MICHIGAN TURFGRASS ENVIRONMENTAL STEWARDSHIP PROGRAM AND WATER ISSUES UPDATE Debbie Swartz

The Michigan Turfgrass Environmental Stewardship Program (MTESP) provides golf course superintendents with information and technical assistance to advance compliance and environmental protection on golf properties. To date, 230 courses are participating in the program and of these, 51 are certified. All courses are encouraged to become involved with the program by attending a stewardship workshop. Courses that achieve certification status are recognized by MSU, state agencies and the golf industry.

One of the growing environmental issues in Michigan is water. This year the Michigan Department of Environmental Quality (MDEQ) changed the Water Use Reporting requirements and asked golf courses to identify the location of all irrigation wells (not drinking water wells) by using a Global Positioning System. Additionally, courses were required to provide a static water level measurement from the primary irrigation well. If the golf course had more than one irrigation well and water was withdrawn from a glacial till and bedrock aquifer, a static water level measurement was required from each aquifer system. Also, the water use reporting fee was increased from \$50.00 to \$100.00.

As of July 1, 2004, Act 177 of the Public Acts of 2003 went into effect for the entire state. Act 177 addresses groundwater withdrawal disputes. It allows small quantity well owners to file complaints with the MDEQ if their wells fail to furnish their normal water supply and there is reason to believe it is due to a high capacity well. A high capacity well is one that is capable of pumping 100,000 gallons of groundwater per day which is equivalent to 70 gallons per minute or greater. A complaint form and additional information can be obtained by calling the toll-free Groundwater Withdrawal Hotline at 1-866-709-0019.

The MDEQ will investigate complaints and make a diligent effort to resolve groundwater withdrawal disputes. If the MDEQ fails to resolve the dispute, they will issue and order to the responsible party, declaring a "groundwater dispute". A groundwater dispute order: 1) will require the immediate temporary provision of an adequate supply of potable water to the complainant, 2) can restrict the amount of water that can be withdrawn from the high capacity well, and 3) may require reasonable and timely compensation by the high capacity well owner for costs incurred by the complainant up to 30 days before the complaint was filed. The state cannot require a high capacity well owner to reimburse a complainant whose well does not comply with the well code that was in effect when the well was constructed.

Act 177 is aimed at preventing disputes by discouraging high capacity well owners from operating their wells in a manner that adversely impacts neighboring wells.

New legislation designed to regulate water usage was announced this spring with the introduction of the Water Legacy Act by Senator Liz Brater and Representative Chris Kolb (Senate Bill 1087 and House Bill 5634). The following is a summary of the key provisions of this proposed legislation:

- Amends Part 327, Great Lakes Preservation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA).
- All new or increased withdrawals from surface water or groundwater greater than 2 million gallons per day or greater than 100 million gallons per year would be required to get a permit.
- Effective January 1, 2010, all new or increased withdrawals from surface water or groundwater greater than 100,000 gallons per day would be required to get a permit.
- A permit is good for a term of 20 years.
- A permit is freely transferable to a new owner/operator of the withdrawal (new owner/operator must inform Department of Environmental Quality that it is the new permittee).
- A permit application would include following information:
 - (a) The current operating capacity of the withdrawal, if the proposed increase requires the expansion of an existing system.
 - (b) The total new or increased operating capacity of the withdrawal.
 - (c) The place and source of the proposed withdrawal.
 - (d) The location of any discharge or return flow.
 - (e) The location and purpose of the proposed water use(s).
 - (f) The estimated withdrawal, including daily, monthly, seasonal and annual mean and peak volumes of withdrawals.
 - (g) The estimated consumptive use from the withdrawal including daily, monthly, annual mean and peak volumes and rates of consumptive use.
 - (h) The anticipated effects, if any, that the withdrawal will have on existing uses of water resources and related land uses within the Great Lakes basin.
 - (i) A list of all federal, state, and local approvals, permits, licenses and other authorizations required for any proposed construction.

- (j) A description of alternate sources or other ways the applicant's need for water may be satisfied if the application is denied or modified.
- (k) A description of the environmentally sound and economically feasible water conservation measures the applicant will implement. For withdrawals subject to section 32712b(2), this should include a water conservation plan and status of implementation.
- (1) For withdrawals subject to section 32712b(2), a description of proposed improvement(s).
- (m) All adjacent property owners have received written notification of the proposed withdrawal.
- Conservation measures are defined as: any beneficial reduction in water loss, waste, or use accomplished by the implementation of water management practices and water-efficiency measures. Water management practices and water efficiency measures must be economically feasible based on a cost-benefit analysis that includes avoided environmental and economic costs.
- After January 1, 2009, all owner/operators not subject to permitting with new or increased withdrawals from surface water or groundwater greater than 2 million gallons per day or greater than 100 million gallons per year are required to submit a five-year water management and conservation plan.