

Peatlands: New Options for Climate Resilience

May 2025

State and Federal Funds for Restoration

BWSR is seeking opportunities to restore and protect peatlands across public and private lands extending from northeast to south central Minnesota. These efforts draw on two funding sources:

- BWSR received state funding in 2023 to acquire easements "to restore and enhance peatlands and adjacent lands... for the purposes of climate resiliency, adaptation, carbon sequestration, and related benefits." Private lands that meet restoration criteria can be placed under a permanent conservation easement through the RIM Reserve Program.
- In 2024, the U.S. Environmental Protection Agency awarded Minnesota \$200 million through the federal Climate Pollution Reduction Grants program. The grant includes \$20 million to BWSR, the Department of Natural Resources, and Tribal Nations to protect and restore peatlands originally drained for agriculture.

What is a peatland?

A peatland is a type of carbon-rich wetland dominated by organic soils, built up over time by decaying plant materials in a waterlogged environment. These soils, known as histosols, or peat or muck soils, hold some of Minnesota's largest carbon reserves, but can emit large quantities of carbon when ditched and drained. Minnesota has the largest peatlands acreage of any state outside Alaska: over 7 million acres, of which over a million acres are fully or partially drained.

Most Minnesota peatlands are known as bogs, fens or swamps. Bogs receive most of their moisture from rainfall and runoff, while fens receive more groundwater, making them less acidic. Swamps are forested wetlands; not all swamps are peatlands.

This peatland in Toivola, St.
Louis County, is a good
example of an intact
vegetative community
known as a Northern Poor
Conifer Swamp, composed
of species such as black
spruce, tamarack, shrubs
such as labrador tea,
sphagnum moss species and
unique peatland ferns,
grasses and sedges.

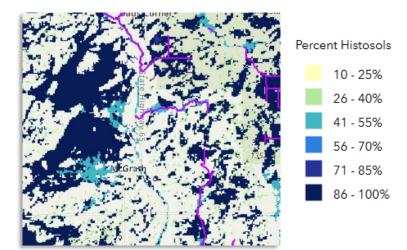


How can landowners and local governments utilize state and federal peatland funding?

Properties with restorable drained and altered wetlands located on peatland soils – known as histosols – are potentially eligible for a conservation easement. BWSR's <u>Potentially Restorable Peatlands</u> web-based mapping tool can help with preliminary screening.

For landowners, the first step is to consult with the local Soil and Water Conservation District (SWCD) or watershed district to see if their property meets other site and program eligibility requirements and can feasibly be restored.

Peatland restorations often involve blocking drainage ditches or tile lines. Many factors need to be considered, including existing hydrology, public or private drainage systems, vegetation, and adjacent landownership. **BWSR Easement and Engineering staff**



A screenshot of the mapping tool shows percentage ranges of histosols and public ditches (purple lines) in a portion of Aitkin County

are available to assist with site assessment. Additional guidance on the RIM application process for peatlands, including eligibility and scoring criteria, is available on the <u>RIM Wetlands</u> page of BWSR's website.

Can a restoration take place without a RIM easement?

In some cases, yes. Federal funds can be used for lands protected through other agreements, such as lands held by local or Tribal Government or non-governmental organizations such as land trusts. Processes for such arrangements are still under development, but BWSR staff are interested in opportunities for collaboration.

Has BWSR restored peatlands before? Are there examples of successful restorations?

BWSR has a long history of successfully restoring thousands of acres of drained and altered peatlands through its conservation easement programs.



This 885-acre peatland site in Steele County was restored under a perpetual RIM Reserve Conservation Easement in partnership with NRCS. The project was designed by BWSR engineering staff. A video by NRCS, "Wetland Restoration in Southern Minnesota," profiles this project in detail.

For more information:

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