

## WORKING WITH THE MICHIGAN DEPARTMENT OF NATURAL RESOURCES

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Thank you for the opportunity to speak to you today. I asked that the Department of Natural Resources be represented in this conference. We have found ourselves increasingly in conflict with golf course owners and developers, and under growing pressure by the public for tighter regulations of golf course development. It is my perception that this conflict and pressure are unnecessary. With relatively minor changes in management practices and development plans, I believe that you can avoid the potentially difficult times that lay ahead for the golf course industry. The focus of my discussion will be "tips" on how to work with the Department and suggestions on ways to increase public confidence in the management of golf courses. Chuck Wolverton and Tom Rohrer will follow up with a detailed explanation of regulatory issues.

Let me begin by assuring you that the Department of Natural Resources recognizes the importance of golf to the tourism and recreational industry of this state. We are involved in not only regulating the management and development of golf courses, but also assisting in financing the development of public courses. The Michigan Natural Resources Trust Fund and the Protecting Michigan's Future Bond Program, administered by the Department, can be, and have been, utilized to assist communities in the purchase and development of golf courses. The Department also administers the Farmland and Open Space Act which has benefitted some golf courses by establishing their property taxes as if the land was undeveloped.

But, as I said, the DNR is coming under increasing pressure by the public to more stringently regulate the development and management of golf courses. I think this pressure is a result of a perception that golf course chemicals and fertilizers are polluting our waters and that golf course developers have a disregard for unique and fragile resources. Let me emphasize it is largely, I believe, a perception problem but one that must not be ignored by the golfing industry. While this concern appears to be growing, I have seen no corresponding response from the golf course industry. Permit problems with the DNR pale in comparison to alleviating the public concerns about your golf course operation or your plans for expansion.

So, allow me to spend a few minutes giving you some "tips" on working with the DNR and some advice on overcoming your potential problems. First, I want to outline the commitments the DNR has made to provide information which will assist golf course developers and managers in avoiding environmental problems.

The DNR promised to produce a permit application guide for use by golf course developers. We have provided this guide to MSU for publishing in the Conference proceedings. Chuck Wolverton will be discussing this guide in this talk. The guide will provide information needed to complete applications for construction of a golf course. By August we have committed to providing information on dealing with water quality issues and guidelines for the use of



chemicals.

What is needed in addition to these efforts is a compilation of currently available research and turf management information to develop a Best Management Practices Manual for golf courses. We believe that golf course owners and developers would be well served to collectively invest in the development of such a manual and the Department is prepared to assist in technical review.

#### Some tips for working with the Department

First, Wetlands: While the information in the permit manual will be very useful to avoid development permit problems, the very best advice that I can give you is to avoid wetlands completely. The law provides that wetlands can only be filled, dredged, or drained when no prudent and feasible alternative exists and where unacceptable impacts to aquatic resources will not occur. In very few cases will you be able to meet these tests. If you do meet the test, you will be required to "mitigate" or replace the lost wetlands. The cost of replacing the lost wetlands, in many cases, will be more expensive than avoiding them in the first place. There are many excellent examples where wetlands have been integrated into golf course designs adding character to the course thereby eliminating the need for permits.

If your development project requires state permits, then the DNR, by law, must insure that certain standards are met--including that the project will cause no pollution, impairment, or destruction of air, land, water, or related natural resources.

So, the first and most important rule is to avoid construction in regulated areas like wetlands.

Second, construct adequate buffers around lakes and streams. Avoid creating runoff directly into a river and stream. Design fairways so they drain into fairways depressions or into a wetland for treatment.

Now, let me turn for a second to what I think you can do to address the perceptual problem that golf courses are contributing to pollution.

While it is apparent that golf courses, at least in several areas of the state, have organized to promote and market their facilities, there has been no corresponding effort to create an organization which can disseminate information on the standards for environmental management and inform the industry on emerging environmental and other regulatory issues. I believe it is imperative that golf course owners organize themselves to do several things:

1. Develop guidelines for best management practices for use of chemicals. Move the industry toward using chemicals when the conditions warrant not because it is "the first Monday of the month." Tailor nutrient applications that meet the needs of turfgrasses and do not exceed the retentation capacity of the soils. Choose chemicals that meet the control levels needed for pest management, that do not leave residues that are persistent and biomagnify.



2. Begin to build the necessary documentation as an industry that your chemical and fertilizer use is not polluting either ground or surface waters. We think the research has been done to demonstrate that golf courses can be managed without creating problems--it needs to be organized and disseminated.
3. Move toward the application rates and types of chemicals which are non-mobile and quickly biodegradable. Make these chemicals the standard for the industry and minimize their use through integrated pest management programs.
4. Begin to educate your users to expect and accept different conditions. Roughs do not have to be kept green and lush. The course does not have to be maintained so that balls are never lost.
5. Anticipate that water use, both surface and groundwater, is going to be an emerging issue that needs to be addressed. The golf course industry should expect that your use of water will be of lower priority when measured against other existing traditional uses of water. Reduce your courses dependence on water by moving toward drought-resistant grasses, and by designing your course to take advantage of the moisture holding capacity of the soils.
6. In areas of the state heavily dependent on golf tourism, begin regular dialogue with the community. The committee, like the one created in northeast lower Michigan, will help to reduce conflicts and concerns. Begin this dialogue before the controversy arises.

Golf courses are almost always constructed at sites that were previously undeveloped. Whether in urban or rural areas, there will always be those people who oppose a golf course development because it will change historical land use patterns in their area. The environmental concerns often become the hook for State or even Federal involvement in what otherwise would be a local land use decision. Protection of wetlands, ground and surface water, flood plains, and habitat for threatened and endangered species are issues that must be addressed in any development--the sooner they are satisfactorily addressed in the planning process, the less likely they are to become the hook for those who are really opposed to the change in land use.

Finally, there are no guarantees that if you follow all the right steps the Department will issue a permit--the permits we issue are not like local building permits, electrical codes, etc. It is not just a matter of conforming to standards--it requires, particularly in the case of wetlands, that a demonstration be made that the project has met all the criteria for an exception to a State and Federal law that protects this valuable natural resource from filling, dredging, or draining. Again, my best advice for dealing with wetlands in golf course construction is to avoid them if at all possible.

Golf courses provide valuable open space in urban settings and outdoor recreation opportunities. In rural and northern Michigan, they provide an essential element of our tourist industry with a low intensity land use that can complement other natural resource values.



On a final note, the best defense is often an offense. In the case of golf course design, and operation there are actions that can be taken to enhance the quality of life and add permanent environmental protection.

Too often golf courses have been designed and managed as rather sterile environments consisting of well manicured, exotic grasses that require intensive chemical treatment to control diseases, and animal pests. The water hazards, sand traps, trees, shrubs and roughs often have an artificial look that is obviously the result of efforts to either make the playing of the game easier in some cases or by adding barriers to increase the difficulty.

Wildlife management is thought by too many golf course operations only in terms of eliminating pests such as moles, skunks, gophers, ground squirrels, mice and even Canada Geese. Designing and operating a golf course to also control pests eliminates the habitat and food supply for more desirable wildlife.

Conversely, you can design and operate golf courses than enhance the habitat for certain wildlife species which enrich the out-of-doors, recreation experience most golfers are seeking. Even in urban settings, habitat for a broad range of birds and mammals can be provided that are not only attractive and interesting to your consumers, but also help control unwanted pests by competing for food and space or by directly preying upon them.

A few well designed and properly located nest boxes can attract blue birds almost anywhere in lower Michigan. Song birds of many varieties uncommon in adjacent subdivisions, may find golf courses in urban areas particularly attractive. If you are fortunate enough to attract an owl, or hawk, to your golf course the need to artificially control rodent pests may be reduced substantially. While it may be difficult to attract certain desirable mammals in truly urban courses, suburban courses and those in rural and northern Michigan have the opportunity to create habitat for both game and non-game species. The northern Michigan tourist golfer is often just as excited about the white-tailed deer, bobcat or elk they observed in the rough along the fairway of the seventh hole as they are the birdie they scored on the 18th.

Water hazards are often created on golf courses when none exist naturally. Rather than designing them with no natural buffer and manicured turf to the edges resulting in over-enriched, bluegreen, algae ponds, they can be natural settings that provide nesting, feeding, and resting areas for migrating waterfowl including ducks, geese, and shorebirds.

Where practical and compatible, golf courses can provide added recreational benefits particularly during the non-golfing seasons for late fall, winter and early spring for hunters, trappers, birdwatcher, hikers and cross country skiers. Encouraging use by non-golfers may well expand the community support for a golf course.

The Department of Natural Resources cannot require the creation or maintenance of wildlife habitat except in rare instances where it is in mitigation for the destruction of a protected resource like wetlands. However, I believe it is in both the short term and long term interest of golf course owners and managers to design and operate with an integrated wildlife management plan, as well as an integrated pest management plan. By doing so

the golf course industry may turn its critics into its champions.

In summary, avoid disturbing wetlands in the design and construction of your courses, take the initiative to develop a manual for best management practices and finally, go on the offense by creating wildlife habitat that will benefit your operation and visibly demonstrate to the public the positive contribution golf courses can make in preserving and enhancing environmental values.