

Who: Tom Anderson,

Plainview High School Agricultural Education – 18 years

Riverland Community College FBM Faculty – 26 years

Work with farmers in 7 of the 8 SE Minnesota counties

Mostly dairy operations (60-65 farms)

1. **We all want clean drinking water** – Farmers included! We all drink the water! It is the very root of survival for humans, livestock and plant life.
 - a. Nobody ‘wants’ contaminated water!
 - b. Nobody ‘wants’ soil erosion and loss of quality topsoil!
 - c. Best results come from Collaboration and Cooperation – not petitions & legal litigations!
2. **Farmers want to comply** with regulations and do so on a regular basis, as evidenced by the growing number of farms listed in the MN Water Quality Certification program. I encourage the farms enrolled in our FBM program – appreciate the tuition assistance.
 - a. How do we attract more participants?
3. Agriculture is the economic driver to the state of MN – Quality products, Quality water & air.

Changes I have seen in the last 40+ years of my professional life in agricultural education.

4. Best Management Practices - Crops

- a. Mold board plows barely exist any longer.
- b. Reduced Tillage, No-Till cropping enterprises, Residue left on the surface-
 - i. Reducing erosion and chemical run-off.
- c. Cover Crops is a largely adapted practice – some harvested and some not.
 - i. Reduces erosion, maintains nutrients from leaching out to subsoil.
 - ii. Soil testing is a routine practice – now Grid Sampling (2-5 acres grids)
 1. nutrient content in small areas – GPS nutrient application as needed.
 - a. Variable Rate Application – applied in proper areas.
 - b. Replacing commercial fertilizer applied.

5. Best Management Practices – Livestock – (LS are a part of the natural life cycle)

- a. Livestock is a “Solution’ to clean water and soil erosion (Not the problem).
 - i. Hay, rye, small grains, pastures - reduce soil erosion and maintain soil nutrients.
- b. Manure management plans – storage facilities – (more funding needed- State & Federal)
 - i. Increase AgBMP Funding available to producers.
- c. Manure is applied in a scientific manner - The best **Organic** material known to man.
 - i. Many apply by injection and drag lines – (especially larger operations)
 1. Little or no runoff, improves air quality and reduces road impact.
 - ii. No longer applied to the closest 10 acres to the farm – scientifically applied.

6. MPCA & EPA

- a. Mission is the same as producers – Quality Water and Air for everyone.
- b. Cooperation and Collaboration will have the best results.
 - i. Surprise visits are seldom beneficial – Little to no changes can occur in 24 hours.
- c. Recent Request to develop a plan and provide education – Great Idea
 - i. Identify specific locations.
 - ii. Find ways to financially assist producers to fund improvements in a timely manner.
 - iii. Fines and penalties are not collaborative, cooperative or results driven.

7. Time – Implemented practices requires time to improve water quality.

- a. Scientifically – both water and air quality are improving – work together to get better!