

Water Quality Enhancement Activity – WQL26 – Reduce the concentration of nutrients imported on farm



Enhancement Description

Grow at least 75% of feed for livestock on the farm and use manure from the livestock to supplement up to 50% of N, 90% of P and 90% K for crops grown on the farm.

Land Use Applicability

Cropland, Pastureland

Benefits

On livestock farms, when feed for livestock is imported on the farm and manure from the livestock is spread on the

farm, over time this can result in a buildup of nutrients on the farm.

This problem is made worse if the nutrient value of the manure is not accounted and additional fertilizer is applied to crops. By growing the majority of feed for livestock on the farm and properly accounting for the nutrients in the manure when applying it to crop land, better nutrient cycling is achieved. Nutrients are not concentrated on the farm and a more sustainable operation is possible.

Conditions Where Enhancement Applies

This enhancement applies to all crop or pasture land use acres.

Criteria

1. At least 75% of feed for livestock must be grown on the farm.
2. For crops grown on the farm, manure from the livestock must be used to supplement up to:
 - a. 50% of N
 - b. 90% of P
 - c. 90% of K

Adoption Requirements

This enhancement is considered adopted when both criteria above have been met.

Documentation Requirements

1. Total feed requirements for livestock,
2. Feed purchases from off farm,
3. Nutrient requirements for crops, and
4. Off farm nutrient purchases.



United States Department of Agriculture
Natural Resources Conservation Service

2013 Ranking Period 1

References

International Plant Nutrition Institute (IPNI). 2012. 4R Plant Nutrition – A Manual for Improving the Management of Plant Nutrition (North American Version). IPNI, Norcross, GA.

USDA-NRCS. 2000. National Engineering Handbook. Part 637, Chapter 2, Composting. Washington, D.C.

USDA-NRCS. 1992. National Engineering Handbook. Part 651, Agricultural Waste Management Field Handbook. Washington, D.C.

Water Quality Enhancement Activity – WQL26 – *Reduce the concentration of nutrients imported on farm*

Reference:

- **590 – Nutrient Management**

Nutrient application rates shall be consistent with University of Minnesota or contiguous land grant university recommendations.

- [University of Minnesota Fertilizer Recommendations for Agronomic Crops in Minnesota](#)
- [University of Minnesota—Nutrient Management of Commercial Fruit and Vegetable Crops in Minnesota](#)
- [University of Minnesota Commodity Crop Production Website](#)
- [Iowa State University—A General Guide for Crop Nutrient and Limestone Recommendations in Iowa](#)
- [South Dakota State University—Fertilizer Recommendations \(EC750 Sept. 2005\)](#)
- [North Dakota State University—North Dakota Fertilizer Recommendation Tables and Equations \(SF-882\)](#)
- [University of Wisconsin—Nutrient Application Guidelines for Field, Vegetable, and Fruit Crops in Wisconsin \(A2809\)](#)