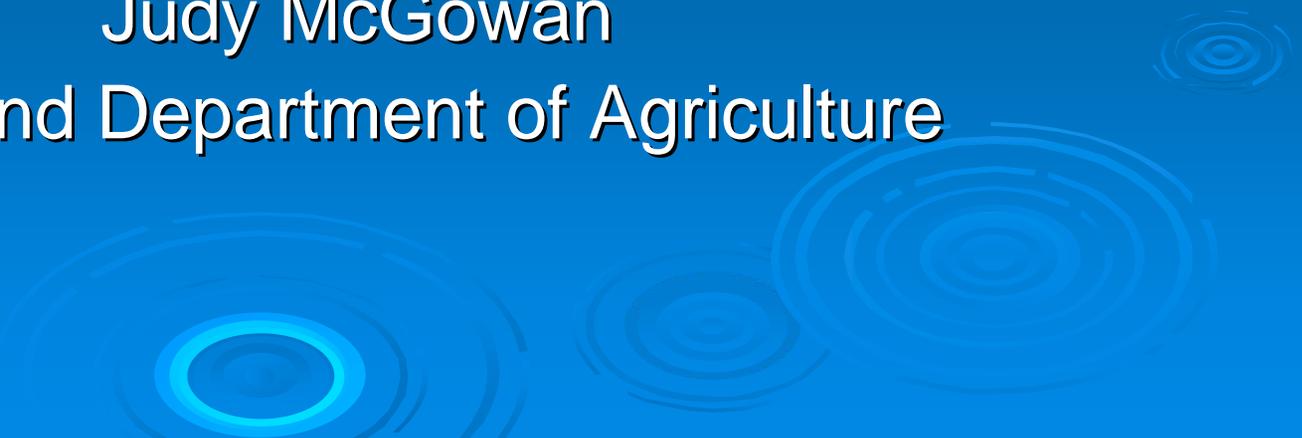


Maryland's Urban Nutrient Management Program

November 16, 2005

Judy McGowan

Maryland Department of Agriculture



How Did We Get Here?

- Mid '70s - Bay watermen complain to state legislature about the declining health of Bay
- 1982 – 5 year EPA study concludes that declining Bay health is largely a result of excess nutrients



How Did We Get Here?

- 1983 - Chesapeake Bay Agreement signed
 - Governors of Maryland, PA, & VA, mayor of the District of Columbia, Administrator of the EPA, and the Chairman of the Chesapeake Bay Commission.
- 

How Did We Get Here?

- Parties committed to reducing the amount of N and P entering the bay by 40% by 2000.

Maryland Nutrient Management Program

- 1993 – Maryland NM Program began
- Voluntary plans for farmers

1996 – EPA lists
Chesapeake Bay as
“impaired” waterway
-mandated cleanup



1996-1997 – Physteria outbreaks on Maryland's Eastern Shore



1998 – Water Quality Improvement Act

- Mandated Nutrient Management Plans for Farmers
 - Regulated Commercial Fertilizer Applicators
- 

Who is Covered?

- Anyone who for-hire applies fertilizer to 10 or more acres, cumulatively, in Maryland

or

- Anyone who for-hire applies fertilizer to any amount of State land

Who is Covered?

- Lawn Care Companies
- Landscapers
- Golf Course Superintendents
- Grounds Managers
- State Highway Administration
- Other Commercial Applicators



Requirements

- Take soil tests
- Apply fertilizer in accordance with the recommendations of the University of Maryland Cooperative Extension
- Keep records of fertilizer use
- Make records available for review by MDA

Records Reviews

- Began in July 2002
- 185 Reviewed
- 342 Not Reviewed
 - fertilize < 10 A
 - subcontract fertilization



Evaluation Factors

- Soil tests
- Record-keeping
- N application rate
- Annual P_2O_5 application rate

Compliance Level Based on 185 Site Reviews



Common Problems

1. Soil testing not complete
2. Excessive P_2O_5 application

Review of BMP's

- Liming & effect of pH
- Timing of nutrient applications
- Mowing height
- Use of slow release N sources
- Calibration
- Educational opportunities



Civil Penalties

- Up to \$ 1000 for first offense
- Maximum of \$ 10,000 for the same set of facts & circumstances

No fines have been issued to date

Current focus is on education



Training

- Nutrient Management for Turfgrass Professionals
- Nutrient Management for Grounds Managers



Training

➤ Practical Training for Turfgrass Technicians

1/2 day class aimed at employees translated into Spanish



Urban Nutrient Management Workgroup

- **MDA, University of MD Cooperative Extension, industry, local governments, Tributary Teams, and concerned citizens**
- **provide counsel to the state**
- **Share information**
- **Provide a forum for exploration and discussion of nutrient concerns**
- **Support MDA & MCE in nutrient management training.**

Challenges

Difficult to identify who is regulated

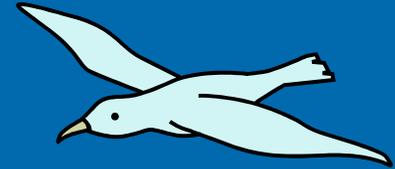
No license required to apply fertilizer

Recommendations are based on soil test results from the MCE soil testing lab, which is closed



On the Bright Side

- Fertilizer applicators, in general, have not been resistant.
- Manufacturers are producing more high-quality, and low P_2O_5 fertilizers.



THANK YOU!

