Soil Health & Water Quality

Healthy soils filter and clean water that moves through them, for improved water quality. Increasing soil health to allow for more of this process to take place across the entire water cycle allows for the whole system to benefit. Many farmers and ranchers in South Dakota are working to increase the health of their soils for just this reason and are also installing conservation practices such as Riparian Buffers to filter water making its way to larger bodies of water. Watch Chad Schooley’s “Our Amazing Grasslands” video from 2018, during which he describes his use of this practice on his ranch.

Water cannot be filtered as efficiently, and water quality increased in areas where soils are not healthy enough to infiltrate well. A soils ability to store water for use by a future crop is extremely beneficial for many producers who may live in areas of sporadic and unpredictable rainfall. Or in areas where precipitation is experienced during inconvenient times, water that is unable to infiltrate can cause ponding and other long-term issues. Weather patterns experienced across the state over the last several years have caused many to turn to various soil health practices which can aid in water management throughout a growing season. Jordan Reimnitz describes his use of cover crops to aid in water management and increase infiltration rates on his farm, throughout his video “Profiles In Soil Health: Building A Resilient Soil”. To view other “Profiles In Soil Health” videos and learn how other producers across the state are working to improve water quality visit https://www.sdsoilhealthcoalition.org/videos/.

Soil Health & Economics

Increased soil health and the use of soil health practices has created long term economic benefits for many farmers and ranchers across the state of South Dakota. Access “The Economics of Soil Health: As Described By South Dakota Producers” brochure to read some of their first hand experiences, which range from the elimination of costly tillage passes and equipment maintenance, to the ability to graze cattle longer on pastures without the use of additional feed using rotational grazing.

The use of cover crops to not only build soil health but to positively affect an operations bottom line comes up many times in these producer testimonials. They can be used in a variety of different ways, as a means to increase soil cover and reduce loss of topsoil, as a lower cost forage resource, to increase diversity in the diet of grazing animals, as well as a way to keep the biological system in the soil active allowing for an increase in production of subsequent crops.
No-till practices are described as being a way to retain valuable moisture, minimize risk of production loss due to the shielding affect residue and soil cover can have on weather extremes, as well as to reduce workload. Interested in speaking to someone who has utilized soil health practices on their operation and has experiences some of these economic benefits? A newly updated version of the “Building Connections” Mentor Network publication is now available. Request your copy of the booklet today by contacting the SD Soil Health Coalition at (605) 280-4190 or by emailing sdsoilhealth@gmail.com or your local USDA NRCS office, and get in touch with those who are willing to share their knowledge and experiences.