

Vermont State Supplement Water Quality and Wildlife Enhancement Activity ANM04 - Extend Existing Filter Strips for Water Quality Protection and Wildlife Habitat

Extend existing filter strips

Where existing filter strips are utilized, extend them to gain more efficiency in intercepting overland flow and reducing the transport of nutrients, pesticides and agro-chemicals.

Land Use Applicability

Cropland and pasture land.

Benefits

Widening existing conservation filter strips that currently meet NRCS conservation practice standard water quality criteria can provide food and cover for native and game species as well as enhancing aquatic habitat. Extended filter strips offer more surface area to filter out sediments and agro-chemicals. Filter strips can also offer buffers to mitigate pesticide drift during pesticide applications and pollen drift where the mixing of plant varieties is not desired.

Riparian habitats are important transition zones between terrestrial landscapes and aquatic zones. Wildlife species utilize these transition zones because they provide a unique combination of cover, access to water and often provide important travel corridors. Often times filter strips are adjacent to these riparian areas or are important for contributing clean water, and habitat areas nearby. Extending existing filter strips not only enhances wildlife habitat but it increases the effectiveness of water quality protection they provide to the streams.

Criteria

Existing filter strips must meet minimum state water quality requirements for width. [The minimum width for Vermont filter strips is 25 feet.](#) Extend the existing filter strip for a total of *60 feet or more* to enhance habitat and water quality functions.

The extended filter strip must be composed of at least 5 species of non-noxious, wildlife friendly grasses and/or perennial forbs best suited to site conditions. Include species that provide pollinator food and habitat where possible ([request list from NRCS](#)). [For other wildlife friendly plants lists that include some introduced but beneficial species, see VT NRCS Technical Notes: \[http://www.vt.nrcs.usda.gov/technical/Technical_Notes/TechNotes_Index.html\]\(http://www.vt.nrcs.usda.gov/technical/Technical_Notes/TechNotes_Index.html\)](#)

- [VT Plant Materials Technote #1 – Grass Seeding Mixes for Wildlife](#)
- [VT Plant Materials Technote #2 – List of Vermont Plants Important to Bees](#)

Filter strips will be planted with at least 5 of the species in one of the following groups. For moderately well and well drained sites recommended species include:

<u>Species</u>	<u>lbs/ac of seed</u>
Orchardgrass	10
Smooth Bromegrass	5
Medium Red Clover	5
Timothy	5

Birdsfoot trefoil 5
Redtop 5

Note: reduce legume seeding rate by 50% if two legumes are planted

For somewhat and poorly drained sites recommended species include:

<u>Species</u>	<u>lbs/ac of seed</u>
Orchardgrass	7
Redtop	5
Red Clover	5
Kentucky Bluegrass	7
Perennial ryegrass	5
Ladino clover	1

Note: reduce legume seeding rate by 50% if two legumes are planted

1. All site preparation and plant establishment shall be accomplished according to the appropriate NRCS conservation practice standard criteria and specifications. [The Vermont NRCS standard and specification for Filter Strips is located at: http://www.vt.nrcs.usda.gov/technical/Conservation_Practices/Index.html](http://www.vt.nrcs.usda.gov/technical/Conservation_Practices/Index.html)
2. Any use of the filter strip must not compromise its intended purpose. Vegetation from filter strips can be harvested for bio-energy as long as the harvesting is done in accordance with a plan that does not compromise the water quality and wildlife benefits of the extended filter strip.
3. To the extent possible the filter strip areas and extended filter strip areas will be vegetated to increase overland flow interception and increase water quality values of the stream or water body.
4. The extension of filter strips can incorporate other buffer types (riparian herbaceous and riparian forest) where applicable to meet specific operator management goals.

Operation and Maintenance:

1. Once established, filter strips must not be mowed, disked, grazed, or otherwise disturbed, until after the primary wildlife ground nesting period has ended ([April 15-August 1](#)).
2. Filter strips will be regularly maintained for its intended purpose through the life of the contract. This includes any removal of vegetation, including grazing.
3. Grazing is allowed if a grazing management plan is used that will maintain the integrity and diversity of vegetation and the filtering function of the vegetation.
4. Filter strips will have a wildlife management plan to maintain established plant communities through the life of the contract. The wildlife plan will maintain the plant community and its structural diversity and provide habitat for intended species.

Documentation Requirements

1. A map showing the location and size of enhanced filter strips.



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2. Documentation of the type and rates of vegetation planted in the new filter strip areas. The Vermont Job Sheet for Filter Strips can be used to document your planting plan. It can be found at: http://www.vt.nrcs.usda.gov/technical/Conservation_Practices/Index.html