



Continuous CRP Practice Information

CP17A Living Snow Fences

4/21/2014

The purpose of this practice is to establish living snow fences on a farm or ranch to manage snow, provide living screens, and enhance wildlife habitat. This practice applies to eligible cropland to protect against drifting snow on lanes, roads, railroads and public facilities. These living barriers trap snow as it blows across fields, piling it up in the snow catch areas before it reaches roads, railroads, and public facilities.

Practice Guidance:

The maximum allowable practice width will consist of 2 to 3 rows of trees and/or shrubs spaced according to guidance in the Windbreak/Shelterbelt Standard, Code 380. The spacing between rows (row-to-row width) depends on the total number of rows, the species of trees or shrubs to be planted, and the type of weed control to be used. Row spacing may vary and row spacing guidance and spacing maximums are listed in the standard. Row spacing may vary within a planting and all rows don't have to be spaced at the maximum width. See Diagram 4 for an example of a living snow fence.

The two snow catch areas (windward and leeward) can be enrolled in the CRP contract if participant takes the snow catch areas out of production. The areas would be seeded according to guidance in the Upland Wildlife Habitat Management Standard, Code 645. The seeding requirements are a mixed stand with a minimum of 5 native species consisting of at least 3 grasses, and 1 forb. If the participant's plans to crop or hay the snow catch areas, the areas would not be included in the CRP contract. The participants can still enroll an area up to one rod in width (16.5 ft.) adjacent to the outside rows to provide access to maintain the living snow fence and allow the tree canopy to develop over the life of the contract.

Living snow fences must be located and positioned to either uniformly distribute snow over field or trap snow to protect roadways, utilities, or other structures.



Example of a Living Snow Fence

■ Environmental and Practical Benefits

- Manages snow deposition. Reduces big snow drifts on roadways
- Improves driver visibility to reduce vehicle accidents
- Lessens impacts on our environment with less salt use, fewer truck trips, and less fuel consumption
- Reduces soil erosion from wind
- Enhances or creates wildlife habitat

■ CCRP Practice Contract information

- Contract length 10-15 years
- Cost-share of 50 percent of the eligible cost of establishing the practice
- \$100 / acre Signing Incentive payment (SIP)
- Practice Incentive Payment (PIP) equal to 40 percent of the eligible installation costs
- NRCS Practice Number 380
- NRCS Practice Number 327 for snow catch areas.

■ Snow Catch Areas

- The windward (upwind) snow catch area is the length of the living snow fence multiplied by 66 ft. (4 rods widths measured perpendicular from the first windward row of trees). 66 ft. is the maximum length for this distance. A shorter distance can be used; however snow depth increases dramatically nearer to the snow fence.
- The leeward (downwind) snow catch area is the distance between the road right-of-way and the first leeward row of trees/shrubs. The set-back distance will be calculated by using the Living Snow Fence Design Program from the following website:
http://climate.umn.edu/snow_fence/

■ Minimum Row-to-Row Spacing

- 10 ft spacing between shrubs less than 10 feet in height
- 12 ft spacing between shrubs and small trees from 10 to 25 feet in height
- 12 ft spacing between small trees less than 25 ft in height
- 16 ft spacing between small and tall trees greater than 25 ft in height
- 25 ft spacing between tall trees greater 16 ft than in height
- 20 ft spacing Between any wide crowned species and conifers
- 20 ft between faster growing species and conifers

■ Spacing Within Rows (Plant-to-Plant Spacing within a row)

- 3 to 6 ft between shrubs less than 10 feet in height
- 5 to 16 feet between shrubs and trees from 10 to 25 feet in height
- 8 to 16 ft between trees greater than 25 feet in height

■ MnDOT Living Snow Fences

A Memorandum of Understanding (MOU) was created between MnDOT, Natural Resource Conservation Service, USDA - Farm Service Agency, and the Minnesota Association of Soil and Water Conservation Districts to plant living snow fences along identified problem areas of MnDOT highways.

As part of this MOU MnDOT agrees to:

- Provide an additional per acre payment equal to or 50% of the CRP payment
- Provide up to 100% cost share to cover all landowner expenses.

Additional Information:

[NRCS CCRP CP17A Eligibility Document](#)

[NRCS Practice Code 380 Standard](#)

[NRCS Practice Code 327 Standard](#)

[MNDOT Living Snow Fences](#)

[NRCS CCRP CP17A Job Sheet](#)

Diagram 4: **Living Snow Fence**
(Not to Scale)

Living Snow Fence Diagram

