

Clean Water Starts at Home

Tip #2: **Spring Ponding**

Cold temperatures in January deepened the frost layer in Minnesota soils. Variable snow depths and a variety of ground covers lead to large variations in soil frost depths. Generally speaking, frost depths under sod range from one foot to one and one-half feet in southern Minnesota, one and one-half feet to three feet in western and northern Minnesota (State Climatology Office - DNR Waters, compiled 2/4/2009).

Until the frost goes out of the ground, historically the first week of April¹, snowmelt or rain cannot infiltrate the soil and so runs off. Interestingly, soil thaws from both the top and the bottom leaving a mid-layer of frozen soil. Low spots may be wetter than usual, until the frost goes out. So, snowmelt can cause ponding.

Ponding can also indicate sites of seasonal, temporary wetlands. What are seasonal wetlands? They are places where the conditions of soil and saturation (hydrology) temporarily create conditions suitable for plants that can survive the lack of oxygen caused by saturation (anaerobic conditions). Generally, under normal circumstances, flooding or saturation is needed for at least 10% of the growing season, 8 days or more in our area. If the site is significantly disturbed, say for agriculture or development, the hydrology might be changed. Yet, it may still be determined a wetland.

Seasonal wetlands may have standing water or be waterlogged; your shoes would get wet when standing there. Perhaps the area has grass that gets brown from too much water. Technically, these seasonal wetlands are often called flooded basins or flats, or Type 1 wetlands. They may not show up until the wet summer months, but often 'appear' in spring.

Those low, wet areas might be hard to determine as wetlands or as a result of frost still in the ground. A wetland professional can help: for technical assistance call either the Anoka Conservation District, or Coon Creek Watershed District (CCWD) if you are located within the CCWD boundary.

So why bother with wetlands that are only temporary? They can:

- Provide storage of runoff, which can help prevent flooding
- Provide habitat for native plants and animals
- Require a permit under the MN Wetland Conservation Act, 1990

If you are thinking of filling, landscaping, or building in an area that is wet even for just a few weeks of the year, please contact the Coon Creek Watershed District office. We can help determine if you need a permit for your project. Contact us at: 763.755.0975 or info@cooncreekwd.org.

*Check out our website www.cooncreekwd.org, "News & Information" for ways to **Get Involved** in protecting & improving water quality.*

¹ usually about 10 days ahead of ice-out