

Economics behind NMPs:

- Balancing nutrient applications to cropped fields from both commercial fertilizer and manure applications to meet crop needs for optimum crop growth and production has many benefits.
- Properly accounting for the nutrients in manure applications can save on fertilizer costs. In the past agriculture producers have been applying commercial fertilizers based on crop needs in addition to manure applications. When the facts are that a manure application can in some cases be enough to meet the crop requirements. So applying both commercial fertilizer and manure applications can waste money, and can have a harmful effect on the environment from potential runoff carrying excess nutrients. This can cause serious water quality problems.
- Penn State did a study and found that about 75 percent of the original nutrients from feed and bedding remain in the manure, so each farm has great potential for recycling nutrients annually.
- Determining economic return also depends on soil tests. A low testing soil will have a more profitable return when applying nutrients versus adding additional nutrients to a high testing soil.
- Another cost savings approach to manure management is incorporating the manure. The liquid fraction of manure contains Urea. Which presents the same problem with urea from commercial fertilizer. Urea left exposed on the soil surface readily converts to ammonia gas which can be lost to volatilization. For example solid beef manure incorporated less than 12 hours after application loses only 5 percent of its nutrients versus no incorporation loses 40 percent of the nutrients. Not only is this money wasted, but it also has a higher risk of causing pollution problems.
- Other factors that influence the cost of manure management are loading, transporting and land applying. Each step can require its own specialized equipment and can vary with the different types of manure.
- Commercial applicators can be hired to spread manure. This will cut out the cost of purchasing land application equipment for the producer. Also it can save on time for the producer so they can tend to other farming duties and their animals. Instead of hauling manure because time equals money and time saved means money saved.

Advantages to a NMP for Farmers:

- Cost savings with proper nutrient applications
- Record keeping
- Understanding crop needs
- Soil tests
- Manure tests – Sampling kits provided by Nutrient Management Specialists
- Manure spreader calibrations – Calibrations provided by Nutrient Management Specialists
- Detailed maps and sensitive feature maps provided to farmers in the NMP plan

Why producers and Ag industries should care about NMPs:

- Water quality

- Protecting our water supply from run off and leaching
- Understanding the whole farm operation
- So we can start decreasing the over use of commercial fertilizers and decrease the over application of manure

What assistance is their for the producer for NMPs and BMPs:

- Nutrient Management Planning Specialist's
- BMP Challenge
- On farm nutrient management evaluation program with MDA, NRCS and Extension
- Web Soil Survey
- Feedlot Officers
- Informational websites – NRCS, Extension, MPCA, Soil and Water, Livestock and Poultry Environmental Learning Center, MDA
- EQIP sign up through NRCS