

Leasing Landowners:

Best Water Quality Practices For Your Land

When it comes to water quality issues, many people wonder WHY should WE be concerned? As responsible landowners, you should do your best to improve/maintain or at the very least avoid the deterioration of the soil, erosion, and fertilizer runoff for example. These issues vary between individual properties, but overall the landowners in our state should have an active role in conservation and water quality impact on their farm.

We have known for years our water in Iowa is not ideal. It has been well documented that we have a serious health problem; according to the new report funded by the Des Moines County Supervisors entitled "Currents of Change" it was scientifically identified that agriculture was the cause of 80% of the excess nitrates and other chemicals and sediment in the water. Prior to this the finger could be pointed at golf courses, cities, businesses, nature and septic tanks thus deflecting the blame. However, it is clearly on our shoulders now. The problem can be mitigated many ways with common sense approaches, of which several are outlined in this report. We hope you give these practices and general land use tactics some serious thought and believe most serious landowners will.

7 Water Quality Practices To Consider

1. Make sure your operator is not over fertilizing the land.
 - a. Get copies of all fertilizer records and require your operator to provide good reports from them, their agronomist or other professional.
 - b. Require soil tests and lab recommendations be provided to you the landowner, then compare with what was actually applied.
 - c. Ensure that soil tests at least show phosphorous, potassium and the pH are in the optimum range or there is a 5-year plan to get them in that range. Some tests may show some very high levels beyond the recommended ranges and the operator and/or an agronomist need to explain the plan related to solving that situation. There are university and industry standards available that we can provide to you.
2. Farm the land with minimal soil loss. Phosphorous attaches to soil and it (along with the soil) moves downhill, commonly into a stream or tile inlet. Phosphorous in water can lead to depletion of oxygen which can be deadly to fish, plants and wildlife. Soil in the stream is also a pollution issue for water quality and fish habitats. Most farm tracts have soil loss even if it is not clearly observable. Require the land be farmed on the contour if at all possible to avoid gully erosion even if it takes more time for the operator to farm. Soil loss on end rows is a major issue with increased gully erosion down the rows that lead to poorer yields as many are already devoid of topsoil. Seed it down if necessary on your own for hay

production or wildlife habitat. Often there are CRP options that will pay for field edge practices.

3. Tiling should be done only when the benefits outweigh the out-of-pocket costs and possible damage to water quality downstream. Tile lines often carry 10 times the amount of nitrates as surface water runoff. An effective plan would be to outlet the tile on the farm into a wetland or some water quality structure so it can be filtered thoroughly before heading out of your land.
4. Tile intakes should be avoided if possible as they are a direct conduit into the tile line as opposed to the surface water filtering down through the soil before reaching the tile 2-4 feet below the surface. Instead of a surface intake there are alternatives that are below the soil surface that are comparable to the effect of intakes but still allow soil filtering before it reaches the tile. There is a lot less fertilizer loss without surface intakes.
5. Part of being a responsible landowner is being cognizant on your neighbors downstream of you. Try to work with your neighbors in a collaborative effort in the watershed that you both are involved with. This might include putting in joint wetlands or installing one on an agreed upon farm while sharing the cost. Several organizations like the FSA, NRCS, Ducks Unlimited, Natures Conservancy, Iowa Dept of Ag, and others might help with expertise and financial assistance.
6. Avoid farming near streams and rivers. This is a major contributor for streambank erosion which delivers more soil into the water causing turbidity (dirty water). This adds nutrients to the stream that hurt fish habitats and other wildlife. For comparison, Minnesota has a law restricting farming to stay outside of 50 feet from streams.
7. There are many organizations, publications, newsletters, podcasts, and local meetings with helpful ideas that can help you make decisions.

The bottom line is that the solutions for soil loss and water quality issues begin at home. Landowners in Iowa all have very valuable land that they need to take care of - we cannot wait for the government to help even though they might someday. The time is now and knowing you are doing your best is a wonderful feeling of success. Take an active role in the land you own, don't take things for granted, use your own good judgment and seek advice from knowledgeable people.

If you'd like more information or help with anything land related feel free to reach out to us at the contact information below.

Sincerely,

Mark Gannon