

Introduction

Golf has long been one of New Jersey's most popular recreational activities. The state has new golf courses opening or expanding every year, and demand still exceeds supply. As the number of golfers and courses continue to grow, so does the need for prudent environmental management. Golf courses are often constructed near streams or lakes for aesthetic reasons and to meet irrigation needs. This close proximity to sensitive environmental areas means that course construction and operation can dramatically impact wildlife and aquatic resources.

Construction soil disturbance, changes in plant communities, irrigation water withdrawals, pesticide and fertilizer use, maintenance of equipment and other routine golf course procedures can harm soil, plants, water, and organisms if done without proper consideration.

Responsible environmental management employing a series of Best Management Practices (BMPs) provides numerous advantages not only to the environment and local public, but also to golfers, golf course superintendents, and owners.

Specifically, it:

- creates healthier turf;
- reduces chemical use;
- lowers operating costs;
- increases course aesthetics;
- protects natural resources;
- better facilitate overall course management by establishing clear objectives and responsible parties.

In contrast, poor environmental practices can mean:

- higher construction costs;
- higher operations costs;
- wildlife habitat fragmentation and loss;
- negative impacts on soil, water, air, and plant resources;
- increased golfer and worker exposure to pesticides
- a less positive experience for golfers

Many superintendents already incorporate good stewardship practices into their daily operations through Integrated Pest Management (IPM). However, IPM makes only a good first step

toward environmentally sound course management. There is much more to consider.

The primary concept to grasp is that *each golf course is part of a unique ecosystem*, consisting of large and small communities of organisms that interact constantly with the soil, water, plant, and air resources of the individual course. In this way, it is clear that no two golf courses are alike, and they should be managed as individual natural systems that relate in a positive way with the surrounding ecosystems.

This document was developed by the New Jersey Department of Environmental Protection, (NJDEP) Division of Watershed Management (DWM) to provide a sound basis for environmentally conscious golf course development and operation to course developers, owners, superintendents, and other responsible individuals.