



Saline Cropland Treatment Opportunities in CRP

Applies to saline cropland and cropped saline seep recharge areas

Continuous Conservation Reserve Program Practice Information Sheet

February 2007

What land is eligible for Continuous CRP Practice CP18B - Establishment of Permanent Vegetation to Reduce Salinity?

Saline seep discharge areas occur where salts accumulate within 18 inches of the soil surface as a result of lateral ground water movement. They occur on side-slopes or at the base of a slope. Most saline seeps in North Dakota are found west and south of the Missouri River, although some are found north or east of the Missouri River. Some large saline seep discharge areas are delineated on NRCS soils maps; other saline seep discharge areas must be identified in the field by NRCS or other registered professional soil classifier. The soil must have an electrical conductivity of four decisiemens per meter or higher at 25⁰ Celsius.



This saline seep is caused by low water use crops and/or fallow on land higher in the landscape. Both this discharge area and its groundwater source – the recharge area upslope – are eligible for practice CP18B.

Saline seep recharge areas are found upslope from saline seeps. Precipitation not used by plants on recharge areas percolates downward and recharges the groundwater

supply; hence the name. Saline seep recharge areas are identified in the field by NRCS staff or other registered professional soil classifiers. Although saline seep recharge areas are not saline, they are eligible for CRP because they must be managed to utilize more precipitation to reduce the excess groundwater that causes saline seeps.

What land is eligible for Continuous CRP Practice CP18C – Establishment of Permanent Salt-tolerant Vegetative Cover?

Saline areas that do not meet the definition of a saline seep are eligible for this practice. In North Dakota, these areas are usually found on flats or next to wetlands north and east of the Missouri River, although some occur south or west of the Missouri River. The soil must have an electrical conductivity of four decisiemens per meter or higher at 25⁰ Celsius. NRCS can identify some of these areas by examining existing soil survey data. Other areas must be identified in the field by NRCS or other registered professional soil classifier.



Bare soil, kochia, and foxtail barley (lighter colored vegetation in background) are indicators of saline cropland eligible for practice CP18C.

How does enrollment in CRP help saline land?

Both CRP saline land practices CP18B and CP18C are intended to improve soil quality and plant productivity on unproductive cropland by planting suitable perennial vegetation and maintaining it for a 10-year contract period. Vigorous, perennial vegetation will utilize soil moisture and reduce excess salt accumulation in the root zone associated with excess groundwater. These practices are intended to reduce or reverse the harmful movement and accumulation of salt due to management or farming practices.

Western wheatgrass, slender wheatgrass, and tall wheatgrass are commonly planted on salt-affected areas. Other species such as alkali sacaton, hybrid wheatgrass (New-Hy), beardless wildrye, sweet clover, alsike clover, or four-wing saltbush may also be suitable. Saline seep recharge areas are usually planted to alfalfa or other deep-rooted grass/legume mixture. Contact NRCS for a plan tailored to your land.



NRCS soil scientists use an electrical conductivity meter to measure soil salinity.

What are the financial benefits of enrolling saline areas and saline seep recharge areas in CRP?

The Conservation Reserve Program provides 90 percent of the estimated cost of installation. (Fifty percent of the payment basis is cost-share; the additional 40 percent is Practice Incentive Payment.) The following practice components are eligible, as needed;

- Temporary Cover
- Seedbed preparation
- Seeding operation
- Seed
- Mulching
- Post-emergent weed control

A payment is provided for a vegetation maintenance operation during the 5th or 6th year of the contract. Options for maintenance include mowing, heavy harrow, inter-seeding with legumes, prescribed burning, or herbicide application, as needed. The specific option must be approved by the Farm Service Agency and NRCS before actual application.

The ten annual rental payments are based on soil types and local rental rates. Contact your local NRCS office to find out the payment rate for land you are interested in enrolling.

Example economic summaries of CRP enrollment for salinity treatment are available from your local NRCS office.

Contact your local NRCS office now to find out if CRP can help solve your salinity problems!

Helping People Help the Land

All programs and services are offered on a non-discriminatory basis.