Regional Stormwater Protection Team Presents "Creek News"

Weekly updates of Regional Surface water information



Creek Icing 2006

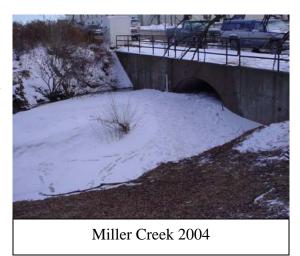
In Winter 2006, many of our creeks were not frozen and flowed freely for much of the winter. This pattern happened again in 2007 until finally having an extended period of frigid subzero weather in late January that froze the Duluth area creeks to a depth of 1-2 feet. These warm periods differ greatly from winter 2003/4 when many creeks froze to the bottom.

When creeks freeze to the bottom, any additional water must flow over the surface causing the stream to expand. In 2003/4 some streams became 20 ft wide. City crews were kept busy cutting ice to create channels to prevent flooding of private property.

Crews with high pressure washers also created channels in the ice to return flow to the creek bed. In 2003/4, the freezing was extreme and Duluth City crews received over 100 calls with flooding problems in one weekend alone.

Fisheries biologists expect that cold winters with little snow cover and thick ice formation can have a a strong negative impact on stream fish populations since most of our stream channels are only six to eighteen inches deep during the low flows of fall and winter and freeze rapidly. This not only limits the amount of their habitat, but because water volume is reduced, inputs of pollutants can much more rapidly increase pollutant concentrations to harmful levels.

The ideal winter for northland stream health is an "average" winter where cold temperatures are accompanied by snow fall. The snow builds up on the thin layer of ice acting as insulation that keeps the stream from freezing to the bottom. Fish and aquatic bugs then have access to pools and well oxygenated flowing water. Animals living along the shores can continue to reach open water to quench their thirst.







Understanding the behavior of our natural waters is important to Northlanders. For more information about icing in local creeks visit www.lakesuperiorstreams.org. Report icing problems to your public works department (In Duluth 218-730-4051).

Creek news is a weekly press release of happenings along our streams, lakes and rivers. For more information contact the Regional Stormwater Protection Team c/o Marnie Lonsdale, City of Duluth (218) 730-4063 or visit www.lakesuperiorstreams.org