

## Bub, Laura A

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**From:** Jaeger, William  
**Sent:** Tuesday, October 05, 2004 11:40 AM  
**To:** Jaeger, William; Watson, Susan S.; Ohm, Steven H.; Bub, Laura A  
**Cc:** Kreitlow, James D.; Peerenboom, Daniel J; Prusak, Peter J.; Masnado, Robert  
**Subject:** RE: Land O Lakes--Vilas Co

? More fuel for this bomb. I know the Elcho "diffused surface water" discharge was designed to surface in a wetland and I suspect the same is true for Land O Lakes. I don't think the impacts to the wetlands have ever been considered. NR 103 review?

William C. Jaeger  
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phone: (715) 365-8971  
fax: (715) 365-8932  
e-mail: william.jaeger@dnr.state.wi.us

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**Cc:** Kreitlow, James D.; Peerenboom, Daniel J; Prusak, Peter J.; Masnado, Robert  
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The guidance on wastewater land application systems located in areas of groundwater discharge to surface water goes back to 1996. The only places where it's been allowed to my knowledge is where there's been a confirmation of groundwater flow discharge to surface water within the point of standards application. That confirmation is done typically during facility planning. It is re-evaluated as part of a groundwater evaluation during permit reissuance.

One of the concerns is that we also be confident that the discharge of the impacted groundwater to surface water would not adversely effect surface water quality. The way that is done in most cases is through groundwater monitoring related to a defined point of standards application to monitor groundwater flow and to assess ground water quality and evaluate additional treatment taking place in the soil beneath the site. That monitoring is relative to both ground water and surface water quality.

While surface water discharge limits in the permit likely in most cases would not be applicable, it would seem to me that it would be preferable in any surface water discharge situation, that we know the stream classification whether the discharge be a direct or diffused surface water discharge.

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**To:** Watson, Susan S.; Ohm, Steven H.; Jaeger, William; Bub, Laura A  
**Cc:** Kreitlow, James D.; Prusak, Peter J.; Franson, Lon J.  
**Subject:** RE: Land O Lakes--Vilas Co

I agree with Susan that we should reclassify water bodies based on complete review and field verification rather than declassify to a default status.

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*diffuse SW  
vs.  
Groundwater discharge*

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**Sent:** Tuesday, October 05, 2004 11:42 AM  
**To:** Peerenboom, Daniel J; Watson, Susan S.; Ohm, Steven H.; Jaeger, William; Bub, Laura A  
**Cc:** Kreitlow, James D.; Prusak, Peter J.; Hansen, James P.  
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OK, here are my initial thoughts, and please read through to the very bottom to get to my suggested answer to Laura's seemingly simple question. For diffuse surface waters at facilities as described below, for compliance and limit determination, they are definitely tweeners, but are still GW dischargers! They are systems (those that I'm familiar with) that discharge to GW adjacent to surface water. As such the GW discharge is likely providing base flow to the surface water. They historically were built as GW dischargers prior to implementation of GW standards. But, and as current guidance (and I think correctly) provides for such systems, we can relax strict enforcement of the GW standards (typically for nitrate) if there is confidence the GW flow is indeed base flow. But I think it should be qualified that I believe this only applies to existing systems, not new, otherwise a facility planning nightmare.

My belief is, that ultimately these situations make good environmental sense. There is no down gradient GW user effected because of discharge to base flow, and the base flow that is seen from this GW is really well treated and the surface water will see little to no impact from conventional pollutants! To develop effluent limits for BOD and/or ammonia are impossible for these situations, and should not, and have not been attempted for a myriad of good reasons.

As for the question for whether or not the surface water needs classification, FFAL or otherwise, why should it matter because we are not going to calculate surface water quality standards for them anyway!

As for the initial and real question, on the drop delete for facilities that no longer have a pipe running to these variance surface waters, I think the answer lies in how any proposed revised code will provide for future department response and flexibility to provide for new and future limits in proposed variance waters, (listed or not). The approach needs to avoid the situation we are now in where if a discharge is proposed to what a biologist classifies as surface water as meeting variance definition by guidance, it doesn't matter and the default FFAL for limit determination needs to be used. So, if a variance water isn't listed as a variance water in code, we can still provide variance limits to a new proposed facility. Thus the code should provide flexibility for growth. Any good document, or code recognizes the need to change and grow as a living document, not one that ties our hands to achieve our environmental goals and provide public service.

Thus, my suggested answer to Laura's question is that unless the flexibility as described above is not provided, don't drop anything for any reason. As for the issue of "diffuse surface water" for the situations described above, I don't care what the surface water ultimately being discharged to is classified as, they are not going to get surface water quality limits calculated for them because they are GW dischargers. 

Now doesn't that make sense?

There's my ramble for the month, haven't had one in quite awhile! I'm trying to cut back.  
Have a good one,  
Lon J.

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