In the summertime, there is nothing that I love more than going on a nice pontoon cruise with my family on Richmond lake. Whether we decide to throw in a line or take a dip in the water, it is always a blast. But as any good swimmer will tell you, it's the dangers that we can't see -lurking beneath the surface of the water that is threatening the livelihood of our lakes, rivers, and streams. Lucky for us, there are different organizations throughout South Dakota to help with problems lurking beneath our rivers and streams. Like our conservation districts, and game fish and parks which all allow for our communities to prosper around our heavily aquatic culture. Proving today's prompt of "Rivers and streams benefit South Dakota".

First, we are going to look at the benefits themselves derived from rivers and streams to South Dakota, before finally examining the efforts taken to conserve these bodies of water so they can continue to benefit us in the future.

If you'd ask anyone from South Dakota about their favorite summer activities, more often than not you'd get an answer like tubing, swimming, or fishing on the Missouri river. But the benefits from rivers and streams expand far beyond just some exciting recreational time, because without them, many urban and rural communities would have no source of potable water. For example, WEB water, the leading provider of water to 17 different counties in northeastern South Dakota, pulls in from the Missouri River. On top of that, there is also a financial benefit from rivers and streams from fishing. Whether it be in the Missouri River or the James - the fishing industry is a major tourist attraction. According to South Dakota game fish and parks, in 2016 the fishing industry in South Dakota generated over 271 million dollars. The article continues by saying that this money goes to support roughly 18,000 full and part-time jobs- which also has a net benefit on our economy. Overall, it is clear that our rivers and streams provide huge benefits if we just look a little closer.

But with all benefits considered, it's important to recognize the efforts taken behind the scenes to maintain our rivers and streams, because without them- there are no benefits. And that fun in the sun afternoon would be anything but.

For example, Richmond Lake may be considered an oasis to some, but this man made lake is a poster child for hazards lurking below. Anyone familiar with Richmond Lake knows it is not known for its crystal clear water- instead- for the fact that it is a swampy green. But it isn't all bad. The South Dakota legislature and stakeholders saw this problem. And introduced the solution of buffer strips- specifically, grass waterways, which are 50 to 150-foot sections of grass

planted along a waterway that stops runoff from getting into the streams and rivers. This is huge for conservation because it allows for us to continue to enjoy our recreational time without questioning the sanitation of these bodies of water.

Another way that our streams and rivers are protected is through simply fencing cattle out of the streams. While old Bessie may like to take a nice dip to cool her thirst by going into Mud Creek she shouldn't because that feeds into Richmond lake- and farmers and ranchers are recognizing this. You may be wondering why it's such a big deal if these cows go and wander free-range, but the problem lies at the foot of the issue- literally. Hooves tear up the stream bank causing erosion which threatens the overall stability of these bodies of water. Not to mention if you can't get your dad to not pee in the pool- I doubt the cows will listen either. So farmers are fencing them out of streams and taking advantage of solar-powered wells or Rural water systems like web water to provide fresh drinking water to their herds.

Finally, it's important to recognize the conservation effort that made it possible for bodies of water like Richmond, and Mina lake, and many more a reality- Dams. Richmond was made in the 1930s by the WPA when they dammed Mud Creek, but as time goes on, it's clear that it needs to be replaced. Luckily for us, earlier this year the South Dakota legislature approved the cash for it- and thankfully they did. Because we saw the harms from not repairing dams when necessary in 2018 when the Hidden Wood dam blew out. Thankfully, no one was hurt- but it simply shows the importance of maintaining our dams because when the dam fail, they release a lot of sediment and built-up pollutants- which is harmful to surrounding bodies of water and contributes to the destruction and loss of life- like the dam that blew out in Rapid City in 1972 resulting in 238 deaths.

So today, we looked at the benefits from rivers and streams to south dakota. Specifically, water accessibility, and the economic benefit from fishing, before finally, we some efforts taken to maintain these bodies of water so they can continue to benefit us in the future. Proving today's prompt of "Rivers and streams benefit South Dakota".

So the next time you go out on the river, remember to recognize not only the fun from taking a swim or throwing in a rod but also to appreciate the myriad of conservative efforts taken to maintain the water's natural benefits and beauty.