Water Sample Collection and Testing

Made possible by:

THE ZEA MAYS FOUNDATION

This program was designed to engage farmers in the nutrient and water quality issues facing agriculture by providing information on possible nutrient losses from their production operations. By comparing their water testing results to other known concentrations and research results, farmers can begin to understand their own impact on water quality and consider management practices which may reduce their losses. These results are simply a snapshot in time of ambient nutrient levels in water collected from tile drainage, surface runoff or nearby streams. Nutrient levels in runoff water can vary greatly depending on the time of year, temperature, rainfall and in-field practices. A measurement of flow (the volume of water leaving a site) would also be needed to determine the total nutrient loading into a waterbody and a measurement of acreage being drained would be needed to know the pounds per acre leaving the field. These test results are just a starting point for learning and for discussion of the practices available for farmers to reduce their nutrient losses.

Sample Collection Instructions:

- Sample containers should be clean and free of any residual chemicals or detergents.
- Water samples need to be at least 8 ounces.
- Samples should be taken as close to the testing time as possible (preferably within 48hrs).
- Samples should be kept refrigerated if not being tested immediately.
- An estimate of flow will allow additional calculations (load in lbs/day)– simply record the seconds it takes to fill up a 5 gallon bucket (this would only apply to tile drain samples).
- With the load calculation and an estimate of acres being drained, the lbs/acre/day can also be determined.