

NUTRIENT MANAGEMENT



Nutrient Management

The objective of this practice is to apply the proper amount of nutrients at the proper time to achieve optimum yields and minimize the entry of nutrients into surface and groundwater supplies. Nutrient management can be applied to all lands where plant nutrients are applied.

Nutrient management uses soil analysis information and realistic yield goals as the basis for a field specific nutrient budget including nitrogen (N), phosphorus (P) and potassium (K). All sources of nutrients including fertilizer, manure, residual legume N, and manure history will included in the nutrient budget.

Maps and soil survey information will be used to delineate environmentally sensitive areas such as lakes, ponds, streams, wells and sinkhole. These areas will be treated in an environmentally sensitive way and may have designated setbacks.

Nutrient application rate will consistent with Penn State recommendations. All nutrients will be applied to the recommended rates. When manure or other organics are used as a nutrient source, recommended N rates may be applied except when the amount of P applied with the organics creates an environmental concern.

The Pennsylvania Phosphorus Index (P-Index) will be used as an environmental risk assessment tool when organics are used as a nutrient source or when nutrients are applied in areas with designated water quality impairments.

Timing of nutrient application will correspond as closely as practical with crop nutrient uptake. This is particularly important with N application. Calibrate manure application equipment and plan practical manure rates.

The nutrient management practice will include guidance for fall and winter nutrient application.

Records will be kept of nutrient applications in accordance with the plan.

In summary:

- Apply nutrients according to soil test recommendations for realistic yield goals
- Analyze stored manure for nutrients
- Use a map to identify soils, fields and sensitive areas with setbacks
- include the crop rotation
- develop a nutrient budget for N, P & K including nutrient credits, all nutrient applications, and P-Index results when required
- Record keeping