

Watershed Wisdom – Watersheds 101

Greetings to the greater Belgrade Lakes Community! After a long winter that saw ten feet of snow in this area and some of the best skiing and snowmobiling in decades, spring arrived with ice out early in the 4th week in April. Now summer has unofficially arrived, marked by this initial edition of this year's "*Summertime in the Belgrades*." This is my second season as author of the Watershed Wisdom column and I am looking forward to having the opportunity to help our readers better understand some of the natural processes that take place in our lakes and some of the science behind the measures that need to be taken to protect our lakes. Because of their fundamental importance, I will be covering some of the same topics I discussed last year but hopefully in a way that will shed more understanding.

Our first topic is one of the most basic but also one of the most important to understand: "**What exactly is a watershed and why should I care?**" When most people hear the word, "watershed," they immediately think of water bodies such as lakes, rivers, or streams. But a watershed actually refers to the *land from which water flows* into a particular water body. Think of it as the land "shedding" water like feathers shed water from a duck's back. When it rains, some of the water evaporates quickly back into the atmosphere, some infiltrates into porous soils and becomes groundwater, and the rest runs off as "stormwater."

The amount that runs off depends on the land characteristics. In undeveloped forest areas or in areas such as the Belgrade Esker with very porous soils, infiltration is high and very little runs off. In steep rocky areas or in developed areas with lots of impervious surfaces such as roofs or pavement, less infiltrates and more runs quickly down the hill, perhaps in a roadside ditch that dumps to a small stream to a larger one and then to the Belgrade Lakes. As the water flows across the surface of the land, it picks up dirt and other pollutants such as oil and grease from the roads.

Some water bodies have very large watersheds- the Mississippi watershed comprises approximately half the area of the continental United States and includes many large subwatersheds such as the Ohio and Missouri Rivers. The Belgrade Lakes Watershed is approximately 180 square miles with portions of 13 different municipalities in three different counties and contains the subwatersheds of East Pond, North Pond, Salmon Lake, McGrath Pond, Great Pond, Long Pond, and Messalonskee Lake. The Belgrade Lakes Watershed in turn is a subwatershed of the Lower Kennebec River Watershed (USGS Hydrologic Unit Code 01030002). This illustrates another important point about watersheds- they are determined entirely by Mother Nature's boundaries when she laid down the topography, not by Man's artificial municipal boundaries. This means that many different political groups need to cooperate to control the land use within a watershed. The bottom line- everyone lives in a watershed. And how we live on the land determines the quality of the water that drains from our watershed. We will talk more about that in future columns.

If you are not yet a member of the BRCA or one of our lake associations, please consider joining to help protect water quality. If you are in Belgrade Lakes Village, please stop by the BRCA Office and introduce yourself. We are in the same building as the Post Office. We have a lot of good information about the natural resources of this region, including maps of the nearby hiking trails and surveys of the lakes.