

## **Options for Preventing Nutrient Enrichment in Lake St. Clair**

### **Presenters:**

*Dr. John Lehman, University of Michigan College of Literature, Science, and Arts*

*Cory Lancaster, CDM*

*Lillian Dean, Southeastern Oakland County Water Authority*

*Anne Vaara, Clinton River Watershed Council*

Point Source and Nonpoint Source Phosphorous loading to Lake St. Clair from the Clinton River seem to be about equal from April to October. But one important caveat is that water quality data are not available for the rivers from December to March, when runoff is the greatest. It is possible that nonpoint source TP is underestimated. Prudent management calls for aggressive abatement of the source that is the most cost effective source to address.

There are numerous options for reducing P discharge from wastewater treatment plants, with advantages and disadvantages to each approach.

Education and outreach to homeowners can help reduce nutrient loadings from lawns. Soil erosion carries phosphorous into waterways, so it is important to try to keep soil and other material in lawn. A healthy lawn is great for water quality. There are several outreach opportunities to teach proper lawn practices, including seminars, websites, and point of sale education. Many feel that healthy lawns and appropriate application (timing, quantity) is more important than complete ban of P.

Ordinances are another means to address nutrient reduction. An example of this is the West Bloomfield Township ordinance on fertilizer. Adopted in 1991, it was the first community in MI to adopt a fertilizer ordinance, geared towards commercial applicators and golf courses, homeowners were exempt. It was then amended in 2001 to include homeowners, along with some other changes. It is one tool that can be used, but adequate research, stakeholder involvement, and evaluation benefits is important.

### **Next Steps:**

A source allocation model is needed; we do not have enough information about sources to target control efforts.