An Overview

2009 Florida Master Gardener Conference
Ocala, Florida

Don Rainey
University of Florida/IFAS Extension
Florida-Friendly Landscaping™ Program
GI-BMP Statewide Program Coordinator
290 Million Cubic Miles of Water

The Hydrologic Cycle

Florida-Friendly Landscaping™
Hydrologic Cycle

• The paradoxical reality is that while we are never going to exhaust our water supply, we cannot increase it – we only recycle it.

• PROBLEM: We are using water faster than natural systems can keep up with.
Global Water Reserves

- Seawater = 96.5%
- Groundwater = 1.7%
- Fresh water = 2.5%
- Lakes = 0.013%
- Swamps = 0.0008%
- Rivers = 0.0002%
- Glaciers = 1.74%
- Rainfall = 0.008%
Peninsular Florida Hydrologic Divide

- Runs from Cedar Key to New Smyrna Beach
- South of the hydrologic divide, Florida is an island as far as fresh water is concerned: it totally depends on rainfall for its fresh water, including ground water stored and recharged in aquifers.
- North of the hydrologic divide, Florida receives water from outside the state.

Source: http://www.amyhremleyfoundation.org/php/education/impacts/NaturalCycles/Hydrologic.php
Peninsular Florida Hydrologic Divide
Water Use in Florida

• Between 1970 and 1995 there was 135% increase in groundwater withdrawals
• Nearly 30% of the water is withdrawn April through June.
• Florida use 8.2 billion gallons/day.
• Residential irrigation systems account for more than 1 billion gallons/day of water.
• Florida consumes more fresh water than any other state east of the Mississippi River.
So What is This All About?
In order to manage water, one must manage the land. In order to manage the land, one must manage the water.
What is the GIBMP Program?

Green Industry Best Management Practices

It is a science-based educational program that provides information and guidance on landscape best management practices to minimize nonpoint source pollution in order to conserve and protect Florida’s water resources and environment.
"Best management practice" means a practice or combination of practices determined by the coordinating agencies, based on research, field-testing, and expert review, to be the most effective and practicable on-location means, including economic and technological considerations, for improving water quality in agricultural and urban discharges.
Another Way of Thinking About It

BMPs are the best ideas of the best companies, coupled with science, and applied with judgment and common sense.
Green Industries BMP Training Program

- Statewide program, began in 2003
- Cooperative effort
  - FDEP, DACS, UF/IFAS and Industry
- Required by some local governments
- New manual & name, 2008
New Name

GIBMP Components

Green Industries BMP Program components

- GI-BMP Manual
- GI-BMP Training
- GI-BMP Certificate
- GI-BMP Instructor Training
Best Management Practices

- Developed to reduce NPSP
- Designed for urban areas
- Structural and non-structural

Florida-Friendly Landscaping™
Non-point Source Pollution

Pollution that comes from diverse sources that CAN’T be “pointed” at
Florida’s Urban Growth
What is wrong with this picture?
1. Runoff
2. Leaching
Controlling Runoff
Direct Effects of Incorrect Maintenance Practices on our water resources

- May encourage excessive plant and algal growth and lower oxygen levels
- May harm aquatic life
- Erosion
More Nonpoint Source Pollution Effects?
Green Industries BMP Training Program

Much more than just fertilizer education!

Florida-Friendly Landscaping™
Objectives for BMPs

1. Reduce off-site transport of sediment, nutrients, and pesticides through surface water or ground water
2. Use appropriate site design and plant selection
3. Use appropriate rates and methods of applying fertilizer and irrigation

Florida-Friendly Landscaping™
4. Use Integrated Pest Management (IPM) to minimize pests and apply chemicals only when appropriate.
What are the laws that affect the need for BMPs in the landscape Industry?
Local Ordinances
as of 2008

• St. Johns
• Wellington
• Windermere
• Naples
• Sanibel
• Sarasota Co.
• City of Sarasota

• Northport
• Charlotte Co.
• Marion Co.
• Lee Co.
• Jacksonville
• Bonita Springs
• Marco Island
Limited Commercial Fertilizer Applicator Certificate (LCFAC)

- Issued by FDACS - Chapter 482
- Required by January 1, 2014
- GI-BMP training certificate pre-requisite [approved equivalent]
- $25 fee, renewal every 4 years
- 4 hours of CEUs required for renewal
- Not required if application is only to property owed by you, your firm, or your employer- “Institutional Applicator”
- LCFAC holders are exempt from further local testing
How Can I Be an Instructor?

• Become GIBMP Certified (≥ 90%)
• Let your Extension Agent/Coordinator Know
• Co-Teach two class with a experienced agent or coordinator
• Pass new exit exam (coming soon)
Questions?