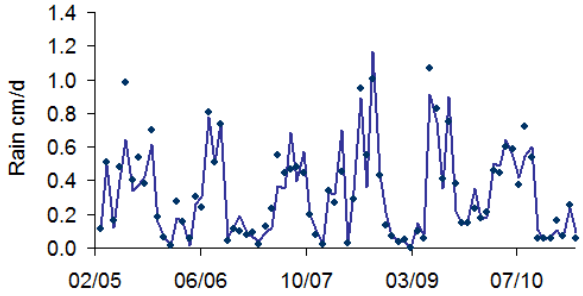
Case: Case = STA1E_PLAN_CW , Cell = OUT
30-Day Averages 02/01/05 thru 04/30/11

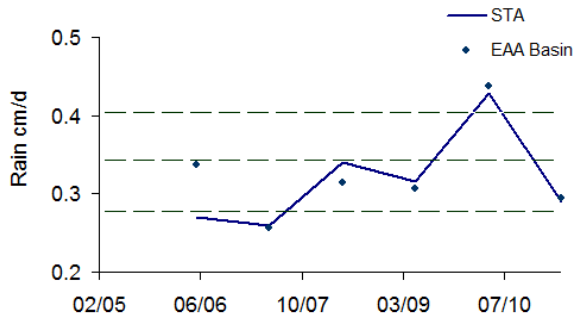
STA1-E Central & Western Flow Path
360-Day Averages 06/01/05 thru 04/30/11 Cumulative 02/01/05 thru 04/30/11

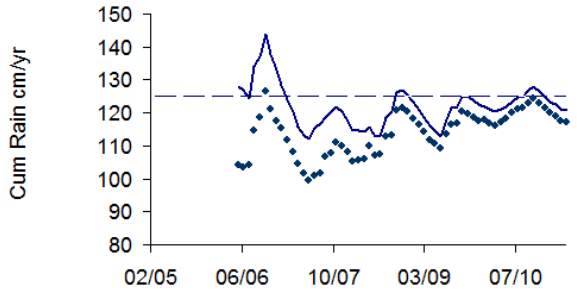
12/3/2012

Rainfall



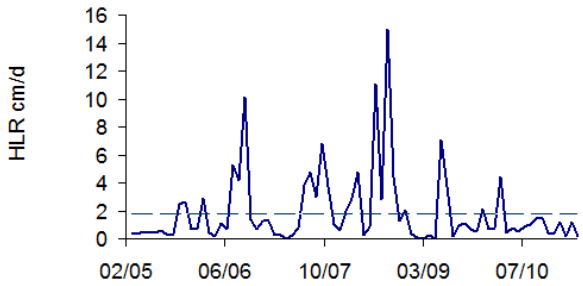
Dashed Lines = EAA Basin Long-Term Average, 10th & 90th Percentiles

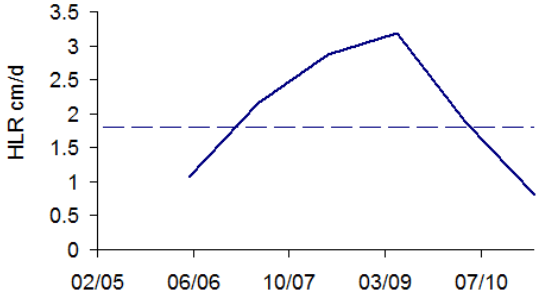


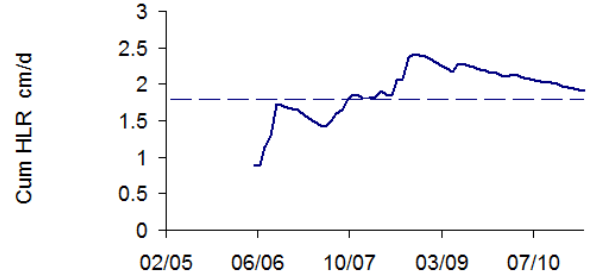


Inflow Hydraulic Loads

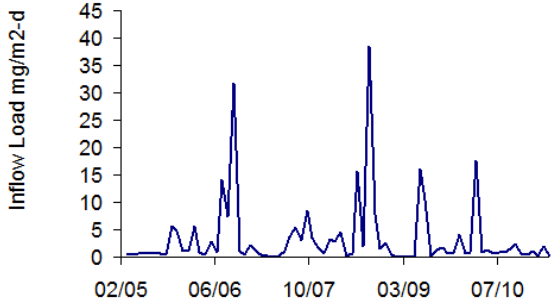
Dashed Lines = RS Design Long-Term Mean

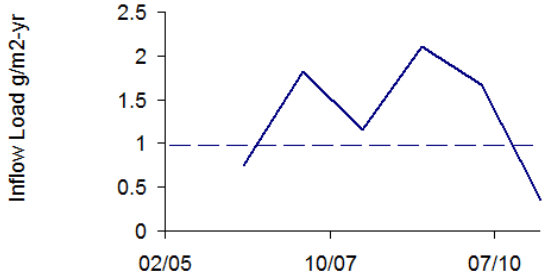


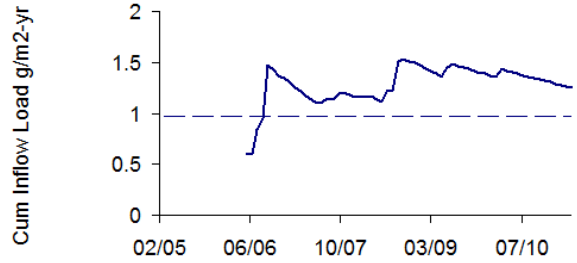




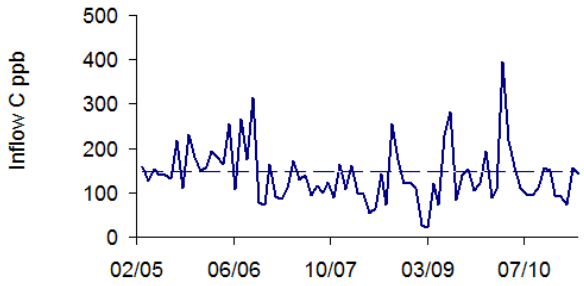
Inflow Phosphorus Loads Per Unit Area

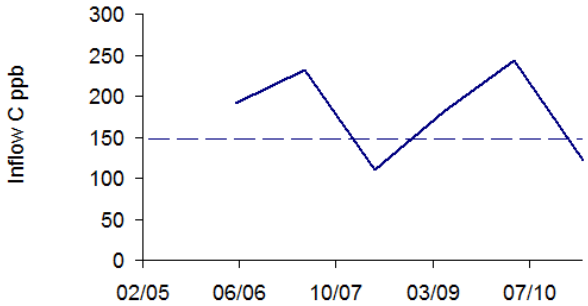


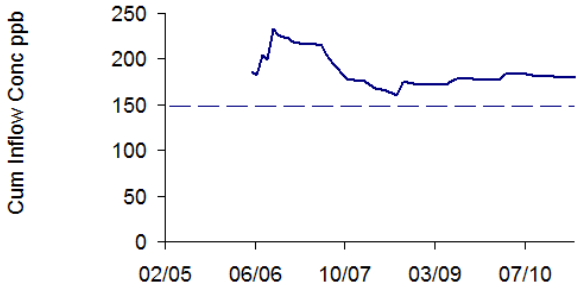




Inflow Concentrations

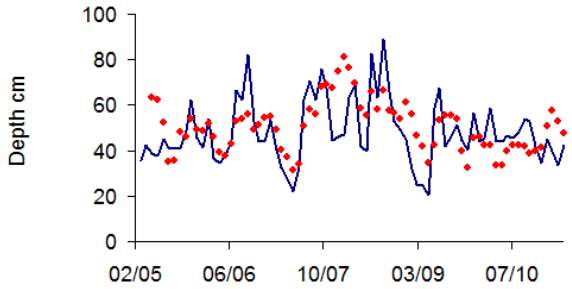


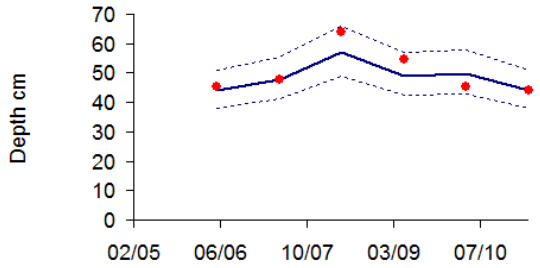


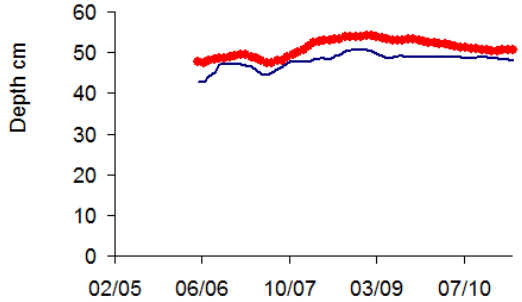


Mean Depths

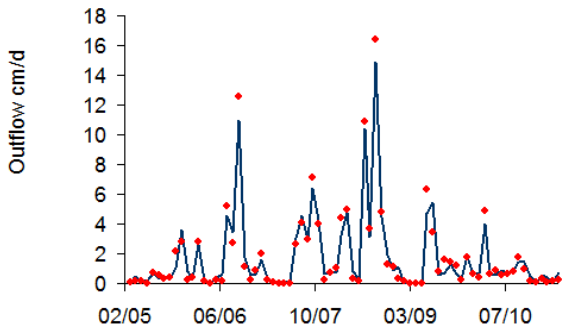
Dashed Lines = 80% Prediction Interval

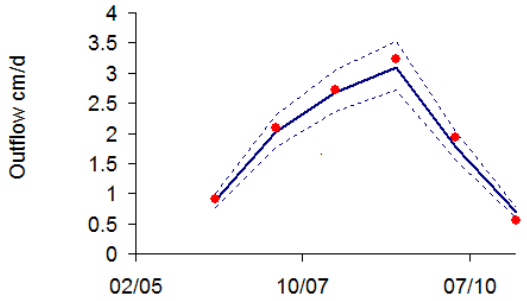


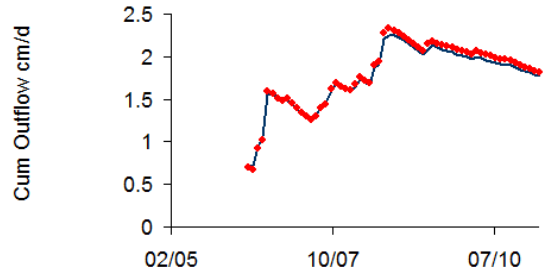




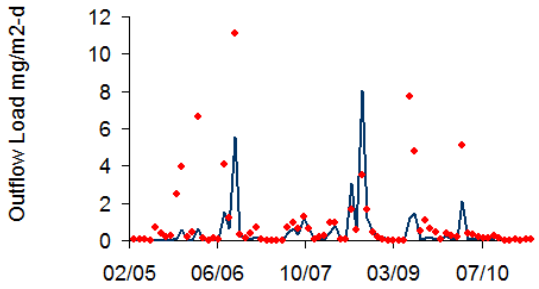
Outflow Volumes Per Unit Area

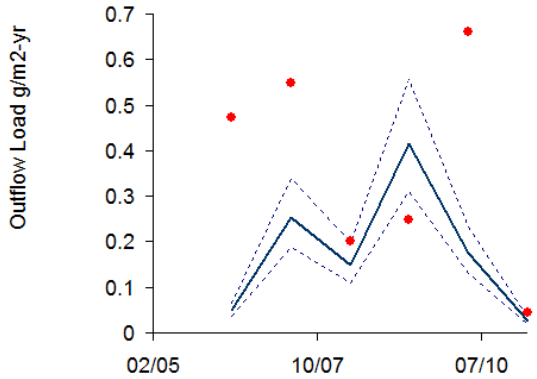


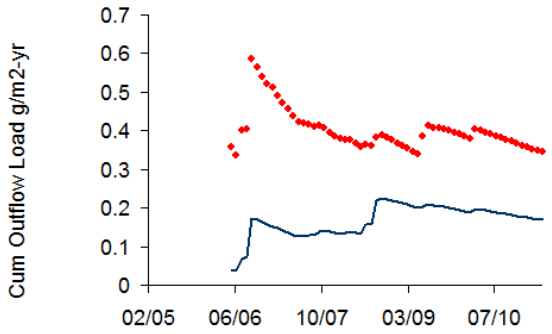




Outflow Loads Per Unit Area

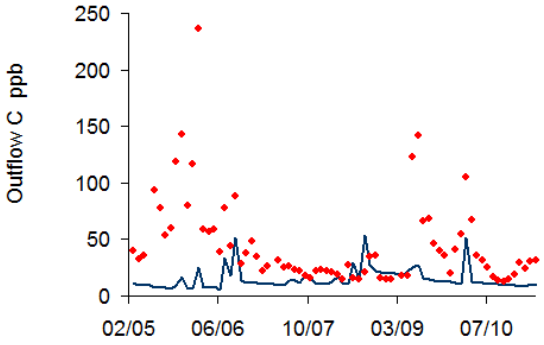


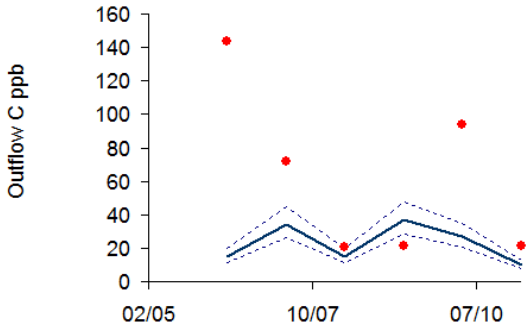


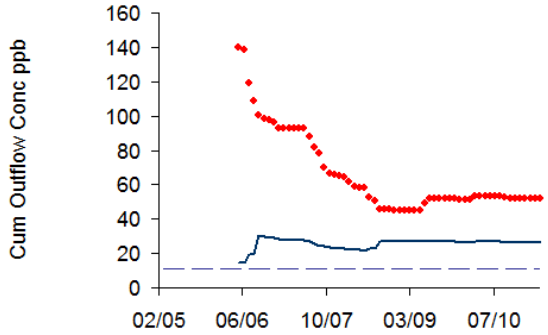


Outflow Concentrations

Dashed Line = RS Design Simulation

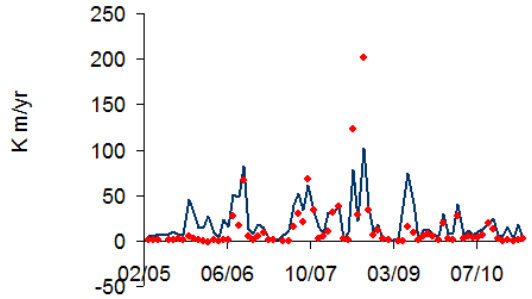


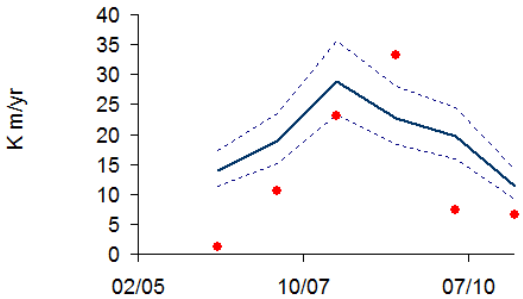


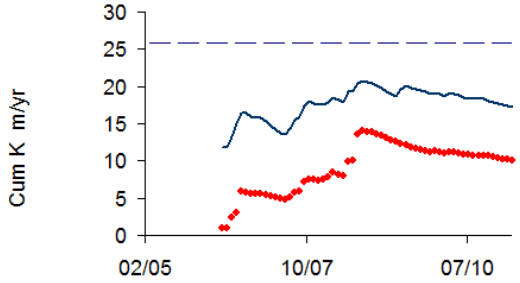


K - Steady State Model, C*=4, n = 6, q* = 0 cm/d

Dashed Line = RS Design Simulation



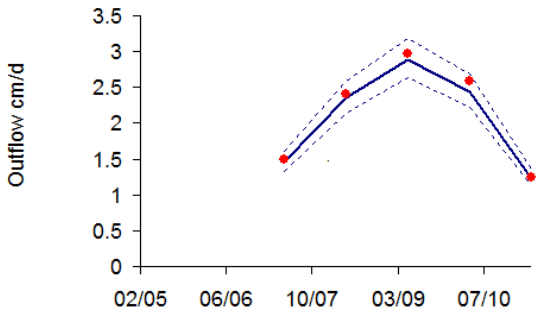


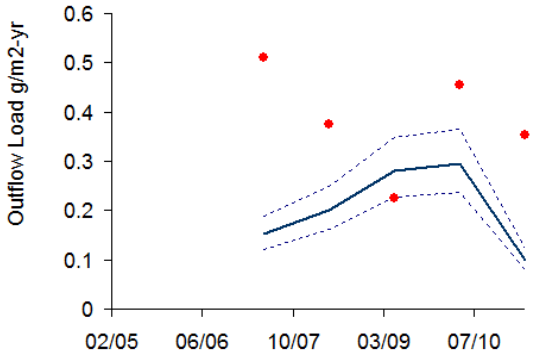


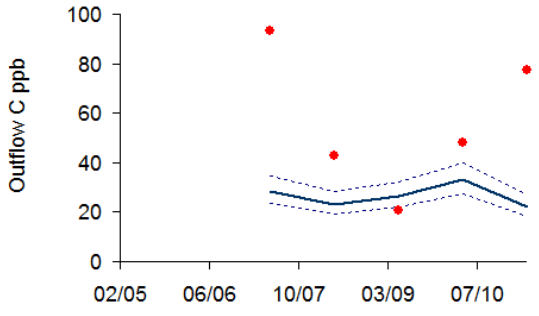
Outflow Volume, Load, Conc vs. Date - 2 Yr Rolling

720-day Averages

Dashed Lines = 80% Prediction Interval



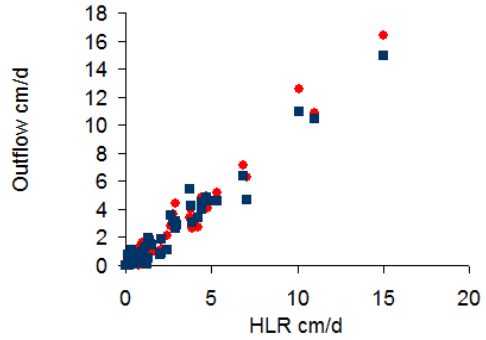


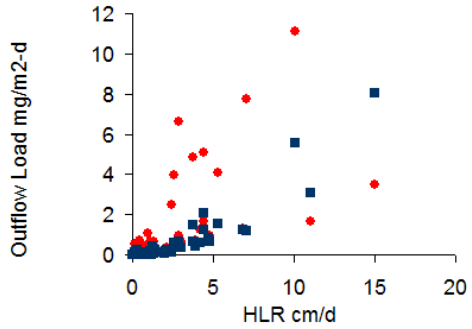


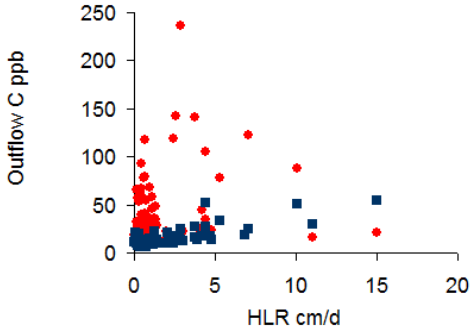
Outflow Volume, Load, & Conc vs. Inflow Hydraulic Load

30-Day Averages

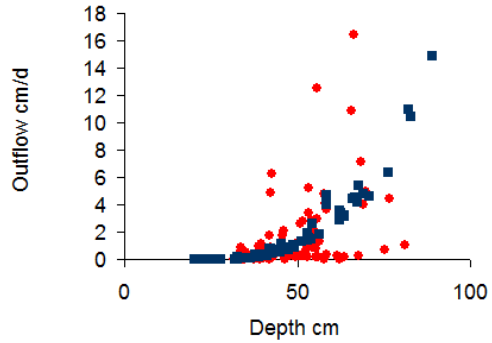
Blue = Predicted, Red = Observed

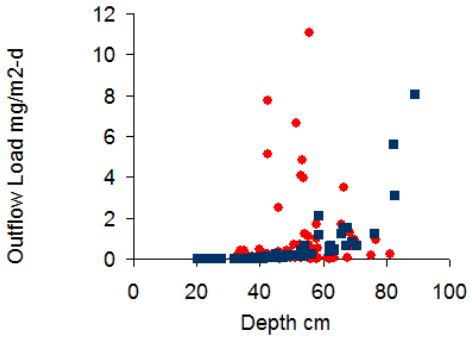


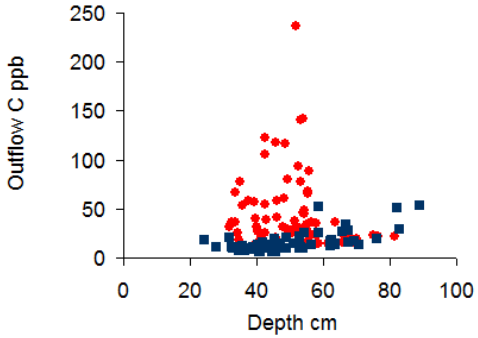




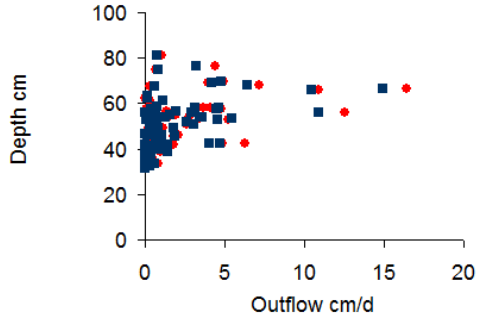
Outflow Volume, Load, & Conc vs. Depth

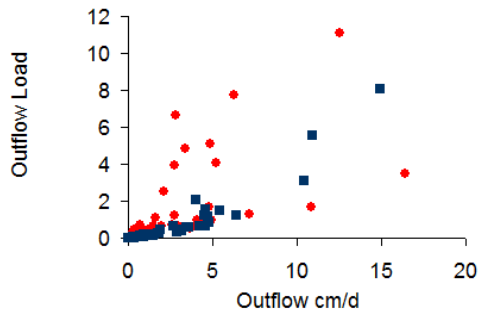


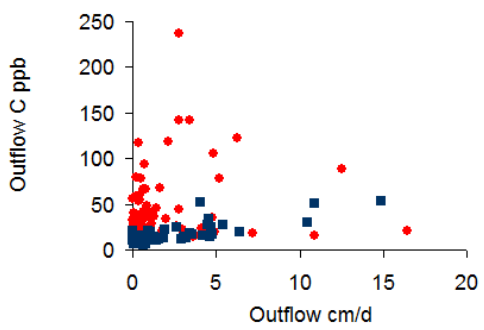




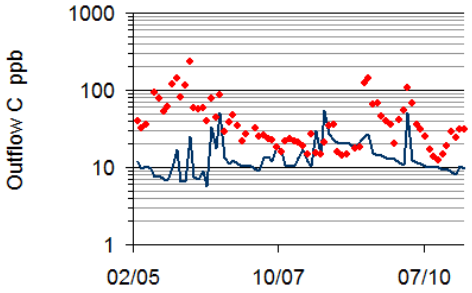
Depth, Load, & Conc vs. Outflow Volume / Area

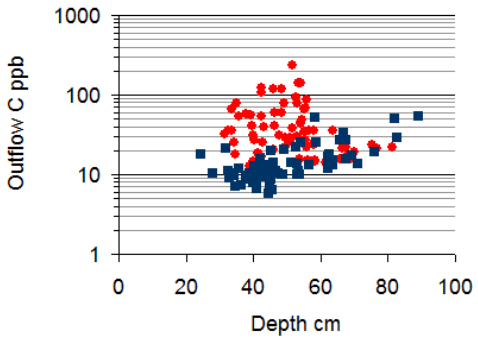


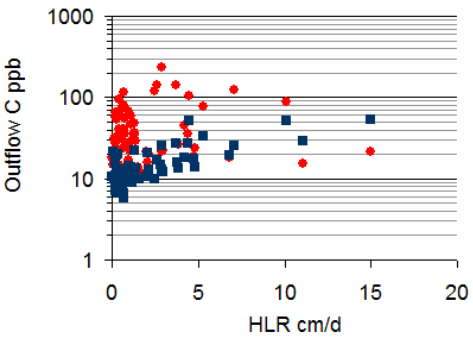




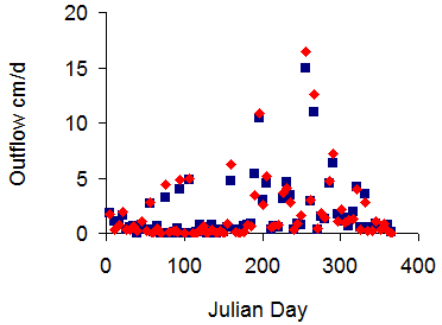
Log Outflow Conc vs. Date, Depth, Hydraulic Load

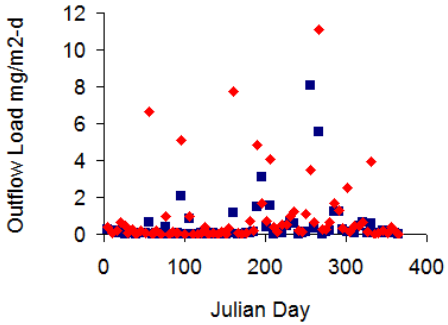


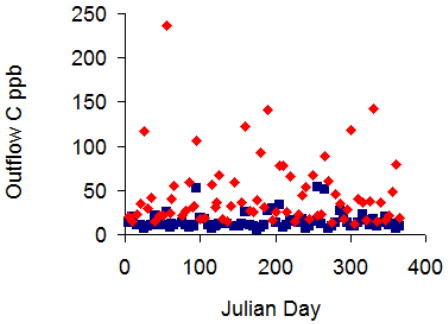




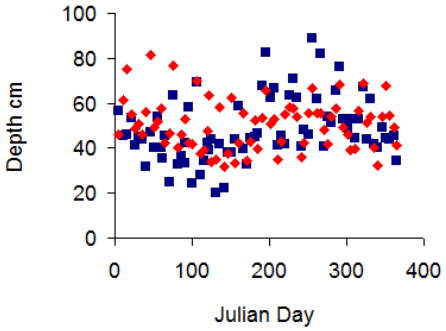
Outflow Volume, Load, Conc vs. Julian Day

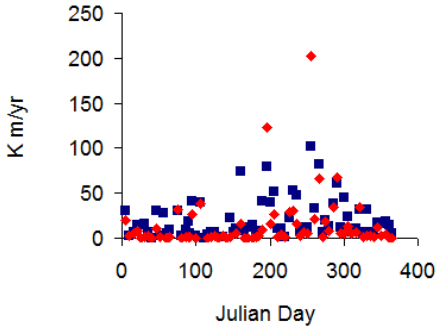


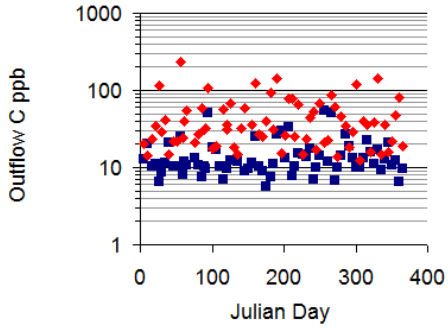




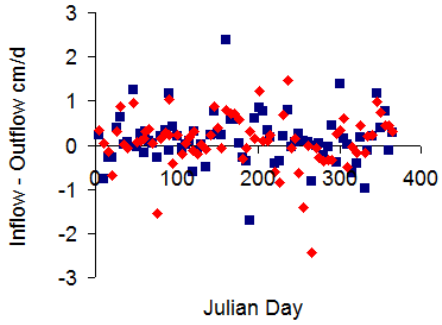
Depth, Settling Rate, Log Conc vs. Julian Day

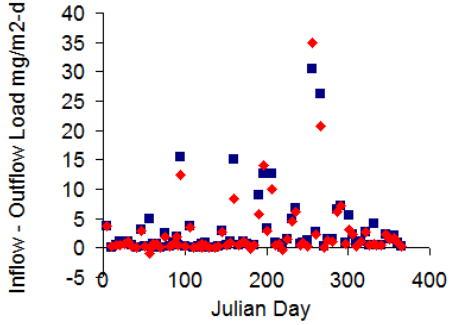


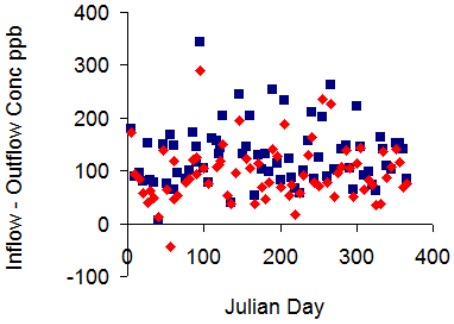




Inflow - Outflow Volume, Load, & Conc vs. Julian Day

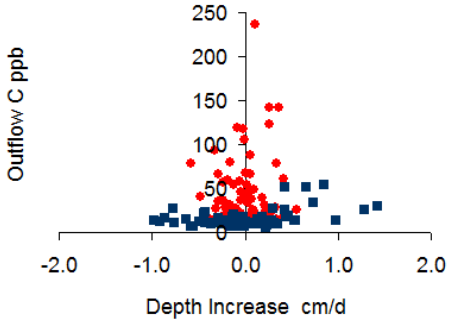


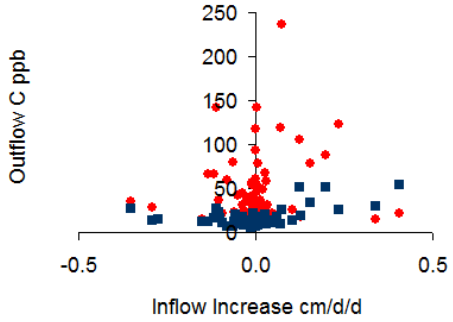


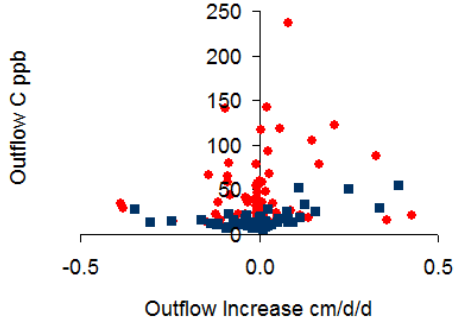


Outflow Conc vs. Increase in Depth, Inflow, & Outflow

Increase = Mean of Interval - Mean of Previous Interval



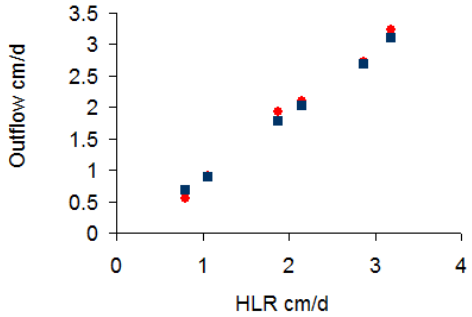


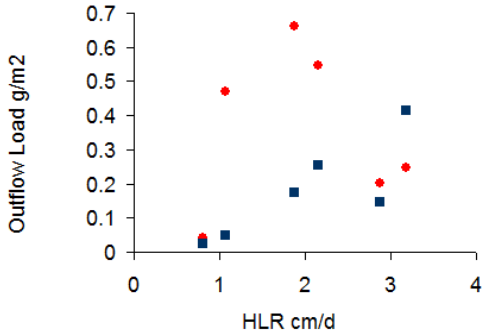


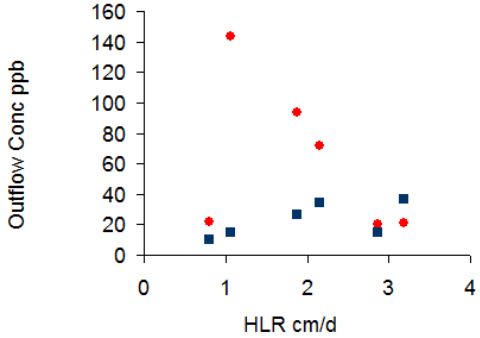
Outflow Volume, Load, & Conc vs. Inflow Hydraulic Load

360-Day Averages

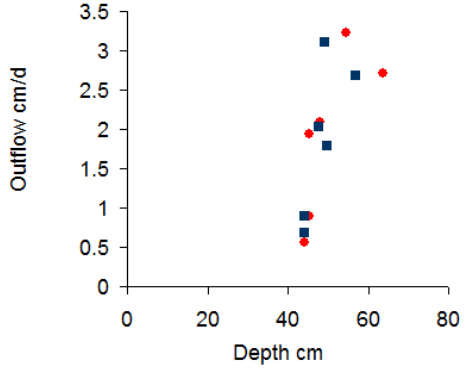
Blue = Predicted, Red = Observed

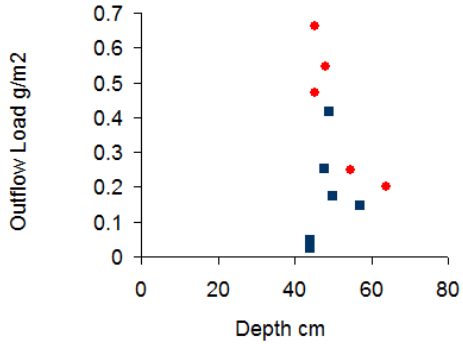


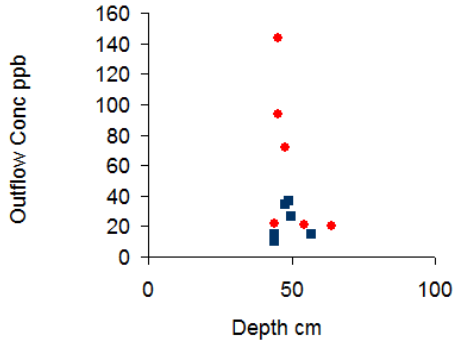




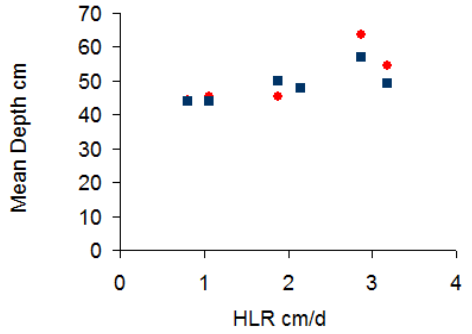
Outflow Volume, Load, & Conc vs. Mean Depth

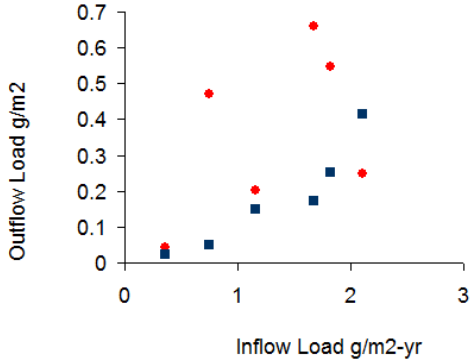


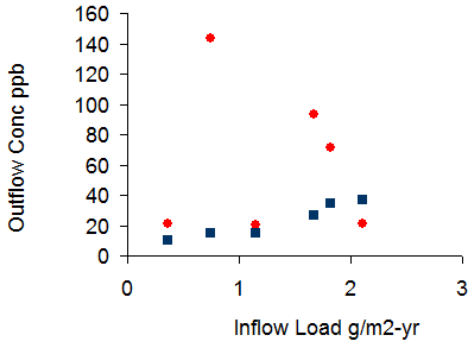




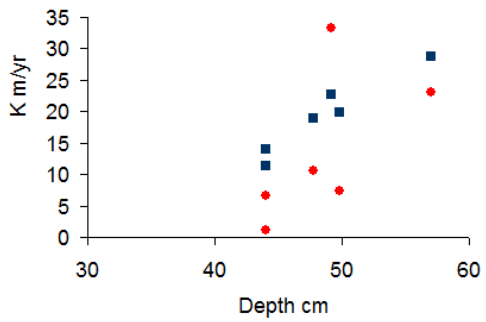
Depth vs. Hydraulic Load, Outflow Load & Conc vs. Inflow Load

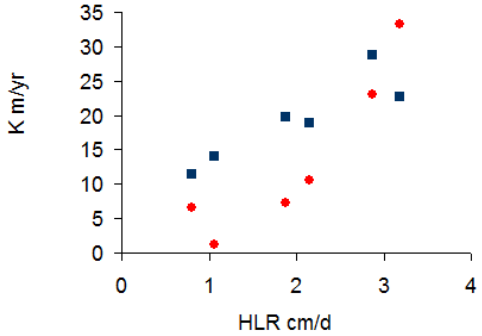


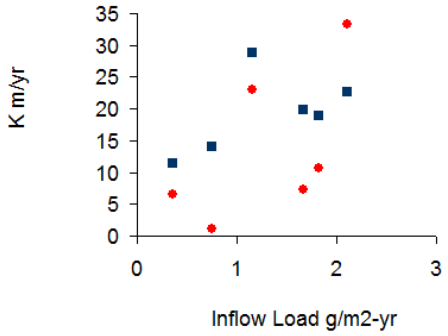




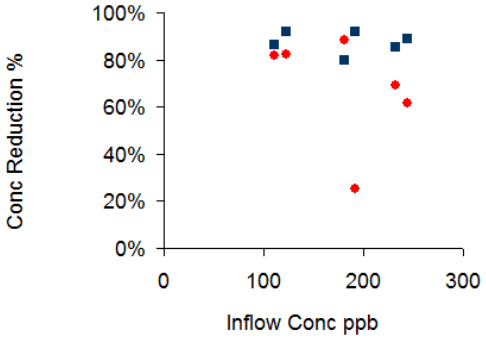
Steady-State Model K Values vs. Depth, HLR, & P Load

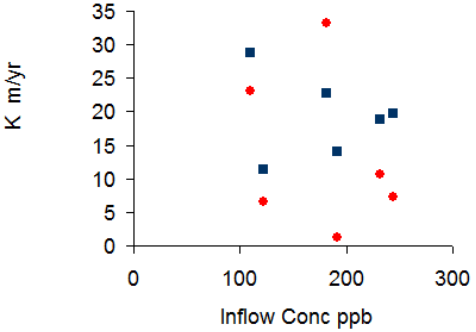


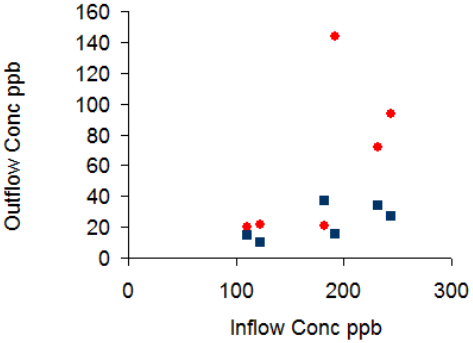




Outflow Conc Reduction, Conc, & K vs. Inflow Conc

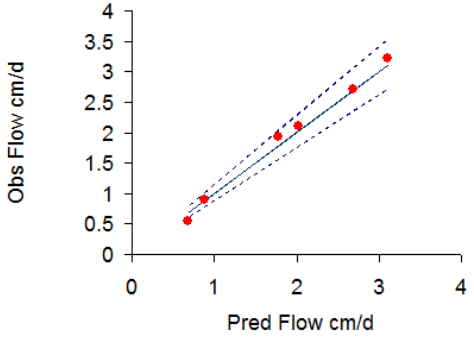


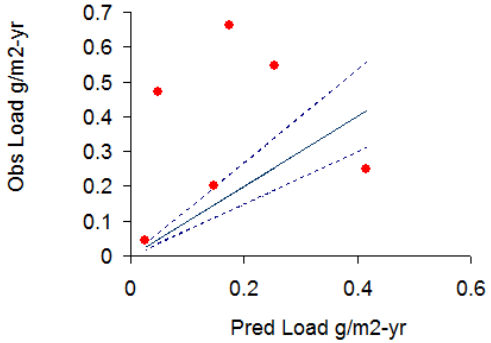


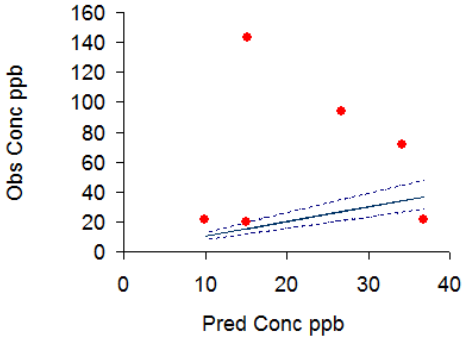


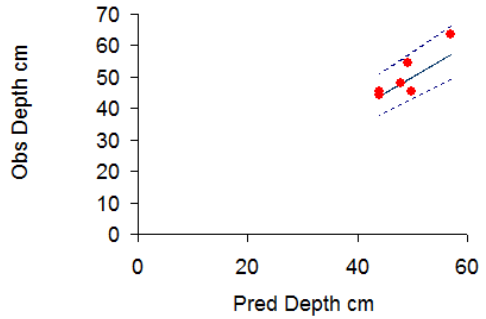
Observed vs. Predicted Values

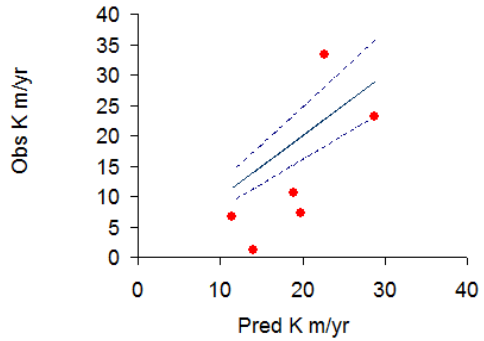
360-Day Averages

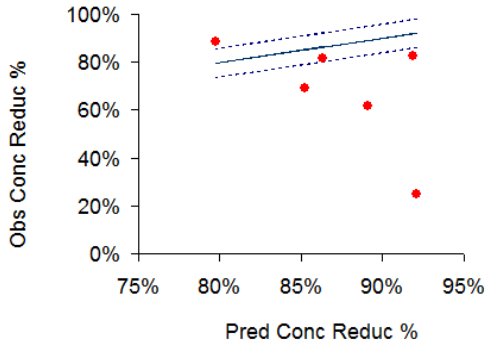






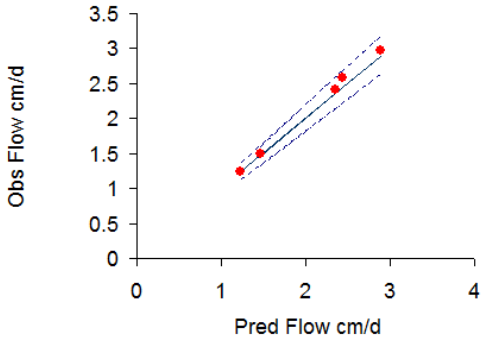


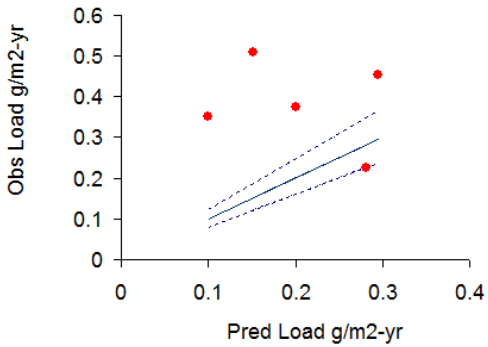


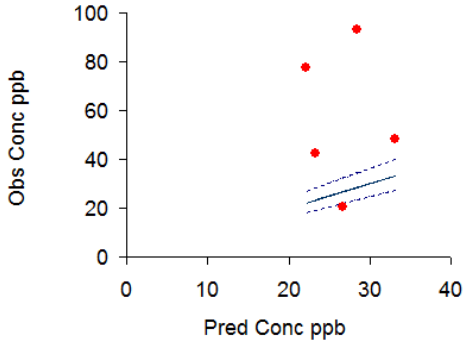


Observed vs. Predicted Values - 2 years

720-day Averages







Residual Statistics	Interval =	360	06/01/05	04/30/11	
Variable	Flow	Load	Conc	Depth	K
count	6	6	6	6	6
resid mean	0.044	0.185	39.0	1.5	-5.6
resid std dev	0.100	0.256	52.3	4.1	8.6
resid rms	0.109	0.316	65.2	4.3	10.2
obs mean	1.905	0.362	52.1	50.2	13.7
obs std dev	1.028	0.235	50.6	7.6	12.1
pred mean	1.861	0.177	26.1	48.6	19.2
pred std dev	0.958	0.840	1.1	4.8	6.2
r squared	0.99	0.00	0.00	0.68	0.28
resid std %	5%	144%	200%	8%	45%
resid rms %	6%	178%	250%	9%	53%
bias mean %	2%	104%	149%	3%	-29%
bias std error %	2%	59%	82%	3%	18%
bias t	1.1	1.8	1.8	0.9	-1.6
bias signif	0.34	0.15	0.14	0.41	0.19
80% prediction intervals for prototype datasets (STA-2 & STA-34)					
% of predicted	14%	34%	30%	16%	24%

12/3/2012

Case: Case = STA1W_PLAN , Cell = OUT

STA-1W, Cells 1-5

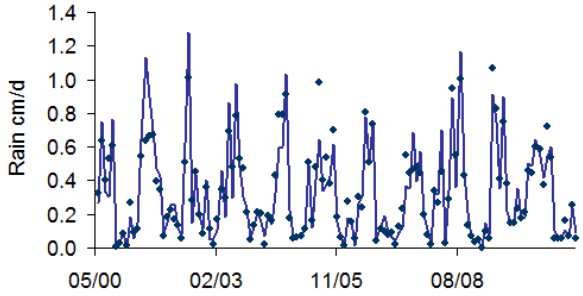
12/3/2012

30-Day Averages 05/28/00 thru 04/30/11

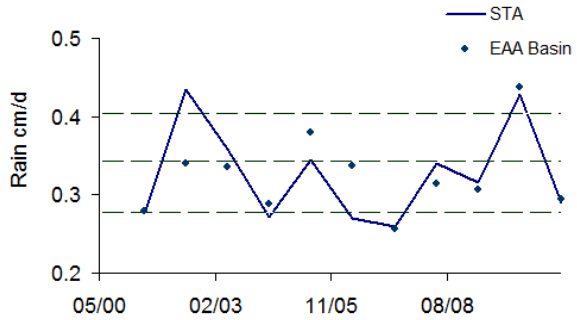
360-Day Averages 06/27/00 thru 04/30/11

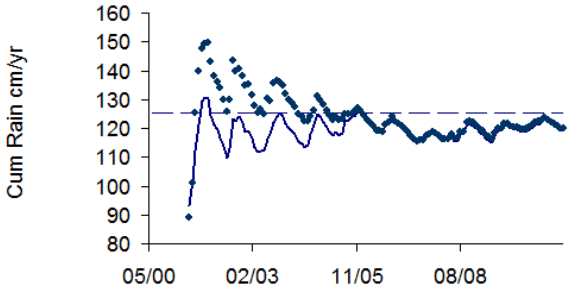
Cumulative 05/28/00 thru 04/30/11

Rainfall

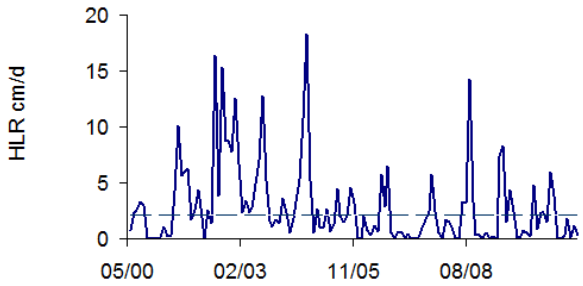


Dashed Lines = EAA Basin Long-Term Average, 10th & 90th Percentiles

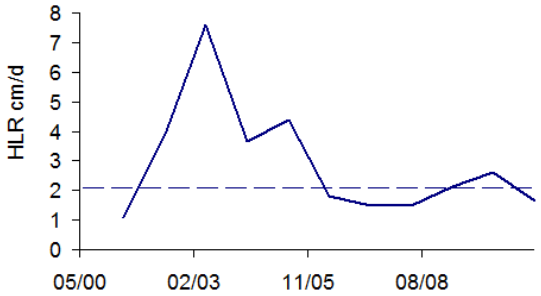


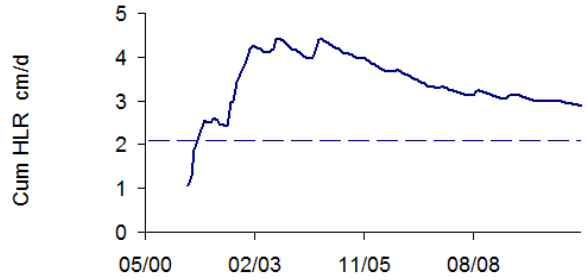


Inflow Hydraulic Loads

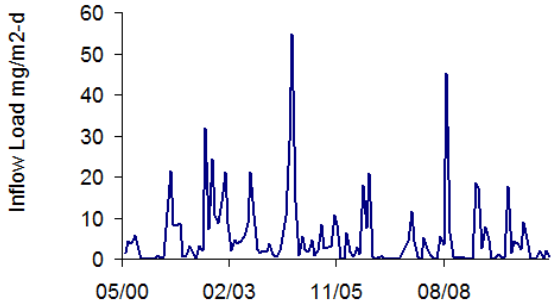


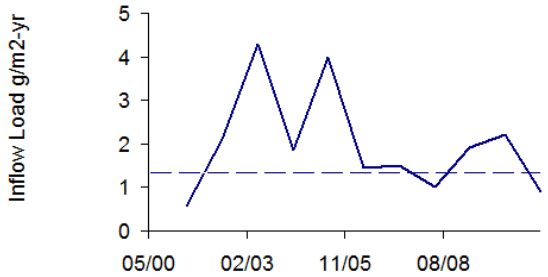
Dashed Lines = RS Design Long-Term Mean

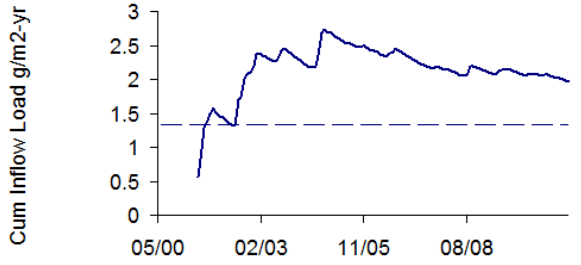




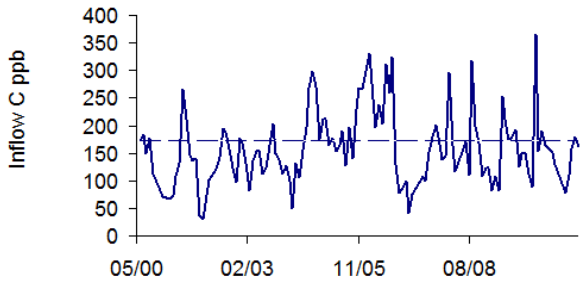
Inflow Phosphorus Loads Per Unit Area

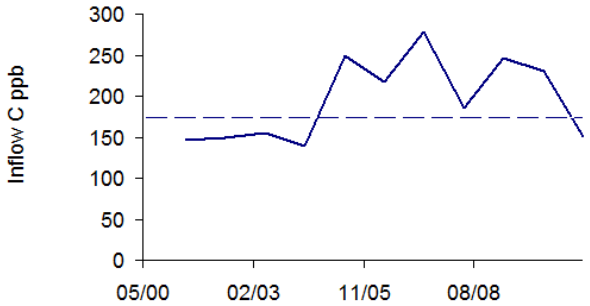


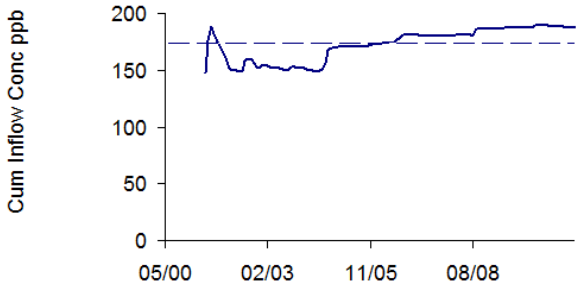




Inflow Concentrations

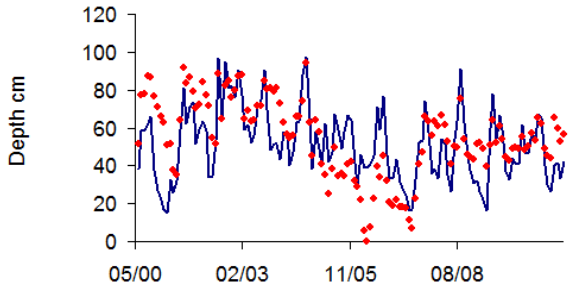


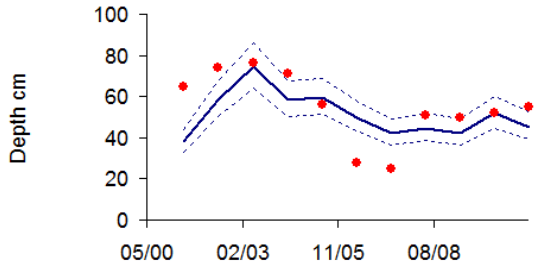


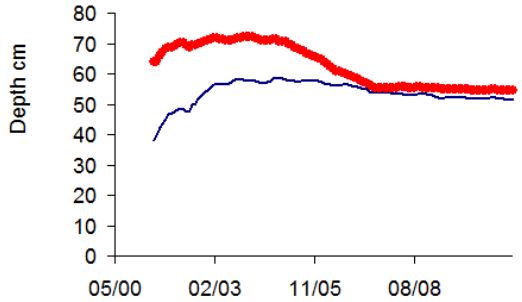


Mean Depths

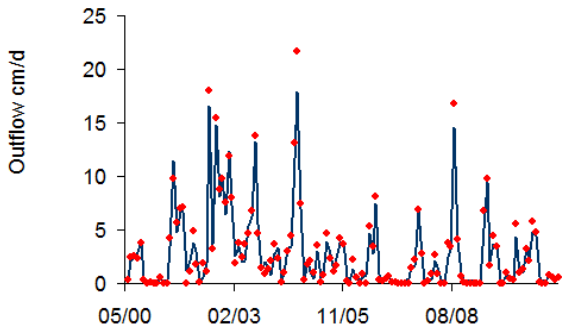
Dashed Lines = 80% Prediction Interval

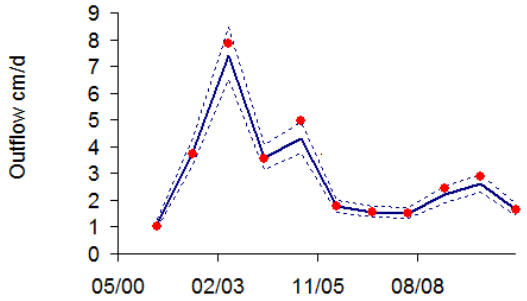


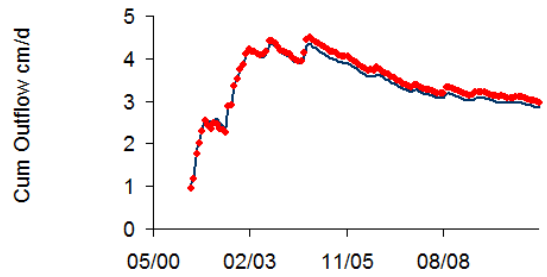




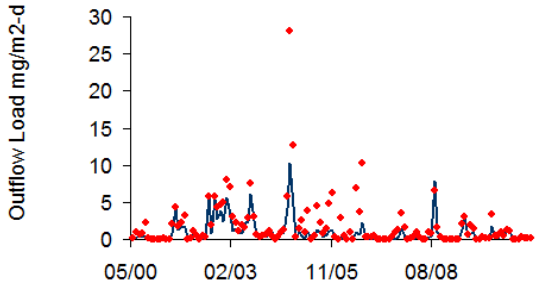
Outflow Volumes Per Unit Area

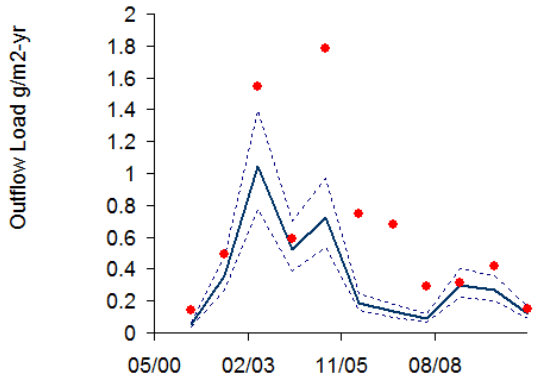


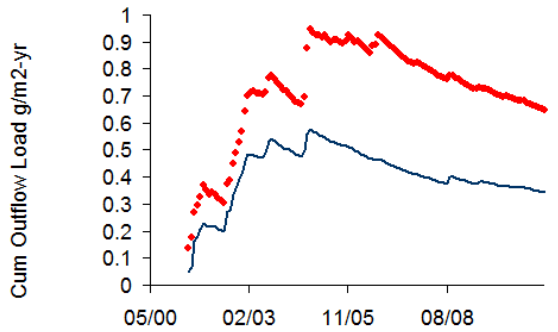




Outflow Loads Per Unit Area

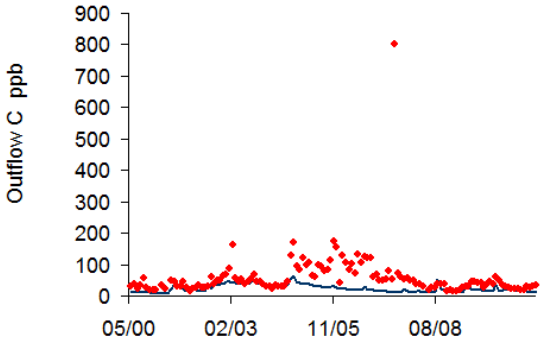


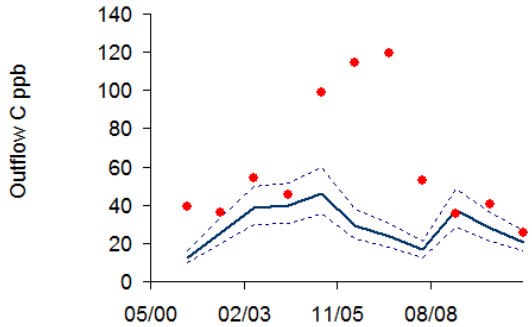


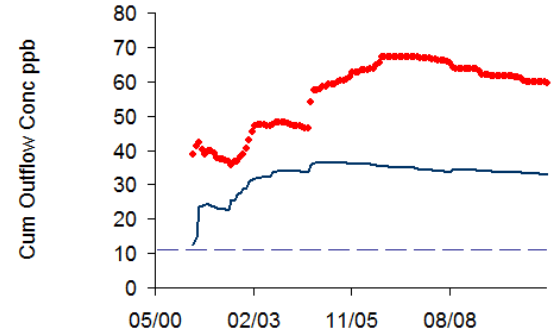


Outflow Concentrations

Dashed Line = RS Design Simulation

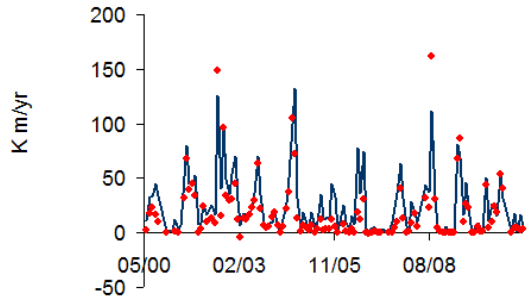


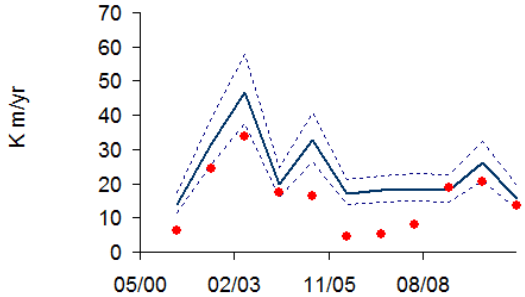


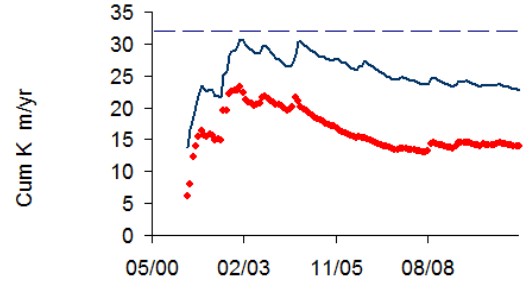


K - Steady State Model, C*=4, n = 6, q* = 0 cm/d

Dashed Line = RS Design Simulation



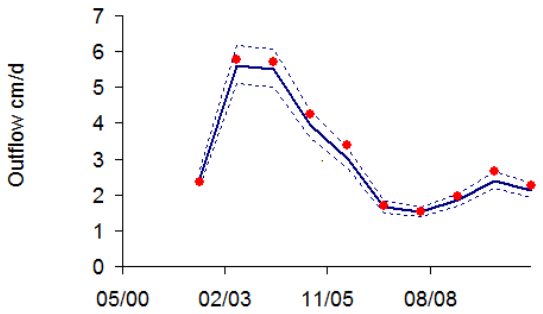


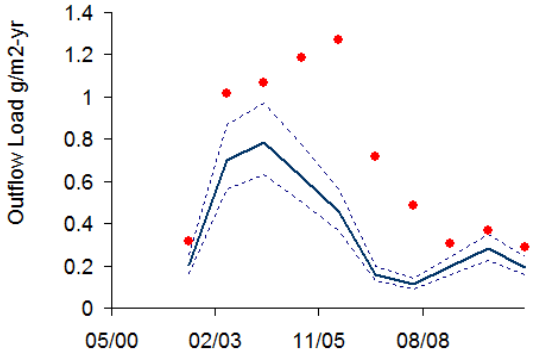


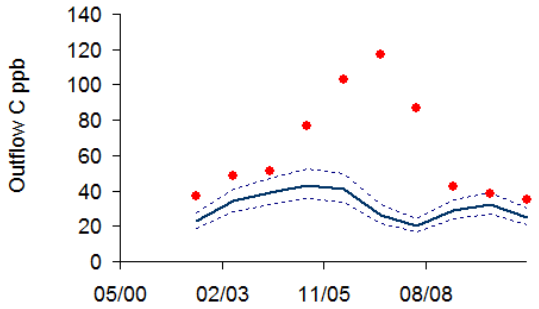
Outflow Volume, Load, Conc vs. Date - 2 Yr Rolling

720-day Averages

Dashed Lines = 80% Prediction Interval



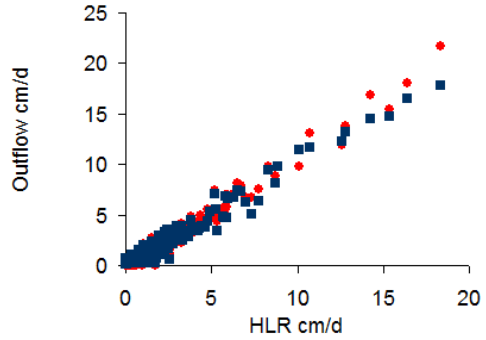


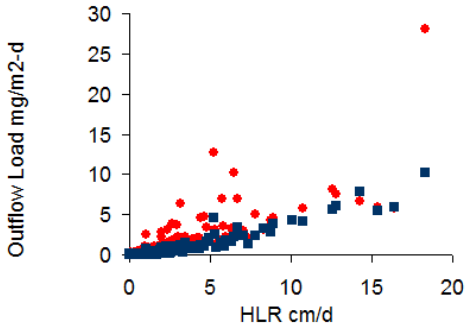


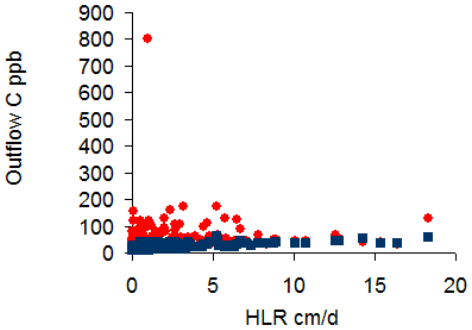
Outflow Volume, Load, & Conc vs. Inflow Hydraulic Load

30-Day Averages

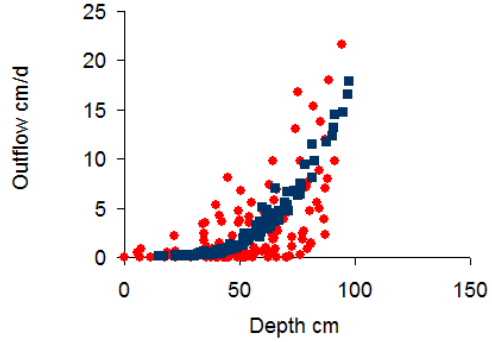
Blue = Predicted, Red = Observed

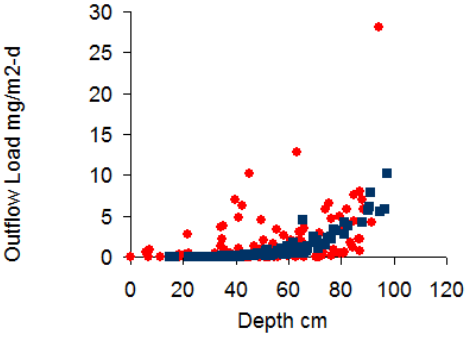


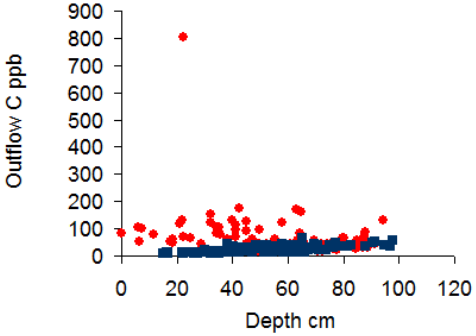




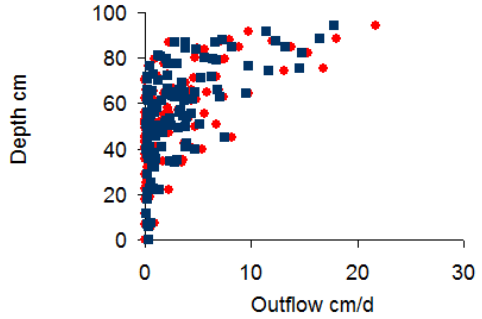
Outflow Volume, Load, & Conc vs. Depth

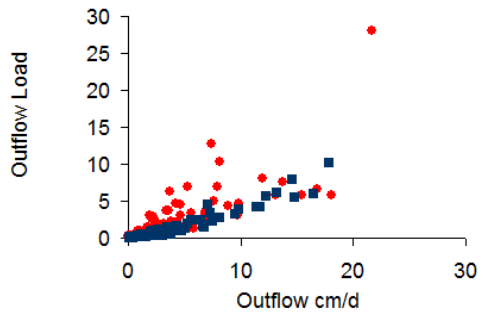


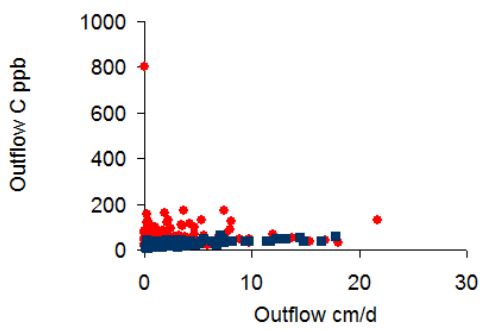




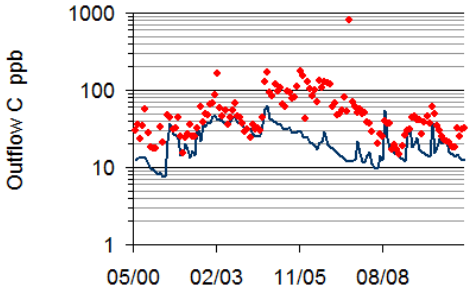
Depth, Load, & Conc vs. Outflow Volume / Area

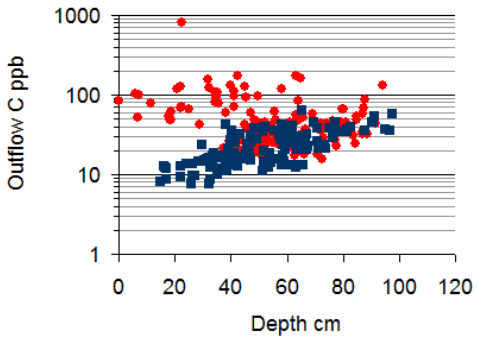


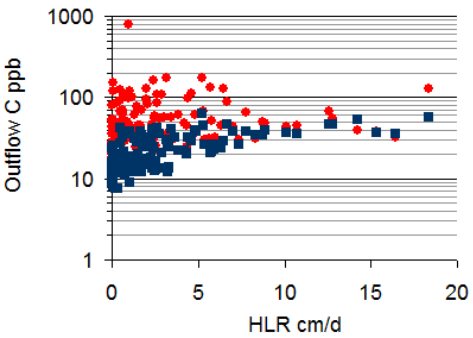




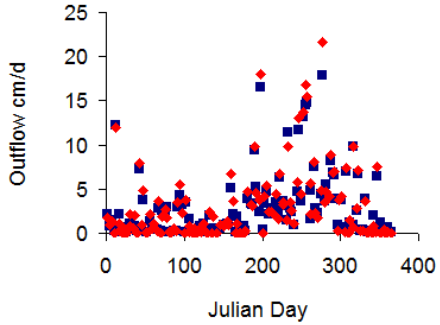
Log Outflow Conc vs. Date, Depth, Hydraulic Load

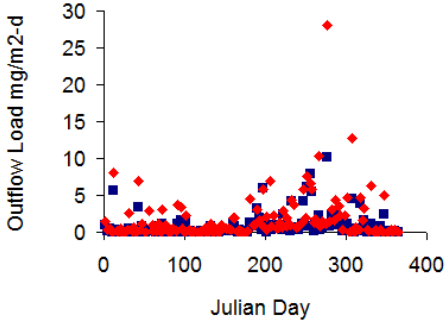


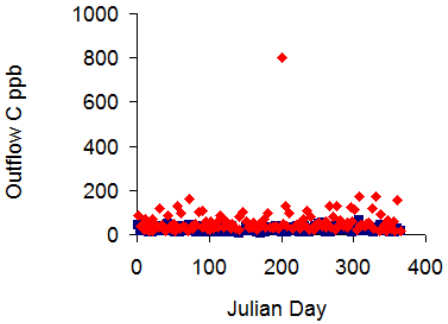




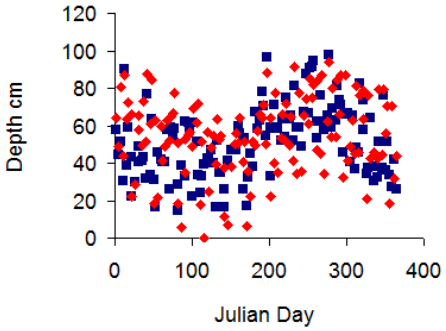
Outflow Volume, Load, Conc vs. Julian Day

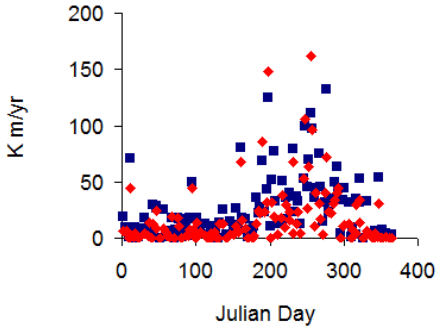


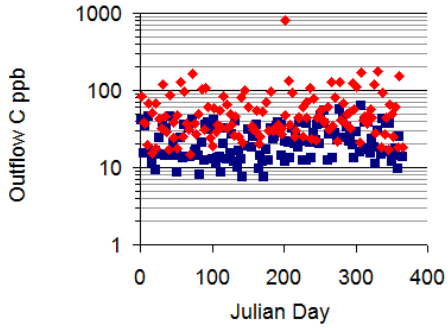




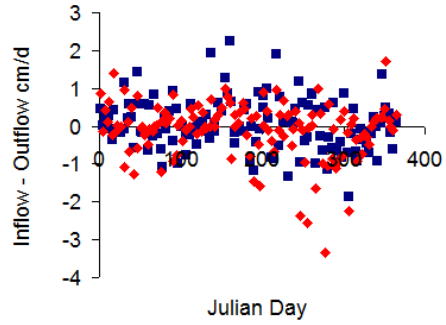
Depth, Settling Rate, Log Conc vs. Julian Day

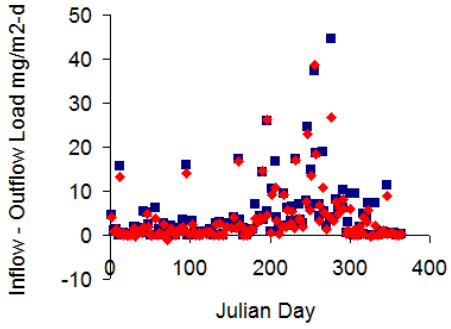


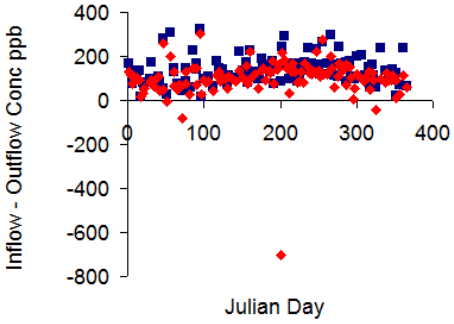




Inflow - Outflow Volume, Load, & Conc vs. Julian Day

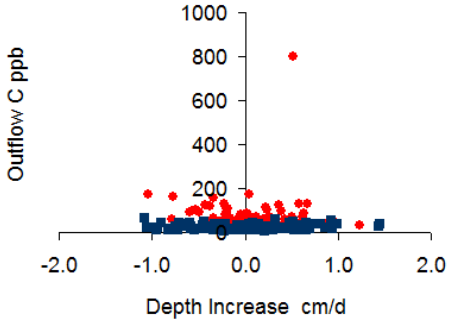


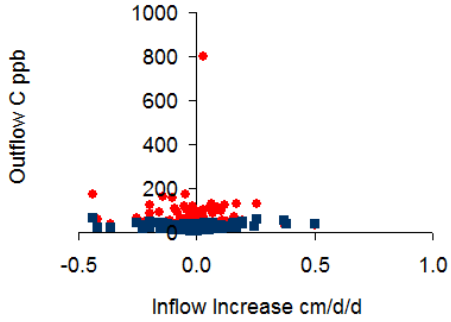


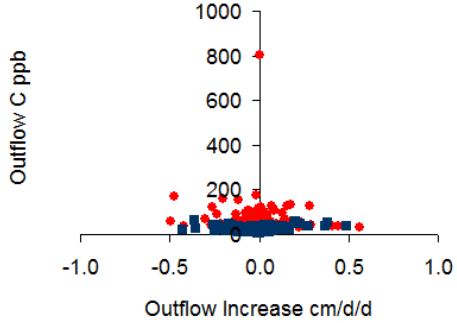


Outflow Conc vs. Increase in Depth, Inflow, & Outflow

Increase = Mean of Interval - Mean of Previous Interval



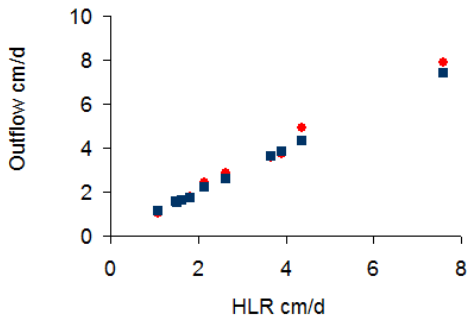


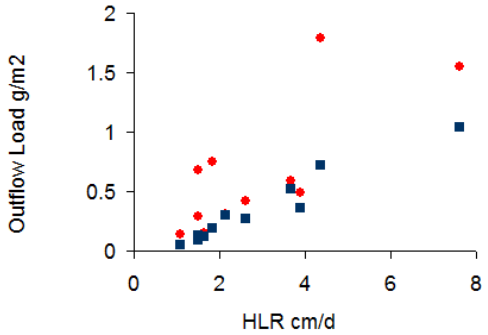


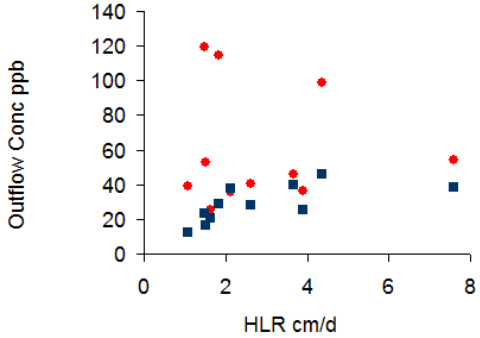
Outflow Volume, Load, & Conc vs. Inflow Hydraulic Load

360-Day Averages

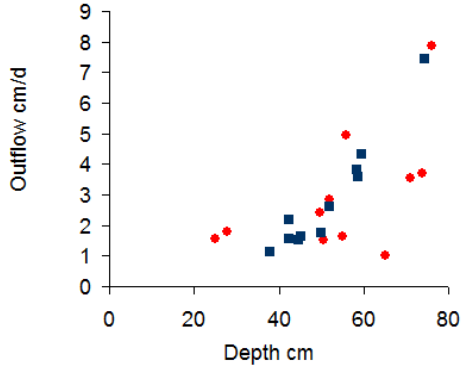
Blue = Predicted, Red = Observed

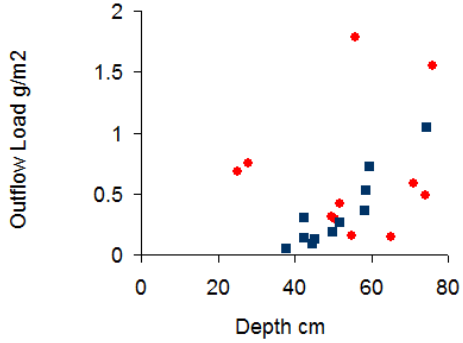


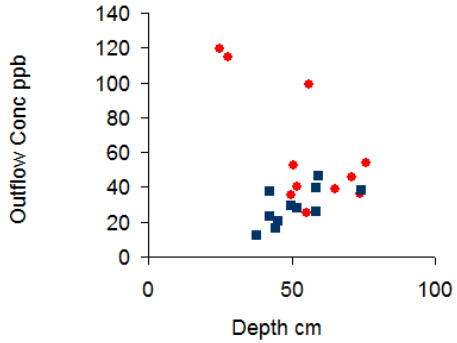




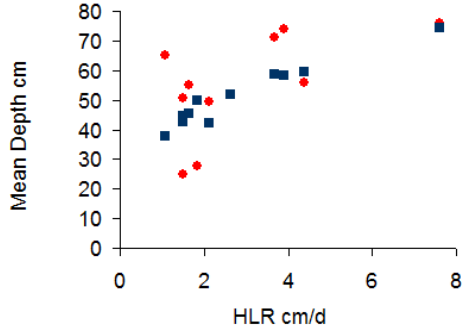
Outflow Volume, Load, & Conc vs. Mean Depth

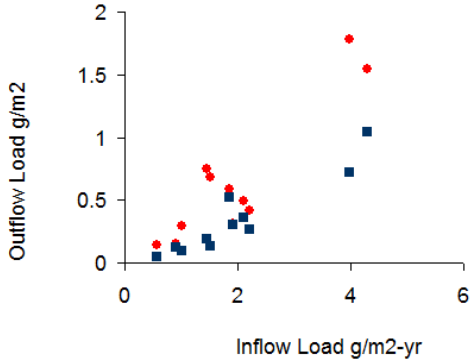


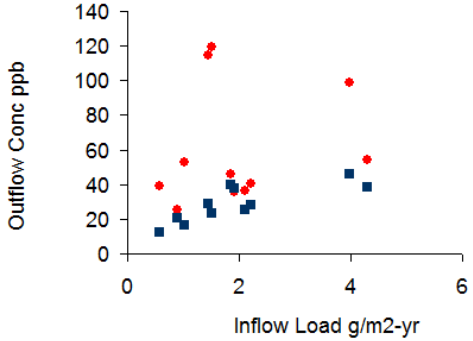




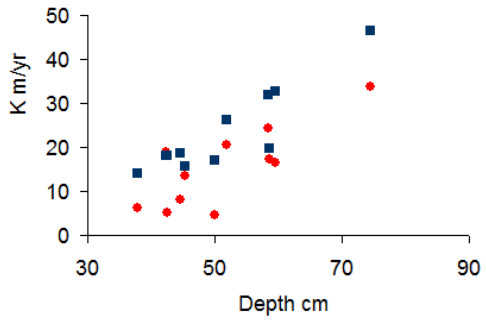
Depth vs. Hydraulic Load, Outflow Load & Conc vs. Inflow Load

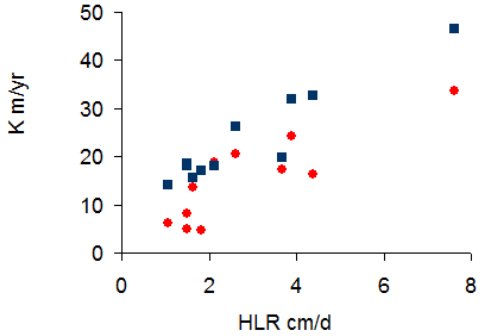


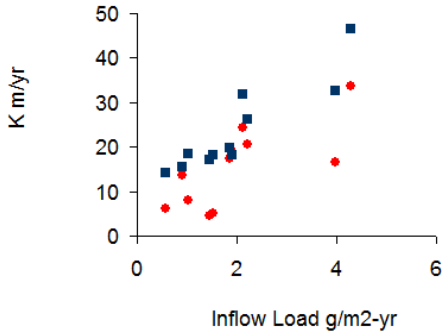




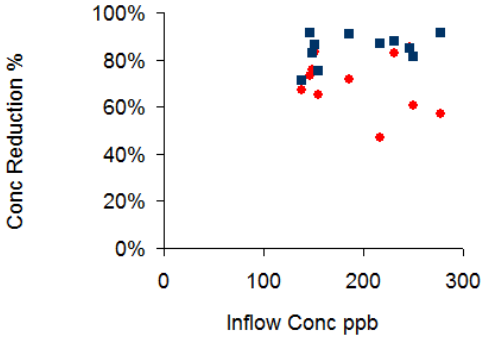
Steady-State Model K Values vs. Depth, HLR, & P Load

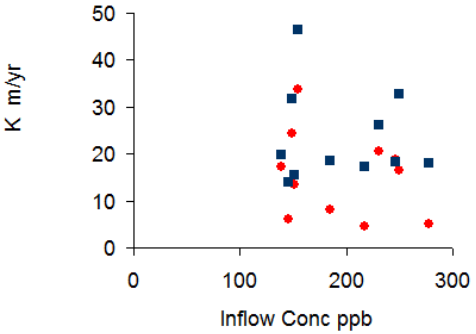


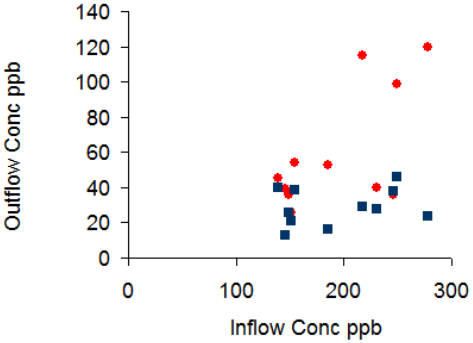




Outflow Conc Reduction, Conc, & K vs. Inflow Conc

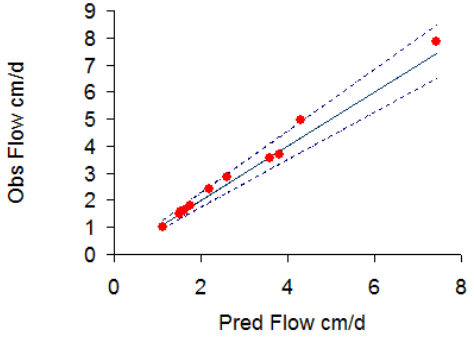


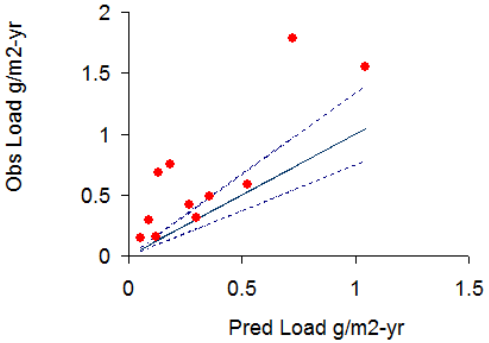


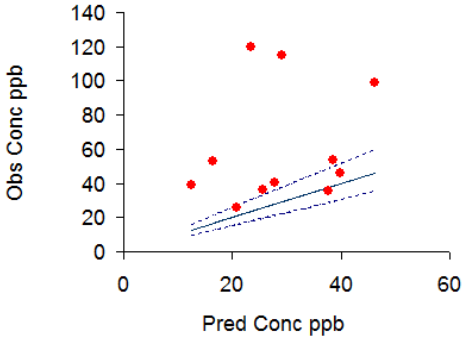


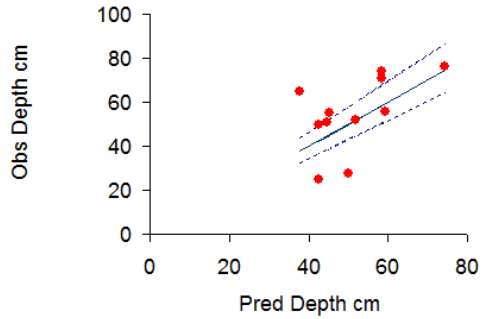
Observed vs. Predicted Values

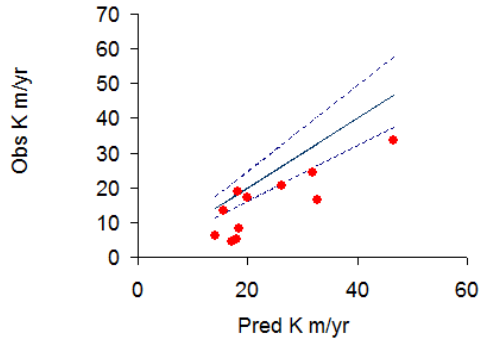
360-Day Averages

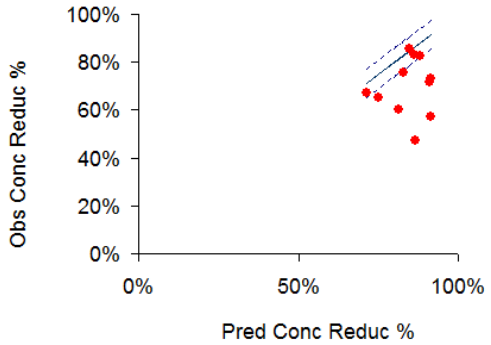






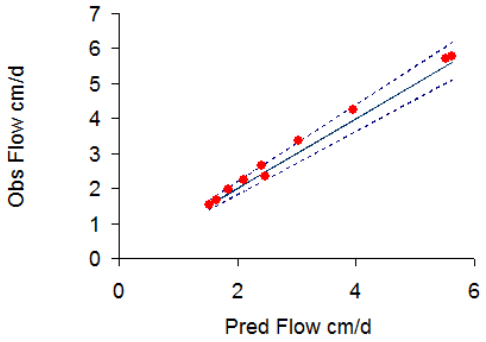


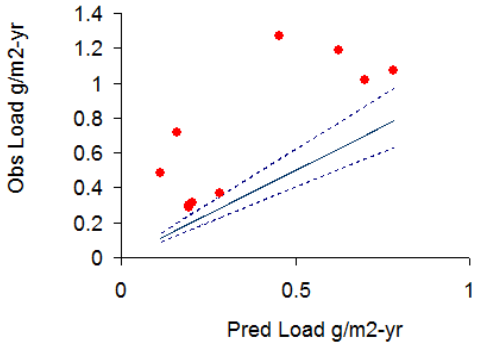


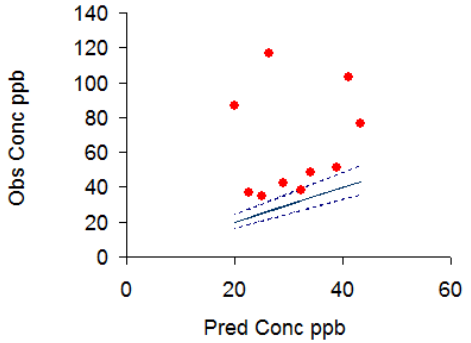


Observed vs. Predicted Values - 2 years

720-day Averages







Residual Statistics Interval = 360 06/27/00 04/30/11

Variable	Flow	Load	Conc	Depth	K
count	11	11	11	11	11
resid mean	0.125	0.306	31.3	3.3	-8.2
resid std dev	0.239	0.326	33.4	14.2	5.4
resid rms	0.270	0.447	45.8	14.5	9.8
obs mean	2.988	0.651	59.7	54.7	15.3
obs std dev	2.004	0.542	33.9	16.9	9.1
pred mean	2.862	0.345	33.0	51.4	23.5
pred std dev	1.851	1.624	2.1	10.6	9.9
r squared	0.98	0.32	0.00	0.26	0.00
resid std %	8%	94%	101%	28%	23%
resid rms %	9%	130%	139%	28%	42%
bias mean %	4%	89%	95%	6%	-35%
bias std error %	3%	28%	30%	8%	7%
bias t	1.7	3.1	3.1	0.8	-5.0
bias signif	0.12	0.01	0.01	0.46	0.00
80% prediction intervals for prototype datasets (STA-2 & STA-34)					
% of predicted	14%	34%	30%	16%	24%

12/3/2012

Case: Case = STA2_PLAN_C123 , Cell = OUT

STA2 Cells 1-3, Original Hydraulics

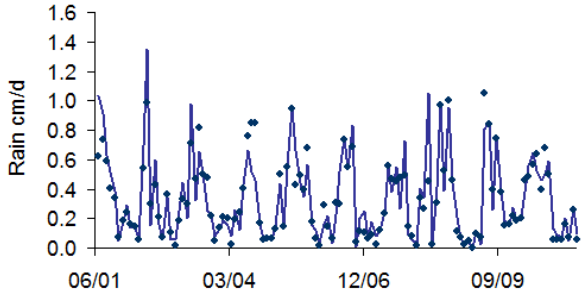
12/3/2012

30-Day Averages 06/23/01 thru 04/30/11

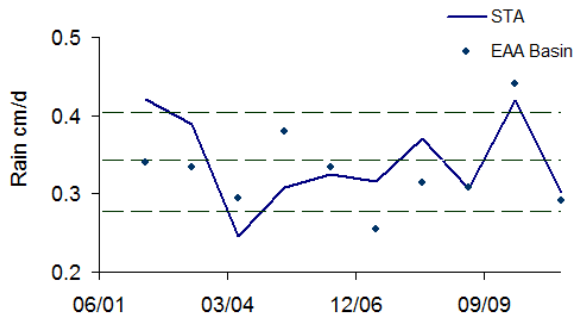
360-Day Averages 06/23/01 thru 04/30/11

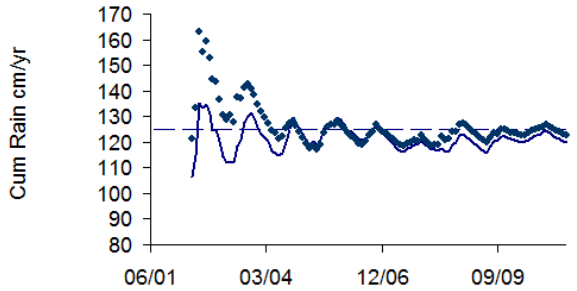
Cumulative 06/23/01 thru 04/30/11

Rainfall

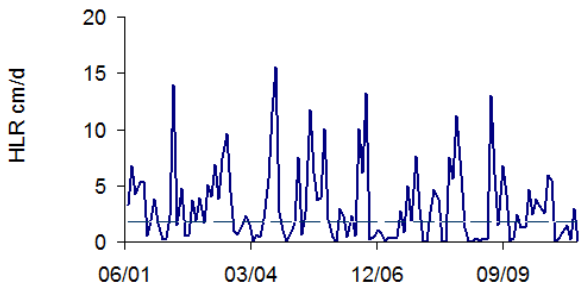


Dashed Lines = EAA Basin Long-Term Average, 10th & 90th Percentiles

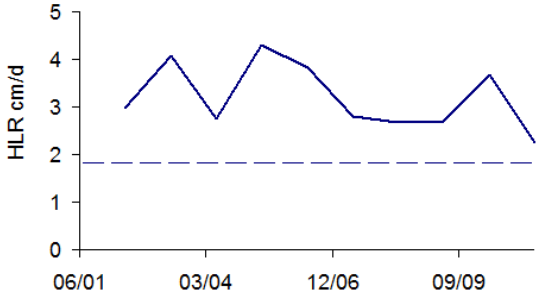


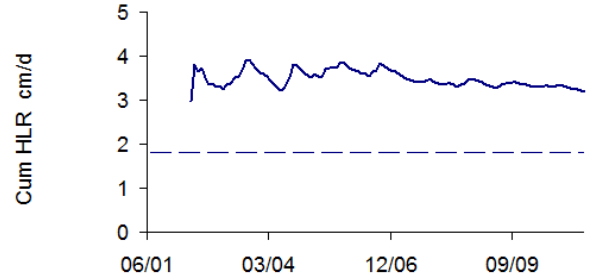


Inflow Hydraulic Loads

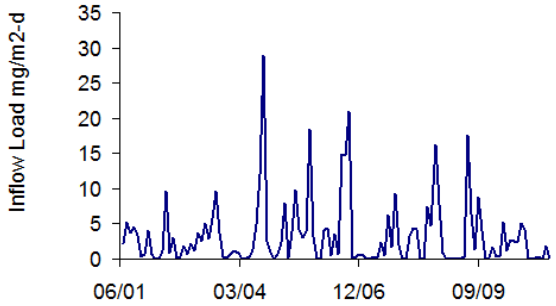


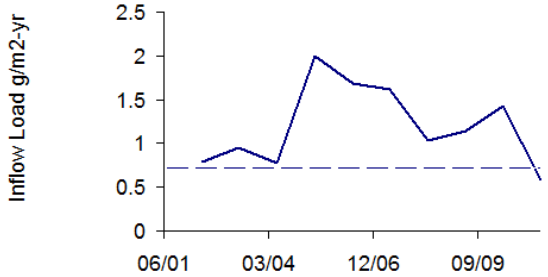
Dashed Lines = RS Design Long-Term Mean

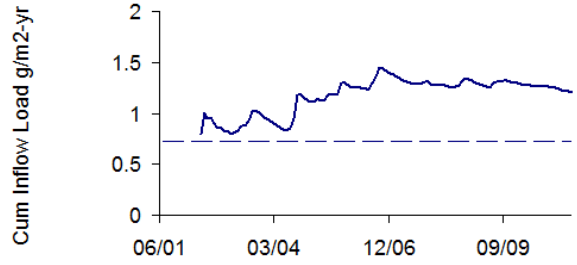




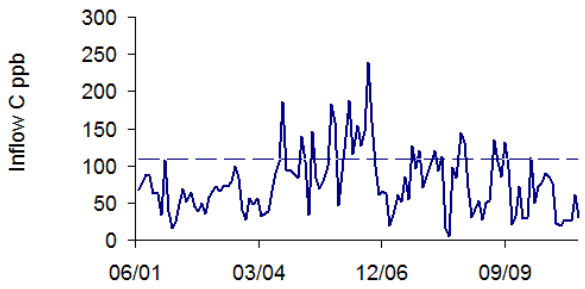
Inflow Phosphorus Loads Per Unit Area

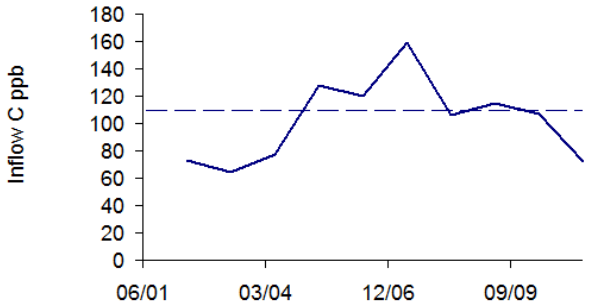


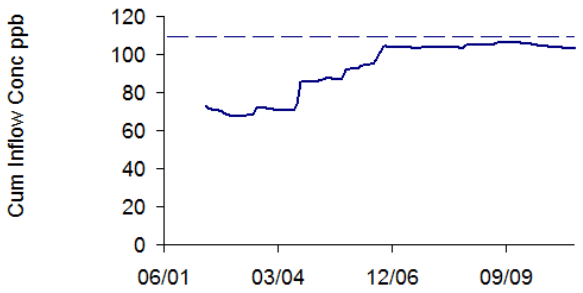




Inflow Concentrations

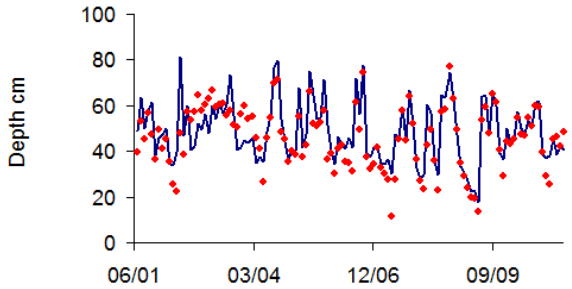


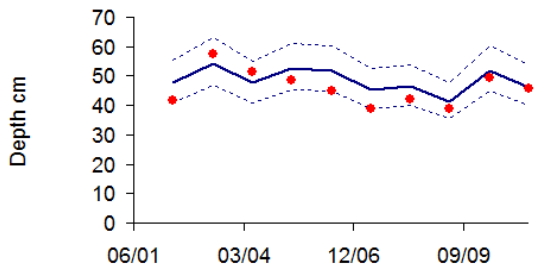


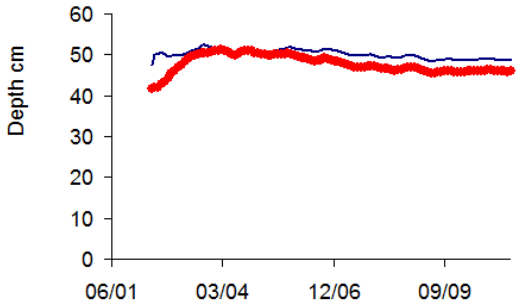


Mean Depths

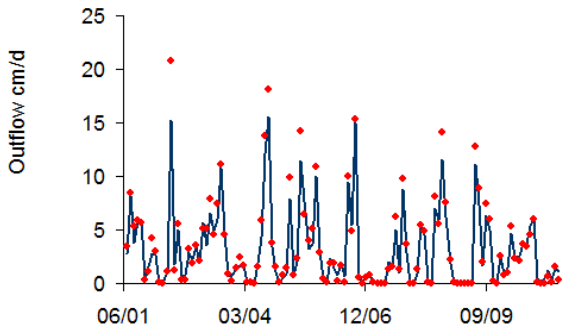
Dashed Lines = 80% Prediction Interval

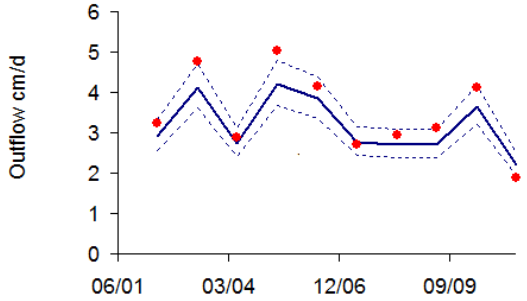


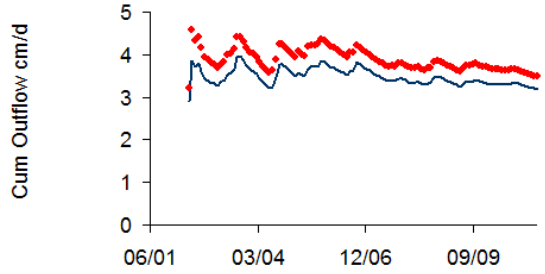




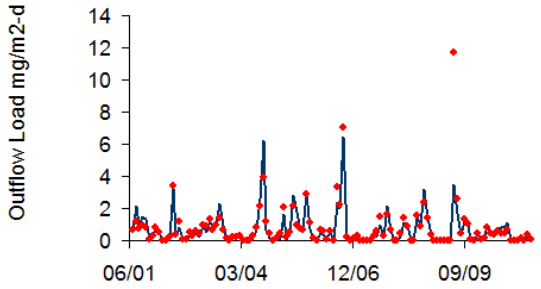
Outflow Volumes Per Unit Area

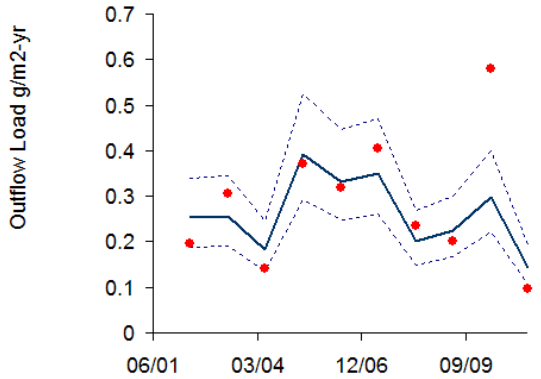


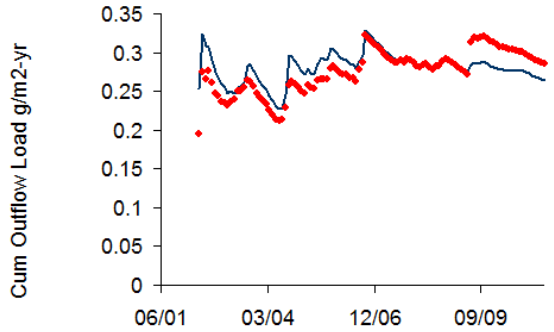




Outflow Loads Per Unit Area

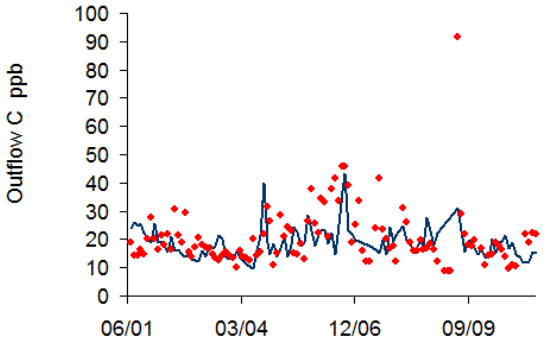


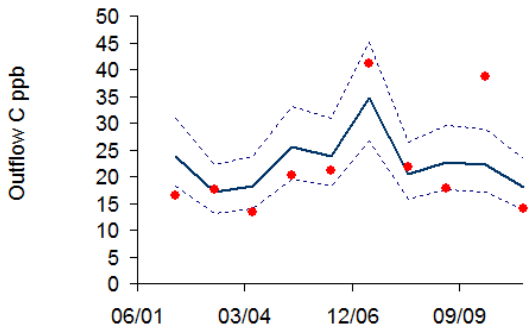


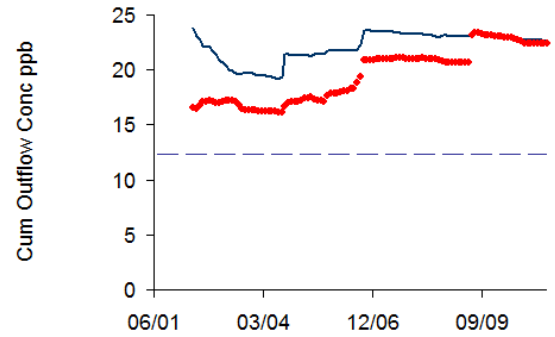


Outflow Concentrations

Dashed Line = RS Design Simulation

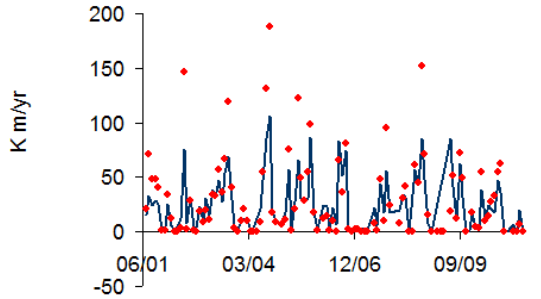


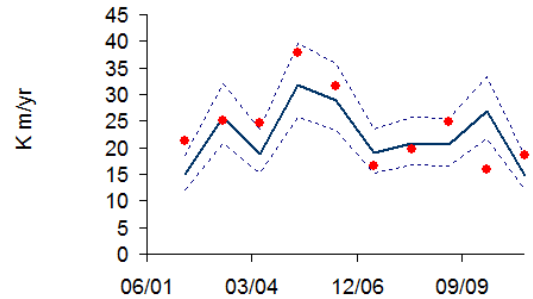


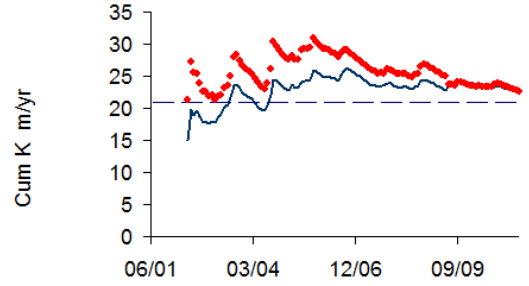


K - Steady State Model, C*=4, n = 6, q* = 0 cm/d

Dashed Line = RS Design Simulation



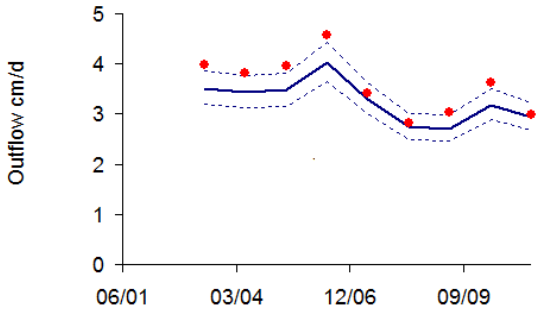


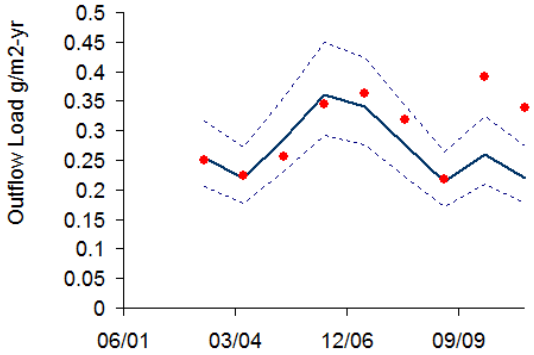


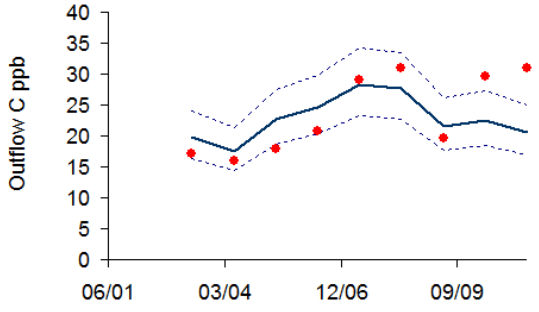
Outflow Volume, Load, Conc vs. Date - 2 Yr Rolling

720-day Averages

Dashed Lines = 80% Prediction Interval



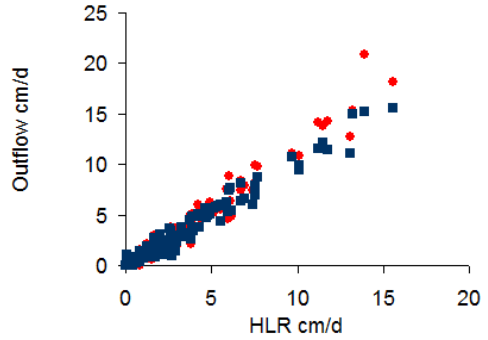


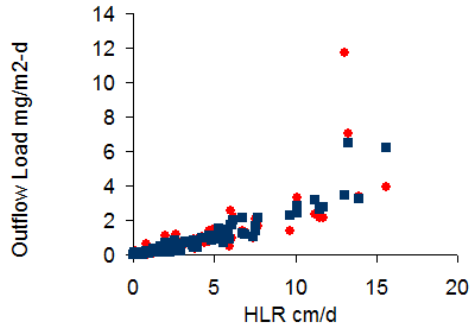


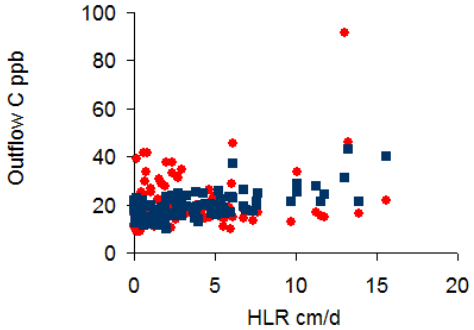
Outflow Volume, Load, & Conc vs. Inflow Hydraulic Load

30-Day Averages

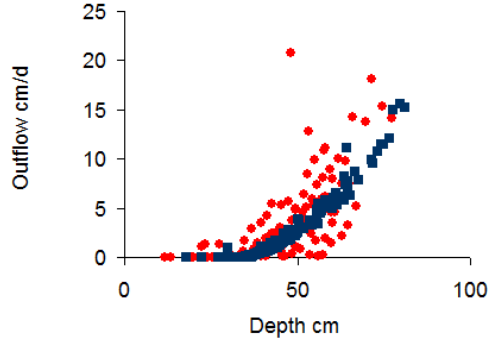
Blue = Predicted, Red = Observed

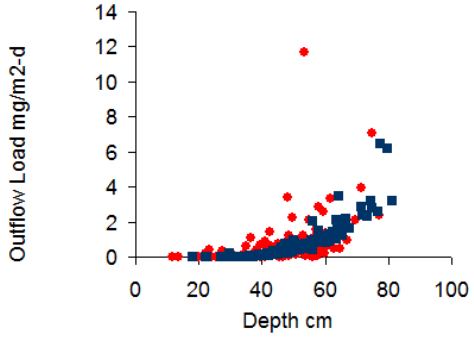


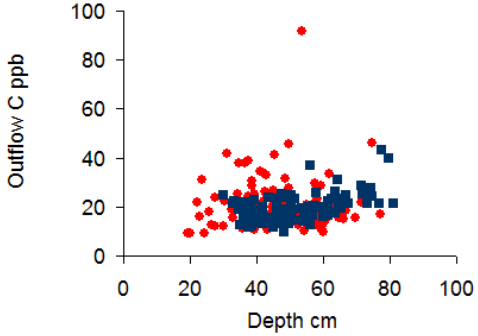




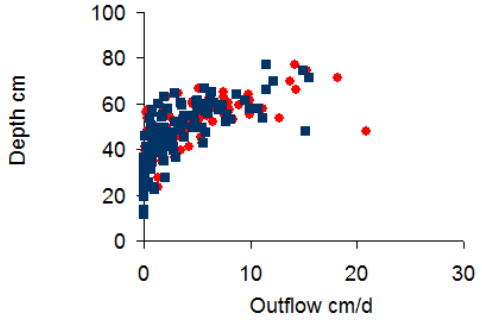
Outflow Volume, Load, & Conc vs. Depth

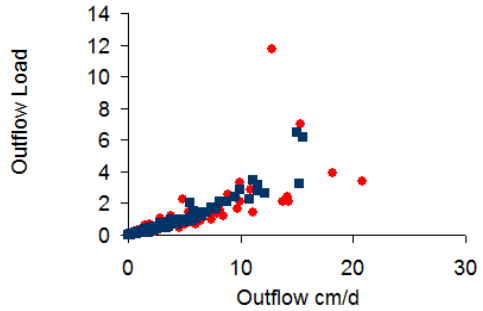


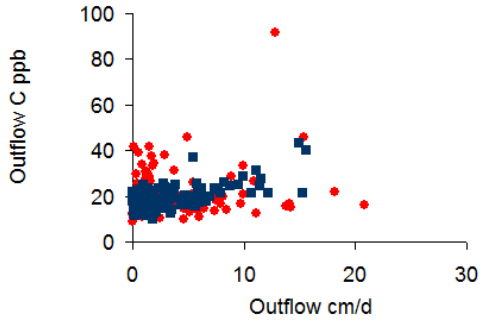




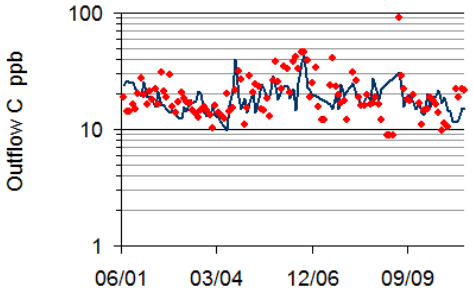
Depth, Load, & Conc vs. Outflow Volume / Area

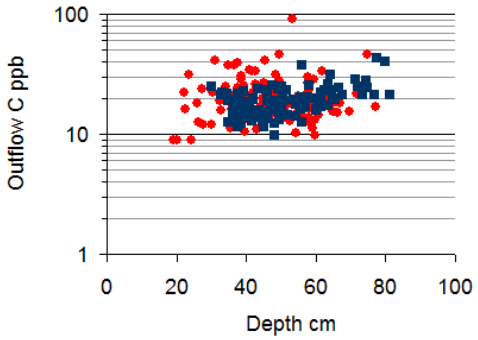


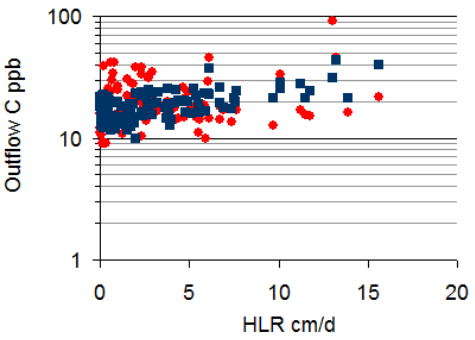




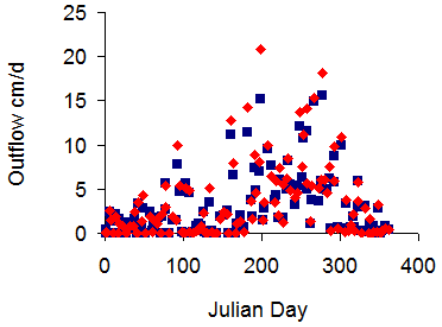
Log Outflow Conc vs. Date, Depth, Hydraulic Load

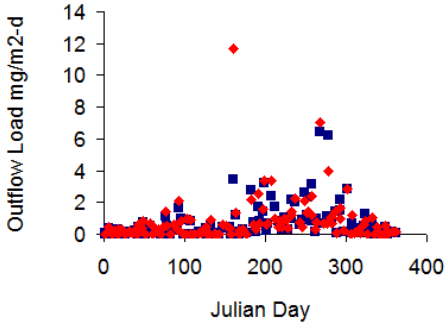


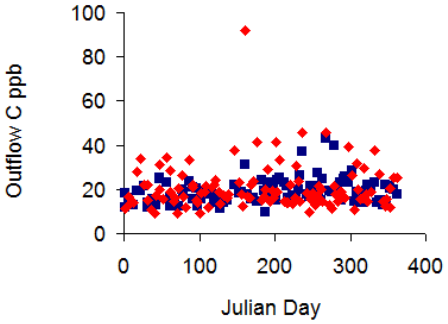




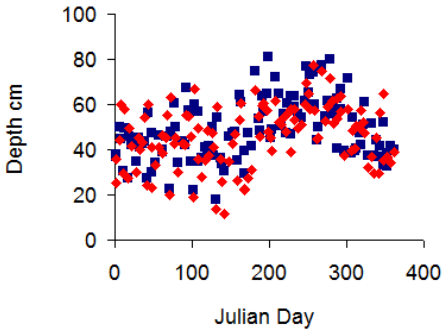
Outflow Volume, Load, Conc vs. Julian Day

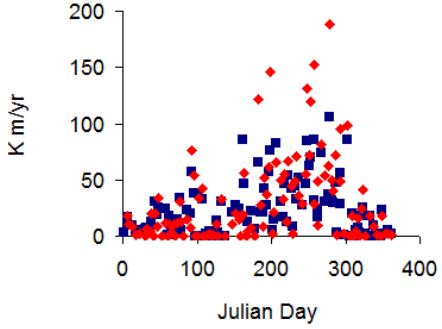


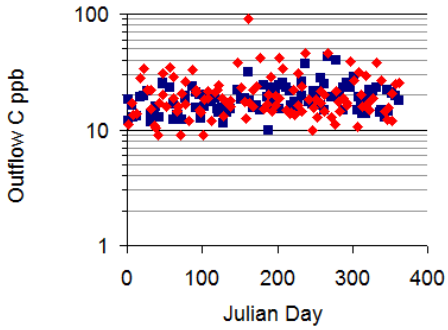




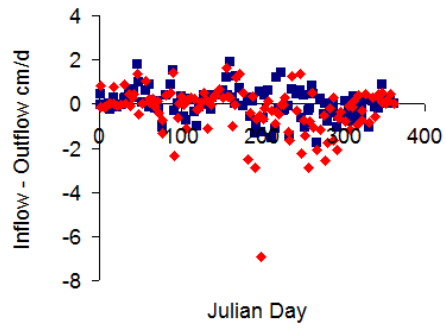
Depth, Settling Rate, Log Conc vs. Julian Day

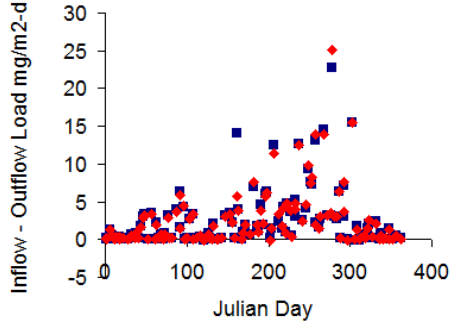


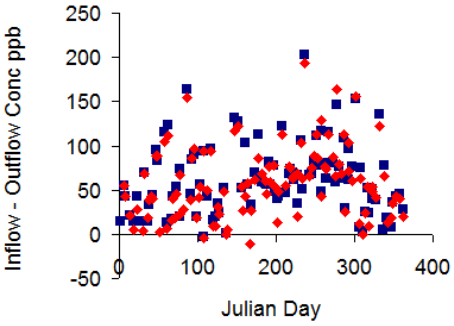




Inflow - Outflow Volume, Load, & Conc vs. Julian Day

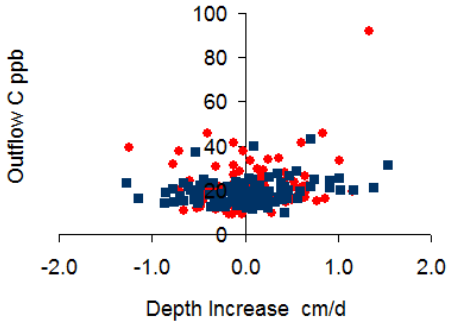


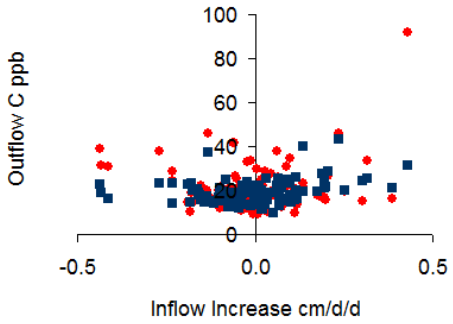


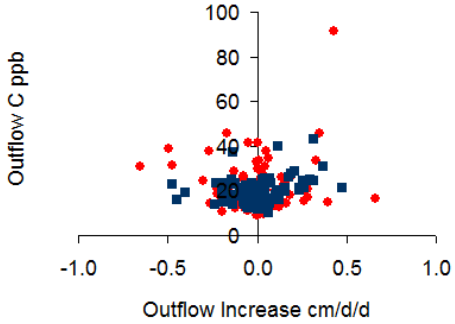


Outflow Conc vs. Increase in Depth, Inflow, & Outflow

Increase = Mean of Interval - Mean of Previous Interval



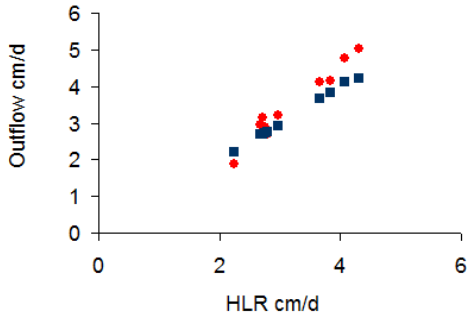


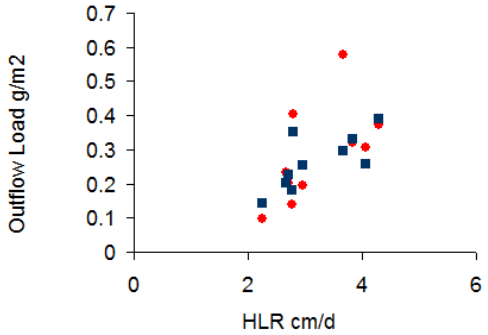


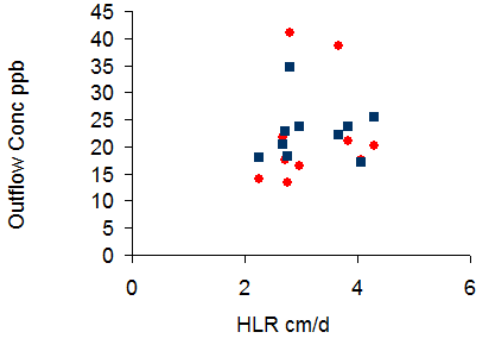
Outflow Volume, Load, & Conc vs. Inflow Hydraulic Load

360-Day Averages

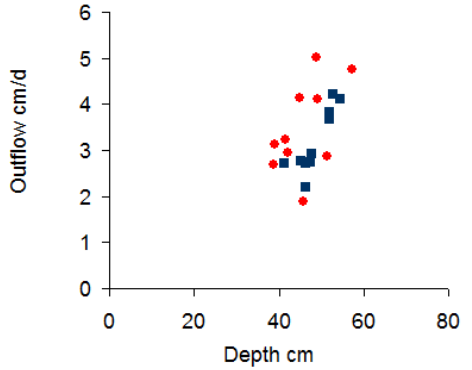
Blue = Predicted, Red = Observed

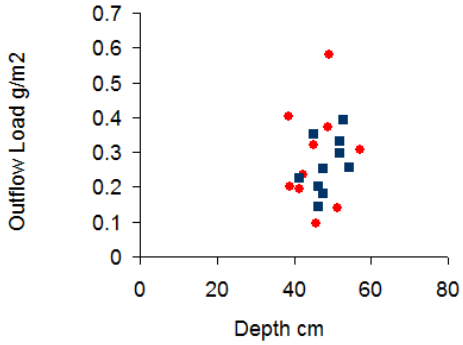


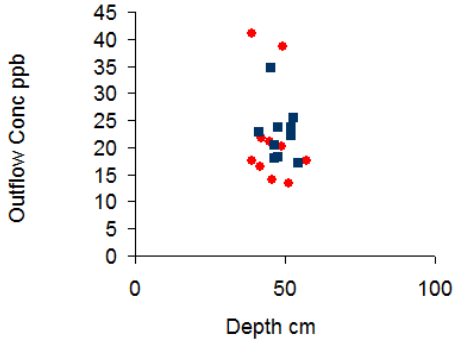




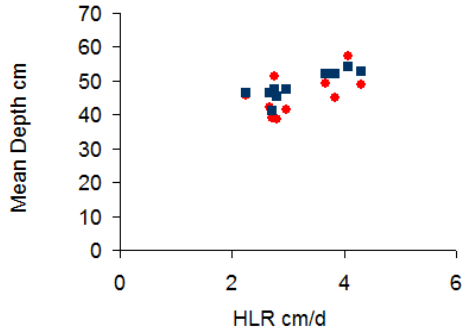
Outflow Volume, Load, & Conc vs. Mean Depth

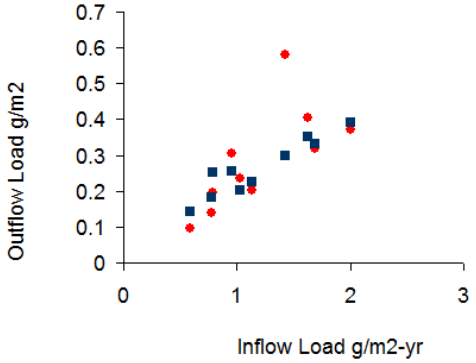


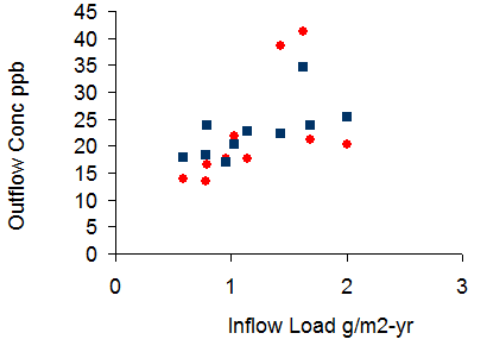




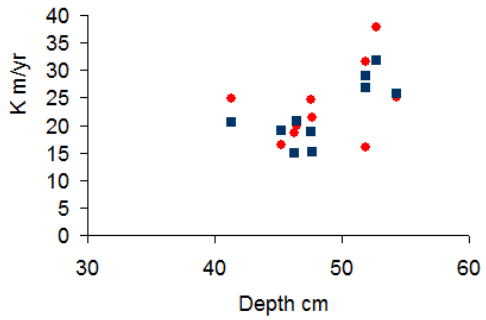
Depth vs. Hydraulic Load, Outflow Load & Conc vs. Inflow Load

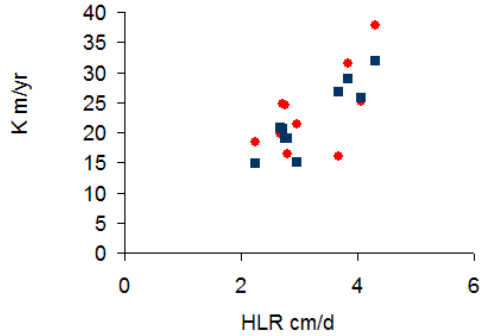


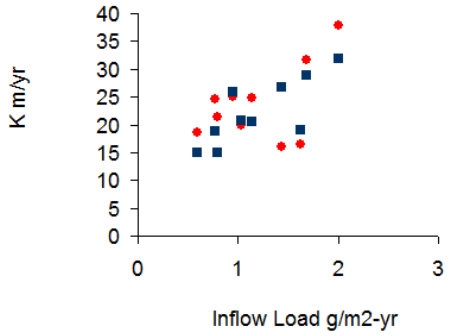




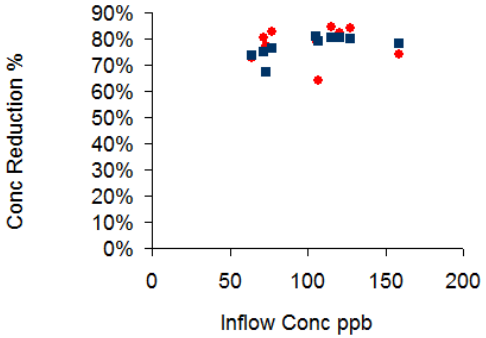
Steady-State Model K Values vs. Depth, HLR, & P Load

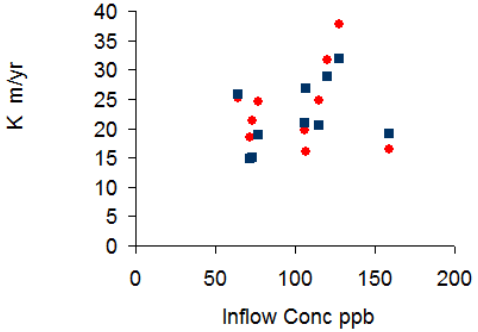


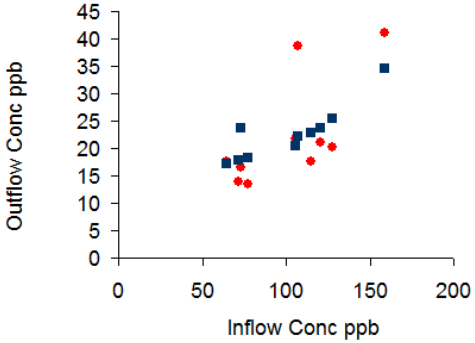




Outflow Conc Reduction, Conc, & K vs. Inflow Conc

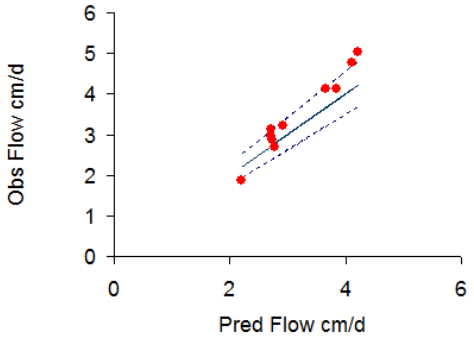


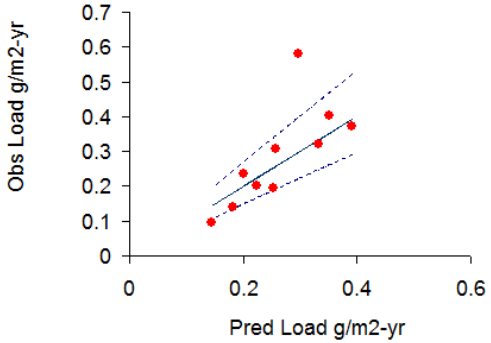


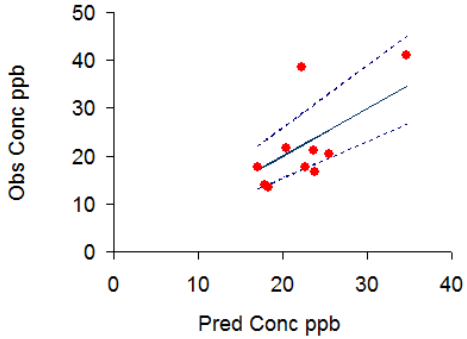


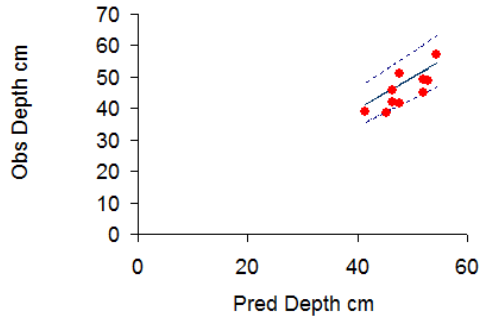
Observed vs. Predicted Values

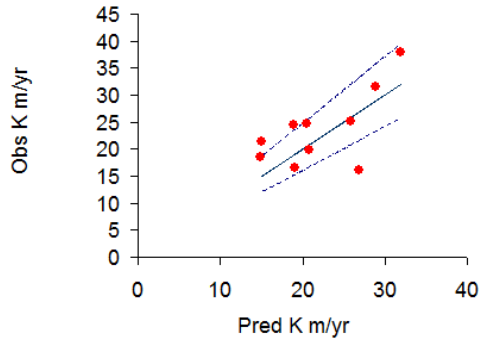
360-Day Averages

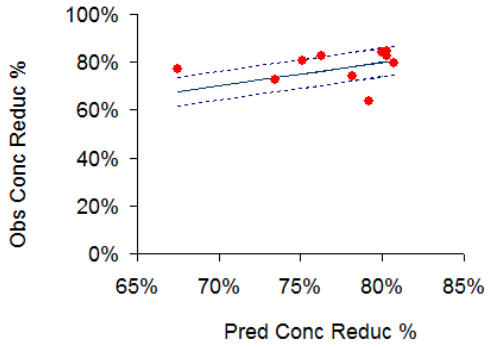






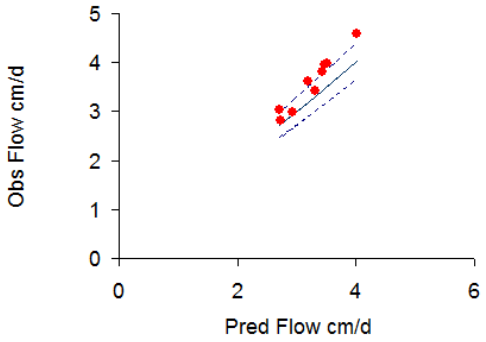


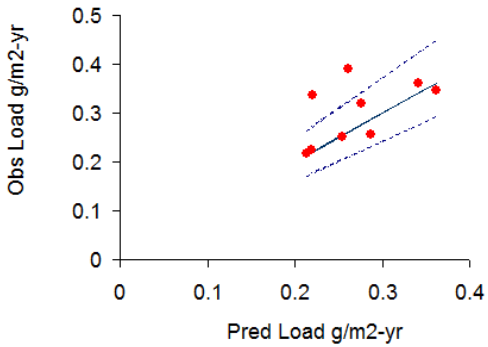


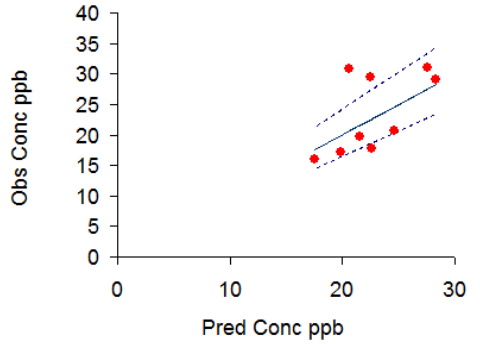


Observed vs. Predicted Values - 2 years

720-day Averages







Residual Statistics Interval = 360 06/23/01 04/30/11

Variable	Flow	Load	Conc	Depth	K
count	10	10	10	10	10
resid mean	0.292	0.021	-0.4	-2.7	1.3
resid std dev	0.331	0.100	7.1	3.7	5.3
resid rms	0.442	0.102	7.2	4.6	5.5
obs mean	3.479	0.285	22.4	45.9	23.6
obs std dev	0.992	0.143	9.7	5.9	6.9
pred mean	3.187	0.263	22.6	48.5	22.3
pred std dev	0.701	0.615	0.8	4.1	5.8
r squared	0.80	0.49	0.46	0.39	0.37
resid std %	10%	38%	32%	8%	24%
resid rms %	14%	39%	32%	9%	25%
bias mean %	9%	8%	-2%	-5%	6%
bias std error %	3%	12%	10%	2%	8%
bias t	2.8	0.7	-0.2	-2.3	0.8
bias signif	0.02	0.52	0.86	0.05	0.45
80% prediction intervals for prototype datasets (STA-2 & STA-34)					
% of predicted	14%	34%	30%	16%	24%

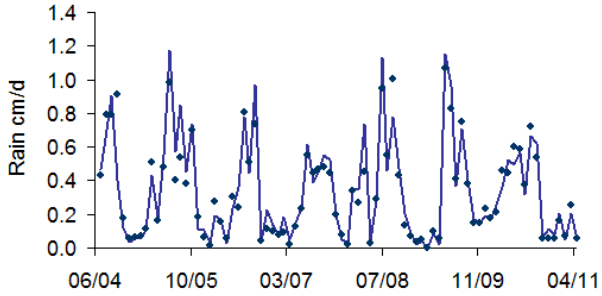
12/3/2012

Case: Case = STA34_Plan , Cell = OUT

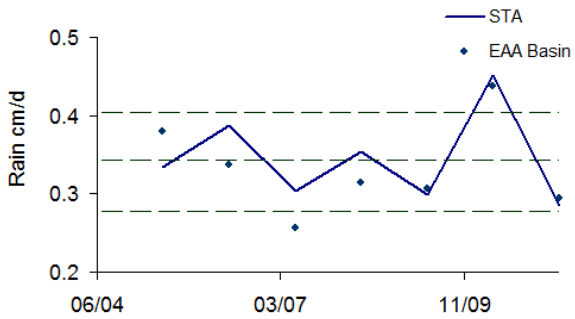
STA-34 Cells 1-3 12/3/2012

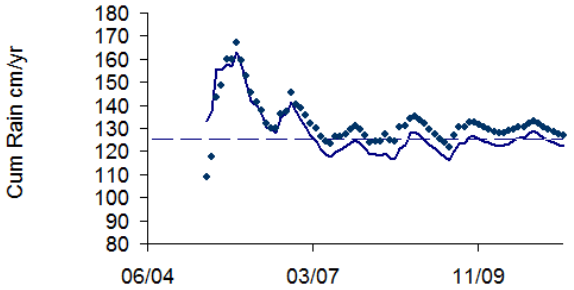
30-Day Averages 06/06/04 thru 04/30/11 360-Day Averages 06/06/04 thru 04/30/11 Cumulative 06/06/04 thru 04/30/11

Rainfall



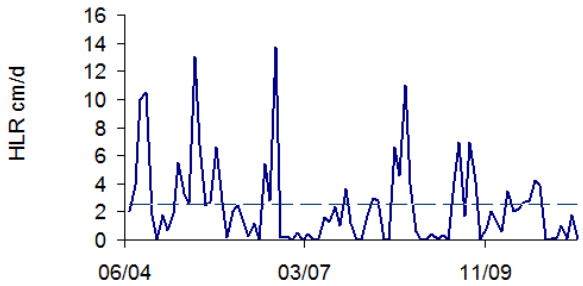
Dashed Lines = EAA Basin Long-Term Average, 10th & 90th Percentiles

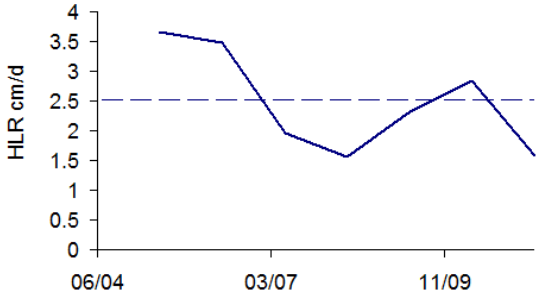


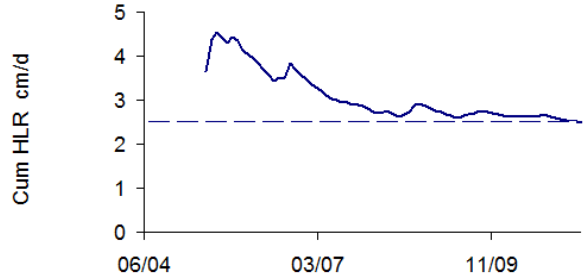


Inflow Hydraulic Loads

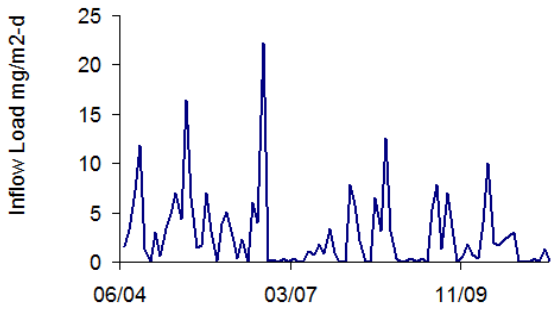
Dashed Lines = RS Design Long-Term Mean

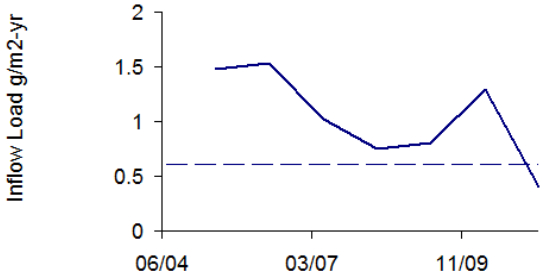


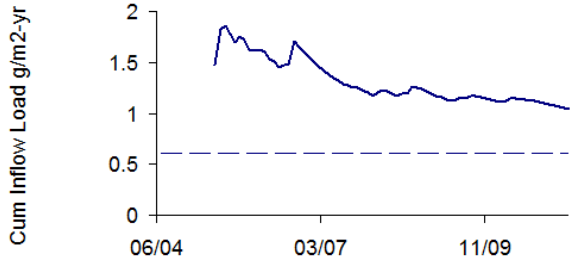




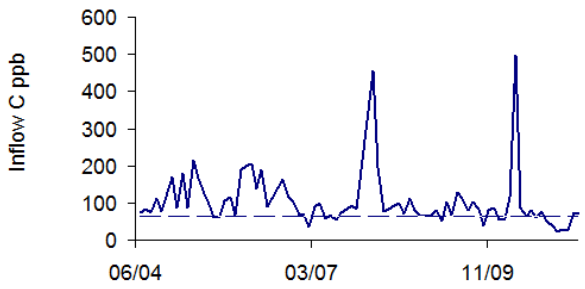
Inflow Phosphorus Loads Per Unit Area

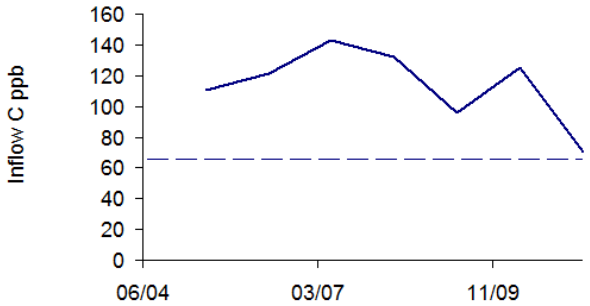


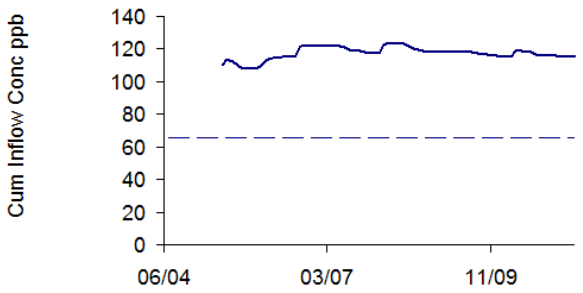




Inflow Concentrations

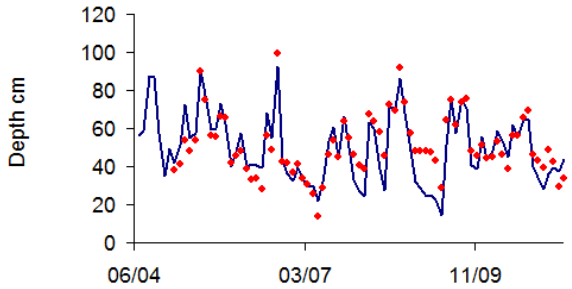


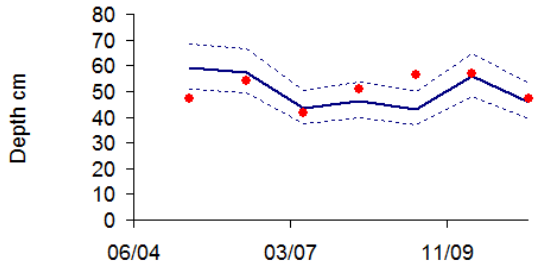


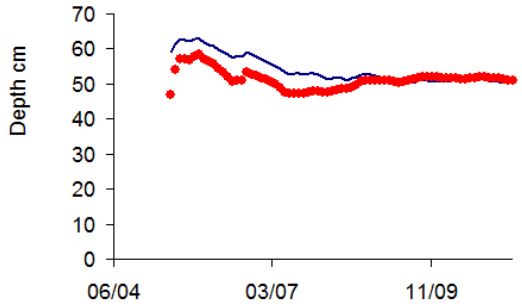


Mean Depths

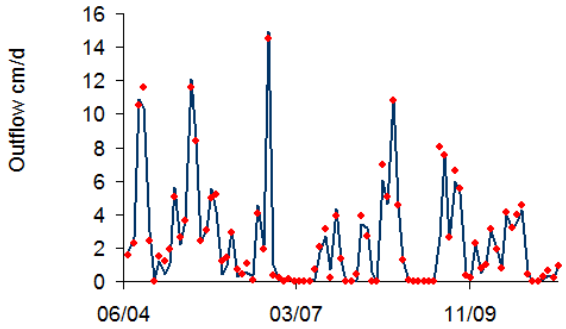
Dashed Lines = 80% Prediction Interval

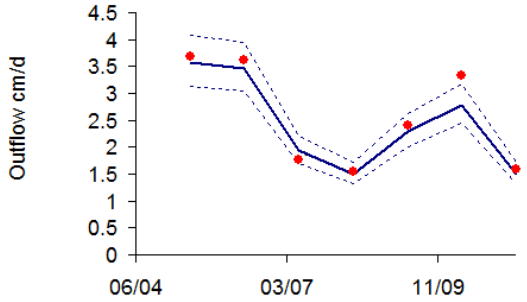


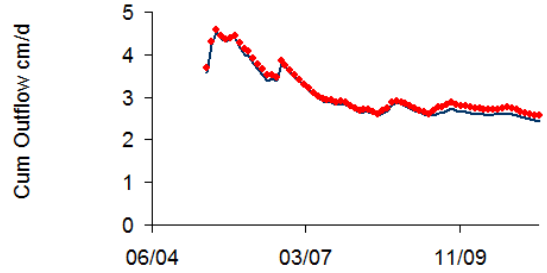




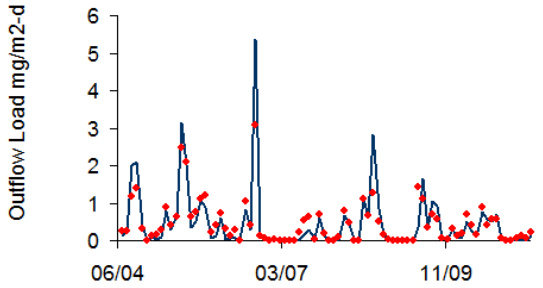
Outflow Volumes Per Unit Area

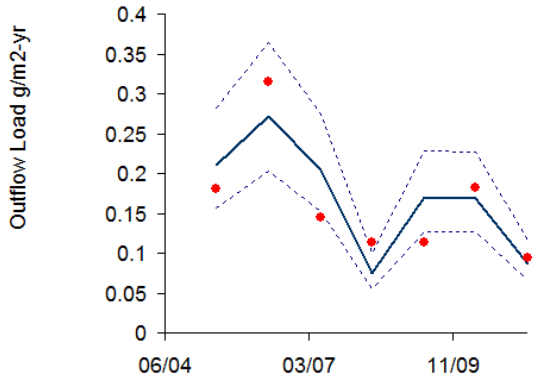


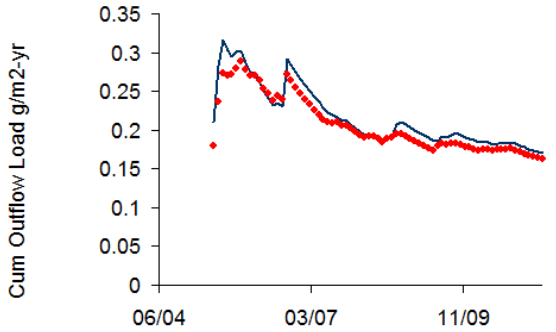




Outflow Loads Per Unit Area

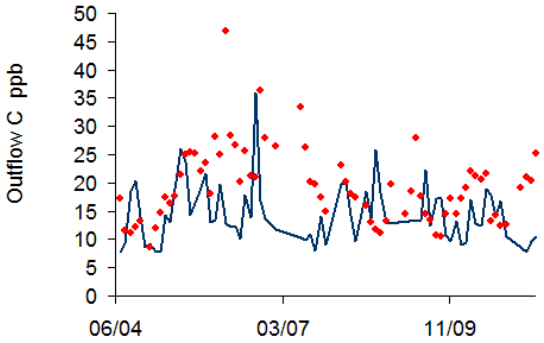


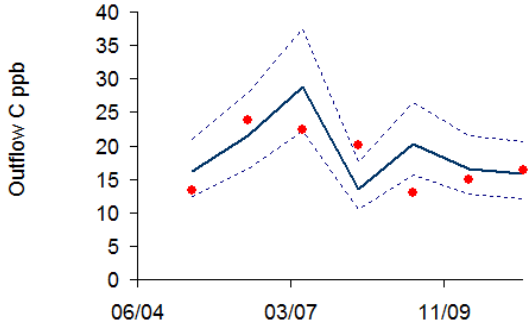


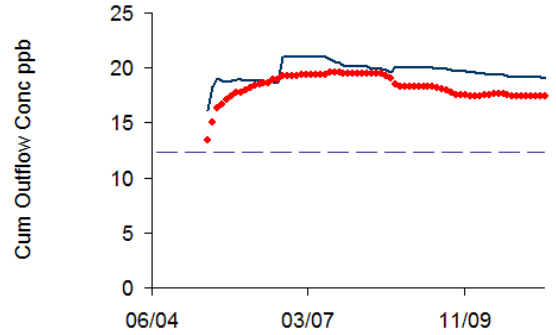


Outflow Concentrations

Dashed Line = RS Design Simulation

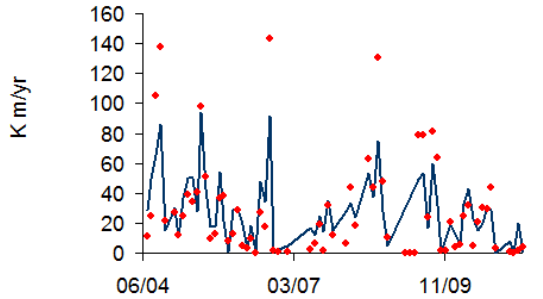


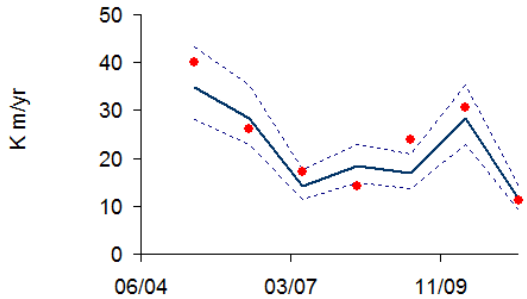


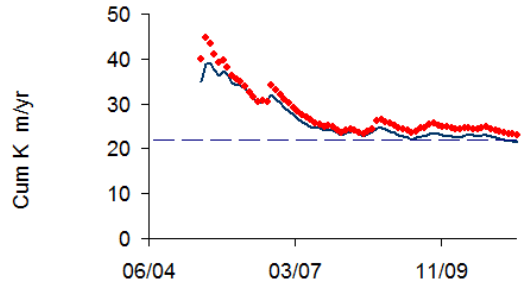


K - Steady State Model, C*=4, n = 6, q* = 0 cm/d

Dashed Line = RS Design Simulation



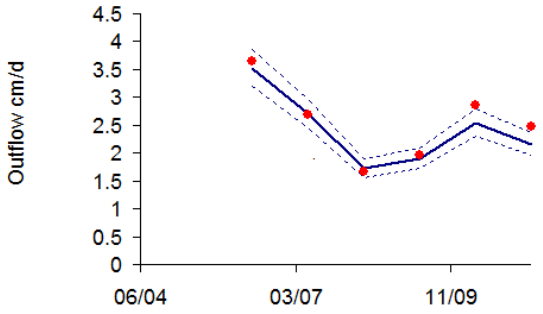


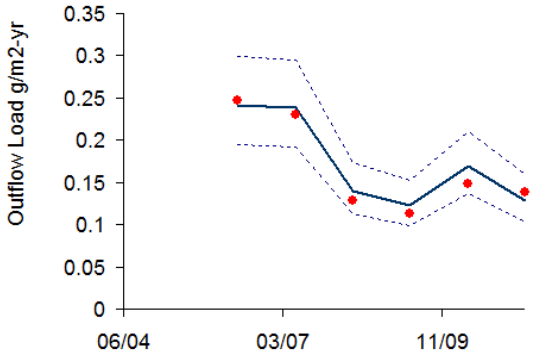


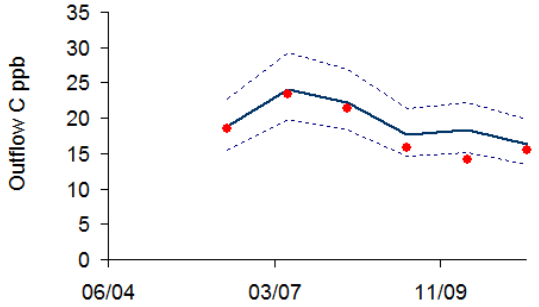
Outflow Volume, Load, Conc vs. Date - 2 Yr Rolling

720-day Averages

Dashed Lines = 80% Prediction Interval



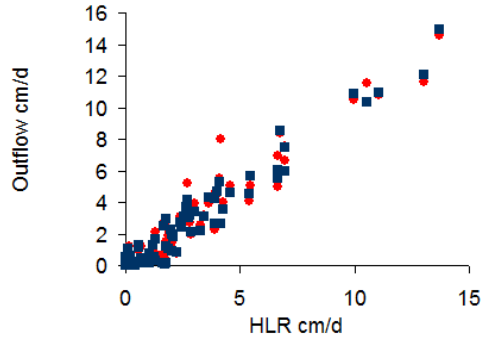


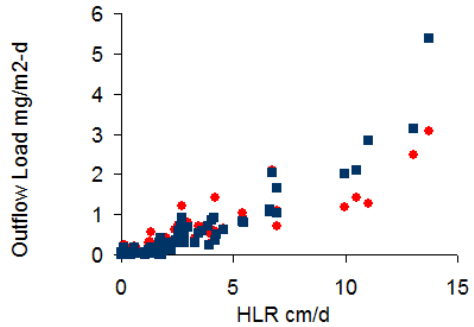


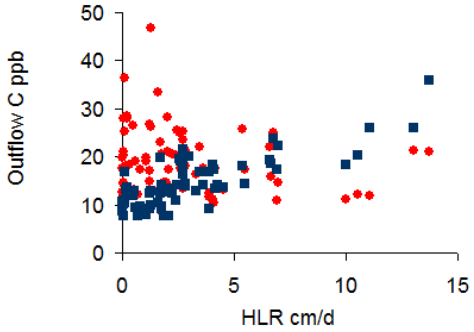
Outflow Volume, Load, & Conc vs. Inflow Hydraulic Load

30-Day Averages

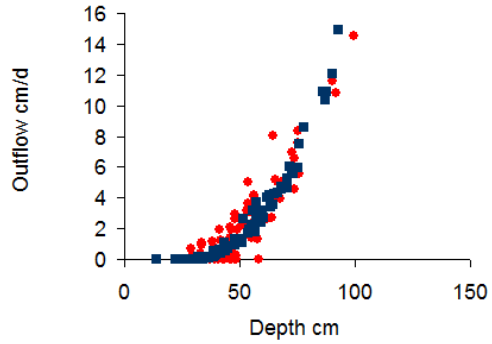
Blue = Predicted, Red = Observed

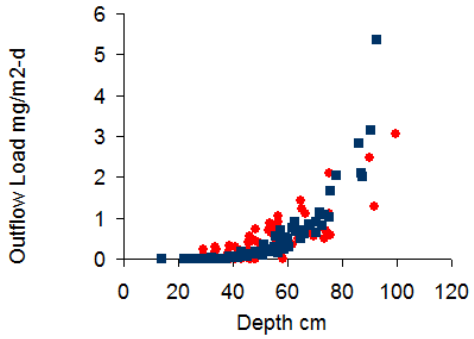


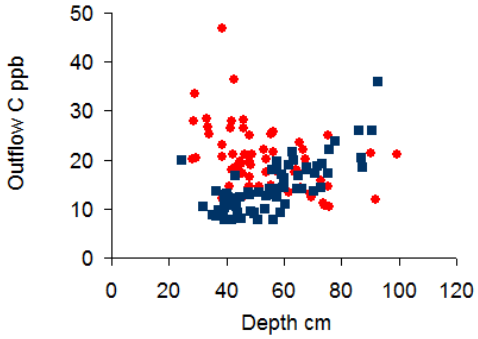




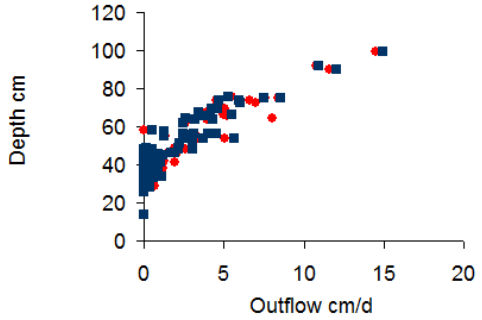
Outflow Volume, Load, & Conc vs. Depth

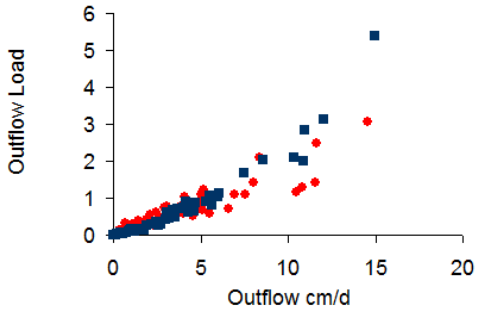


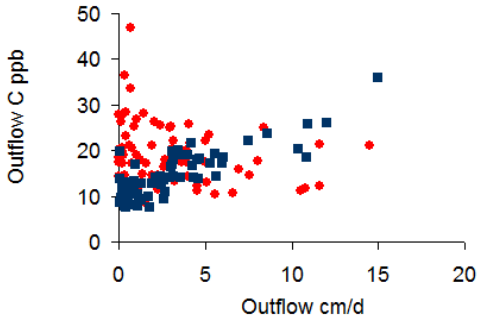




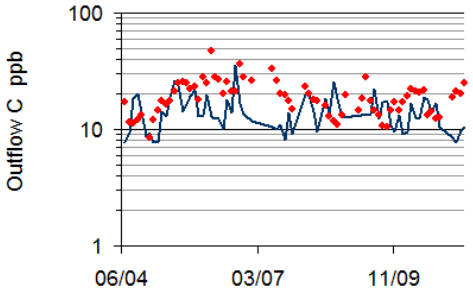
Depth, Load, & Conc vs. Outflow Volume / Area

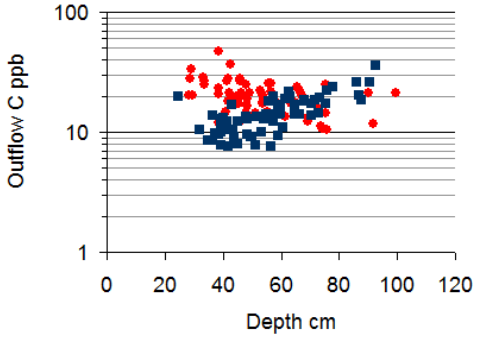


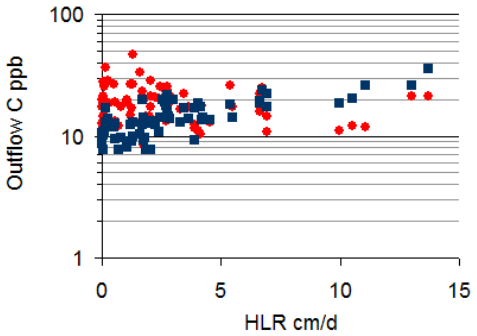




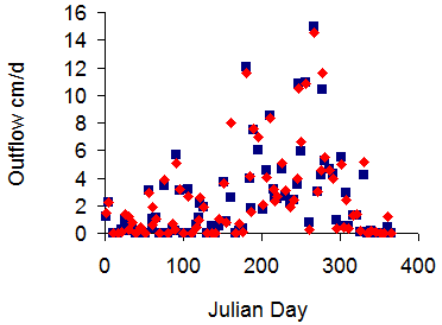
Log Outflow Conc vs. Date, Depth, Hydraulic Load

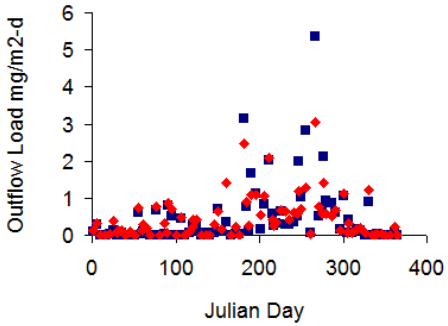


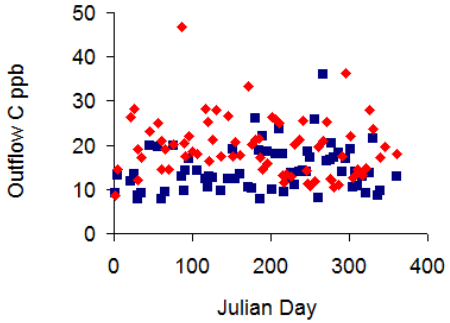




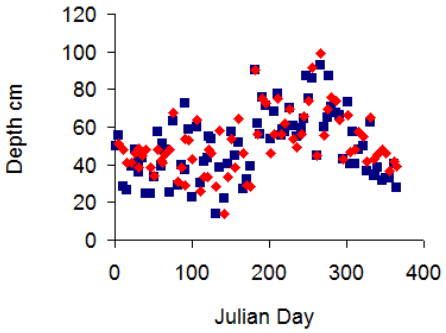
Outflow Volume, Load, Conc vs. Julian Day

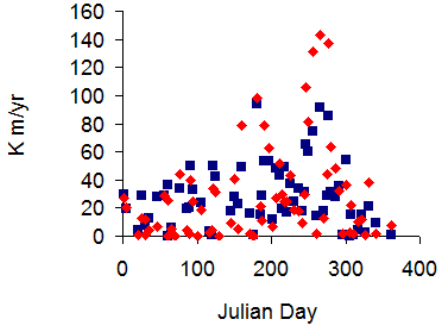


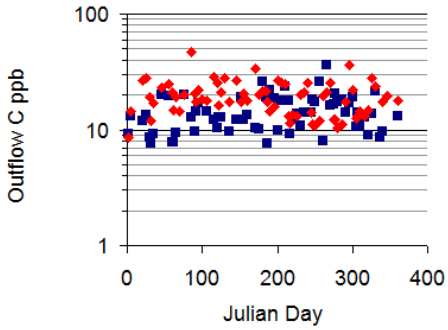




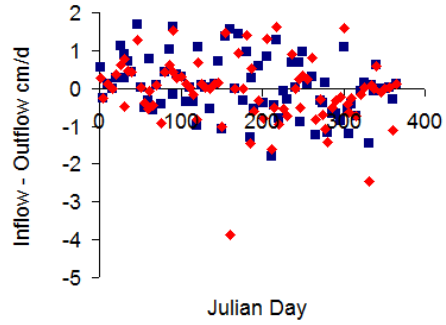
Depth, Settling Rate, Log Conc vs. Julian Day

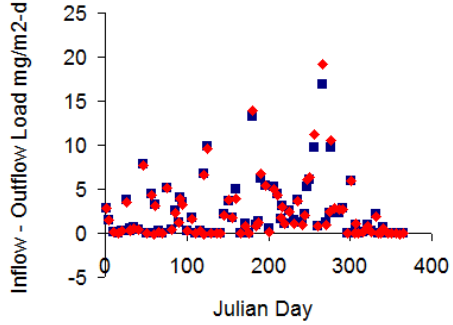


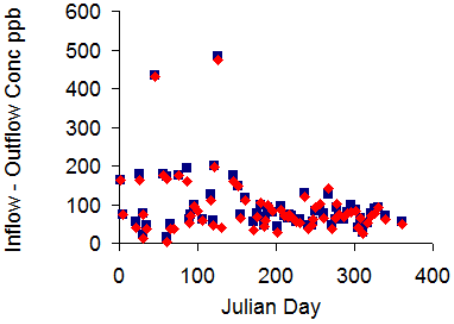




Inflow - Outflow Volume, Load, & Conc vs. Julian Day

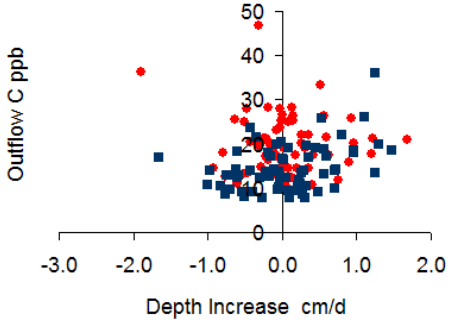


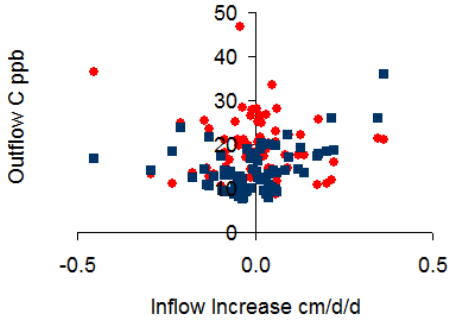


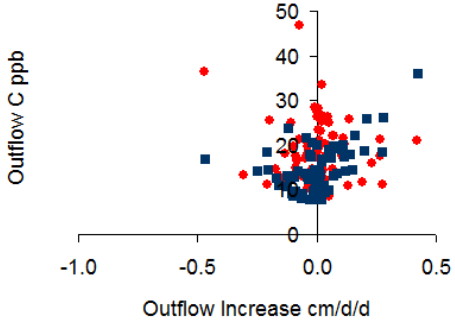


Outflow Conc vs. Increase in Depth, Inflow, & Outflow

Increase = Mean of Interval - Mean of Previous Interval



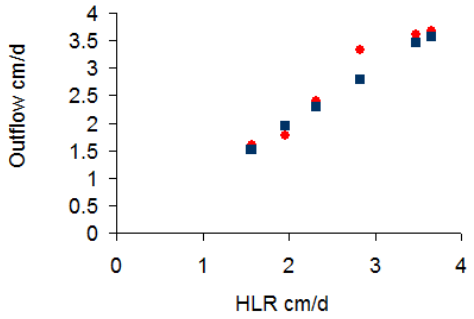


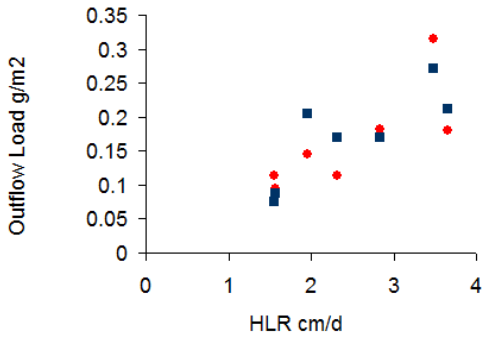


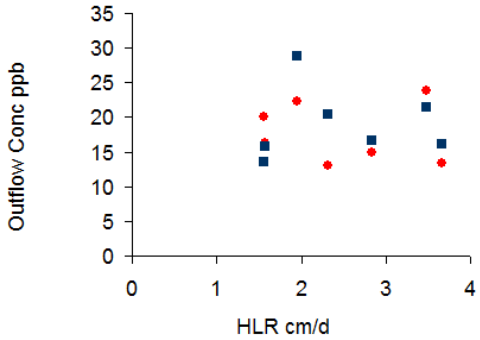
Outflow Volume, Load, & Conc vs. Inflow Hydraulic Load

360-Day Averages

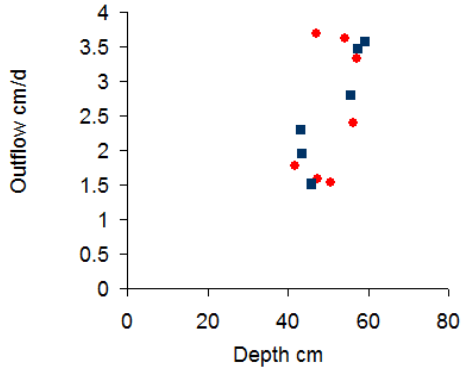
Blue = Predicted, Red = Observed

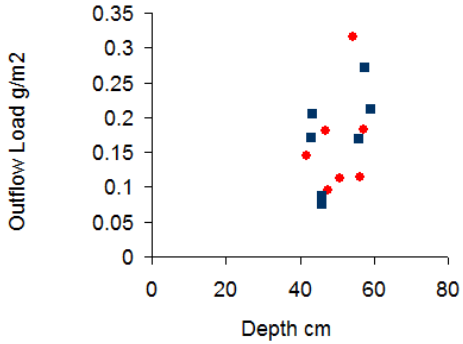


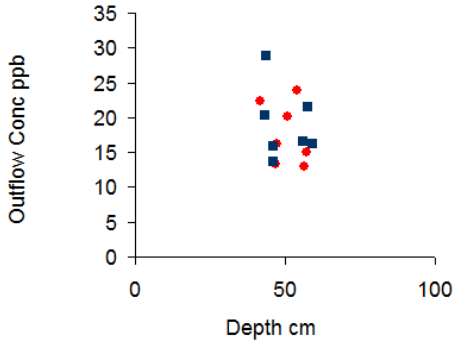




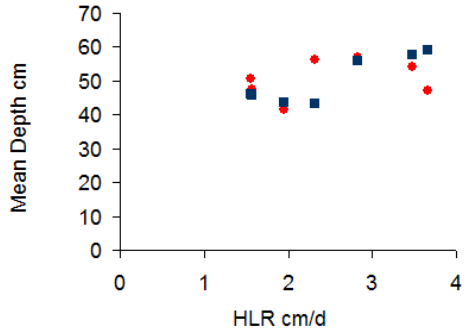
Outflow Volume, Load, & Conc vs. Mean Depth

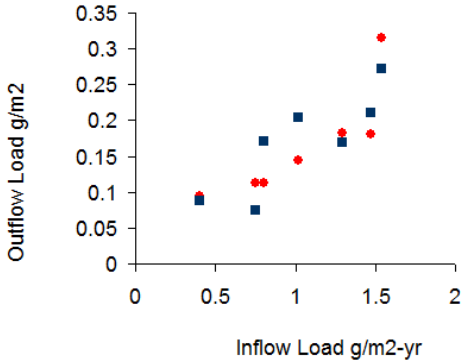


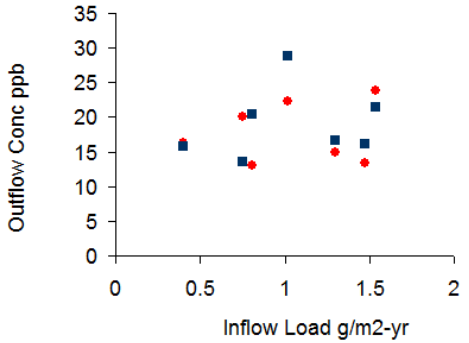




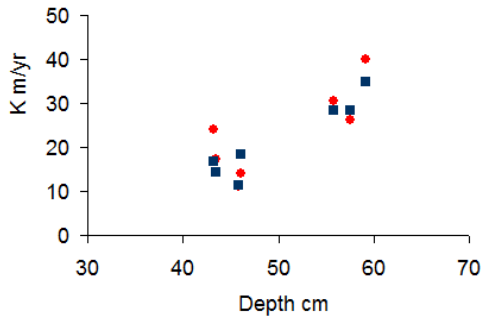
Depth vs. Hydraulic Load, Outflow Load & Conc vs. Inflow Load

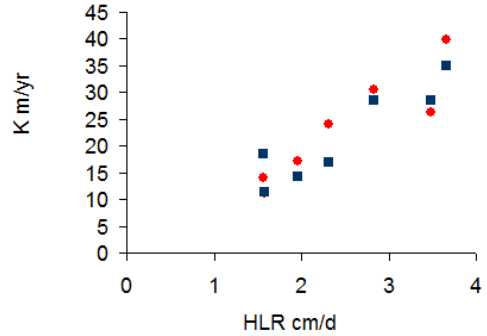


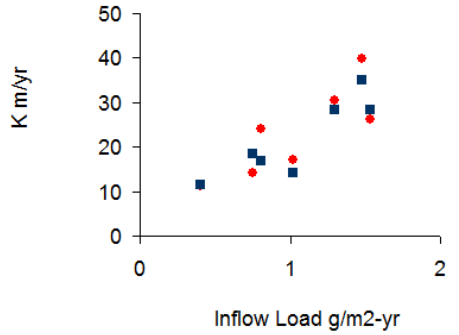




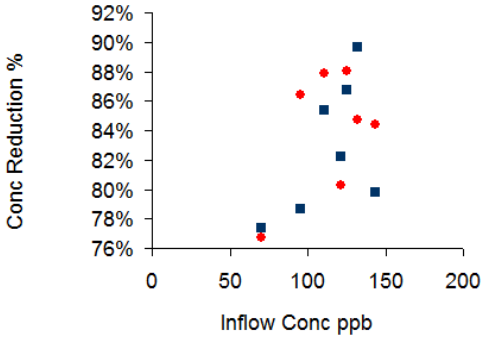
Steady-State Model K Values vs. Depth, HLR, & P Load

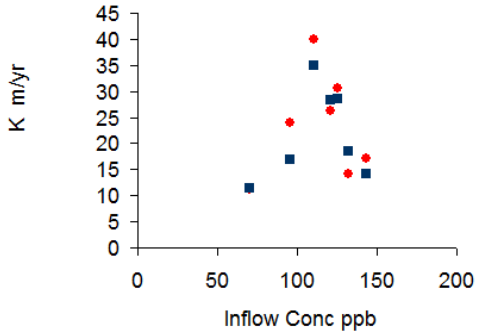


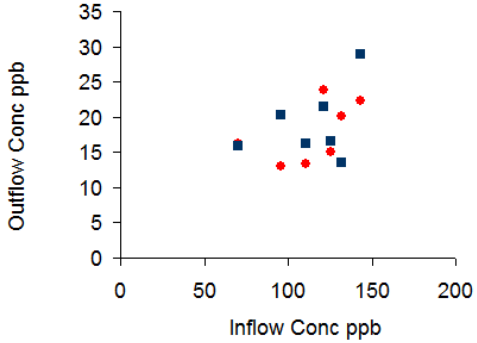




Outflow Conc Reduction, Conc, & K vs. Inflow Conc

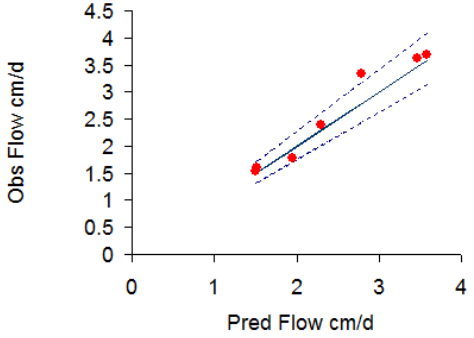


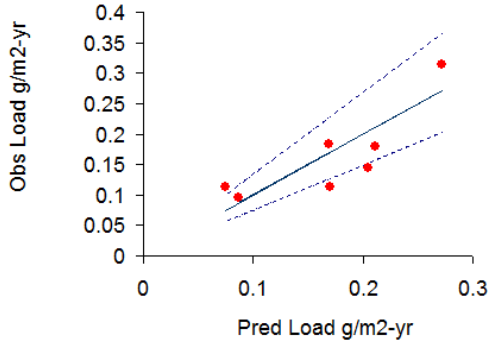


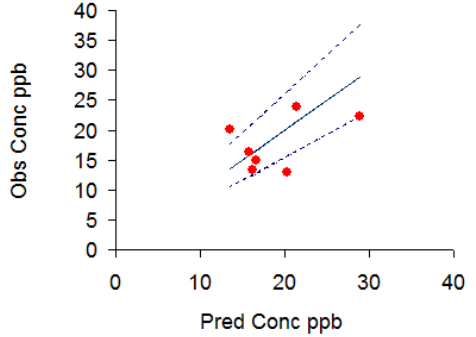


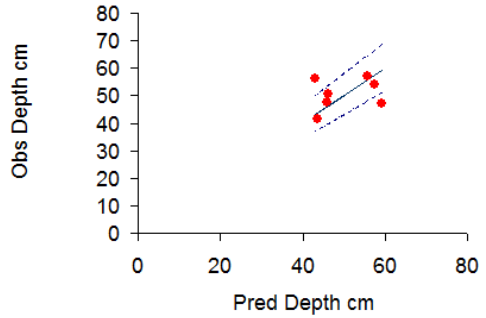
Observed vs. Predicted Values

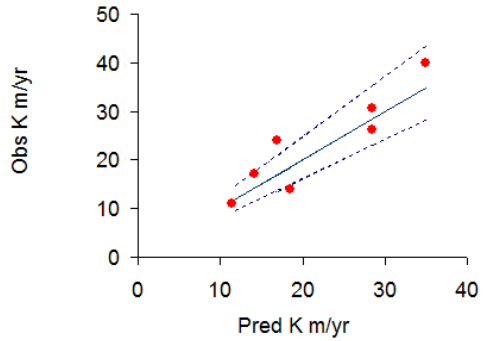
360-Day Averages

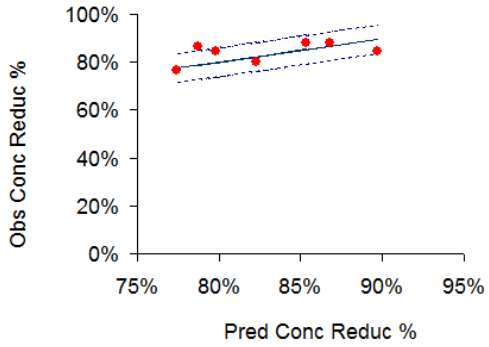






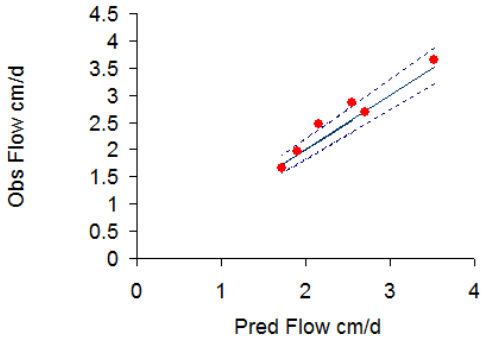


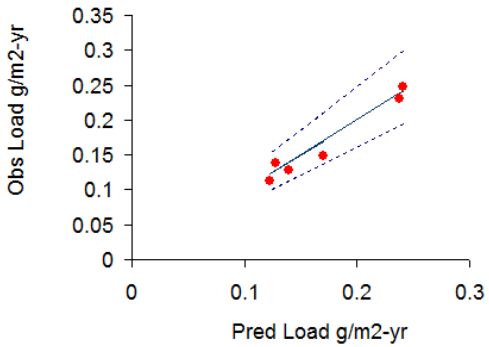


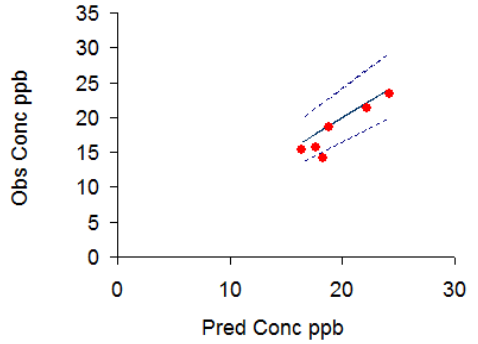


Observed vs. Predicted Values - 2 years

720-day Averages







Residual Statistics Interval = 360 06/06/04 04/30/11

Variable	Flow	Load	Conc	Depth	K
count	7	7	7	7	7
resid mean	0.122	-0.006	-1.3	0.4	1.5
resid std dev	0.214	0.043	4.9	7.7	4.0
resid rms	0.247	0.044	5.1	7.7	4.3
obs mean	2.562	0.163	17.5	50.6	23.3
obs std dev	0.967	0.075	4.4	5.6	10.1
pred mean	2.440	0.170	19.1	50.2	21.8
pred std dev	0.864	0.757	1.0	7.0	8.8
r squared	0.93	0.66	0.00	0.00	0.82
resid std %	9%	25%	26%	15%	19%
resid rms %	10%	26%	27%	15%	20%
bias mean %	5%	-4%	-7%	1%	7%
bias std error %	3%	10%	10%	6%	7%
bias t	1.5	-0.4	-0.7	0.1	1.0
bias signif	0.19	0.71	0.52	0.89	0.38
80% prediction intervals for prototype datasets (STA-2 & STA-34)					
% of predicted	14%	34%	30%	16%	24%

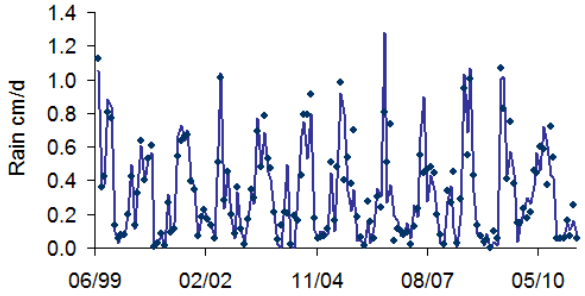
12/3/2012

Case: Case = STA5_PLAN_C12_EMG , Cell = OUT
30-Day Averages 06/03/99 thru 04/30/11

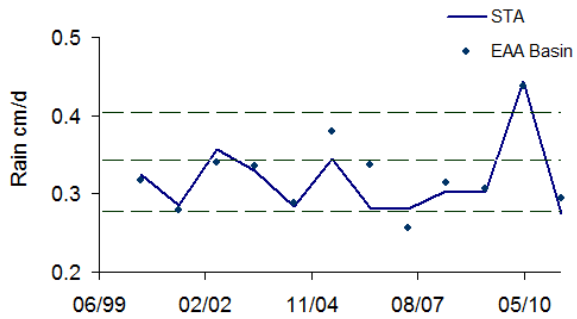
STA5 Cells 1 & 2 with Emergent Calibration in 1B & 2B
360-Day Averages 07/03/99 thru 04/30/11 Cumulative 06/03/99 thru 04/30/11

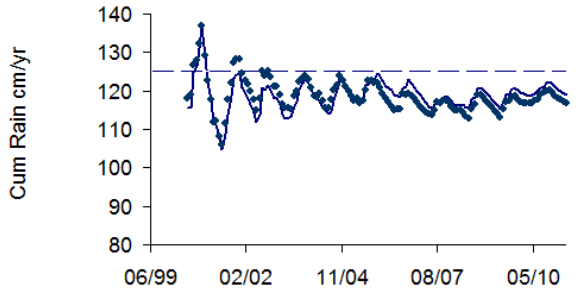
12/3/2012

Rainfall



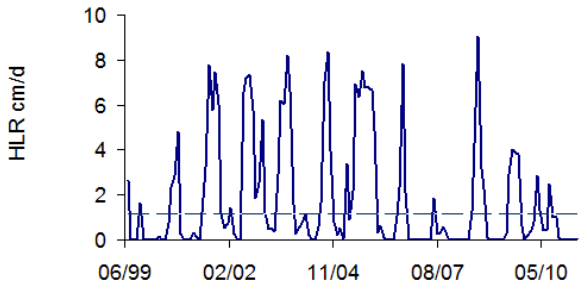
Dashed Lines = EAA Basin Long-Term Average, 10th & 90th Percentiles

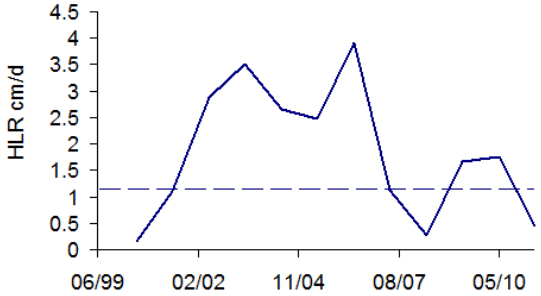


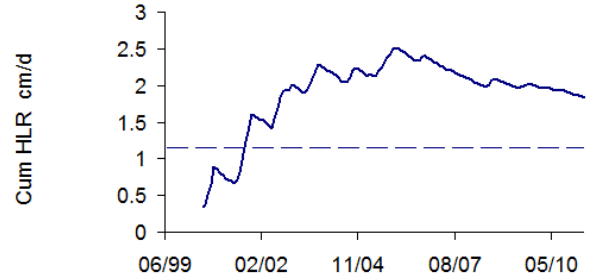


Inflow Hydraulic Loads

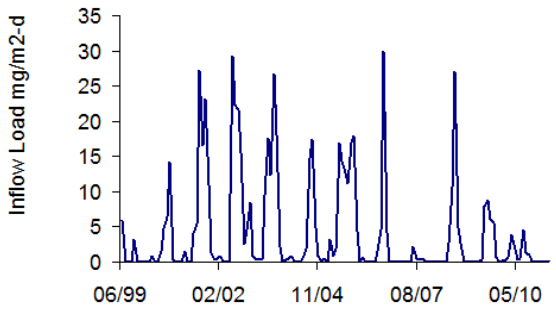
Dashed Lines = RS Design Long-Term Mean

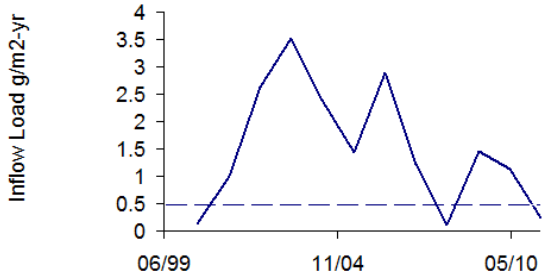


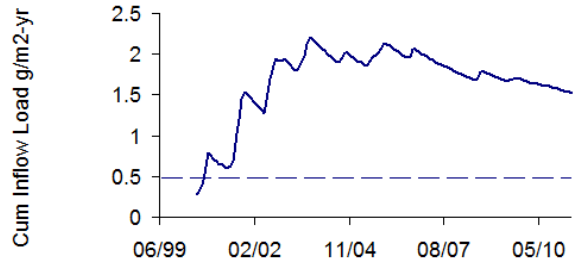




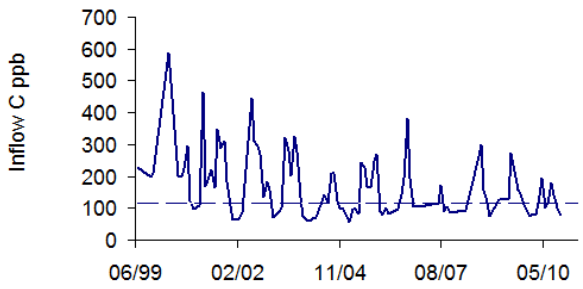
Inflow Phosphorus Loads Per Unit Area

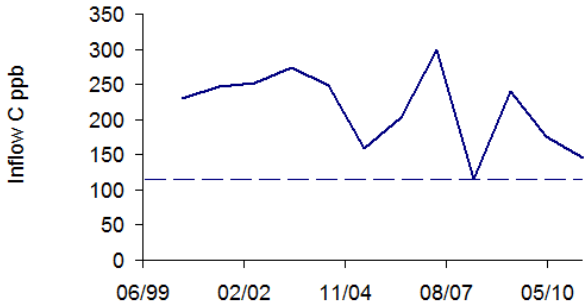


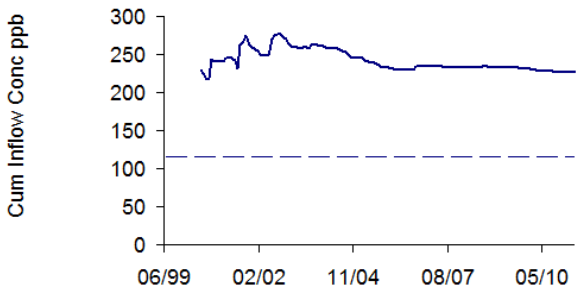




Inflow Concentrations

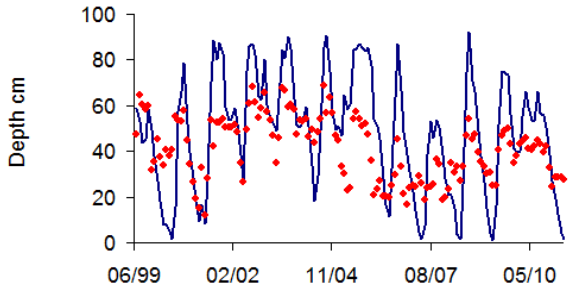


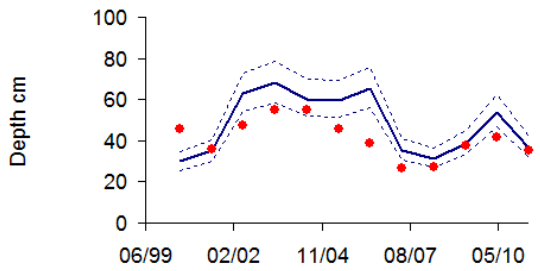


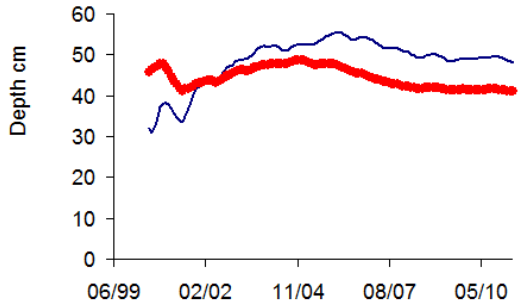


Mean Depths

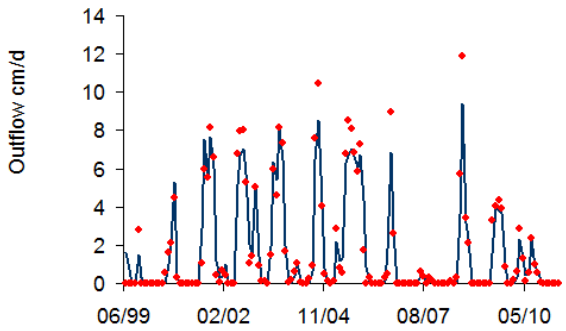
Dashed Lines = 80% Prediction Interval

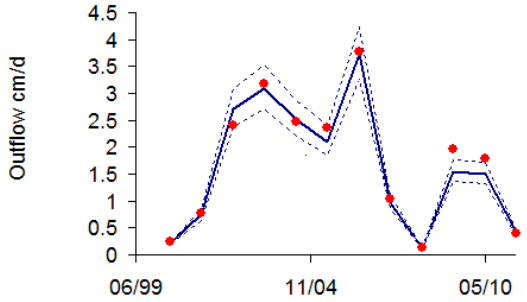


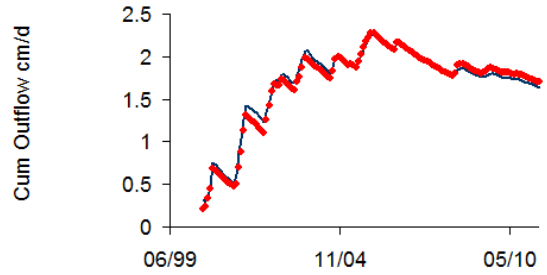




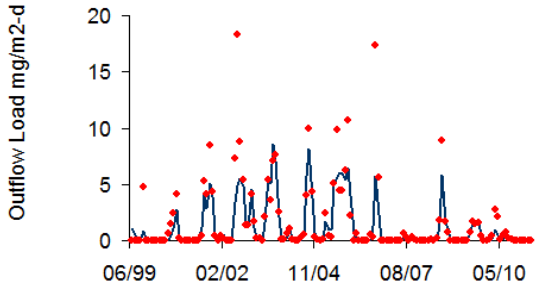
Outflow Volumes Per Unit Area

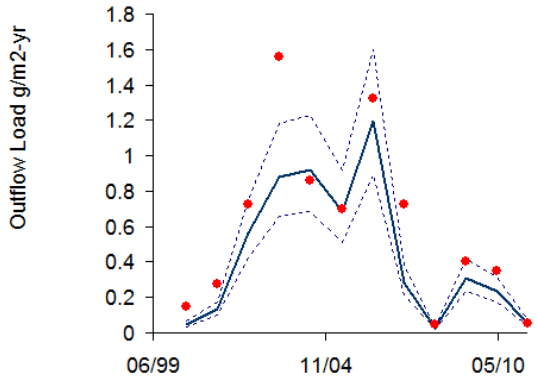


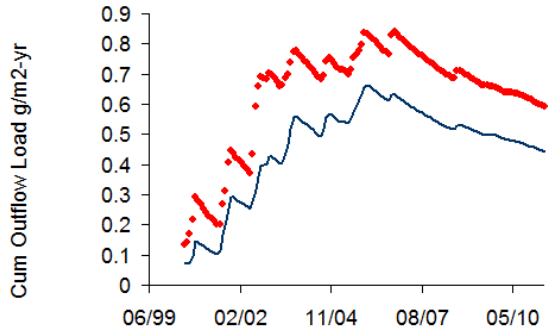




Outflow Loads Per Unit Area

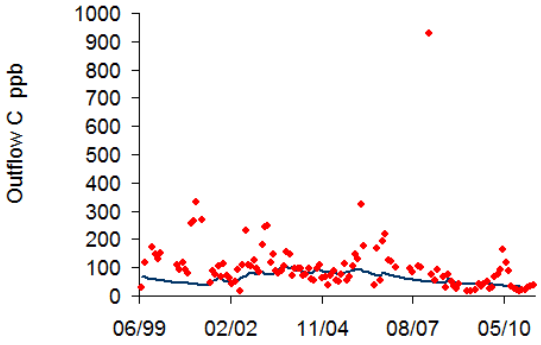


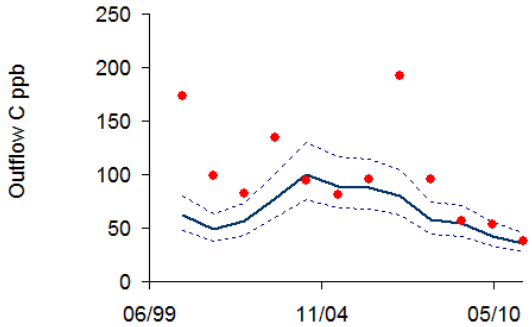


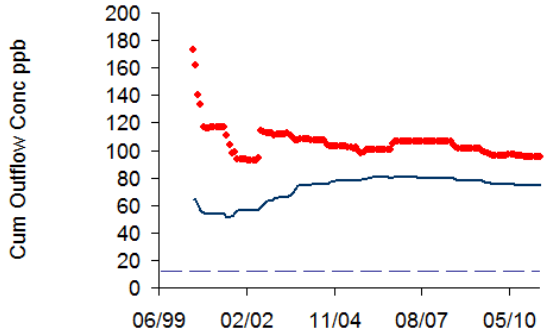


Outflow Concentrations

Dashed Line = RS Design Simulation

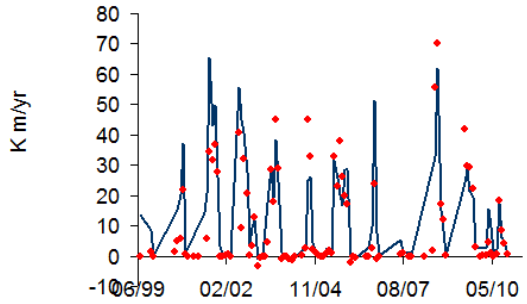


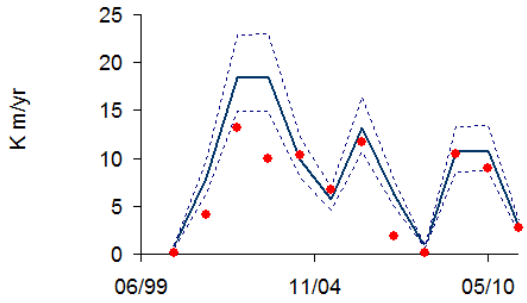


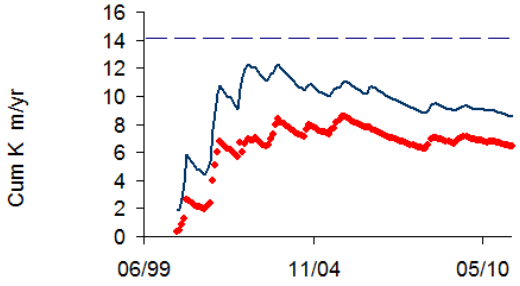


K - Steady State Model, C*=4, n = 6, q* = 0 cm/d

Dashed Line = RS Design Simulation



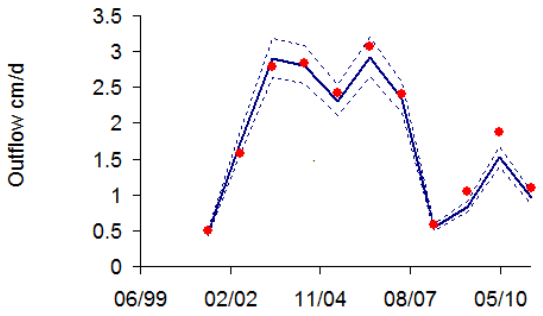


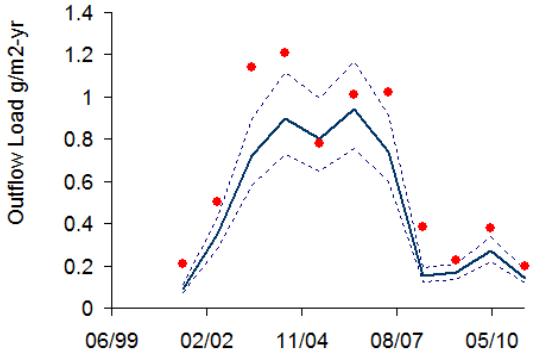


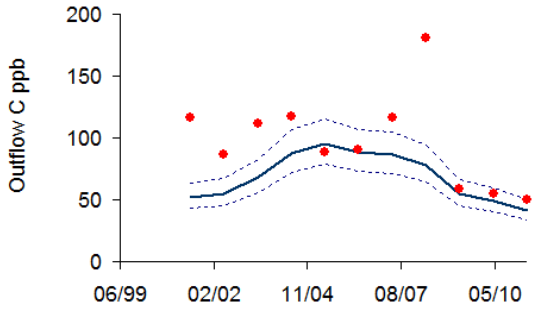
Outflow Volume, Load, Conc vs. Date - 2 Yr Rolling

720-day Averages

Dashed Lines = 80% Prediction Interval



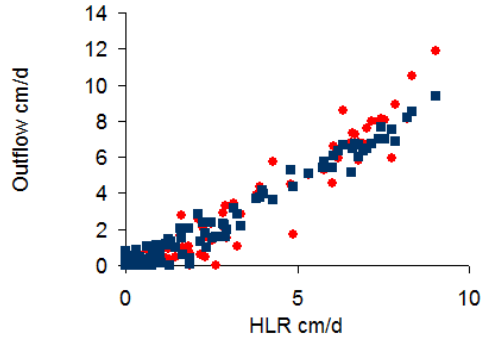


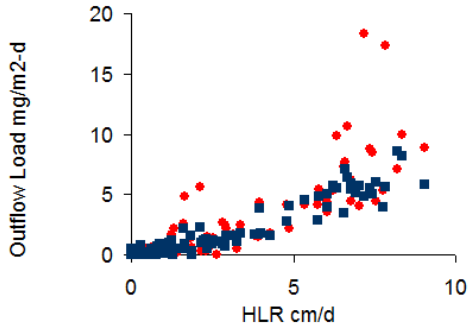


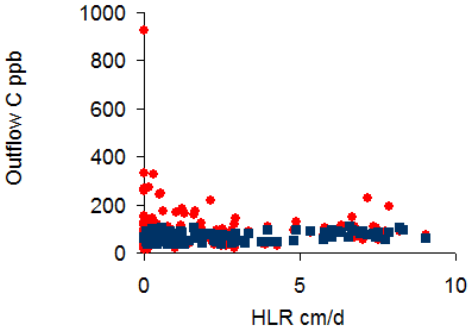
Outflow Volume, Load, & Conc vs. Inflow Hydraulic Load

30-Day Averages

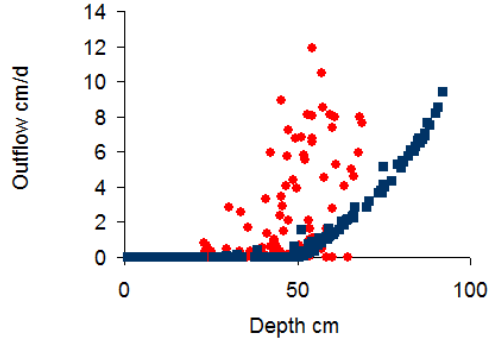
Blue = Predicted, Red = Observed

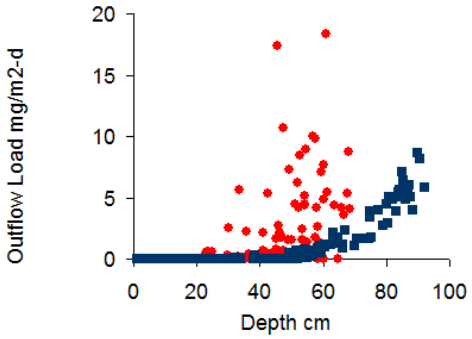


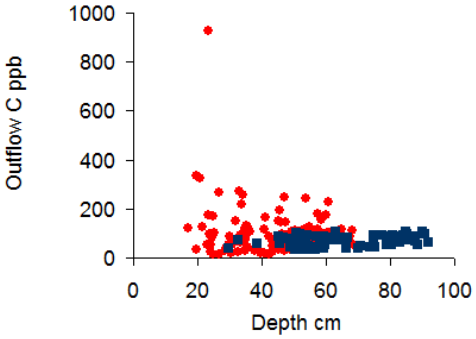




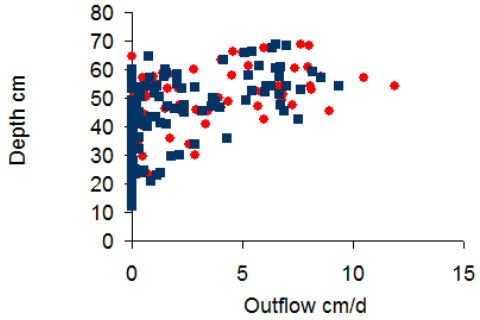
Outflow Volume, Load, & Conc vs. Depth

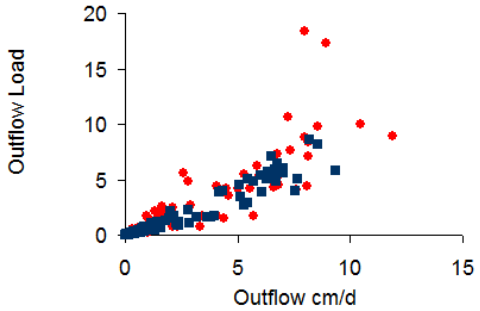


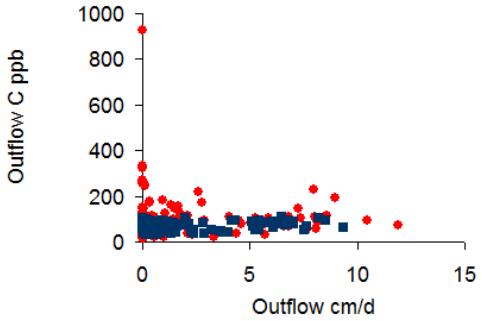




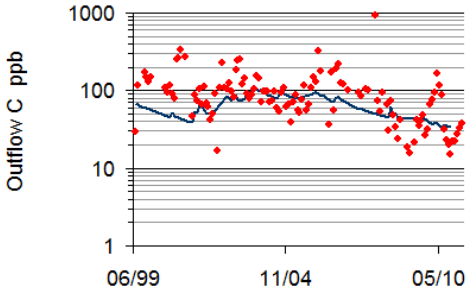
Depth, Load, & Conc vs. Outflow Volume / Area

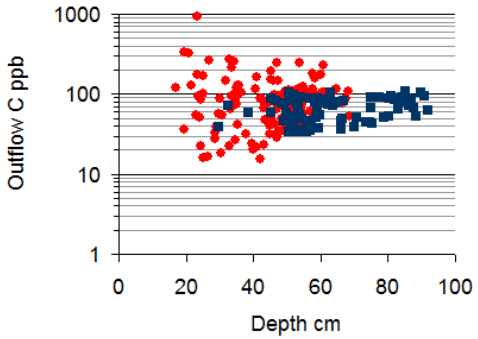


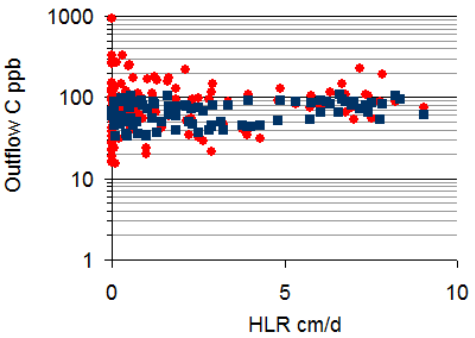




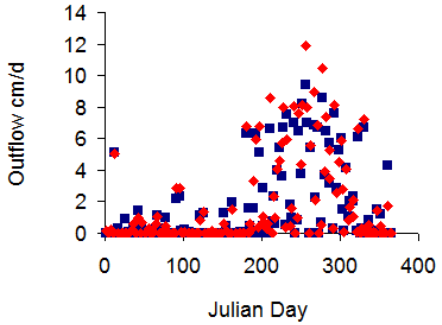
Log Outflow Conc vs. Date, Depth, Hydraulic Load

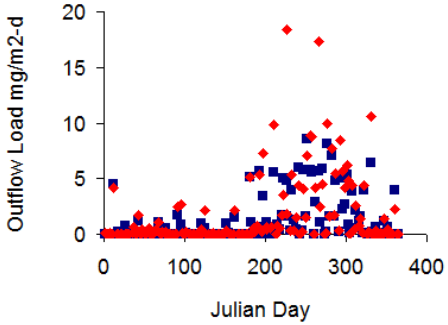


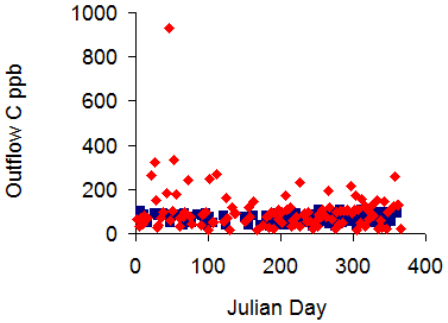




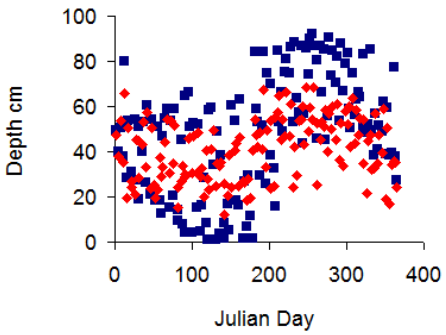
Outflow Volume, Load, Conc vs. Julian Day

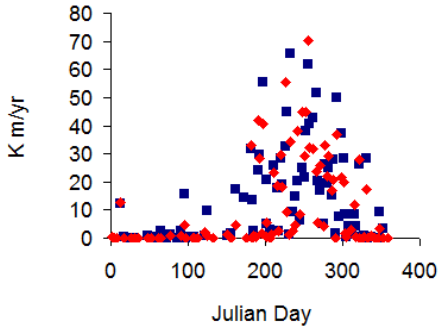


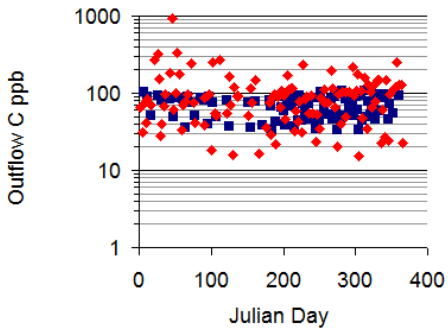




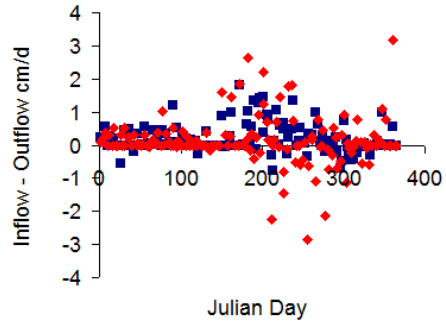
Depth, Settling Rate, Log Conc vs. Julian Day

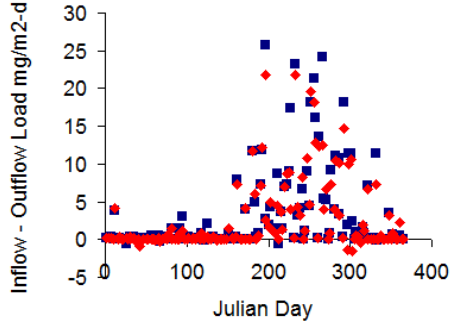


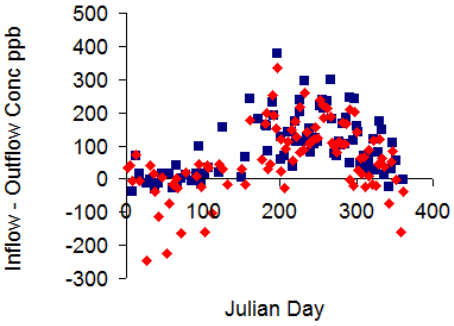




Inflow - Outflow Volume, Load, & Conc vs. Julian Day

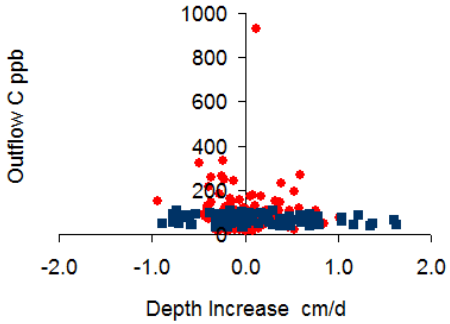


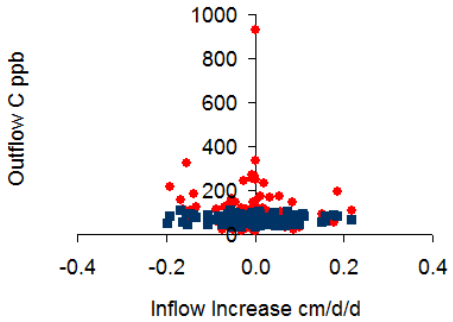


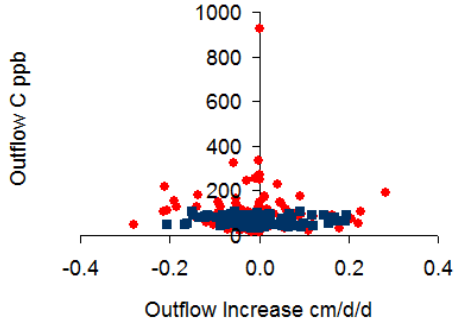


Outflow Conc vs. Increase in Depth, Inflow, & Outflow

Increase = Mean of Interval - Mean of Previous Interval



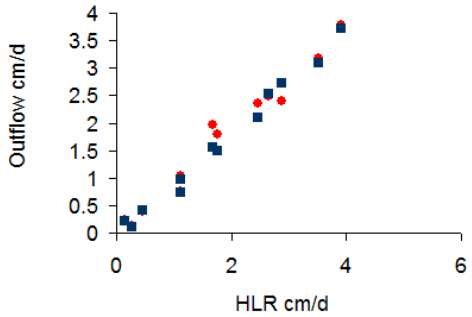


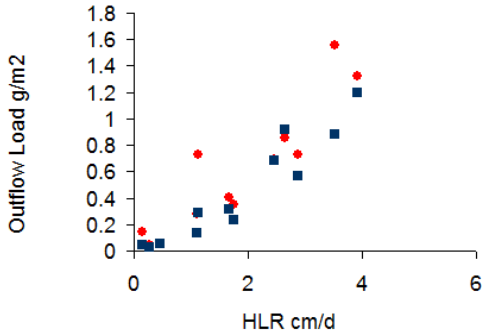


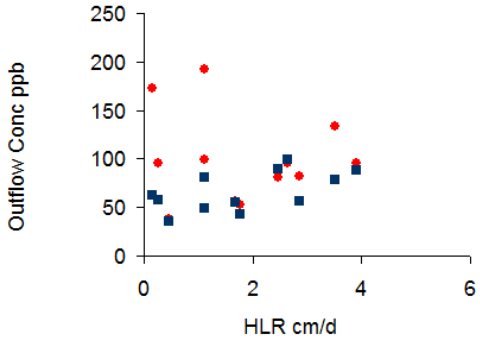
Outflow Volume, Load, & Conc vs. Inflow Hydraulic Load

360-Day Averages

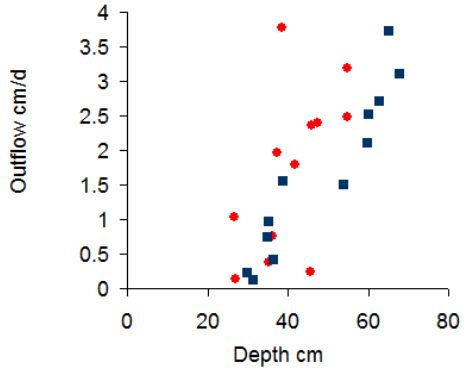
Blue = Predicted, Red = Observed

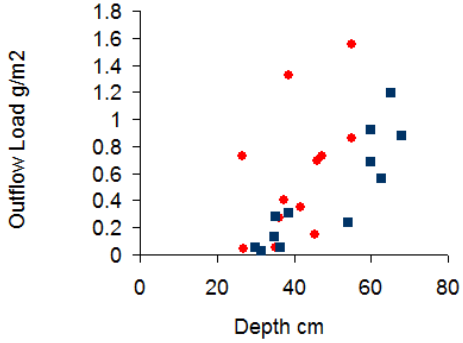


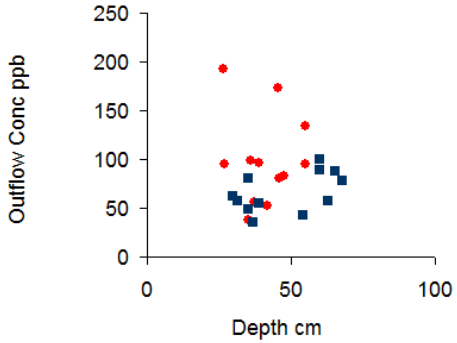




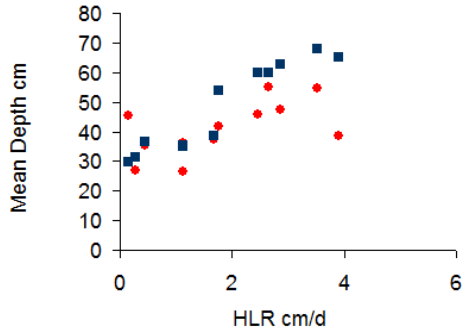
Outflow Volume, Load, & Conc vs. Mean Depth

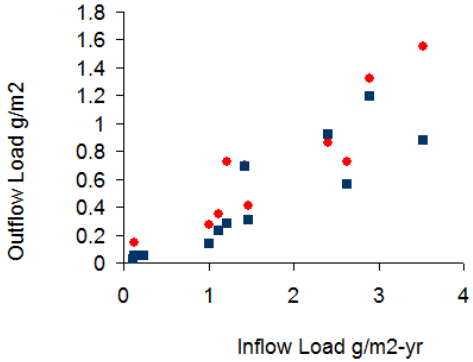


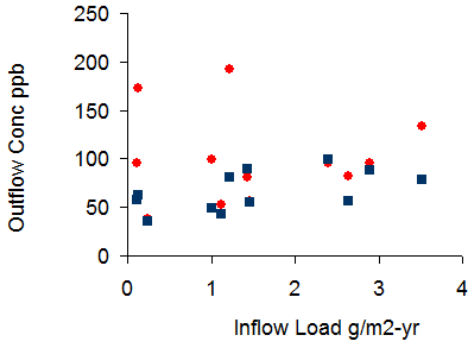




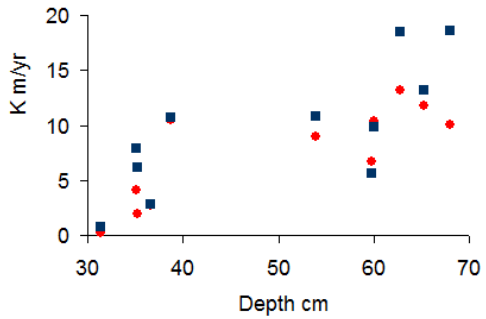
Depth vs. Hydraulic Load, Outflow Load & Conc vs. Inflow Load

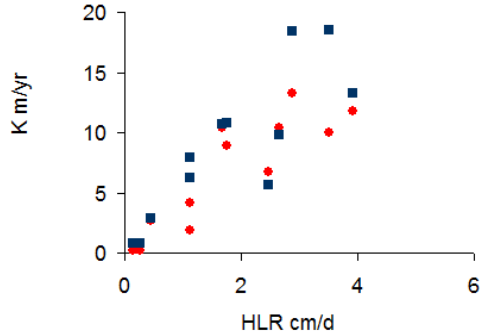


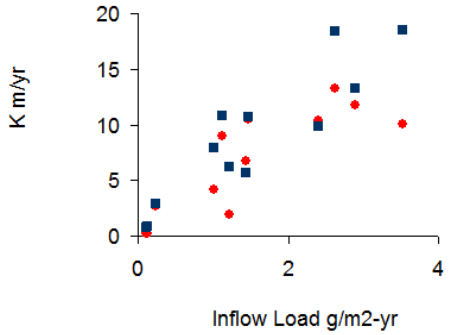




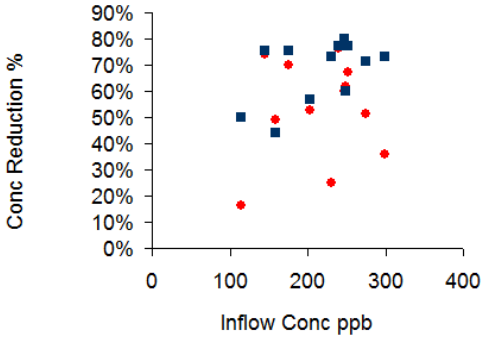
Steady-State Model K Values vs. Depth, HLR, & P Load

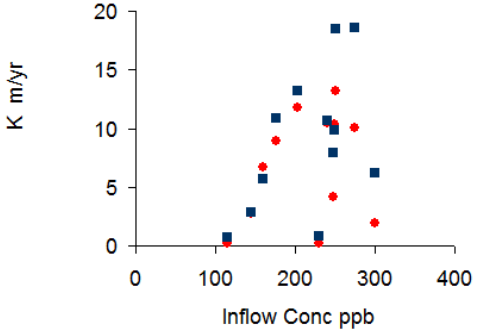


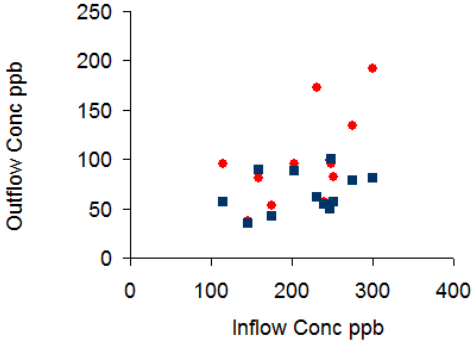




Outflow Conc Reduction, Conc, & K vs. Inflow Conc

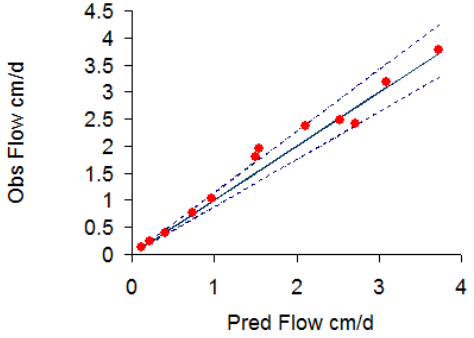


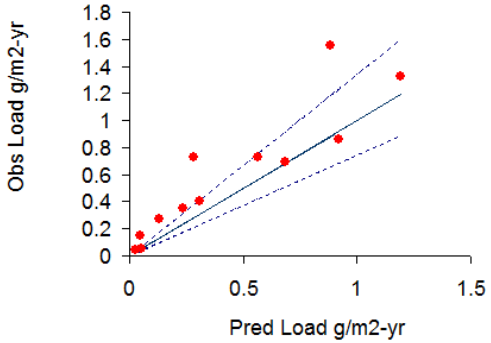


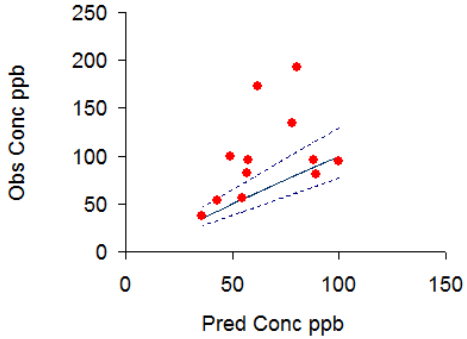


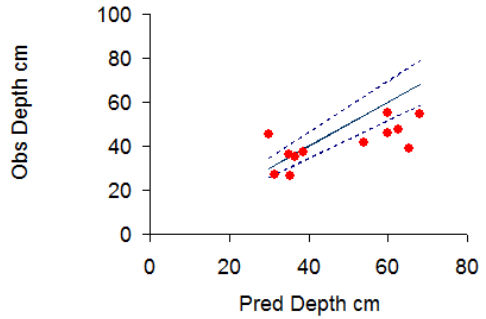
Observed vs. Predicted Values

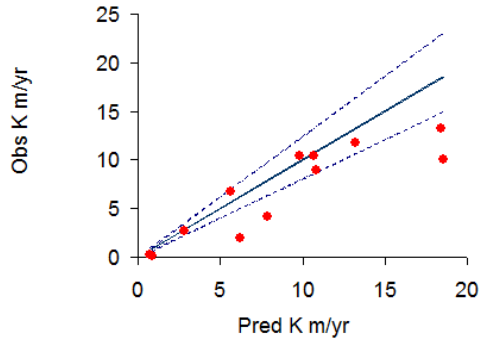
360-Day Averages

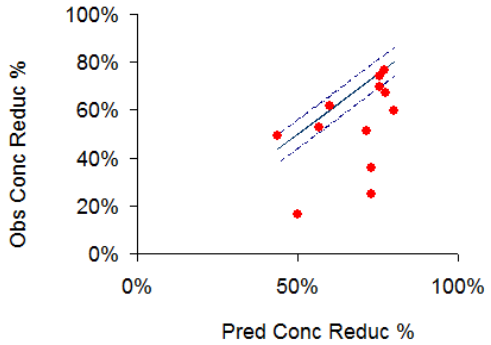






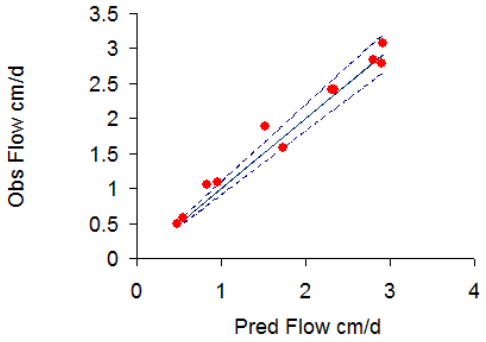


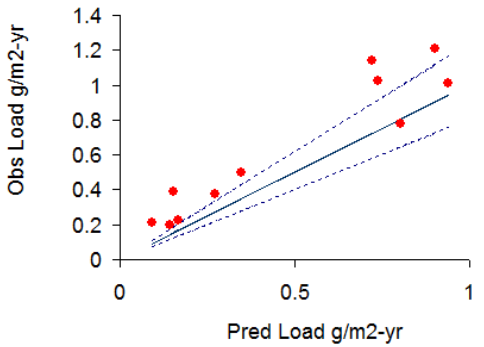


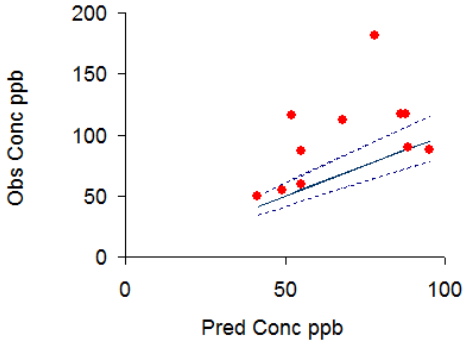


Observed vs. Predicted Values - 2 years

720-day Averages







Residual Statistics Interval = 360 07/03/99 04/30/11

Variable	Flow	Load	Conc	Depth	K
count	12	12	12	12	12
resid mean	0.071	0.152	33.5	-7.1	-2.1
resid std dev	0.185	0.207	42.0	10.5	2.8
resid rms	0.198	0.257	53.7	12.7	3.5
obs mean	1.709	0.597	95.7	40.9	6.7
obs std dev	1.198	0.483	46.4	9.3	4.7
pred mean	1.638	0.444	74.3	48.1	8.8
pred std dev	1.196	1.049	1.4	14.7	6.0
r squared	0.97	0.72	0.00	0.00	0.44
resid std %	11%	46%	57%	22%	32%
resid rms %	12%	58%	72%	26%	40%
bias mean %	4%	34%	45%	-15%	-24%
bias std error %	3%	13%	16%	6%	9%
bias t	1.3	2.6	2.8	-2.3	-2.6
bias signif	0.21	0.03	0.02	0.04	0.03
80% prediction intervals for prototype datasets (STA-2 & STA-34)					
% of predicted	14%	34%	30%	16%	24%

12/3/2012

Case: Case = STA5_PLAN_C12_PEW , Cell = OUT

STA5 Cells 1 & 2 with PEW Calibration in 1B & 2B

12/3/2012

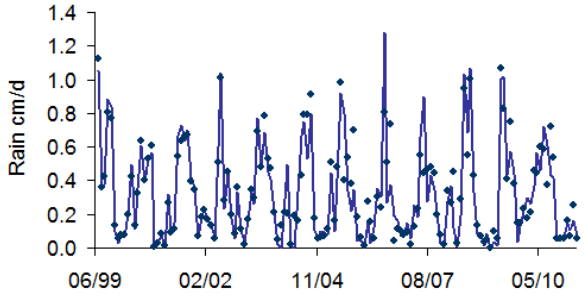
30-Day Averages 06/03/99 thru 04/30/11

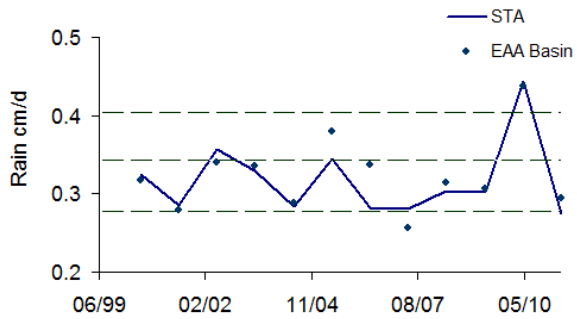
360-Day Averages 07/03/99 thru 04/30/11

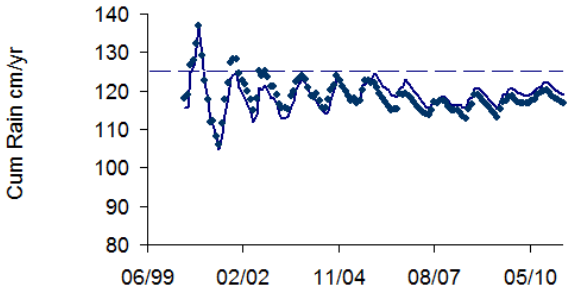
Cumulative 06/03/99 thru 04/30/11

Rainfall

Dashed Lines = EAA Basin Long-Term Average, 10th & 90th Percentiles

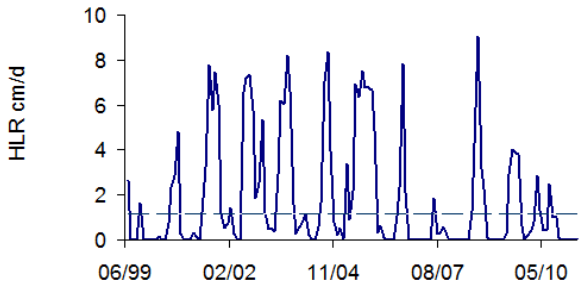


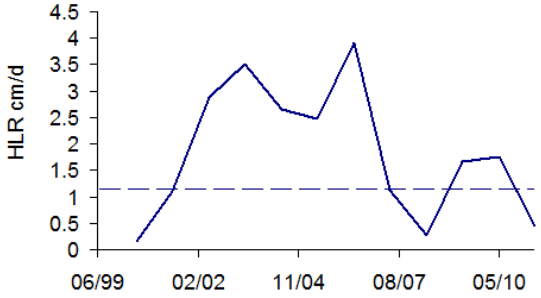


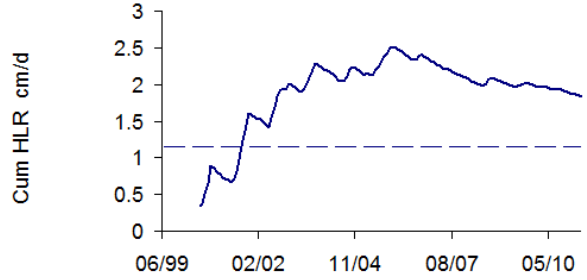


Inflow Hydraulic Loads

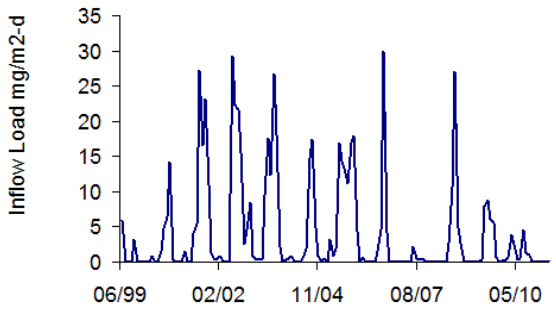
Dashed Lines = RS Design Long-Term Mean

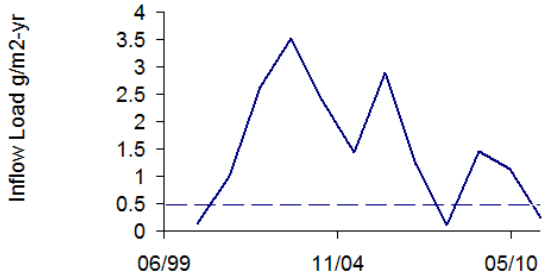


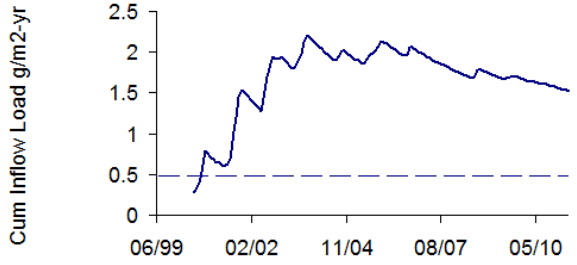




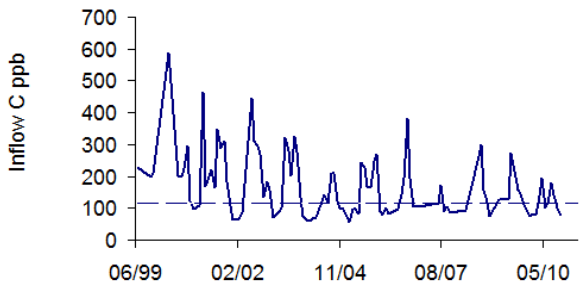
Inflow Phosphorus Loads Per Unit Area

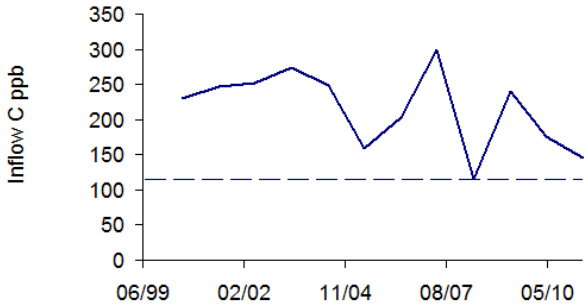


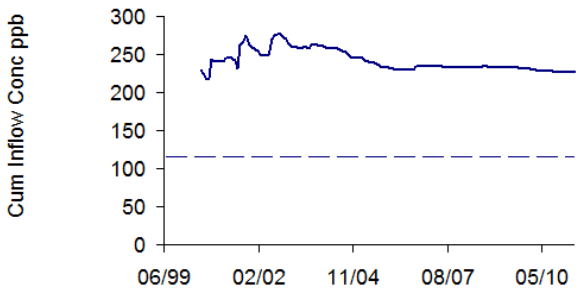




Inflow Concentrations

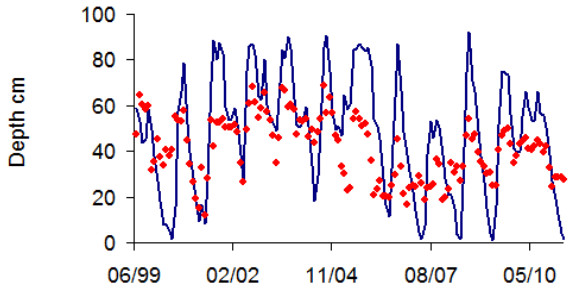


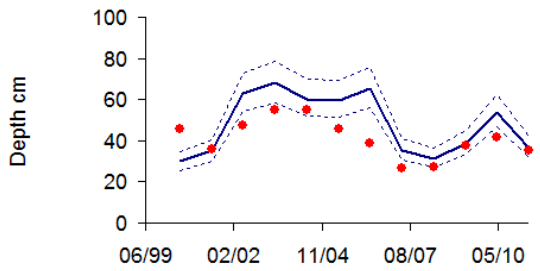


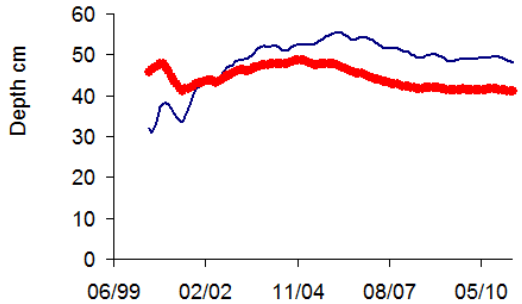


Mean Depths

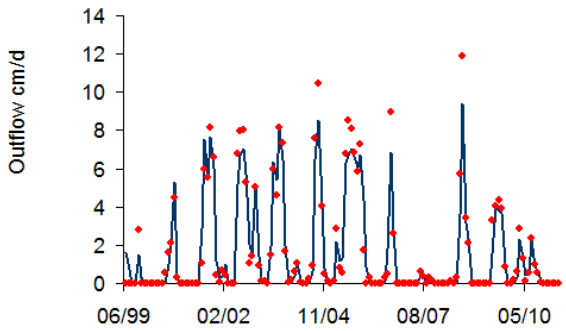
Dashed Lines = 80% Prediction Interval

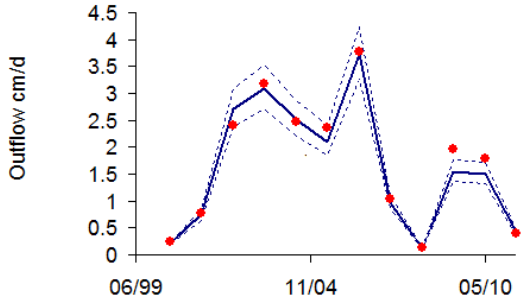


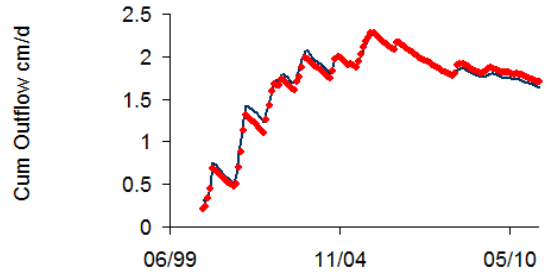




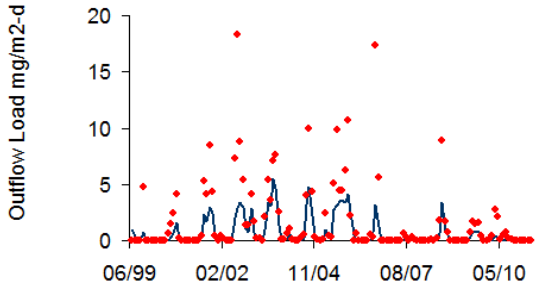
Outflow Volumes Per Unit Area

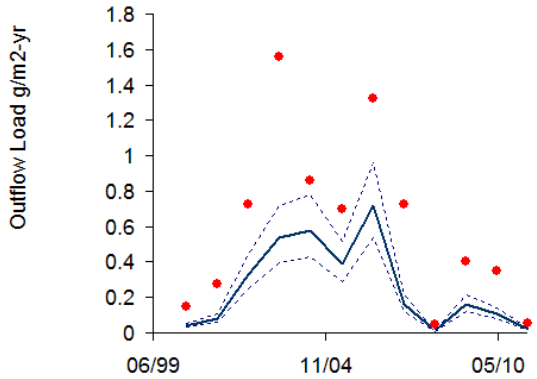


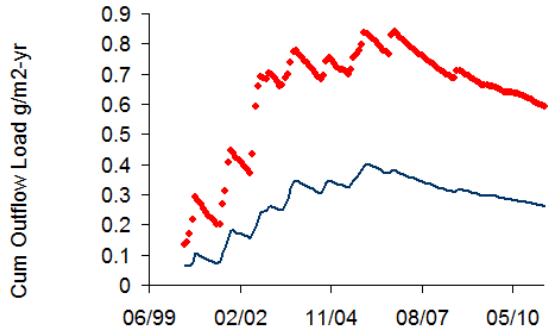




Outflow Loads Per Unit Area

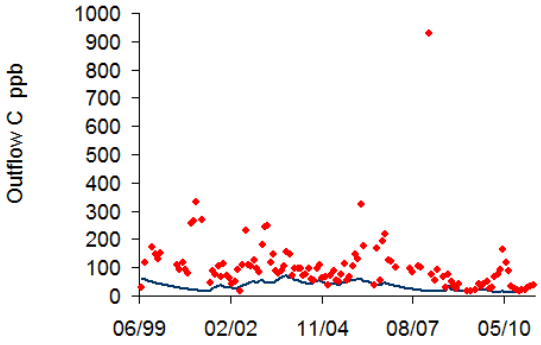


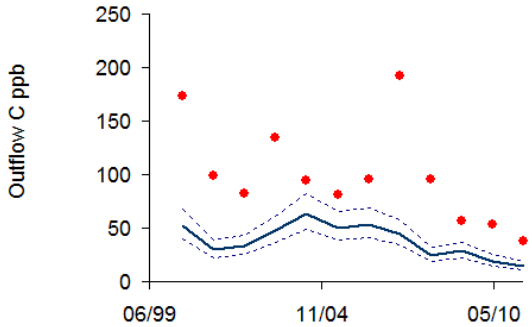


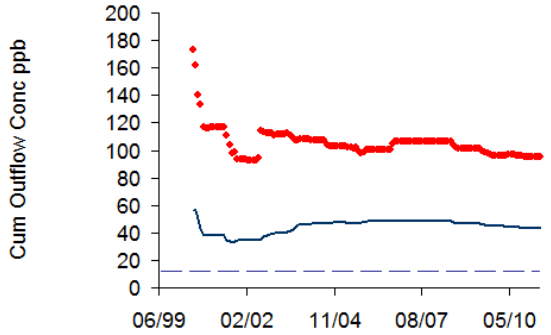


Outflow Concentrations

Dashed Line = RS Design Simulation

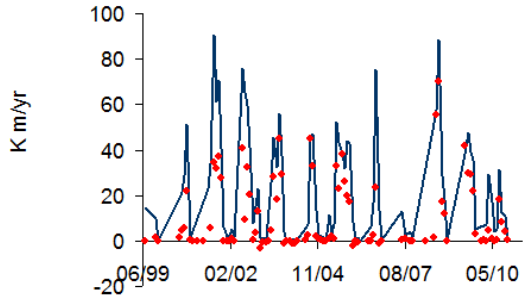


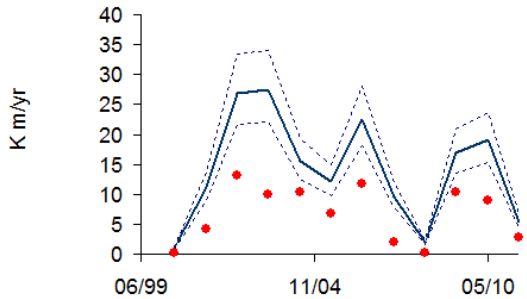


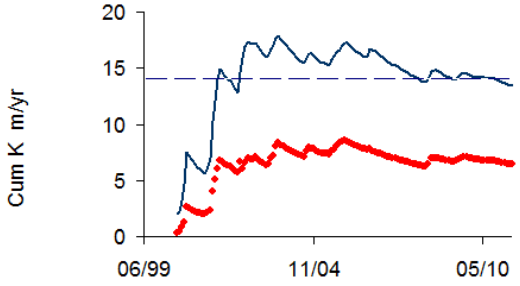


K - Steady State Model, C*=4, n = 6, q* = 0 cm/d

Dashed Line = RS Design Simulation



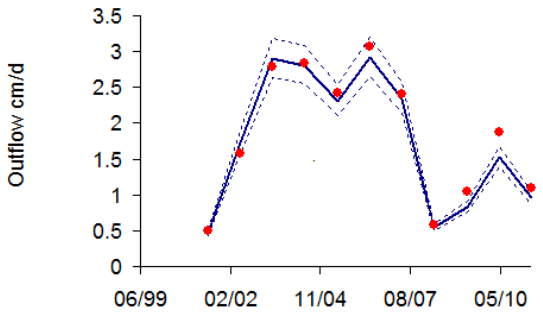


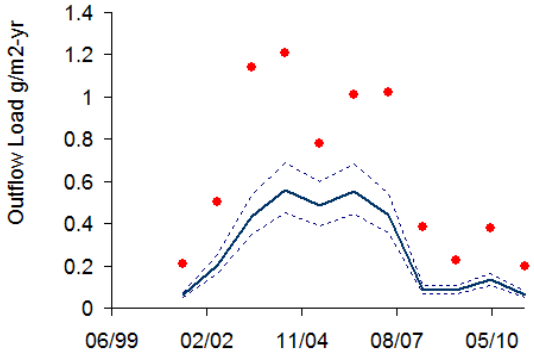


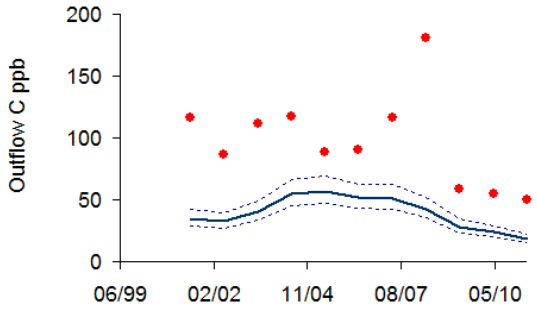
Outflow Volume, Load, Conc vs. Date - 2 Yr Rolling

720-day Averages

Dashed Lines = 80% Prediction Interval



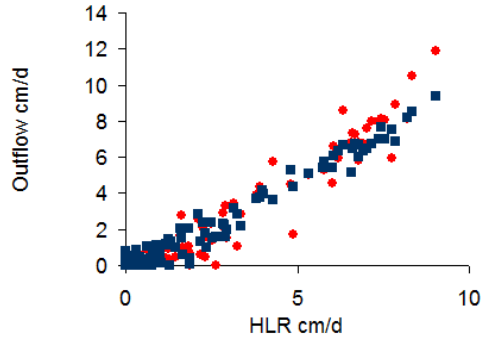


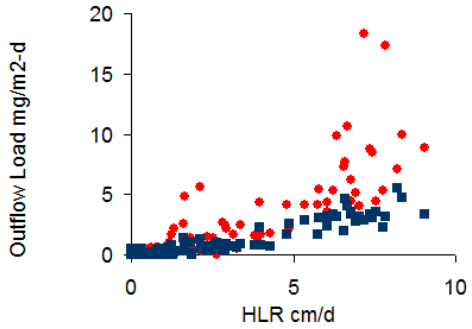


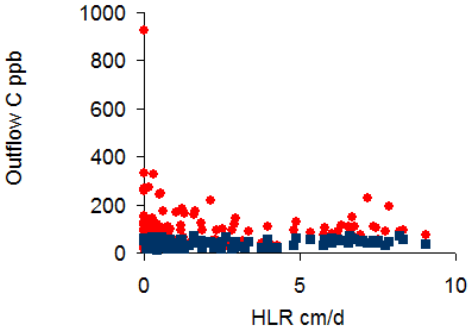
Outflow Volume, Load, & Conc vs. Inflow Hydraulic Load

30-Day Averages

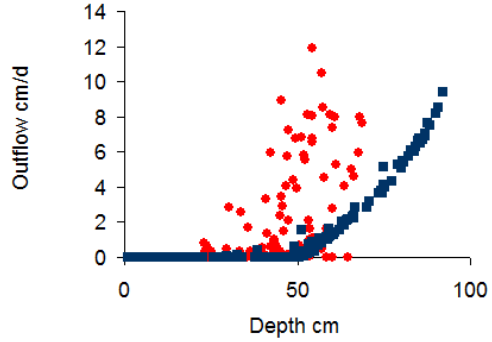
Blue = Predicted, Red = Observed

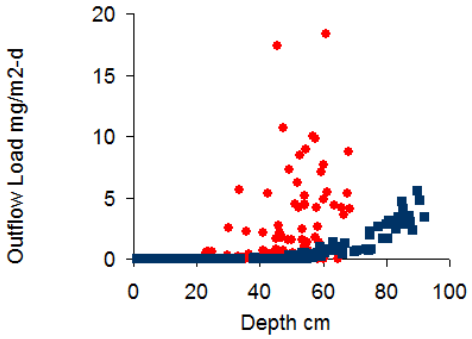


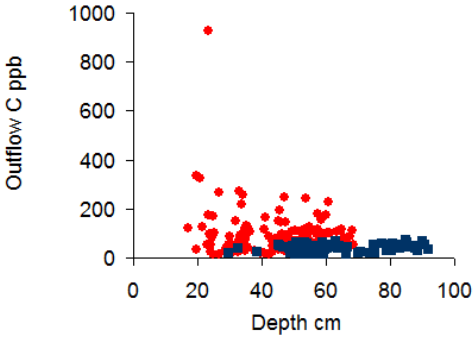




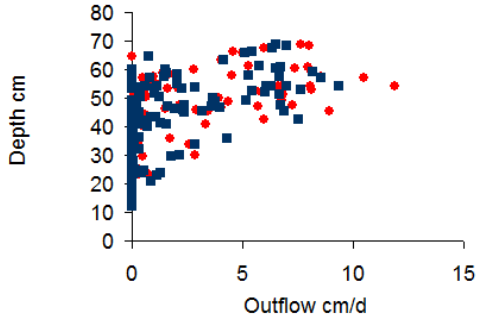
Outflow Volume, Load, & Conc vs. Depth

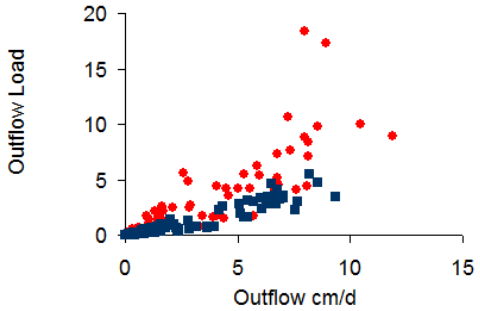


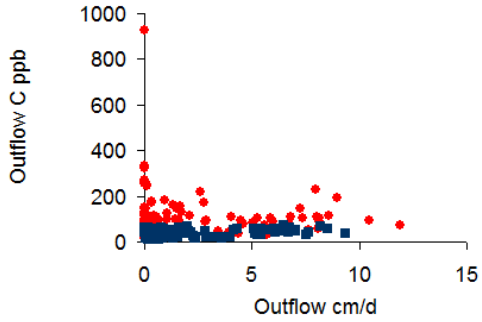




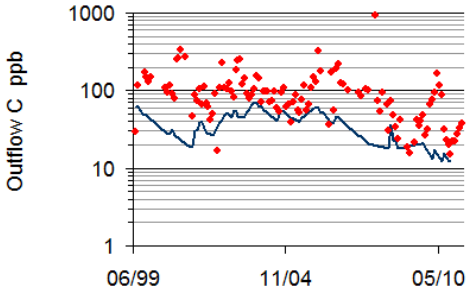
Depth, Load, & Conc vs. Outflow Volume / Area

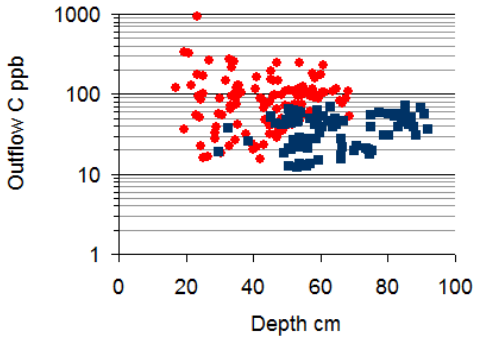


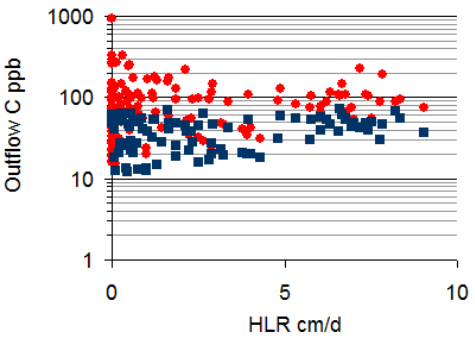




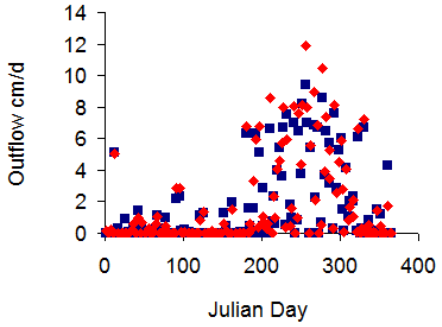
Log Outflow Conc vs. Date, Depth, Hydraulic Load

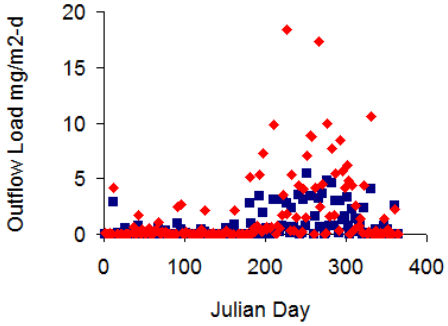


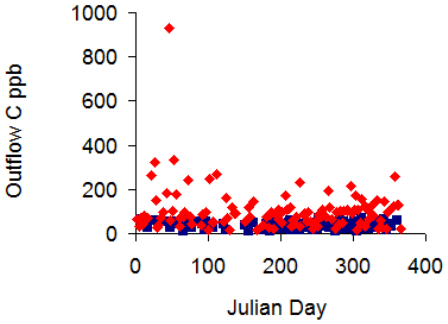




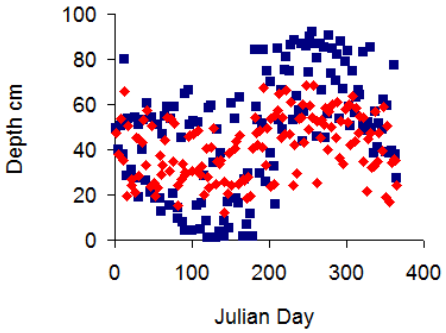
Outflow Volume, Load, Conc vs. Julian Day

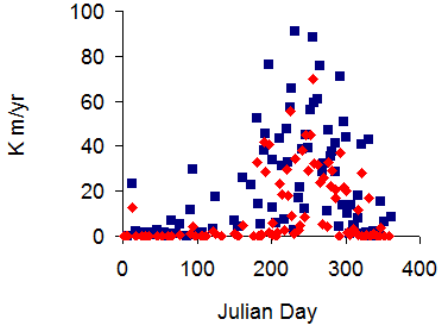


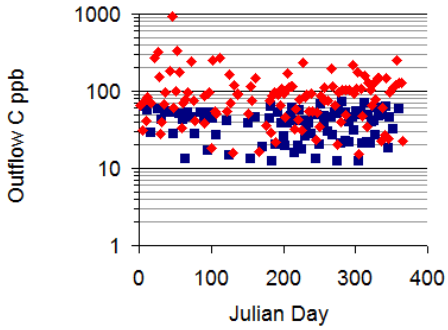




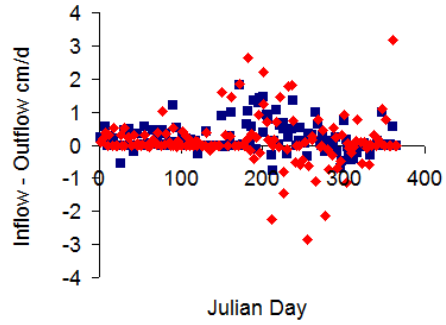
Depth, Settling Rate, Log Conc vs. Julian Day

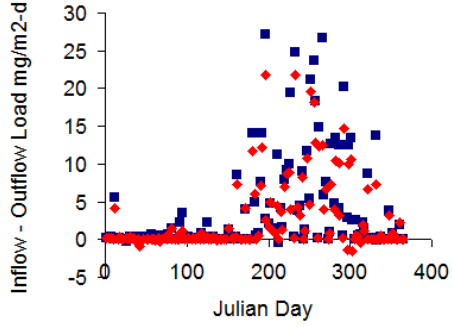


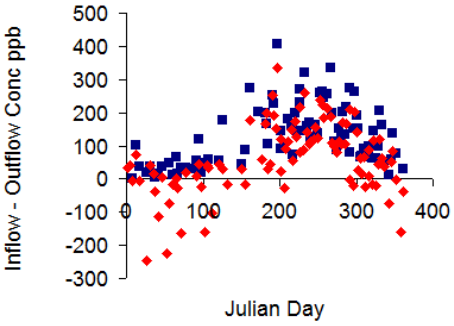




Inflow - Outflow Volume, Load, & Conc vs. Julian Day

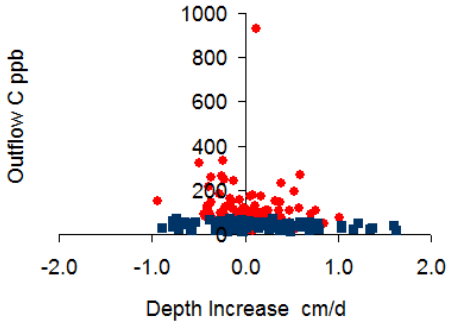


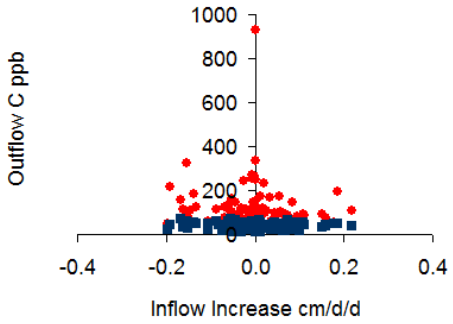


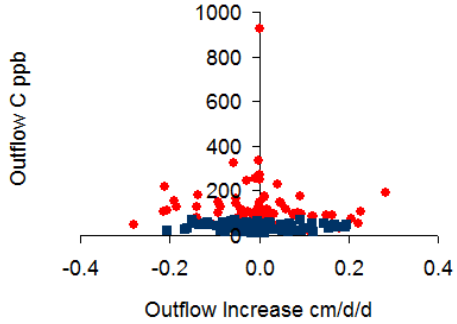


Outflow Conc vs. Increase in Depth, Inflow, & Outflow

Increase = Mean of Interval - Mean of Previous Interval



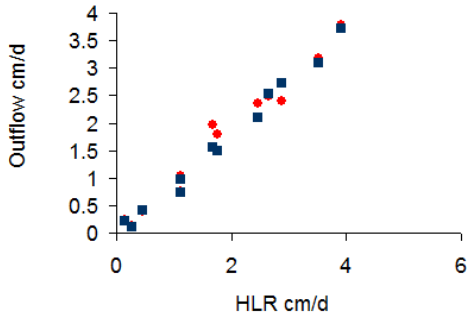


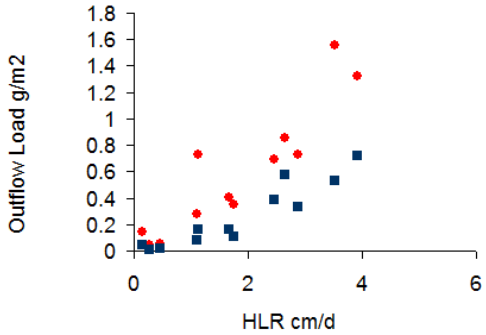


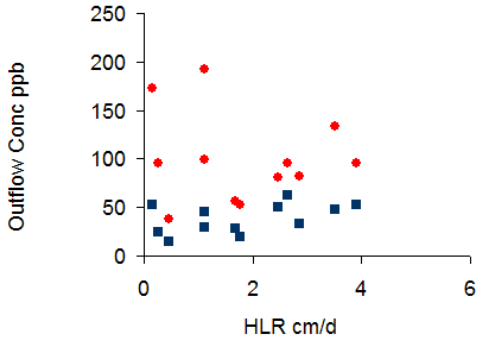
Outflow Volume, Load, & Conc vs. Inflow Hydraulic Load

360-Day Averages

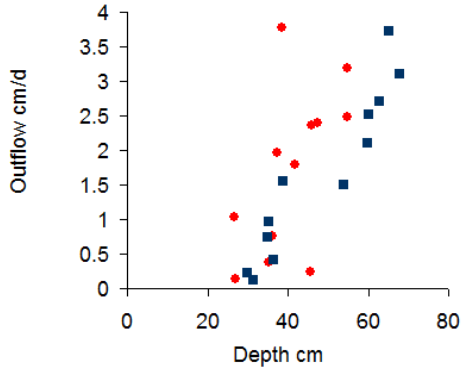
Blue = Predicted, Red = Observed

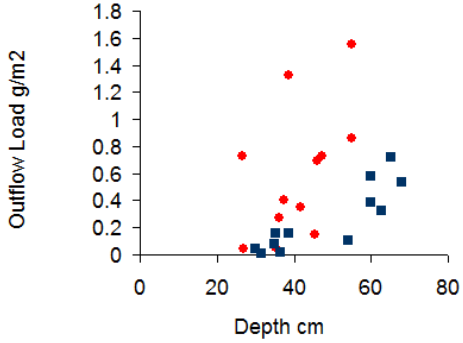


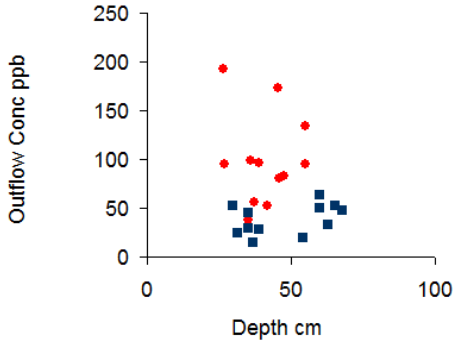




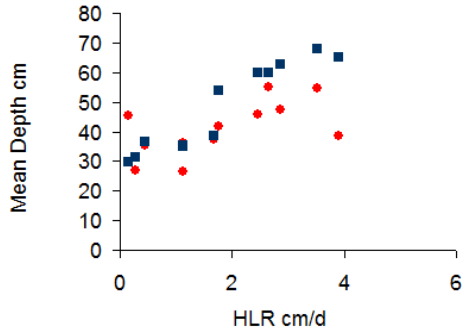
Outflow Volume, Load, & Conc vs. Mean Depth

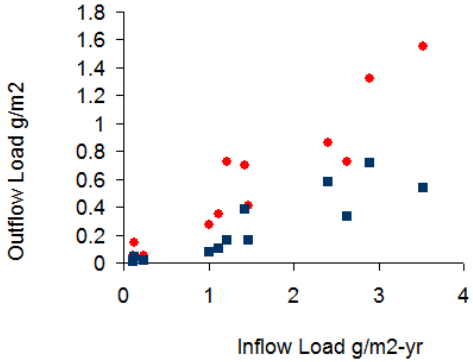


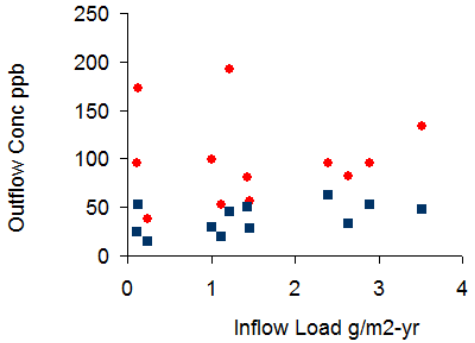




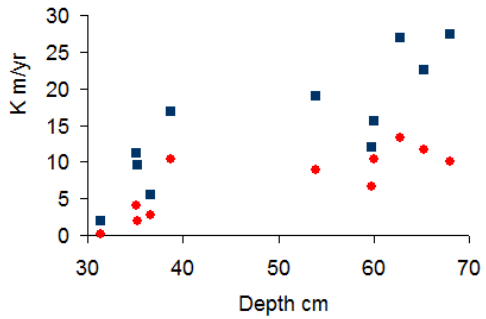
Depth vs. Hydraulic Load, Outflow Load & Conc vs. Inflow Load

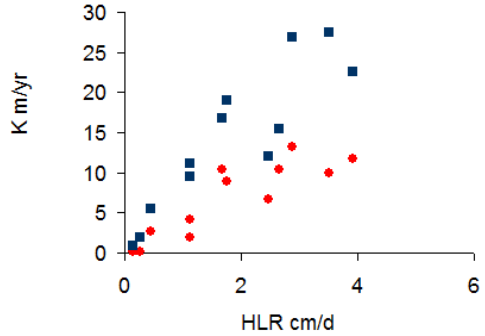


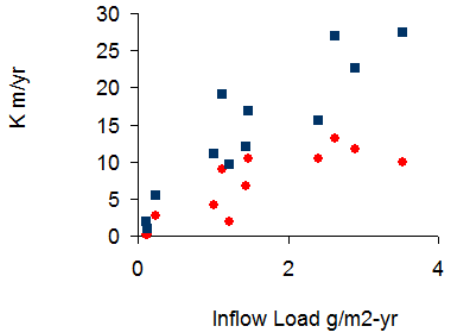




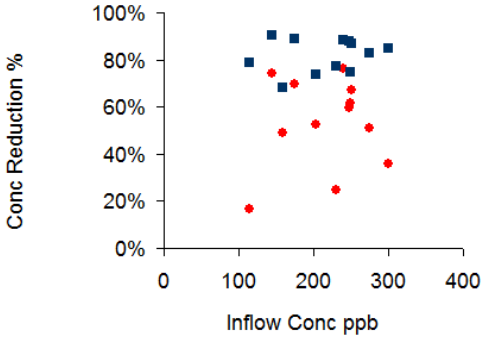
Steady-State Model K Values vs. Depth, HLR, & P Load

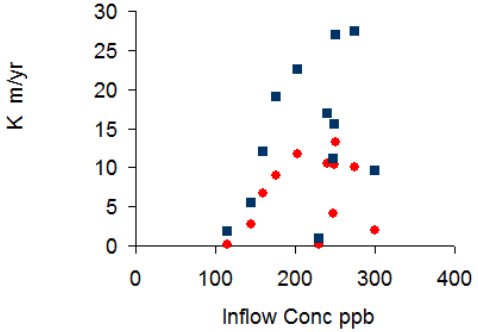


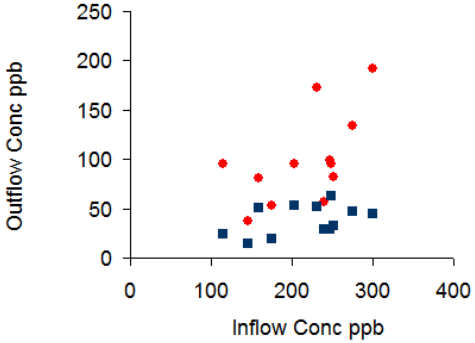




Outflow Conc Reduction, Conc, & K vs. Inflow Conc

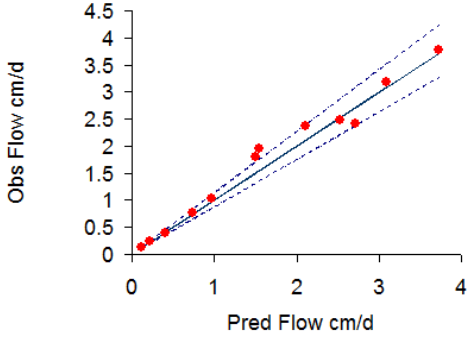


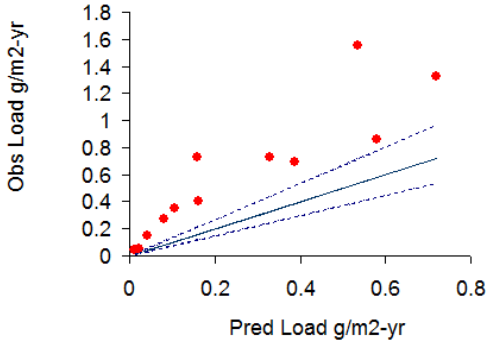


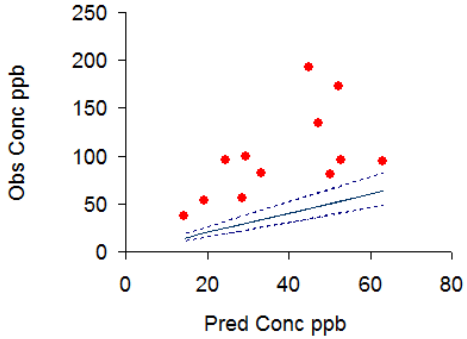


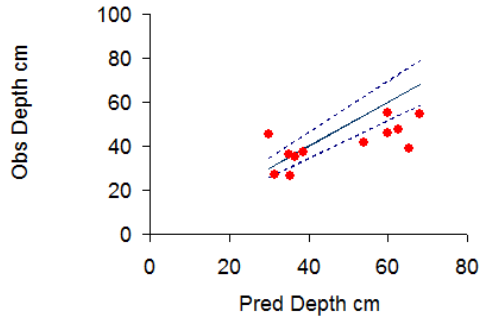
Observed vs. Predicted Values

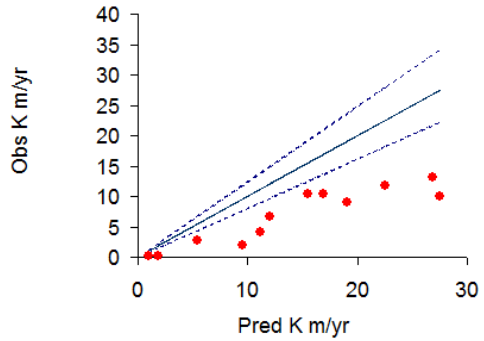
360-Day Averages

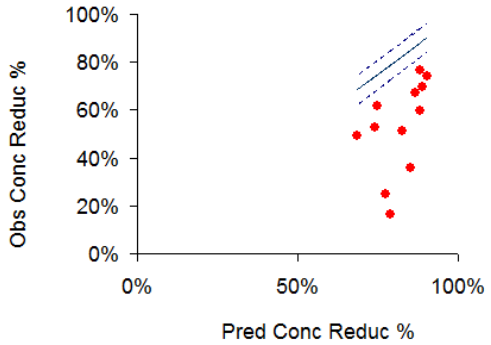






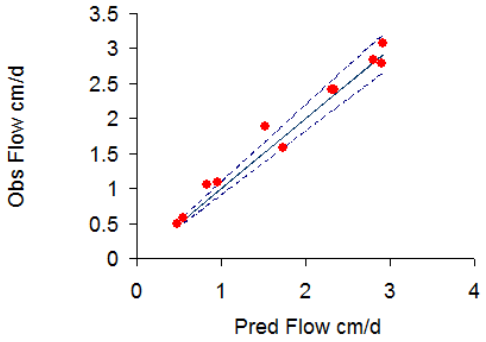


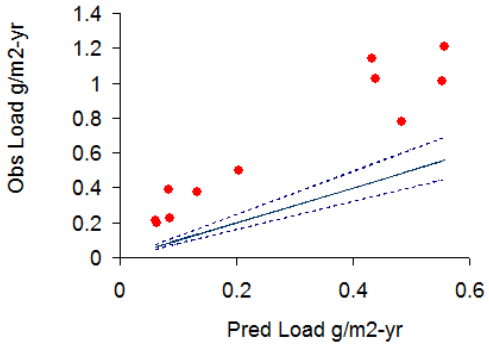


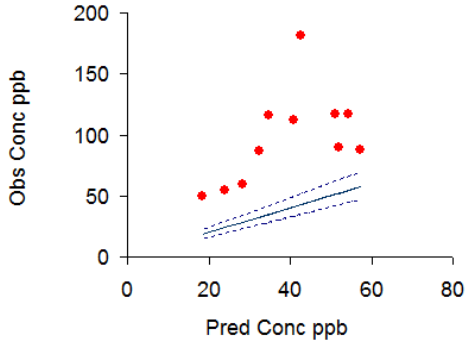


Observed vs. Predicted Values - 2 years

720-day Averages







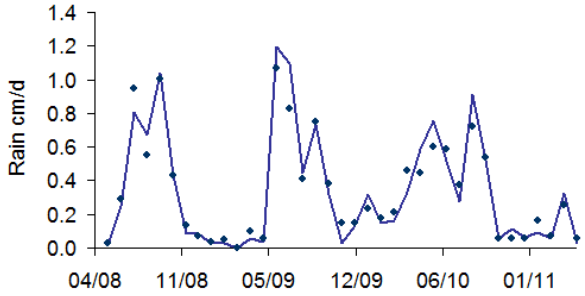
Residual Statistics	Interval =	360	07/03/99	04/30/11	
Variable	Flow	Load	Conc	Depth	K
count	12	12	12	12	12
resid mean	0.071	0.336	61.3	-7.1	-7.4
resid std dev	0.185	0.282	39.7	10.5	4.9
resid rms	0.198	0.439	73.1	12.7	8.9
obs mean	1.709	0.597	95.7	40.9	6.7
obs std dev	1.198	0.483	46.4	9.3	4.7
pred mean	1.638	0.261	43.6	48.1	14.1
pred std dev	1.196	1.049	1.4	14.7	8.9
r squared	0.97	0.17	0.00	0.00	0.00
resid std %	11%	108%	91%	22%	35%
resid rms %	12%	168%	168%	26%	63%
bias mean %	4%	129%	141%	-15%	-52%
bias std error %	3%	31%	26%	6%	10%
bias t	1.3	4.1	5.3	-2.3	-5.2
bias signif	0.21	0.00	0.00	0.04	0.00
80% prediction intervals for prototype datasets (STA-2 & STA-34)					
% of predicted	14%	34%	30%	16%	24%

12/3/2012

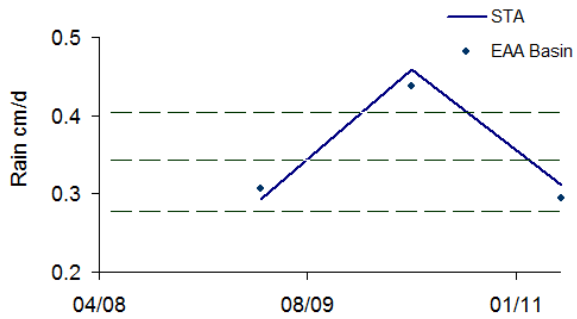
Case: Case = STA6_PLAN_C235_PEW , Cell = OUT STA6 Sections 1 & 2 12/3/2012

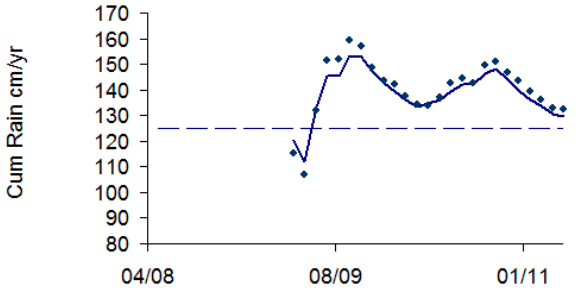
30-Day Averages 04/16/08 thru 04/30/11 360-Day Averages 05/16/08 thru 04/30/11 Cumulative 04/16/08 thru 04/30/11

Rainfall



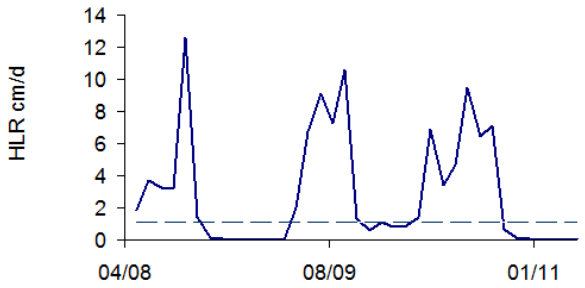
Dashed Lines = EAA Basin Long-Term Average, 10th & 90th Percentiles

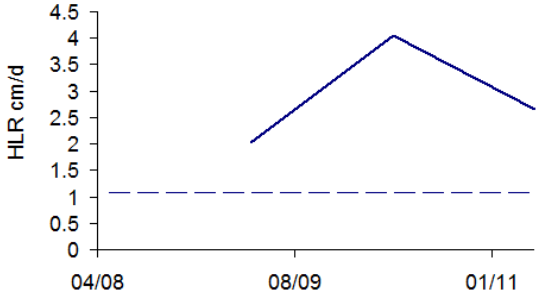


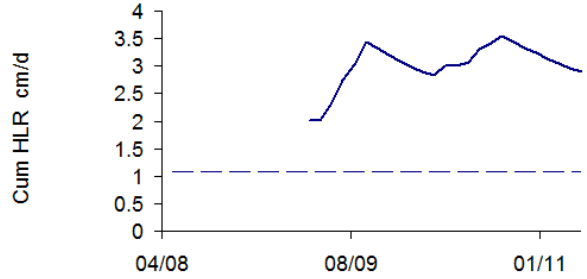


Inflow Hydraulic Loads

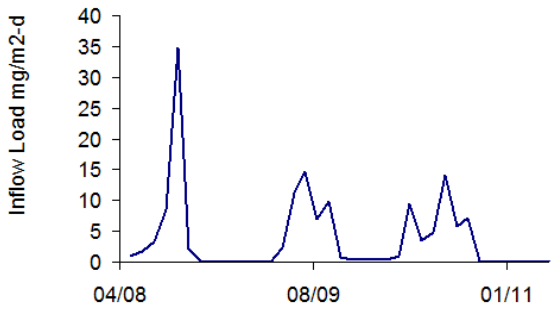
Dashed Lines = RS Design Long-Term Mean

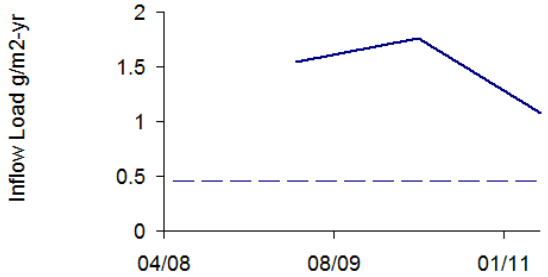


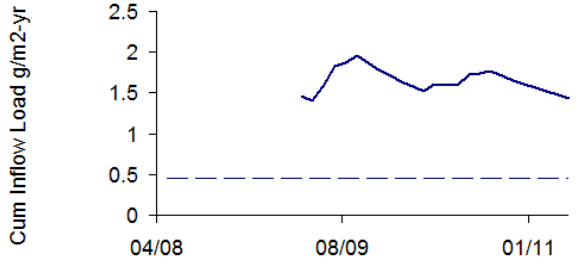




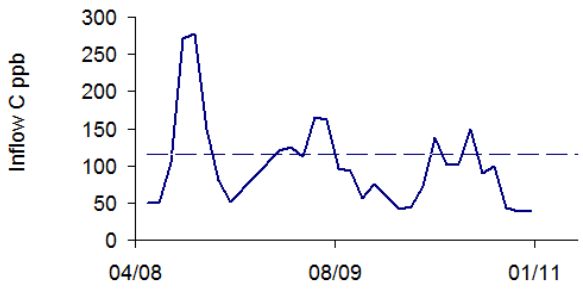
Inflow Phosphorus Loads Per Unit Area

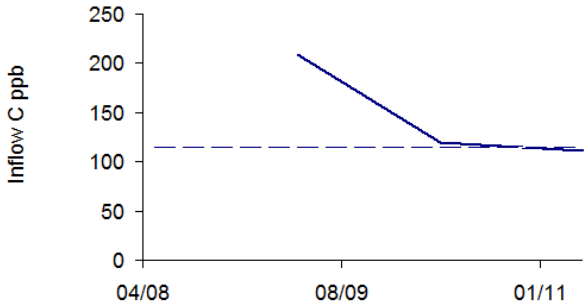


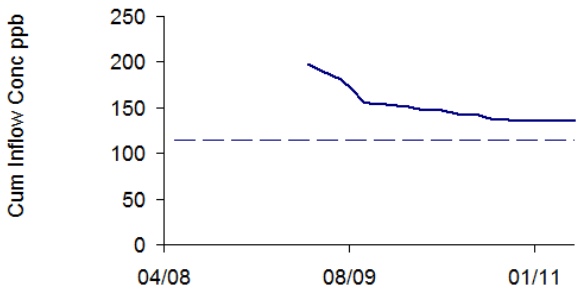




Inflow Concentrations

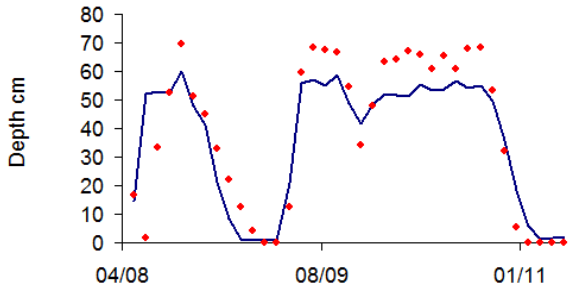


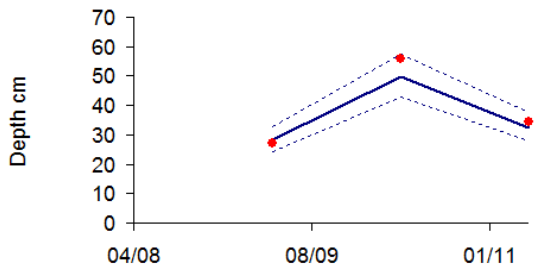


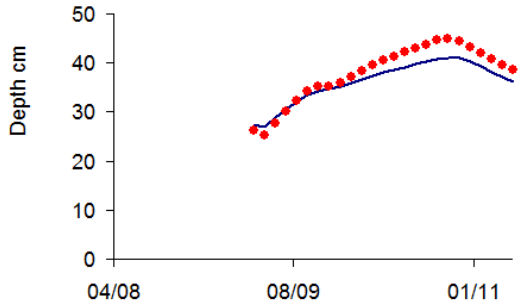


Mean Depths

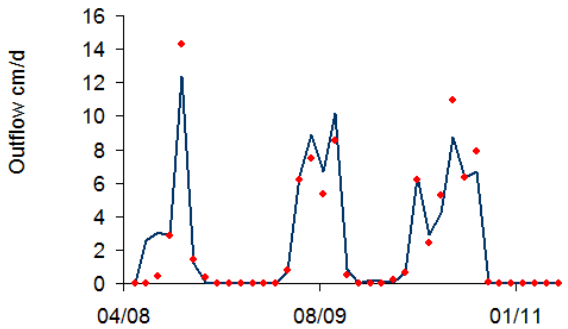
Dashed Lines = 80% Prediction Interval

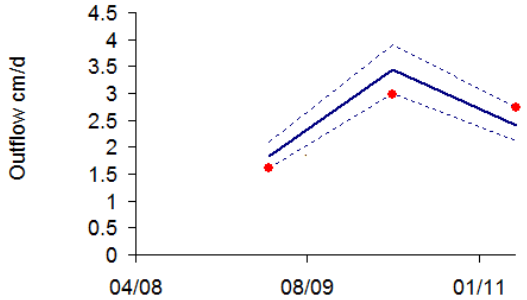


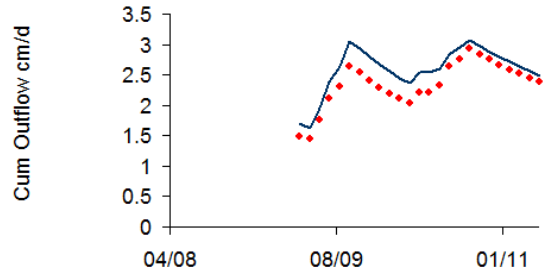




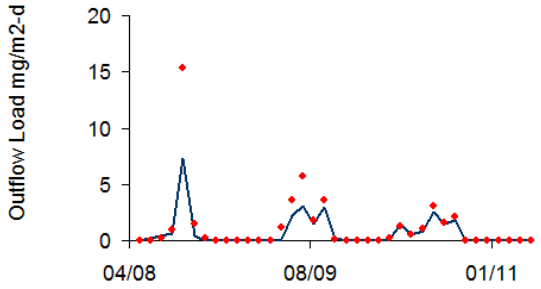
Outflow Volumes Per Unit Area

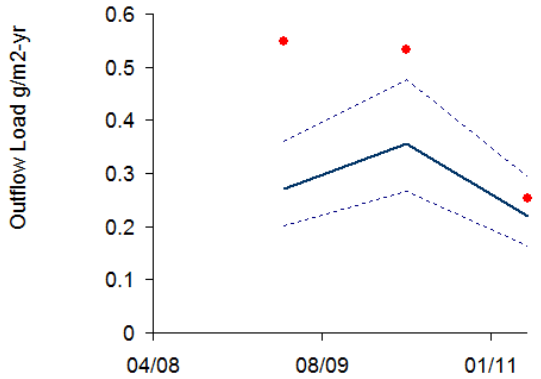


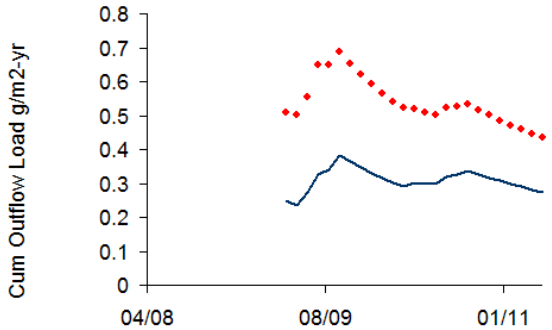




Outflow Loads Per Unit Area

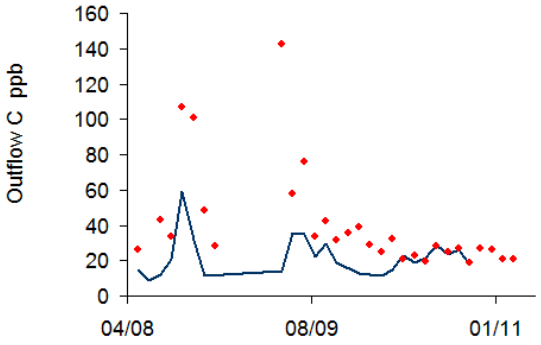


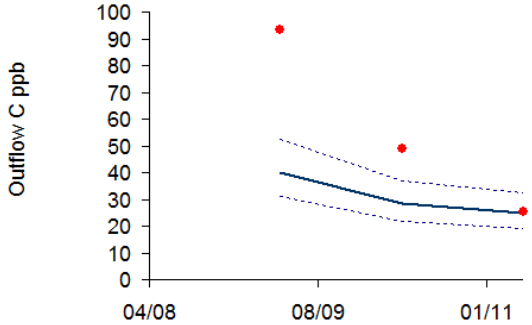


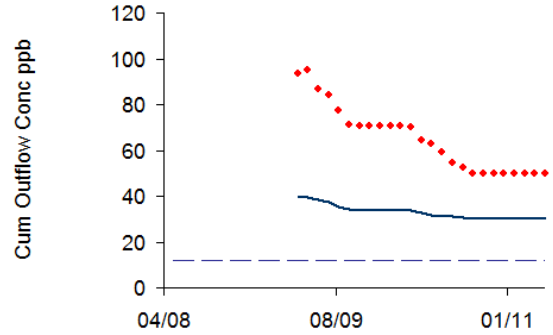


Outflow Concentrations

Dashed Line = RS Design Simulation

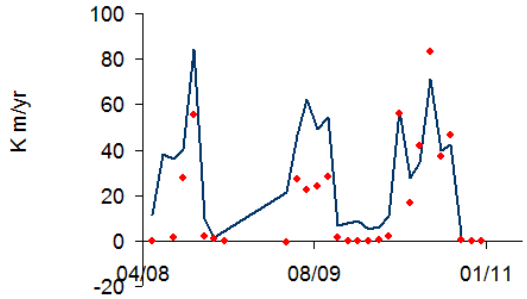


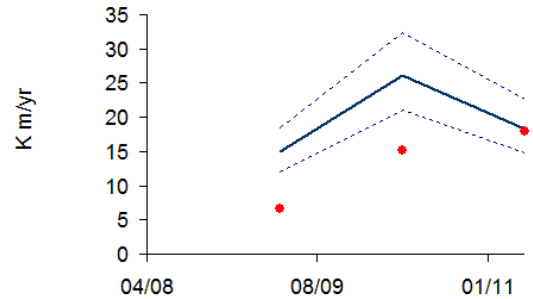


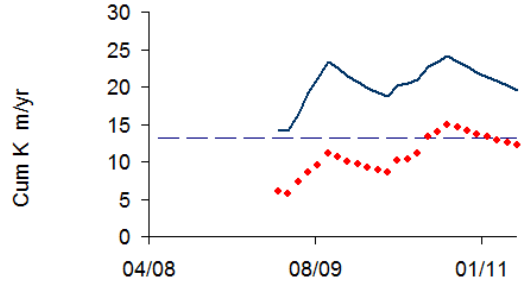


K - Steady State Model, C*=4, n = 6, q* = 0 cm/d

Dashed Line = RS Design Simulation



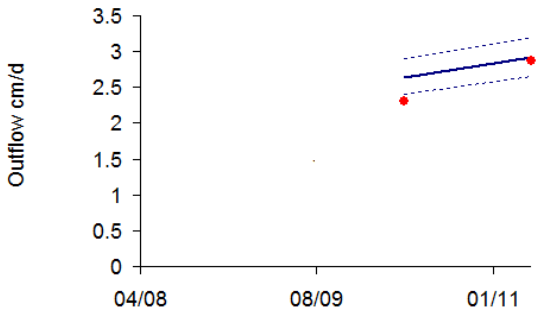


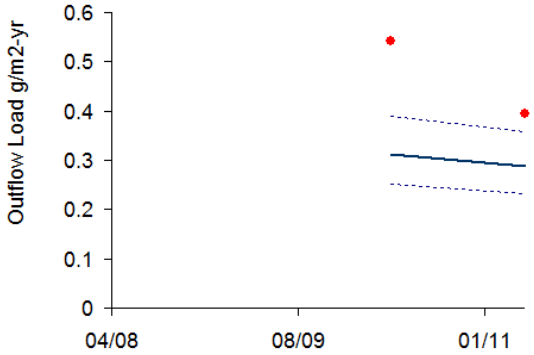


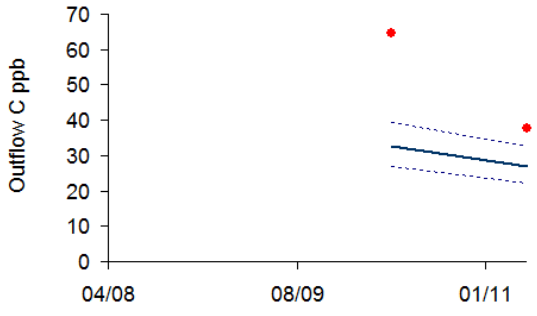
Outflow Volume, Load, Conc vs. Date - 2 Yr Rolling

720-day Averages

Dashed Lines = 80% Prediction Interval



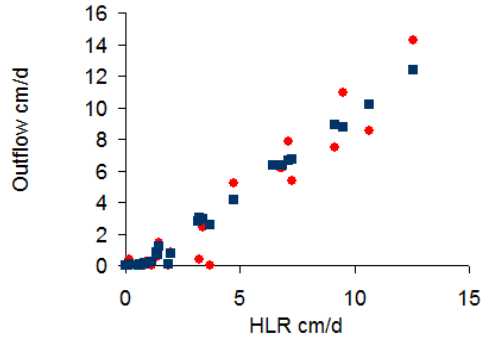


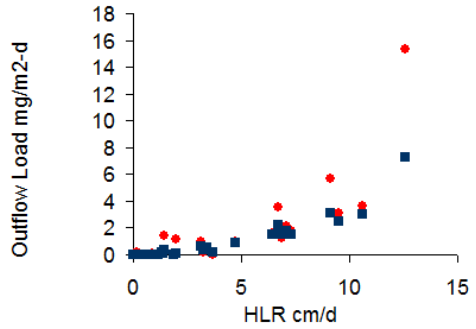


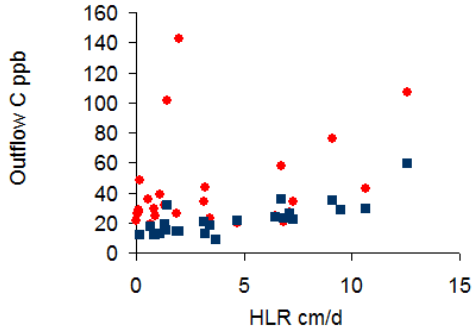
Outflow Volume, Load, & Conc vs. Inflow Hydraulic Load

30-Day Averages

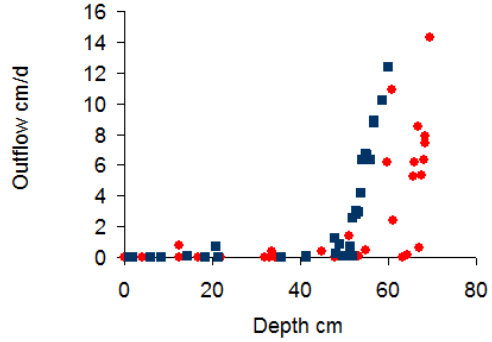
Blue = Predicted, Red = Observed

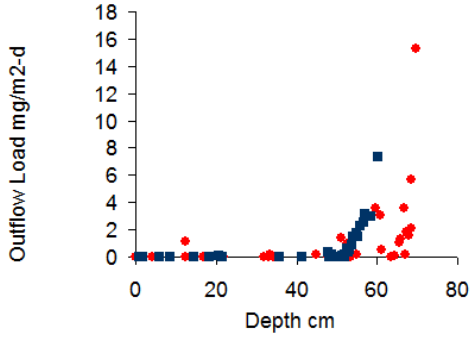


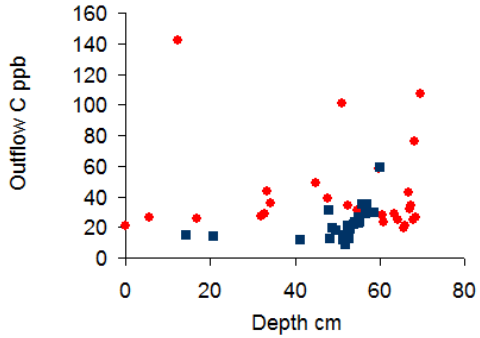




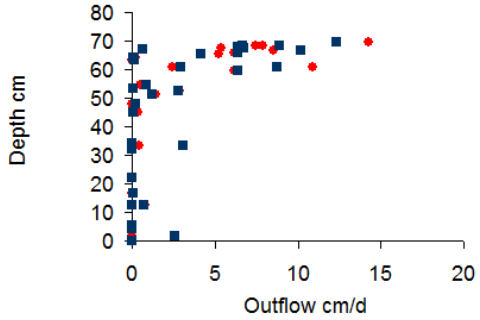
Outflow Volume, Load, & Conc vs. Depth

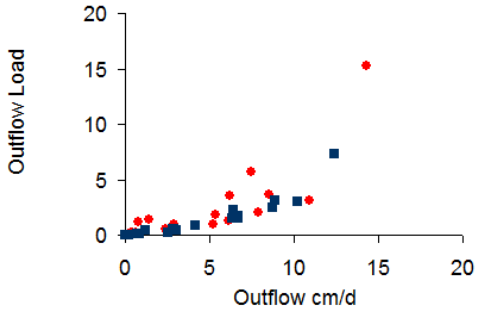


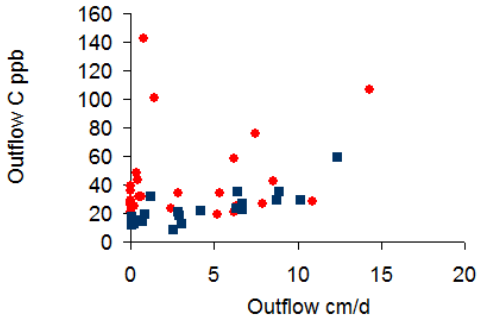




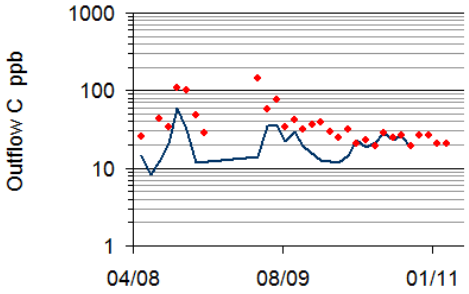
Depth, Load, & Conc vs. Outflow Volume / Area

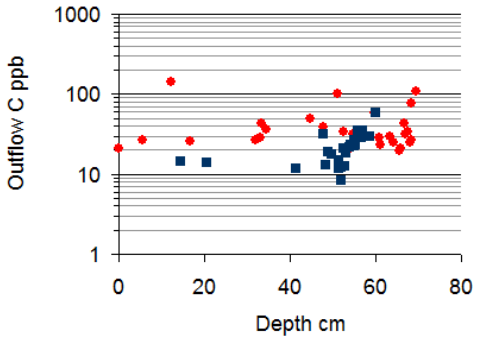


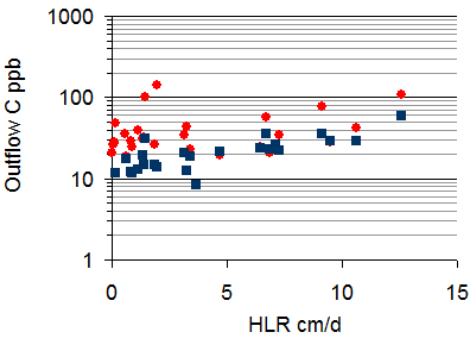




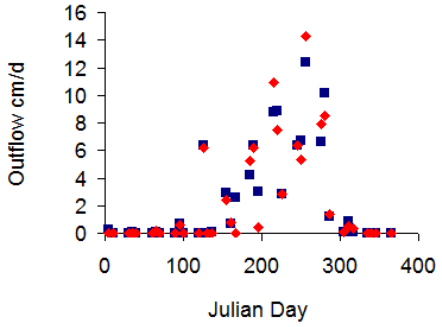
Log Outflow Conc vs. Date, Depth, Hydraulic Load

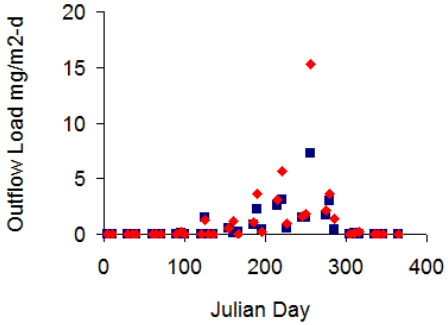


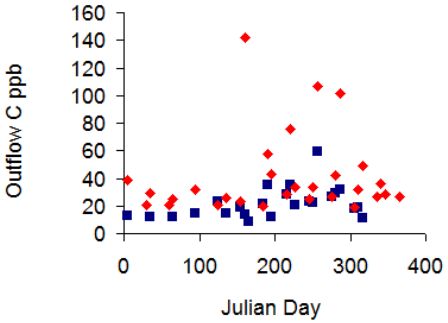




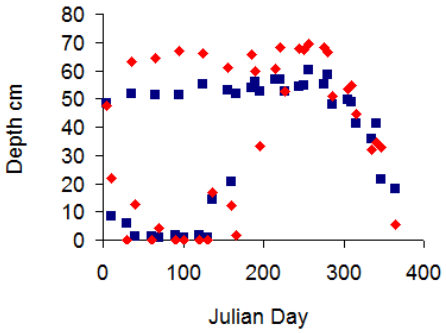
Outflow Volume, Load, Conc vs. Julian Day

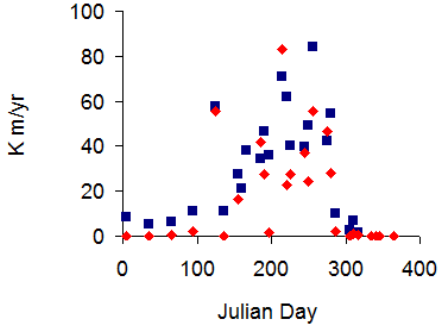


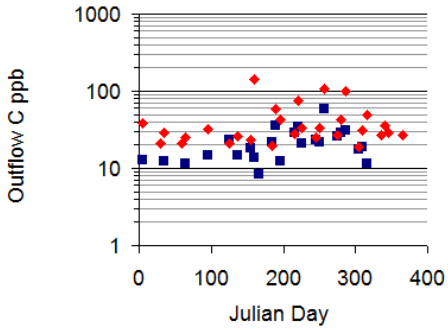




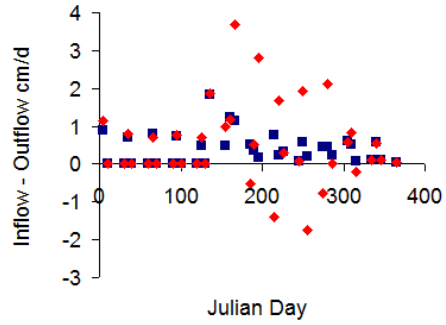
Depth, Settling Rate, Log Conc vs. Julian Day

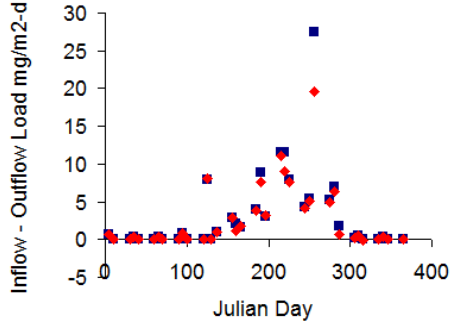


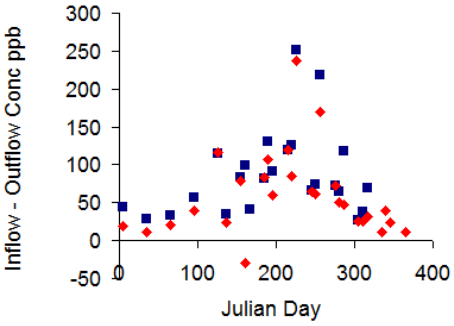




Inflow - Outflow Volume, Load, & Conc vs. Julian Day

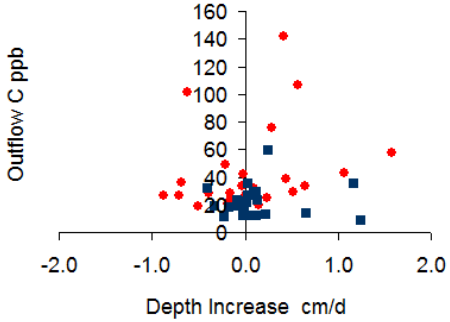


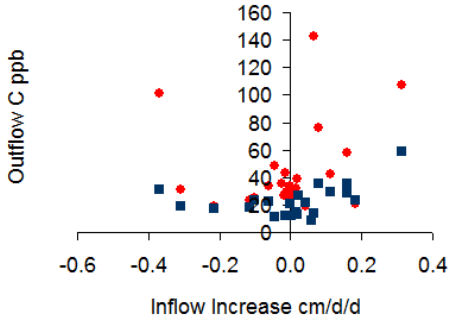


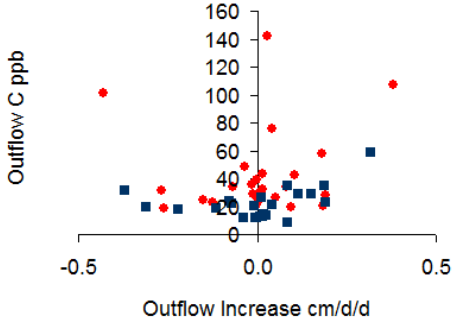


Outflow Conc vs. Increase in Depth, Inflow, & Outflow

Increase = Mean of Interval - Mean of Previous Interval



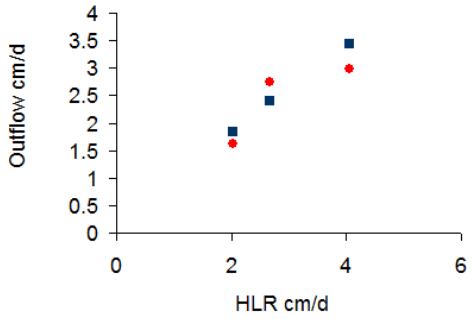


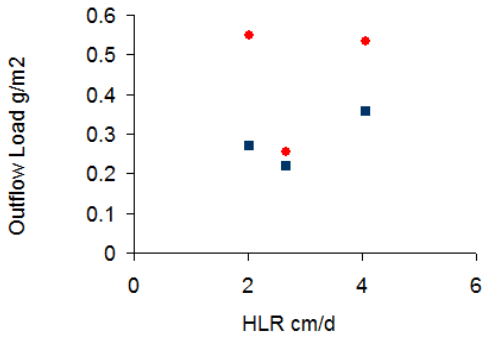


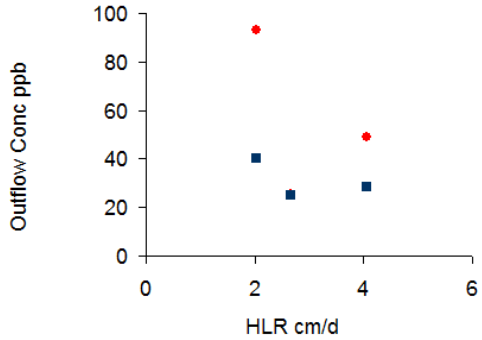
Outflow Volume, Load, & Conc vs. Inflow Hydraulic Load

360-Day Averages

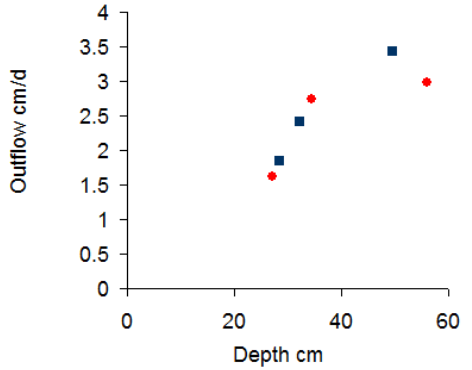
Blue = Predicted, Red = Observed

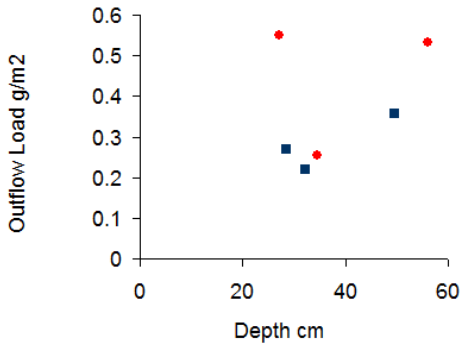


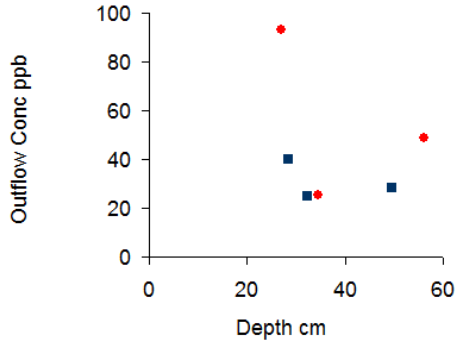




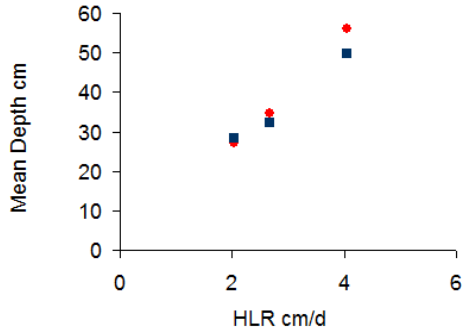
Outflow Volume, Load, & Conc vs. Mean Depth

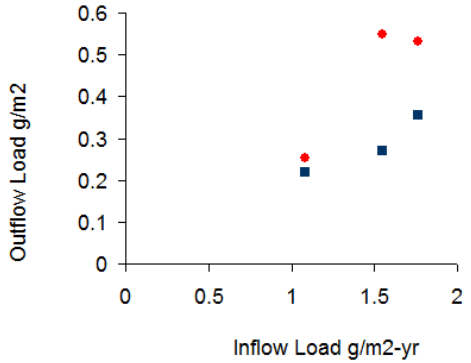


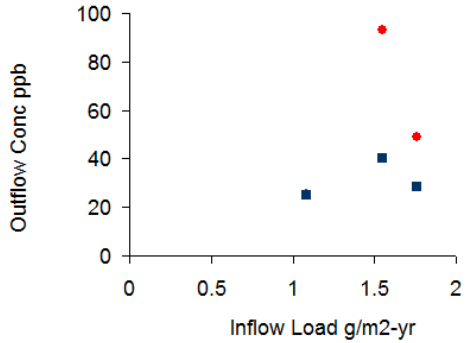




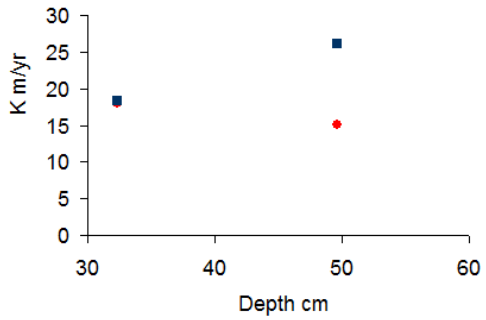
Depth vs. Hydraulic Load, Outflow Load & Conc vs. Inflow Load

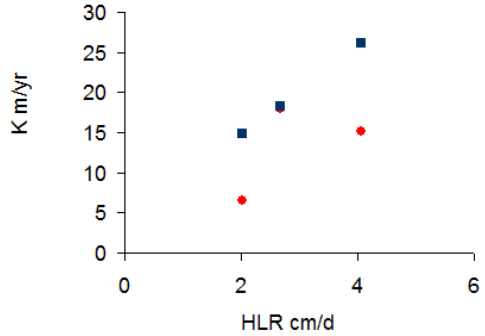


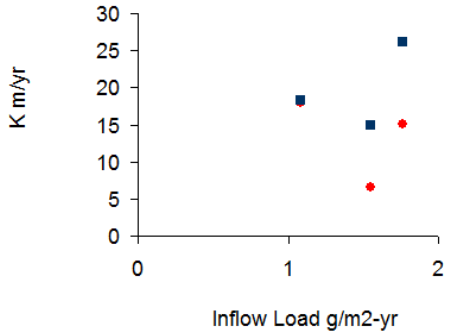




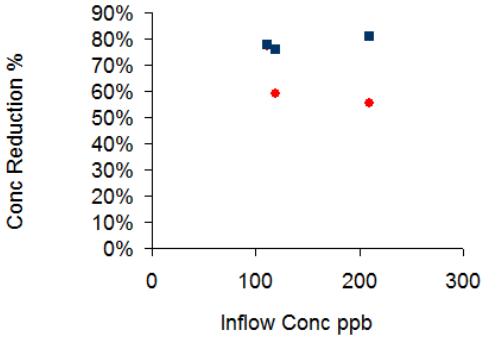
Steady-State Model K Values vs. Depth, HLR, & P Load

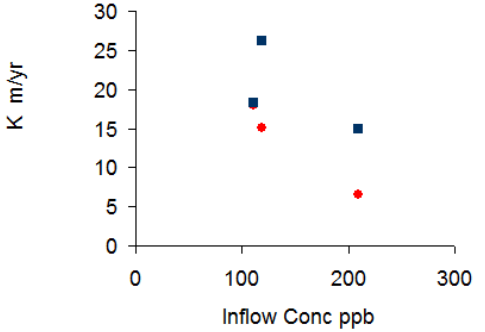


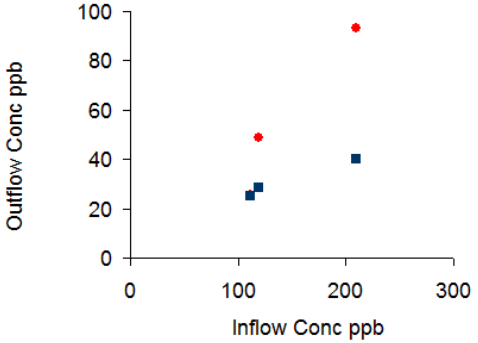




Outflow Conc Reduction, Conc, & K vs. Inflow Conc

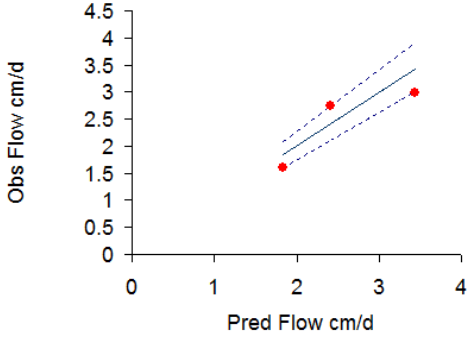


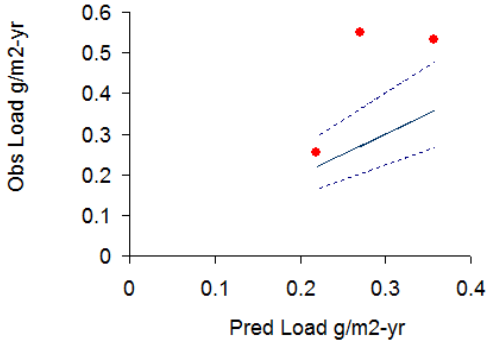


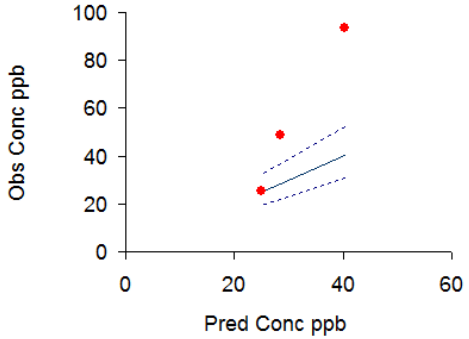


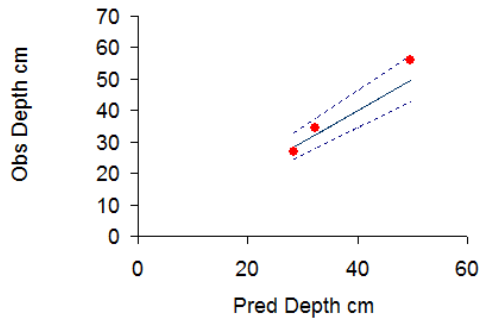
Observed vs. Predicted Values

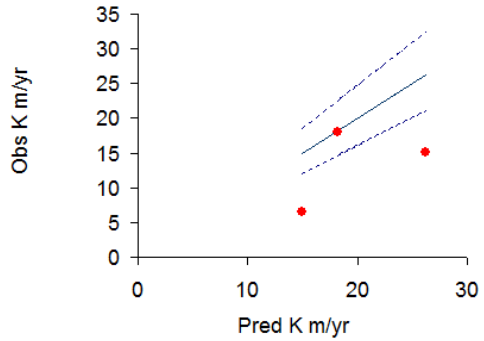
360-Day Averages

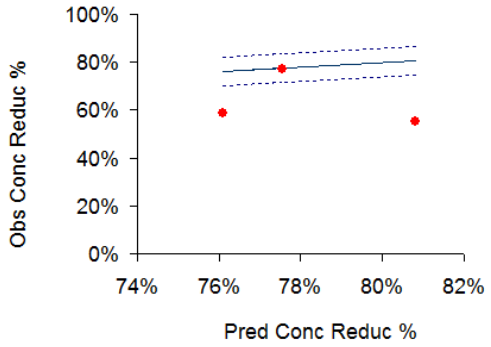






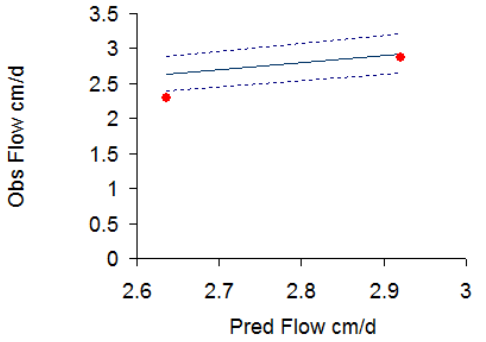


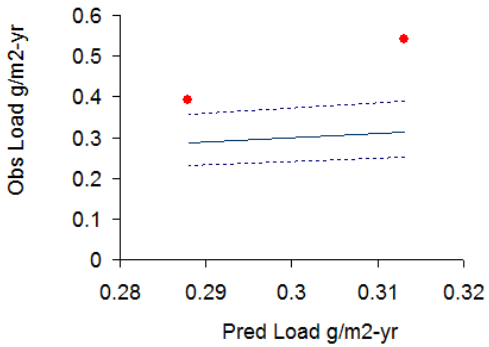


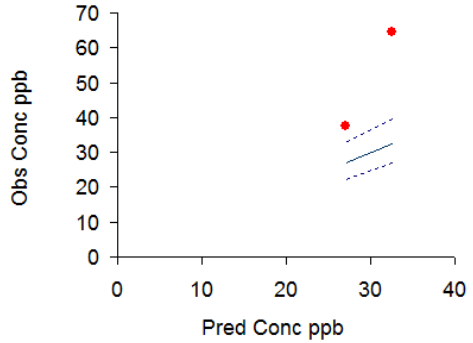


Observed vs. Predicted Values - 2 years

720-day Averages







Residual Statistics	Interval =	360	05/16/08	04/30/11	
Variable	Flow	Load	Conc	Depth	K
count	3	3	3	3	3
resid mean	-0.114	0.163	24.7	2.4	-6.5
resid std dev	0.402	0.123	26.6	3.9	5.6
resid rms	0.418	0.205	36.3	4.6	8.6
obs mean	2.446	0.445	49.9	39.2	13.2
obs std dev	0.732	0.166	34.5	15.0	5.9
pred mean	2.560	0.282	30.2	36.8	19.8
pred std dev	0.808	0.708	0.9	11.3	5.8
r squared	0.67	0.00	0.00	0.91	0.00
resid std %	16%	44%	88%	11%	28%
resid rms %	16%	73%	120%	12%	44%
bias mean %	-4%	58%	82%	7%	-33%
bias std error %	9%	25%	51%	6%	16%
bias t	-0.5	2.3	1.6	1.1	-2.0
bias signif	0.71	0.26	0.35	0.47	0.29
80% prediction intervals for prototype datasets (STA-2 & STA-34)					
% of predicted	14%	34%	30%	16%	24%

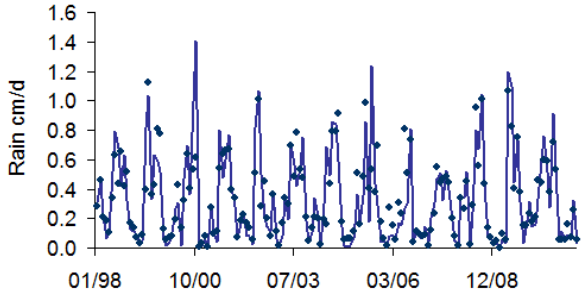
12/3/2012

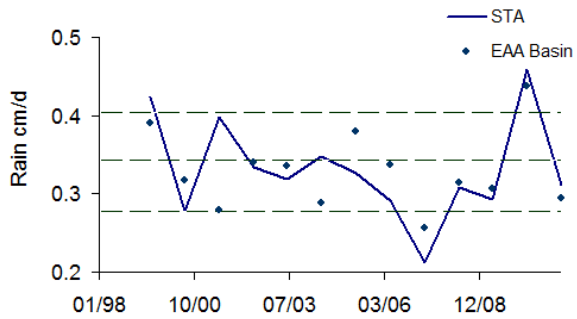
Case: Case = STA6_PLAN_C35_PEW , Cell = Out STA6 - Cells 3 & 5 12/3/2012

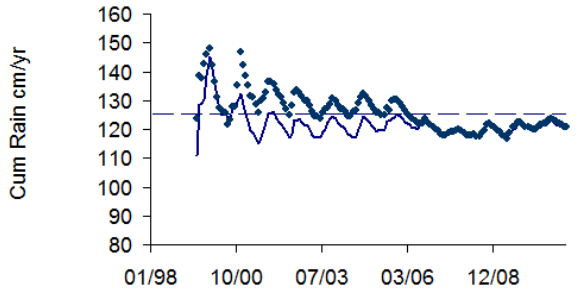
30-Day Averages 01/09/98 thru 04/30/11 360-Day Averages 07/08/98 thru 04/30/11 Cumulative 01/09/98 thru 04/30/11

Rainfall

Dashed Lines = EAA Basin Long-Term Average, 10th & 90th Percentiles

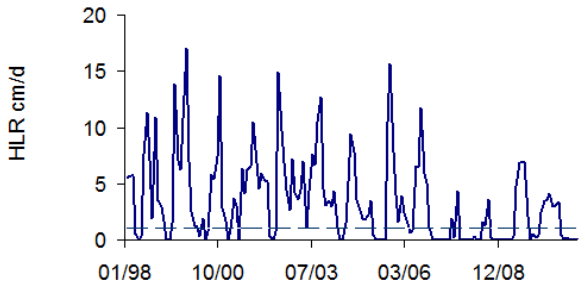


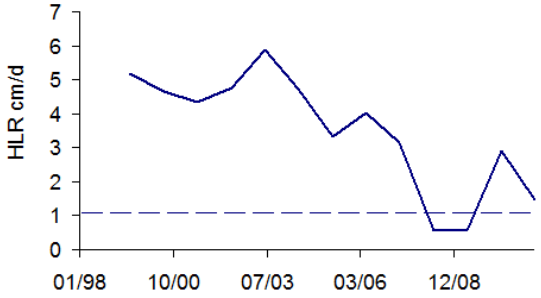


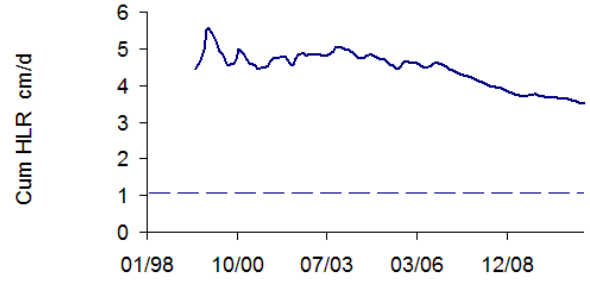


Inflow Hydraulic Loads

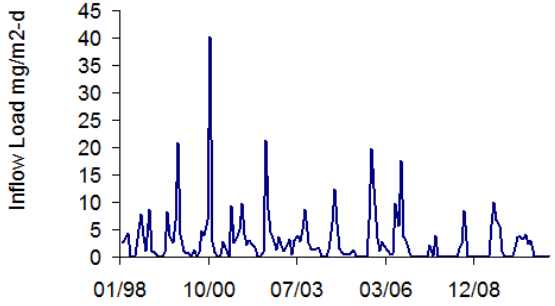
Dashed Lines = RS Design Long-Term Mean

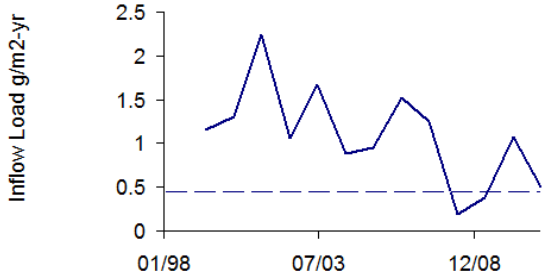


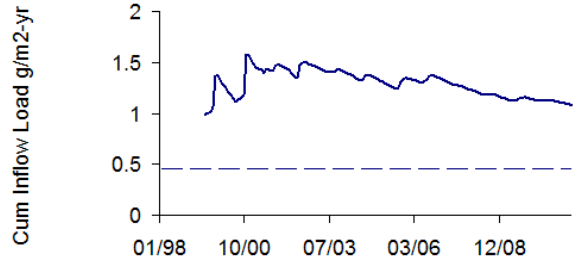




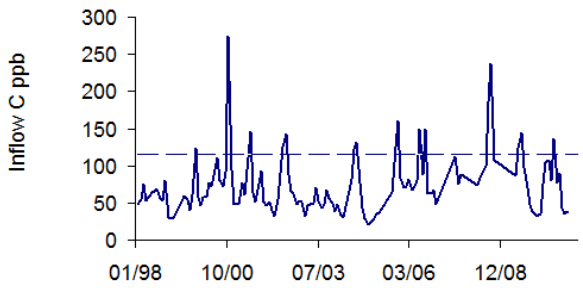
Inflow Phosphorus Loads Per Unit Area

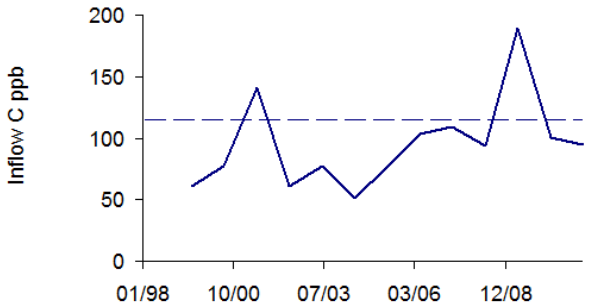


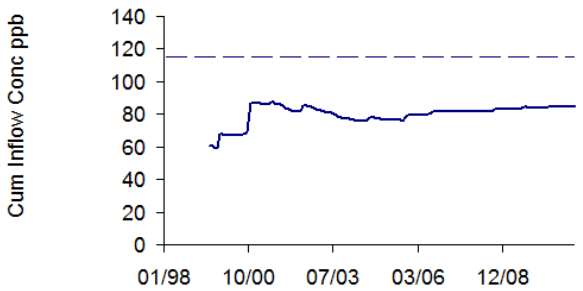




Inflow Concentrations

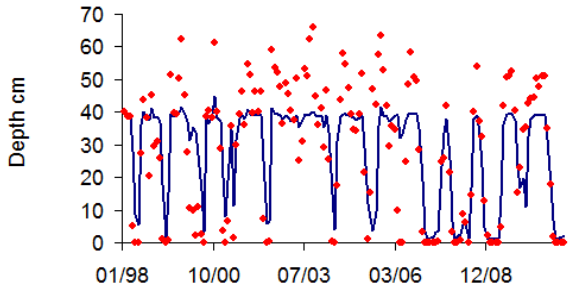


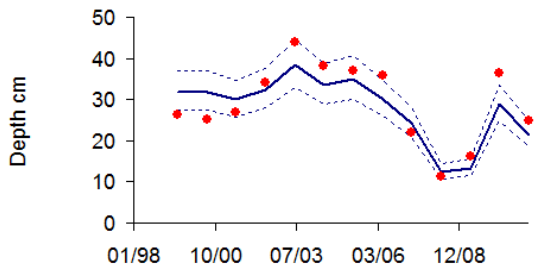


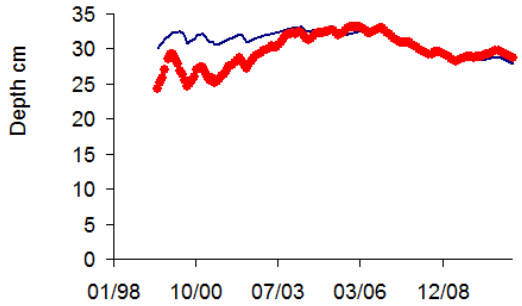


Mean Depths

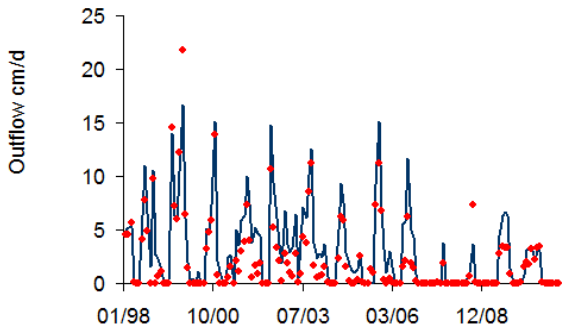
Dashed Lines = 80% Prediction Interval

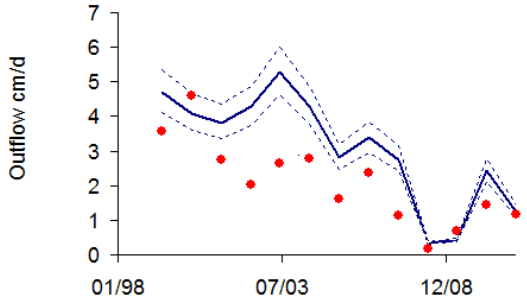


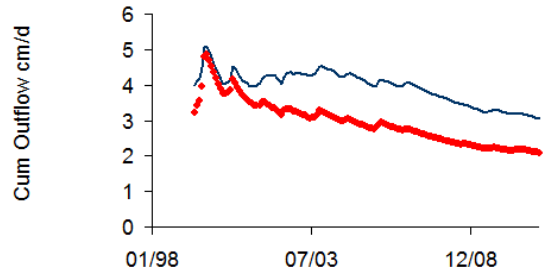




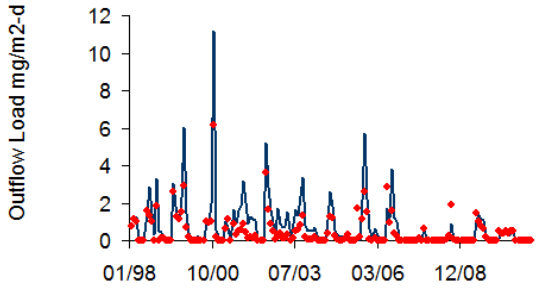
Outflow Volumes Per Unit Area

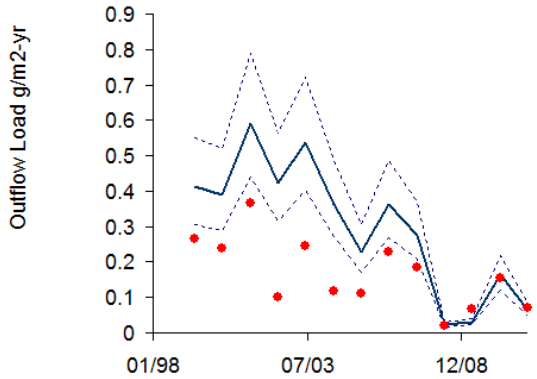


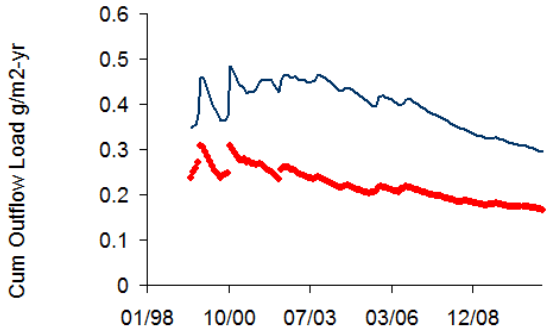




Outflow Loads Per Unit Area

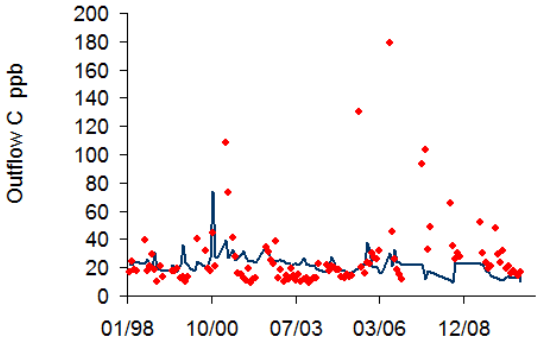


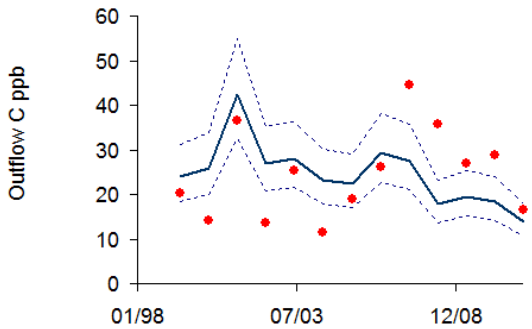


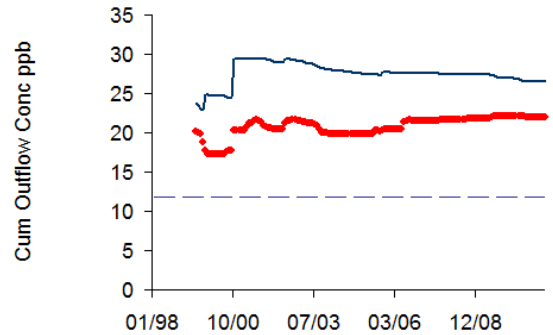


Outflow Concentrations

Dashed Line = RS Design Simulation

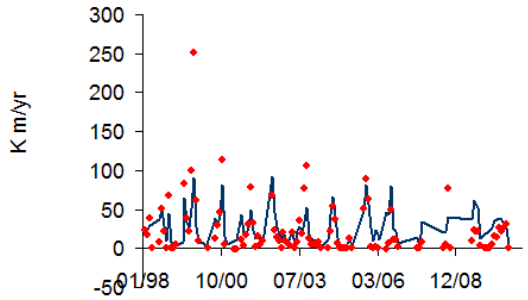


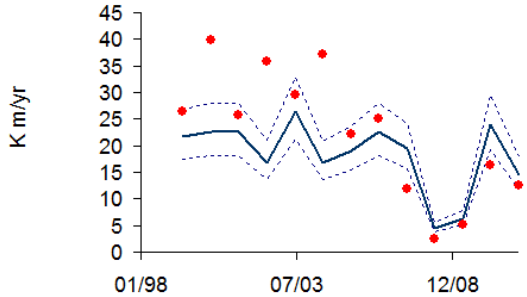


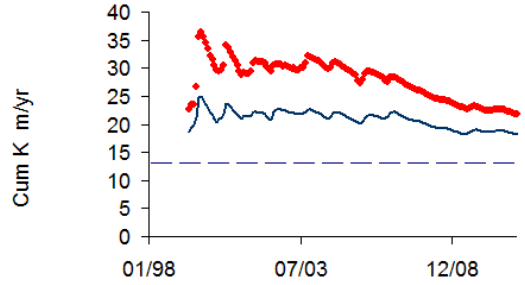


K - Steady State Model, C*=4, n = 6, q* = 0 cm/d

Dashed Line = RS Design Simulation



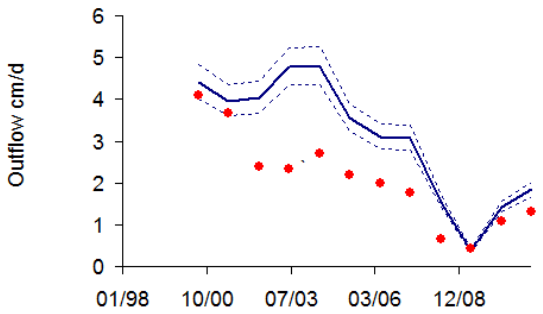


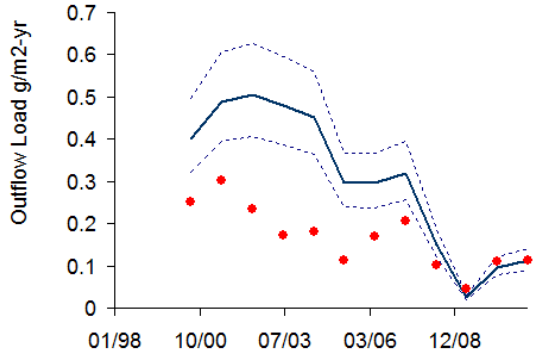


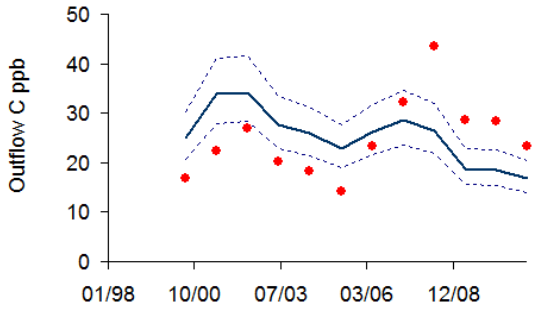
Outflow Volume, Load, Conc vs. Date - 2 Yr Rolling

720-day Averages

Dashed Lines = 80% Prediction Interval



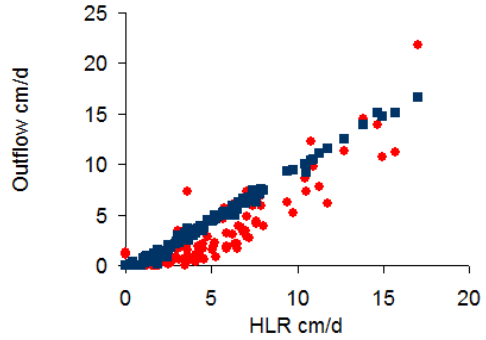


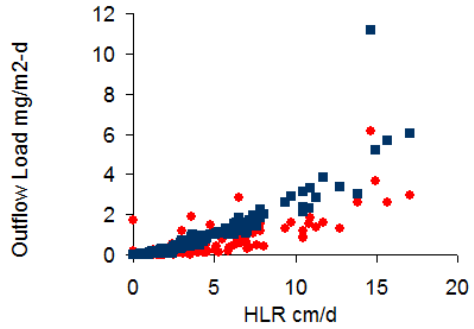


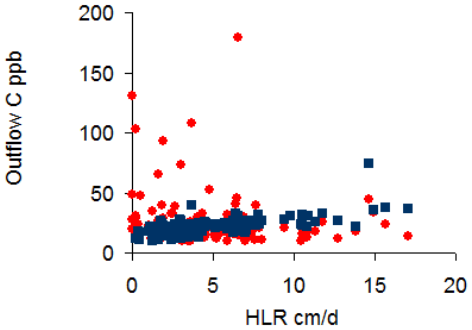
Outflow Volume, Load, & Conc vs. Inflow Hydraulic Load

30-Day Averages

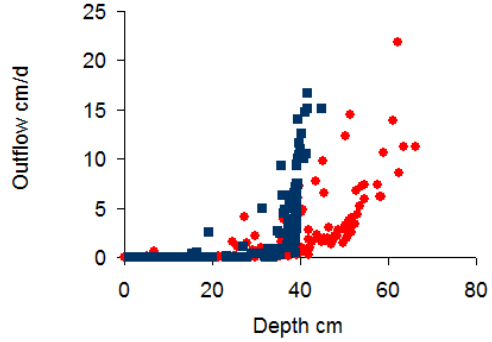
Blue = Predicted, Red = Observed

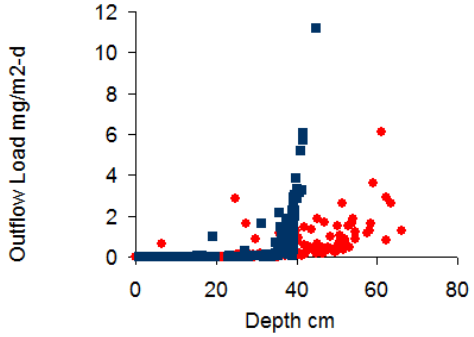


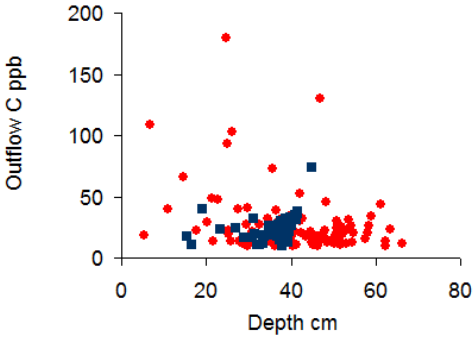




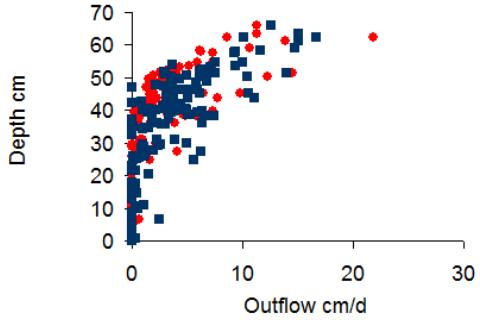
Outflow Volume, Load, & Conc vs. Depth

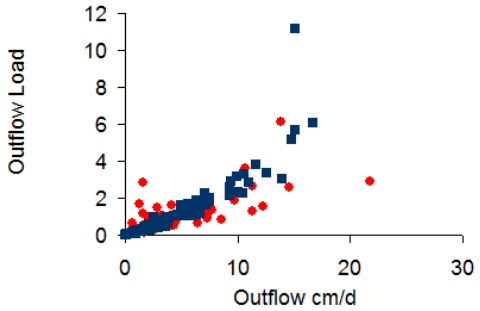


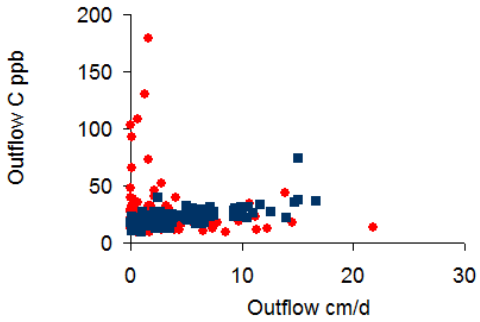




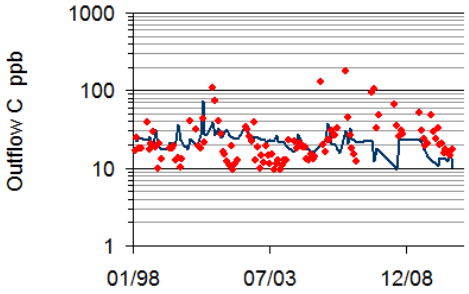
Depth, Load, & Conc vs. Outflow Volume / Area

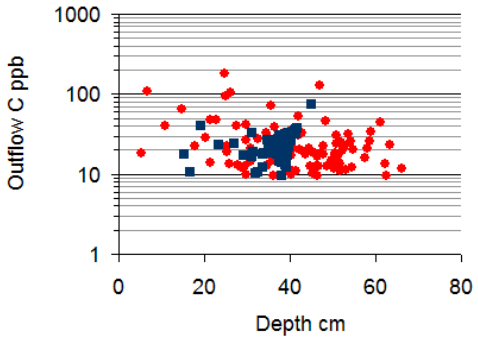


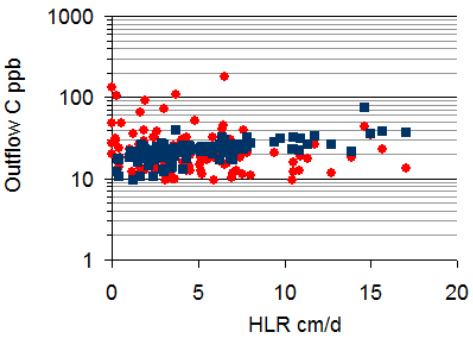




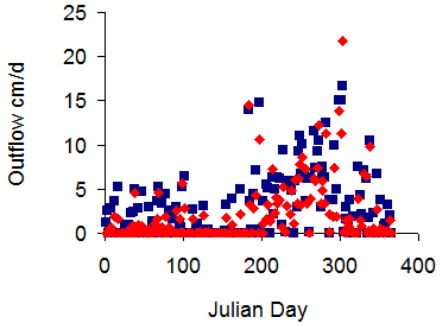
Log Outflow Conc vs. Date, Depth, Hydraulic Load

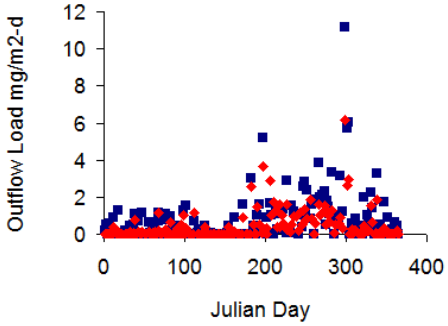


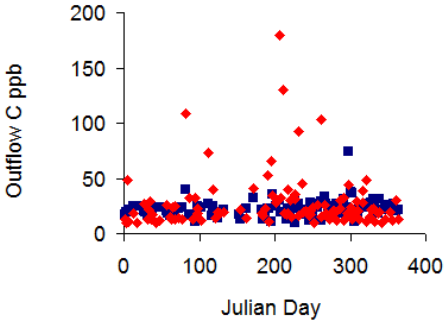




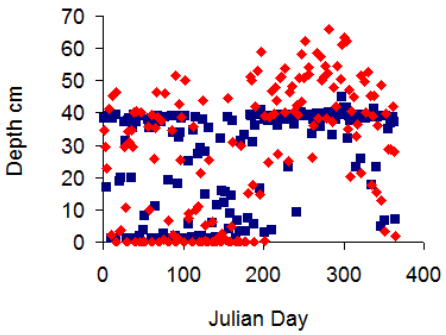
Outflow Volume, Load, Conc vs. Julian Day

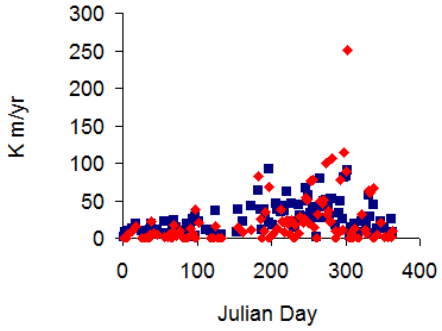


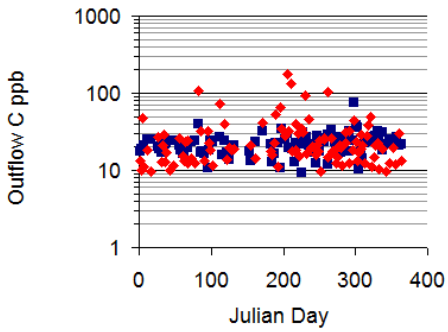




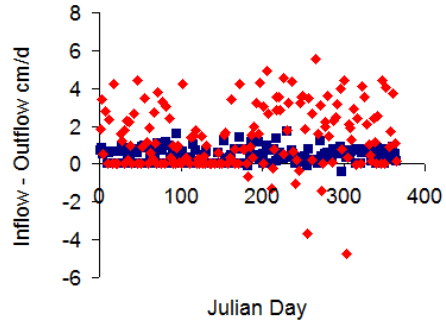
Depth, Settling Rate, Log Conc vs. Julian Day

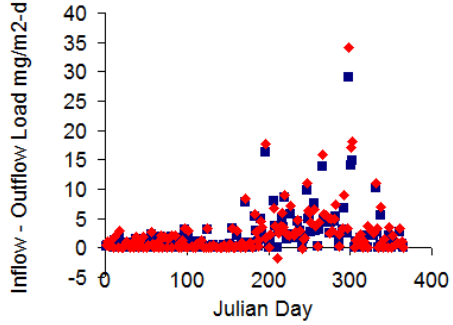


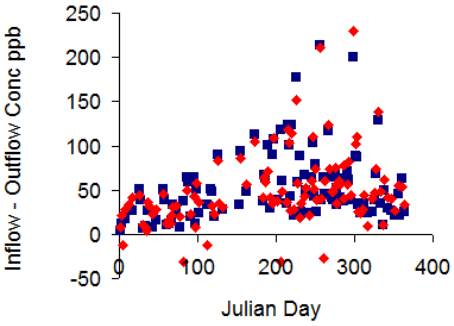




Inflow - Outflow Volume, Load, & Conc vs. Julian Day

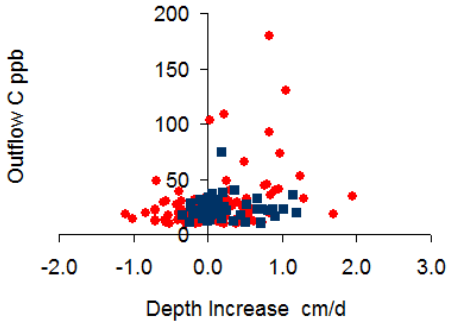


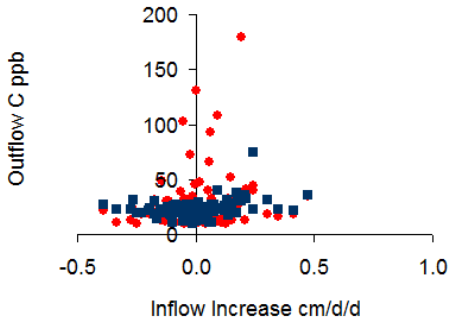


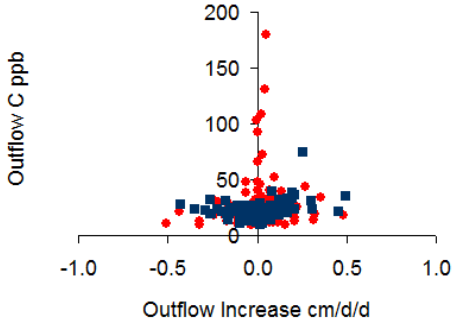


Outflow Conc vs. Increase in Depth, Inflow, & Outflow

Increase = Mean of Interval - Mean of Previous Interval



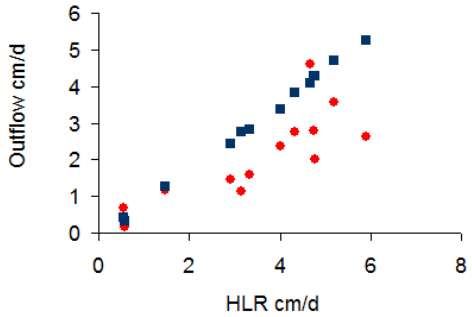


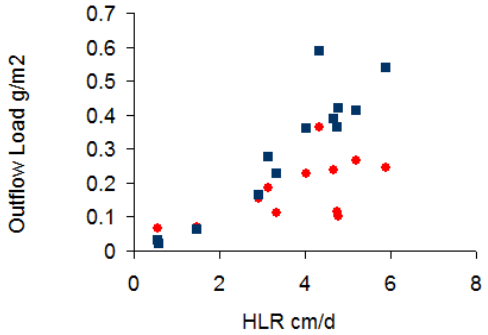


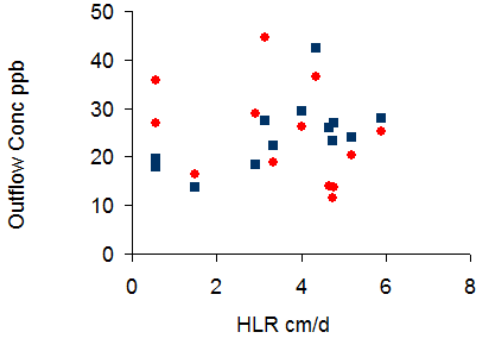
Outflow Volume, Load, & Conc vs. Inflow Hydraulic Load

360-Day Averages

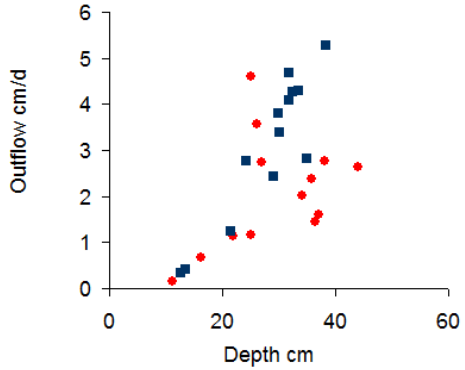
Blue = Predicted, Red = Observed

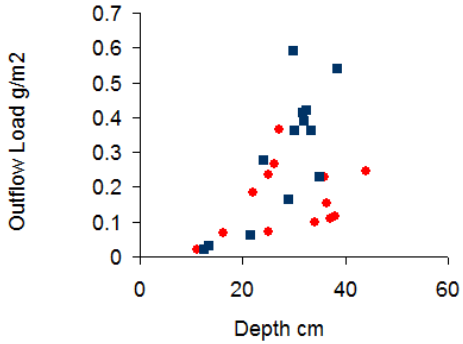


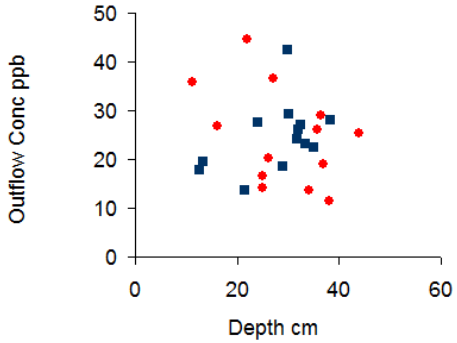




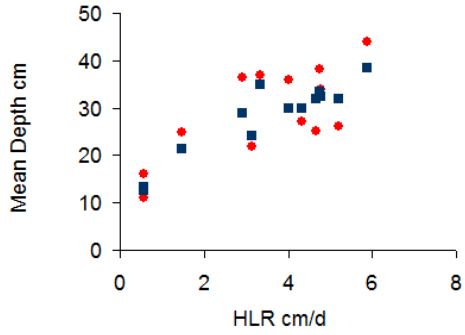
Outflow Volume, Load, & Conc vs. Mean Depth

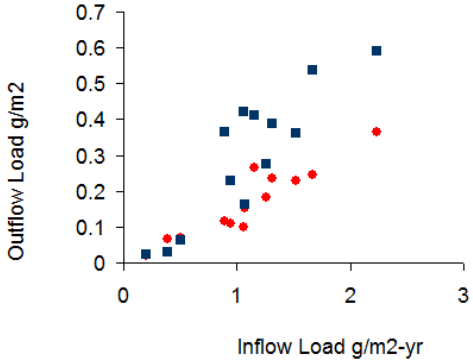


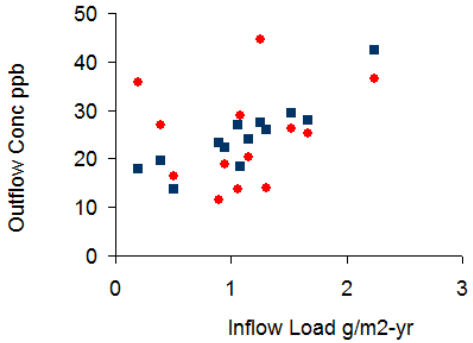




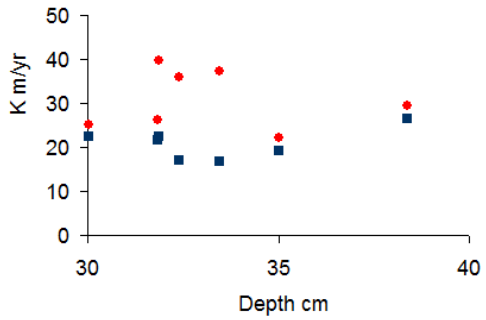
Depth vs. Hydraulic Load, Outflow Load & Conc vs. Inflow Load

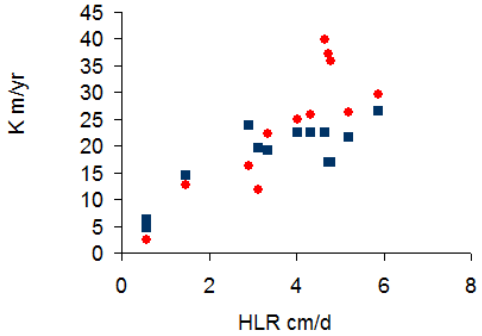


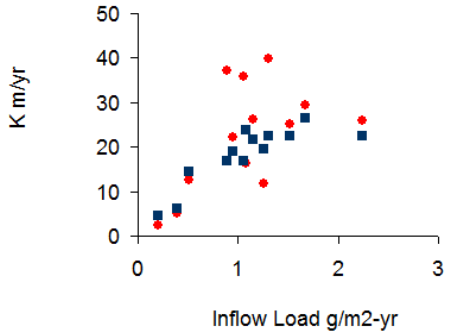




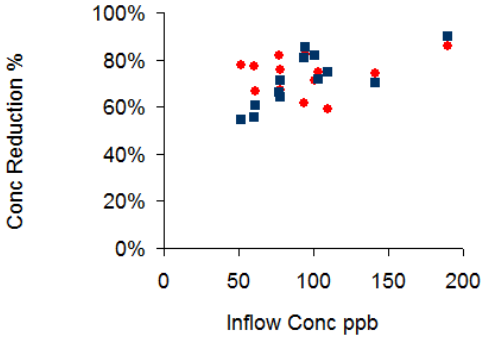
Steady-State Model K Values vs. Depth, HLR, & P Load

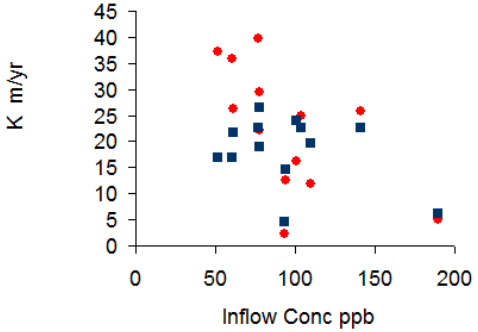


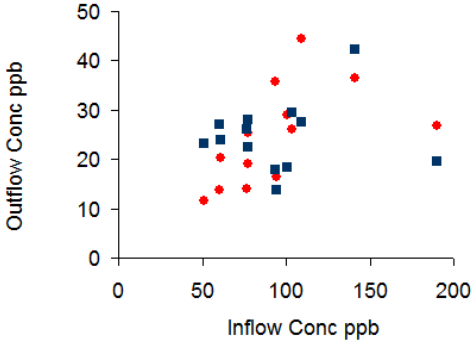




Outflow Conc Reduction, Conc, & K vs. Inflow Conc

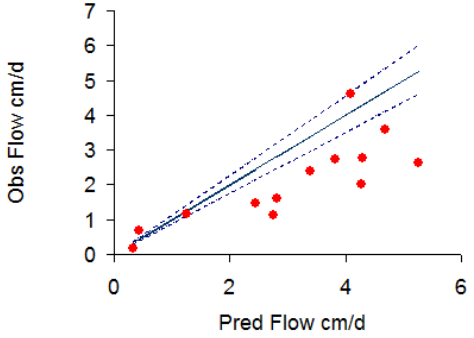


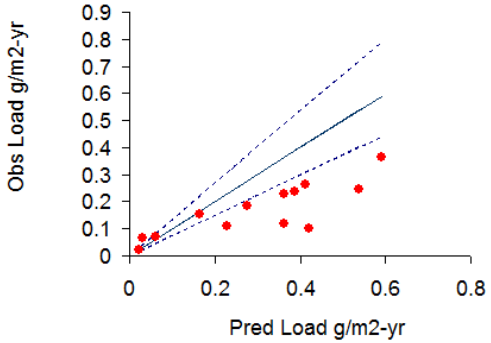


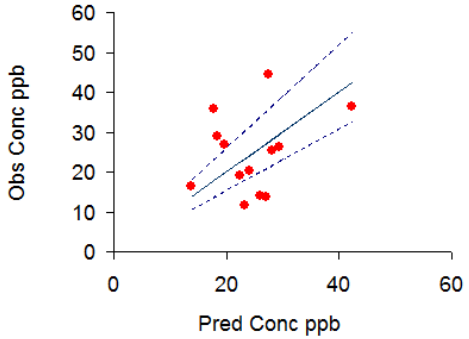


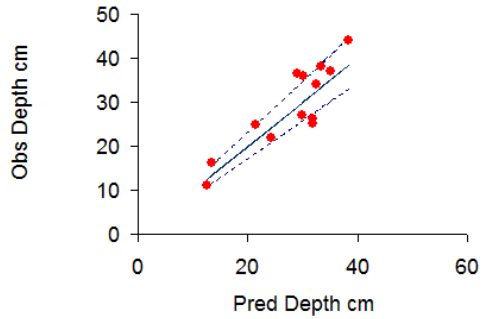
Observed vs. Predicted Values

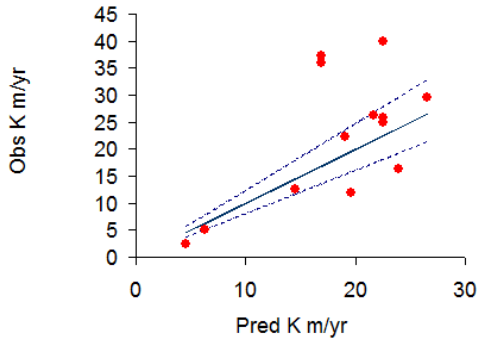
360-Day Averages

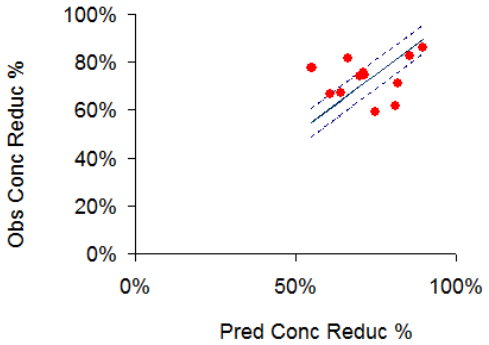






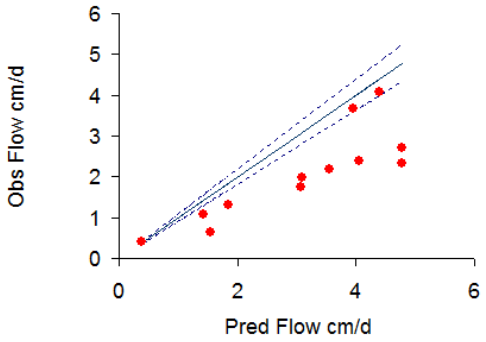


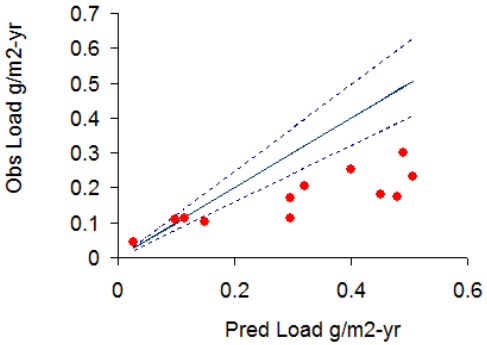


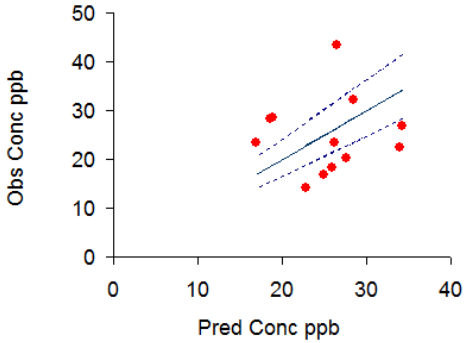


Observed vs. Predicted Values - 2 years

720-day Averages







Residual Statistics	Interval =	360	07/08/98	04/30/11	
Variable	Flow	Load	Conc	Depth	K
count	13	13	13	13	13
resid mean	-0.992	-0.130	0.0	1.1	4.1
resid std dev	0.929	0.118	10.5	4.5	9.3
resid rms	1.359	0.176	10.5	4.7	10.2
obs mean	2.072	0.167	22.0	29.1	22.3
obs std dev	1.222	0.098	10.0	9.5	12.0
pred mean	3.064	0.297	26.6	28.0	18.3
pred std dev	1.593	1.398	1.8	7.9	6.6
r squared	0.00	0.00	0.00	0.76	0.28
resid std %	30%	40%	39%	16%	51%
resid rms %	44%	59%	39%	17%	56%
bias mean %	-32%	-44%	0%	4%	22%
bias std error %	8%	11%	11%	4%	14%
bias t	-3.8	-4.0	0.0	0.9	1.6
bias signif	0.00	0.00	1.00	0.40	0.15
80% prediction intervals for prototype datasets (STA-2 & STA-34)					
% of predicted	14%	34%	30%	16%	24%

12/3/2012