



**Jefferson County
Open Space**
enriching life

Pine Valley Ice Conditions

Few things symbolize winter as strongly as ice skating, or ice fishing on an open lake. However, there is no sure way to tell if ice is 100 percent secure for those winter activities we love at Pine Valley Ranch Park. The strength of ice cannot be measured just by its appearance, age, thickness, temperature, or whether or not the ice is covered with snow. Strength is based on all these factors – plus the depth of water under the ice, size of the water body, water chemistry and currents, the distribution of the load on the ice, and local conditions.

Thickness is only one factor used in determining whether to open the lake for ice skating. For example, consistency of thickness across the lake surface was a major concern in 2014. The quality of the ice, as ice can be thick but very weak or unstable, as in the case with what is called, "frazil ice" is also used to gauge ice strength. Standing water on top of the ice surface can also be a factor that weakens the ice and creates dangerous conditions. Also, with fluctuating water levels on the lake, and the South Platte River which feeds the lake, the water level can drop below the layer of ice, creating a gap between the ice and the lake water. When these potentially dangerous conditions are found, the lake is closed to recreation regardless of the ice thickness. Hazards on the ice surface have also caused Jefferson County Park Rangers to close the lake to ice skating, such as rocks and debris being thrown onto the rink, which quickly freezes to the ice and cannot be removed.

Weather fluctuations can also make it too dangerous for park rangers to safely clear snow from the rink, or test the lake ice. If the lake ice is determined to be unsafe for testing, or rangers are not able to test or monitor lake conditions for any reason, the lake will be closed for ice skating. When warm temperatures are predicted that could drastically change conditions on the lake, the lake may be closed as a precaution. Last year, the lake ice went from nearly a foot thick on the south shore to open water in less than a week.

Please remember that all recreation, especially ice activities, is at-your-own-risk. Ice can ALWAYS be dangerous, and even when the lake is open for recreation/ice activities, we do not claim that the ice is safe in any way. Although ice has begun forming on the lake and slower moving sections of the South Platte River at Pine Valley Ranch. The ice is very thin and extremely dangerous! We will need consistent sustained temperatures below freezing for several weeks before the ice can be safely measured and managed for ice skating.