Conservation's Importance: Today and Tomorrow

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The snow is melting, the temperature is rising, and spring seems to finally be near. With each passing day, I get more and more restless for pleasant weather. Peaceful mornings kayaking the Long Prairie River with my dad, sunburnt afternoons tubing down the "Little Amazon" between Lakes Darling and Cowdry, and long evenings spent at the beach create heavenly summer days, and I'm anxious for their arrival. But these sun-drenched days are dependent on my community's ability to protect its land and water. Our actions—from fertilizing our yards to neglecting our lakes—have huge potential to shape our future.

It's easy to forget the impact we have on the soil beneath our feet. Unlike smog in the air or garbage in a river, the damage done to the earth itself is more difficult to notice. The biggest problem facing soil conservationists is the issue of erosion. Wind and water sweep away the life-giving layer of delicate topsoil in a natural and inevitable process, but the actions of humankind have transformed erosion into an environmental problem. According to a Cornell University study, modern-day agricultural and developmental techniques have caused the United States to lose its topsoil ten times faster than the natural replenishment rate ("Soil Erosion Threatens"). In fact, due to the effects of erosion, nearly one-third of all the world's arable land has now been rendered barren ("Soil Erosion Threatens"). This global problem is painfully present in Minnesota, where forty-five percent of cultivated farmland is eroding faster than what the Natural Resources Conservation Service considers to be "tolerable" ("Fact Sheet"). The danger of high levels of erosion is nothing to scoff at. Because erosion washes away the nutrient-rich topsoil and hampers the soil's ability to absorb and store water, it prohibits healthy

plant growth. The end result—paltry crop production—is often devastating to farmers and those involved in agribusiness (“Soil Erosion Threatens”).

With my father employed by a seed company, it’s worrisome to imagine a future in which Minnesota’s farms were turning out low crop yields. If the land farmed by his customers became unproductive, he would likely be searching for work. Fortunately, however, utilization of better farming techniques will help to prevent such detrimental erosion. Planting cover crops, constructing windbreaks, and using methods like contour plowing, terracing, and crop rotation are excellent means of limiting erosion (“Soil Erosion: Causes and Effects”). It is critical that these techniques continue to be promoted and used, as they ensure that Minnesota’s farms—and the families involved in the business of agriculture—will stay strong.

The issues of soil conservation are often meshed with those of water conservation. It is estimated that sixty percent of eroded soil washes into bodies of water—lakes, rivers, and streams (“Soil Erosion Threatens”). In cases of extreme erosion, these waters may actually be filled by the sediment (“Fact Sheet”). The most common problem, however, occurs when the soil that makes its way into the lake contains residual pesticides and nutrients. Because this soil originated from both farm fields and residential lawns, any fertilizer or insecticide used on these lands may also be washed into local water sources. Aquatic plants and fish are easily harmed by transported pesticides (“Fact Sheet”). The fertilizer that can be carried into the water also poses a threat to this aquatic life. Sediment bearing traces of nutrients such as nitrogen and phosphorus may fuel the development of algal blooms in water bodies. These blooms thrive on the remnants of fertilizer washed into the water. As they grow in size, they use increasing amounts of the

water's oxygen. Eventually, they will consume so much that other aquatic species will be unable to survive. This leads to so-called "dead zones"—areas without any life except the algae. But this problem is not just a local one. As watersheds across the middle of the United States empty into the Mississippi River, nitrogen and phosphorus are carried down the river and into the Gulf of Mexico. This has resulted one of the largest dead zones in the world, spanning six to seven thousand square miles. It's impacted the United States seafood industry heavily, as the Gulf provides much of American-fished catches (Bruckner).

We must look to our future in order to realize the local danger this threat poses. If we continue to allow our waters to become polluted with fertilizer, we could see our lakes and streams experiencing such dead zones. As Alexandria is a town that thrives on the summer crowd of resorters and cabin owners, its economy stands to take a serious hit if we were to lose our valuable lakes to algal blooms. Fortunately, many agencies and residents of the lakes area have been proactive about this impending issue. Serious work has been done to ensure the integrity of our lakes' water, from working with the local water treatment plant to rehabilitating suffering lakes.

"Most people are on the world, not in it," John Muir, nineteenth-century naturalist and founder of the conservationist Sierra Club, once mused (qtd. in Wood). Too many of us, forgetting to live *in* our world, exist without any real connection to our environment. But if we take a hard look at our actions—and their impact on our earth and water—we realize how they may affect our future. Worsening erosion threatens not only local farms and agribusinesses, but the quality of our lakes. Our community's financial well-being depends on both the health of local crop fields and the state of our precious lakes, so it's

important for all of us to protect them. But I can think of other, more immediate reasons to ensure the integrity of our soil and our water—those sunny summer days spent embracing all our lakes have to offer.

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