

Southwest Branch Watershed Based Plan

May 28, 2024



BRPC
Berkshire Regional Planning Commission

South Branch Watershed Based Plan

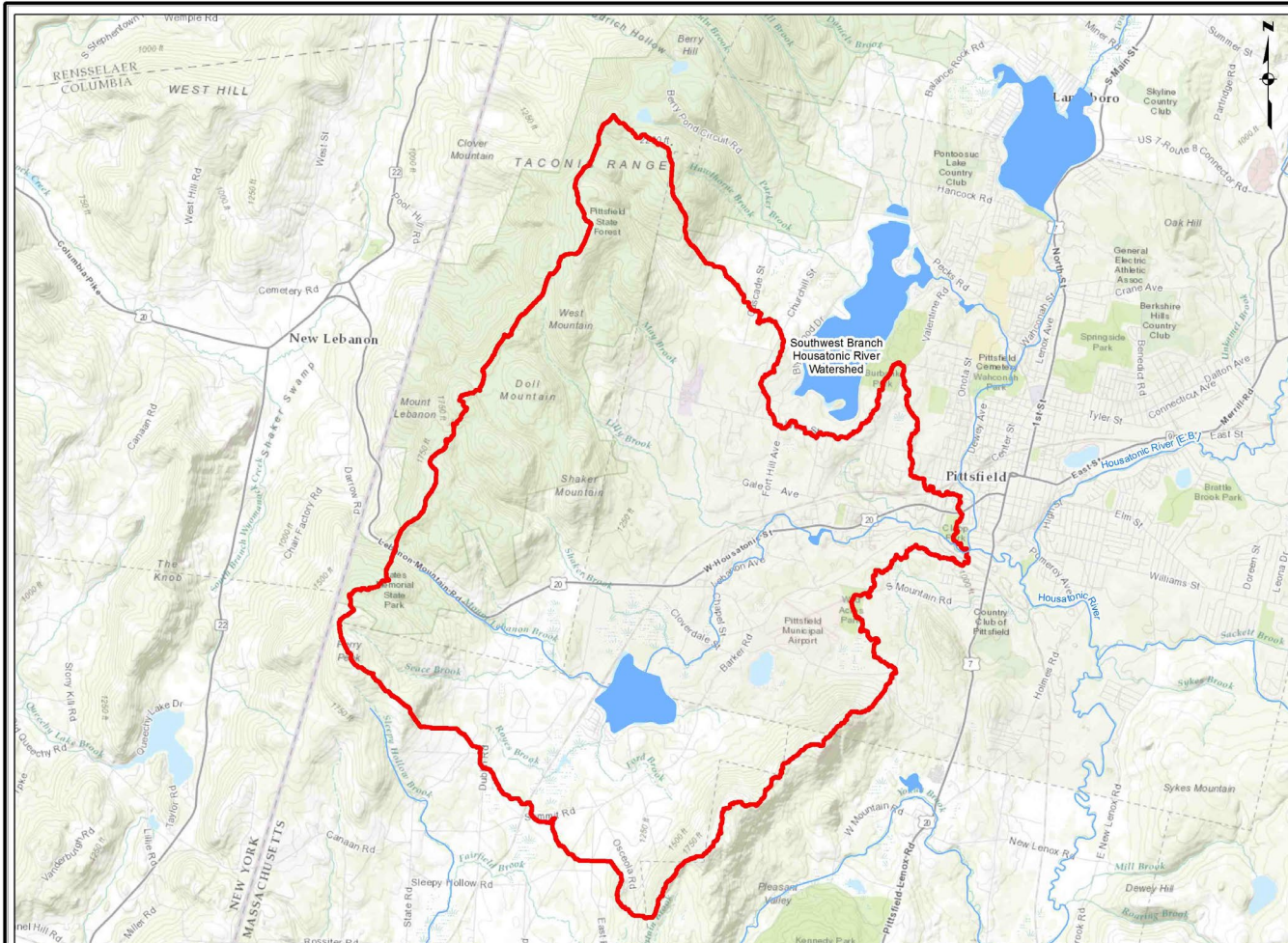
Goal: Develop and Implement projects to improve water quality:

Steps:

1. Pull existing information together
2. Identify problem areas
3. Provide Conceptual Designs

Once complete:

3. Obtain funding
4. Implement!
5. Revisit and revise the Plan

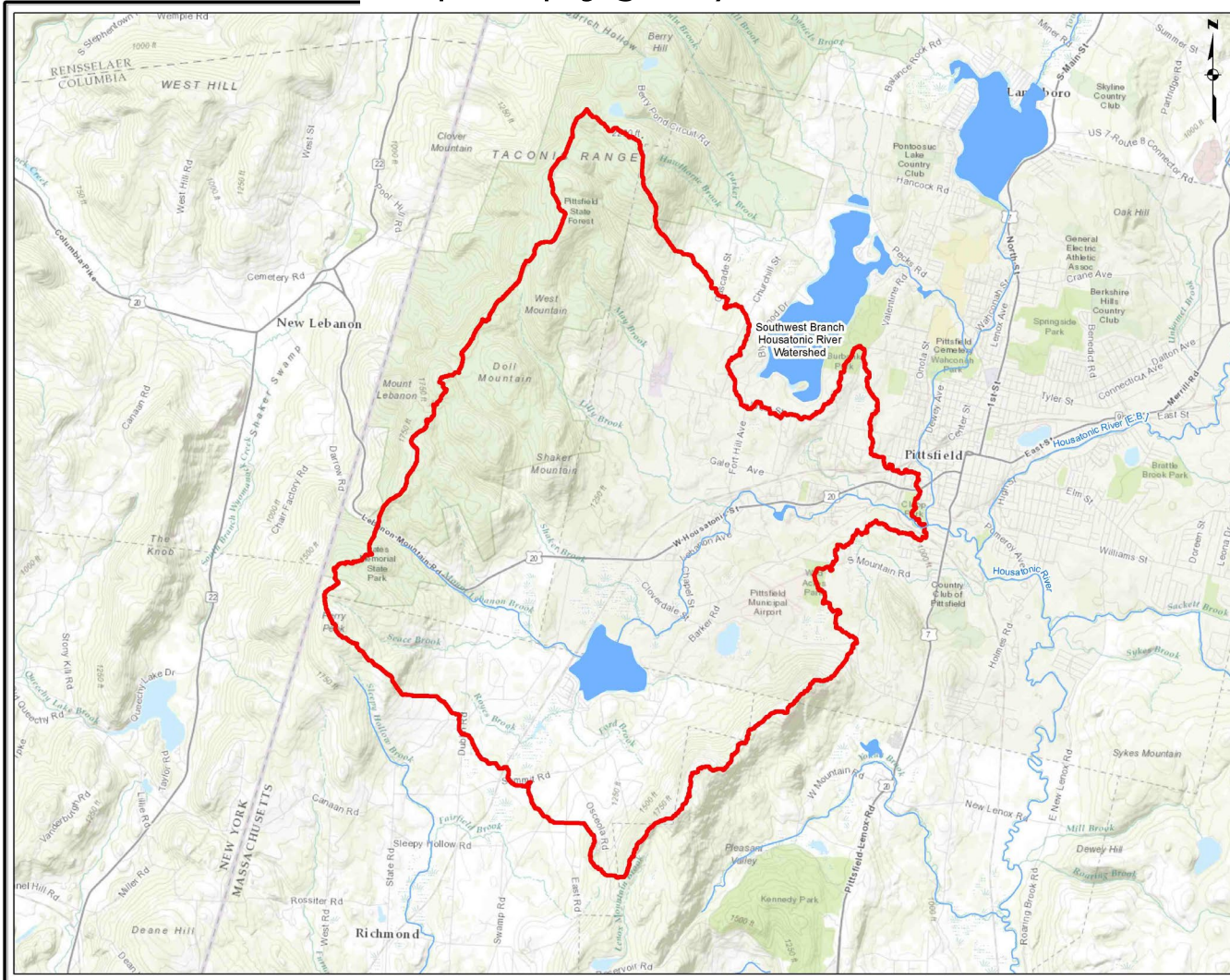


<https://prj.geosyntec.com/MassDEPWBP/Account/AcceptedPlans>



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Nine Elements:

Element A: Identify Causes of Impairment & Pollution Sources

Element B: Determine Pollutant Load Reductions Needed to Achieve Water Quality Goals

Element C: Describe management measures that will be implemented to achieve water quality goals

Element D: Identify Technical and Financial Assistance Needed to Implement Plan

Element E: Public Information and Education

Elements F & G: Implementation Schedule and Measurable Milestones

Elements H & I: Progress Evaluation Criteria and Monitoring

HOW STORMWATER RUNOFF CREATES POLLUTION

Rainwater flows from roofs, streets, or other surfaces into waterways, picking up pollutants as it goes.



Cobblestone Cove, Pittsfield, BRPC

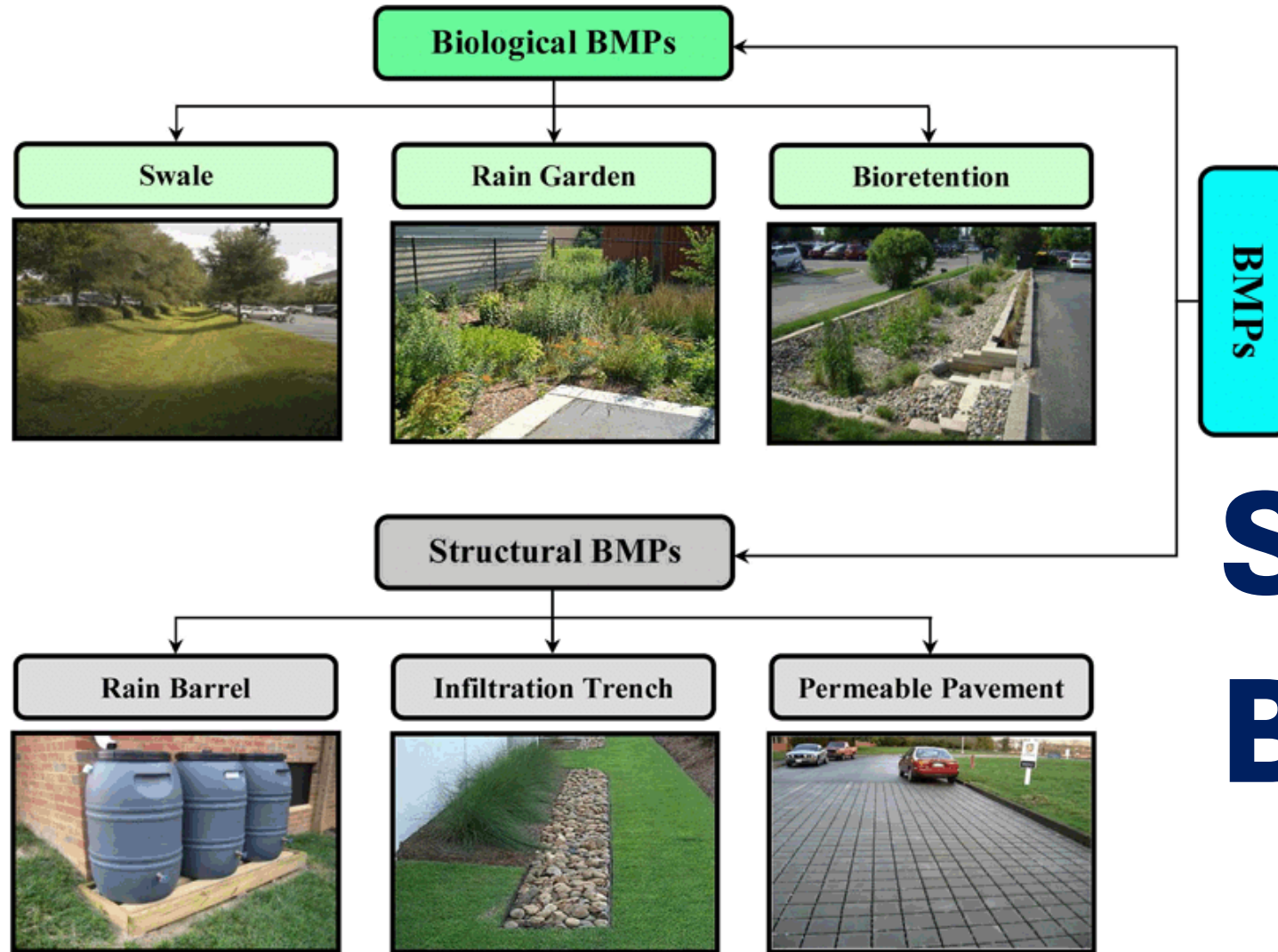


AFTER A RAIN STORM!



BEFORE A RAIN STORM!

SOAK UP THE RAIN!



Structural BMPs

Non-Structural BMP examples:

- Education programs
- Planning
- Regulations



North Street Rain Garden, Courtesy of HVA

Benefits:

- Cleaner rivers/lakes
- Less flooding
- Recharge groundwater
- Beautify neighborhoods
- Add pollinator habitats

Conceptual designs for Structural BMPs – Richmond Pond

SITE #	SITE NAME	BMP TYPE	BMP LOCATION	Total Suspended Solids (ton/yr)	Total Phosphorus (lb/yr)	Total Nitrogen (lb/yr)	ESTIMATED COST (\$)
8	Richmond Pond Boat Access Parking Area	Improved bio-infiltration swale	Town Beach Road, Richmond	0.16	0.2	0.91	42,000
9	Spruce Road (lower/northern half), Richmond Shores	Gravel Road Stabilization	Spruce Road, Richmond	3.5	3.5	7	47,000
10	Spruce Road (upper/southerly portion), Richmond Shores	Gravel Road Stabilization	Spruce Road, Richmond	0.0015	3.1	6.1	66,000
11	Lake Street, Whitewood, Richmond	Vegetated Swales with check dams and sediment trap	Lake Street, Richmond	3.75	3.96	9.68	47,000

Non-Structural BMPs – Richmond Pond

Management Measures	Location	Capital Costs	Operation & Maintenance Costs (Annual)	Relevant Authorities	Technical Assistance Needed	Funding Needed
Implement an Updated Weed Management Plan	Richmond Pond	\$20,000	Estimated between \$5000 - \$15,000	City of Pittsfield; Town of Richmond; Richmond Pond Association	Natural Heritage; MassDEP; BRPC; Technical Consultants	\$35,000
Phosphorous Modelling for Richmond Pond	Richmond Pond	\$40,000	\$0	City of Pittsfield, Town of Richmond, Richmond Pond Association	MassDEP; Lakes and Ponds Specialist.	\$40,000
Water Quality Monitoring Review/Update Program	Richmond Pond Tributaries	\$10,000	See D-4	Richmond Pond Association, HVA	Mass DEP	\$5,000

Recommended Future Management Measures

- *Commercial Properties on Richmond Pond – Work with the camps to educate and identify suitable projects*
- *Richmond Pond “Be Pond Smart” Program – a residential outreach program to support educational initiatives and, with willing property owners, identify appropriate locations to install BMPs*
- *Work with willing farmers to reduce agricultural impacts*
- *Integrate stormwater BMPs when road-stream Crossings*
- *Investigate the sedimentation/water quality issue on Clark’s and identify BMPs to mitigate*
- *Reduce sedimentation off of gravel roads by ensuring best maintenance practices are used and upgrade roads to be climate resilience.*

Next Steps:

Secure Funding to Support Implementation:

- Municipal Vulnerability Preparedness Program Grants (May)
- Clean Water Act Section 319 Grants (May)
- Mass DEP Water Quality Grants (Nov/Dec)

Revisit and Revise the Plan:

- Update the information
- Include new projects

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