



PROJECT:

Boy Scouts of America – Northern Tier High Adventure Base



Leading the way with sustainable solutions

LOCATION

Ely, Minnesota

PROJECT TYPE

Wastewater Treatment

COMPLETION DATE

2001

PROJECT SIZE

9,000 gpd

NEED

The Northern Tier High Adventure Base is located on Moose Lake, a remote area in northern Minnesota adjacent to the Boundary Waters Canoe Area. Due to expanding use, the existing package plant was overloaded and not suitable for winter use. The treatment plant discharge was to a beaver pond, which during heavy rain events would overflow into Moose Lake, causing an unpermitted discharge.

SOLUTION

The package plant was replaced with an insulated subsurface flow wetland with Forced Bed Aeration. The wetland is designed for year-round use, despite the severe freezing conditions. Two disposal drainfields were constructed; one for winter use (1,500 gpd) and one for summer use (9,000 gpd). The surface water discharge was eliminated and biosolids in the old beaver pond were stabilized in-situ.

BENEFIT

The new treatment system has allowed the Scouts to expand their year-round programs at this High Adventure base. Constructed wetlands are in sync with the environmental values held by the Boy Scouts and provide an educational opportunity for thousands of campers every year.



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