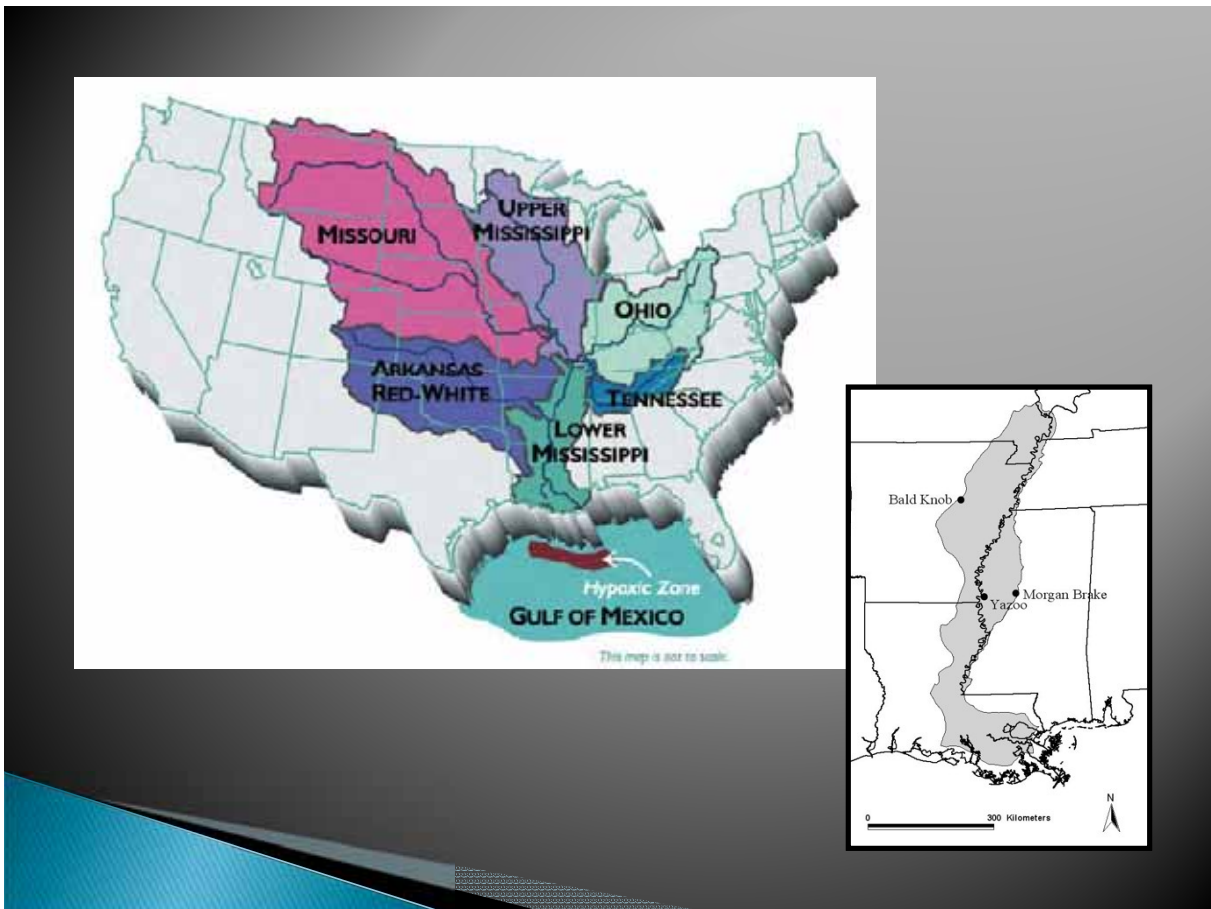


Nutrient and Suspended Sediment Mitigation through the Use of a Vegetated Ditch System Fitted with Consecutive Low-Grade Weirs

Corrin Flora and Robert Kröger
Department of Wildlife,
Fisheries, & Aquaculture
Mississippi State University





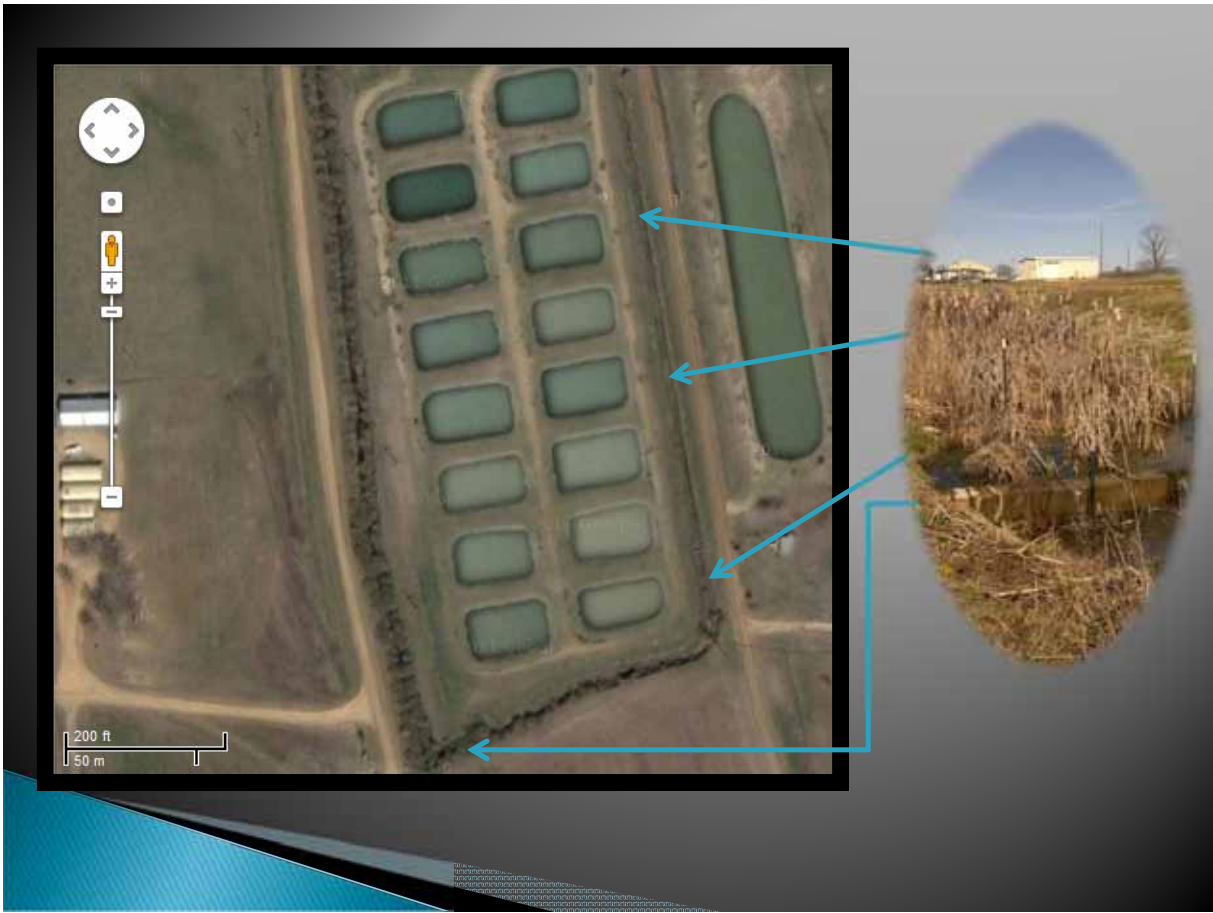
Dr. Terrill R. Hanson

Current Best Management Practices

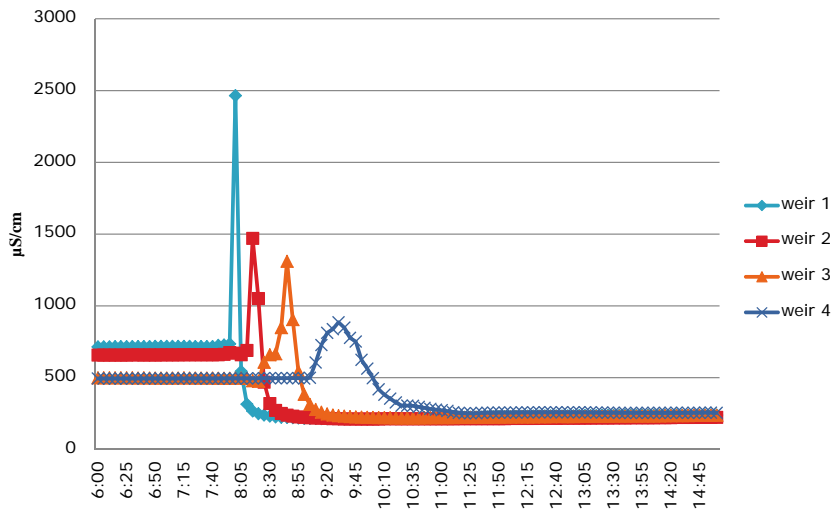
- ▶ No drain
- ▶ Drop-fill schemes
- ▶ Constructed wetlands
- ▶ Settling basins





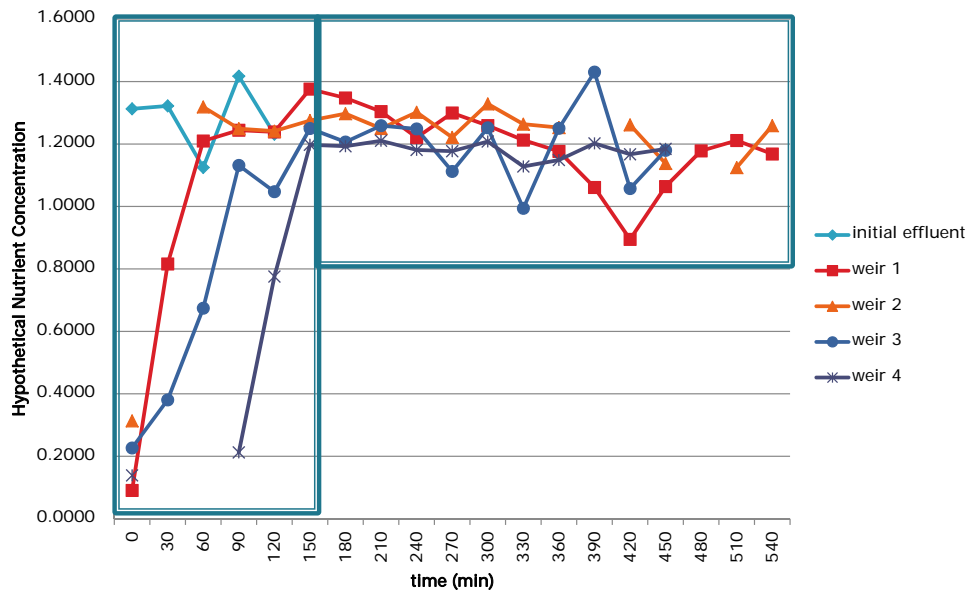


Specific Conductance over Time



➤ 116 minute residence time

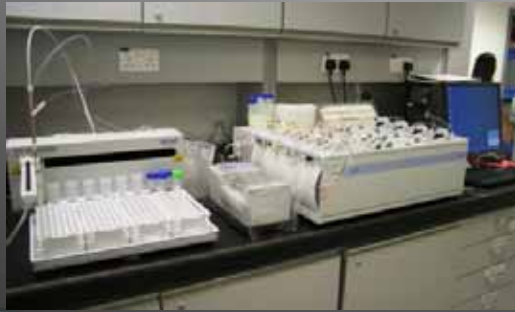
Dilution Period Biological Processes



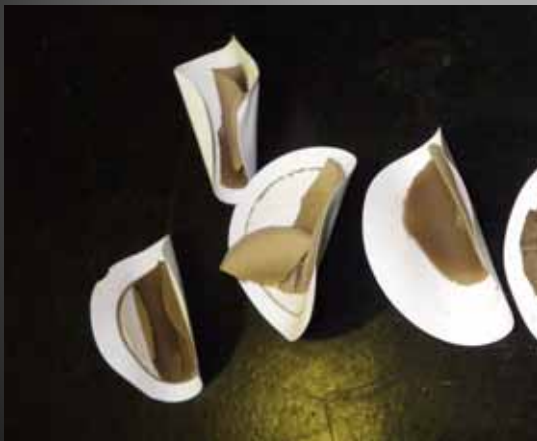
Nutrients



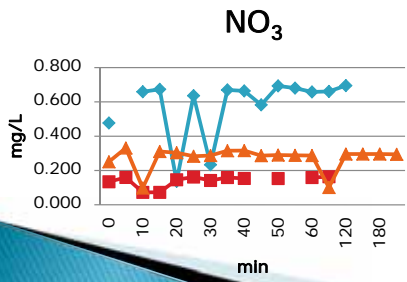
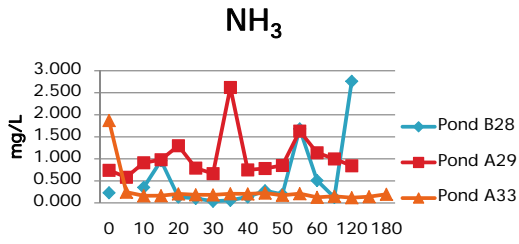
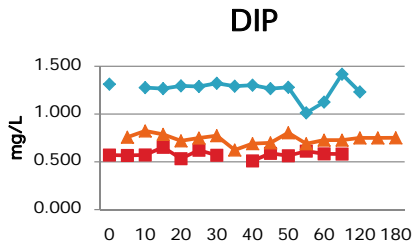
- ▶ HACH DR 5000 Spectrophotometer
- ▶ LaChat Quickchem 8500



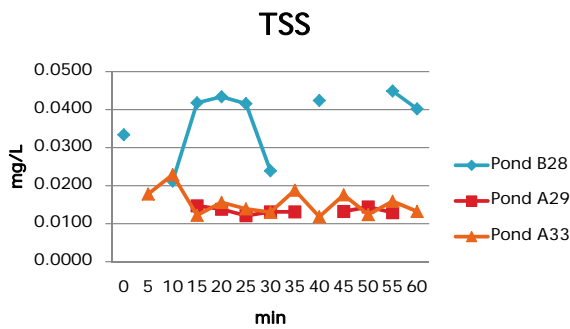
Suspended Solids



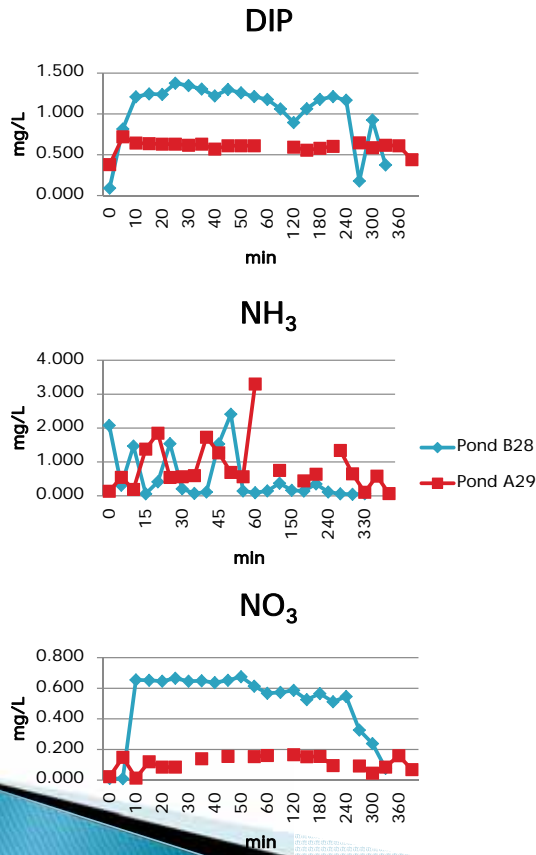
Initial Effluent



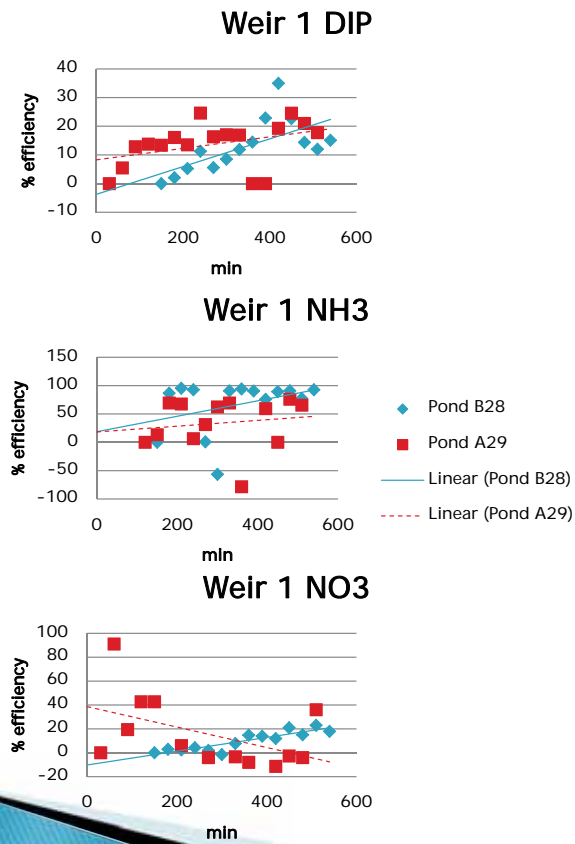
Initial Effluent



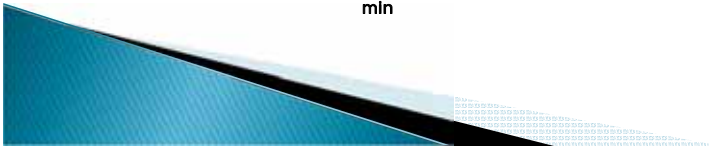
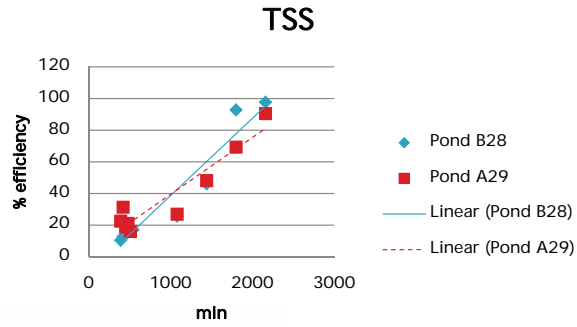
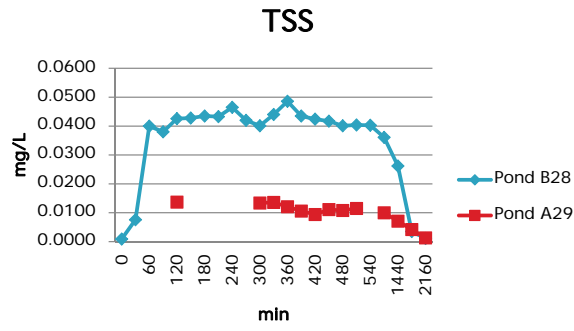
Weir 1



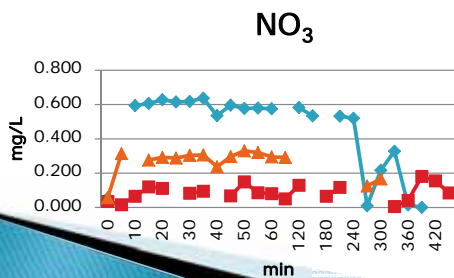
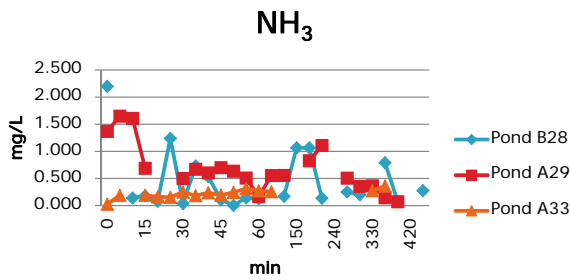
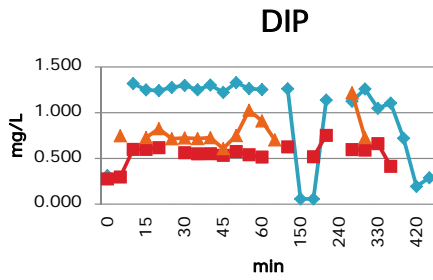
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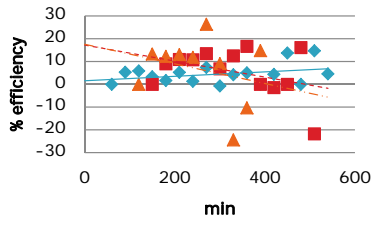
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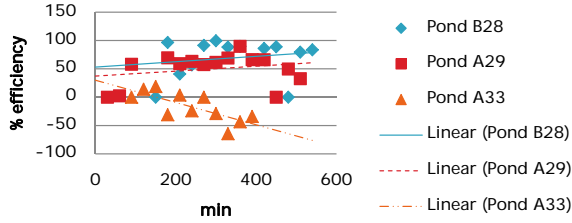
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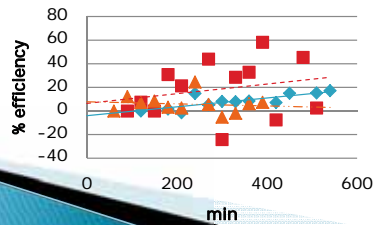
DIP



NH₃



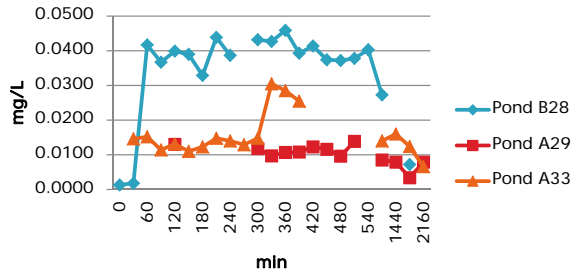
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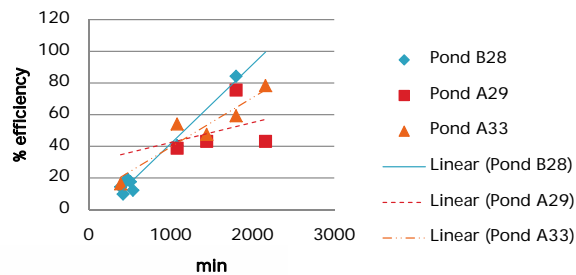
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TSS



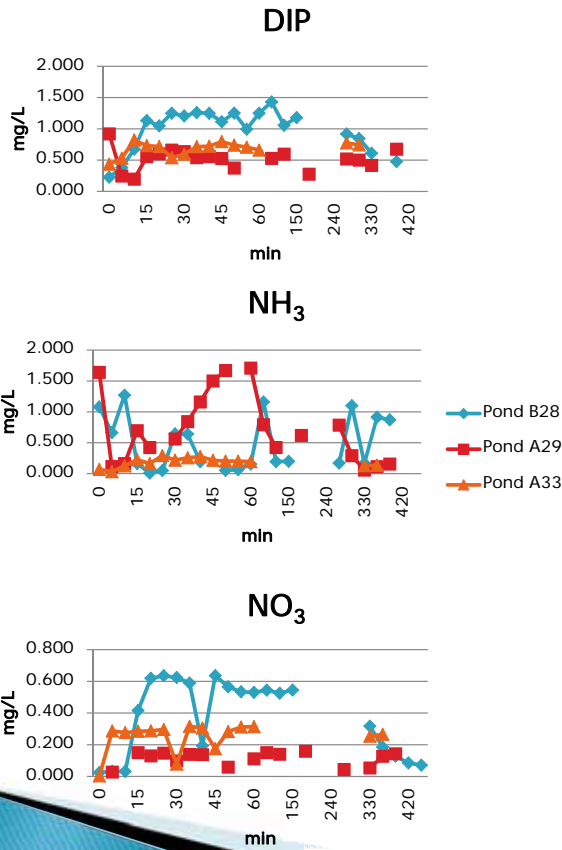
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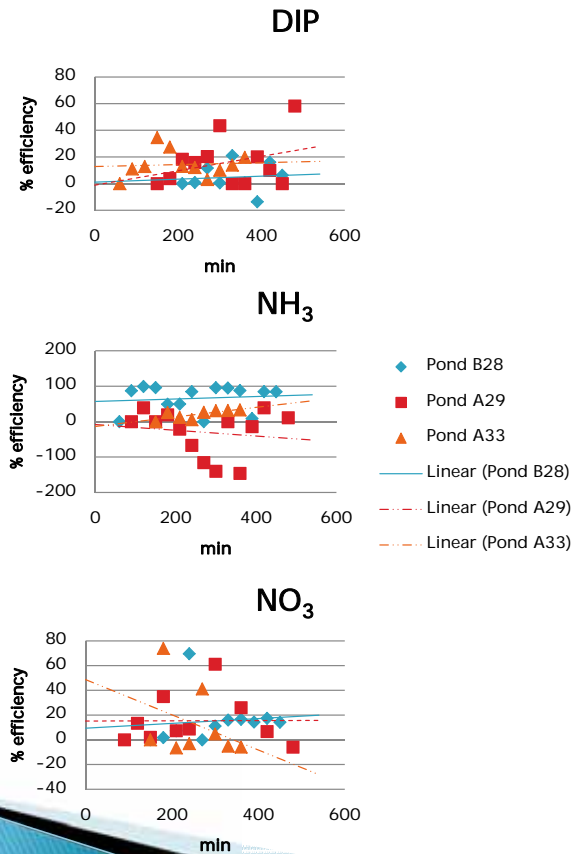
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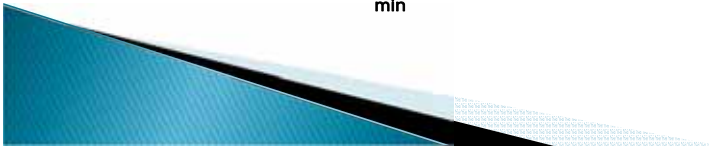
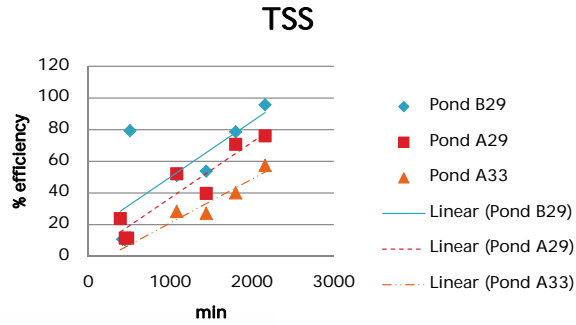
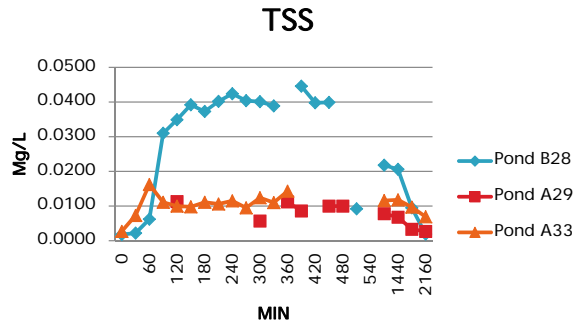
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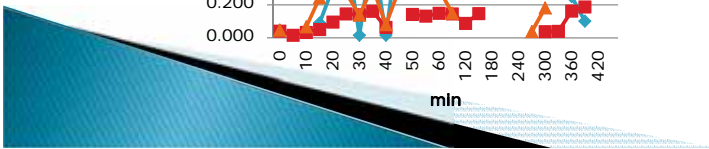
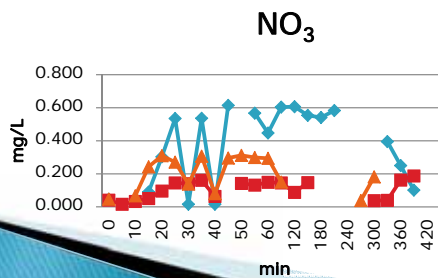
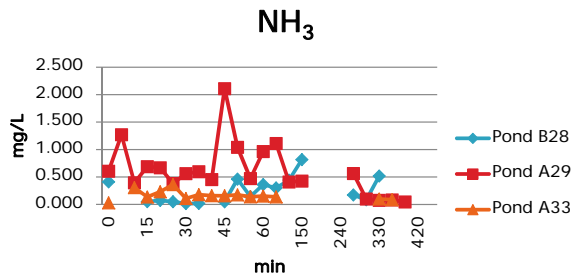
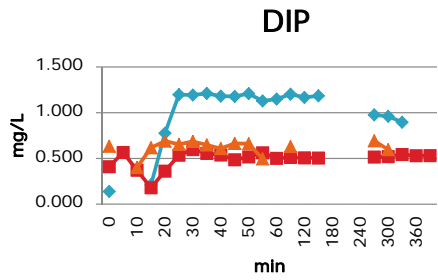
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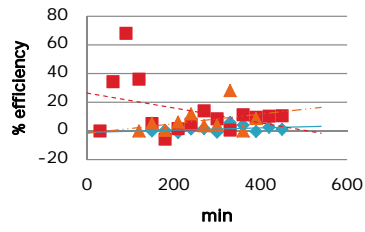
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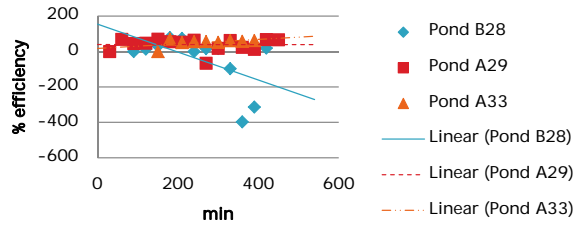
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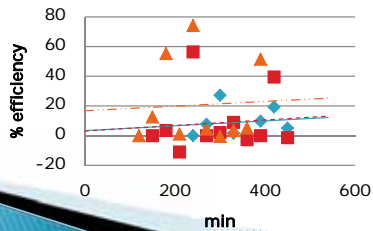
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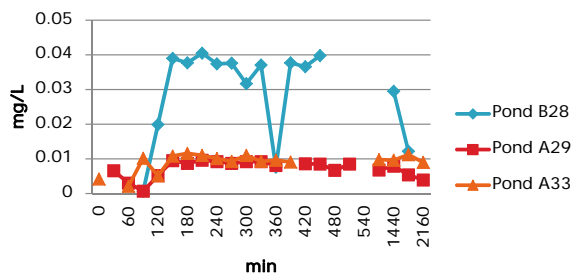
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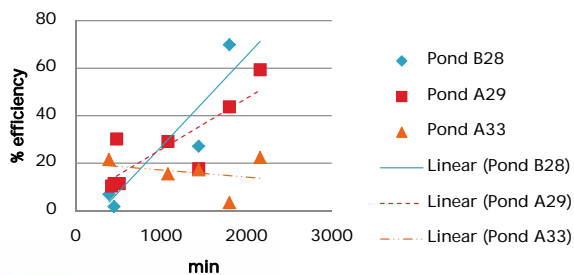
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Weir 4 TSS

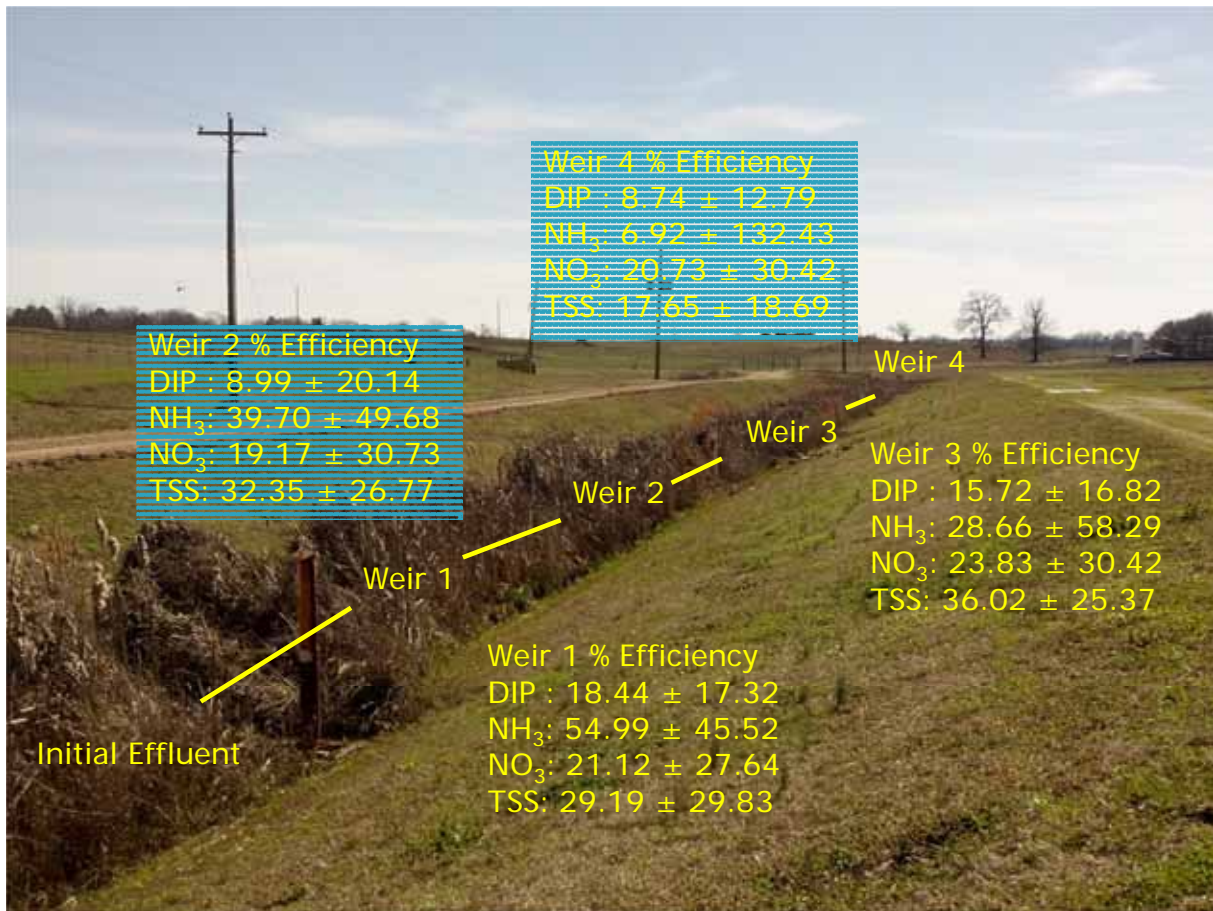


Weir 4 TSS



Weir 4





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Questions

