

Conservation and Environmental Stewardship

Situation Overview:

A. *How does this farm view their environmental responsibilities for both the farm and land? Please describe.*

We view the land as our most valuable asset, even though we are renters and not owners. We strive to protect and maintain soil and water quality for our animals and the environment. We work with consultants on crops, nutrient management and feeding to ensure we are profitably maintaining the farm and land.

B. *What conservation and environmental best management practices (BMPs) have been incorporated into the farm plan during the last 5-10 years?*

- Crop residue management
- No-till planting
- Crop rotations
- Cover crops
- Grassed waterways
- Pasture and hayland plantings
- Stream bank protection
- Stream crossings
- Watering facility
- Barnyard runoff controls / Heavy use area protection (i.e. Animal concentration areas)
- Water (manure) storages / Manure stacking
- Milk house waste diversion
- Roof runoff management
- Precision feeding / Feed management

C. *Does the farm have a Nutrient Management Plan (NMP) or Manure Management Plan? Yes. Did this project change the way the farm handles animal manure? Please describe.* No.

D. *Are phosphorus levels in your soils rising to excessive levels [200 ppm of P] due to the application of manure generated on the farm? Please describe.* We have several fields that have very high phosphorus levels. Although we have not pushed any fields above the P-index, we are working with crop rotation and cover crops to limit levels from increasing in the future.

E. *Is manure applied in the winter months (generally December – February)? Is the manure applied in winter due to not enough storage or for other reasons such as timing, field conditions in spring, etc.?* Yes. Most solid (pen-pack) manure is applied in winter time to give an ample amount of time for degradation and natural incorporation into the soil. Liquid manure is occasionally applied if storage is getting full and ground conditions allow.

F. *Does the farm have a conservation plan or an agricultural erosion and sedimentation control plan? If yes, what are the key components?* Yes. The key components include crop rotation, cover crops, riparian buffer and no-till practices.

Conservation and Environmental Stewardship...continued

G. *If this project included new conservation or environmental changes, how did they impact farm profitability? Please describe.* No-till planting practices reduced fuel costs and equipment use on the farm. Cover crops created additional feed for animals.

H. *Can the farm quantify the environmental impact of the project? Please describe.* Manure analysis has shown a reduction in phosphorus after adjusting ration for less dietary phosphorus. Milk urea nitrogens (MUNs) are trending downward after reaching higher than desired levels.

I. *What is the most significant environmental/conservation improvement made on this operation within the last 5 years, and what improvement(s) did it result in?* Adopting no-till has been a significant improvement. We use less fuel and labor, conserve soil and water and build soil organic matter.

