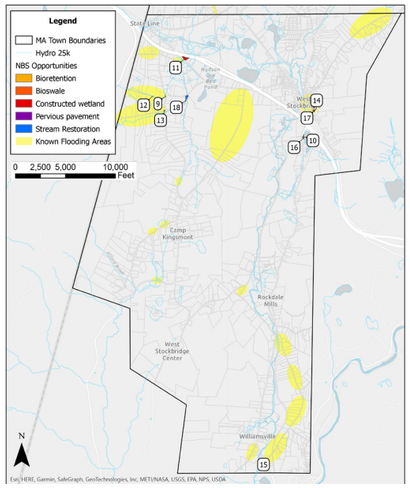
Resilient Stormwater Action & Implementation Plan for West Stockbridge

Project Prioritization Matrix

Known Flooding Areas & Nature Based Solutions



Project Description

This plan addresses high priority action items to address climate change vulnerabilities from flooding and stormwater runoff. Here are the prioritized projects found to be most beneficial and most feasible for addressing environmental and other impacts of stormwater runoff in the community. These solutions can help incorporate climate resilience in local projects and decision making for community infrastructure and roads. Recommendations for implementation and more information can be found in the Resilient Stormwater Action and Implementation Plan.

What is a Resilient Stormwater Action Plan?

- Evaluates and prioritizes capital projects for stormwater management
- Plans for climate change and severe weather
- Incorporates equity and community priorities
- Multi-year implementation plan
- Prevents disruption to infrastructure
- Manages vulnerabilities

This Plan Addresses Climate Resilience & Hazard Mitigation Priorities from the MVP & HMP Planning Processes:

- Develop a stormwater management plan for culverts and drainage
- Identify solutions for gravel roads to address flooding and washouts
- Mitigate erosion in known problem areas
- Evaluate nature-based flood storage techniques
- Use a model of future climate conditions to identify projects

MVP Project 2023 Resilient Plan Prioritization Matrix

Legend - Impact Score	
Lowest	0
	1
	2
	3
	4
Highest	5

Legend - Rank	
Highest	1
	7
	14
	21
	28
Lowest	35

					Impact on Flooding		Co-Benefits 0 (No Impact) to 5 (High Impact)				Feasability 0 (least favorable) to 5 (most favorable)						
					Weight	Weight	Weight	Weight	Weight	Weight	Weight	Weight	Weight	Weight	Weight	Weight	
					5	5	8	8	12	12	15	5	5	5	10	10	
Site Location	Project ID	Infrastructure Type	Project Type	Area (sqft)	Flooding Impact to Problem Areas Ranking	Model Flooding Ranking	Biodiversity/ Habitat/ Pollinators	Water Quality Improvements	Safety Improvements	Soil Stabilization and Hillside Protection	Opinion of Cost	Funding Availability	Permitting Difficulty	Land Ownership	Maintenance Frequency	Maintenance Effort	Rank
Woodruff @ Red Rock Rd	9	NBS	Bioretention	12265	5	0	5	3	3	5	4	5	3	5	3	3	4
Pixley Hill Rd	10	NBS	Bioretention	980	3	2	5	3	1	3	4	5	5	5	3	3	9
State Line Rd @ Smith Rd	11	NBS	Constructed Wetland	67430	3	4	5	5	3	1	1	5	1	5	4	5	10
Red Rock Rd	12	NBS	Bioswale	1725	5	2	5	3	1	3	4	1	3	1	3	3	15
Austerlitz Rd	13	NBS	Bioswale	1720	5	1	5	3	3	5	4	1	3	1	3	3	8
South St	14	NBS	Bioswale	17775	5	0	5	3	3	5	1	1	5	1	3	3	14
South St	15	NBS	Stream Restoration	17885	5	0	5	5	1	5	2	5	1	5	5	5	5
Great Barrington Rd @ Card Pond	16	NBS	Bioretention	5860	0	0	5	3	1	3	3	3	3	3	3	3	19
Great Barrington Rd @ Card Pond	17	NBS	Pervious Pavement	15230	0	0	0	3	3	3	3	3	3	3	3	1	28
West Center Rd	18	NBS	Stream Restoration	49450	3	5	5	5	3	5	1	5	1	5	5	5	1
Intersection of oak street and Main St	GI1	GI	Bioretention	150	0	0	5	3	3	3	5	5	3	5	3	3	7
Down Main St past oak toward downtown	GI2	GI	Infil., Trench, Swale, Porous Strip	431	0	0	3	3	3	3	5	5	3	5	3	3	11
Gravel parking down 102 before depot Street	GI3	GI	Porous	724	3	0	0	3	1	1	4	1	5	1	5	5	20
Intersection Of Harris St & Moscow Rd green space	GI4	GI	Bioretention	475	5	0	5	3	1	1	5	1	5	1	3	3	17
Intersection of Hotel St. and 102	GI5	GI	Bioretention	116	5	0	5	3	1	1	5	5	3	5	3	3	12
Intersection of Lenox & Swamp Rd	GI6	GI	Bioretention	260	5	0	5	3	3	3	5	5	5	5	3	3	3
Downtown past Hotel St	GI7	GI	Porous Stalls	545	5	0	0	3	1	0	4	5	3	5	5	5	16
Intersection of Old Great Barrington & 102	GI8	GI	Bioretention, Rain Garden, Mini Forest	287	5	0	5	3	3	5	5	5	3	5	3	3	2
Intersection of Old Great Barrington & 102	GI9	GI	Bioretention, Tree Pits, Infil. Trench Along curb	224	5	0	5	3	3	3	5	5	3	5	3	3	6
Parking Strip down Main St past Oak toward downtown	GI10	GI	Permeable Paving, Infil.	644	0	3	0	3	3	3	4	1	3	1	5	5	13
Shaker Mill Pond Dam (MA00732)	D5	D	Potential for Increased Storage/Drawdown	N/A	0	3	0	0	0	0	3	0	1	5	1	1	34
Card Pond Dam (MA01047)	D6	D	Potential for Increased Storage/Drawdown	N/A	0	1	0	0	0	0	3	0	1	5	1	1	35
Kingsmont Dam (MA02223)	D12	D	Dam Removal Candidate	N/A	3	3	3	3	3	0	1	1	1	1	5	5	22
Alford Brook Club Dam (MA02224)	D13	D	Dam Removal Candidate	N/A	0	3	3	3	3	0	1	1	1	1	5	5	26
Rose Lower Dam (MA02631)	D14	D	Dam Removal Candidate	N/A	0	2	3	3	3	0	1	1	1	1	5	5	29
Shaker Mill Pond Dam (MA00732)	D15	D	Dam Removal Candidate	N/A	0	5	3	3	3	0	1	3	1	5	5	5	18
Unnamed Dam, West Stockbridge, behind 46 Main Street	D16	D	Dam Removal Candidate	N/A	0	1	3	3	3	0	1	1	1	1	5	5	31
Unnamed Dam, West Stockbridge, adjacent to 30 Great Barrington Road	D17	D	Dam Removal Candidate	N/A	0	1	3	3	3	0	1	1	1	1	5	5	31
Unnamed Dam, West Stockbridge, adjacent to 245 Great Barrington Road	D18	D	Dam Removal Candidate	N/A	0	4	3	3	3	0	1	1	1	1	5	5	23
West Alford Road (Adjacent to 15 West Alford Road driveway)	CWS2	C	High Risk Culvert	N/A	5	4	1	1	5	1	1	1	3	5	3	3	21
West Alford Road (Approximately 50 feet east of private driveway for 9 West Alford Road)	CWS4	C	High Risk Culvert	N/A	5	0	1	1	5	1	1	1	3	5	3	3	24
Wilson Road (Between Alford Brook Club and telephone pole 7-84)	CWS5	C	High Risk Culvert	N/A	5	2	1	1	5	1	1	1	1	5	3	3	24
Quarry Road (200 feet into Quarry Road, private, about 100 feet before gate)	CWS1	C	High Risk Culvert	N/A	0	5	1	1	5	1	1	1	1	5	3	3	30
Baker Street (Adjacent to 22 Baker Street)	CWS3	C	High Risk Culvert	N/A	0	0	1	1	5	1	1	1	1	5	3	3	33
Smith Road (South of 3 Smith Road)	CWS6	C	High Risk Culvert	N/A	5	1	1	1	5	1	1	1	1	5	3	3	27

Resilient Stormwater Action & Implementation Plan for Richmond

Project Prioritization Matrix

Project Description

This plan addresses high priority action items to address climate change vulnerabilities from flooding and stormwater runoff. Here are the prioritized projects found to be most beneficial and most feasible for addressing environmental and other impacts of stormwater runoff in the community. These solutions can help incorporate climate resilience in local projects and decision making for community infrastructure and roads. Recommendations for implementation and more information can be found in the Resilient Stormwater Action and Implementation Plan.

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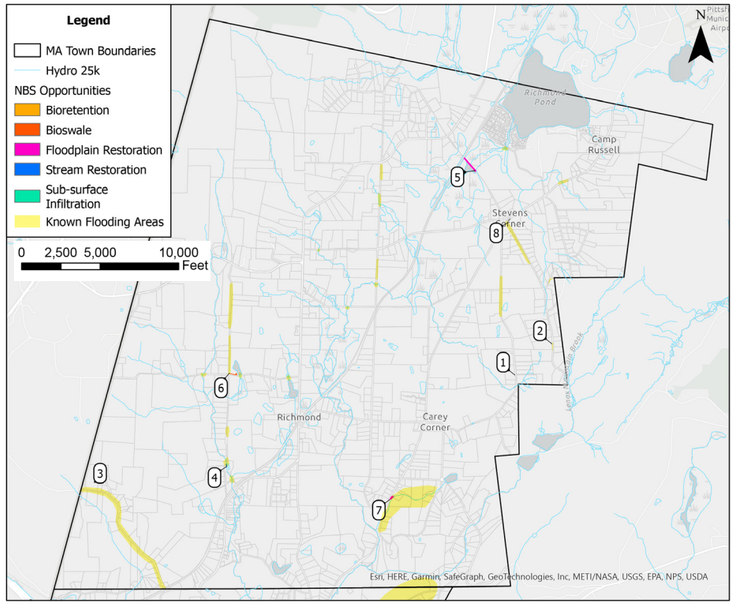
- Mitigate erosion in known problem areas
- Evaluate nature-based flood storage techniques
- Use a model of future climate conditions to identify projects

Known Flooding Areas & Nature Based Solutions



NBS #1-3 are gravel roads projects that were not modeled and so are not ranked in the matrix

MVP Project 2023 Resilient Plan Prioritization Matrix

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Lowest	0
	1
	2
	3
	4
Highest	5

Legend - Rank	
Highest	1
	4
	8
	12
Lowest	18

					Impact on Flooding		Co-Benefits 0 (No Impact) to 5 (High Impact)				Feasability 0 (least favorable) to 5 (most favorable)						
					Weight	Weight	Weight	Weight	Weight	Weight	Weight	Weight	Weight	Weight	Weight	Weight	
					5	5	6	6	12	16	10	10	5	5	10	10	
Site Location	Project ID	Infrastructure Type	Project Type	Area (sqft)	Flooding Impact to Problem Areas Ranking	Model Flooding Ranking	Biodiversity/ Habitat/ Pollinators	Water Quality Improvements	Safety Improvements	Soil Stabilization and Hillside Protection	Opinion of Cost	Funding Availability	Permitting Difficulty	Land Ownership	Maintenance Frequency	Maintenance Effort	Rank
West Road @ Furnace Brook	4	NBS	Stream Restoration	5577	5	1	5	5	1	3	3	1	1	1	5	5	3
Swamp Road near Dublin Road	5	NBS	Floodplain Restoration	17471	5	0	5	5	1	3	4	1	1	1	4	5	4
West Rd at Rossiter Rd	6	NBS	Bioswale	13846	5	3	5	3	3	5	2	1	1	1	3	3	2
Osceola Rd at Swamp Rd	7	NBS	Bioswale	4791	5	3	5	3	3	3	4	5	5	5	3	3	1
Town Beach Rd/Richmond Fen Wildlife Management Area	8	NBS	Floodplain Restoration	62480	0	5	5	5	0	1	4	3	1	3	4	5	5
Upper Root Reservoir Dam (MA00019)	D1	D	Potential for Increased Storage/Drawdown	N/A	0	3	0	0	0	0	3	0	1	5	1	1	16
Lower Root Reservoir Dam (MA00018)	D2	D	Potential for Increased Storage/Drawdown	N/A	0	2	0	0	0	0	3	0	1	5	1	1	17
Richmond Pond Dam (MA00017)	D3	D	Potential for Increased Storage/Drawdown	N/A	0	2	0	0	0	0	3	0	1	5	1	1	17
Richmond Iron Works Dam (MA01045)	D4	D	Potential for Increased Storage/Drawdown	N/A	0	0	0	0	0	0	3	0	1	1	1	1	18
Unnamed Dam, Pittsfield, near 98 Central Berkshire Boulevard	D7	D	Dam Removal Candidate	N/A	0	4	3	3	3	0	1	1	1	1	5	5	13
Unnamed Dam, Richmond, behind 1018 Dublin Road	D8	D	Dam Removal Candidate	N/A	3	1	3	3	3	0	1	1	1	1	5	5	13
Unnamed Dam, Richmond, on driveway for 350 West Road	D9	D	Dam Removal Candidate	N/A	3	3	3	3	3	0	1	1	1	1	5	5	8
Sherrill Pond Dam (MA02203)	D10	D	Dam Removal Candidate	N/A	3	2	3	3	3	0	1	1	1	1	5	5	10
Richmond Iron Works Dam (MA01045)	D11	D	Dam Removal Candidate	N/A	0	4	3	3	3	0	1	1	1	1	5	5	13
Summit Road (About 150 feet east of 477 Summit Road)	CR1	C	High Risk Culvert	N/A	0	2	1	1	5	1	1	1	1	5	3	3	15
Swamp Road (Quarter of a mile southwest of Swamp Road and Osceola Road intersection)	CR4	C	High Risk Culvert	N/A	3	3	1	1	5	1	1	1	1	5	3	3	9
Lenox Road (By fire hydrant marked 14, and telephone pole 22)	CR2	C	High Risk Culvert	N/A	0	2	1	1	5	1	1	1	1	5	3	3	15
Former Swamp Road	CR5	C	High Risk Culvert	N/A	5	4	1	1	5	1	1	1	3	5	3	3	6
Sleepy Hollow Road (About halfway down Sleepy Hollow Road)	CR3	C	High Risk Culvert	N/A	5	1	1	1	5	1	1	1	1	5	3	3	9
Dublin Road (Next to 10 Dublin Road)	CR8	C	High Risk Culvert	N/A	0	4	1	1	5	1	1	1	1	5	3	3	14
Summit Road (Near Telephone Pole MECO 36)	CR6	C	High Risk Culvert	N/A	5	5	1	1	5	1	1	1	1	5	3	3	7
West Road (South, between red barn and railroad crossing at the beginning of West Road)	CR7	C	High Risk Culvert	N/A	5	1	1	1	5	1	1	1	1	5	3	3	9
West Road (North, between a 15 sign and 951 West Road)	CR9	C	High Risk Culvert	N/A	5	1	1	1	5	1	1	1	1	5	3	3	9