



Windham County Natural Resources Conservation District Conservation Action Plan

Introduction

This conservation action plan (CAP) has been prepared by Windham NRCD staff for review by district supervisors and other members of the local working group. This plan draws upon key findings in the 2026 Natural Resources Assessment and the result of the Locally-led Conservation Resource Concern Survey. While the primary purpose of this document is to identify priority needs for financial and technical assistance through USDA Natural Resources Conservation Service programming, this document also identifies other possible actions that can be used to address priority needs. Some of these proposed actions fall within Windham NCRD's current slate of programming, including many backed by grant funding. Other actions fall outside of current programming but will be used to inform district strategic planning and future district programming. Finally, it is the hope that this action plan will serve as a useful planning document for other partners engaged in this work, including towns, conservation commission, nonprofits and State of Vermont agencies.

Priority Resource Concerns

The Local Working Group has identified 15 of resource concerns that fall within five key areas:

- A. Extreme Weather and Its Impacts
- B. Threats to Forest Health
- C. Threats to Wildlife Habitat
- D. Limitations in Management of Urban and Suburban Spaces for People and Wildlife
- E. Threats to Surface Water Quality

These primary areas of concern derive from a few consistent themes that are impacting people, animals and the landscape we all rely upon: changing climate, human migration and a

decentralized system for decision making and management around natural resources.

These larger factors and trends are beyond the scope of this plan. However, mitigation to the impacts of these drivers is well within the scope of this plan and features throughout our proposed actions.

A. Extreme Weather and Its Impacts

Much of the U.S. (and in the world) has been encountering more frequent and more intense inclement weather events driven by a changing climate. In few places is this trend more pronounced than in Vermont, which is the 9th fastest warming state in the U.S. Vermonters are also navigating a local climate that is much wetter than in recent generations. Average annual precipitation has increased nearly 6 inches since the 1960's. More frequent and intense rain events have impacted land stewards and producers in a number of ways, including lost crops, soil erosion, damage to structures and roads and costly disruptions to daily work and life. Conversely, recent years have also featured long drought periods, which have brought with it further challenges to producers. Essentially, Vermonters are battling either too much water or too little water with a lack of predictability exacerbating the impacts of both challenges. Intense rain events not only cause significant damage but also threaten water quality, as intense rain events produce both gully erosion that transports heavy sediment loads into water bodies and sheet flow carries nutrients and pollutants from fields, roads and parking lots.

B. Threats to Forest Health

Windham county is heavily forested and much of that land is privately managed. Achieving landscape scale management that supports forest health and wildlife habitat is a challenge and requires significant outreach, education and technical assistance to private forest land owners. Windham county's forests have been impacted by increased development, particularly in higher elevation areas around ski resorts. Subdivision and development of forest lots results in fragmentation of forests, which negatively impacts edge-sensitive wildlife species and provides dispersal corridors for invasive species. These invasive species then further threaten forest health, impacting wildlife and forest products businesses alike. Undersized culverts and obsolete dams restrict the movement of aquatic organisms on many forest streams. Finally, a growing deer population, likely aided by a warming climate, prevents forest regeneration, impacting wildlife habitat and forestry businesses, notably the maple industry.

C. Threats to Wildlife Habitat

A wide variety of wildlife species rely upon the matrix of fields and forests that give Windham county its idyllic nature. Unfortunately, under managed fields and ever-spreading invasive species threaten the health of both forests and fields. Earlier springs and later falls have resulted in phenotypic mismatches between key plants, pollinators and birds. Windham county's fields are a key component of protecting our biodiversity, both for pollinators and grassland birds. Iconic species like Bobolink and Meadowlark need these fields for nesting habitat.

D. Limitations in Management of Urban and Suburban Spaces for People and Wildlife

At the interface between wildlife and more densely populated human development lies the challenge of managing urban and suburban spaces. Several Windham county towns feature densely populated areas with a high proportion of rental properties. Small parcels that are either under managed by owners or those whose management responsibilities are shared are frequently overrun with invasive species. These parcels are often along streams and rivers, providing excellent corridors for the dispersal of invasive plant species. The result is entire river corridors taken over by knotweed and potential recreation spaces overrun by barberry, multi flora rose and bittersweet. The under management of these spaces prevents their enjoyment by humans and often disproportionately impacts historically underserved communities. These spaces also allow invasive species to reach new intact forests and fields and outcompete native species.

E. Threats to Surface Water Quality

Human migration to southern Vermont spiked during the Covid-19 pandemic, as city dwellers moved to the area in search of more open spaces, fewer people and a slower pace of life. This phenomenon was merely a preview of the future waves of climate migrations to come. Much of our infrastructure is not prepared for increased development; from inadequate stormwater systems to infrequent municipal wastewater systems in many municipalities. The primary result of these shortcomings will be increased nutrients and pollutants reaching out surface waters. Currently, the Connecticut River is under a Total Maximum Daily Load (TMDL) restriction from the EPA for nitrogen. Excess from nutrients from agriculture and improper septic systems still impact some surface waters, most notably some direct tributaries to the Connecticut River.

Proposed Actions

Advocating for Increased Financial and Technical Assistance from NRCS

Increased cost share assistance and technical assistance from the USDA Natural Resources Conservation Service (NRCS) can help land stewards implement conservation practices to address many of these primary resource concerns. Specifically, the Local Working Group is recommending the following priorities:

1. Provide financial and technical assistance to land stewards to implement targeted conservation practices to address water management issues:
 - Irrigation
 - Water catchment and diversion

- Roof runoff structure
- Stormwater runoff control
- Ponds
- Well establishment
- Contour farming
- Contour buffer strips

2. Provide financial and technical assistance to land stewards to implement targeted conservation practices to improve and promote forest health:

- Forest management plan
- Brush management
- Forest stand improvement
- Forest management assessment
- Trails and landings
- Stream crossing
- Aquatic organism passage
- Wetland wildlife habitat management
- Upland wildlife habitat management
- Wetland restoration
- Wetland enhancement
- Pest management conservation system
- Early successional habitat development management
- Tree and shrub establishment

3. Provide financial and technical assistance to land stewards to implement targeted conservation practices to improve and promote field and pollinator habitat:

- Brush management
- Herbaceous weed management
- Pollinator habitat design
- Fish and wildlife habitat design
- Conservation plan
- Conservation cover
- Stream habitat improvement and management
- Riparian herbaceous cover
- Riparian forest buffer
- Filter strip
- Wildlife habitat planting
- Tree and shrub establishment
- Early successional habitat
- Restoration of rare or declining natural communities

- Wetland wildlife habitat management
 - Upland wildlife habitat management
 - Structures for wildlife
 - Constructed wetland
 - Wetland restoration
 - Wetland enhancement
4. Provide financial and technical assistance to land stewards to implement targeted conservation practices to maximize ecosystem services in urban settings:
- Conservation plan
 - Fish and wildlife habitat design
 - Pollinator habitat design
 - Pest management conservation delivery system
 - Brush management
 - Herbaceous weed treatment
 - Critical area planting
 - Stormwater runoff control
 - Stream crossing
 - Structure for water control
 - Obstruction removal
 - Cover crop
 - High tunnel
 - Low tunnel
 - Irrigation
 - Mulching
 - Raised beds
 - Residue and tillage management
 - Soil carbon amendment
 - Design and Implementation Activity (DIA) for soil tests and pollinator plants
5. Provide financial and technical assistance to land stewards to implement targeted conservation practices to improve and maintain surface water quality:
- Fish and wildlife habitat design
 - Stream habitat improvement and management
 - Riparian herbaceous cover
 - Riparian forest buffer
 - Filter strip
 - Wetland wildlife habitat management
 - Wetland restoration
 - Wetland enhancement
 - PFAS testing in water or soil

- Waste storage facility
- Composting facility
- Contour farming
- Contour buffer strips
- Amending soil properties with Gypsum Products
- Critical area planting
- Sediment basin
- Reduced till
- Fence
- Field border
- AOP
- Stream habitat improvement and management
- Grassed waterway
- Drainage water management
- Stormwater runoff control
- Stream crossing
- Waste treatment
- Waste separation facility
- Waste recycling
- Waste transfer
- Vegetated treatment area
- Water and sediment control basin
- Forest trails and landings
- Road/trail/landing closure and treatment

Proposed Recommendations to NRCS about Programs and Practices

The Windham County Local Working Group will provide recommendation to the State Technical Committee on ways that NRCS programming can better address priority resource concerns regarding the following needs:

1. A shortage of engineering staff at NRCS is preventing many needed practices from being implemented. NRCS should prioritize hiring additional engineers in all possible ways.
2. NRCS programming is best suited to those stewarding larger parcels of land, allowing smaller parcels to fall between the cracks. There are situations where allowing the conservation district to serve as the applicant for federal cost share assistance would streamline the process and enable conservation practices to be installed on smaller parcels. This change would also support more neighborhood-scale conservation work. This change would need to be enacted through the federal farm bill.
3. Deer pressure is a serious challenge to forest health in Windham County. If NRCS would fund the use of exclusion fencing to allow forest regeneration after management activities it would make a significant difference for Windham county forest health.

4. The Cost list updates by NRCS for FY 26. The payment rate list is drastically different than in the past. Some key examples:

- Individual plant treatment (herbicide):\$36.48/acre
- Chemical control (#314) no longer has light, medium, or difficult. The FY26 rate for 314 is \$25.98/acre but on difficult for FY25 was \$895.88/acre
 - Cost share historically covered the practice
 - Foresters try to match the rate that NRCS has even though this has been a lower price point than is realistic. The FY26 payment rate steeply dropped, and will be at too low a price point for contractors to take this work on. This is something that has been identified as an issue for the past 5 years on our conservation survey.
- Site prep (#490) Heavy Use Mechanical, Heavy with chemical application is at \$585.99/acre
 - To implement, likely need hand saws, bronchos, hack and squirt method. Would not be able to pull invasives under this payment. Implementation would have to be cut stump, or cut stump and foliar spray. The goal would be to control invasives and replace this footprint with a tree planting, i.e. have regeneration for tree and shrub establishment *however, invasives recruitment is likely

5. Forest stand Improvement (#666) practice can be used to create early successional habitat, followed by 490. This usually requires fencing, meaning the state biologist for NRCS would have to be on board. Fencing around the practices hasn't been workable in VT so far.

- While we have organized this fund pool around these changes to payment rates, we will be missing out on those who do not want chemical treatment options

6. Bedded pack practice payment was removed, this directly impacts producers in need in Windham County

7. Under 647, patch cuts were removed but mowing was included

- Patch cuts are included in 666, but payment rates went down by 50%
- These are practices that foresters are not inherently interested in as they are not directly profitable. By reducing the payment rates, they will not be incentivized to complete these practices

8. Livestock grazing had payment options under AFT, but this funding source will end soon. Payment rates on fence, livestock, and water through NRCS will need other funding options to get implementing

9. Advocating for increased financial assistance

Actions Windham NRCD Can Take:

1. Seek funding for a District-level engineer trained in NRCS work.

District staff to potentially getting trained in engineering approvals and other job approval authority.

2. Develop and deliver outreach, education and technical assistance about invasive species.

Windham NRCD will work with other key partners within the Southeast Vermont CISMA to develop and implement a program of outreach, education and technical assistance regarding invasive species. Current grant funding supports this work, and the district will continue to seek funding to continue this work in the future.

3. Develop and deliver outreach, education and technical assistance to riparian land stewards about invasive species and water quality.

Windham NRCD will work with other organizations, towns, conservation commissions and the DEC Watershed Planner for this region to develop and implement outreach, education and technical assistance to land stewards about invasive species and water quality. Current grant funding supports this work and the district will prioritize seeking continuing funding for this work in the future.

4. Work with partners to locate and map invasive species infestations and plan management activities in the future.

Windham NRCD will work with key partners through the SE VT CISMA to locate and map invasive species and develop plans for management of current infestations and prevention of their spread. Preventing the establishment of new invasive species will remain a priority in this work.

5. Work with neighborhood associations, lake associations and other nonprofits that manage land to promote joint applications for financial and technical assistance.

Under managed spaces in urban and suburban areas are excellent candidates for a district-led effort to secure federal cost share assistance for conservation practices. The district will provide project coordination and support for organizations and land stewards interested in taking part in a neighborhood-scale management plan. Support for urban agriculture, including community gardens and small scale agriculture will be a priority in this work.

6. Develop fund pool proposals to address key Financial Assistance and Technical Assistance needs not well-addressed by statewide funding pools:

Windham NRCD will work with the local working group to prepare proposals for local funding pools to address identified priority areas with targeted funding. Priority areas will be:

- Community-scale Agriculture Pool limited to operations <10 acres -
- Forest Health Fund Pool
- Forest Management Plan-only Pool

7. Provide low-cost native plants and planting advice to the public

Windham NRCD will continue to operate an annual plant sale that will provide low-cost plants and planting advice to the public. The district will also develop and implement buffer planting projects where willing land stewards exist.

8. Move towards sourcing native plants locally (at least in Vermont)

Windham NRCD will seek local suppliers for our plant sale and buffer planting projects in order to support native biodiversity and reduce the carbon footprint of these programs.

9. Develop restoration and protection projects throughout Windham county focused on improving water quality and wildlife habitat.

Windham NRCD will work with land stewards, towns, conservation commissions, partner staff and the DEC Watershed Planner to identify priority projects for restoration and protection of water quality and wildlife habitat.

10. Work with partners and producers to implement most effective best management practices for reducing nitrogen loss from farms in the CT River Valley. Seek funding for improved financial and technical assistance to implement said practices.

Windham NRCD currently has grant funding for this initiative. We will plan to use the results of this community watershed planning effort to inform future efforts to develop and implement outreach, education and technical assistance for farmers.

11. The Windham County NRCD has a NFWF grant that will assist land owners with financial compensation to improve their hay land quality.