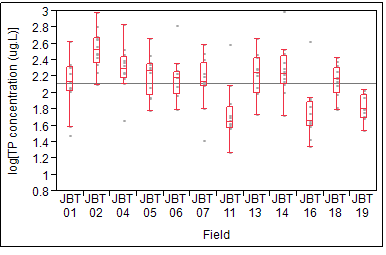
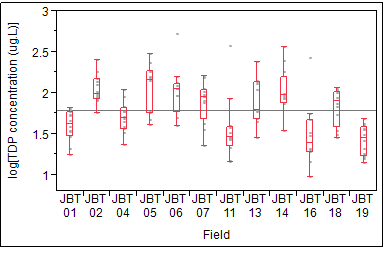
New and improved figures for tile drainage report

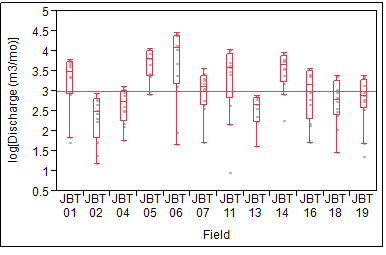
Figure 12 Tile monitoring data by field [to be reorganized as a, b, c, … panels]



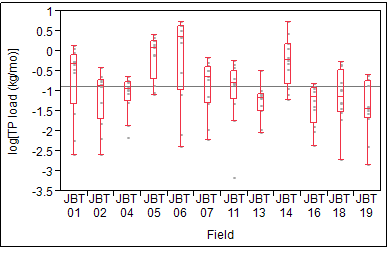
1. TP concentration by field



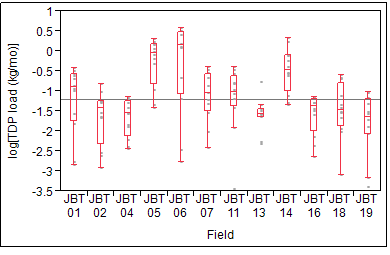
1. TDP concentration by field



1. Tile drain discharge by field

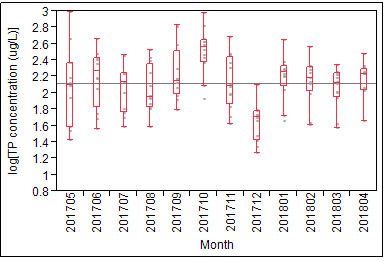


1. TP load by field

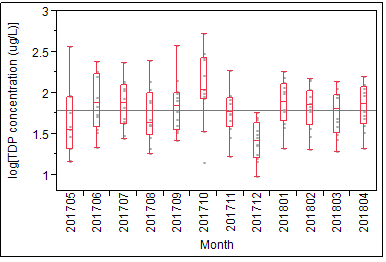


1. TDP load by field

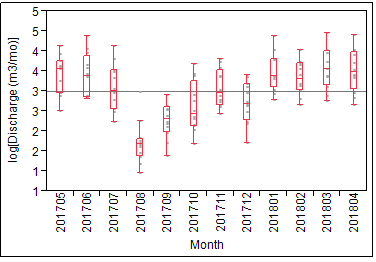
Figure 13 Tile monitoring data by month [to be reorganized as a, b, c, … panels]



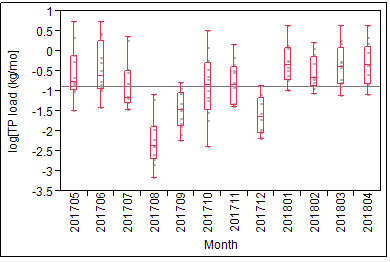
1. TP concentration by month



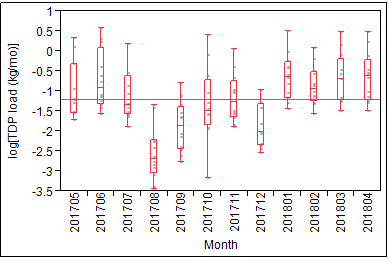
1. TDP concentration by month



1. Tile drain discharge by month

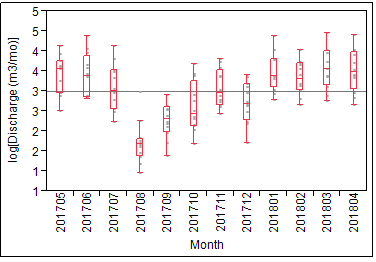


1. TP load by month

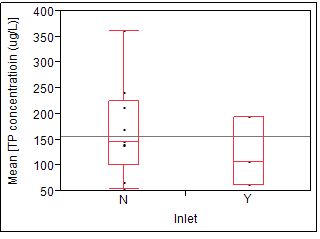


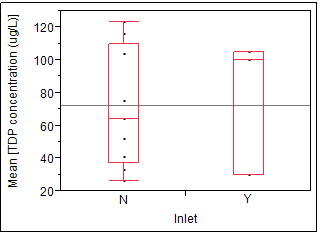
1. TDP load by month

Figure 14



1. Figure 15. Associations between TP and TDP concentrations and surface inlets





1. Figure 16. Association between tile discharge and surface inlets

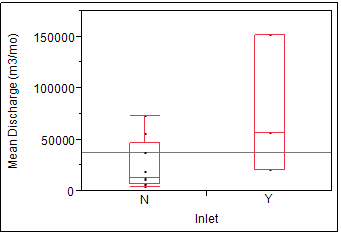
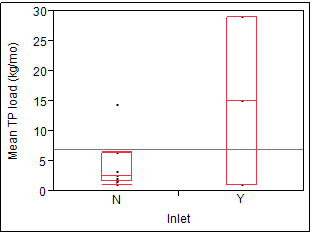
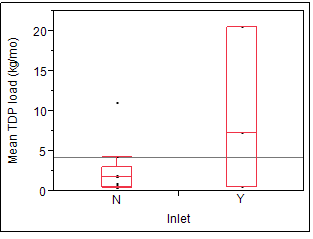
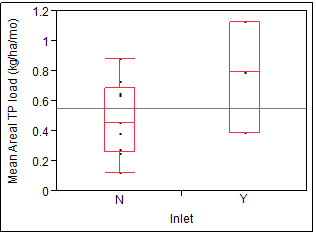


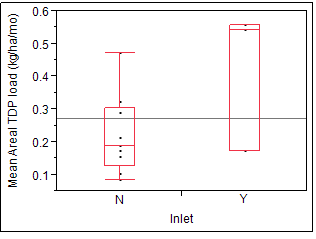
Figure 17. Associations between TP and TDP load and surface inlets

[note Matt asked for the areal TP and TDP plots in an appendix, but I think they should be in the main report with the absolute load plots]









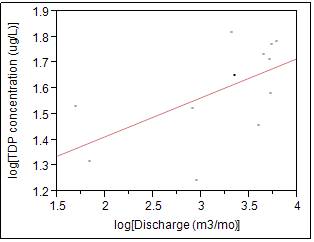
Detailed look at Q/Conc correlations (in text or appendix, your choice, but if appendix, text should summarize better and refer) If you can think of a good reason why JBT05, 06, and 16 should show the strongest relationships, be my guest.

Table X. Simple linear regression statistics for P concentrations vs. tile discharge by field; analysis on log-transformed data. **\*** and **boldface** indicate statistically significant relationships at *P*<0.10.

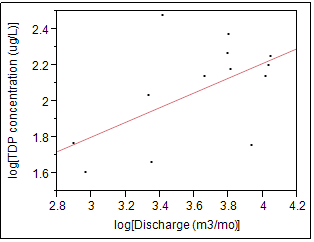
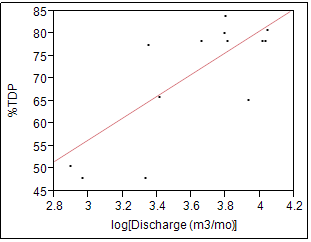
|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Field | TP | | TDP | | %TDP | |
|  | r2 | *P* | r2 | *P* | r2 | *P* |
| JBT01 | 0.479 | 0.170 | **0.351** | **0.042\*** | 0.047 | 0.497 |
| JBT02 | 0.040 | 0.533 | 0.162 | 0.195 | 0.104 | 0.842 |
| JBT04 | 0.030 | 0.593 | <0.001 | 0.989 | 0.002 | 0.889 |
| JBT05 | 0.153 | 0.209 | **0.315** | **0.058\*** | **0.651** | **0.002\*** |
| JBT06 | **0.292** | **0.097\*** | **0.413** | **0.024\*** | **0.458** | **0.016\*** |
| JBT07 | 0.046 | 0.504 | 0.049 | 0.489 | 0.002 | 0.882 |
| JBT11 | **0.257** | **0.092\*** | 0.180 | 0.161 | 0.003 | 0.861 |
| JBT13 | 0.012 | 0.748 | 0.048 | 0.517 | 0.066 | 0.445 |
| JBT14 | 0.003 | 0.857 | 0.009 | 0.764 | 0.217 | 0.127 |
| JBT16 | **0.358** | **0.040\*** | **0.374** | **0.035\*** | 0.106 | 0.302 |
| JBT18 | 0.240 | 0.106 | 0.195 | 0.150 | <0.001 | 0.935 |
| JBT19 | 0.039 | 0.556 | **0.402** | **0.027\*** | 0.105 | 0.305 |

Here are regression plots for the significant relationships

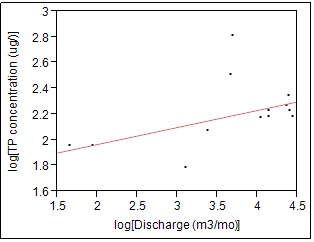
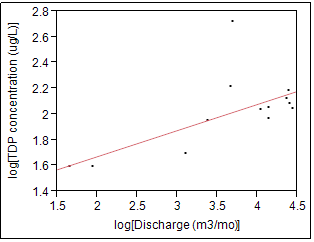
JBT01



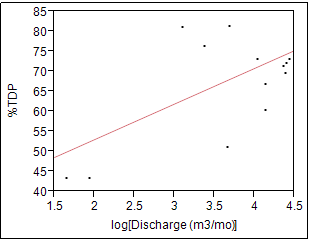
JBT05

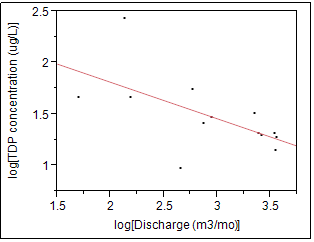


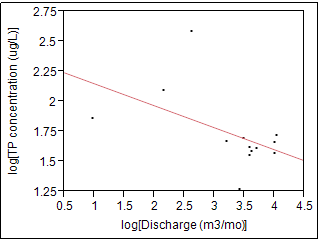
JBT06



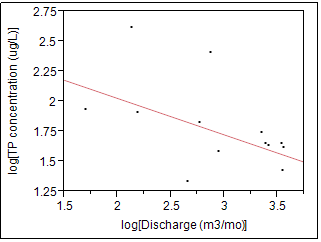
JBT06 (continued)



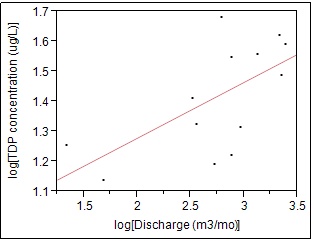
JBT11



JBT16



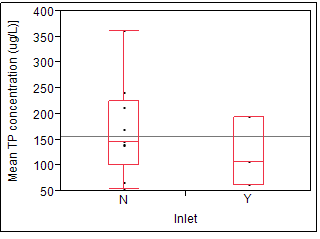
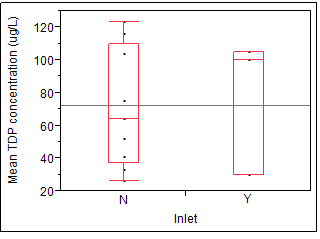
JBT19

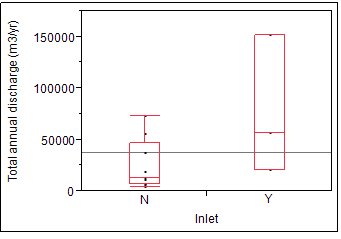


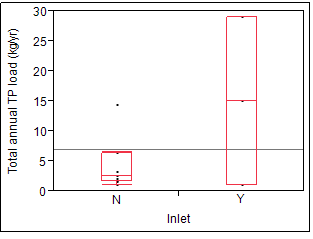
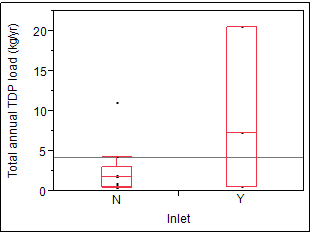
Matt wanted to see a plot of seasonal tile discharge pattern by individual site in addition to the monthly discharge box plot in Figure 14 (p. 34-36). I’m not sure if the plot below actually reveals anything different from Fig 14, but here it is if you want to include it. Seems like all sites behaved pretty much the same (except JBT07 perhaps)

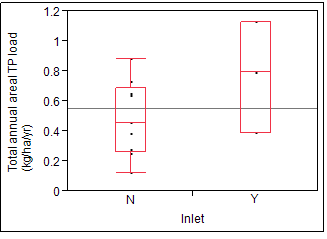
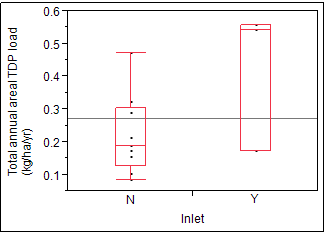


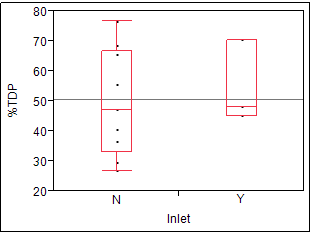
p. 37-38, Figures 15-17 (and more) – axis labels revised; Matt wants all plots included either in body or in appendix.











p. 43 Matt wants plots of conc, flow, loads, etc. by CC (even though no significant effects were observed). I (reluctantly because there were only 2 fields without CC and they were substantially smaller than the fields with CC, although the difference was nonsignificant) suggest putting them in an appendix rather than in the report body, but your call.

