A Trout Stream

Spring Water—A Good Start

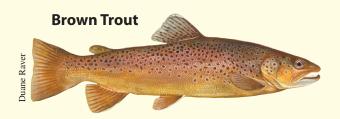
The water in Seven Mile Creek comes from springs located within Seven Mile Creek Park. Because the spring water is held underground, it is a constant temperature of 48° F. This temperature is cool enough to

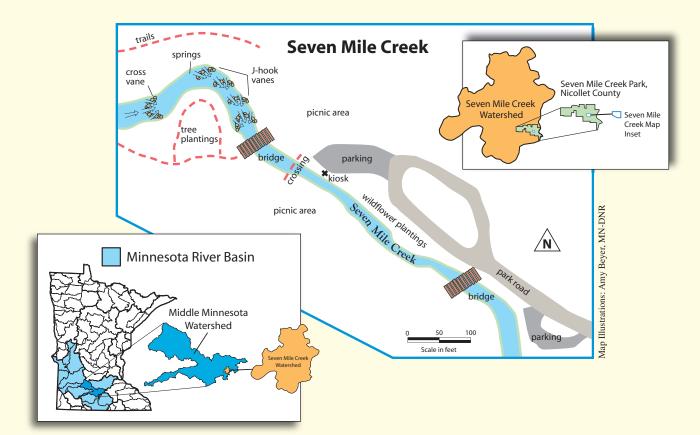


sustain trout throughout the hot months of summer and warm enough so that the stream remains open during most winters. The stream does not currently have suitable spawning habitat for trout, so the Minnesota Department of Natural Resources stocks brown trout to provide a unique fishing opportunity in the area.

Stocked Brown Trout

Approximately 7,500 brown trout fingerlings, each 2 inches in length, are released into the creek in late May or early June each year. Most trout you see will reach 6 to 12 inches, although you may find a few as large as 18 inches in length. Although trout are wary, they can be seen in pools. Quietly approach the creek and hide behind plants to view them.





Watershed Influences

In presettlement times, wetlands and lakes were common in the upstream watershed. These water bodies served to hold water on the land after heavy rains and during times of snowmelt. The water slowly percolated into the ground to recharge the groundwater supply.

With few of these lakes and wetlands in the upstream watershed today, heavy rains and melting snow run off the land quickly and pour into Seven Mile Creek. At these peak flows, the very high, fast water widens the channel and erodes the banks. To reduce the effects of the erosion, bank stabilization

and habitat improvement structures were built in December of 2002 and native vegetation was planted in the construction area in June of 2003.



Habitat Improvement



Cross and J-hook vanes are structures built into the body of the stream to improve fish habitat. They are made of natural materials including logs and boulders. J-hook vanes were used on outside bends to protect the bank from erosion. They dissipate energy and direct water flow away from the bank.

Cross vanes were used on straight sections. They concentrate the water flow into the middle of the channel, again protecting the banks. The water flowing over the structure digs a hole downstream, creating a pool for the fish to congregate.

Re-establishing Riparian Vegetation

After the cross and J-hook vanes were constructed, the streambanks needed to be revegetated right away. Willow stakes were planted in areas most likely to be at risk of eroding. Willow cuttings ranging from twigs to 4-inch diameter posts, all about 2 to 4 feet in length, were planted in early spring before the willows started budding. All parts of willow trees are able to grow after planting if there is enough moisture. They grow quickly and their roots help hold the streambank together.

In the early summer, native trees, shrubs, grasses, and wildflowers were planted. The native plants will help stabilize the bank and prevent erosion, shade the water to keep trout cool in summer,



and provide cover for trout and other animals to stay hidden.

For more information about this project, please contact:

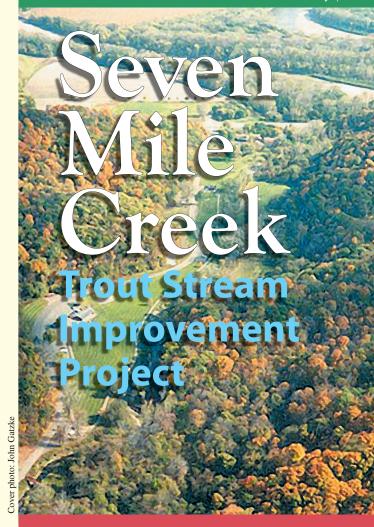
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A cooperative project between Nicollet County, Brown Nicollet Cottonwood Water Quality Board, Minnesota Pollution Control Agency, and the Minnesota Department of Natural Resources— Section of Fisheries





