

KICKOFF MEETING

Lake Carmi Best Management Practice Assessment and Design Project

June 29th, 2022

Franklin, Vermont

Outline

- Project Partner Introduction
- BMP Project Introduction
- Project Discussion
- Open floor for questions and comments



Project Partners

- Franklin County Natural Resources Conservation District
- Franklin Watershed Committee
- Fitzgerald Environmental Associates



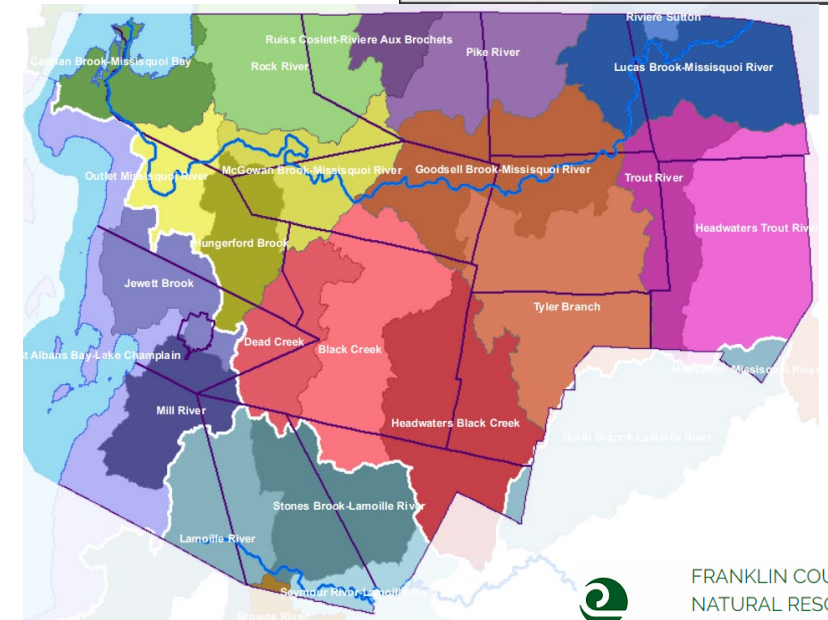
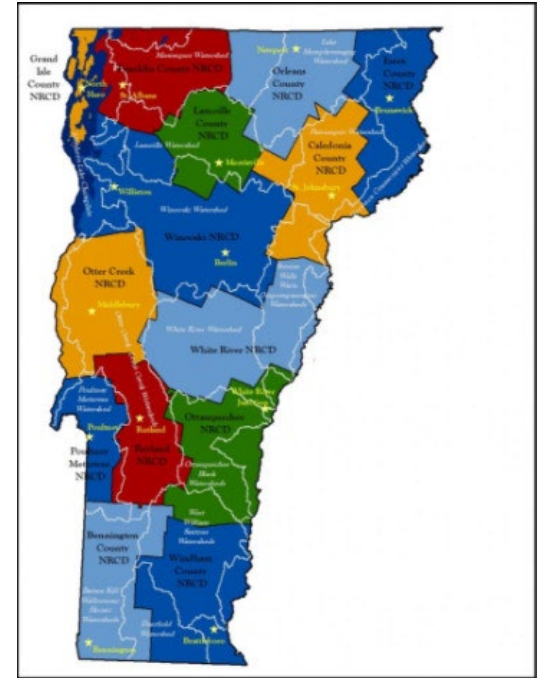
Franklin County Natural Resources Conservation District

Who we are:

- One of 14 NRCDs across VT
- Small team of 4
- Governed by elected Board of Supervisors

What we do:

- Annual Tree Sale + Trout Sale
- Tree Plantings along Streams
- Water Quality Sampling/Monitoring
- Nutrient Management Planning and Soil Sampling with Farmers
- Farm referrals to State and NRCS programs for water quality + other opportunities
- Watershed Planning
- Wetlands and Natural Resource Projects
- Dam Removals and Monitoring
- Soil Health
- Lakeshore and bank stabilization design projects
- + More!

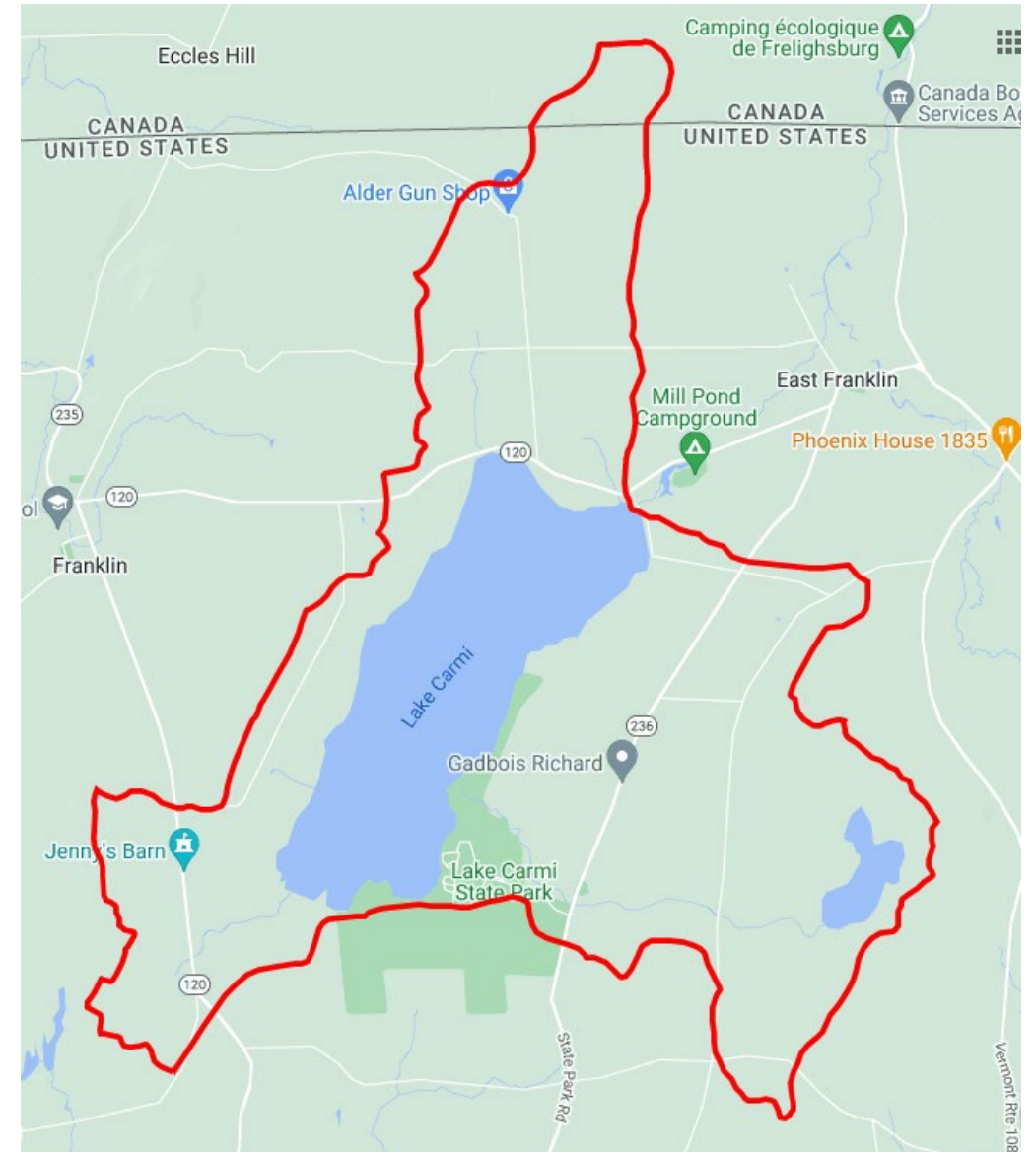




PROJECT INTRODUCTION

Lake Carmi Watershed

- Entire area of land from which rainfall and snow melt eventually reach Lake Carmi
- More than just the lakeshore – streams also drain into Lake Carmi!
 - Streams include Marsh Brook, Alder Run, Dewing Brook, Sandy Bay Brook



What causes algae blooms?

- Excess phosphorus (+ warm temperatures)
- Phosphorus likes to stick to soil particles!
 - Erosion can be major source of phosphorus
- Sources of phosphorus:
 - Soil from eroding streambanks, lakeshore, fields
 - Stormwater runoff
 - Nutrient runoff from farms or lawns
 - Septic systems
 - Legacy phosphorus from lake sediments
 - Groundwater



Current work in Lake Carmi watershed

- University of Vermont Extension; Vermont Agency of Agriculture, Food, and Markets; Natural Resources Conservation Service
 - Manure injection for farmers in Lake Carmi watershed
 - Helping farmers adopt practices that prevent erosion and nutrient loss
- Lake Carmi Coordination Team
 - Crisis Response Plan and Critical Pathways Projects
 - Projects in agricultural, natural resources, roads/stormwater, lake management sectors
- Northwest Regional Planning Commission
 - Road Erosion Inventory on Lake Carmi Private Roads



What is a BMP?

- **B**est **M**anagement **P**ractice – actions that effectively protect water quality
 - Goal: prevent erosion and nutrient-rich runoff from reaching Lake Carmi
- Can take place on residential properties, public land and roads, farms
- Examples: rain gardens, planting trees and shrubs near streams, maintaining dirt roads to prevent erosion, vegetated lakefront property, streams and ditches with access to floodplain, adequately-sized culverts



What BMPs are we looking at in this project?



Natural Resources

- Restoring, improving, and conserving wetlands, streams, and streamside vegetation



Agriculture

- Restoring, improving, and conserving wetlands, streams/ditches, and streamside vegetation on agricultural lands
- NOT focusing on required agricultural practices and other field/farmstead practices – this work is in progress!



Lakeshore/Lake Wise

- Shoreland vegetation, rain gardens and other home stormwater practices, crowned driveways
- Shore, recreation area, driveway, structure and septic



Process & Goals

1. Inventory existing best management practices in natural resources, agricultural, and shoreland/Lake Wise sectors



What has already been done to restore the Lake Carmi watershed?

2. Evaluate efficacy of current BMPs



What's working well?

3. Identify and prioritize opportunities for new BMPs



What projects should we focus on in the future?

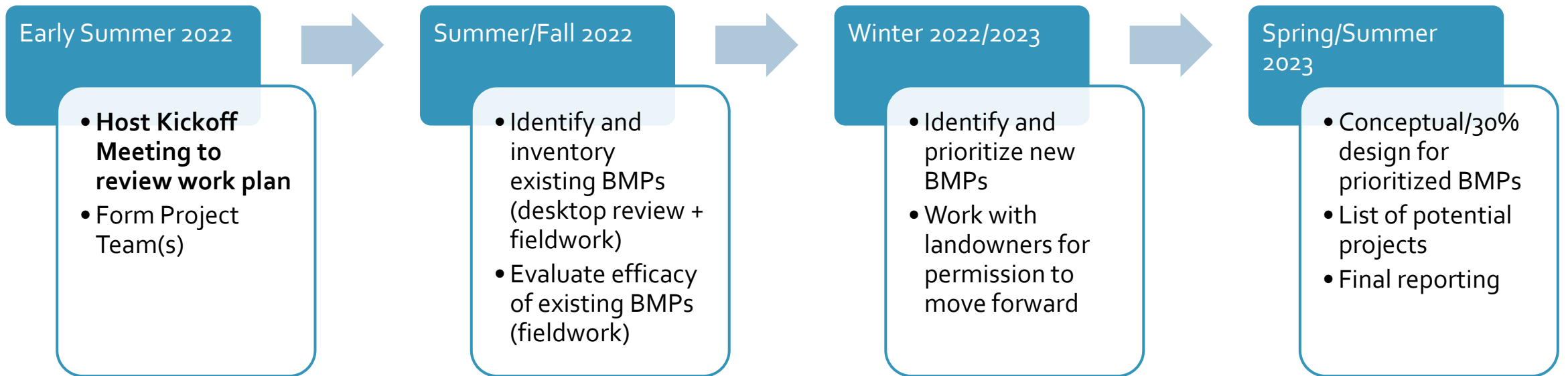
4. Conceptual/30% designs for prioritized BMPs



Where do we start?




Timeline



Get involved with the project team!

- Team members may include town representatives, lake associations, lake users, farmers, landowners, water resources professionals, and more
- Team involvement is flexible, and might look like:
 - Share your knowledge about existing or planned BMP projects
 - Invite team to your property to see what you've done
 - Help connect team with landowners and residents
 - Help develop prioritization criteria for new BMP projects





DISCUSSION

What is important to you about Lake Carmi?
What is your vision for Lake Carmi?



Would you be willing to host us to come to your neighborhood and talk about this project and connect with neighbors? Are there community events that we should attend?



Are there areas around the lake where significant progress has been made that we should know about?



Are there areas around the lake where there are opportunities for future BMP work – for example, a wetland that could be restored, an area of shoreline that can be revegetated?



OPEN FLOOR

Questions? Comments?

Please keep comments to 3 minutes.

Additional comments to share? Email
info@franklincountynrcd.org

Next Steps

- Create prioritization matrix
- Start doing fieldwork to inventory and assess BMPs

Tell us about how you are taking care of the lake!

Email: info@franklincountynrkd.org

