal hydrological flow: Herrick Road, Georgetown Road, Pye Brook Lane, Glendale Road, Ipswich Road	Flooding from Precipitation Events, Winter Storms, Hurricane/ Tropical Storms, Other Severe Weather, and Coastal Conditions	DPW and contractors	8	Long-term	High	MVP Action Grants and ARPA funding and local funds (Chapter 90 and borrowing)	2024	Culverts in Pye Brook watershed were studied and designs were created for new culverts. Designs have been approved and permitted through local Conservation Commission and DEP. Next steps: secure funding and prioritizing the replacement of the culverts.
Planning/ Structural	Analyze existing flooding problem areas and design/implement appropriate corrective measures for dams and bridges. Priorities areas include: Depot Rd./ Bare Hill Rd. by Four Mile Pond (2008); Lowe Pond Dams (2016); Endicott Bridge (2023)	Flooding from Precipitation Events, Winter Storms, Hurricane/ Tropical Storms, Earthquakes, and Coastal Conditions	Boxford Public Works	6	Long-term	High Cost	MassDOT Municipal Small Bridge Program, EEA Dam and Seawall Repair Program Grants	2008	Boxford collaborated with the Town of Topsfield to advance the design of Endicott Bridge reconstruction. This will be utilized for ch. 85 bridge review and local permitting of the work. Expected to be filed in 2024 and approved in 2025. Boxford will pursue funding through the state's "small bridge" program.
GROVELAND									
Planning/ Structural	Complete design, permitting and construct improvements to the Johnson's Creek Dam. Next steps include design & cost estimate development	Flooding from Precipitation Events, Winter Storms, Hurricane/ Tropical Storms, and Other Severe Weather	Town Highway Dept	9	Medium-term	High cost	EEA Dam and Seawall Repair Program Grant, EOED Massworks Grant	2016	Since 2016, a survey and design (50%) has been conducted. Groveland is actively working to get the project listed in the TIP and secure funding.

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Planning/ Structural	Construct storm system improvements including outfall capacity replacement at Main/School Street	Inland Flooding, Storm Events, Erosion	Town Highway Dept	8	Short-term	Moderate cost (cost for Main/School St. project est. at \$150k)	FEMA HMGP, FMA, PDM; DER Culvert Replacement Municipal Assistance Grant	2016	No action has occurred, and conditions of outfalls continue to worsen. Next steps include continuing to engage the Army Corps of Engineers.
HAVERHILL									
Structural	Small bridge repairs/replacement at Rosemont Street (replace), North Forest Street (repair), West Lowell Street (repair)	Multi-Hazard (Including Earthquakes, Flooding, and Severe Storms)	DPW, City Engineer	6	Medium-term	High Cost	Municipal Small Bridge Program), ARPA funding	2024	The City is working to advance projects as funding enables. Rosemont Street recently received ARPA funding and is beginning design.
Structural	Expand stream flow/drainage system capacity at North Avenue bridge/dam on Snow's Brook	Flooding from Precipitation Events, Winter Storms, Hurricane/Tropical Storms, and Other Severe Weather, Earthquakes	City DPW/ Engineering/ MassDOT/ Merrimack Valley MPO	4	Medium-Long term	High Cost (prelim design phase est.\$1.6 million)	Funding Authorized by City Council, MassDOT funding, Federal Highway Administration funding	2016	Project is still currently in design phase by City/MassDOT/70%. The plan is to remove the dam and restore full stream flow.
Structural	Remove dilapidated Brandy Brow Road bridge over East Meadow River and restore natural streambank	Flooding, Drought, Riverine Erosion, Earthquakes	DPW, Conservation Department	4	Short to Medium-term	Moderate Cost	Culvert Replacement Municipal Assistance Grant Program	2024	Design completion anticipated June 2024

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Structural	Assess and upgrade Route 108 culvert system to restore natural stream flow patterns and eliminate flooding on Route 110	Flooding from Precipitation Events, Winter Storms, Hurricane/Tropical Storms, and Other Severe Weather	Conservation Commission, DPW	4	Short to Medium-term	High Cost	Culvert Replacement Municipal Assistance Grant Program	2024	Municipal stakeholders discussed concerns and have pursued project funding in recent years.
LAWRENCE									
Structural	Replace and reconfigure Daisy Street Bridge to eliminate stream flow bottleneck and minimize area flooding hazard	Flooding, Riverine Erosion	City DPW/MVMPO/Community Development	7	Long-term	High cost	MassDOT TIP program	2016	No action- project has not yet been funded on the TIP. Still waiting for funding for project.
Structural	Reconstruct/replace structurally deficient Amesbury Street Bridge over South Canal	Flooding, Erosion, Earthquakes	MassDOT Highway/City/Merrimack Valley MPO	4	Long-term	High cost	Mass-Highway Bridge Program /MVMPO	2016	No action- project has not yet been funded on the TIP. Still waiting for funding for project.
METHUEN									
Planning/ Structural	Replace failing/undersized culverts at locations including Brook St.; Pelham St. at Harris; Woodburn Dr.; and Drew St. (off Old Ferry Rd)	Flooding from Precipitation Events, Winter Storms, Hurricane/Tropical Storms, and Other Severe Weather	DPW/ Conservation	10	Medium-term	Medium Cost	Capital Bond, DER Culvert Replacement Municipal Assistance Grant	2024	Locations identified as priorities. Next step is design/permitting

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Planning/ Structural	Plan and Construct Resilience Upgrades to the following identified problem bridge structures: Stone Arch Bridge at Broadway by Organ Hall (MassDOT); Oakland Avenue Bridge over Rail Trail (Methuen local); privately owned steel bridge structures at end of Chase St. spanning Spicket River.	Flooding, Earthquakes, Riverine Erosion	DPW	8	Medium-term	High cost	MassDOT Municipal Small Bridge Program, Property Owner @ Chase St.,	2024	Work with state and property owner to Conduct bridge assessments and develop cost estimates, finance plan for bridge upgrades.
Structural	Design and construct drainage improvements to reduce Spicket River flooding at the Rail Trail Bridge over Spicket "choke" point. Next steps are for design and funding to incorporate bridge replacement into Rail Trail improvement project.	Flooding from Precipitation Events, Winter Storms, Hurricane/ Tropical Storms, and Other Severe Weather	City DPW/ Community Development; MassDOT	5	Short-term	High cost	FEMA FMA, MVP Action Grant, MassDOT Surface Transportation	2008	Work towards this goal has continued since last update. Improvements to the rail trail were made in 2018. Rail trail Bridge over the Spicket (at end of Pine Street) has not yet been replaced. Next step includes trying to identify opportunities for design.
Structural	Rehabilitate the Hampshire Road Bridge spanning the Spicket River near the Methuen - Salem NH town line.	Flooding, Earthquakes, Riverine Erosion	MassDOT, City, MVPC/ Merrimack Valley MPO	3	Long-term	High cost	MassDOT Highway	2008	No action as project not funded in Regional Bridge Program. Elevating the bridge and roadway will impact clearance under I-93 and may require expanded scope with changes to I-93 overhead.

ROWLEY

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Structural	Design and construct drainage system improvements to alleviate chronic flooding due to undersized culverts/structures at following locations: 1) Newbury Road near Harrison Circle-- Completed; 2) Haverhill Street (Rt. 133) at Bradford Street-- Completed; 3) Wethersfield Street at Wild Pasture Lane; 4) Glen Street bridge replacement at Jewell Mill Dam over Mill River— new priority project	Flooding from Precipitation Events, Winter Storms, Hurricane/ Tropical Storms, and Other Severe Weather, as well as SLR; Erosion	Town Highway Dept	6	Short-term	High cost	FEMA HMGP, FMA; Municipal DER Culvert Replacement Municipal Assistance Grant Program, Town 25% match	2008. Glen Street Bridge added in 2016	Since 2016: an undersized culvert at Haverhill Street has been identified and needs to be replaced; Study/ engineering of potential culvert replacement at Wethersfield/ Wild Pasture Lane still needs to be done; Work hasn't yet been completed as the site hasn't posed an issue since the Mother's Day storm; Glen Street Bridge replacement is still a high priority. The Town is working with MassDOT through small bridge replacement program to upgrade structure.
Structural	Design and construct drainage improvements at Hillside Street to alleviate occasional flooding that renders the street impassable. This may involve elevating the road for a stretch of approximately 150 ft. and installing a larger culvert	Flooding from Precipitation Events, Winter Storms, Hurricane/ Tropical Storms, and Other Severe Weather	Town Highway Dept	1	Short-term	High cost	FEMA Flood Mitigation Assistance Grant	2008	Two locations have been identified for drainage improvements on Hillside Road: Hillside near Glen Street and Hillside near Hellman Farm. Next steps include funding for engineering/design

SALISBURY

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Category of Action	Description of Action	Hazard Addressed	Responsible Group	Priority	Timeframe	Cost	Resources/ Funding	Year Added	2024 Project Update
Planning and Structural	Study and reconstruct State Route 1A (Beach Road) to permit emergency access and evacuation at Salisbury Beach	Coastal and Inland Flooding	Salisbury DPW, MADOT /Merrimack Valley MPO	8	Short-term	High cost	MassDOT and Army Corps of Engineer Funding, Merrimack Valley MPO TA and Funding	2016	Project has made slow progress since last update. Salisbury has reached out to MassDOT and DCR to begin collaboration. Next steps include continuing to work with both groups to identify plan to mitigate flooding along Beach Road
Planning and structural	Install larger culverts at Ferry Road and March Road to facilitate tidal flow in adjacent marshes; encourage building floodwalls or elevating buildings to protect against coastal flooding along Route 1 South; study elevating roadways to increase flood protection	Coastal and Inland Flooding and Erosion from Precipitation Events, Winter Storms, Hurricane/ Tropical Storms, Tsunamis, and Other Severe Weather, as well as SLR	Salisbury DPW, Conservation Commission	7	Short term study; long term implementation	High cost (\$300k)	DER Municipal Culvert Replacement Grant Program, MassWorks Infrastructure; FEMA Flood Hazard Mitigation or HMGP	2008	Survey and designs were completed, but implementation did not occur as permitting was not granted through MEPA due to saltmarsh impacts. Salisbury is continuing to explore possible options to address flooding in Marsh and Ferry Road Community. Next steps include exploring what work/improvements can be done under current WPA.
WEST NEWBURY									
All	Study erosion, flooding, and impacts of sea-level rise along Merrimack River. Specifically, along River Road.	Coastal and Inland Flooding (from storms and SLR), Riverine Erosion	DPW, CCRC, Finance Department, Conservation Department	8	Short-term: complete study, Medium-term: coordinate implementation plan, Long-term: complete implementation projects	Moderate cost for study/ High cost for implementation	MVP Action Grant & Seed funding, FEMA BRIC grant, DER Municipal Culvert Replacement Grant	2024	Erosion and culvert study currently ongoing, expected completion date 2024. Next steps will be to use study to develop a comprehensive mitigation plan and find funding to begin work on projects.

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Planning/ Structural Project	Replace undersized culverts, swales, and drainage systems on an as needed basis.	Coastal and Inland Flooding, Riverine Erosion	DPW, Conservation Commission	7	Short-Term planning and Medium-Long term culvert identification & implementation	Moderate cost	State Infrastructure Revolving Fund/ MassDOT/ DER Municipal Assistance Grant/FEMA FMA or BRIC grant	2008	Steps have been taken to advance this goal: 1) a New Stormwater bylaw was passed in 2021, 2) Quotes have been received to replace two Coffin Street culverts, 3) River Road culverts are currently being studied and mapped under an MVPC action grant (2023). Work is still ongoing to inventory and prioritize draining structure upgrades in CIP and enter in GIS. Town is actively seeking grants to continue implementation work.