

Implement Best Management Practices on Golf Courses near the Lake Worth Lagoon

ACTION:

Encourage Golf Courses located near the Lake Worth Lagoon (LWL) to implement Best Management Practices (BMPs) to minimize pollution and reduce stormwater runoff.

BACKGROUND:

A typical 18-hole golf course requires three to four tons of various germicides, herbicides, and pesticides every year to keep the green and fairways healthy, to combat weeds, and kill insects. The nitrogen and phosphorus in the fertilizers mix with rainwater and eventually flow via runoff to the nearest waterbody. The high nutrient content in the water can stimulate the growth of algae. There are 13 golf courses adjacent or close to the LWL. Engaging these golf courses in practicing BMPs is one the goals of this action plan.

In January 2007, Florida Department of Environmental Protection (FDEP), in collaboration with the Florida Golf Course Superintendents Association, the University of Florida and many private sector partners, released an updated edition of *Best Management Practices for the Enhancement of Environmental Quality on Florida Golf Courses*. The manual aims to develop guidelines for minimizing pollution and conserving Florida's water resources. It provides the superintendent or golf course operator with sound management strategies to maintain the golf course in a positive manner with respect to environmental protection, water quality protection, and conservation. It is also intended to provide elected officials, regulators, developers, and others with an overview of golf course management practices and how they relate to environmental issues. A comprehensive program of BMPs should include a combination of components that are properly selected, designed, operated, and maintained. BMP options should be screened for feasibility based on the following factors:

- Physical and technical limitations,
- Operational and management limitations,
- Pollutant reduction/water conservation effects,
- Profitability/cost considerations,
- Other benefits or disadvantages, and
- Public acceptance.

While no progress has been made since 2008, there is a renewed interest by stakeholders to work on some of the following steps.

STRATEGY:

STEP 1 Provide Golf Courses along the LWL with the BMP manual developed by FDEP and encourage them to adopt it and implement the following BMPs' priorities:

1. To correct any identified existing water quality/quantity problems.
2. To minimize water quality/quantity problems resulting from land use and operations.
3. To improve the effectiveness of existing BMPs implemented.
4. To seek additional improvement of BMPs based on new, quantifiable information.

Responsible parties: LWL Outreach Advisory Committee (OAC)

STEP 2 Monitor the environmental effects of implemented BMPs along the LWL.

Responsible parties: Participating Golf Courses with FDEP assistance

STEP 3 Develop new BMPs or revise existing implemented BMPs to further improve water quality, and reduce stormwater runoff to the lagoon.

Responsible parties: Participating Golf Courses with FDEP assistance

SCHEDULE:

Step 1 will be implemented during 2008. Step 2 will be initiated after BMPs implementation according to FDEP guidelines. Step 3 will be initiated after monitoring results are available.

COST:

Initial costs would be minimal since this manual is available on-line and can be duplicated on CD. Since most golf courses already have routine maintenance programs, this action could help to direct expenditures to areas where specific problems have been identified, and seek funding for maintenance and upgrades to these systems. Additionally, an aggressive preventive maintenance program may prove most cost-effective in the long run.

REGULATORY NEEDS:

None anticipated. In the event that these BMPs are adopted by rule, as provided by Subsection 403.067(7)(c)1, Florida Statutes (F.S.), certain protection from liabilities may be established through the voluntary implementation of BMPs that have been verified by FDEP to be effective in protecting water quality.

FUNDING:

To be determined.

EXPECTED BENEFITS:

Improved BMP's and pollution prevention standards will reduce the amount of fertilizer, pesticide, and nutrients being introduced into the LWL through stormwater runoff and provide increased water quality conditions.

POTENTIAL PARTNERS AND FUNDING SOURCES:

FDEP, IFAS, Environmental Education Centers, Lagoon Keepers

*Listed Agencies have not committed funds and are subject to Agencies' budget approvals