WISCONSIN SOILS REPORT



New DNR Water Conservation Rule May Affect You Next Season

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X*i*th its ample groundwater resources and proximity to two of the largest freshwater lakes in the world, Wisconsin has more freshwater than just about any other place on earth. That status has led other less fortunate states to consider the feasibility of siphoning water from the Great Lakes. The Great Lakes Compact, agreed upon by local government units and signed into law by President Bush in 2008, will prevent states, provinces, or private companies from selling and transporting water out of the basin. The Compact also requires state governments to develop water conservation regulations to conserve and protect water resources with in the Great Lakes Basin. These regulations are required to be in place by the end of 2010, which means the normally slow rule-making process is beingfast-tracked.

The Wisconsin DNR has proposed a water conservation and water use efficiency rule (NR 852) that will be applied to water users within the Great Lakes Basin (Fig. 1) with high capacity wells¹ that have new or increased withdrawals over the current baseline level. Water users within the basin should have received a letter from DNR in late 2008 specifying the baseline level. As I understand, the baseline was based on current pumping capacity, not historical water use. Therefore, unless the pumping capacity is increased (i.e. new well, or new pump), exceeding the baseline should be difficult.

¹ A high capacity well is defined as a well that withdraws averages 100,000 gallons per day in any rolling 30 day period (roughly 3,000,000 gallons per month).



Figure 1. Map of the Great Lakes Basin (shaded in yellow). Full map can be found at: http://dnr.wi.gov/org/water/dwg/greatlakes/images/GLB_Map.jpg

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NR 852 is the rule that will specify new regulations related to water use; the rule is in draft form right now, and based on the initial meetings I expect major changes to be made. However, rather than quote exact figures that are likely to change, I will describe some of the general things that you can expect when the final version appears later this year.

For new and increased withdrawals within the Great Lakes Basin, a user would be required to conduct a water audit which establishes the efficiency of the irrigation system and checks for leaks and other inefficiencies. From this information, a water conservation plan would be developed and submitted to DNR. The conservation plan will describe the results of the audit, the current water use level, the water conservation measures already in place, the feasibility of implementation of other water conservation measures, an implementation strategy for feasible water conservation measures, and a monitoring plan to assess the effectiveness of the newly implemented practices. The DNR has developed a tentative list of conservation and efficiency measures. Some examples of the measures may include things like: using irrigation scheduling programs, following turf maintenance practices that conserve water (i.e. mowing higher), decreasing irrigated areas, identifying areas for re-use of water (i.e. stormwater detention), installing rainfall shut-off devices, replacing toilets and fixtures, upgrading the irrigation system or system components, and choosing lower water using grasses or plants. These will not be mandatory, but as mentioned above, the DNR will require a feasibility study for some of the options resulting in a report on the environmental and economic tradeoffs. If they are determined to be economically feasible and environmentally sound, they need to be implemented. Obviously, "economically feasible" is a tricky word. However, a second, much simpler route to compliance is available: reduce water use by 10% over a five-year period. If this route is chosen, the feasibly studies of the CEMs can be skipped.

Like NR-151, this rule is complicated and many unanswered questions remain. However, I am heartened by the process so far. The DNR met with stakeholders twice in March and listened intently to the comments of the WGCSA (represented by Colin Seaberg), irrigation contractors, a representative from the Wisconsin Green Industry Federation, myself, and other university specialists. I have faith that the final rules will be reasonable and UW-Extension will work hard to make the compliance process as transparent and painless as possible for those affected. Until the final rule is in place, there is not much that can be done, in the meantime feel free to contact me with questions or concerns.

ELIMINATE GUESSWORK WHEN SPRING FEEDING

S pring fertilization varies greatly on a number of factors. Cultural practices performed, soil amendments made, irrigation and drainage upgrades, fertilizers applied, and what happened last fall plays a significant role with this season's success. However, having a sound fertility program will provide you with your best chance of success for the upcoming season.

Typically, spring applications are applied after the early flush of shoot growth has occurred, but predicting spring weather can

be a challenge when it comes to soil and air temperature, and precipitation. That's why choosing a fertilizer that performs in cool climates is so vital.

The nitrogen applied with UMAXX, a top performer in cool weather, is plant available as soon as watering in occurs. In addition, what the plant does not immediately use will be held onto the soil colloid as a reserve for future use.



John Meyer Regional Manager AGROTAIN International, LLC

This is a drastic change from other fertilizers.

Coated products are a great example of fertilizers that don't offer immediate plant nutrition and are subject to leaching once the protective coating breaks down.

Still other products rely on a process called mineralization, depending on soil microbes to break down nitrogen. Whereas soil microbes aren't fully active until the soil temperature reaches 55 degrees – which might not happen until late spring depending on the region – UMAXX begins working immediately and is not dependent on soil temperature for nitrogen release.

Although fine-tuning a spring fertilization program varies on many factors, its importance will be felt all summer long and even into the fall. The benefit of using an all-weather, long-lasting performer such as UMAXX provides immediate benefits, as well as a positive long-term impact. UMAXX gives the freedom to apply as a nitrogen component in a blend or part of a soluble fertilizer program. UMAXX offers consistent performance regardless of temperature or application type.

For more information on UMAXX contact me at 952-334-6845 or jmeyer@agrotain.com

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