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My Most Vivid Memory Concerning Water

Growing up in Bismarck, North Dakota, I was very fortunate to learn the many benefits that water provides us. Whether it's the water we drink, water for industry, or water we can use for recreational use, it certainly shapes the way we live and interact with the world around us. From an early age, I learned that water is more than just a precious resource, it's also an undeniable force of nature that needs to be managed and regulated. But my most memorable and impactful experience regarding water is definitely the bipolar nature of the Missouri River.

Every summer, my family and I take our boat out on the Missouri River to enjoy the beautiful weather and scenery. During these outings, my father, who serves on the Burleigh County Water Resource District Board, usually takes the opportunity to teach me about the river. He frequently points out the different pieces of infrastructure such as water intakes and treatment plants that are abundant up and down the river. He is constantly reminding me of the importance of the Missouri River, for our local community, and for a lot of other as well.

The Missouri River, the longest river in the United States, provides several industrial benefits such as power generation, irrigation, and water supply. But while the river supports so much life and industry, it can also bring immense destruction when nature strikes and its power is not able to be mitigated properly. I learned this firsthand in the spring and summer of 2011, when Montana and Wyoming experienced record-breaking snowfall and rainfall. This surplus in water filled the system reservoirs to capacity, and resulted in dramatic flooding of the Missouri River in North Dakota, resulting in devastation across several communities, including Bismarck. I can still vividly recall those days. As a five-year-old, I joined my parents to help fill and place sandbags throughout neighborhoods in an attempt to hopefully mitigate some of the damage. I saw families evacuate, homes submerged, and entire stretches of land damaged. The flood caused hundreds of millions of dollars in damage, and more than a decade later, some areas are still in recovery. This experience opened my eyes to the raw power of water and how important it is to have the knowledge, planning, and infrastructure needed to manage it properly.

From that young age, I realized just how impactful water can be when not properly regulated or managed. The river does not just provide us its benefits, but it also challenges us to innovate and adapt to its ever-changing nature and conditions. That's why I believe it is crucial that we continue to learn from past events like the 2011 flood, so we can develop better strategies, design better systems, and take better precautions in the future.

The Missouri River offers its communities several recreational opportunities, supports its communities' infrastructure, and serves as a constant reminder of both the beauty and danger it holds. The river has shaped not just my childhood memories, but also my goals for the future. Part of the reason I wanted to become a civil engineer in the first place was because I wanted to better understand the Missouri River. I hope to collaborate with others to create solutions that allow us to safely reap the benefits of water, while minimizing its risks.

Overall, living alongside the Missouri River has taught me more than just how to have fun on the water. It has taught me that an important balance is needed, when dealing with a valuable resource and a potential destructive force of nature. We are very fortunate as citizens of North Dakota to have such a reliable and abundant water resource. However, if we are not careful and strategic when dealing with it, it could be wasted or cause us more harm than good.