

## Johnson, Bill H (DNR)

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**From:** Tina Pint <[REDACTED]>  
**Sent:** Thursday, August 16, 2012 1:46 PM  
**To:** 'Fred Marinelli'; Al Trippel  
**Cc:** David Blaha; John L. Adams; Carlson, Erik (DNR)  
**Subject:** RE: An idea to consider

Fred-  
You are correct that this is an issue that will need to be addressed. We've been working on a slightly different solution, but will certainly give some thought as to whether your idea makes more sense. I don't think we'll get to this level of detail in the next AWMP meeting, but likely in the one after that.

Thanks for being in problem solving mode!  
Tina

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resourceful. naturally.



**From:** Fred Marinelli [[mailto:\[REDACTED\]](mailto:[REDACTED])]  
**Sent:** Thursday, August 16, 2012 10:34 AM  
**To:** Al Trippel  
**Cc:** David Blaha; John L. Adams; Carlson, Erik (DNR); Tina Pint  
**Subject:** An idea to consider

All,

An issue with the FTB collection trench during closure is that it will flood and likely transmit water laterally through the pipe and gravel (that is, parallel to the trench alignment). One way to minimize this effect is to breach the trench/pipe with an excavator at a number of locations and backfill with bentonite. This would essentially create dams along the trench\pipe alignment, prevent lateral flow, and encourage more even groundwater upflow into the engineered wetlands.

This is certainly not Einstein thinking; just a suggestion to eliminate lateral flow issues associated with long-term closure.

Fred

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**Fred Marinelli**  
Senior Groundwater Hydrologist

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