

The Future of Phosphorus Use in Michigan

Gregory T. Lyman

Department of Crop and Soil Sciences

Have you checked your phosphorus level today?? We may be headed to a time when you will be asked to check the phosphorus levels in your soils much like you would check the oil in your mowers. Phosphorus is one of the major elements required for successful turf growth and a routine component of virtually all turf fertilizer products. We are now enmeshed in a public policy debate about the use of phosphorus as fertilizer products and its influence on degrading water quality. On one end of the spectrum we have those that are convinced that turf applied phosphorus has a direct and deleterious effect on surface water bodies and that the use and sale of fertilizers containing phosphorus should be banned throughout the state. On the other end of the spectrum there are those that believe that prudent phosphorus use poses no threat to water quality and that elimination of use will not lead to reduced phosphorus loading in our surface water.

The concern about phosphorus use has inspired public debate and prompted legislative efforts throughout the Great Lakes region. Minnesota authorized a state-wide phosphorus use ban approximately 18 months ago. Local ordinances are currently being written and authorized here in Michigan and in Wisconsin. Locales that have current or pending legislation in Michigan are Commerce Township, Hamburg Township, Fenton Township, West Bloomfield Township and the City of E. Grand Rapids.

The fate of phosphorus in a turf system, current research and the potential impacts on the turf industry will be discussed at this field day stop. The discussion will include the following topics –

- What is a TMDL and who cares?
- What does the research say about the fate of phosphorus?
- What's the role of soil testing?
- What about seed emergence and sand-based growing systems?
- What's a low phosphorus fertilizer?
- What's a low phosphorus fertility program?
- Can you be successful and profitable with a low phosphorus approach?
- What about state-wide pre-emption for local ordinances?
- What is the industries role in this process?