

## Locally Led 2026 Conservation Action Plan (CAP) for Rutland County

Name of District(s): Poultney Mettowee and Rutland NRCDS  
Geographic Territory: Rutland County  
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### Shared Agriculture Staff

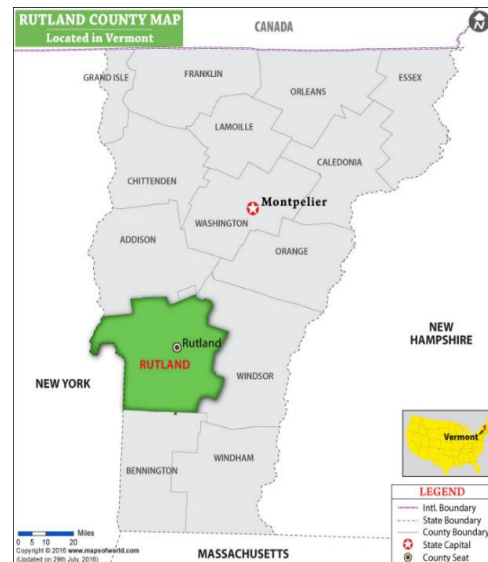
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### Project Area: Rutland County

*Map 1: Rutland County is the project area for the PMNRCD / RNRCD conservation action plan.*



### Background

Poultney Mettowee NRCDS is located within the southwestern part of the state of Vermont and encompasses the Poultney and Mettowee River Basins (Basin 2) in western Rutland County, as well as forming part of the South Lake Champlain Direct watershed in West Haven and Benson (Basin 4). In their entirety, the Poultney and Mettowee Watersheds encompass 309,000 acres (373 square miles) and (all or part of) the 17 Vermont and New York towns that make up the majority of the South Lake watershed.

Similarly, the Rutland NRCD makes up the eastern portion of Rutland County and consists nearly entirely of the upper half of the Otter Creek Watershed (Basin 3). Rutland NRCD services all or part of 16 towns within Rutland County, closely collaborating with Poultney Mettowee NRCD to ensure needs are met within Rutland County as a whole.

The PMNRCD Natural Resources Assessment highlights how various factors threaten the ecological and economic stability of local farmers and landowners. Streams and forests are changing due to shifting weather patterns, with inadequate riparian buffers failing to protect clean water and stream stability. A 2002 ENSR report revealed that the Mettowee River downstream of Pawlet suffers from thermal pollution, in part because of the inadequate riparian buffers. PMNRCD's annual water quality monitoring has consistently found high E. coli levels during high water, along with elevated total phosphorus and turbidity (sediment) after storms. Furthermore, many farms, especially dairies, are struggling economically, leading to business closures and livestock sales.

### **Role of the Conservation Action Plan**

To address these challenges, the Poultney Mettowee and Rutland NRCDs have developed a Conservation Action Plan (CAP) for Rutland County. This document is intended to be used in conjunction with the South Lake and Otter Creek Tactical Basin Plans, which offer multiple overarching strategies to enhance water quality in the area. The CAP incorporates findings from subwatershed-based studies, such as stormwater master plans and lake watershed action plans, which provide highly detailed analyses of specific subsections of the county. In addition, the CAP considers basin-specific data, such as water and soil samples that the Poultney Mettowee and Rutland NRCD staff collect each year. Ultimately, the CAP is designed to identify sustainable farming practices and improve resource management to promote sustainable agriculture, enhance land stewardship, safeguard natural resources for future generations, and improve community livelihoods and overall quality of life.

## **Soil**

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Regionally, many of our soils are naturally slightly acidic, which is not optimal for many legumes, and can limit productivity and soil health. This is seen in the results of soil samples regularly collected across Rutland County by PMNRCD and RNRCD staff. Erosion and sediment and nutrient runoff from agricultural land contributes significant levels of nutrients and sediments to the region's water quality (PMNRCD water quality monitoring and Basin 3 TBP) and results in soil and nutrient loss from the land, impacting the soil quality.

### **Priorities for Addressing Conservation Needs:**

- **Conservation priorities include:** Improve Soil quality limitations, reduce soil erosion, reducing runoff and improving soil health (Basin 3 TBP)

### **Measurable Conservation Goals and Objectives:**

- **Improve Soil Quality and Soil Health:** Within the next 24 months, we will work with landowners and agricultural producers in Rutland County to improve soil quality and overall soil health through practices to increase organic matter content, aggregate formation, and water infiltration and retention, and achieve optimal pH and nutrient pools for soil ecosystem health and plant productivity on no less than 100 acres.

**Supporting Practices:** 805: Amending Soil with Lime, 336: Soil Carbon Amendment, 328: Conservation Crop Rotation

- **Reduce Soil and Nutrient Loss from Erosion and Runoff:** Within the next 24 months, we will work with landowners and agricultural producers in Rutland County to reduce soil and nutrient loss to bank erosion and runoff with practices to maintain soil cover and improve soil aggregation on no less than 100 acres.

**Supporting Practices:** 512: Pasture and Hay Planting, 328: Conservation Crop Rotation, 810: Annual Forages for Grazing Systems, 612: Tree/Shrub Establishment

### **Conservation Technology Needed:**

- Formula grant for phosphorus crediting for gully restoration, strategic woody additions. PMNRCD's no-till drill can help support implementation of various practices. Champlain Valley Native Plant Restoration Nursery assures access to native trees and shrubs for planting.

### **Responsibility for Action and Time Schedule:**

- PMNRCD, RNRCD, and NRCS staff will work together to ensure farms receive information about the local fund pool practices and meet the current timeline for signups and practice completion.

### **Programs and Services:**

- On-farm technical assistance including: Soil sampling, Nutrient Management Plan support, Grazing plan development, Riparian buffer planting, assistance with a variety of stream restoration and riparian buffer planting programs, access to native plants from the Champlain Valley Native Plant Restoration Nursery, PMNRCD no-till seed drill.

## Need for New Programs or Processes:

- N/A

## Water

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Rivers in this watershed have minimized vegetation on banks and in riparian zones (Otter Creek SGA, SMRC) including key areas impacting thermal pollution levels (ENSR 2002). Rivers are also impacted regionally by channel erosion and *E. coli*, phosphorus, and sediment inputs after storm events.

## Priorities for Addressing Conservation Needs:

- Reduce nutrient and sediment loss from the landscape to surface waters, degraded riparian buffers, and stream channel erosion and incision

## Measurable Conservation Goals and Objectives:

- **Reduce fluvial and overland erosion that has the potential to transport sediment and nutrients to surface waters AND mitigate sediment and nutrient loads, including dissolved phosphorus to improve water quality:** Within the next 24 months, we will work with landowners and agricultural producers in Rutland County to reduce fluvial and overland erosion by improving habitat along 1000 LF of stream for riparian improvement, and improving vegetation and soil cover on at least 50 acres of ag land.

**Supporting Practices:** 395: Stream Habitat Improvement and Management, 612: Tree and Shrub Establishment, 512: Pasture and Hay Planting, and 810: Annual Forages for Grazing Systems

- **Enhance forested riparian buffers:** Within the next 24 months, we will work with landowners and agricultural producers in Rutland County to establish and/or increase forested riparian buffers on five acres.

**Supporting Practices:** 612: Tree and Shrub Establishment

- **Restore fluvial processes in small drainages:** Within the next 24 months we will work with landowners, agricultural producers, and municipalities in Rutland County to improve fluvial processes and address factors that impair stream function and structure in at least 3 subwatersheds.

## **Supporting Practices: 612: Tree and Shrub Establishment**

### **Conservation Technology Needed:**

Recent studies (FEA 2026 and SMRC various) have shown that stream incision is a common threat to water quality, destabilizing stream banks and making floodplain restoration projects more difficult. In that regard, additional conservation research and technology is needed to help understand the following:

- Information about the various wood addition practices (SWA, BDA, PALs) and how they decrease incision and how resilient they are over time.
- In Rutland County, gullies and related stream erosion are significant sources of sediment entering surface waters. Currently, few programs or practices exist to fund gully restoration efforts. Additional insight into the drivers of gully formation and how restoration methods could reduce phosphorus would be valuable

### **Responsibility for Action and Time Schedule:**

- PMNRCD, RNRCD, and NRCS staff will work together to ensure farms receive information about the local fund pool practices and meet the current timeline for signups and practice completion.

### **Programs and Services:**

- On-farm technical assistance including: Soil sampling, Nutrient Management Plan support, Grazing plan development, Riparian buffer planting, assistance with a variety of stream restoration and riparian buffer planting programs, access to native plants from the Champlain Valley Native Plant Restoration Nursery, PMNRCD no-till seed drill.
- Natural Resource project support including: stream restoration projects, lake clean water programs, forestry support (skidder bridge rental), surveys and assessments for watersheds, stormwater plans and geomorphic assessments.

### **Need for New Programs or Processes:**

- Need formula grant phosphorus crediting methodologies for gully restoration and strategic wood additions (BDA and PALs included)

Air quality has not been a priority of concern and therefore resources have been limited to determining current state of air quality in Rutland County. There has not been significant concern for air quality in Rutland County.

**Priorities for Addressing Conservation Needs:**

- Not a priority of concern for Rutland County conservation

**Measurable Conservation Goals and Objectives:**

- No goals or objectives at this time

**Conservation Technology Needed:**

- N/A

**Responsibility for Action and Time Schedule:**

- N/A

**Programs and Services:**

- None at this time

**Need for New Programs or Processes:**

- None at this time

## Plants

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Rutland County faces many of the same challenges seen across the state with the spread of invasive species, limited plant productivity, and a decline of native species composition and diversity. Non-native invasive plants such as common and glossy buckthorn, multi-flora rose, Japanese barberry, honeysuckles, Japanese knotweed, purple loosestrife, and common reed (*Phragmites australis*) pose widespread threats to native vegetation and habitat structure. Early successional habitat conservation and creation is a priority in this region, as well. The 2015 Vermont Wildlife Action Plan calls out early successional habitat as a priority for conservation and in 2026 the Department of Fish and Wildlife further emphasized the importance of young forest creation, especially in the southwestern portion of the state, including Rutland County. The Department of Fish and Wildlife has also recommended greater forest stand improvement to improve health vigor and diversity of species in the forest. Many streams and rivers in

Rutland County will also benefit from increased and enhanced riparian woody buffers (Basin 3 TBP).

### **Priorities for Addressing Conservation Needs:**

- Improve native plant communities in our forests, prevent / control terrestrial and aquatic invasive and nuisance species, reduce plant pest and disease pressure, and improve plant and habitat health, productivity, and condition.

### **Measurable Conservation Goals and Objectives:**

- **Improve native plant communities:** Within the next 24 months we will work with landowners and agricultural producers to improve native plant communities through native plant establishment and practices to improve stand health and productivity on at least 25 acres.

**Supporting Practices:** 612: Tree and Shrub Establishment, CPA 106: Forest Management System, 666: Forest Stand Improvement

- **Prevent and control invasive species and reduce plant pest pressure:** Within the next 24 months, we will work with landowners and agricultural producers in Rutland County to control and/or prevent the spread of invasive plant, insect, and animal species on at least 50 acres.

**Supporting Practices:** 315: Herbaceous Weed Treatment, 314: Brush Management, 595: Pest Management Conservation System, CPA 106: Forest Management System, 666: Forest Stand Improvement

- **Improve plant health, productivity, and condition:** Within the next 24 months, we will work with landowners and agricultural producers in Rutland County to implement practices to improve plant health and productivity on at least 100 acres of forest, pasture, hay, or cropland.

**Supporting Practices:** CPA 106: Forest Management System, 666: Forest Stand Improvement, 328: Conservation Crop Rotation, 325: High Tunnel System, 821: Low Tunnel System, 808: Amending Soil with Lime

### **Conservation Technology Needed:**

- Forest management equipment and operators regionally

### **Responsibility for Action and Time Schedule:**

- PMNRCD, RNRCD, and NRCS staff will work together to ensure farms receive information about the local fund pool practices and meet the current timeline for sign ups and practice completion.

### **Programs and Services:**

- Riparian buffer planting, on-farm TA, conservation planning, tree/shrub planting and establishment, workshops and training events, grant application and support.

### **Need for New Programs or Processes:**

- Expanded support for establishing connected forest habitat, especially early succession

## **Animals**

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Habitat fragmentation and conversion of lands for development threaten natural communities and the animals within them. Bird and snowshoe hares are especially vulnerable to the loss of early successional forest habitat. Livestock health and productivity is also a resource concern of the those who participates in the 2026 locally led process.

### **Priorities for Addressing Conservation Needs:**

- Address habitat loss due to conversion, degradation, fragmentation, and lack of needed successional stages and promote regional biodiversity for both livestock and wildlife health.

### **Measurable Conservation Goals and Objectives:**

- **Promote wildlife biodiversity:** Within the next 24 months, we will work with landowners and agricultural producers in Rutland County to promote animal biodiversity by increasing habitat and habitat quality on at least three properties with 20 or more acres of forest and ag lands.

**Supporting Practices:** CPA 106: Forest Management Plan, 666: Forest Stand Improvement, 395: Stream Habitat Improvement and Management, 612: Tree and Shrub Establishment, 328: Conservation Crop Rotation.

- **Maintain or improve livestock health and productivity:** Within the next 24 months, we will work with landowners and agricultural producers in Rutland County to maintain or improve livestock health on at least 3 farms.

**Supporting Practices:** 810: Annual Forages for Grazing Systems, 328: Conservation Crop Rotation, 512: Pasture and Hay Planting

**Conservation Technology Needed:**

- No-till seed drill provided by PMNRCD

**Responsibility for Action and Time Schedule:**

- PMNRCD, RNRCD, and NRCS staff will work together to ensure farms receive information about the local fund pool practices and meet the current timeline for sign ups and practice completion.

**Programs and Services:**

- Manure and forage sampling, grazing plan development, Nutrient Management Plan support, culvert replacements, river corridor planning and stream geomorphic assessment, basin planning, riparian buffer planting, dam removals, floodplain reconnection

**Need for New Programs or Processes:**

- None identified.

## Energy

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Energy has not been a priority of concern and therefore resources have been limited to determining current state of energy needs in Rutland County. There has not been significant concern for energy conservation in Rutland County.

**Priorities for Addressing Conservation Needs:**

- Not a priority of concern for Rutland County conservation

**Measurable Conservation Goals and Objectives:**

- No goals or objectives at this time

**Conservation Technology Needed:**

- N/A

**Responsibility for Action and Time Schedule:**

- N/A

**Programs and Services:**

- None at this time

**Need for New Programs or Processes:**

- None at this time

## Humans

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There are no direct Human social or economic impacts being called out. Other resource concern areas capture situations that with improvement, will in turn, support “Humans” in social and economic capacities as their conditions improve locally. Therefore, Humans, specifically, have not been a priority of concern.

**Priorities for Addressing Conservation Needs:**

- Not a priority of concern for Rutland County conservation

**Measurable Conservation Goals and Objectives:**

- No goals or objectives at this time

**Conservation Technology Needed:**

- N/A

**Responsibility for Action and Time Schedule:**

- N/A

**Programs and Services:**

- None at this time

**Need for New Programs or Processes:**

- None at this time

## **Rutland County 2026 Local Fund Pool Proposed Practices**

- CPA 106 Forest Management System
  - Assess resource concerns and plan management activities for forest health
- Herbaceous Weed Treatment (315)
  - Control pervasive plant species restore or release native or desired plant communities
- Brush Management (314)
  - Create the desired plant community consistent with the ecological state, control of pervasive plant species
- High Tunnel System (325)
  - Improve plant health and vigor
- Conservation Crop Rotation (328)
  - Maintain or increase soil health and organic matter content, improve soil moist
- Soil Carbon Amendment (336)
  - Improves overall soil health and supports health soil microbial communities, encourages optimal pH and nutrient pools, aggregate formation, and water infiltration and retention.
- Stream Habitat Improvement and Management (395)
  - Supports proper stream geomorphology and hydrologic processes, reducing erosion and overland flow contributing to sediment and nutrient loads
- Pasture and Hay Planting (512)
  - Reduces soil erosion, provides soil cover
- Pest Management Conservation System (595)
  - Reduce plant pest pressure
- Tree/Shrub Establishment (612)
  - Control erosion, improve water quality by reducing excess nutrients and other pollutants
- Forest Stand Improvement (666)

- Maintain or improve forest structure and composition
- Amending Soil with Lime (805)
  - Encourages optimal pH for plant productivity and health, improves habitat for soil organism
- Amending Soil with Lime (808)
  - Improve plant productivity and health, improve plant structure and composition
- Annual Forages for Grazing Systems (810)
  - Provide temporary cover to reduce water erosion, improve soil aggregate stability
- Low Tunnel System (821)
  - Improved plant productivity and health, reduced plant pest pressure