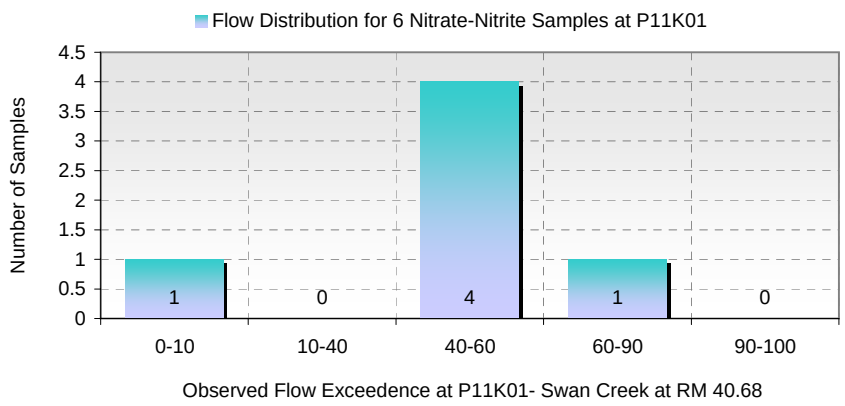
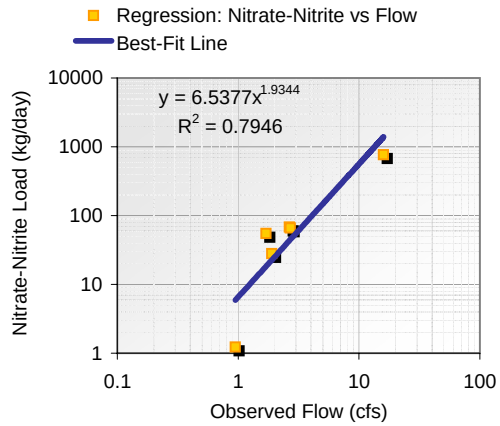
Appendix A: Load Duration Curves

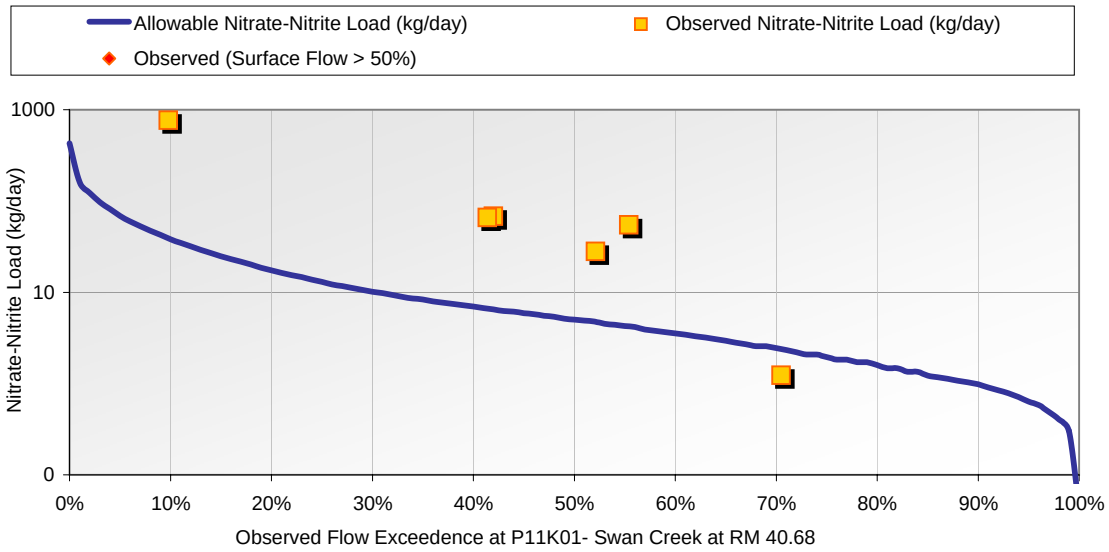
[1: Nitrate-Nitrite at P11K01 (mg/L)] -vs- [1: Flow at P11K01- Swan Creek at RM 40.68 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

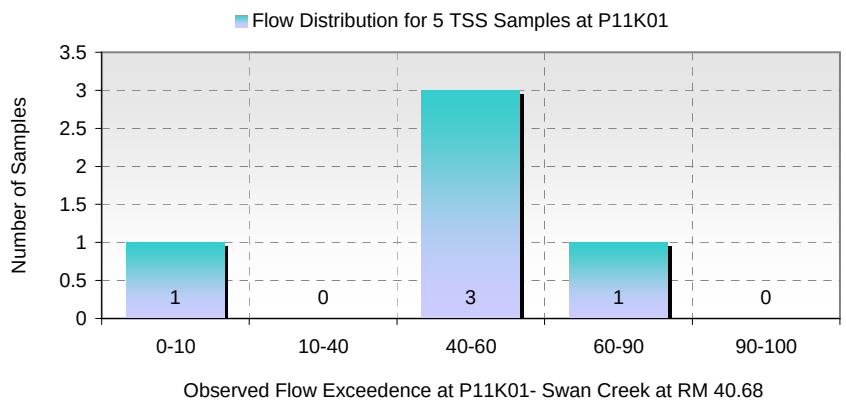


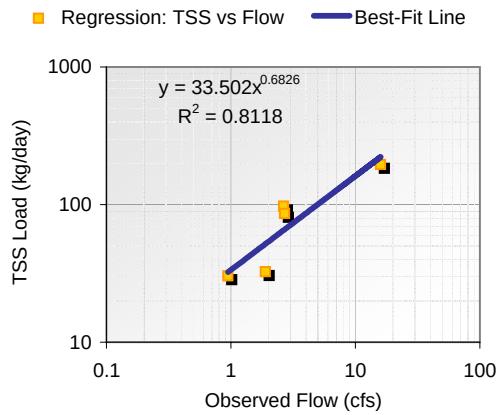
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	28.00	68.5	768.8	91.1%
10-40	0	5.30	13.0	No Data	No Data
40-60	4	2.05	5.0	60.5	91.7%
60-90	1	0.80	2.0	1.2	0.0%
90-100	0	0.26	0.6	No Data	No Data

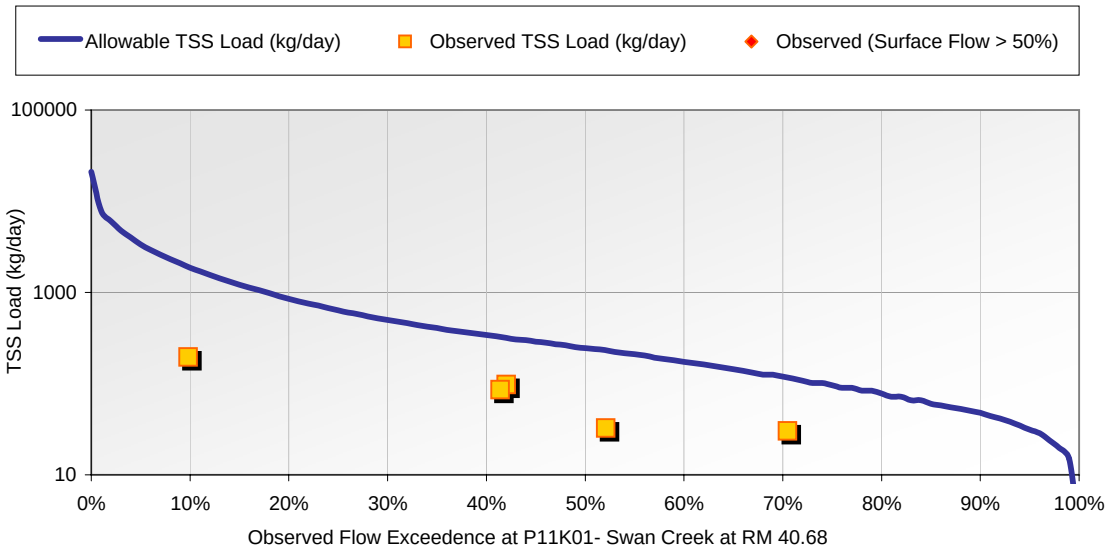
[2: TSS at P11K01 (mg/L)] -vs- [1: Flow at P11K01- Swan Creek at RM 40.68 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

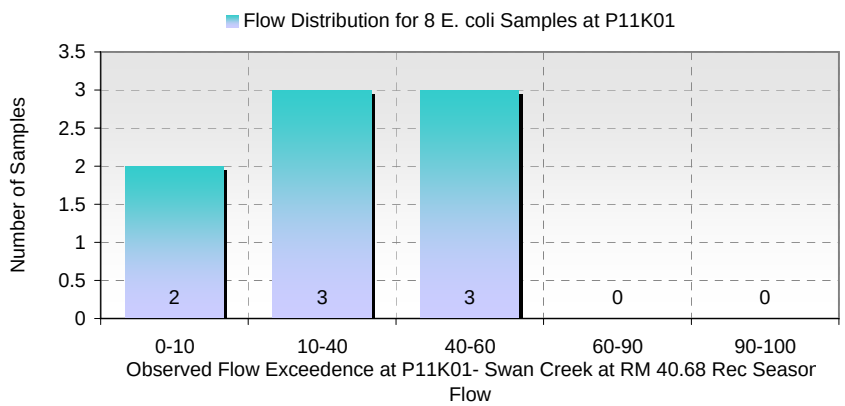


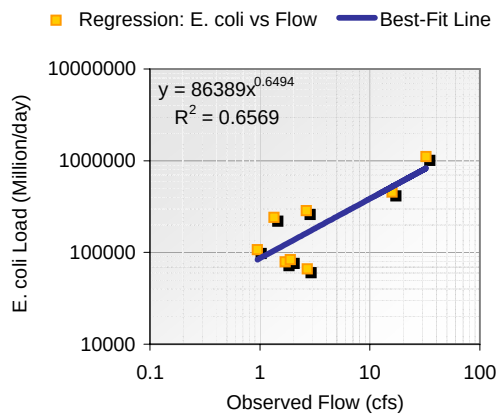
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	5-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	28.00	3,357	195	0.0%
10-40	0	5.30	635	No Data	No Data
40-60	3	2.05	246	86	0.0%
60-90	1	0.80	96	30	0.0%
90-100	0	0.26	31	No Data	No Data

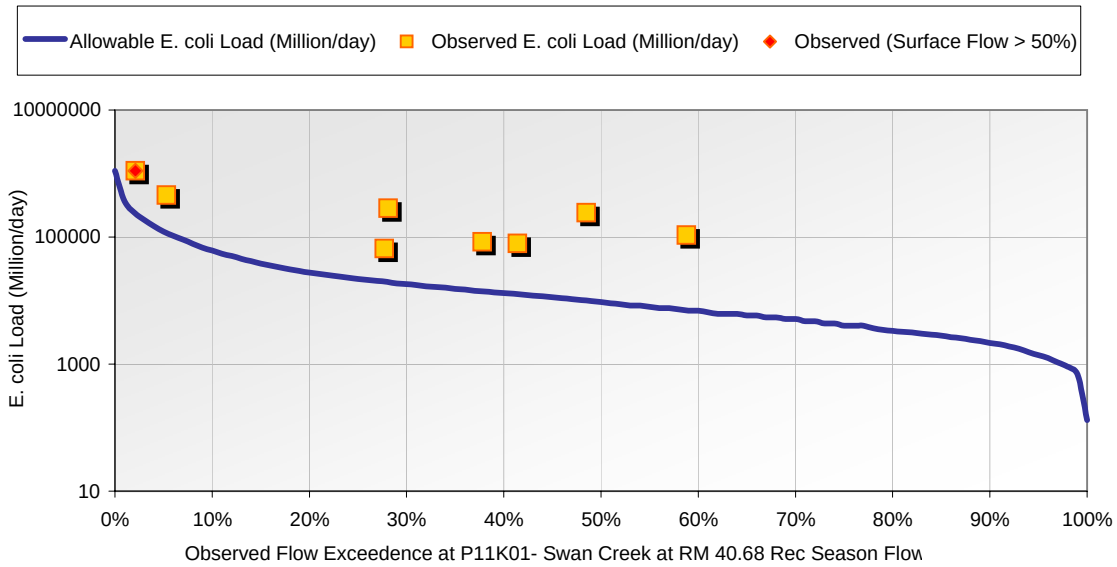
[3: E. coli at P11K01 (MPN/100mL)] -vs- [29: Flow at P11K01- Swan Creek at RM 40.68 Rec Season Flow (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

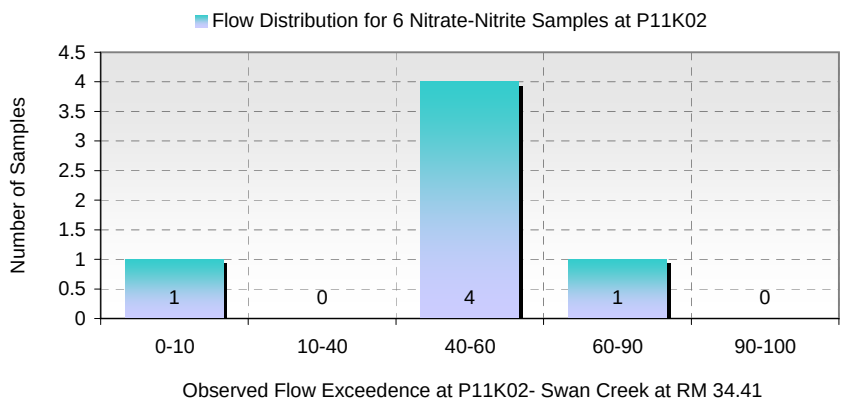


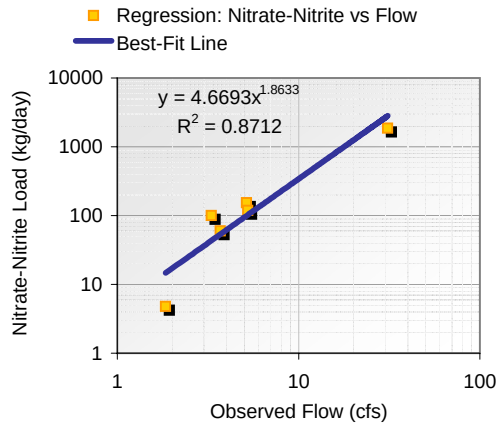
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	8-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Median Load (Million/day)	Estimated Reduction (%)
0-10	2	16.70	121,756	782,192	84.4%
10-40	3	3.00	21,872	83,674	73.9%
40-60	3	1.30	9,478	106,917	91.1%
60-90	0	0.55	4,010	No Data	No Data
90-100	0	0.19	1,385	No Data	No Data

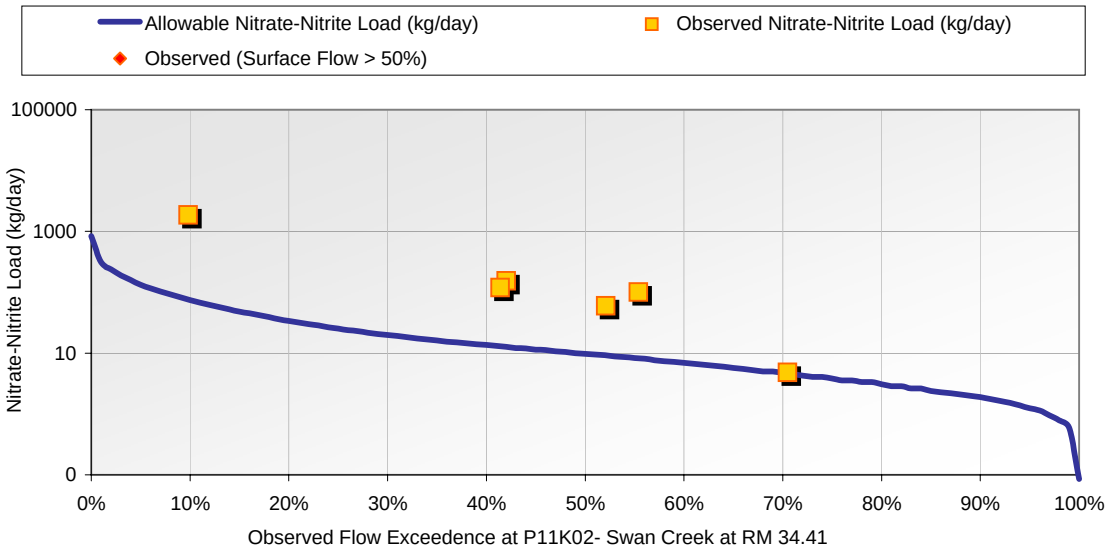
[4: Nitrate-Nitrite at P11K02 (mg/L)] -vs- [2: Flow at P11K02- Swan Creek at RM 34.41 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

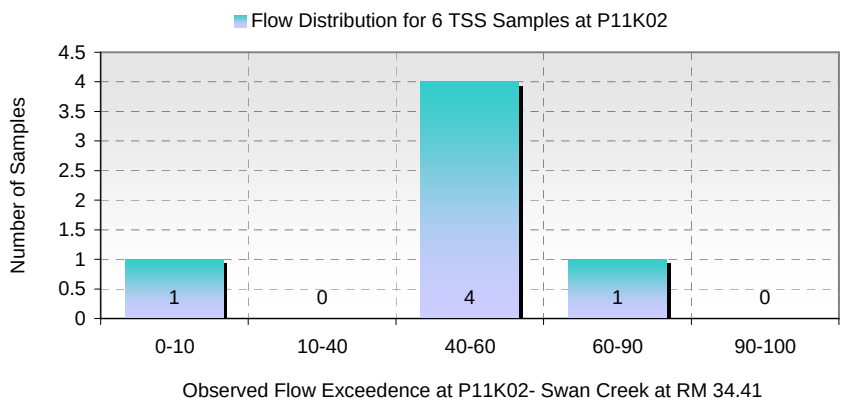


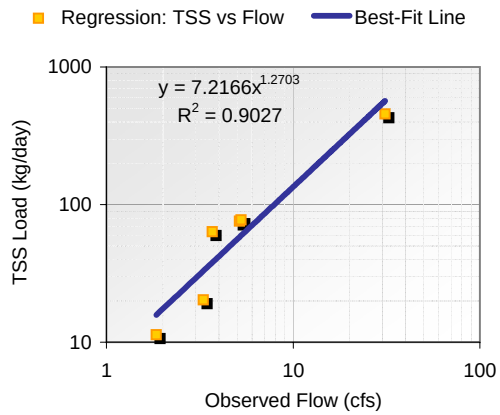
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	54.51	133.4	1861.1	92.8%
10-40	0	10.32	25.2	No Data	No Data
40-60	4	3.99	9.8	109.7	91.1%
60-90	1	1.56	3.8	4.8	20.6%
90-100	0	0.51	1.2	No Data	No Data

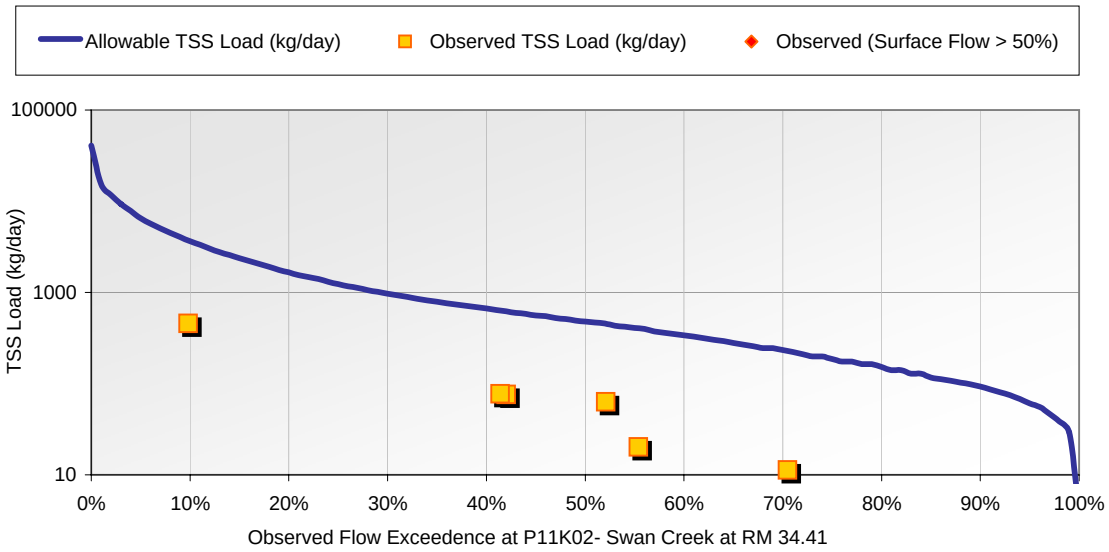
[5: TSS at P11K02 (mg/L)] -vs- [2: Flow at P11K02- Swan Creek at RM 34.41 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

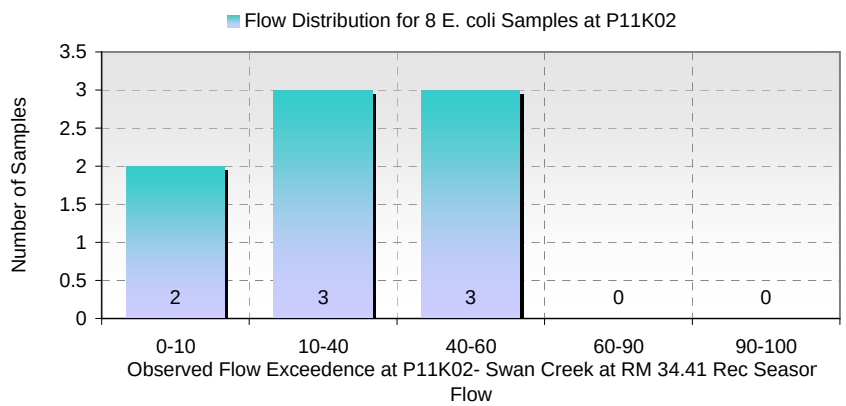


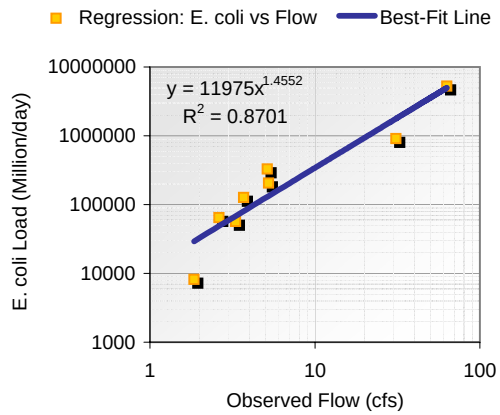
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	54.51	6,534	456	0.0%
10-40	0	10.32	1,237	No Data	No Data
40-60	4	3.99	478	70	0.0%
60-90	1	1.56	187	11	0.0%
90-100	0	0.51	61	No Data	No Data

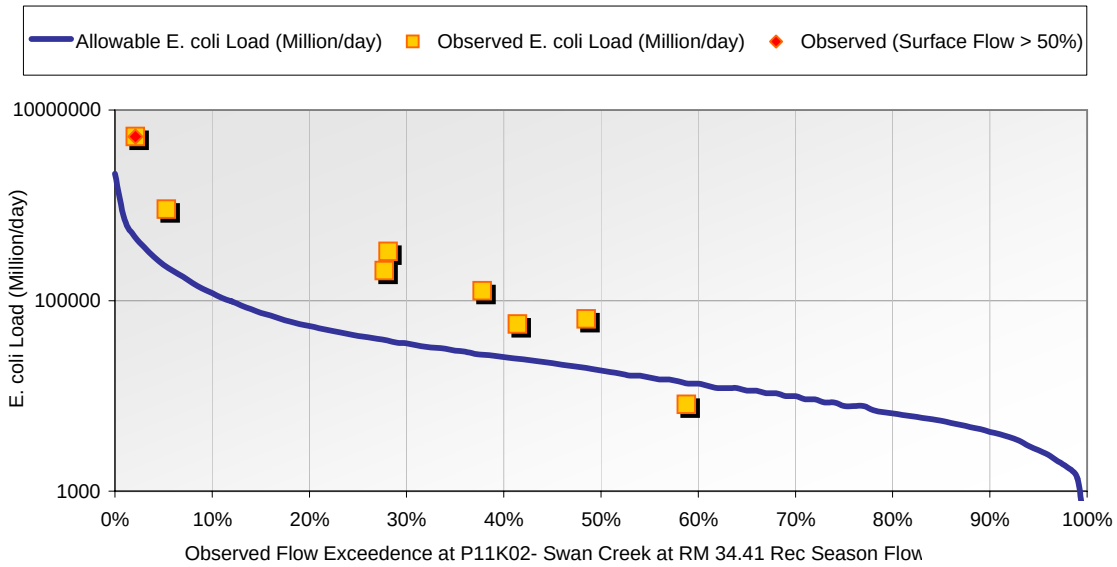
[6: E. coli at P11K02 (MPN/100mL)] -vs- [30: Flow at P11K02- Swan Creek at RM 34.41 Rec Season Flow (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

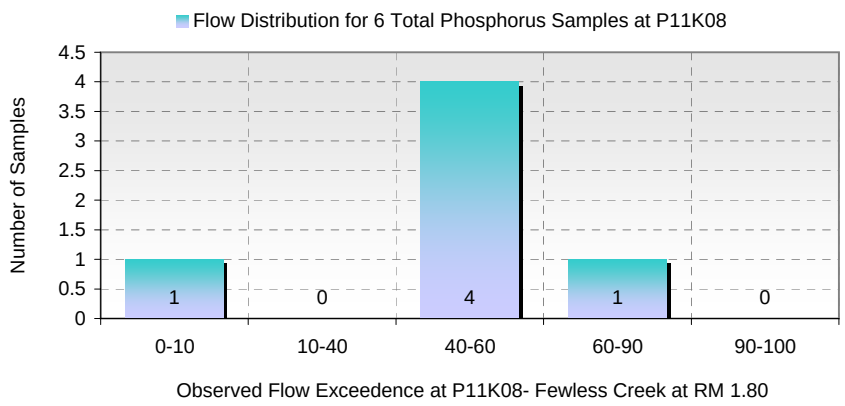


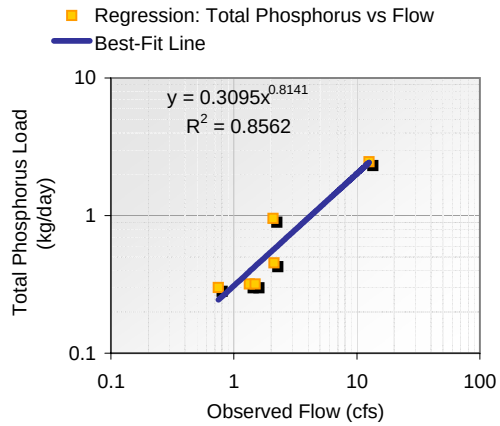
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	8-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Median Load (Million/day)	Estimated Reduction (%)
0-10	2	32.51	237,019	3,079,066	92.3%
10-40	3	5.84	42,578	205,749	79.3%
40-60	3	2.53	18,451	56,676	67.4%
60-90	0	1.07	7,806	No Data	No Data
90-100	0	0.37	2,697	No Data	No Data

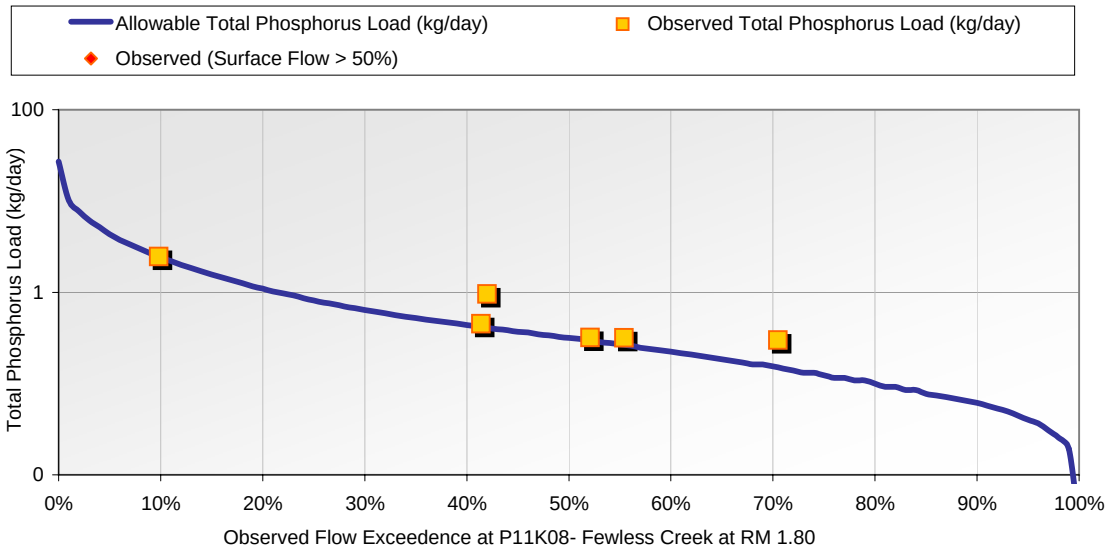
[15: Total Phosphorus at P11K08 (mg/L)] -vs- [5: Flow at P11K08- Fewless Creek at RM 1.80 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

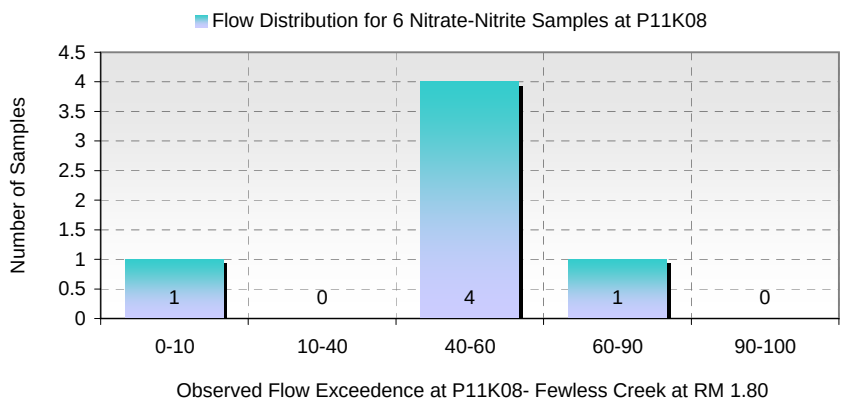


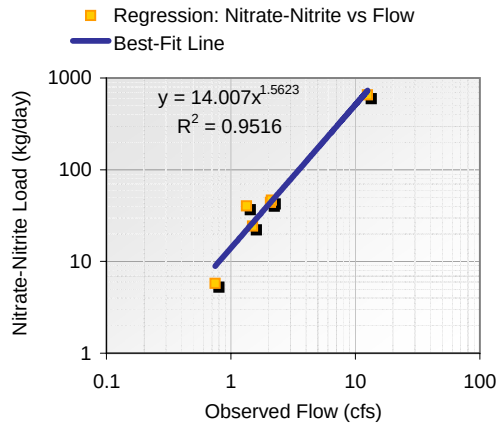
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	22.03	4.31	2.46	0.0%
10-40	0	4.17	0.82	No Data	No Data
40-60	4	1.61	0.32	0.39	18.0%
60-90	1	0.63	0.12	0.30	58.9%
90-100	0	0.20	0.04	No Data	No Data

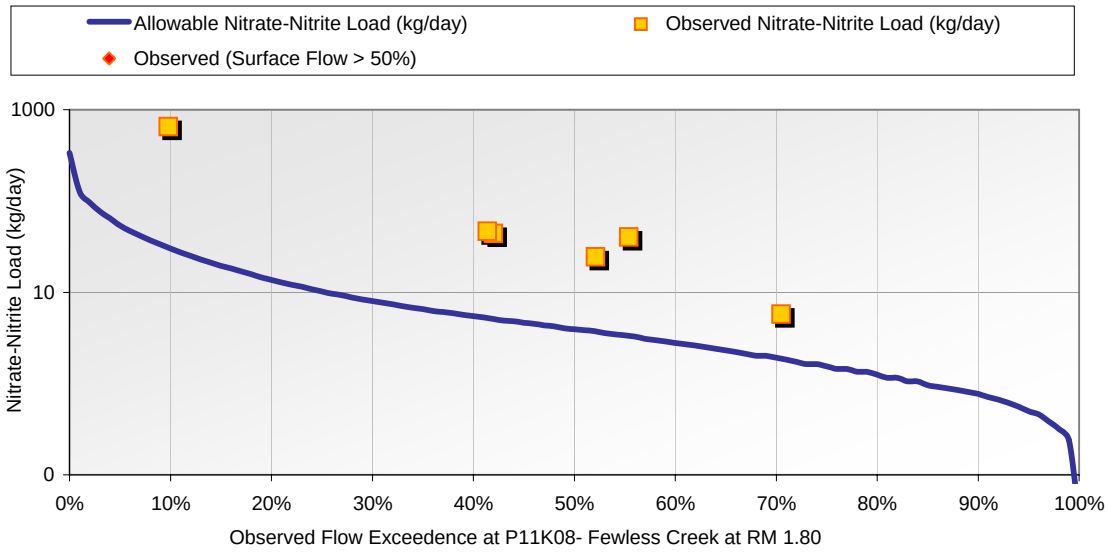
[14: Nitrate-Nitrite at P11K08 (mg/L)] -vs- [5: Flow at P11K08- Fewless Creek at RM 1.80 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

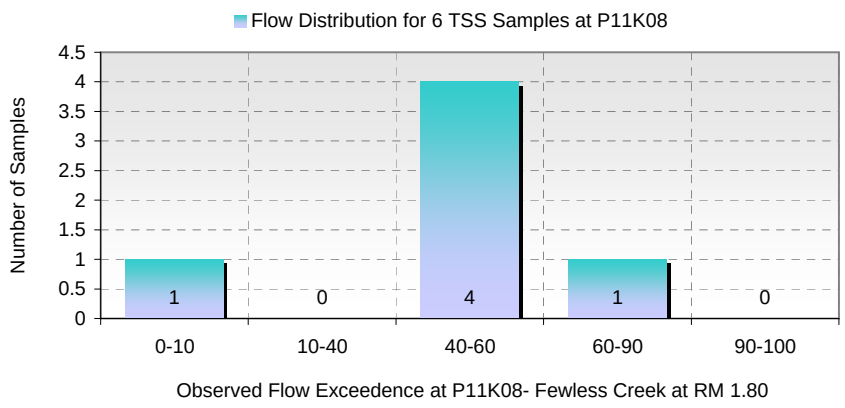


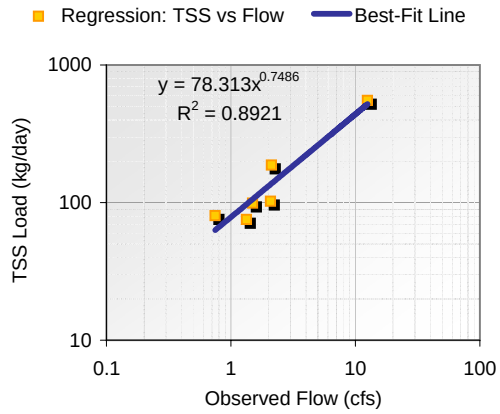
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	22.03	53.9	650.8	91.7%
10-40	0	4.17	10.2	No Data	No Data
40-60	4	1.61	3.9	42.1	90.6%
60-90	1	0.63	1.5	5.8	73.3%
90-100	0	0.20	0.5	No Data	No Data

[16: TSS at P11K08 (mg/L)] -vs- [5: Flow at P11K08- Fewless Creek at RM 1.80 (cfs)]

1. Data Assessment and Trend Confirmation





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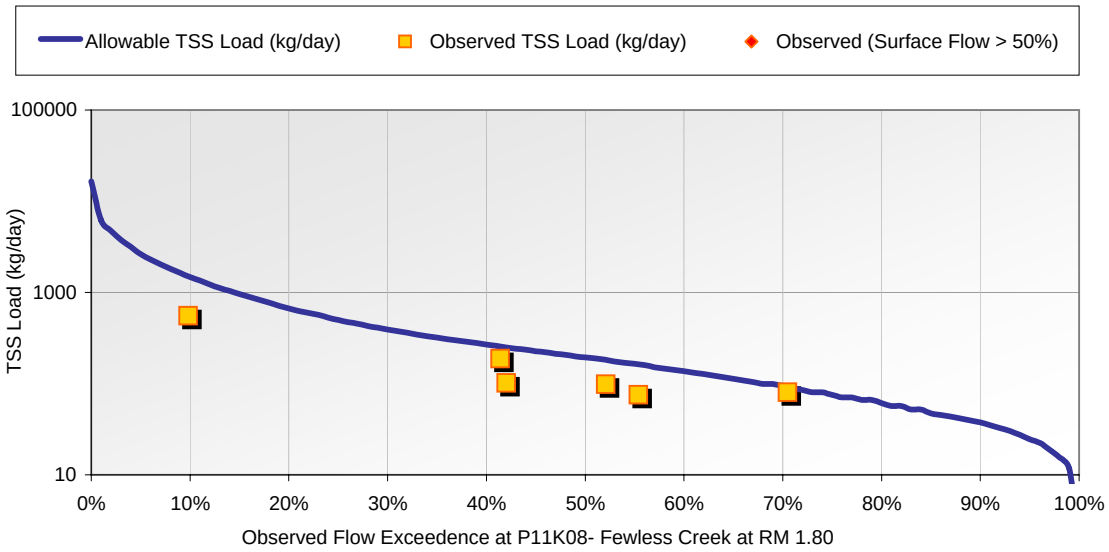
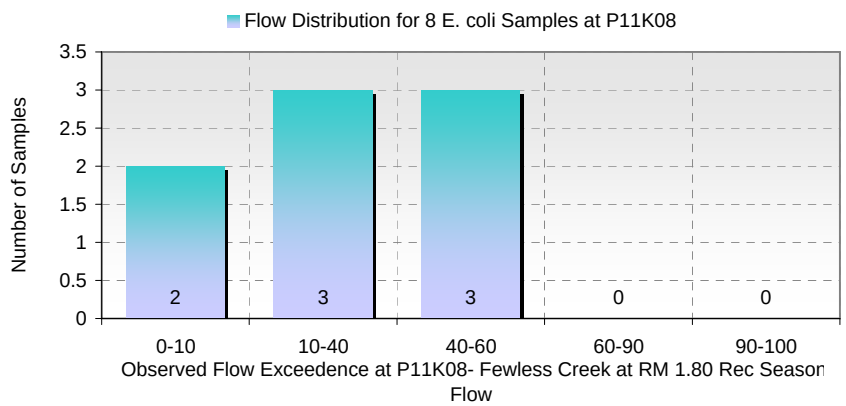


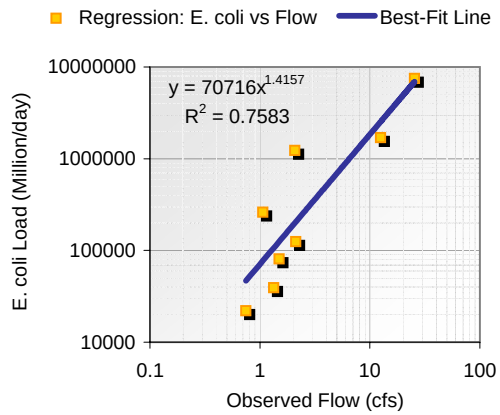
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	22.03	2,641	553	0.0%
10-40	0	4.17	500	No Data	No Data
40-60	4	1.61	193	100	0.0%
60-90	1	0.63	75	80	6.2%
90-100	0	0.20	25	No Data	No Data

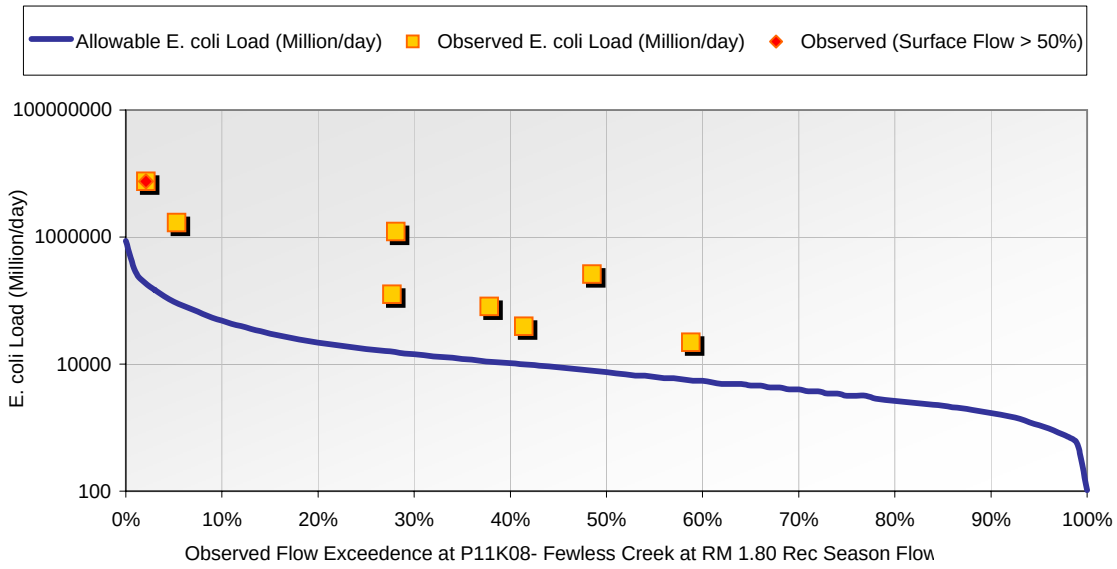
[17: E. coli at P11K08 (MPN/100mL)] -vs- [33: Flow at P11K08- Fewless Creek at RM 1.80 Rec Season Flow (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

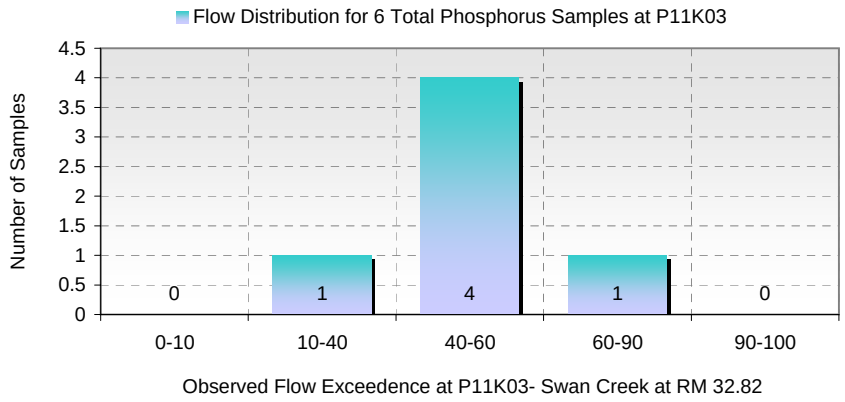


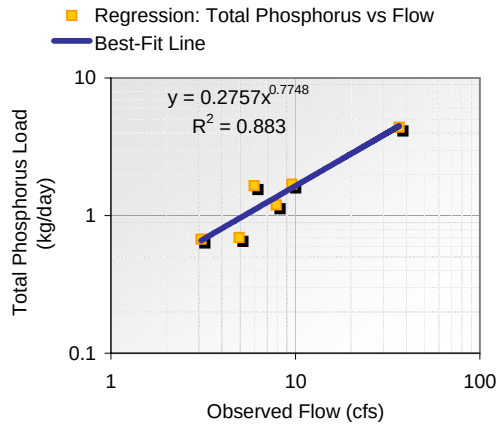
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	8-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Median Load (Million/day)	Estimated Reduction (%)
0-10	2	13.14	95,782	4,585,697	97.9%
10-40	3	2.36	17,206	124,717	86.2%
40-60	3	1.02	7,456	39,263	81.0%
60-90	0	0.43	3,155	No Data	No Data
90-100	0	0.15	1,090	No Data	No Data

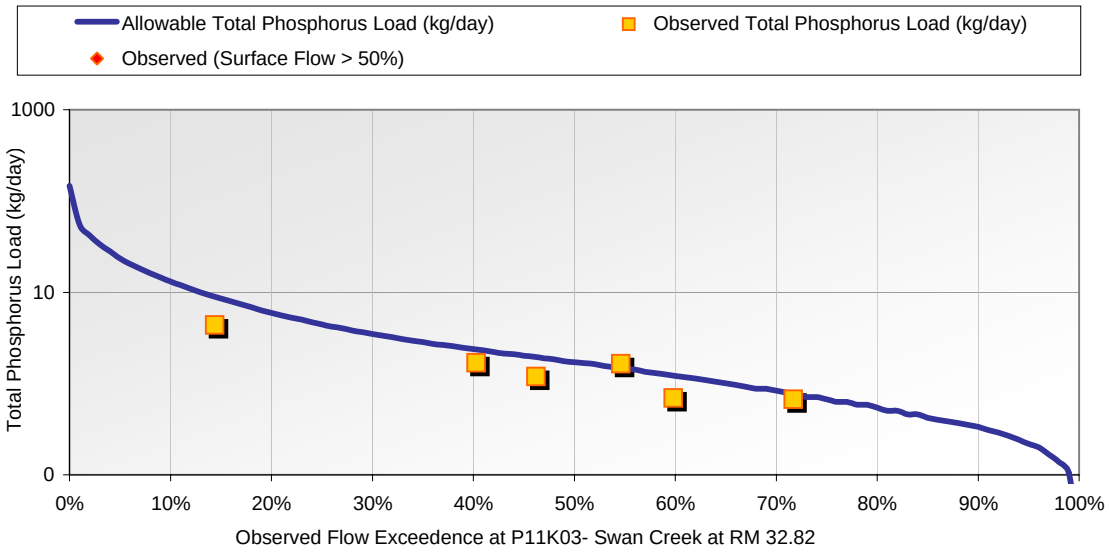
[8: Total Phosphorus at P11K03 (mg/L)] -vs- [3: Flow at P11K03- Swan Creek at RM 32.82 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

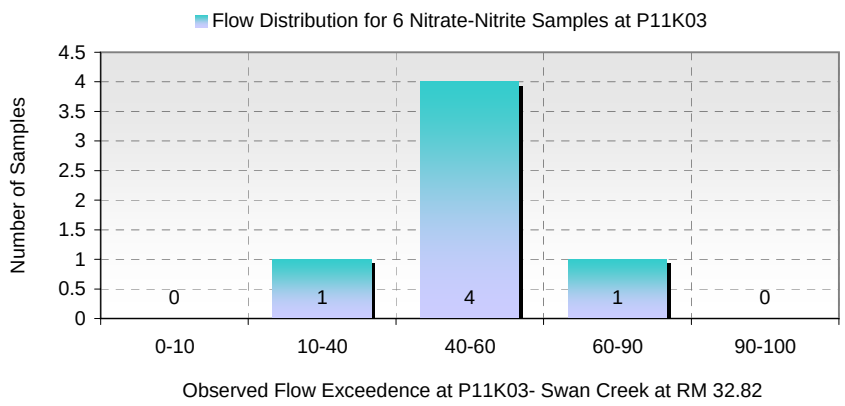


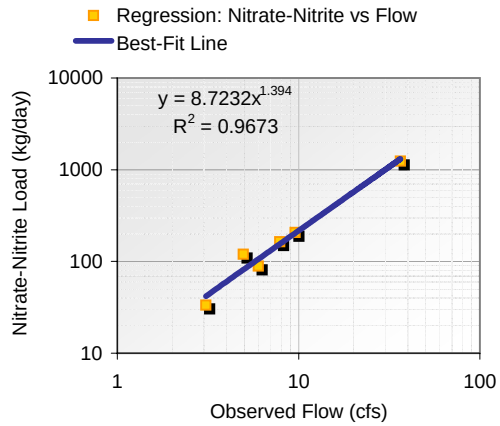
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	0	95.95	23.47	No Data	No Data
10-40	1	18.16	4.44	4.37	0.0%
40-60	4	7.02	1.72	1.42	0.0%
60-90	1	2.74	0.67	0.67	0.1%
90-100	0	0.89	0.22	No Data	No Data

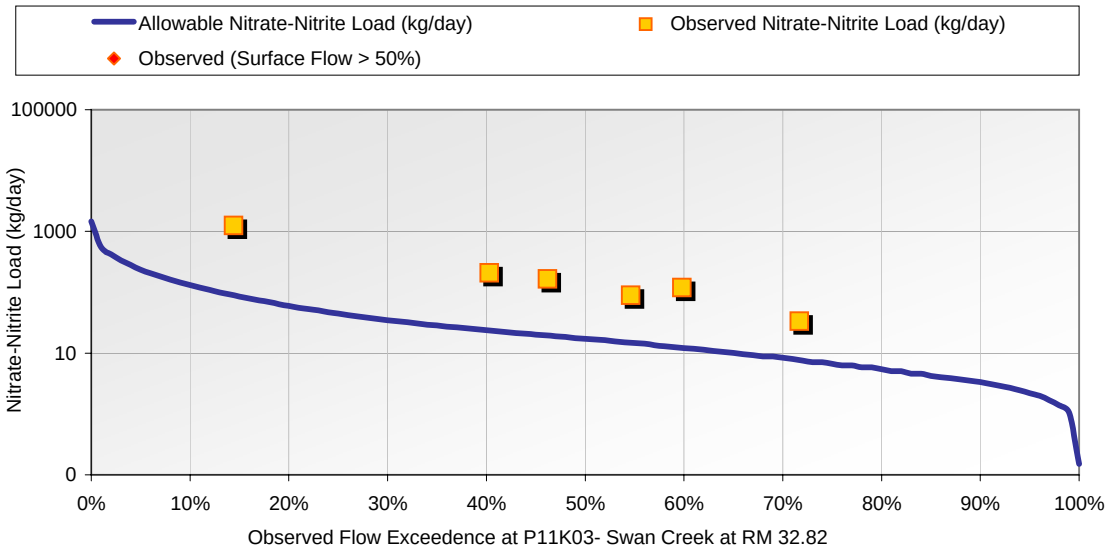
[7: Nitrate-Nitrite at P11K03 (mg/L)] -vs- [3: Flow at P11K03- Swan Creek at RM 32.82 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

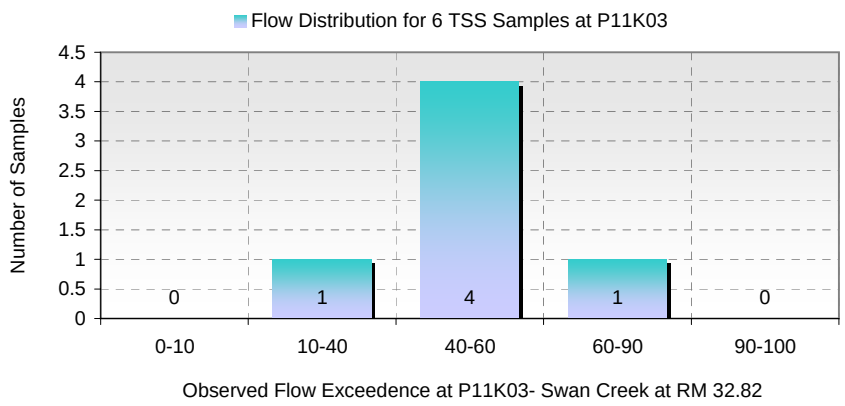


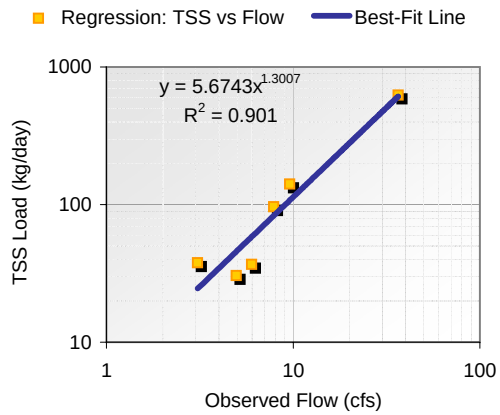
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	0	95.95	234.7	No Data	No Data
10-40	1	18.16	44.4	1241.1	96.4%
40-60	4	7.02	17.2	141.8	87.9%
60-90	1	2.74	6.7	33.4	79.9%
90-100	0	0.89	2.2	No Data	No Data

[9: TSS at P11K03 (mg/L)] -vs- [3: Flow at P11K03- Swan Creek at RM 32.82 (cfs)]

1. Data Assessment and Trend Confirmation





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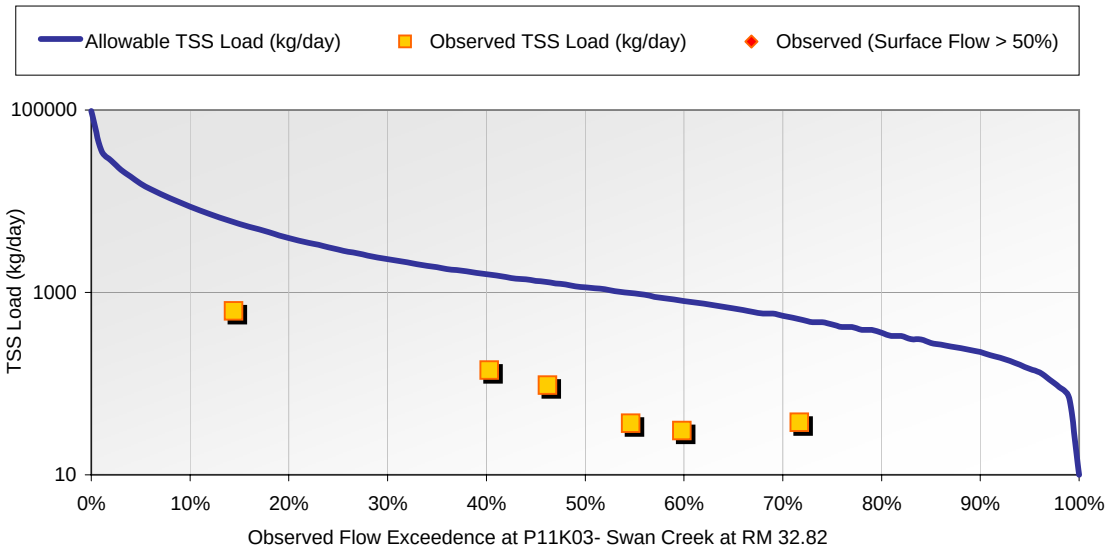
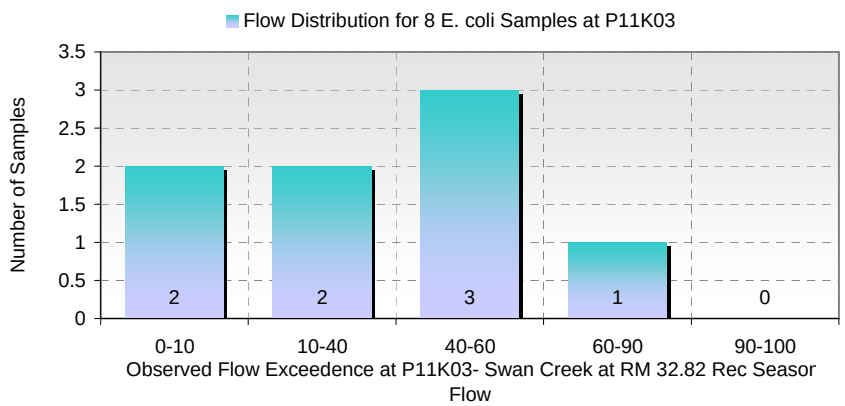


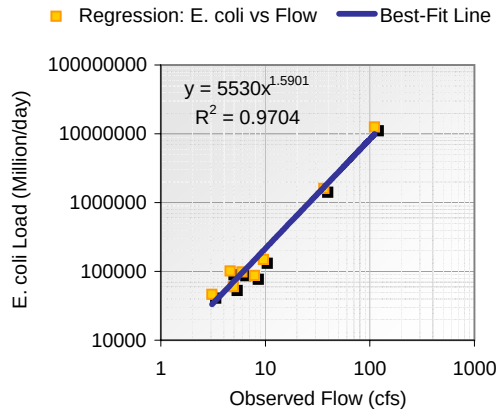
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	0	95.95	15,587	No Data	No Data
10-40	1	18.16	2,950	625	0.0%
40-60	4	7.02	1,141	67	0.0%
60-90	1	2.74	445	38	0.0%
90-100	0	0.89	145	No Data	No Data

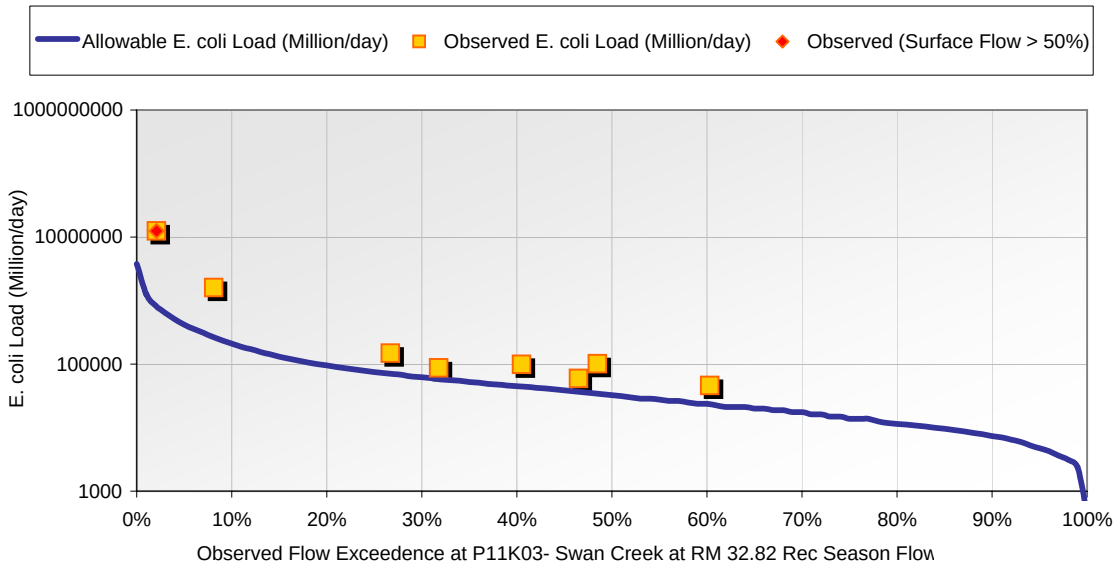
[10: E. coli at P11K03 (MPN/100mL)] -vs- [31: Flow at P11K03- Swan Creek at RM 32.82 Rec Season Flow (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

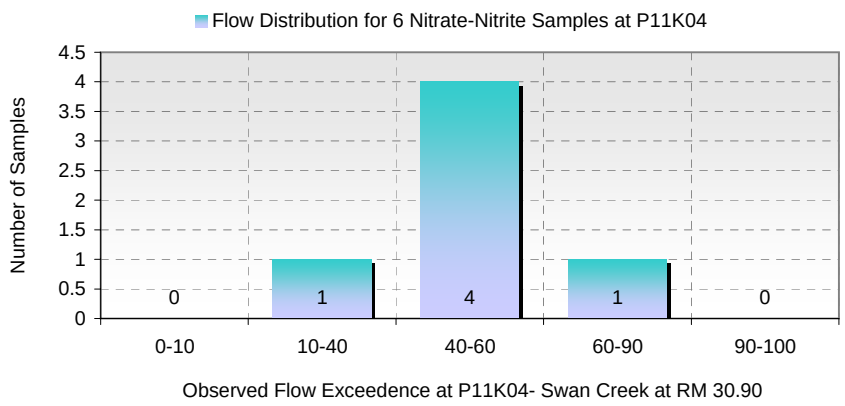


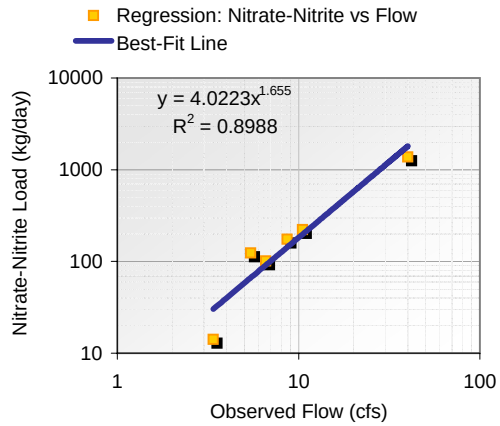
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	8-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Median Load (Million/day)	Estimated Reduction (%)
0-10	2	57.23	417,219	7,051,031	94.1%
10-40	2	10.28	74,950	117,329	36.1%
40-60	3	4.45	32,478	98,299	67.0%
60-90	1	1.88	13,741	46,027	70.1%
90-100	0	0.65	4,747	No Data	No Data

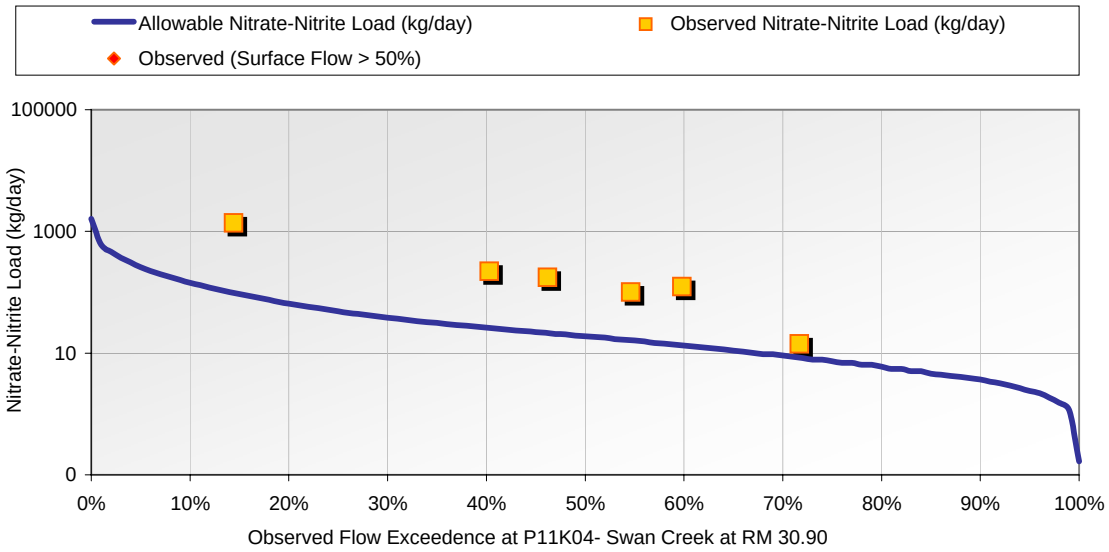
[11: Nitrate-Nitrite at P11K04 (mg/L)] -vs- [4: Flow at P11K04- Swan Creek at RM 30.90 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

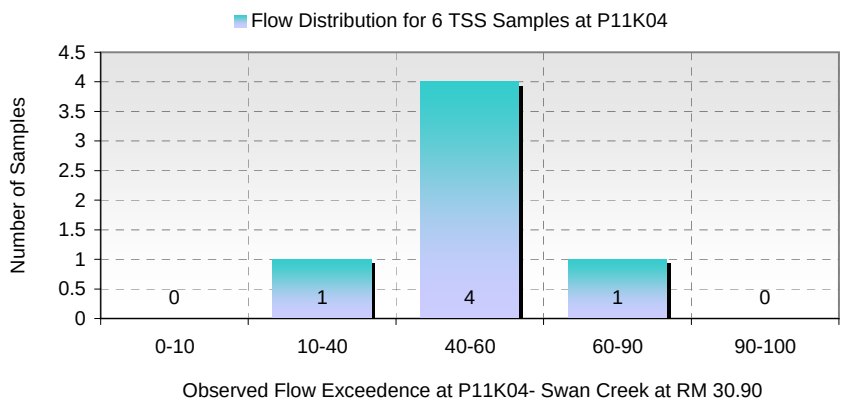


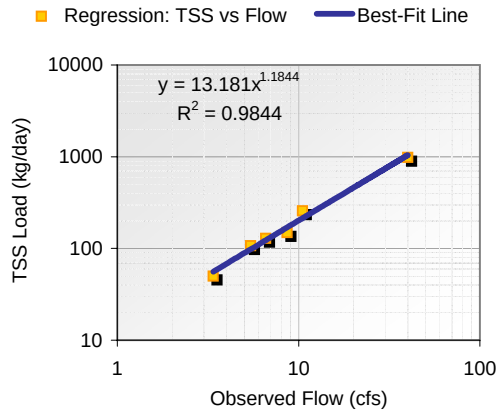
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	0	105.28	257.6	No Data	No Data
10-40	1	19.93	48.8	1371.6	96.4%
40-60	4	7.71	18.9	149.0	87.3%
60-90	1	3.01	7.4	14.2	48.0%
90-100	0	0.98	2.4	No Data	No Data

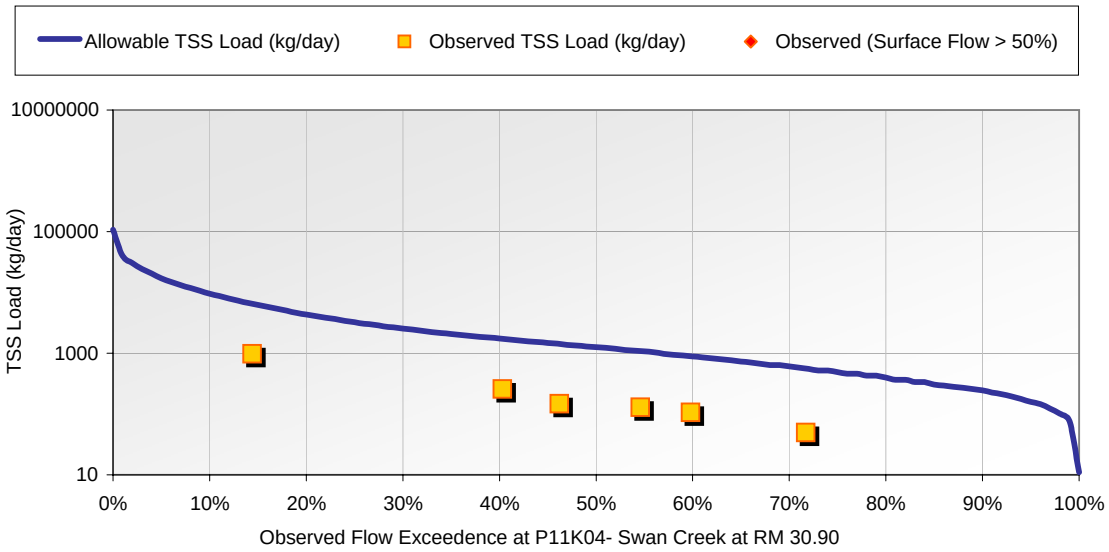
[12: TSS at P11K04 (mg/L)] -vs- [4: Flow at P11K04- Swan Creek at RM 30.90 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

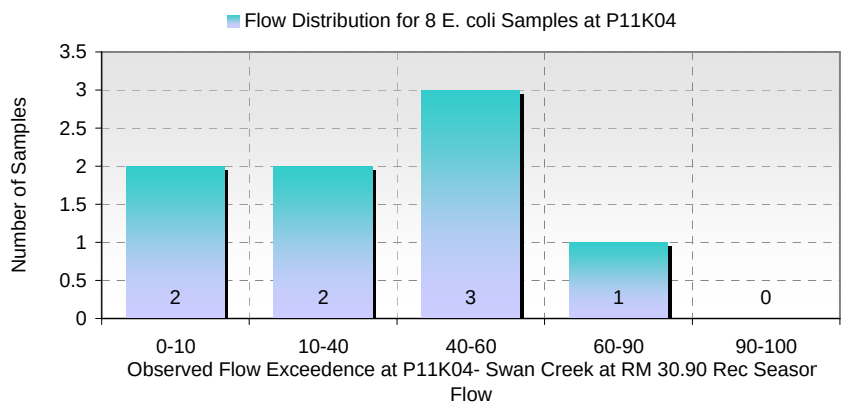


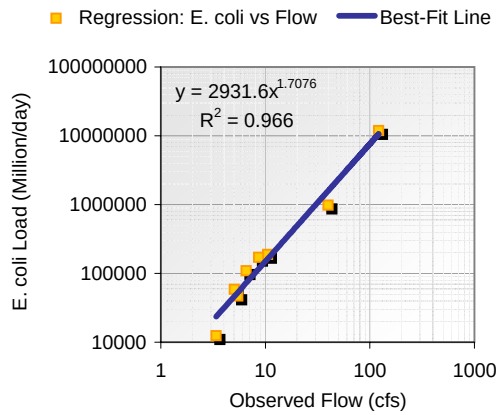
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	0	105.28	17,103	No Data	No Data
10-40	1	19.93	3,237	980	0.0%
40-60	4	7.71	1,252	138	0.0%
60-90	1	3.01	489	50	0.0%
90-100	0	0.98	159	No Data	No Data

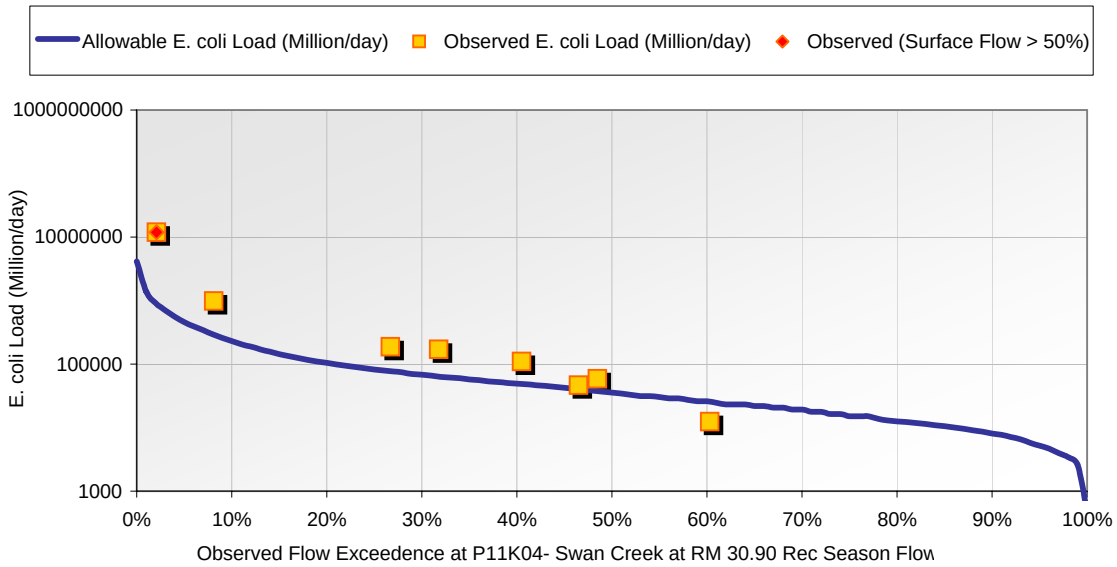
[13: E. coli at P11K04 (MPN/100mL)] -vs- [32: Flow at P11K04- Swan Creek at RM 30.90 Rec Season Flow (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

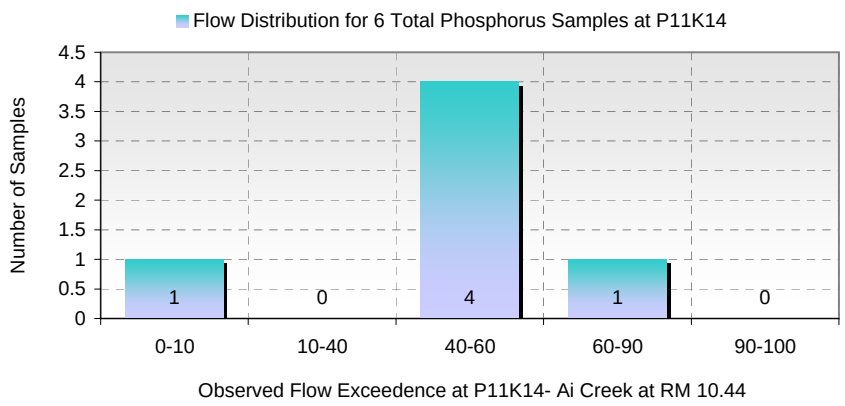


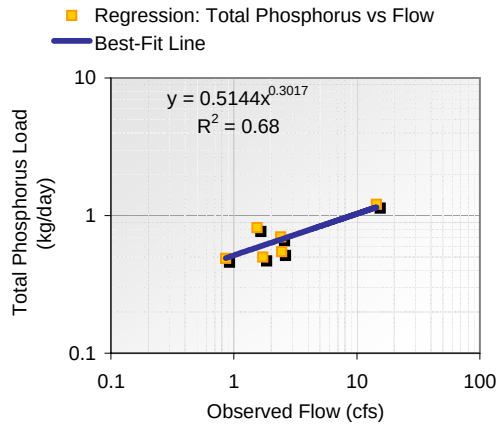
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	8-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Median Load (Million/day)	Estimated Reduction (%)
0-10	2	62.79	457,804	6,450,890	92.9%
10-40	2	11.28	82,240	179,706	54.2%
40-60	3	4.89	35,638	58,369	38.9%
60-90	1	2.07	15,078	12,419	0.0%
90-100	0	0.71	5,209	No Data	No Data

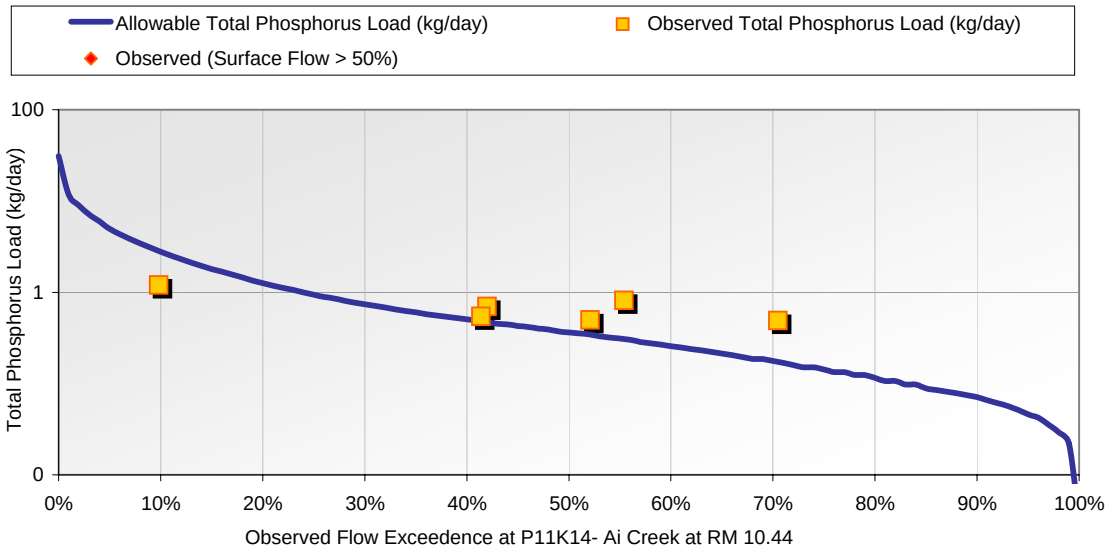
[19: Total Phosphorus at P11K14 (mg/L)] -vs- [6: Flow at P11K14- Ai Creek at RM 10.44 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

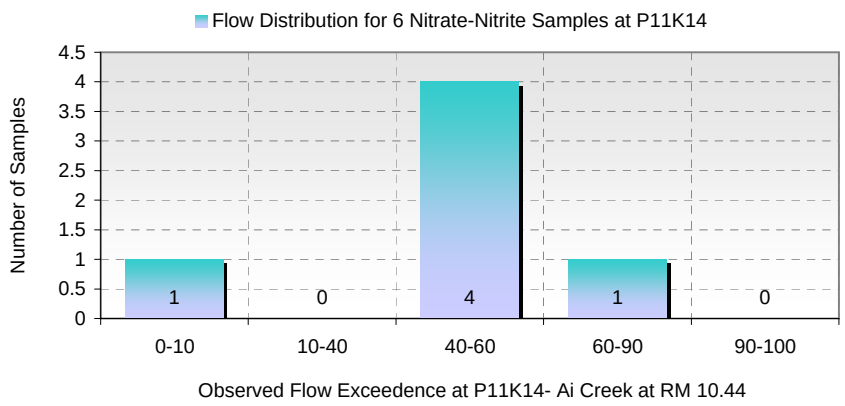


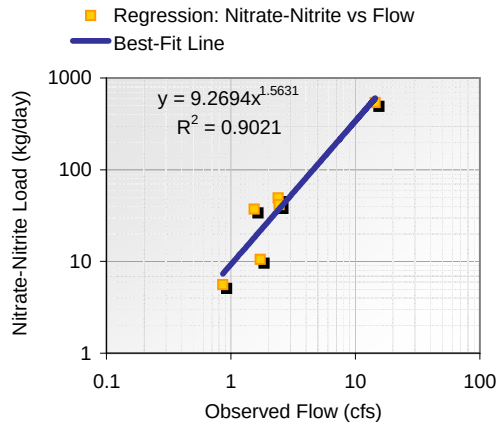
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	25.39	4.97	1.20	0.0%
10-40	0	4.81	0.94	No Data	No Data
40-60	4	1.86	0.36	0.62	41.5%
60-90	1	0.73	0.14	0.49	71.0%
90-100	0	0.24	0.05	No Data	No Data

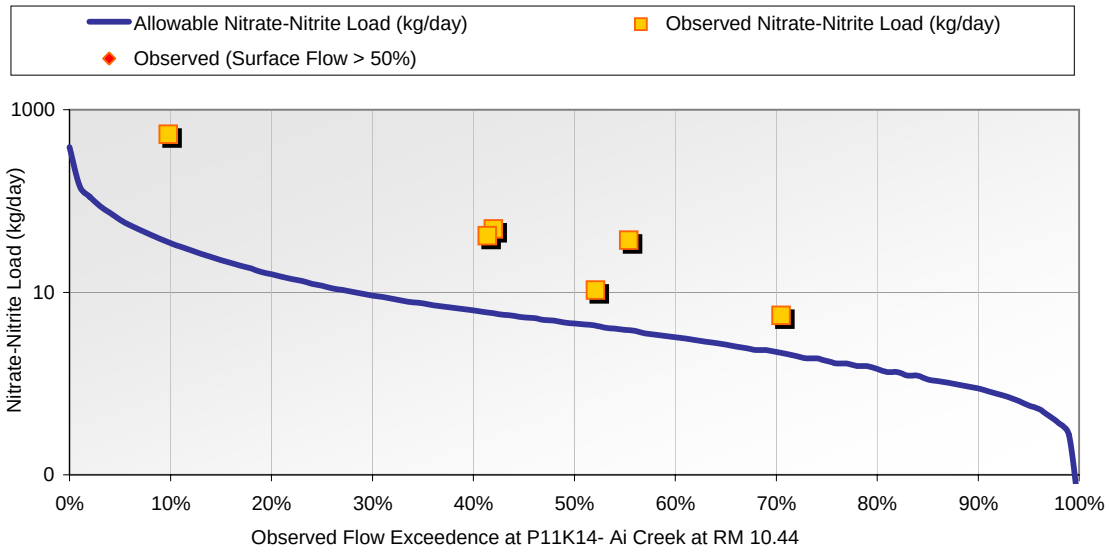
[18: Nitrate-Nitrite at P11K14 (mg/L)] -vs- [6: Flow at P11K14- Ai Creek at RM 10.44 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

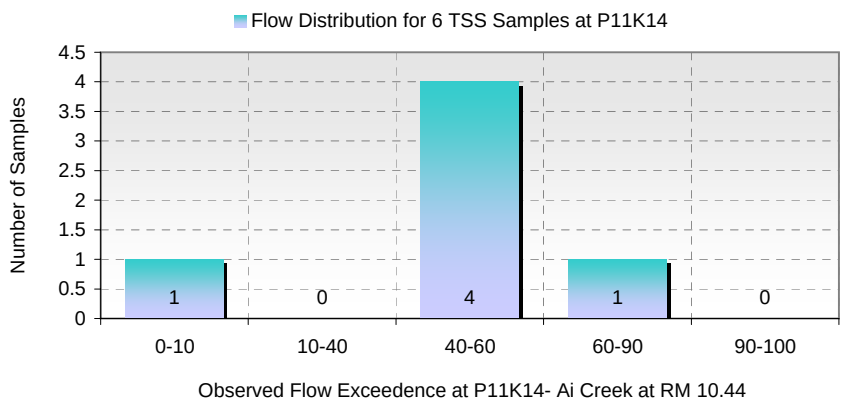


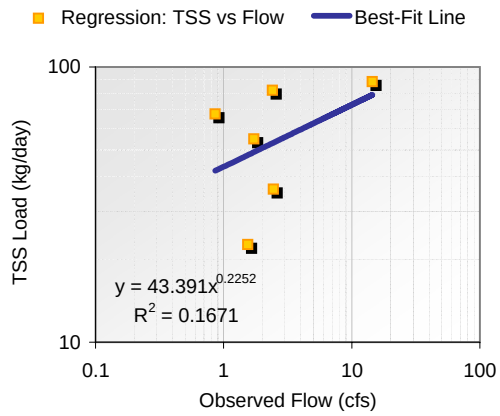
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	25.39	62.1	537.8	88.5%
10-40	0	4.81	11.8	No Data	No Data
40-60	4	1.86	4.5	39.3	88.4%
60-90	1	0.73	1.8	5.6	68.2%
90-100	0	0.24	0.6	No Data	No Data

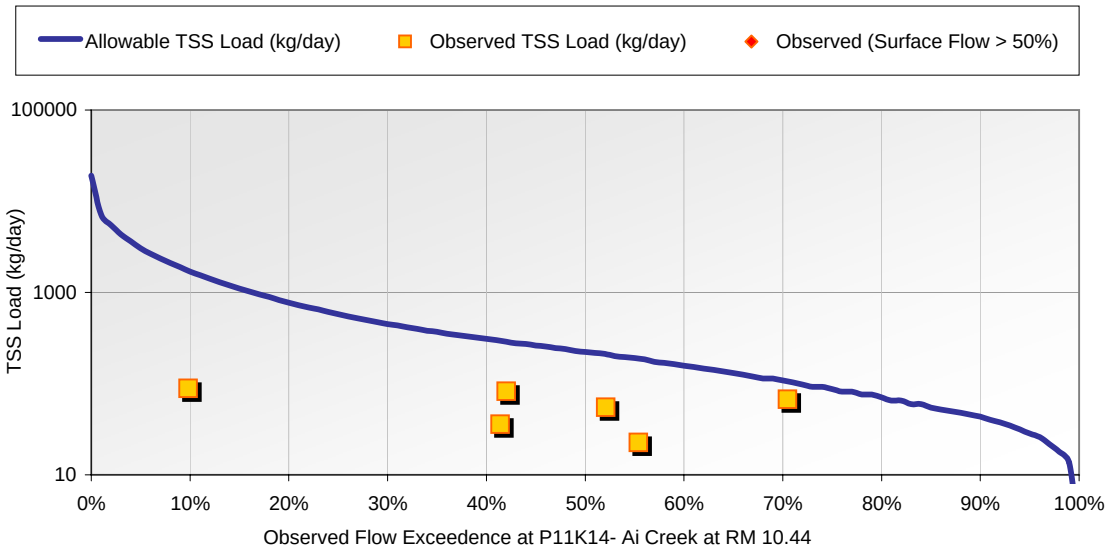
[20: TSS at P11K14 (mg/L)] -vs- [6: Flow at P11K14- Ai Creek at RM 10.44 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

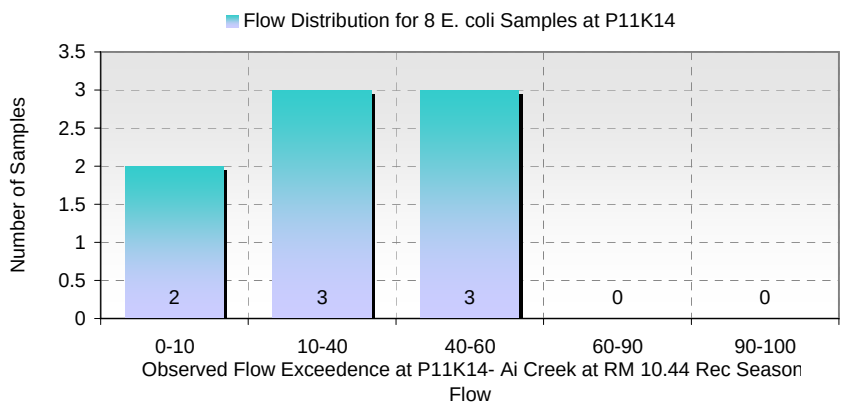


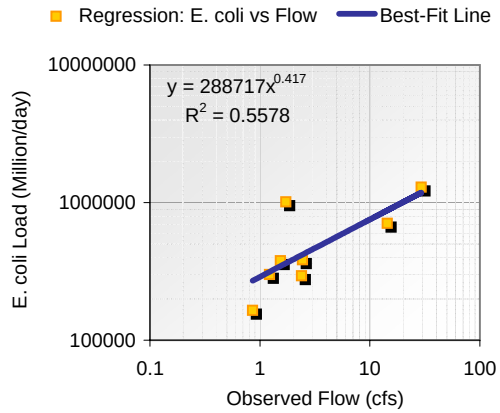
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	25.39	3,043	88	0.0%
10-40	0	4.81	576	No Data	No Data
40-60	4	1.86	223	45	0.0%
60-90	1	0.73	87	67	0.0%
90-100	0	0.24	28	No Data	No Data

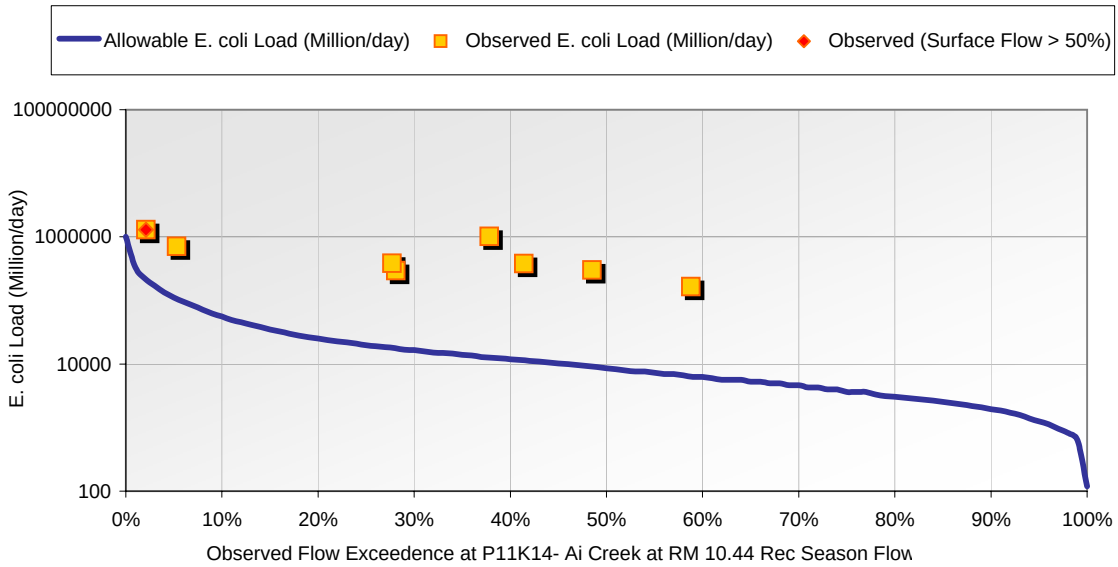
[21: E. coli at P11K14 (MPN/100mL)] -vs- [34: Flow at P11K14- Ai Creek at RM 10.44 Rec Season Flow (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

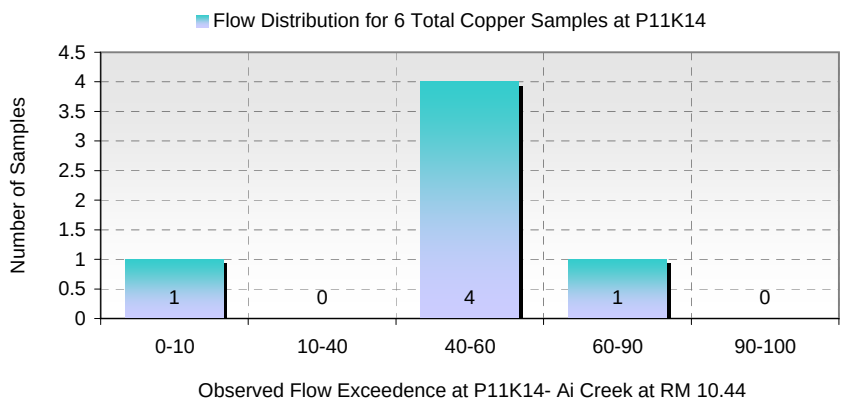


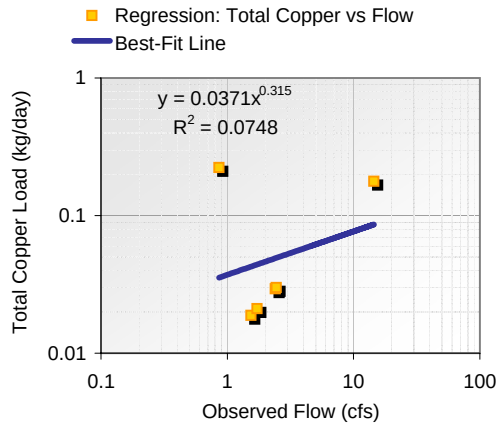
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	8-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Median Load (Million/day)	Estimated Reduction (%)
0-10	2	15.14	110,392	1,000,644	89.0%
10-40	3	2.72	19,831	383,312	94.8%
40-60	3	1.18	8,593	299,465	97.1%
60-90	0	0.50	3,636	No Data	No Data
90-100	0	0.17	1,256	No Data	No Data

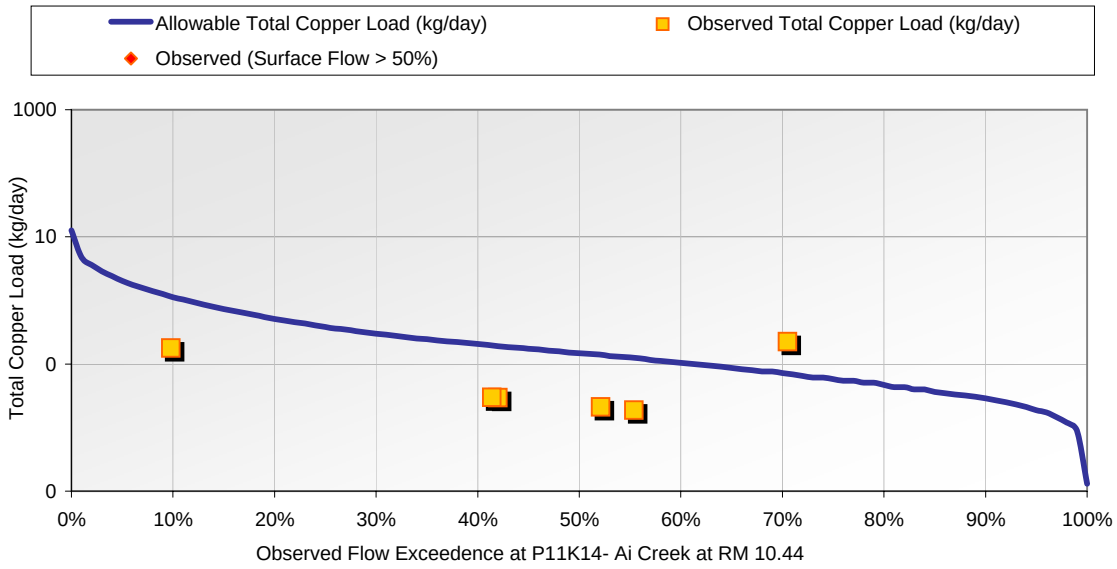
[22: Total Copper at P11K14 (µg/L)] -vs- [6: Flow at P11K14- Ai Creek at RM 10.44 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

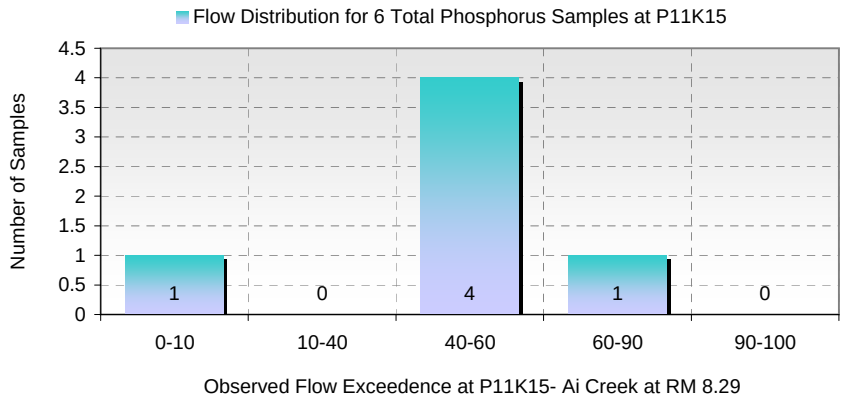


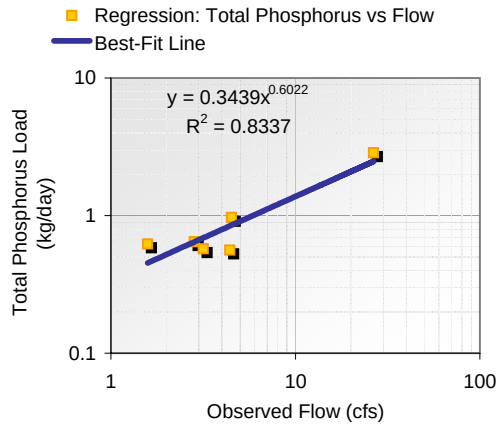
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	25.39	2.02	0.18	0.0%
10-40	0	4.81	0.38	No Data	No Data
40-60	4	1.86	0.15	0.03	0.0%
60-90	1	0.73	0.06	0.22	74.1%
90-100	0	0.24	0.02	No Data	No Data

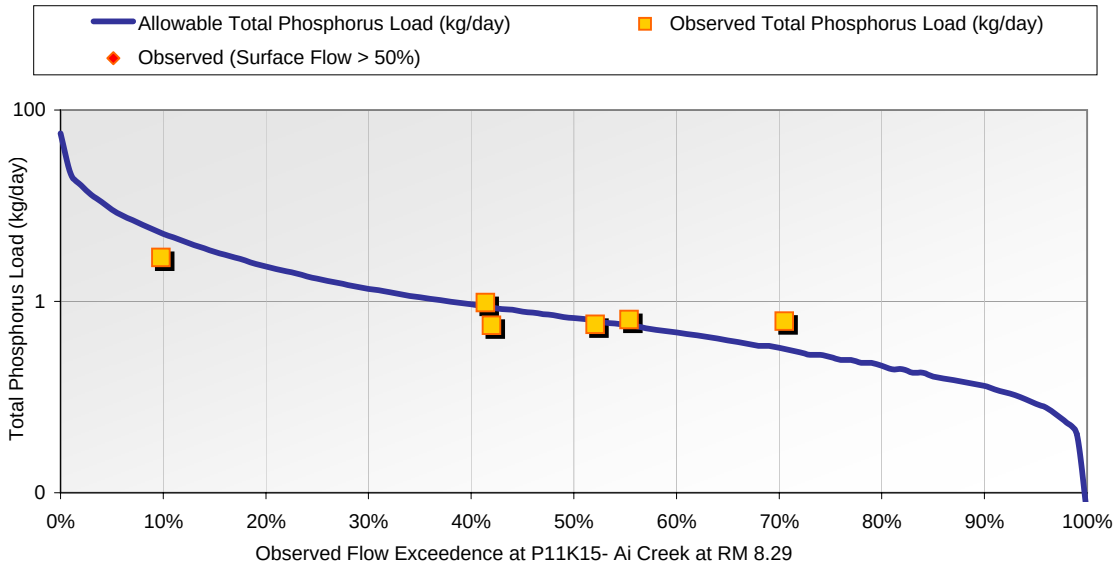
[24: Total Phosphorus at P11K15 (mg/L)] -vs- [7: Flow at P11K15- Ai Creek at RM 8.29 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

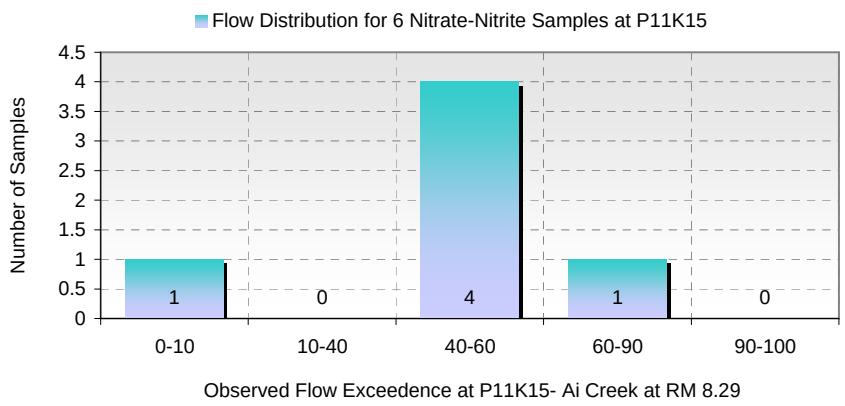


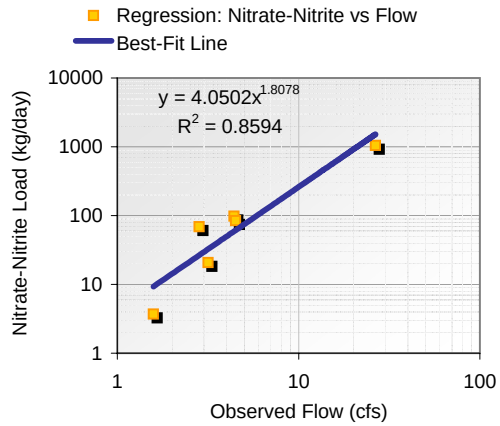
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	46.67	9.13	2.86	0.0%
10-40	0	8.83	1.73	No Data	No Data
40-60	4	3.42	0.67	0.61	0.0%
60-90	1	1.33	0.26	0.62	57.9%
90-100	0	0.43	0.08	No Data	No Data

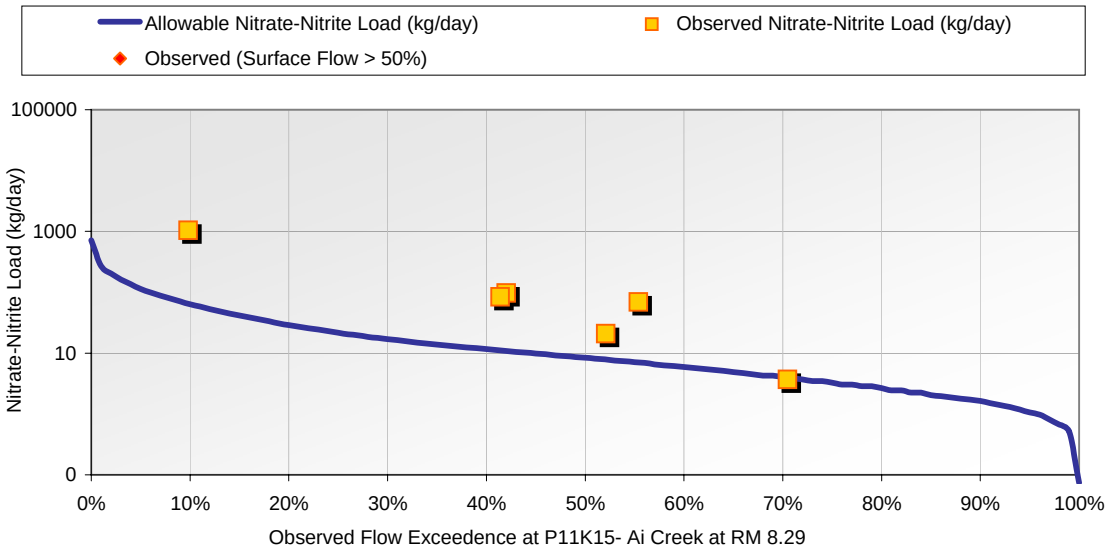
[23: Nitrate-Nitrite at P11K15 (mg/L)] -vs- [7: Flow at P11K15- Ai Creek at RM 8.29 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

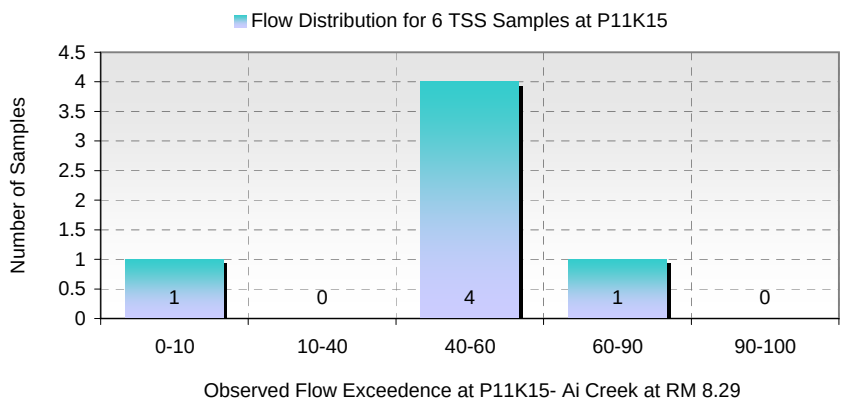


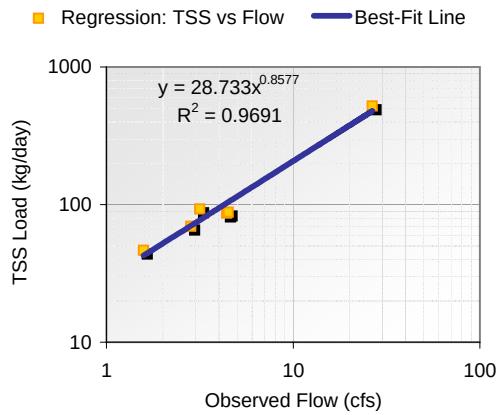
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	46.67	114.2	1040.6	89.0%
10-40	0	8.83	21.6	No Data	No Data
40-60	4	3.42	8.4	76.3	89.0%
60-90	1	1.33	3.3	3.7	11.4%
90-100	0	0.43	1.1	No Data	No Data

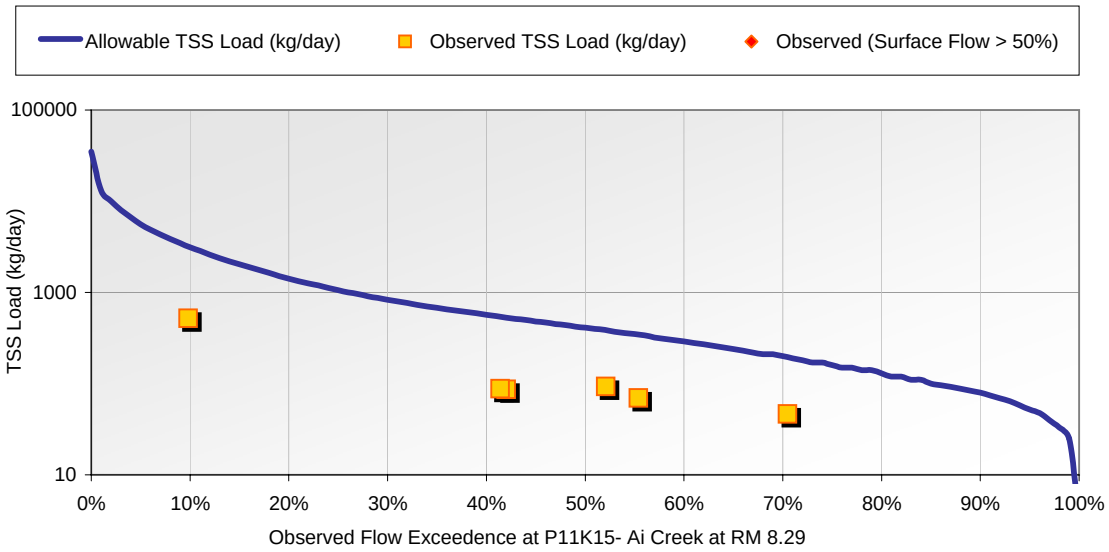
[25: TSS at P11K15 (mg/L)] -vs- [7: Flow at P11K15- Ai Creek at RM 8.29 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

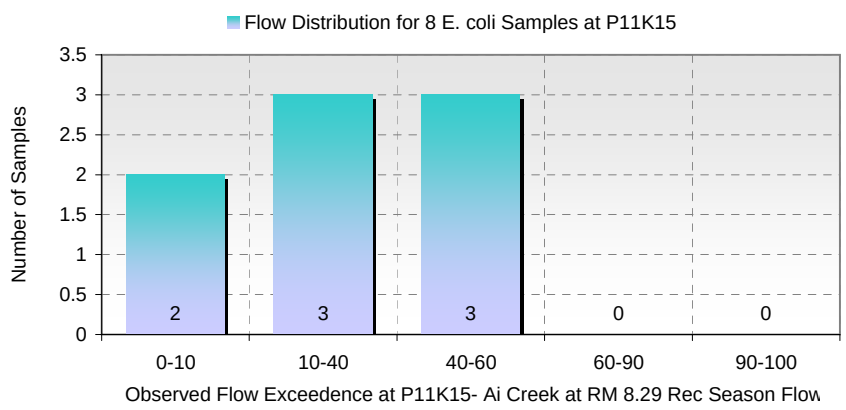


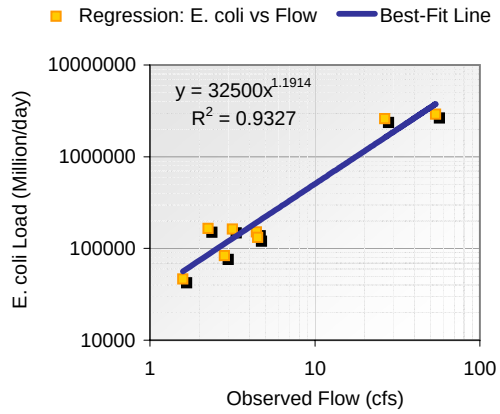
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	46.67	5,595	520	0.0%
10-40	0	8.83	1,059	No Data	No Data
40-60	4	3.42	410	87	0.0%
60-90	1	1.33	160	46	0.0%
90-100	0	0.43	52	No Data	No Data

[26: E. coli at P11K15 (MPN/100mL)] -vs- [35: Flow at P11K15- Ai Creek at RM 8.29 Rec Season Flow (cfs)]

1. Data Assessment and Trend Confirmation





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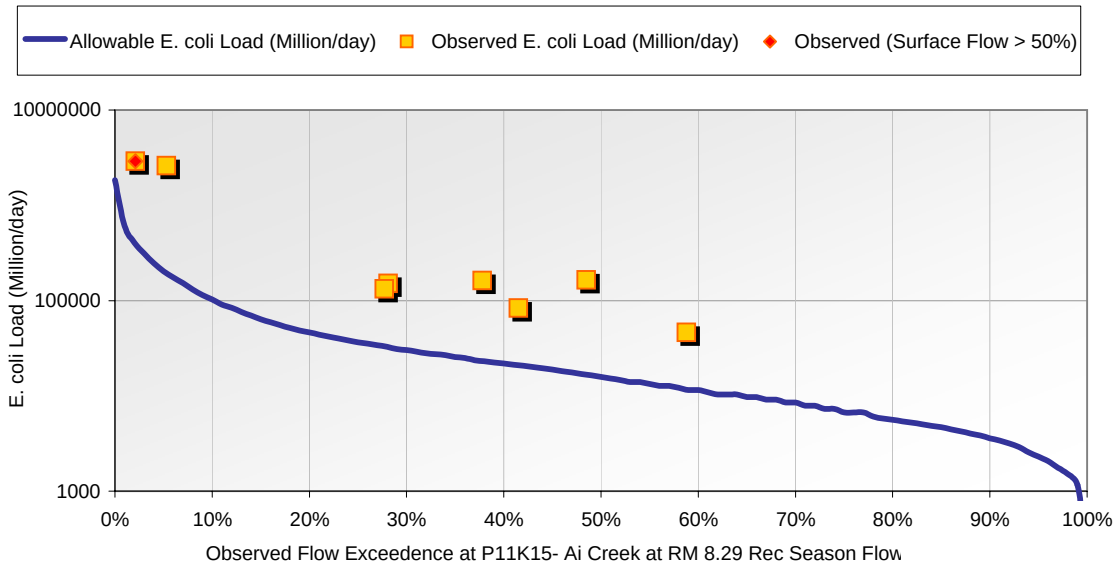
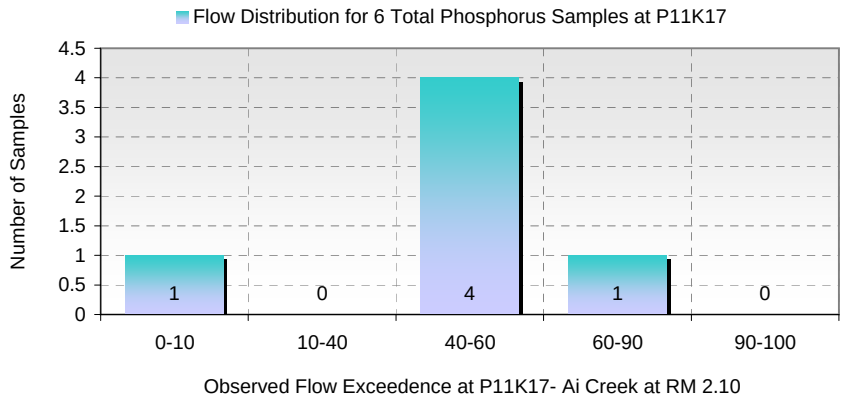


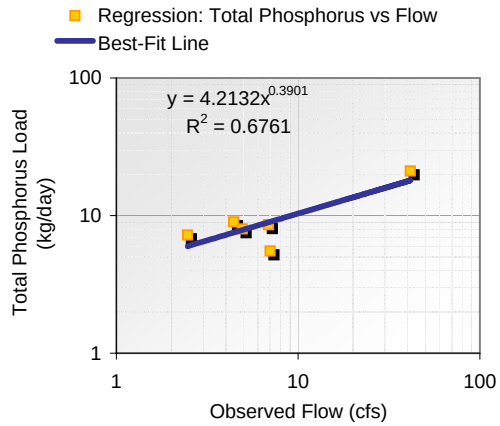
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	8-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Median Load (Million/day)	Estimated Reduction (%)
0-10	2	27.83	202,927	2,754,031	92.6%
10-40	3	5.00	36,454	151,281	75.9%
40-60	3	2.17	15,797	83,184	81.0%
60-90	0	0.92	6,683	No Data	No Data
90-100	0	0.32	2,309	No Data	No Data

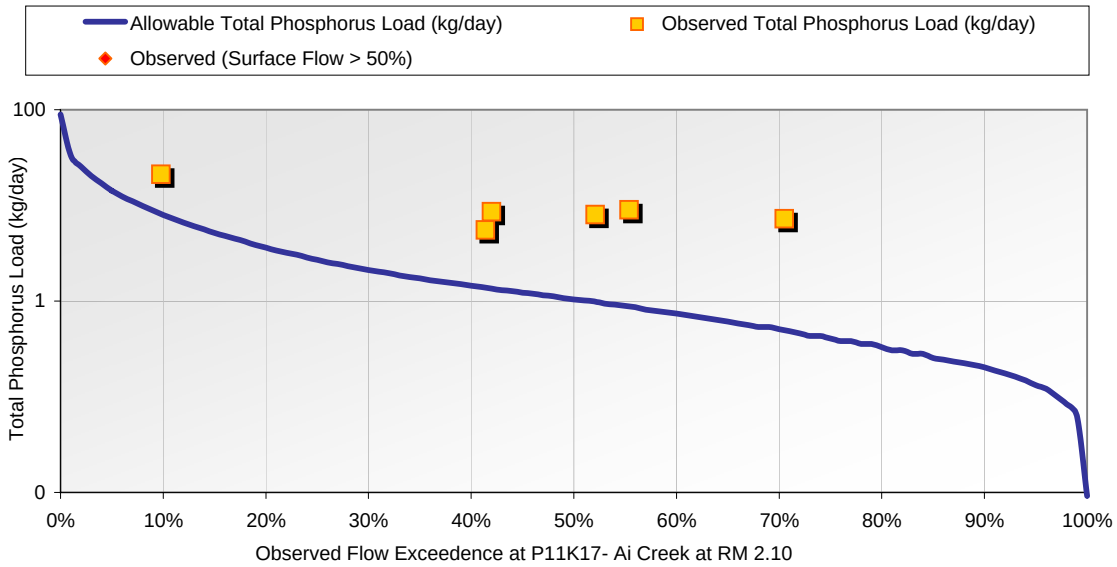
[28: Total Phosphorus at P11K17 (mg/L)] -vs- [8: Flow at P11K17- Ai Creek at RM 2.10 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

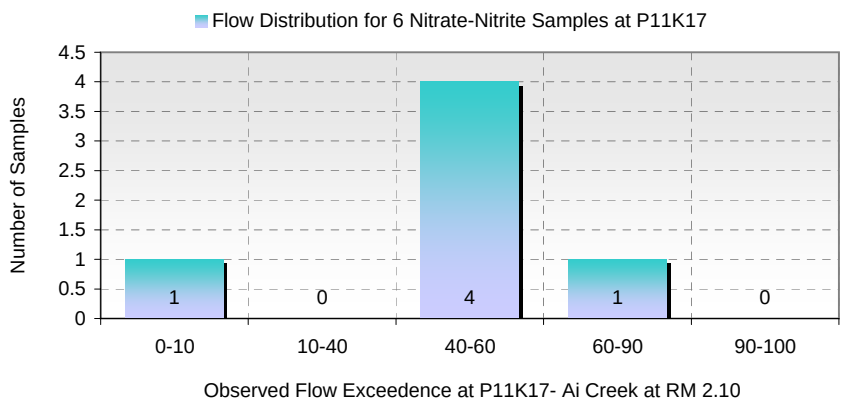


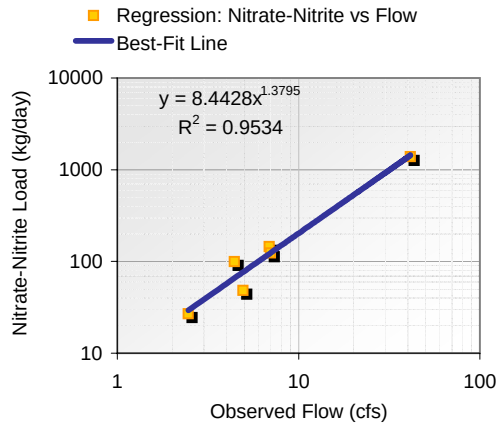
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	72.80	14.25	21.10	32.5%
10-40	0	13.78	2.70	No Data	No Data
40-60	4	5.33	1.04	8.27	87.4%
60-90	1	2.08	0.41	7.22	94.4%
90-100	0	0.68	0.13	No Data	No Data

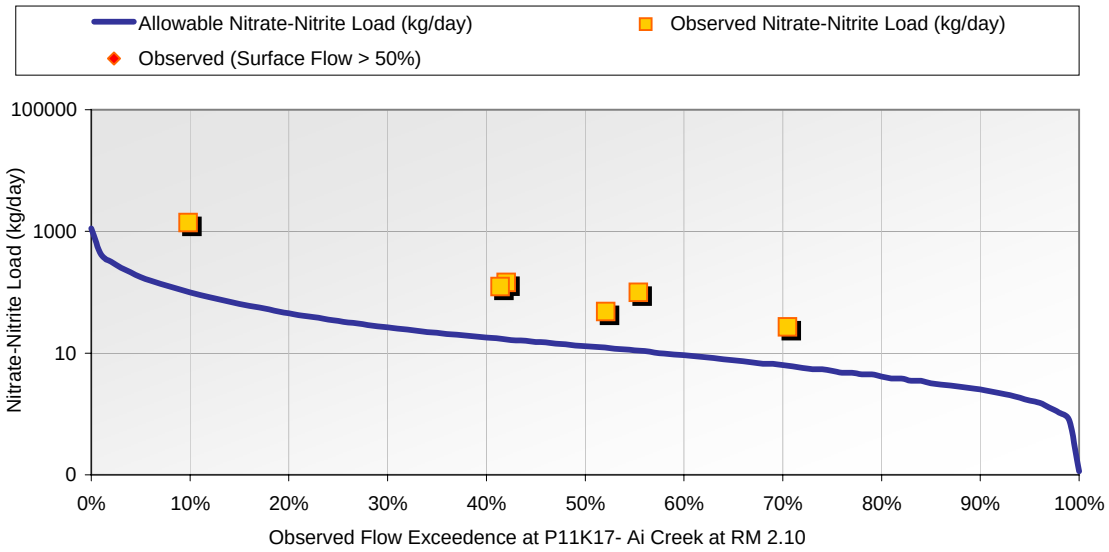
[27: Nitrate-Nitrite at P11K17 (mg/L)] -vs- [8: Flow at P11K17- Ai Creek at RM 2.10 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

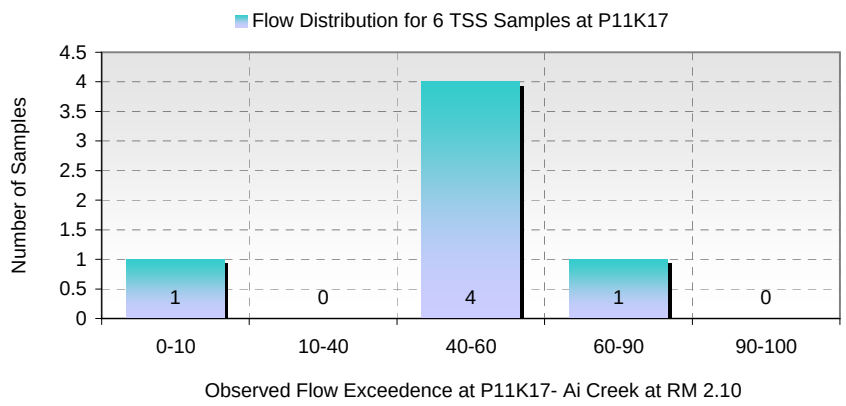


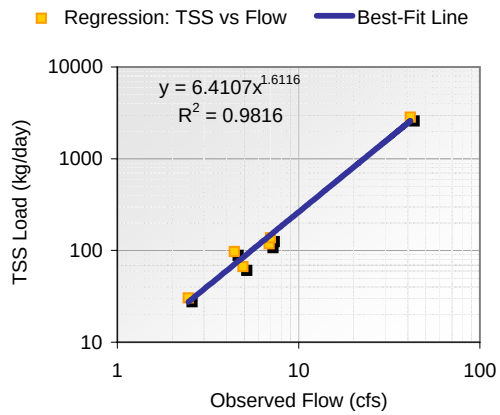
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	72.80	178.1	1390.0	87.2%
10-40	0	13.78	33.7	No Data	No Data
40-60	4	5.33	13.0	111.3	88.3%
60-90	1	2.08	5.1	26.8	81.0%
90-100	0	0.68	1.7	No Data	No Data

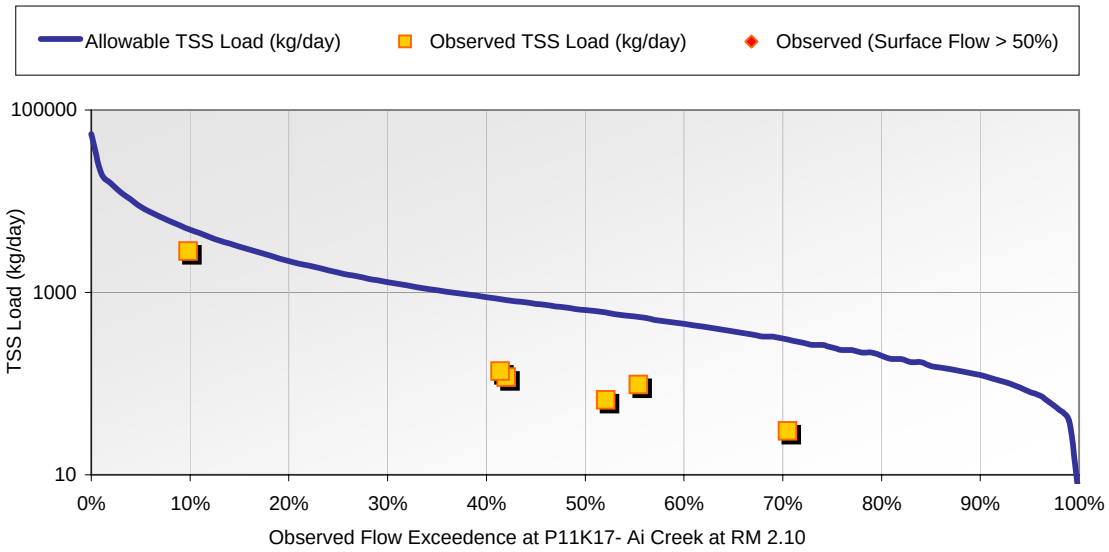
[29: TSS at P11K17 (mg/L)] -vs- [8: Flow at P11K17- Ai Creek at RM 2.10 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

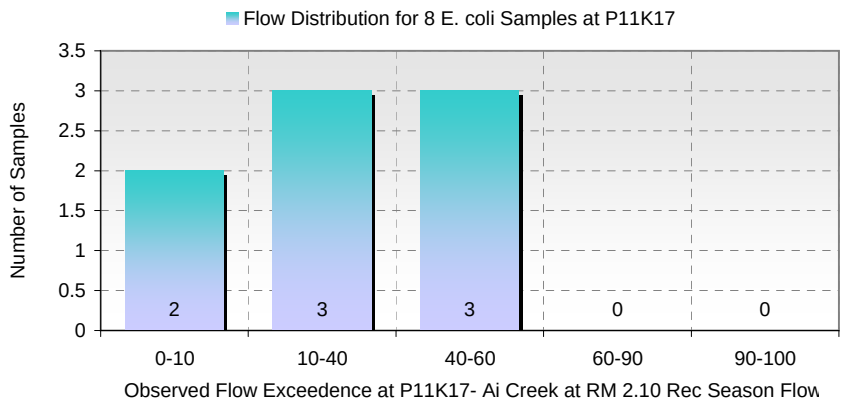


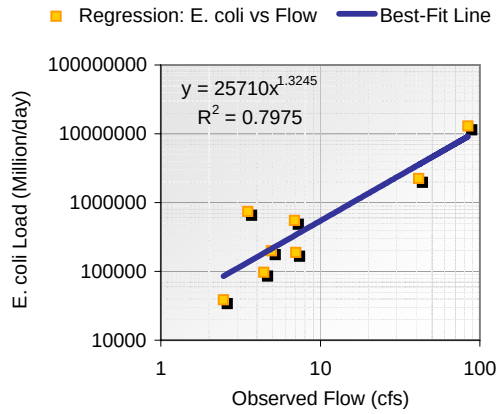
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	72.80	8,727	2,841	0.0%
10-40	0	13.78	1,652	No Data	No Data
40-60	4	5.33	639	108	0.0%
60-90	1	2.08	249	30	0.0%
90-100	0	0.68	81	No Data	No Data

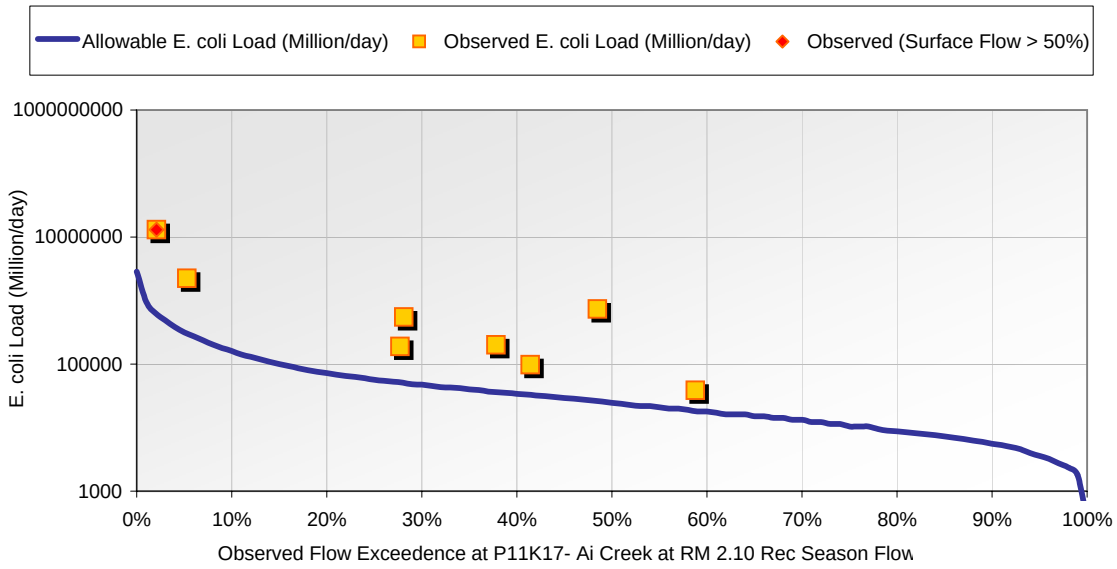
[30: E. coli at P11K17 (MPN/100mL)] -vs- [36: Flow at P11K17- Ai Creek at RM 2.10 Rec Season Flow (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

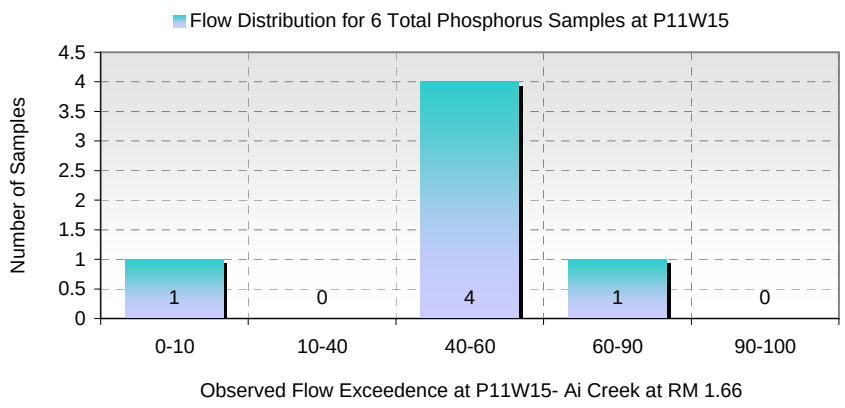


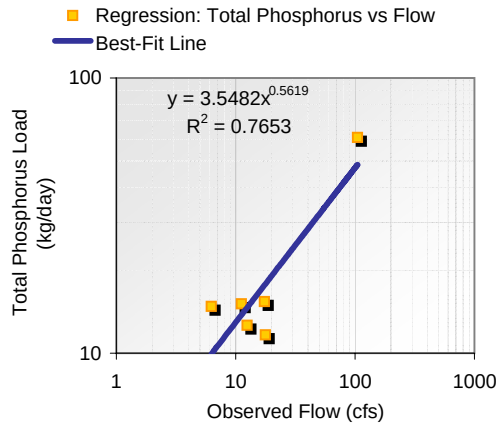
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	8-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Median Load (Million/day)	Estimated Reduction (%)
0-10	2	43.42	316,567	7,608,194	95.8%
10-40	3	7.80	56,868	199,422	71.5%
40-60	3	3.38	24,643	97,326	74.7%
60-90	0	1.43	10,426	No Data	No Data
90-100	0	0.49	3,602	No Data	No Data

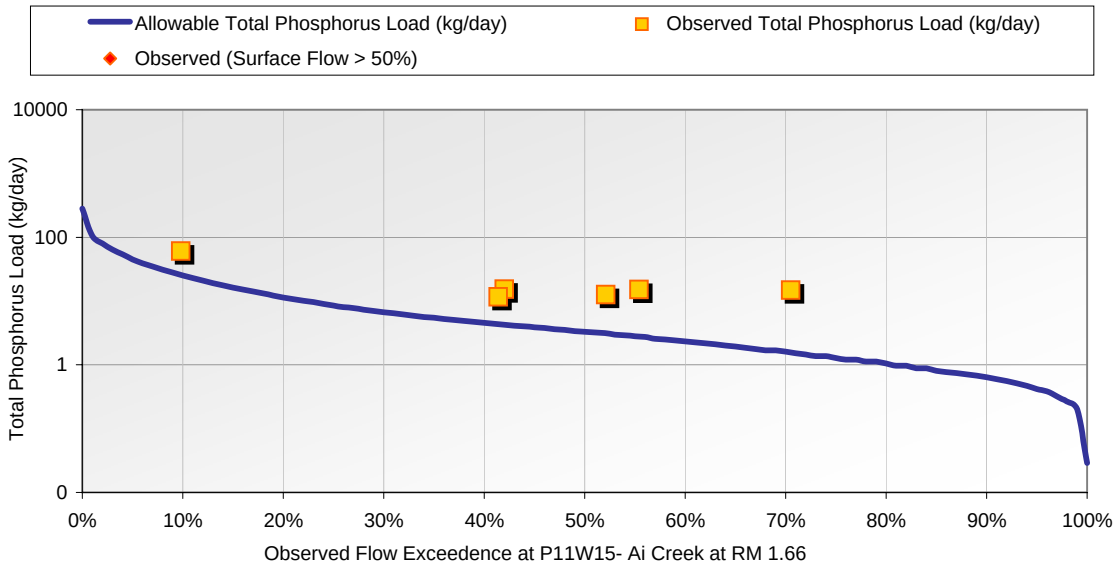
[32: Total Phosphorus at P11W15 (mg/L)] -vs- [9: Flow at P11W15- Ai Creek at RM 1.66 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

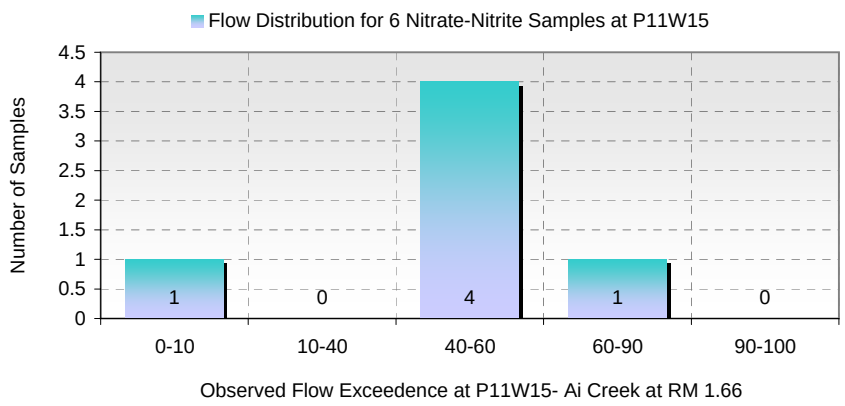


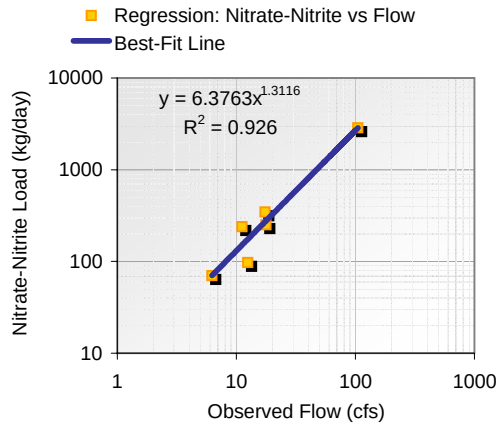
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	184.05	45.03	60.79	25.9%
10-40	0	34.84	8.52	No Data	No Data
40-60	4	13.48	3.30	13.86	76.2%
60-90	1	5.26	1.29	14.79	91.3%
90-100	0	1.71	0.42	No Data	No Data

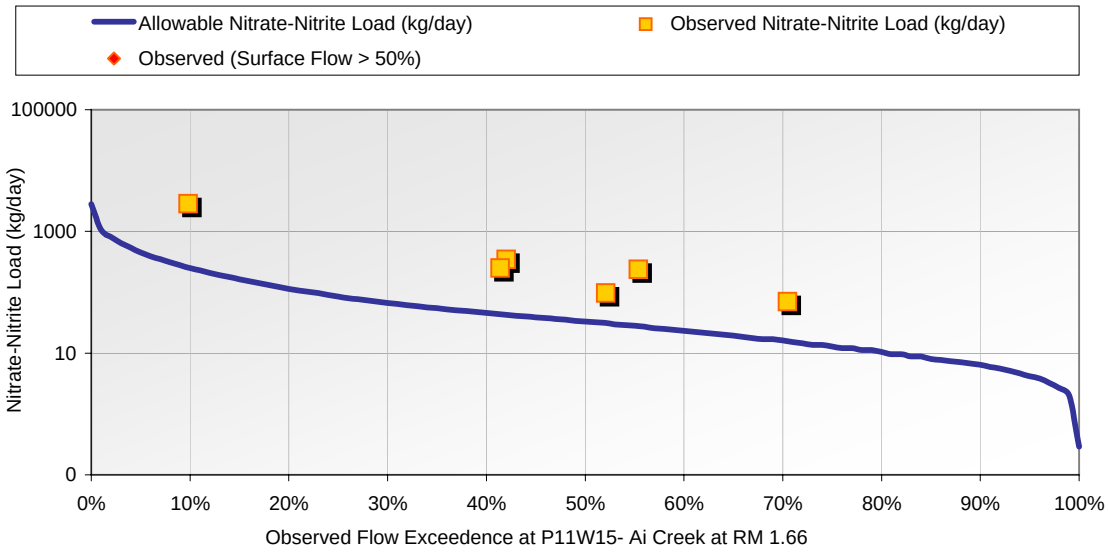
[31: Nitrate-Nitrite at P11W15 (mg/L)] -vs- [9: Flow at P11W15- Ai Creek at RM 1.66 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

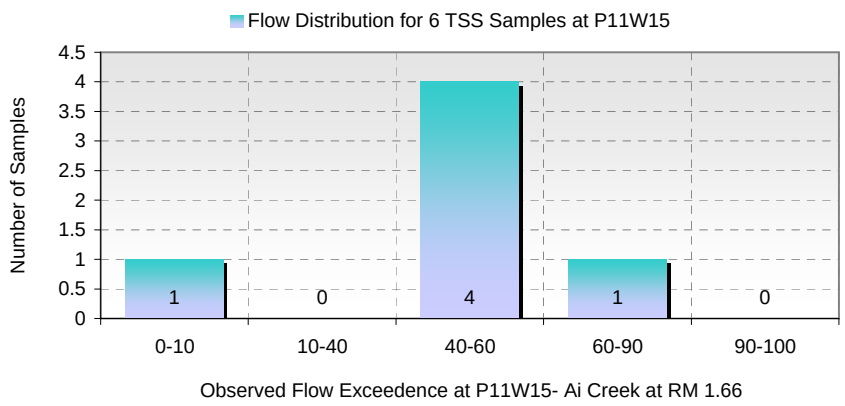


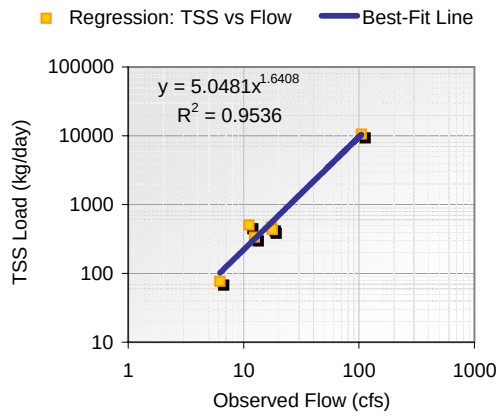
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	184.05	450.3	2847.3	84.2%
10-40	0	34.84	85.2	No Data	No Data
40-60	4	13.48	33.0	244.5	86.5%
60-90	1	5.26	12.9	69.8	81.6%
90-100	0	1.71	4.2	No Data	No Data

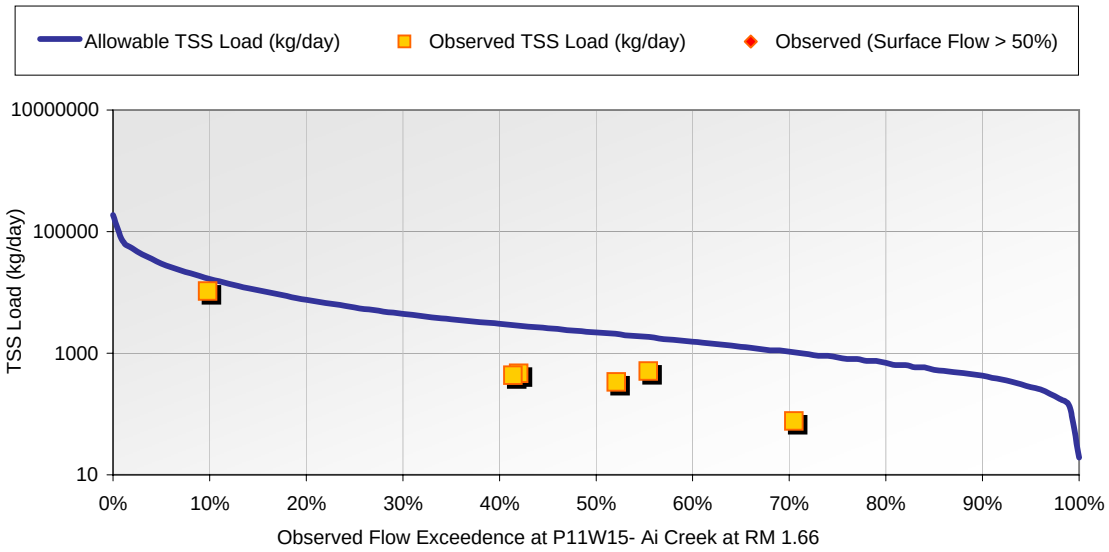
[33: TSS at P11W15 (mg/L)] -vs- [9: Flow at P11W15- Ai Creek at RM 1.66 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

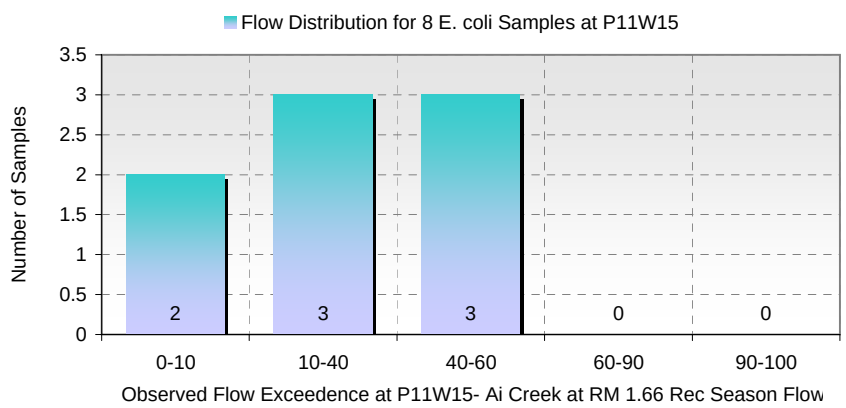


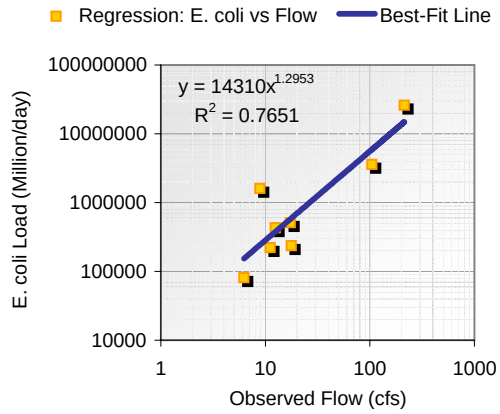
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	184.05	29,900	10,517	0.0%
10-40	0	34.84	5,660	No Data	No Data
40-60	4	13.48	2,189	452	0.0%
60-90	1	5.26	854	76	0.0%
90-100	0	1.71	278	No Data	No Data

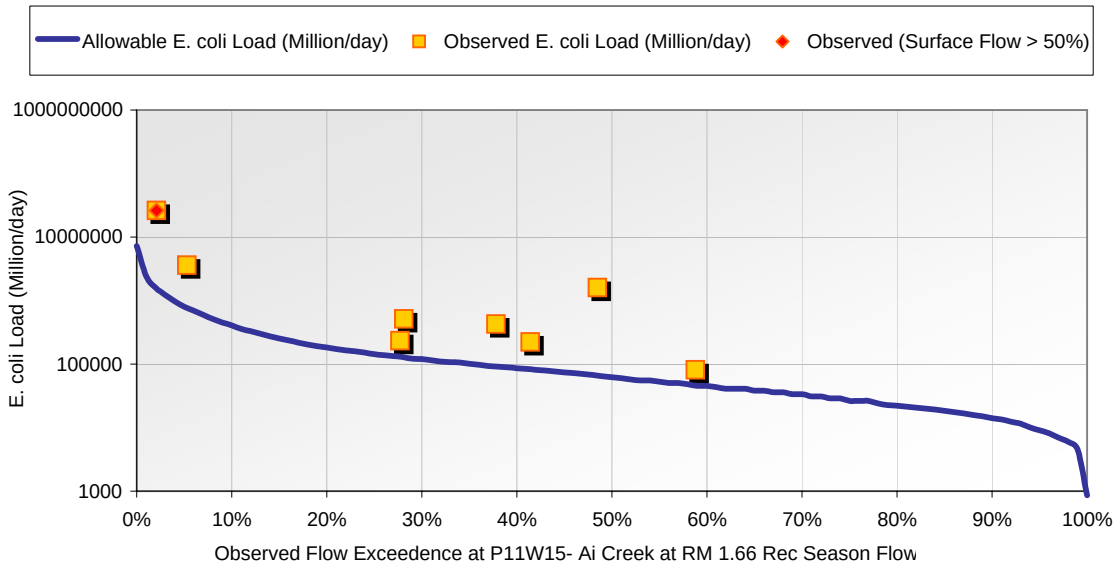
[34: E. coli at P11W15 (MPN/100mL)] -vs- [37: Flow at P11W15- Ai Creek at RM 1.66 Rec Season Flow (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

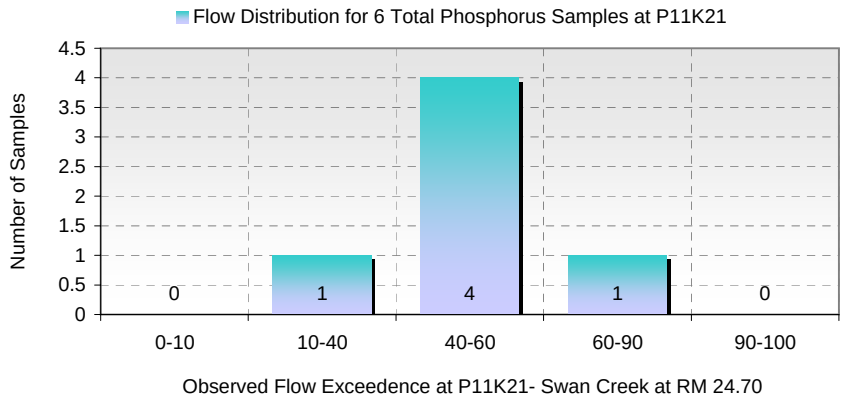


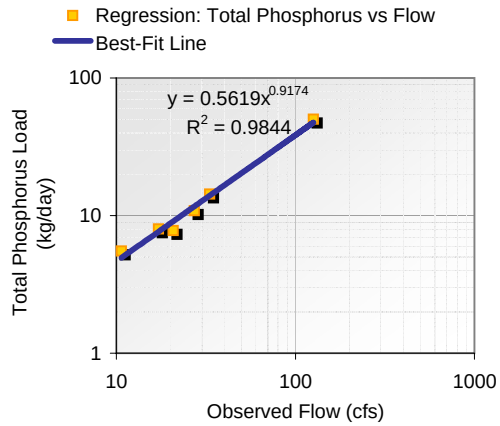
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	8-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Median Load (Million/day)	Estimated Reduction (%)
0-10	2	109.77	800,345	14,822,129	94.6%
10-40	3	19.72	143,775	427,789	66.4%
40-60	3	8.55	62,303	221,454	71.9%
60-90	0	3.62	26,359	No Data	No Data
90-100	0	1.25	9,106	No Data	No Data

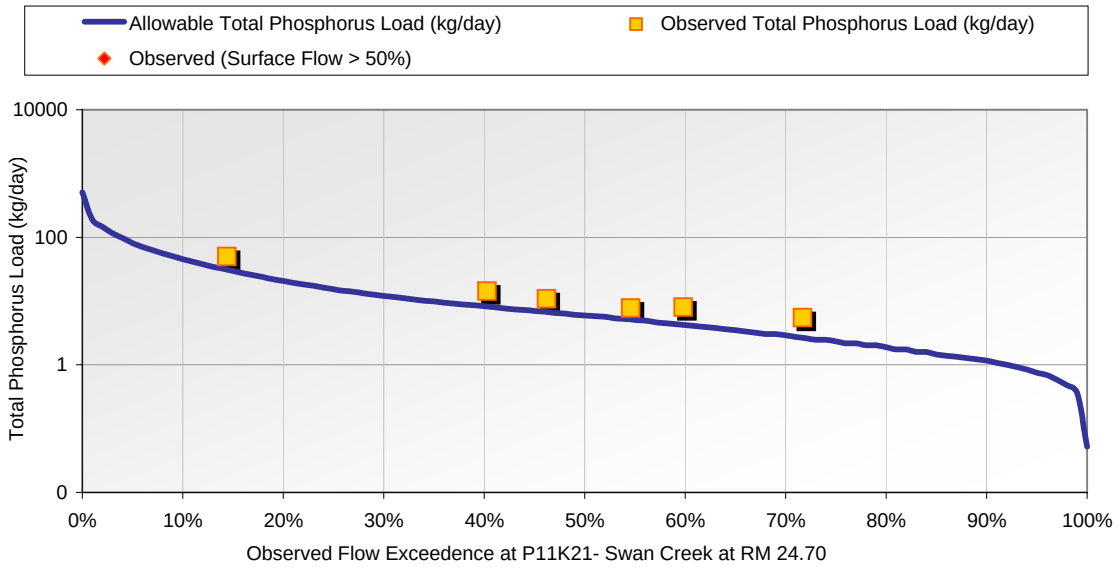
[36: Total Phosphorus at P11K21 (mg/L)] -vs- [10: Flow at P11K21- Swan Creek at RM 24.70 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

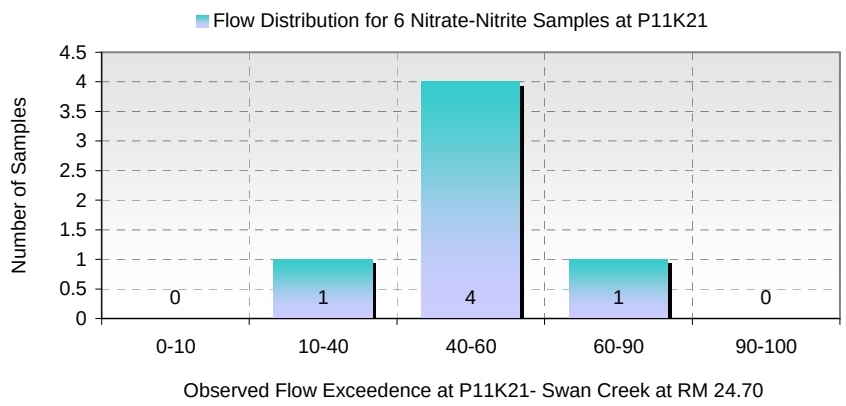


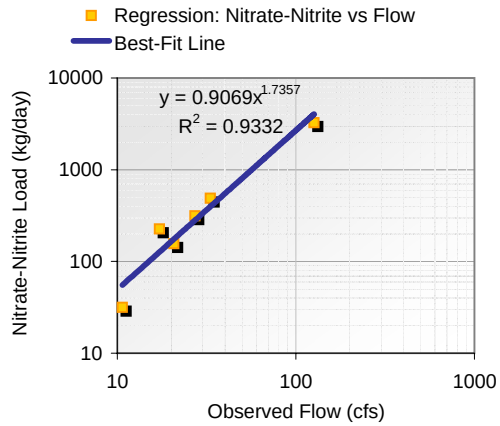
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	0	332.27	81.29	No Data	No Data
10-40	1	62.89	15.39	50.09	69.3%
40-60	4	24.33	5.95	9.41	36.7%
60-90	1	9.49	2.32	5.51	57.9%
90-100	0	3.09	0.75	No Data	No Data

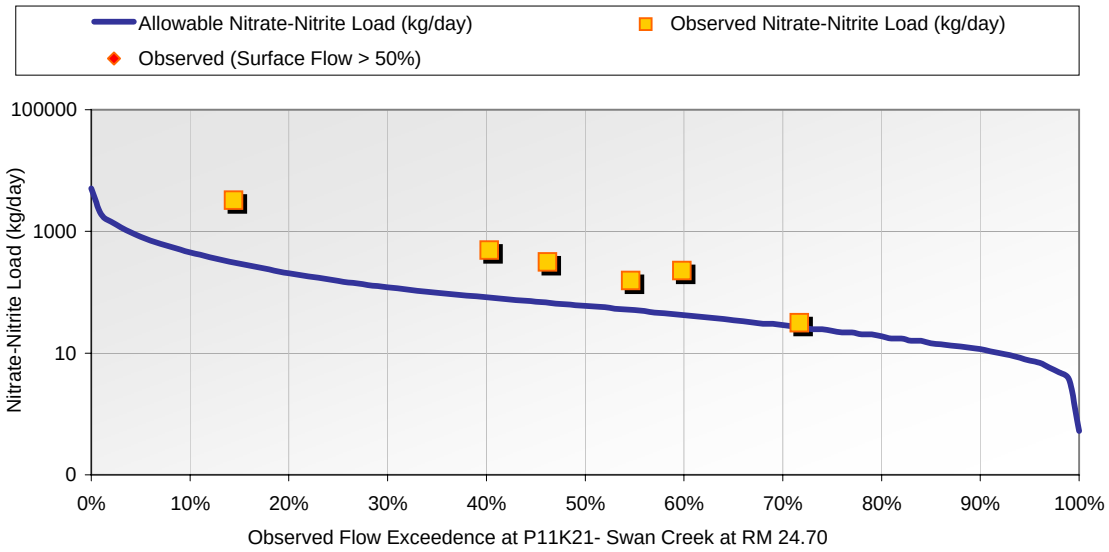
[35: Nitrate-Nitrite at P11K21 (mg/L)] -vs- [10: Flow at P11K21- Swan Creek at RM 24.70 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

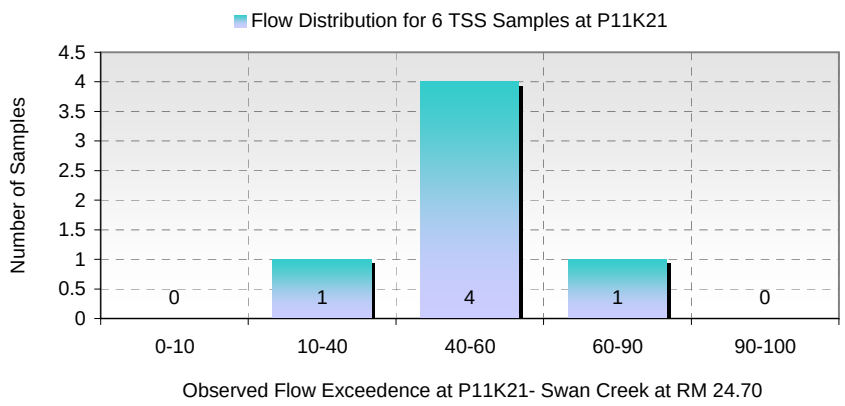


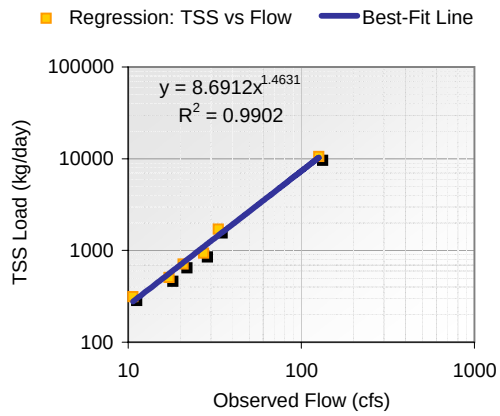
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	0	332.27	812.9	No Data	No Data
10-40	1	62.89	153.9	3246.6	95.3%
40-60	4	24.33	59.5	269.8	77.9%
60-90	1	9.49	23.2	31.6	26.5%
90-100	0	3.09	7.5	No Data	No Data

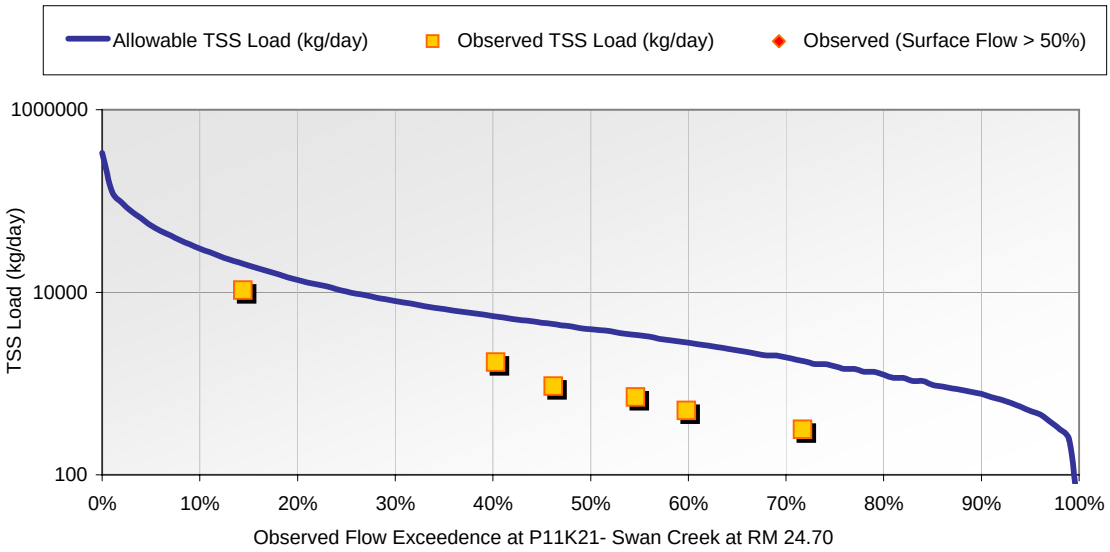
[37: TSS at P11K21 (mg/L)] -vs- [10: Flow at P11K21- Swan Creek at RM 24.70 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

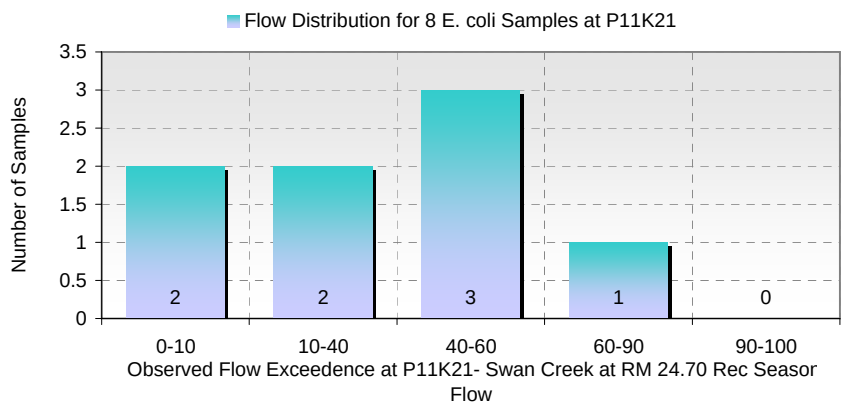


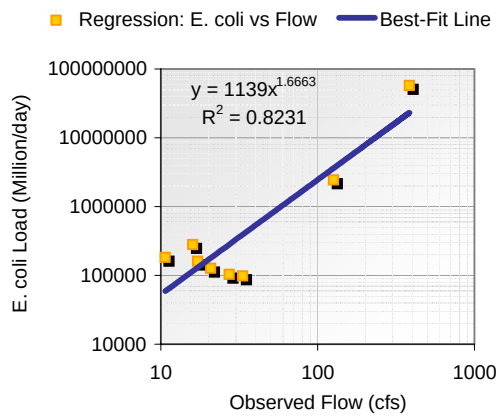
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	0	332.27	53,978	No Data	No Data
10-40	1	62.89	10,217	10,513	2.8%
40-60	4	24.33	3,952	823	0.0%
60-90	1	9.49	1,542	314	0.0%
90-100	0	3.09	501	No Data	No Data

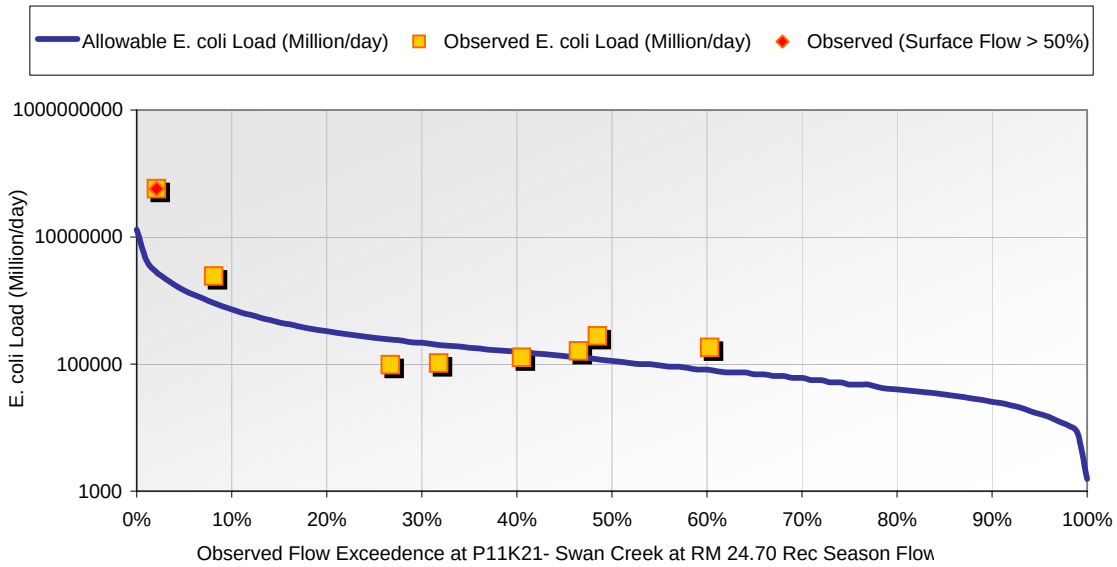
[38: E. coli at P11K21 (MPN/100mL)] -vs- [38: Flow at P11K21- Swan Creek at RM 24.70 Rec Season Flow (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

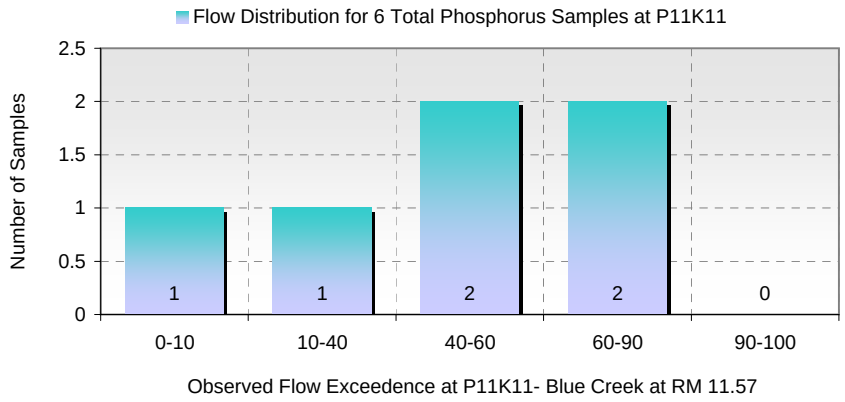


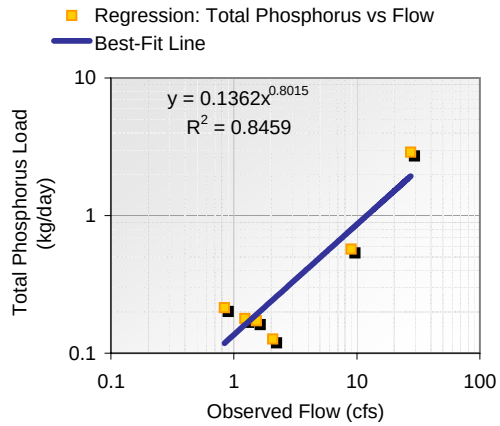
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	8-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Median Load (Million/day)	Estimated Reduction (%)
0-10	2	198.17	1,444,842	29,911,462	95.2%
10-40	2	35.60	259,553	100,526	0.0%
40-60	3	15.43	112,474	159,972	29.7%
60-90	1	6.53	47,586	182,910	74.0%
90-100	0	2.25	16,439	No Data	No Data

[39: Total Phosphorus at P11K11 (mg/L)] -vs- [11: Flow at P11K11- Blue Creek at RM 11.57 (cfs)]

1. Data Assessment and Trend Confirmation





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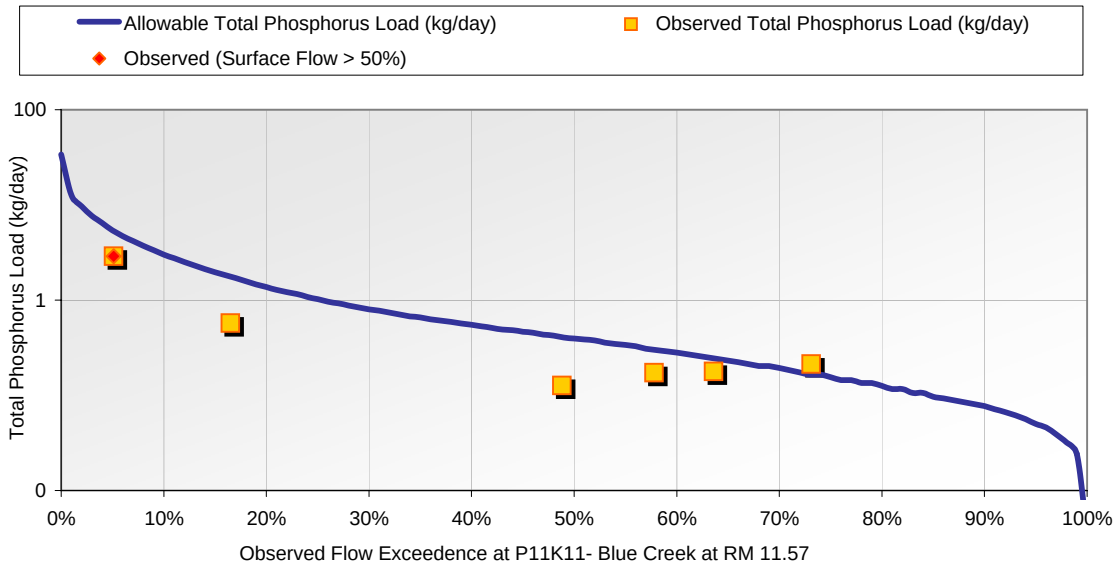
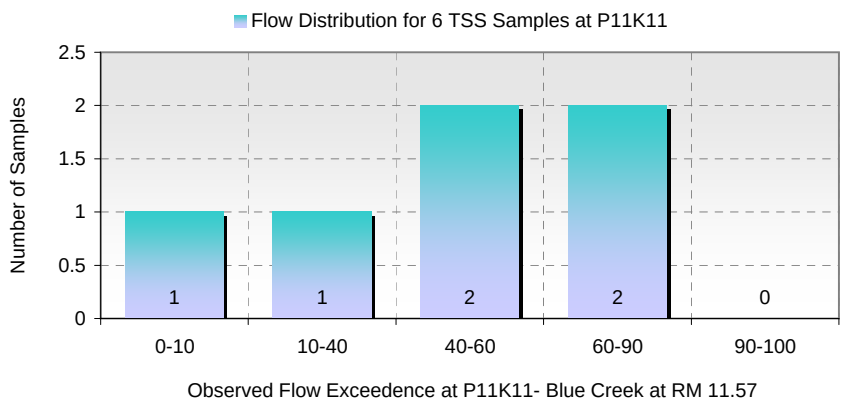


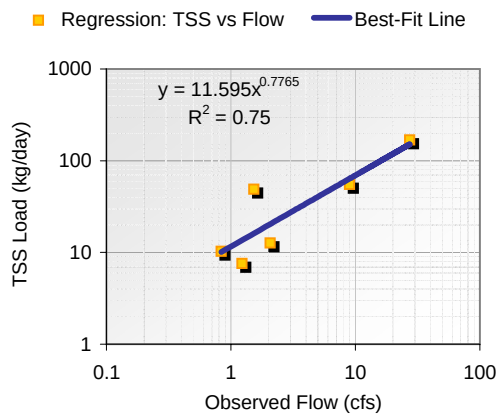
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	27.63	5.41	2.89	0.0%
10-40	1	5.23	1.02	0.57	0.0%
40-60	2	2.02	0.40	0.15	0.0%
60-90	2	0.79	0.15	0.20	21.1%
90-100	0	0.26	0.05	No Data	No Data

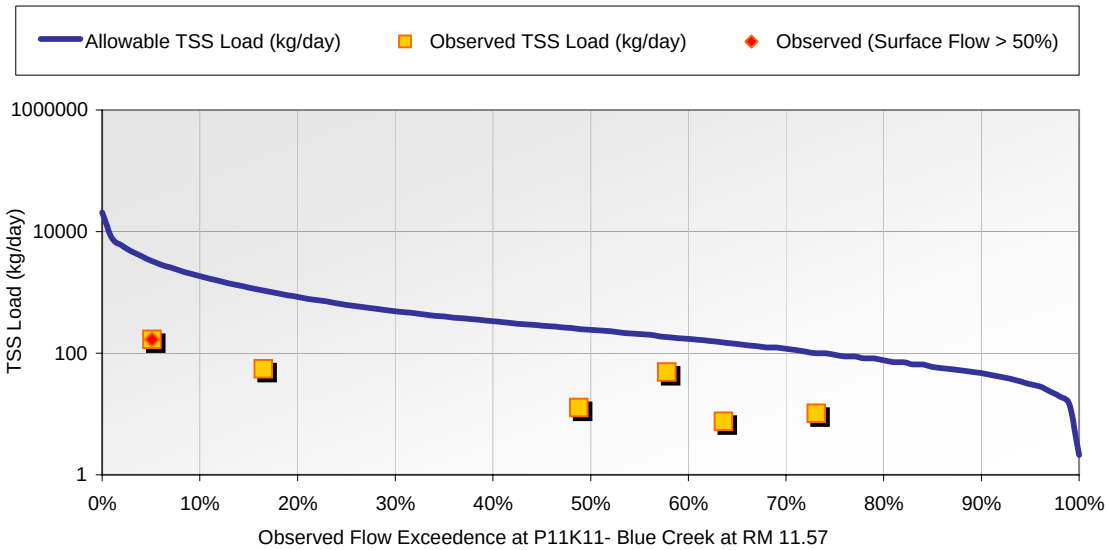
[40: TSS at P11K11 (mg/L)] -vs- [11: Flow at P11K11- Blue Creek at RM 11.57 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

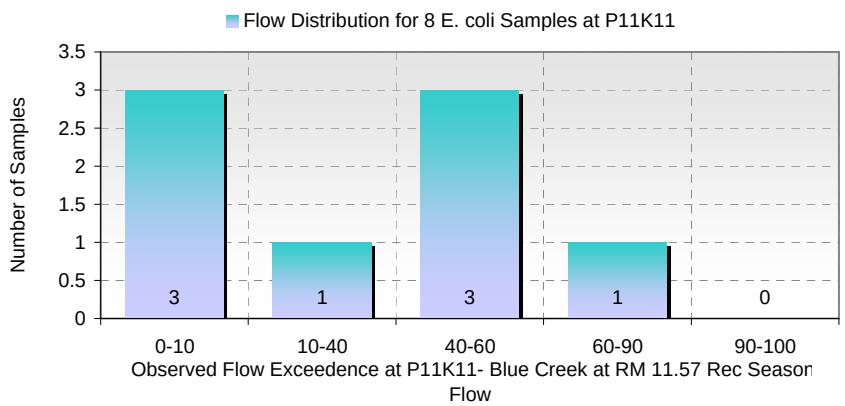


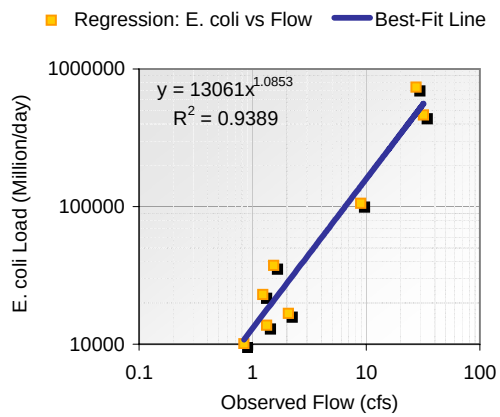
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	27.63	3,312	168	0.0%
10-40	1	5.23	627	55	0.0%
40-60	2	2.02	242	31	0.0%
60-90	2	0.79	95	9	0.0%
90-100	0	0.26	31	No Data	No Data

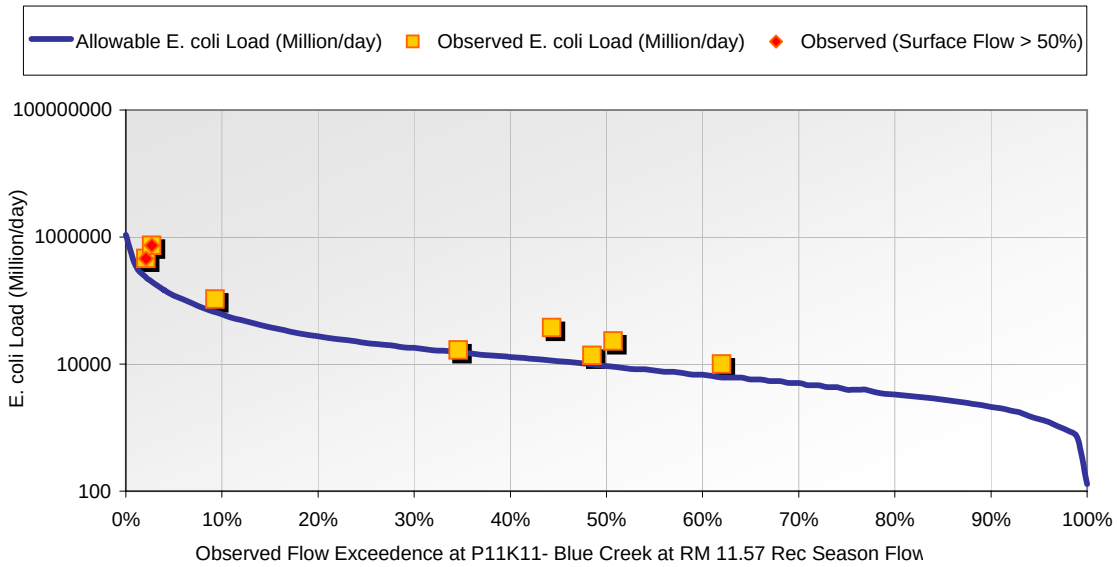
[41: E. coli at P11K11 (MPN/100mL)] -vs- [39: Flow at P11K11- Blue Creek at RM 11.57 Rec Season Flow (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

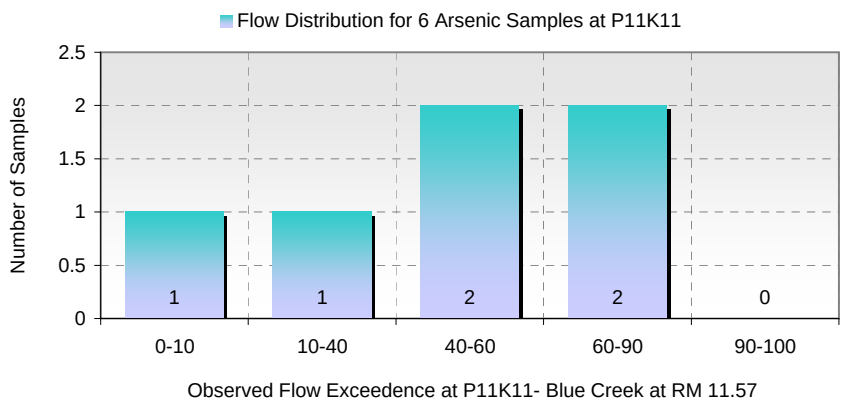


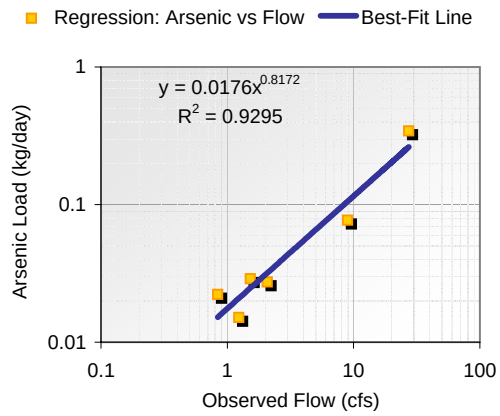
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	8-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Median Load (Million/day)	Estimated Reduction (%)
0-10	3	16.48	120,133	461,452	74.0%
10-40	1	2.96	21,581	16,729	0.0%
40-60	3	1.28	9,352	22,933	59.2%
60-90	1	0.54	3,957	10,054	60.6%
90-100	0	0.19	1,367	No Data	No Data

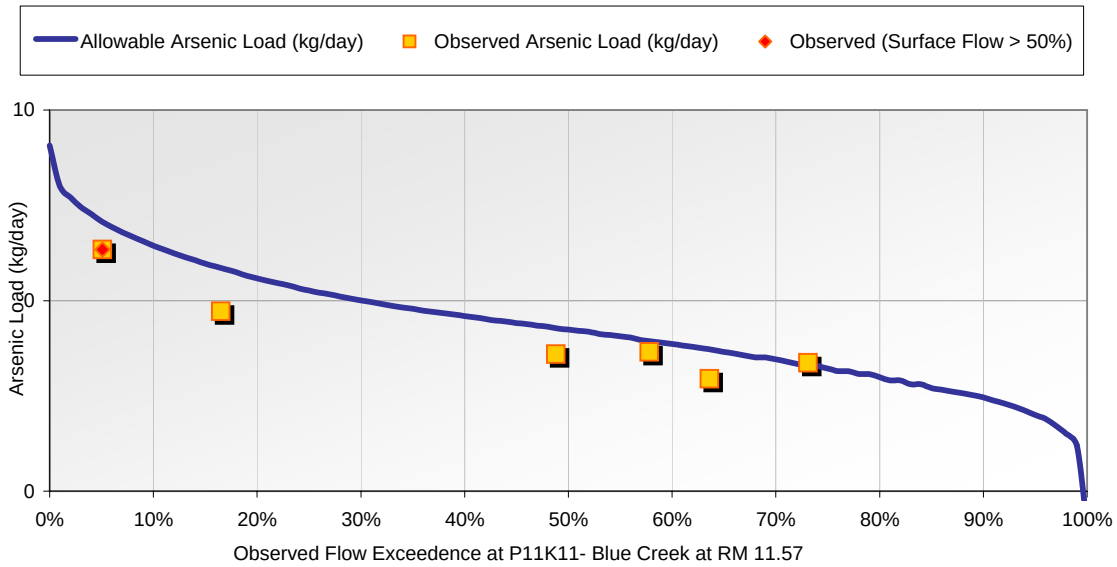
[42: Arsenic at P11K11 (µg/L)] -vs- [11: Flow at P11K11- Blue Creek at RM 11.57 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

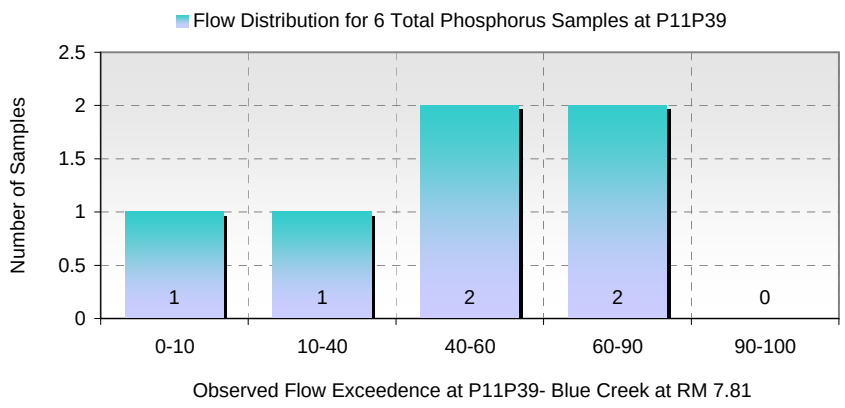


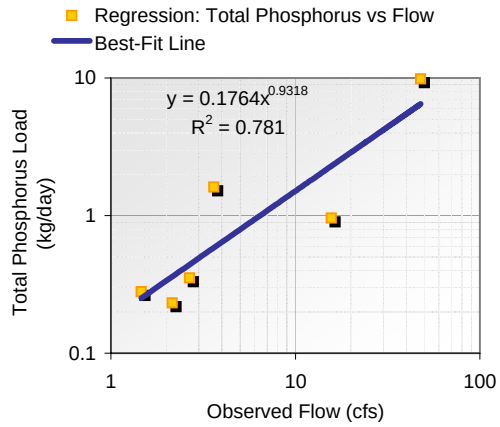
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	27.63	0.68	0.34	0.0%
10-40	1	5.23	0.13	0.08	0.0%
40-60	2	2.02	0.05	0.03	0.0%
60-90	2	0.79	0.02	0.02	0.0%
90-100	0	0.26	0.01	No Data	No Data

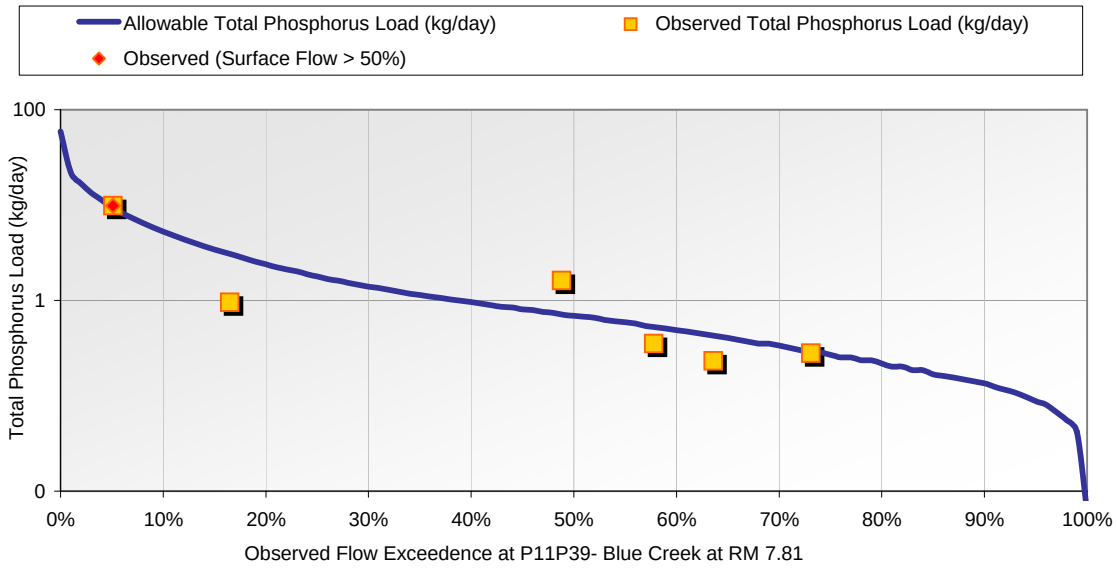
[44: Total Phosphorus at P11P39 (mg/L)] -vs- [12: Flow at P11P39- Blue Creek at RM 7.81 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

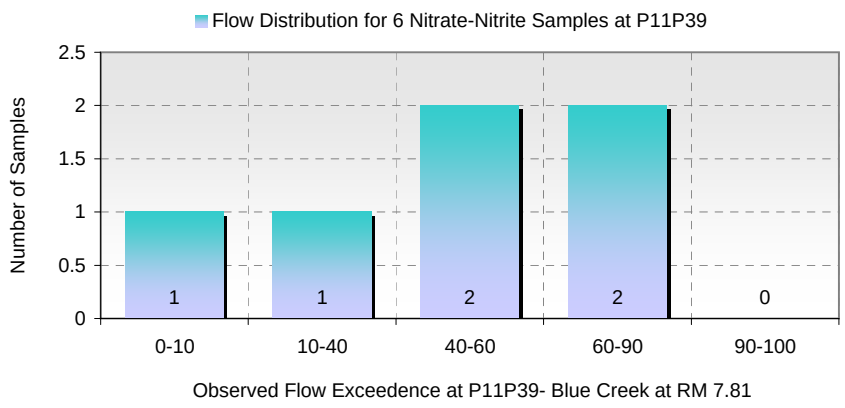


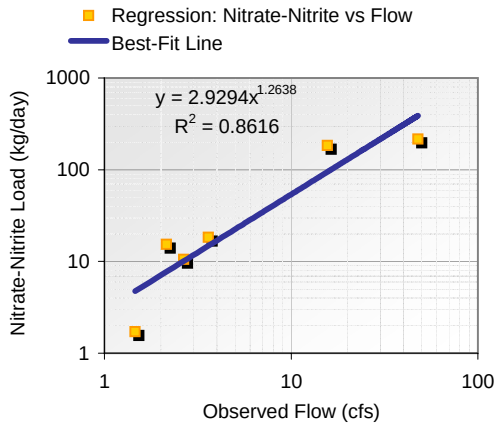
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	48.16	9.43	9.83	4.1%
10-40	1	9.12	1.78	0.96	0.0%
40-60	2	3.53	0.69	0.98	29.6%
60-90	2	1.38	0.27	0.26	0.0%
90-100	0	0.45	0.09	No Data	No Data

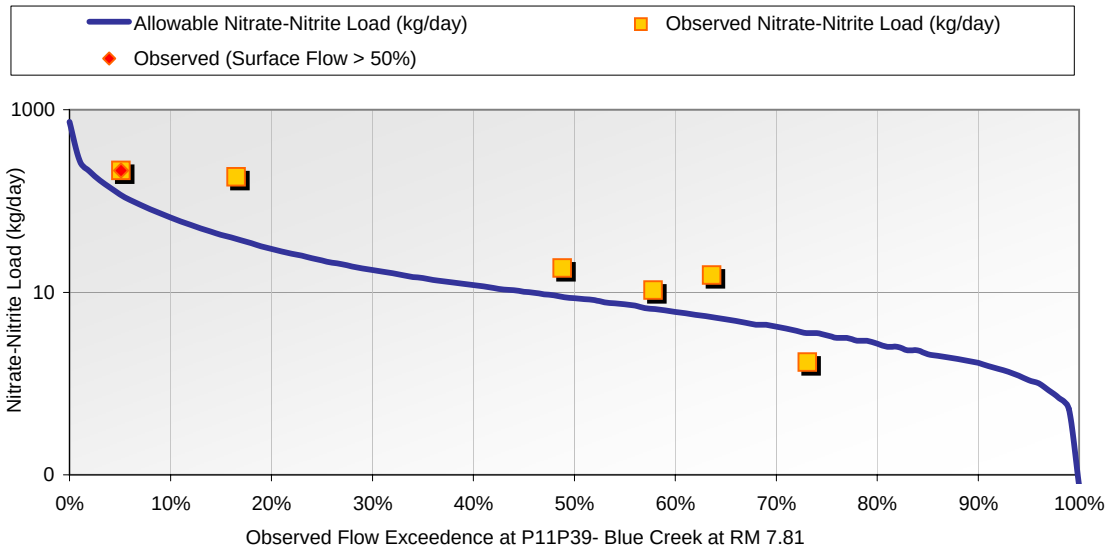
[43: Nitrate-Nitrite at P11P39 (mg/L)] -vs- [12: Flow at P11P39- Blue Creek at RM 7.81 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

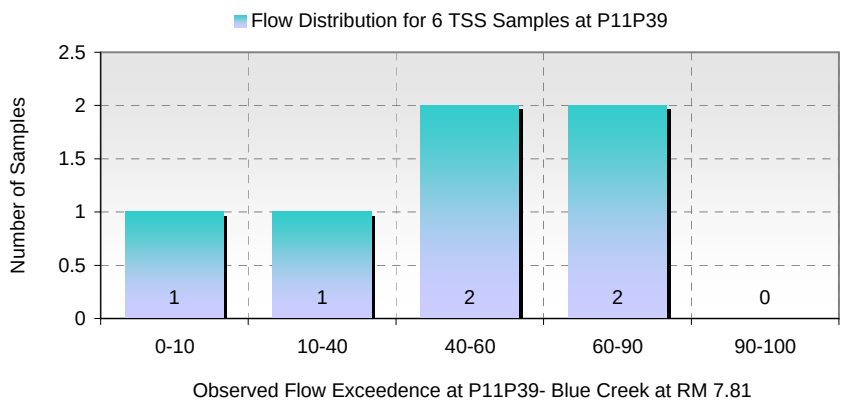


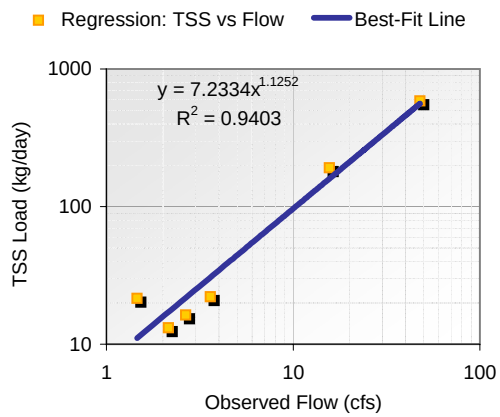
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	48.16	117.8	215.8	45.4%
10-40	1	9.12	22.3	183.6	87.9%
40-60	2	3.53	8.6	14.4	40.3%
60-90	2	1.38	3.4	8.5	60.6%
90-100	0	0.45	1.1	No Data	No Data

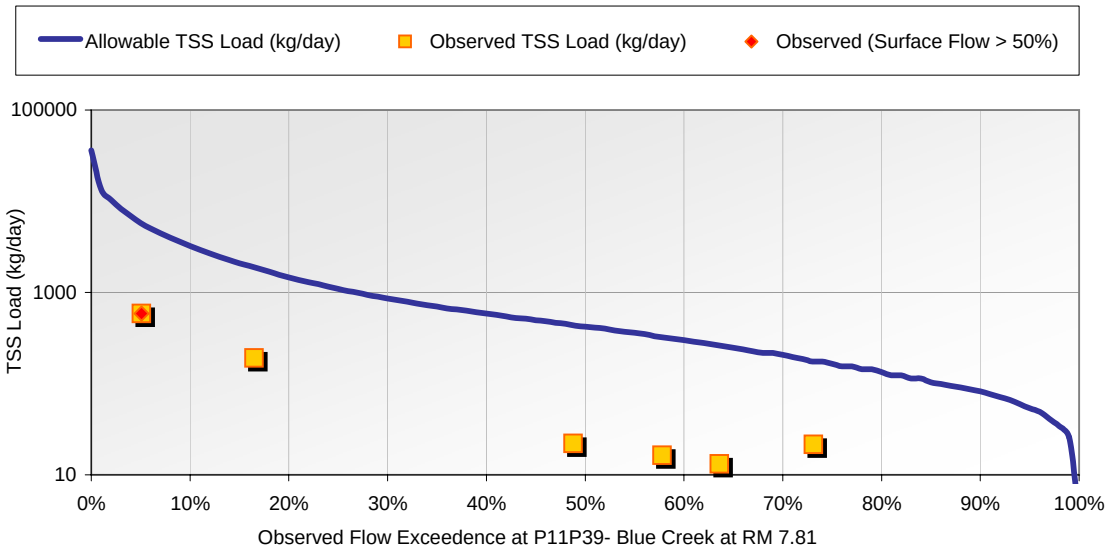
[45: TSS at P11P39 (mg/L)] -vs- [12: Flow at P11P39- Blue Creek at RM 7.81 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

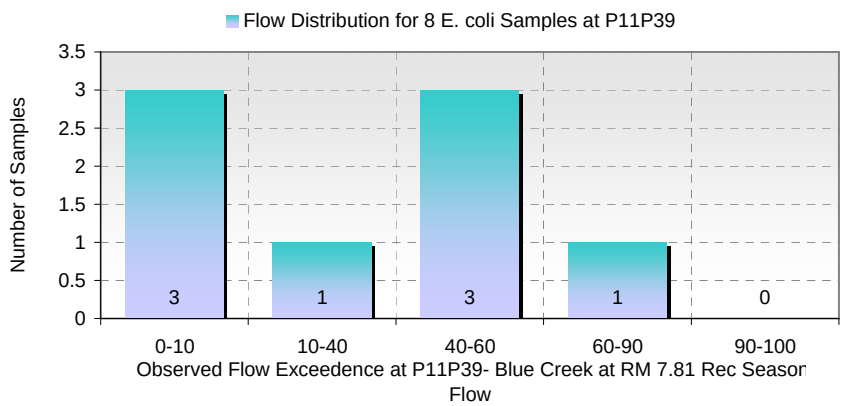


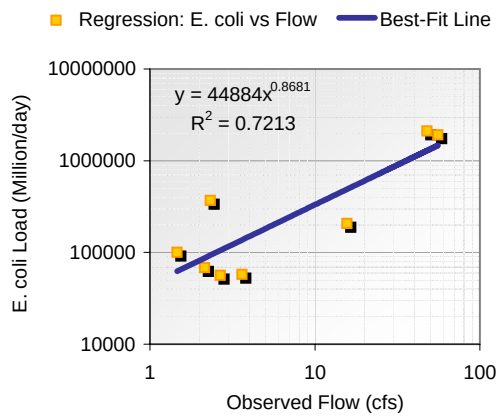
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	48.16	5,774	585	0.0%
10-40	1	9.12	1,093	191	0.0%
40-60	2	3.53	423	19	0.0%
60-90	2	1.38	165	17	0.0%
90-100	0	0.45	54	No Data	No Data

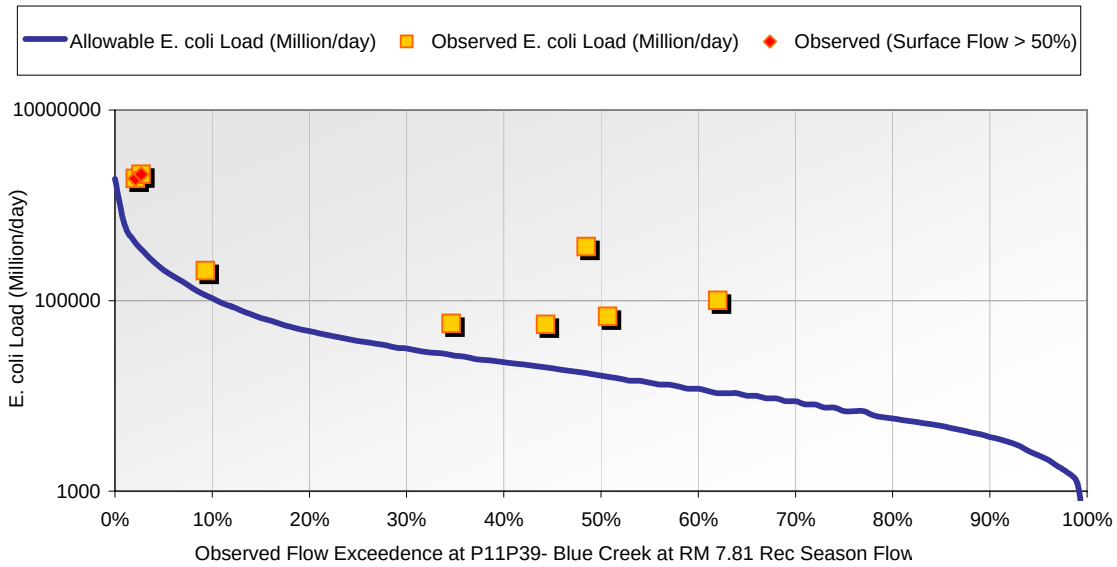
[46: E. coli at P11P39 (MPN/100mL)] -vs- [40: Flow at P11P39- Blue Creek at RM 7.81 Rec Season Flow (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

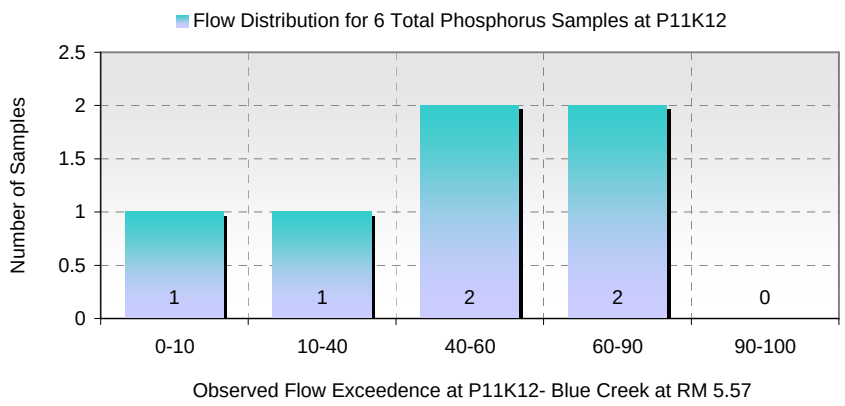


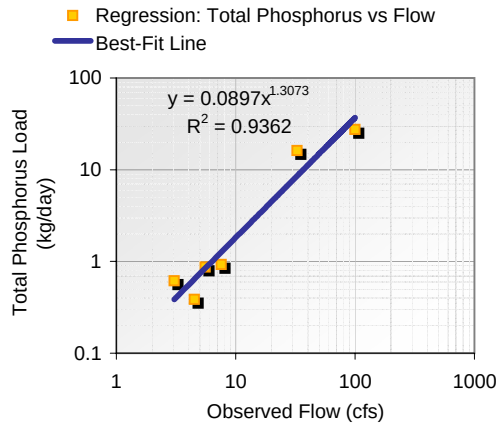
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	8-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Median Load (Million/day)	Estimated Reduction (%)
0-10	3	28.72	209,421	1,908,800	89.0%
10-40	1	5.16	37,621	57,441	34.5%
40-60	3	2.24	16,302	68,383	76.2%
60-90	1	0.95	6,897	100,155	93.1%
90-100	0	0.33	2,383	No Data	No Data

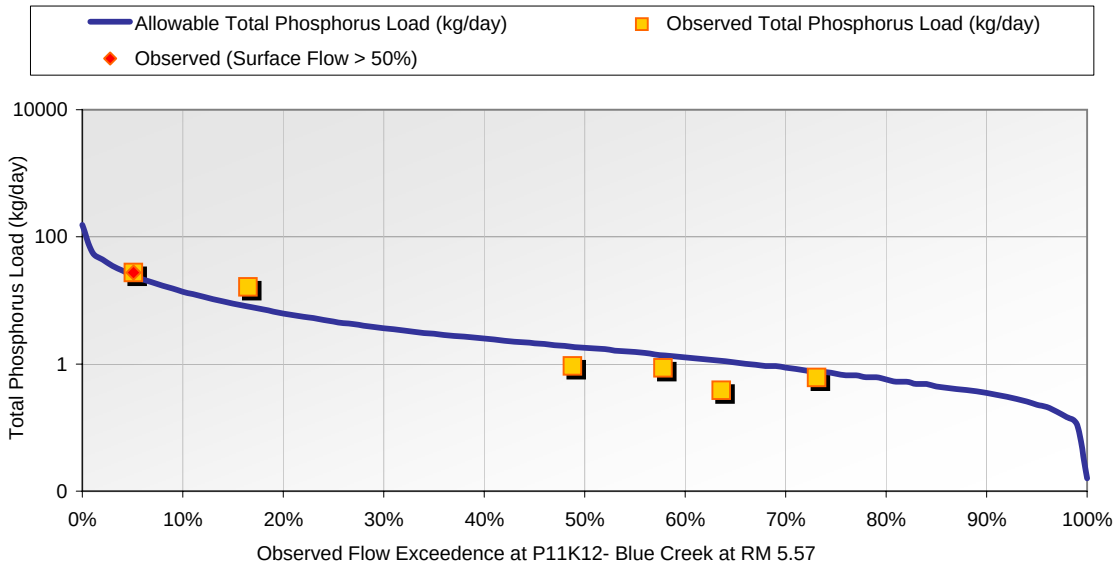
[48: Total Phosphorus at P11K12 (mg/L)] -vs- [13: Flow at P11K12- Blue Creek at RM 5.57 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

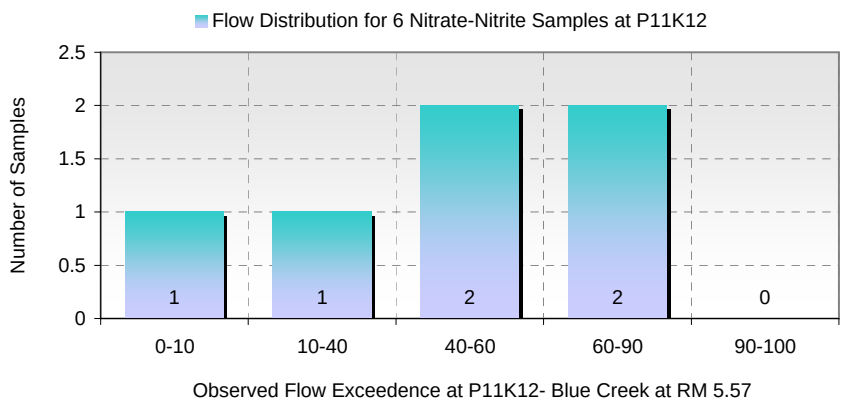


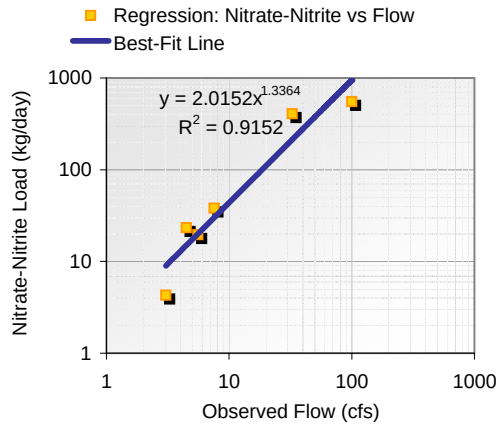
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	100.80	24.66	27.42	10.1%
10-40	1	19.08	4.67	16.19	71.2%
40-60	2	7.38	1.81	0.90	0.0%
60-90	2	2.88	0.70	0.50	0.0%
90-100	0	0.94	0.23	No Data	No Data

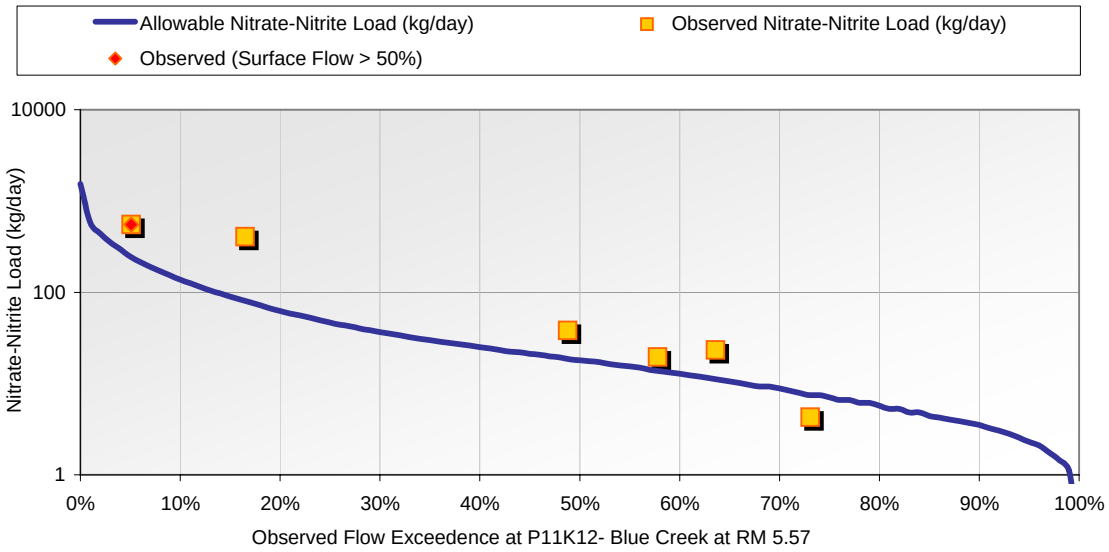
[47: Nitrate-Nitrite at P11K12 (mg/L)] -vs- [13: Flow at P11K12- Blue Creek at RM 5.57 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

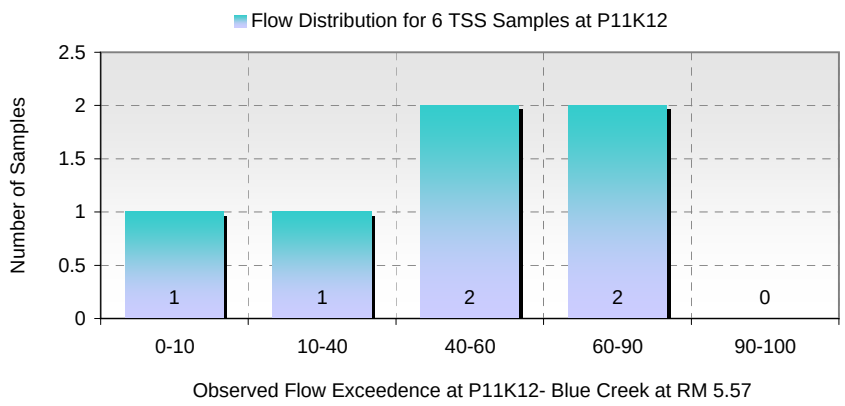


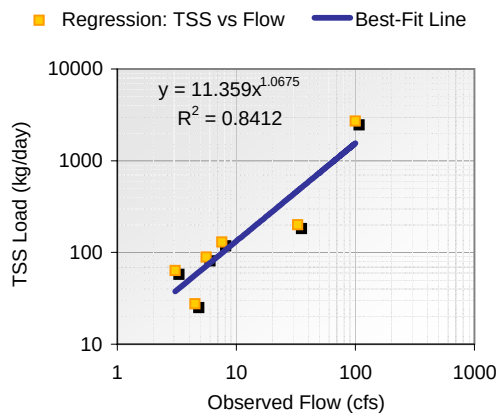
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	100.80	246.6	553.4	55.4%
10-40	1	19.08	46.7	405.6	88.5%
40-60	2	7.38	18.1	28.7	37.2%
60-90	2	2.88	7.0	13.8	49.0%
90-100	0	0.94	2.3	No Data	No Data

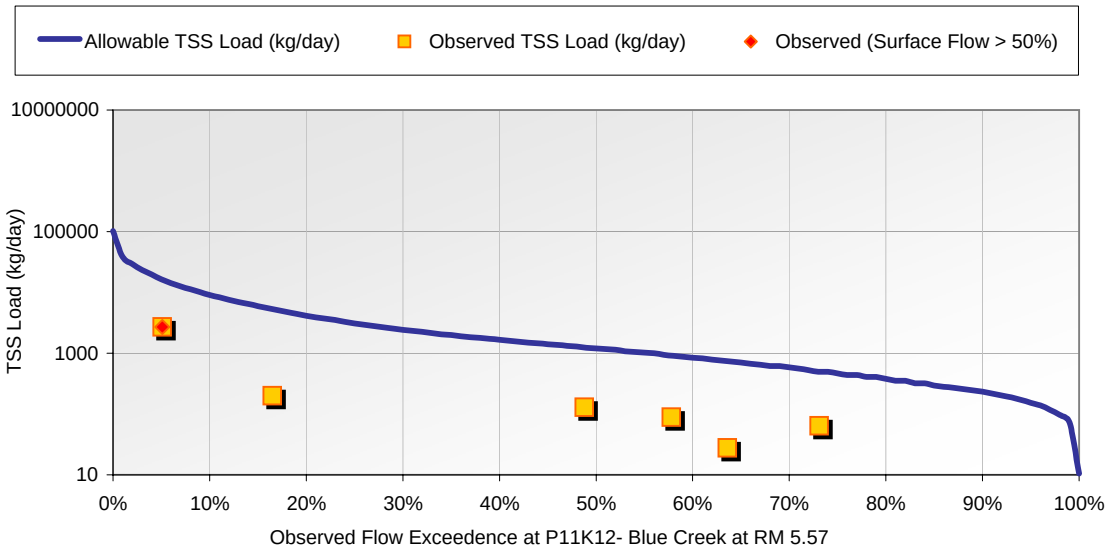
[49: TSS at P11K12 (mg/L)] -vs- [13: Flow at P11K12- Blue Creek at RM 5.57 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

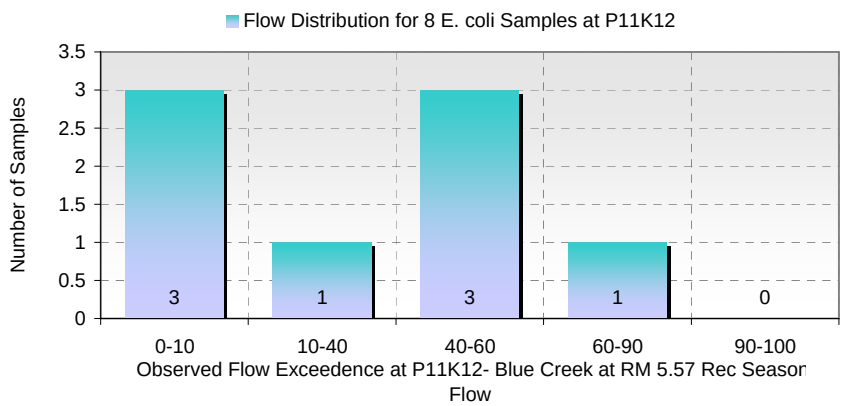


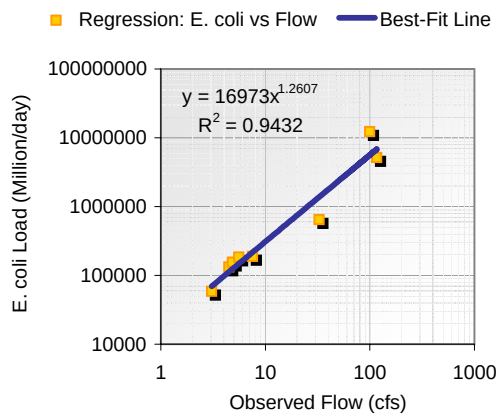
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	100.80	16,375	2,693	0.0%
10-40	1	19.08	3,100	200	0.0%
40-60	2	7.38	1,199	109	0.0%
60-90	2	2.88	468	46	0.0%
90-100	0	0.94	152	No Data	No Data

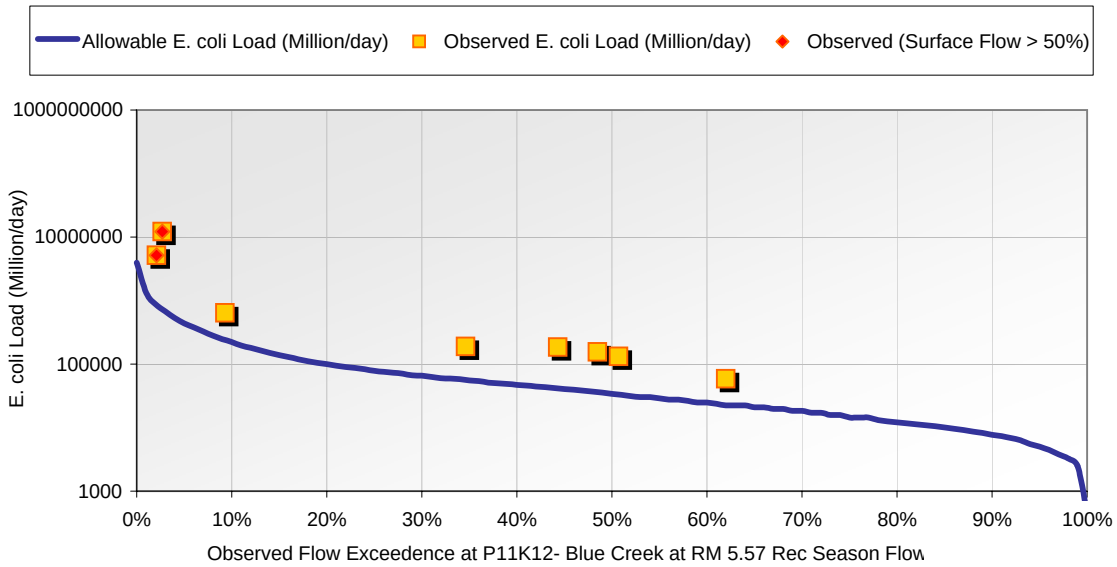
[50: E. coli at P11K12 (MPN/100mL)] -vs- [41: Flow at P11K12- Blue Creek at RM 5.57 Rec Season Flow (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

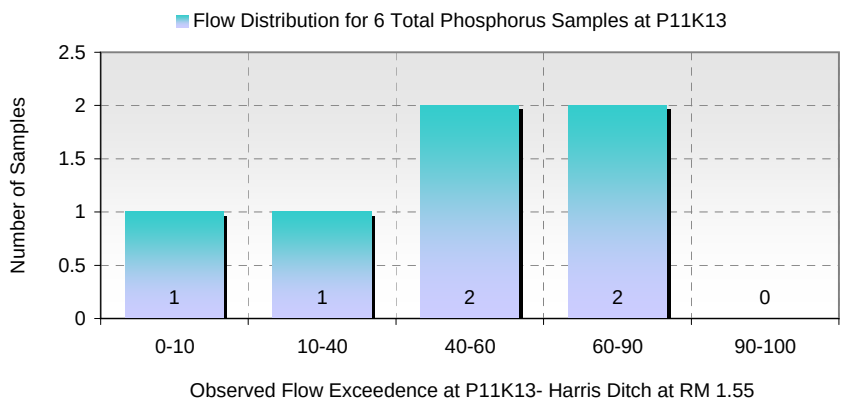


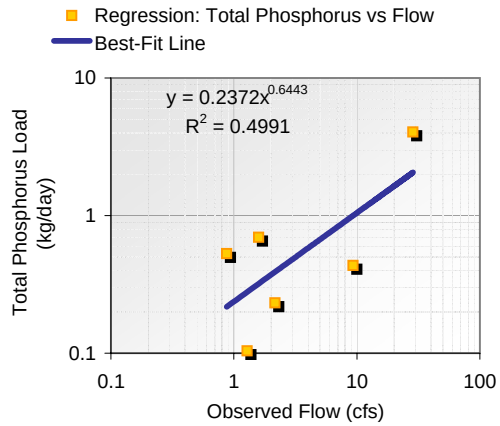
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	8-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Median Load (Million/day)	Estimated Reduction (%)
0-10	3	60.12	438,323	5,136,637	91.5%
10-40	1	10.80	78,741	188,662	58.3%
40-60	3	4.68	34,121	154,577	77.9%
60-90	1	1.98	14,436	58,770	75.4%
90-100	0	0.68	4,987	No Data	No Data

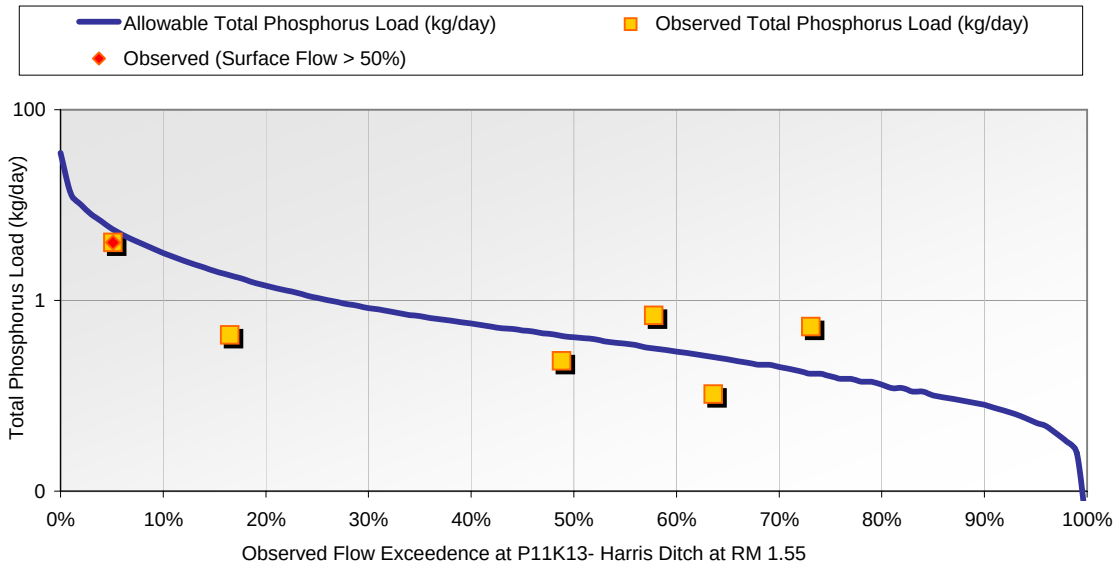
[55: Total Phosphorus at P11K13 (mg/L)] -vs- [15: Flow at P11K13- Harris Ditch at RM 1.55 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

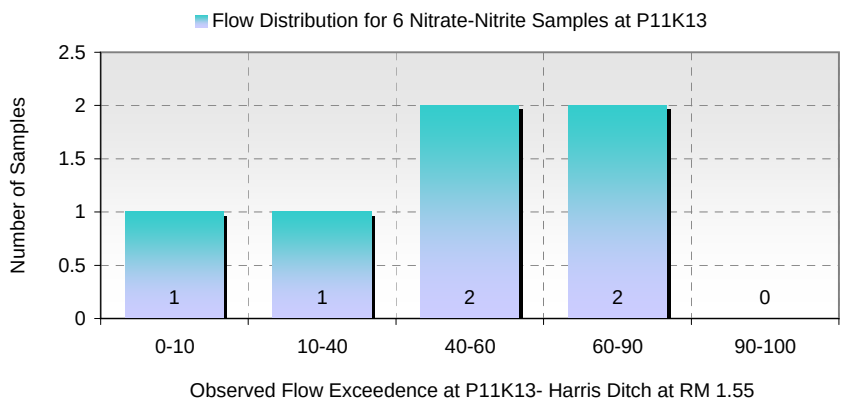


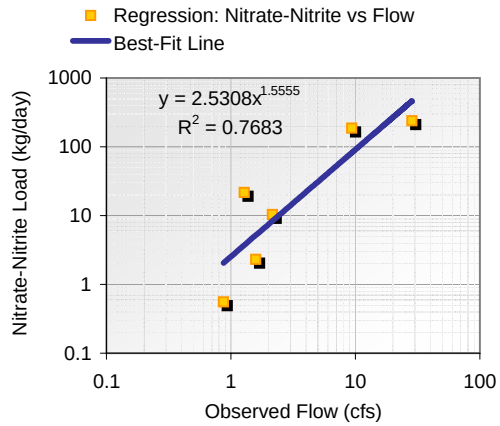
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	28.75	5.63	4.05	0.0%
10-40	1	5.44	1.07	0.43	0.0%
40-60	2	2.10	0.41	0.46	10.9%
60-90	2	0.82	0.16	0.32	49.2%
90-100	0	0.27	0.05	No Data	No Data

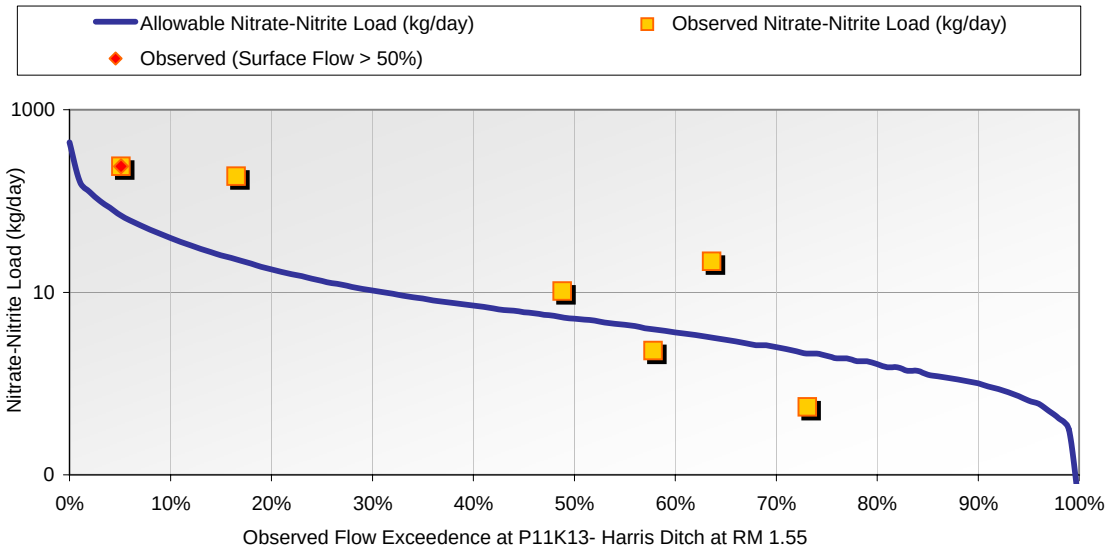
[54: Nitrate-Nitrite at P11K13 (mg/L)] -vs- [15: Flow at P11K13- Harris Ditch at RM 1.55 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

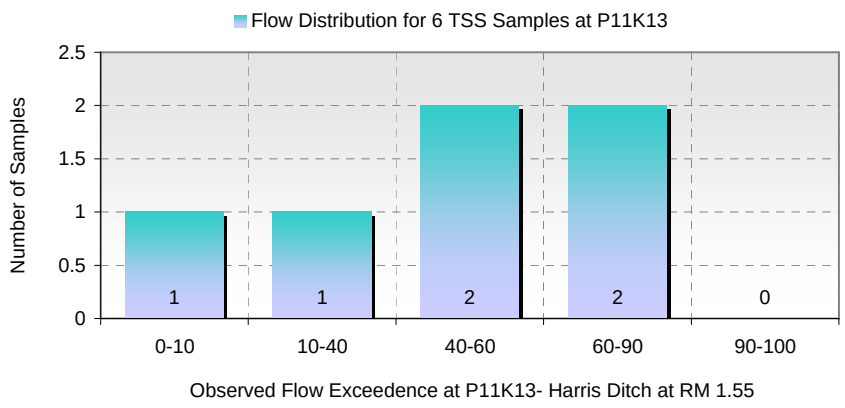


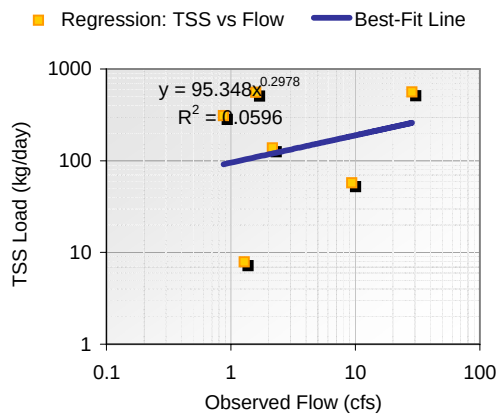
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	28.75	70.3	238.8	70.5%
10-40	1	5.44	13.3	186.1	92.8%
40-60	2	2.10	5.1	6.3	18.2%
60-90	2	0.82	2.0	11.1	82.0%
90-100	0	0.27	0.7	No Data	No Data

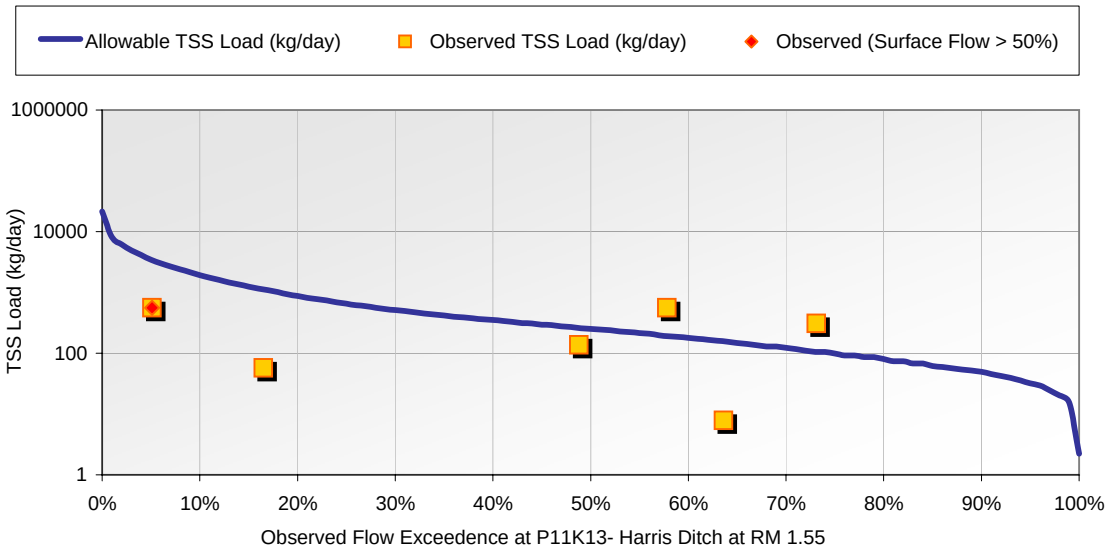
[56: TSS at P11K13 (mg/L)] -vs- [15: Flow at P11K13- Harris Ditch at RM 1.55 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

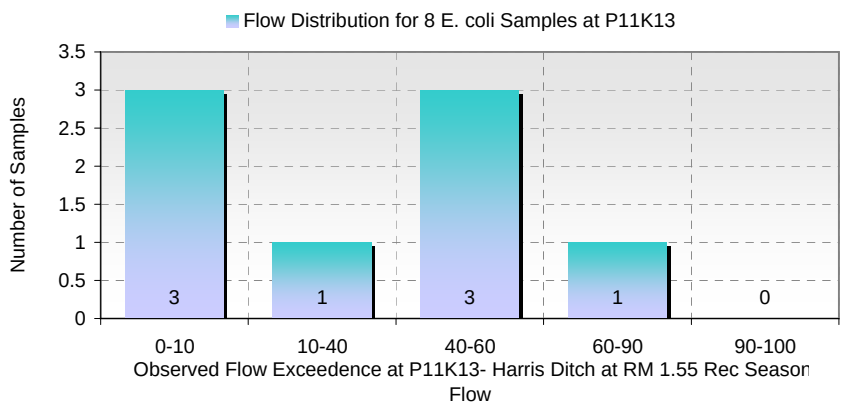


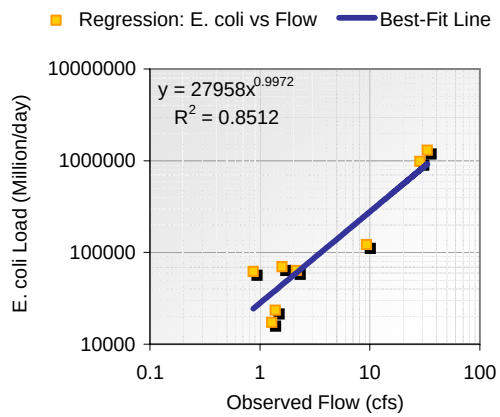
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	28.75	3,446	559	0.0%
10-40	1	5.44	652	57	0.0%
40-60	2	2.10	252	347	27.3%
60-90	2	0.82	98	159	38.0%
90-100	0	0.27	32	No Data	No Data

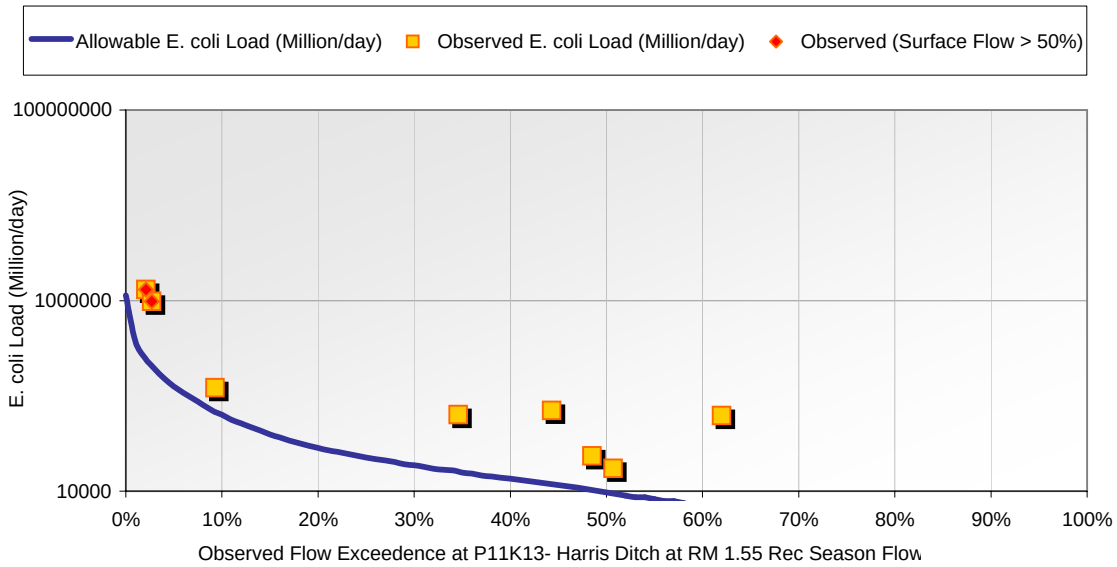
[57: E. coli at P11K13 (MPN/100mL)] -vs- [43: Flow at P11K13- Harris Ditch at RM 1.55 Rec Season Flow (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

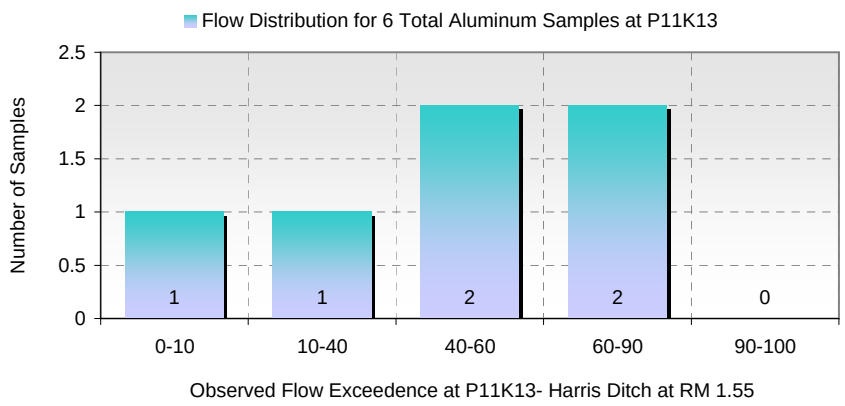


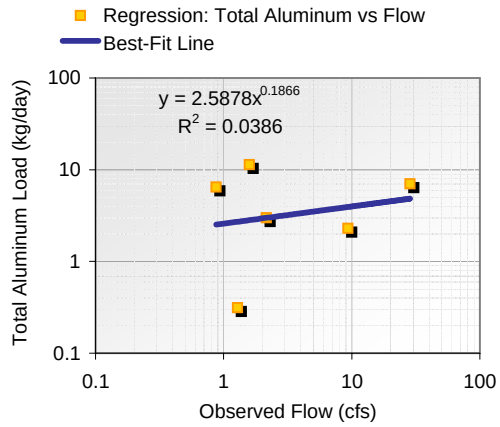
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	8-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Median Load (Million/day)	Estimated Reduction (%)
0-10	3	17.15	125,003	977,600	87.2%
10-40	1	3.08	22,456	63,298	64.5%
40-60	3	1.33	9,731	23,398	58.4%
60-90	1	0.56	4,117	61,918	93.4%
90-100	0	0.20	1,422	No Data	No Data

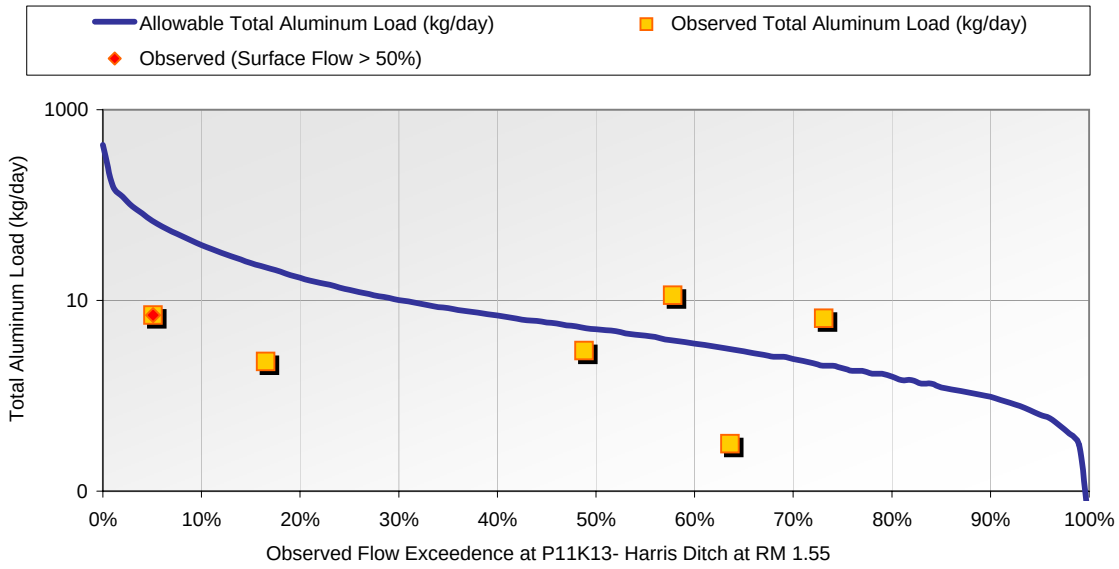
[58: Total Aluminum at P11K13 (µg/L)] -vs- [15: Flow at P11K13- Harris Ditch at RM 1.55 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

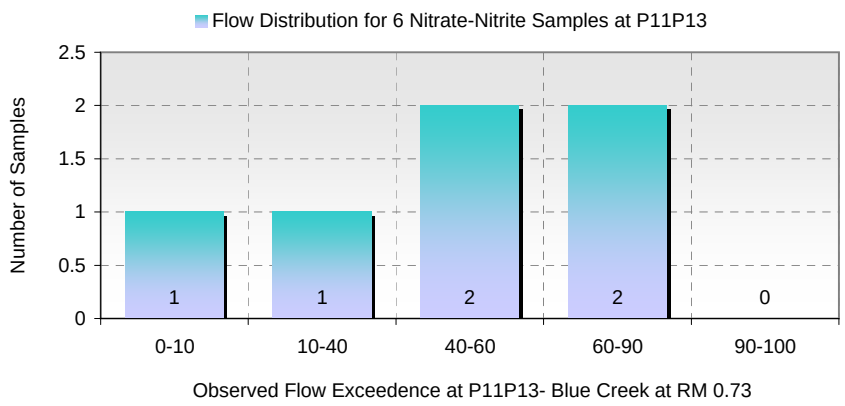


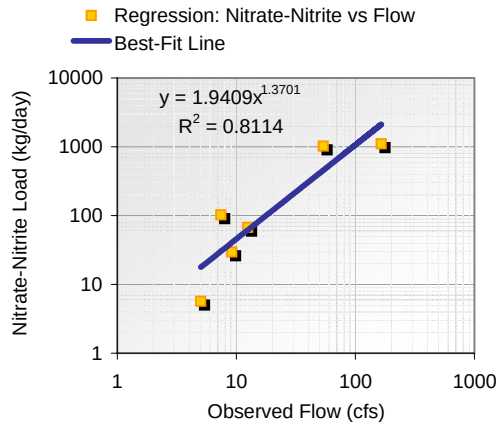
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	28.75	68	7	0.0%
10-40	1	5.44	13	2	0.0%
40-60	2	2.10	5	7	30.2%
60-90	2	0.82	2	3	42.5%
90-100	0	0.27	1	No Data	No Data

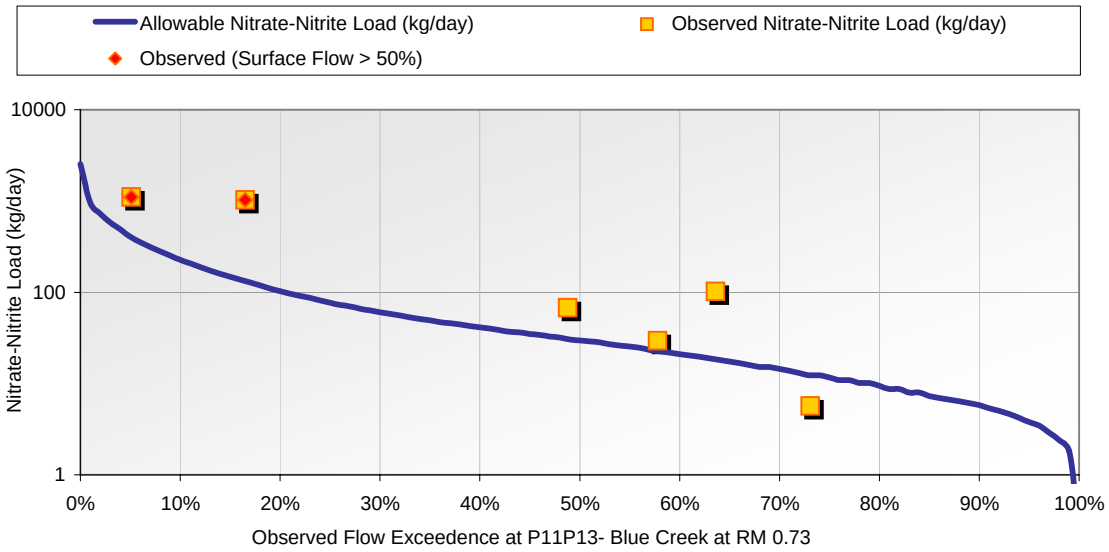
[51: Nitrate-Nitrite at P11P13 (mg/L)] -vs- [14: Flow at P11P13- Blue Creek at RM 0.73 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

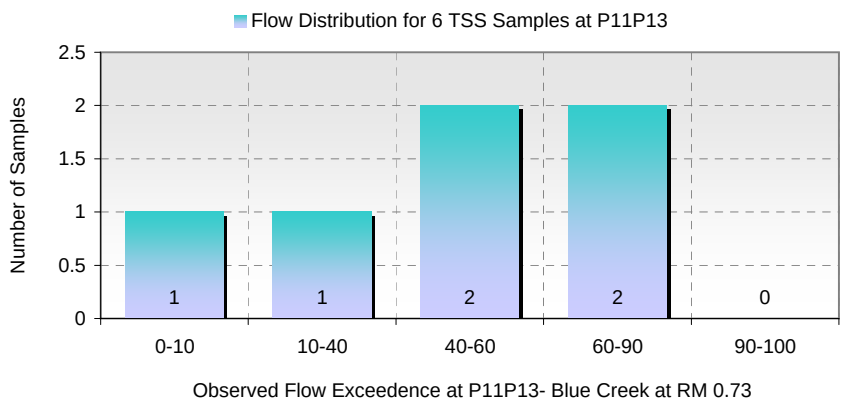


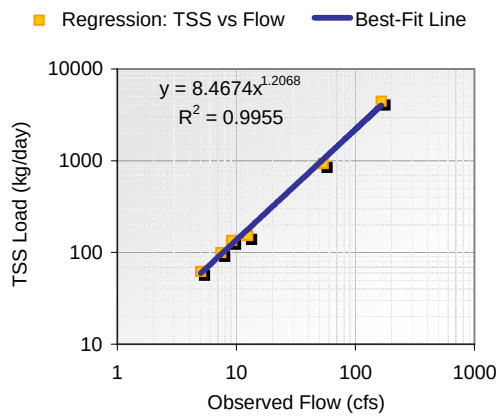
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	166.13	406.5	1105.7	63.2%
10-40	1	31.45	76.9	1025.1	92.5%
40-60	2	12.16	29.8	48.4	38.5%
60-90	2	4.75	11.6	53.9	78.5%
90-100	0	1.54	3.8	No Data	No Data

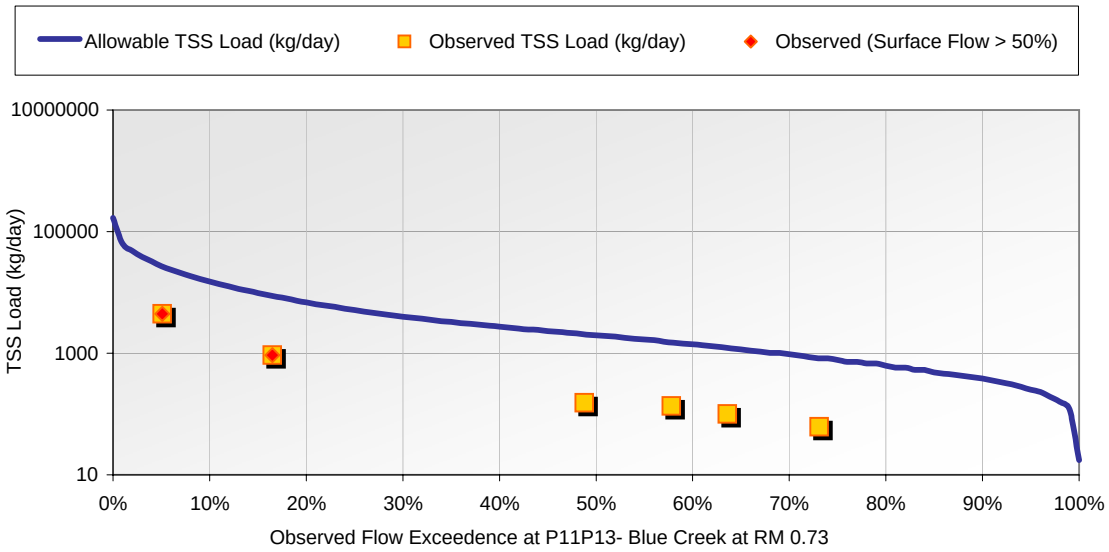
[52: TSS at P11P13 (mg/L)] -vs- [14: Flow at P11P13- Blue Creek at RM 0.73 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

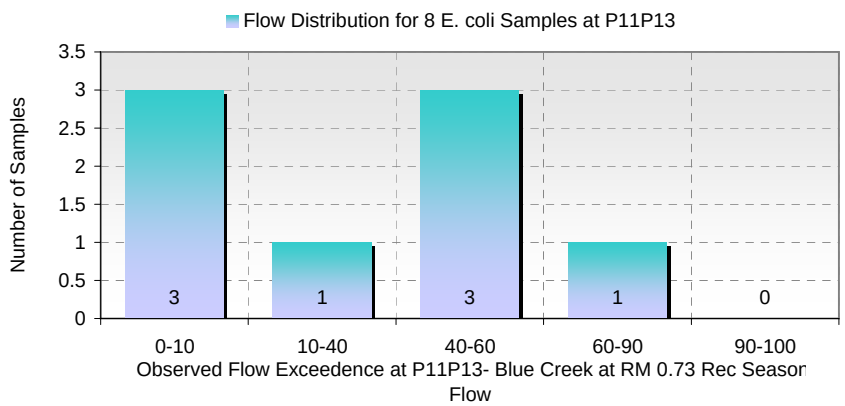


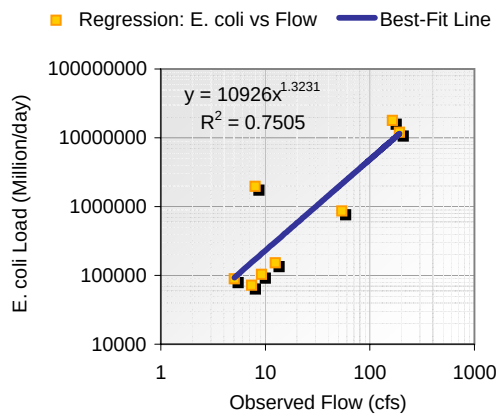
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	166.13	26,989	4,439	0.0%
10-40	1	31.45	5,109	925	0.0%
40-60	2	12.16	1,976	144	0.0%
60-90	2	4.75	771	81	0.0%
90-100	0	1.54	251	No Data	No Data

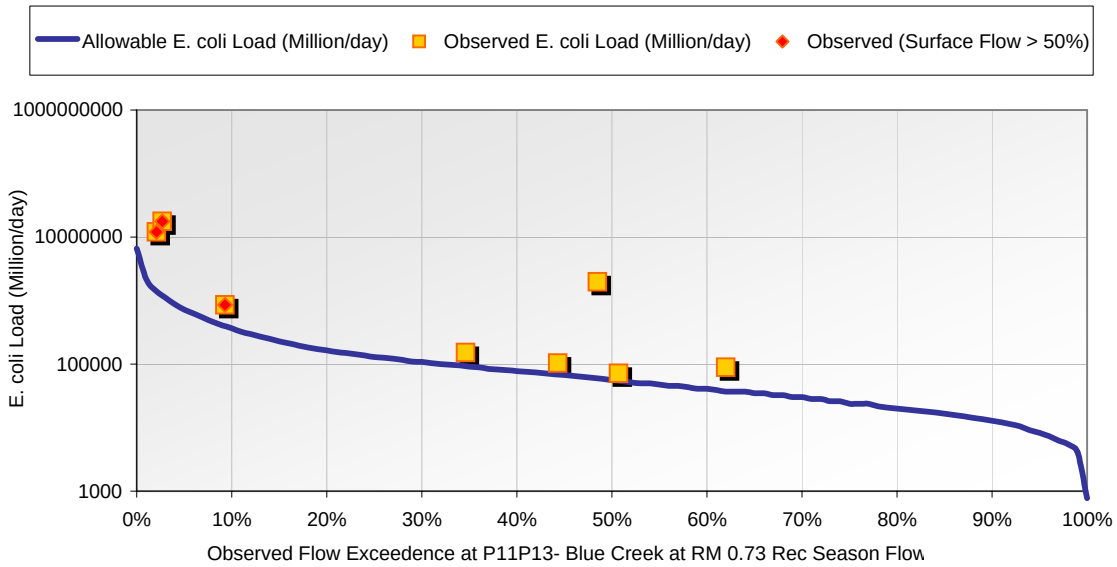
[53: E. coli at P11P13 (MPN/100mL)] -vs- [42: Flow at P11P13- Blue Creek at RM 0.73 Rec Season Flow (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

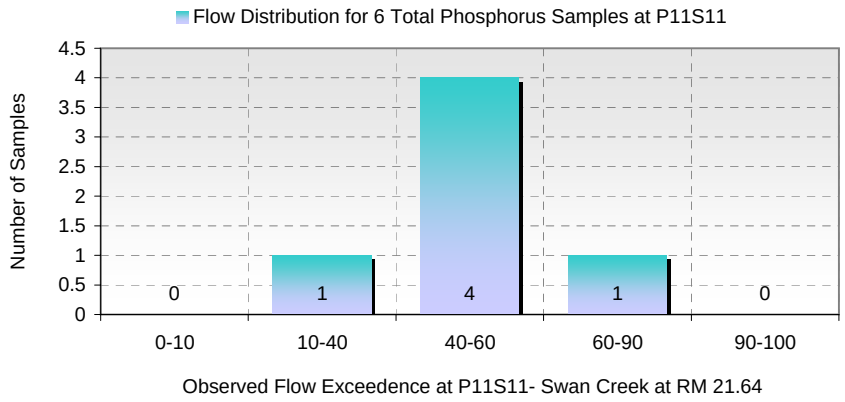


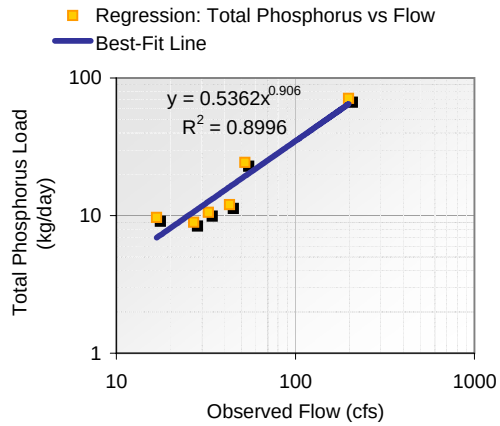
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	8-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Median Load (Million/day)	Estimated Reduction (%)
0-10	3	99.09	722,421	11,993,414	94.0%
10-40	1	17.80	129,777	152,423	14.9%
40-60	3	7.71	56,237	103,503	45.7%
60-90	1	3.26	23,793	88,842	73.2%
90-100	0	1.13	8,220	No Data	No Data

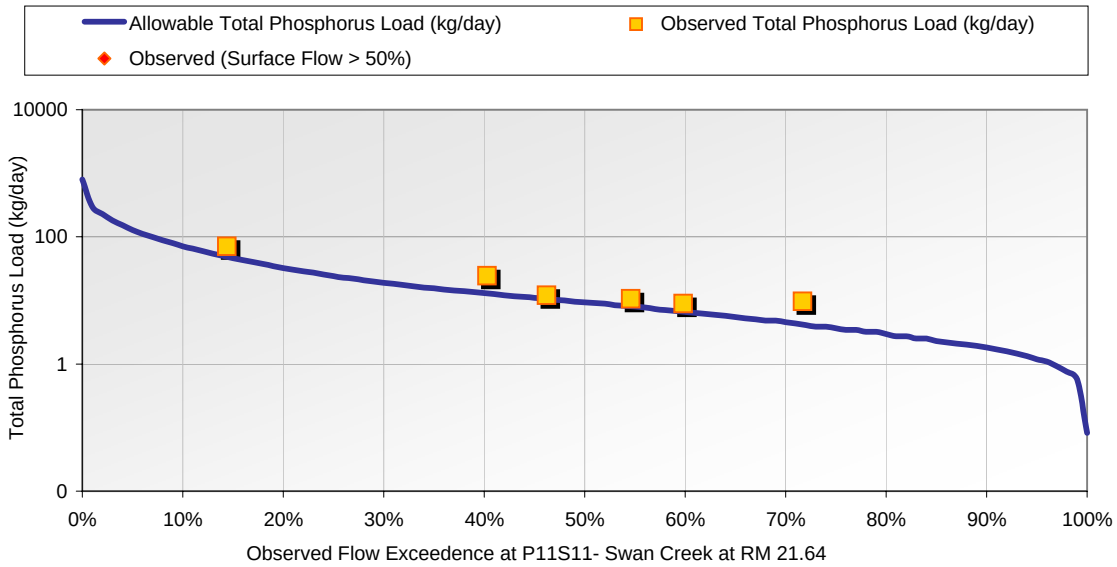
[60: Total Phosphorus at P11S11 (mg/L)] -vs- [16: Flow at P11S11- Swan Creek at RM 21.64 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

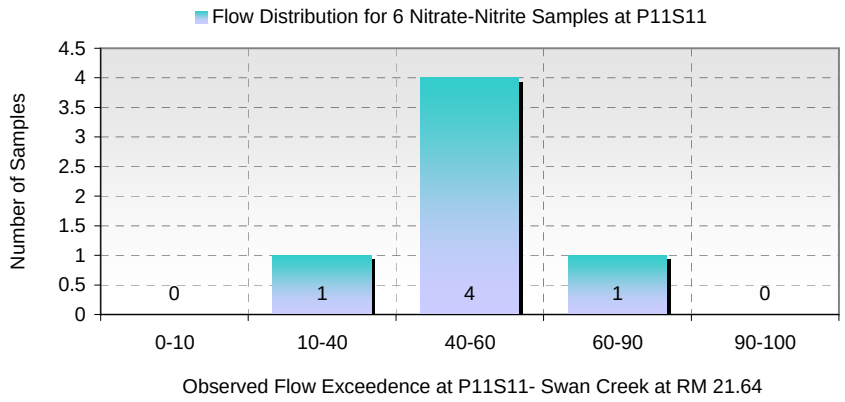


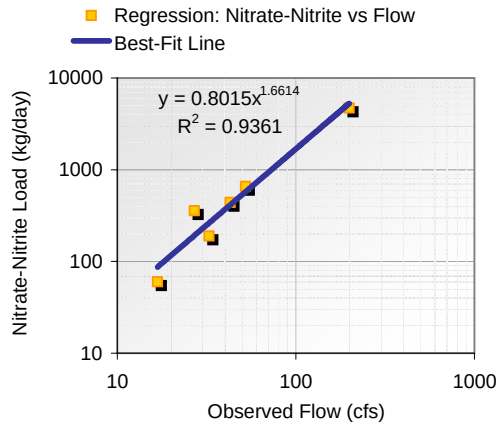
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	0	522.67	127.87	No Data	No Data
10-40	1	98.93	24.20	71.01	65.9%
40-60	4	38.27	9.36	11.26	16.9%
60-90	1	14.93	3.65	9.66	62.2%
90-100	0	4.85	1.19	No Data	No Data

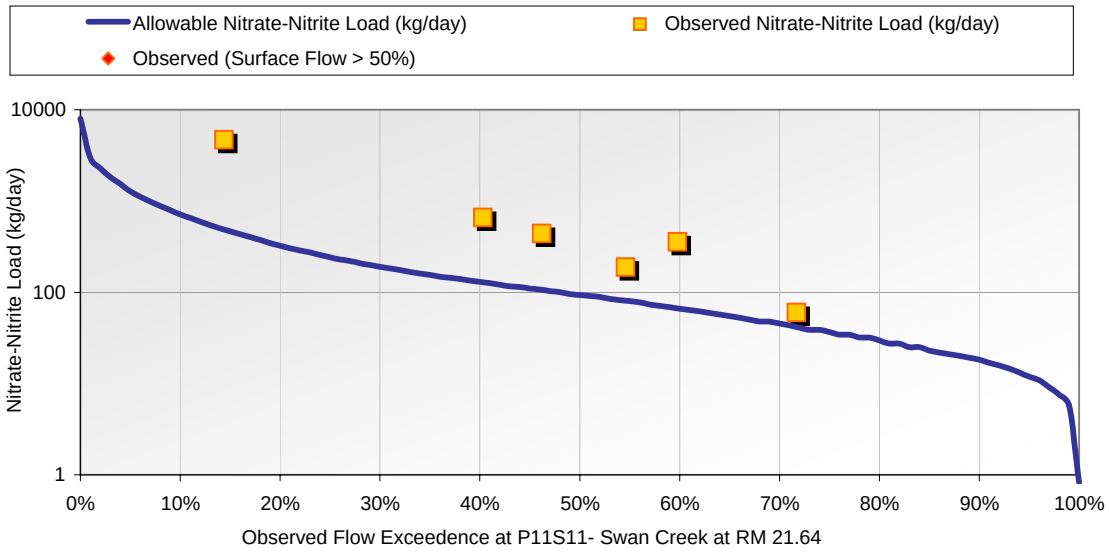
[59: Nitrate-Nitrite at P11S11 (mg/L)] -vs- [16: Flow at P11S11- Swan Creek at RM 21.64 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

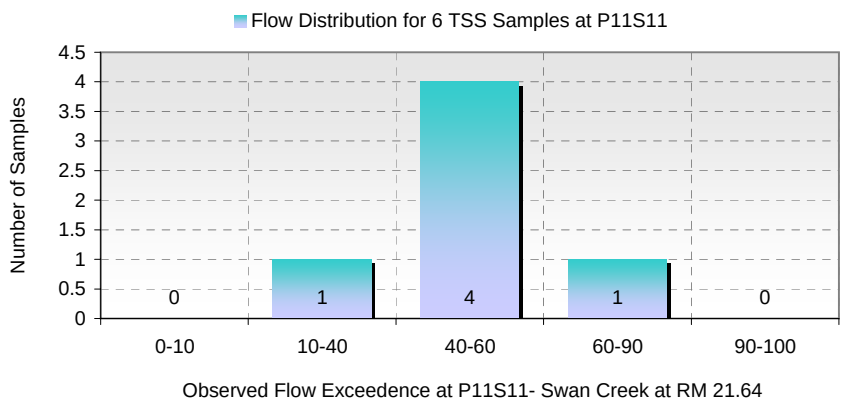


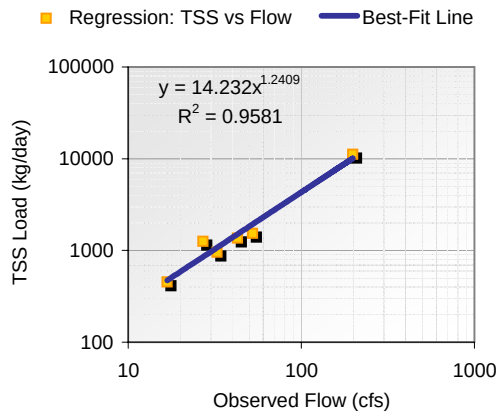
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	0	522.67	1278.7	No Data	No Data
10-40	1	98.93	242.0	4693.6	94.8%
40-60	4	38.27	93.6	398.9	76.5%
60-90	1	14.93	36.5	60.0	39.1%
90-100	0	4.85	11.9	No Data	No Data

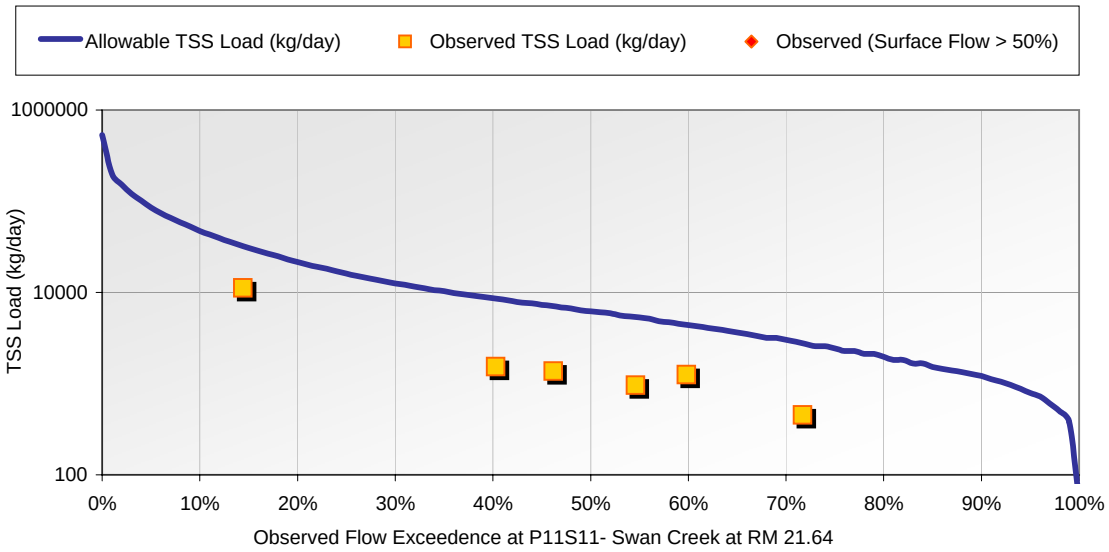
[61: TSS at P11S11 (mg/L)] -vs- [16: Flow at P11S11- Swan Creek at RM 21.64 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

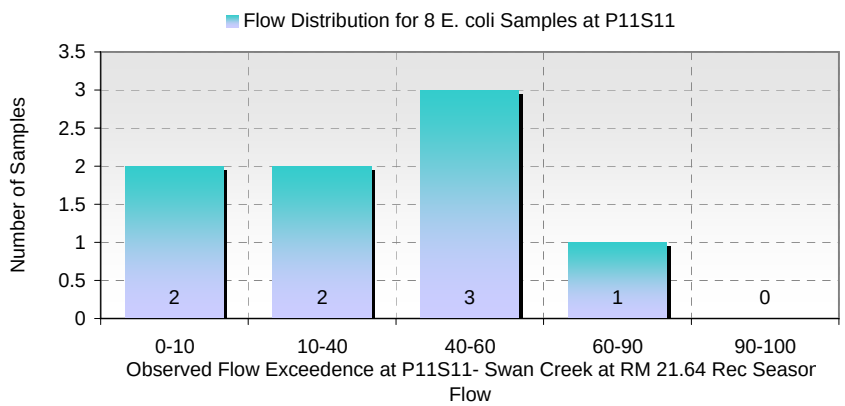


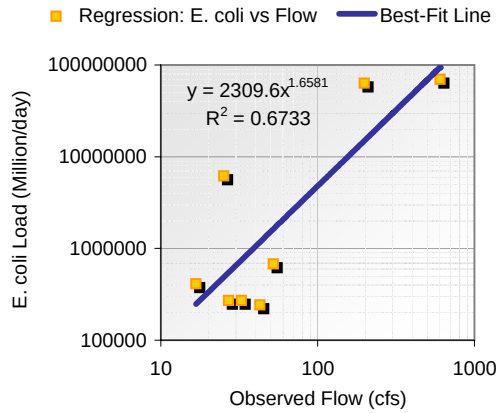
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	0	522.67	84,909	No Data	No Data
10-40	1	98.93	16,072	11,187	0.0%
40-60	4	38.27	6,217	1,312	0.0%
60-90	1	14.93	2,426	452	0.0%
90-100	0	4.85	788	No Data	No Data

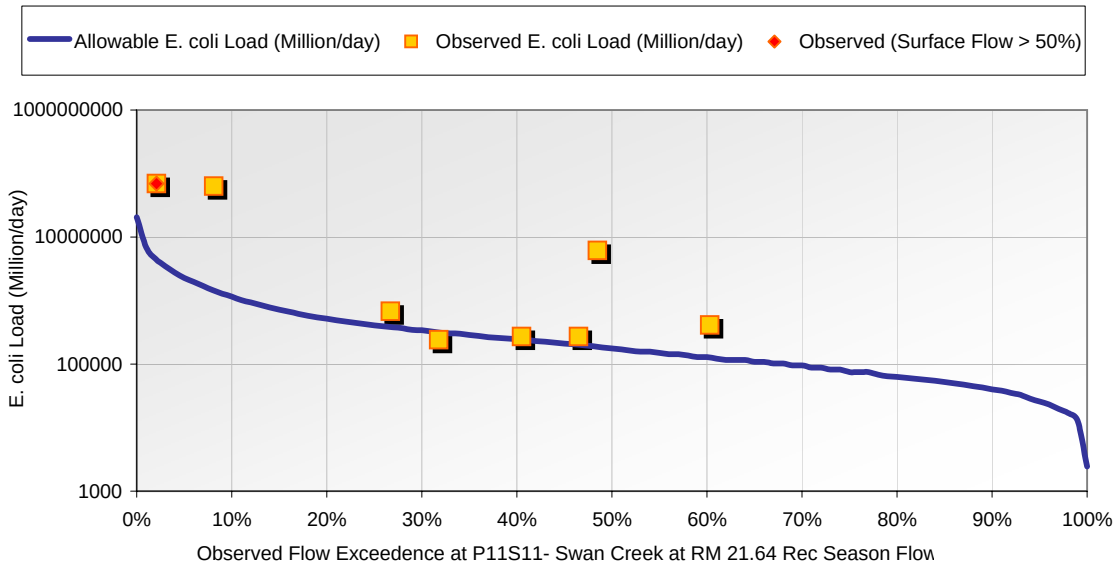
[62: E. coli at P11S11 (MPN/100mL)] -vs- [44: Flow at P11S11- Swan Creek at RM 21.64 Rec Season Flow (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

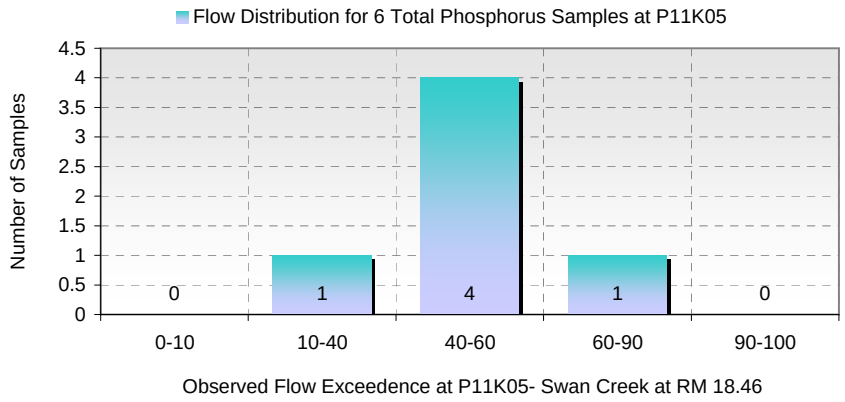


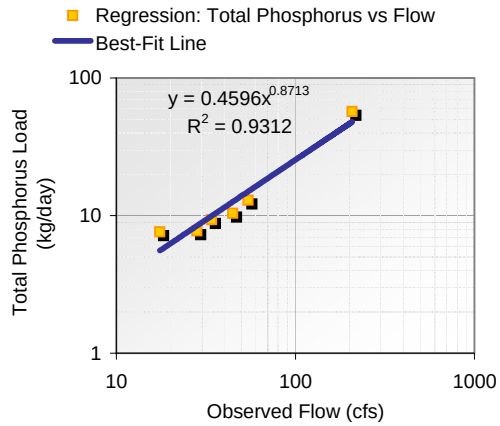
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	8-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Median Load (Million/day)	Estimated Reduction (%)
0-10	2	311.73	2,272,786	66,387,410	96.6%
10-40	2	56.00	408,286	459,666	11.2%
40-60	3	24.27	176,925	271,736	34.9%
60-90	1	10.27	74,854	411,033	81.8%
90-100	0	3.55	25,860	No Data	No Data

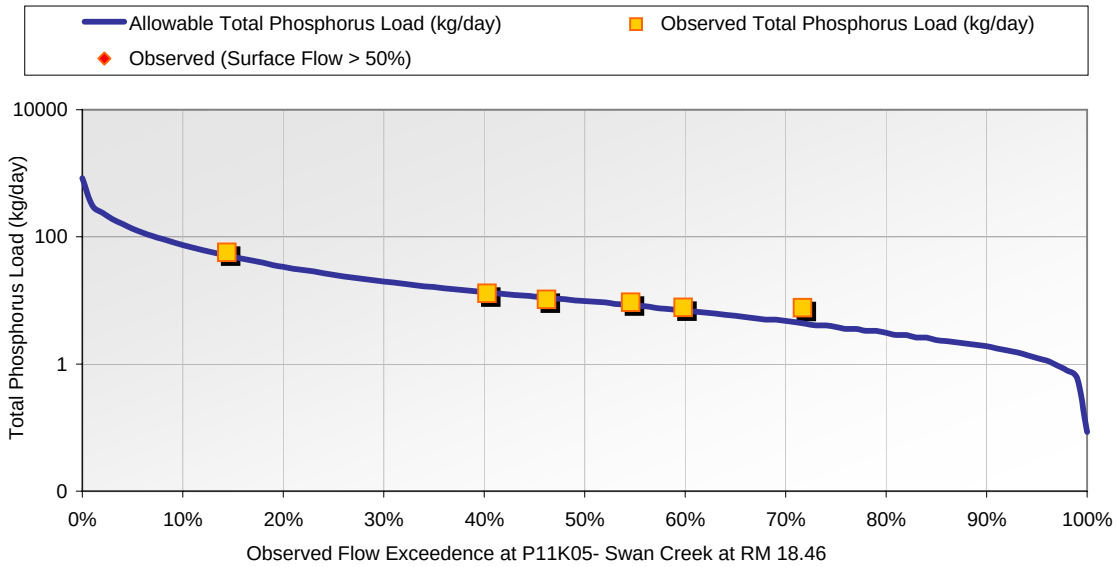
[64: Total Phosphorus at P11K05 (mg/L)] -vs- [17: Flow at P11K05- Swan Creek at RM 18.46 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

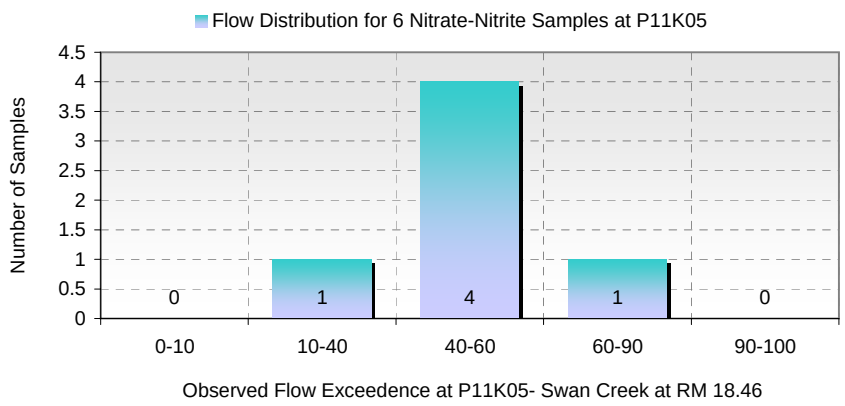


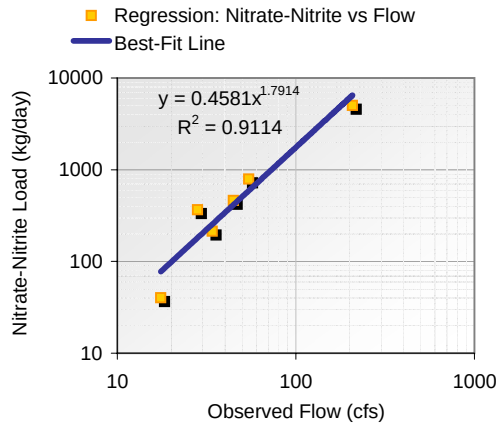
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	0	545.07	133.35	No Data	No Data
10-40	1	103.17	25.24	57.06	55.8%
40-60	4	39.91	9.76	9.87	1.1%
60-90	1	15.57	3.81	7.63	50.1%
90-100	0	5.06	1.24	No Data	No Data

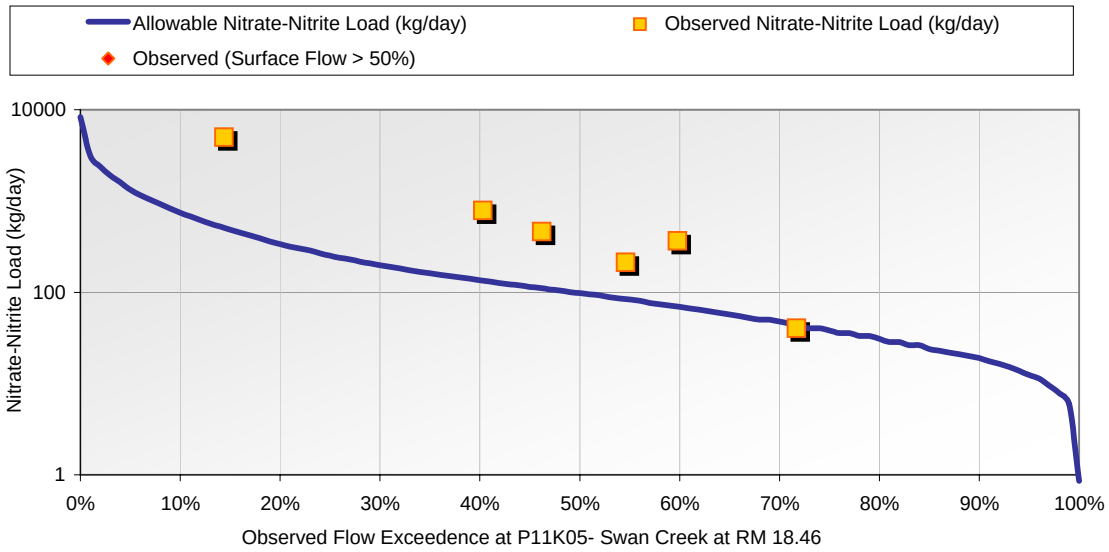
[63: Nitrate-Nitrite at P11K05 (mg/L)] -vs- [17: Flow at P11K05- Swan Creek at RM 18.46 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

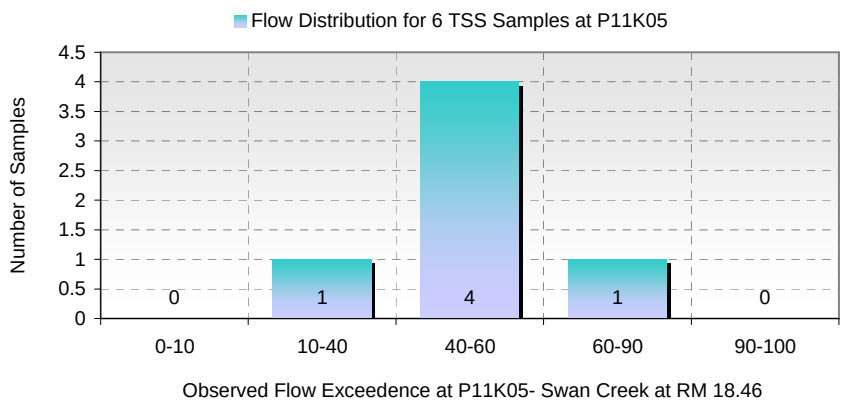


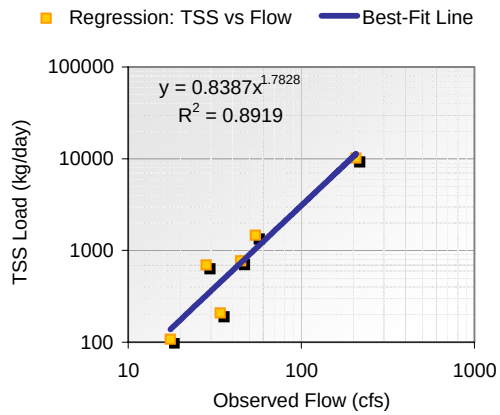
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	0	545.07	1333.5	No Data	No Data
10-40	1	103.17	252.4	4998.7	95.0%
40-60	4	39.91	97.6	413.6	76.4%
60-90	1	15.57	38.1	40.3	5.4%
90-100	0	5.06	12.4	No Data	No Data

[65: TSS at P11K05 (mg/L)] -vs- [17: Flow at P11K05- Swan Creek at RM 18.46 (cfs)]

1. Data Assessment and Trend Confirmation





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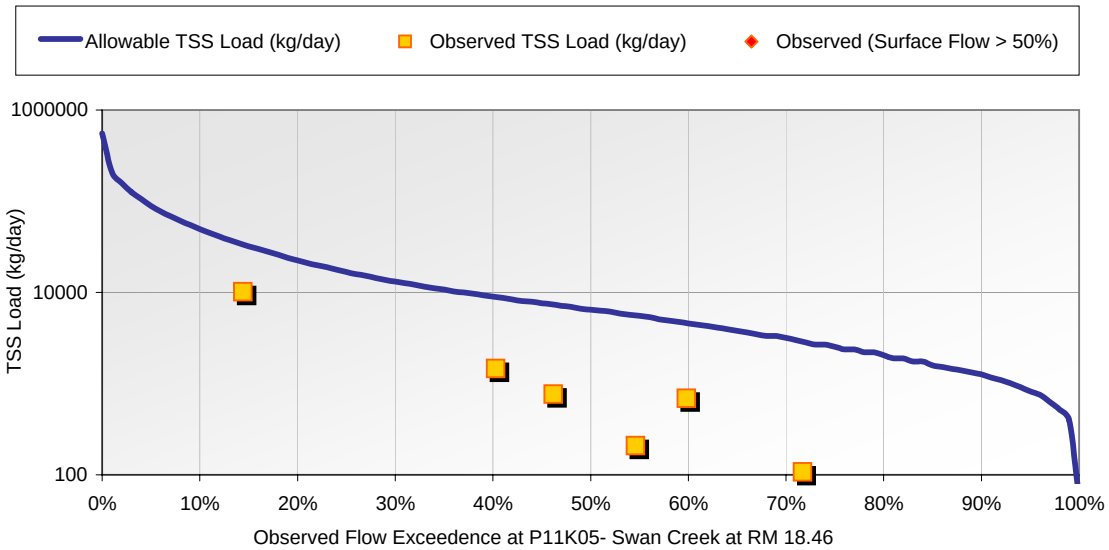
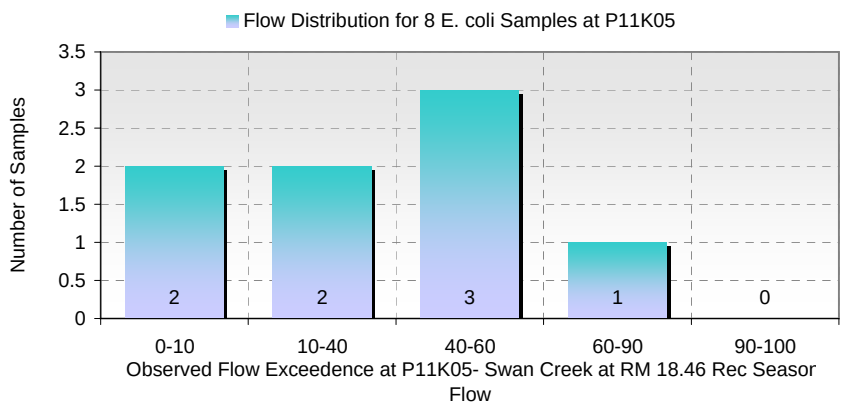


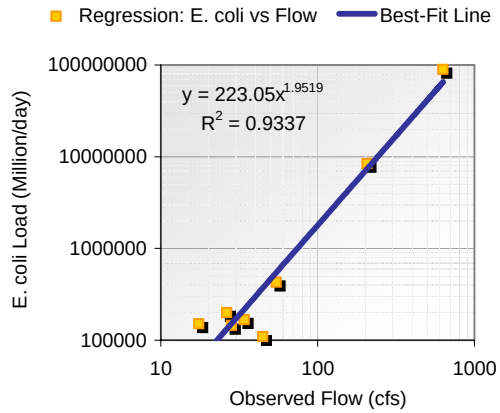
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	0	545.07	88,548	No Data	No Data
10-40	1	103.17	16,761	10,144	0.0%
40-60	4	39.91	6,483	729	0.0%
60-90	1	15.57	2,530	107	0.0%
90-100	0	5.06	822	No Data	No Data

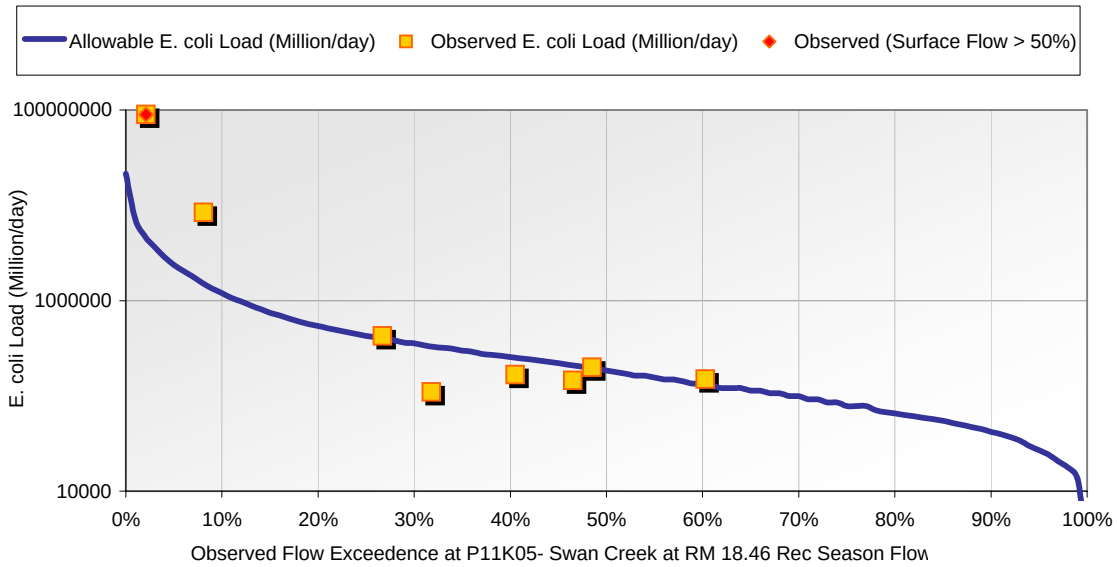
[66: E. coli at P11K05 (MPN/100mL)] -vs- [45: Flow at P11K05- Swan Creek at RM 18.46 Rec Season Flow (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

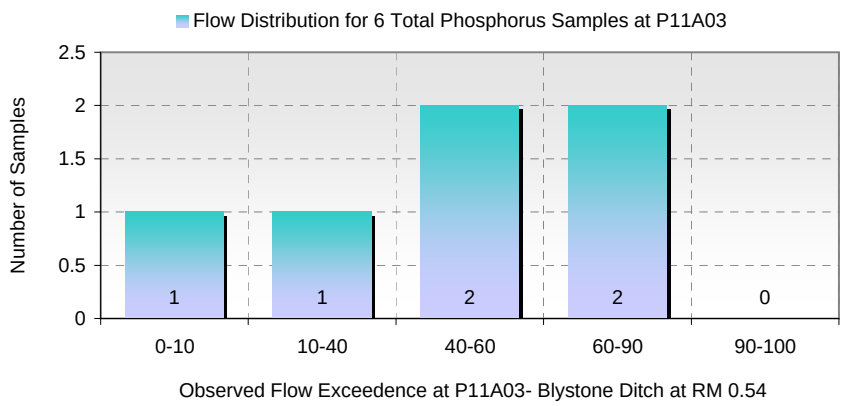


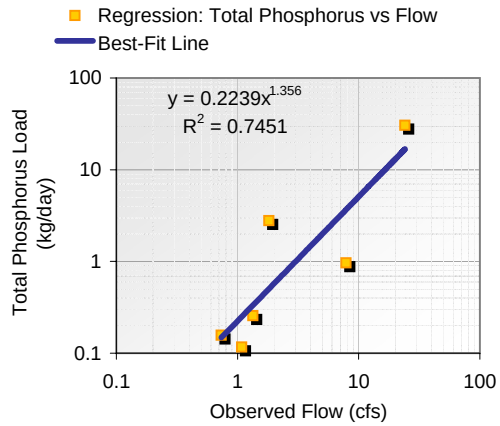
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	8-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Median Load (Million/day)	Estimated Reduction (%)
0-10	2	325.09	2,370,191	48,972,691	95.2%
10-40	2	58.40	425,784	268,140	0.0%
40-60	3	25.31	184,507	166,695	0.0%
60-90	1	10.71	78,062	150,027	48.0%
90-100	0	3.70	26,968	No Data	No Data

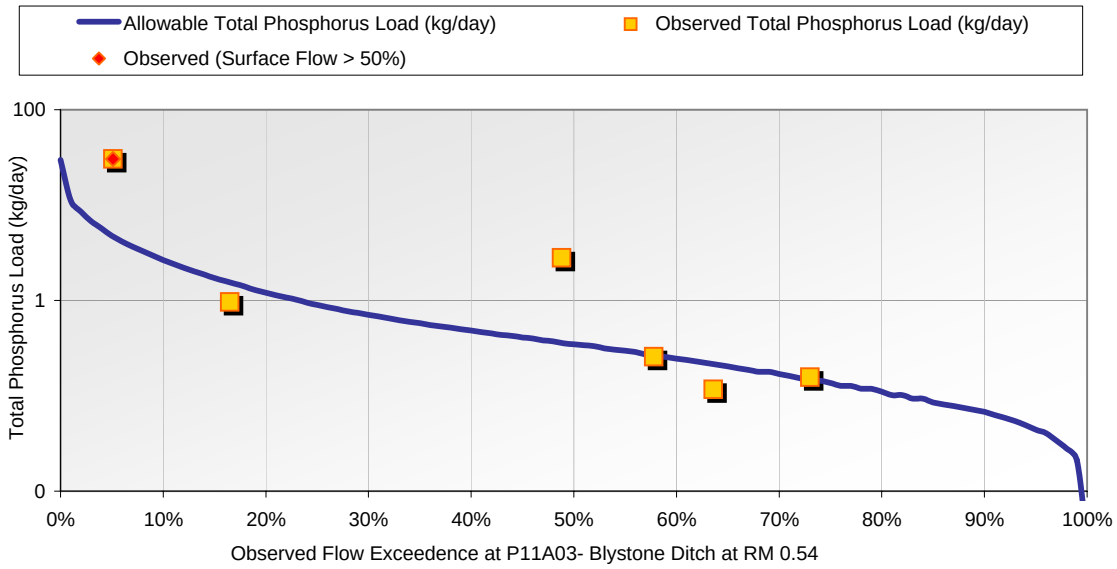
[72: Total Phosphorus at P11A03 (mg/L)] -vs- [19: Flow at P11A03- Blystone Ditch at RM 0.54 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

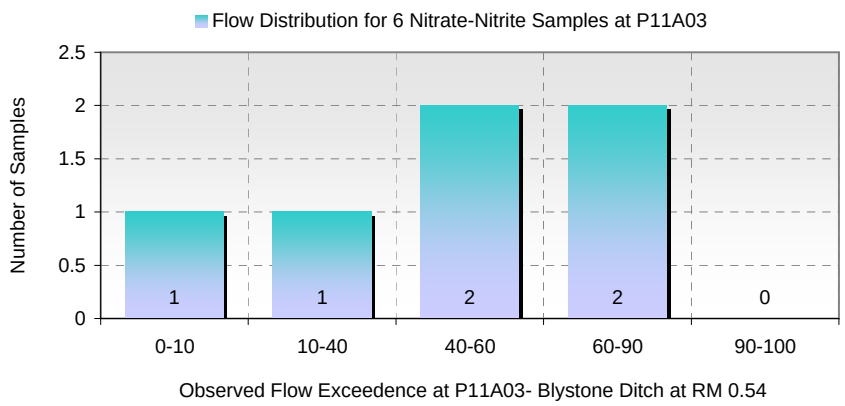


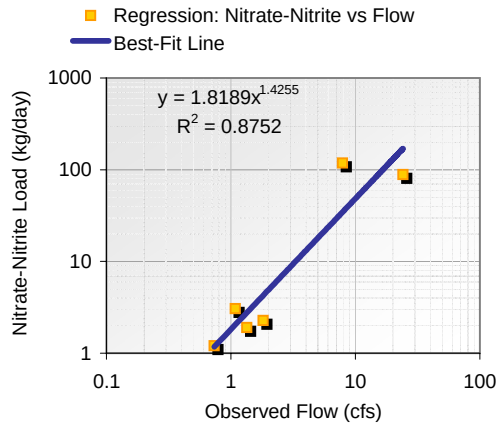
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	24.27	4.75	30.42	84.4%
10-40	1	4.59	0.90	0.96	6.8%
40-60	2	1.78	0.35	1.52	77.2%
60-90	2	0.69	0.14	0.14	0.7%
90-100	0	0.23	0.04	No Data	No Data

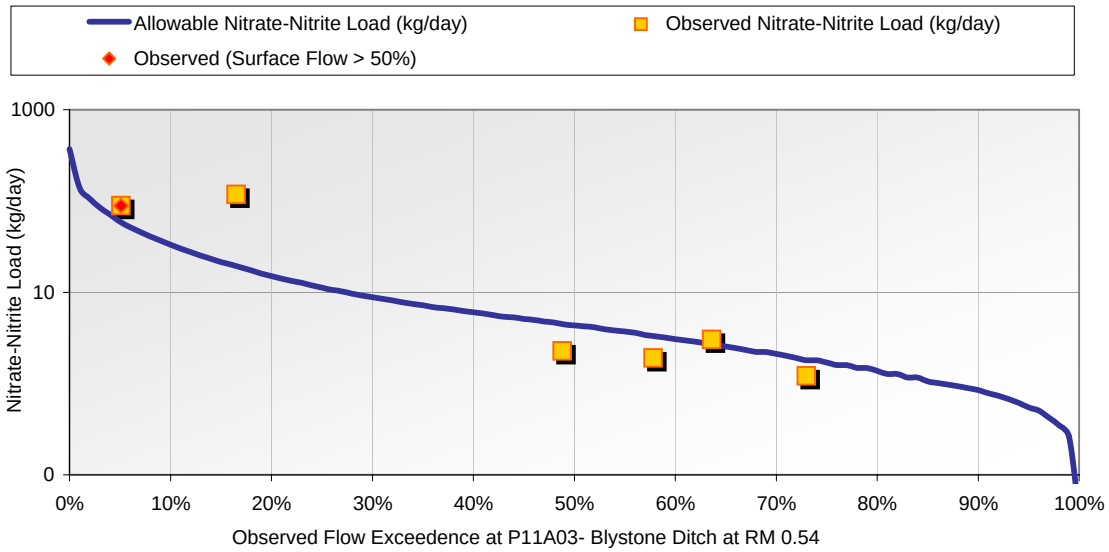
[71: Nitrate-Nitrite at P11A03 (mg/L)] -vs- [19: Flow at P11A03- Blystone Ditch at RM 0.54 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

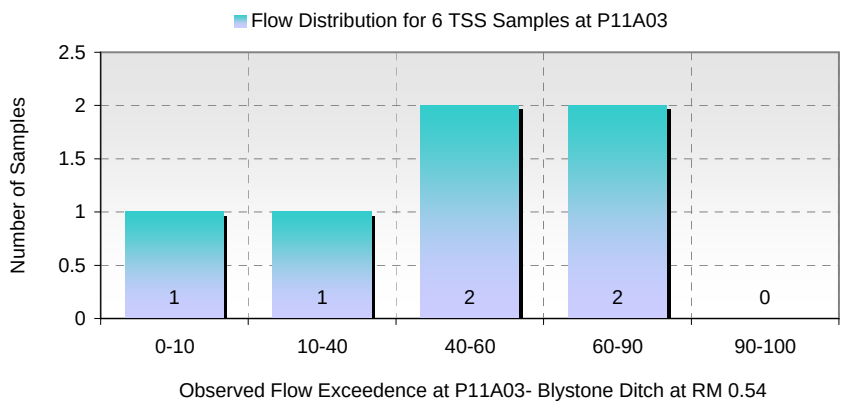


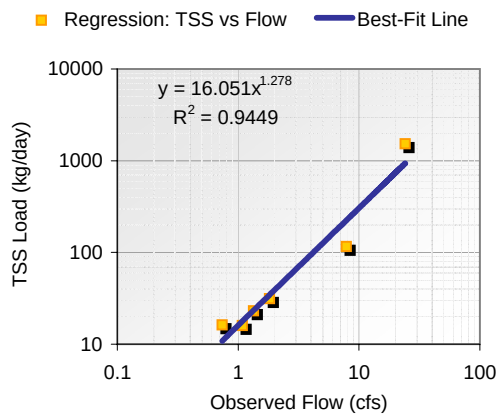
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	24.27	59.4	88.4	32.9%
10-40	1	4.59	11.2	118.1	90.5%
40-60	2	1.78	4.3	2.1	0.0%
60-90	2	0.69	1.7	2.1	20.3%
90-100	0	0.23	0.6	No Data	No Data

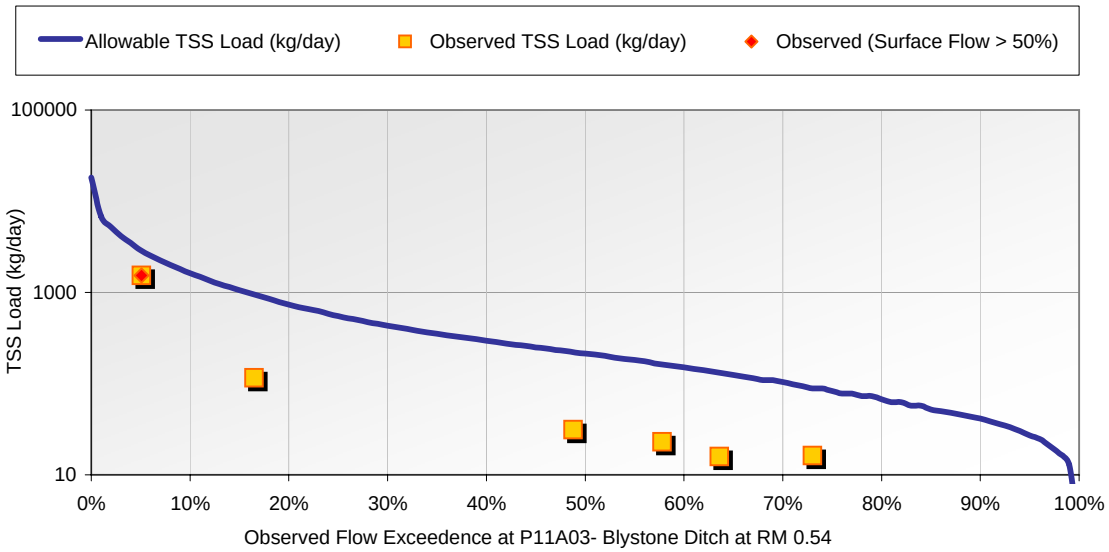
[73: TSS at P11A03 (mg/L)] -vs- [19: Flow at P11A03- Blystone Ditch at RM 0.54 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

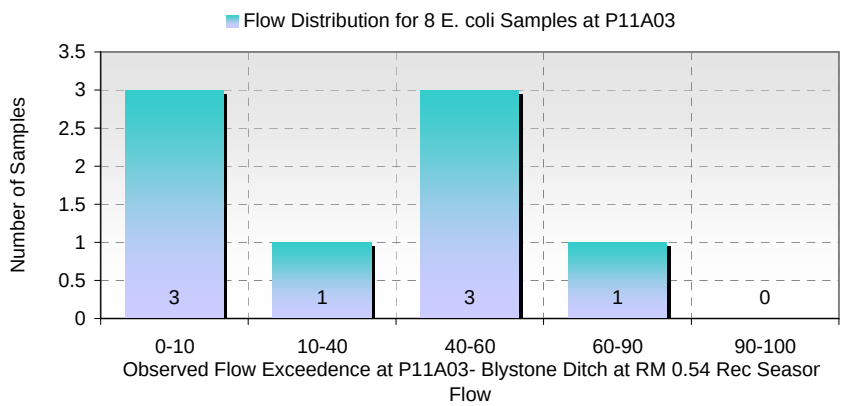


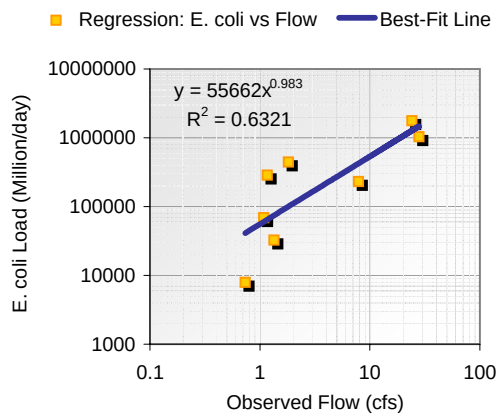
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	24.27	2,909	1,533	0.0%
10-40	1	4.59	551	116	0.0%
40-60	2	1.78	213	27	0.0%
60-90	2	0.69	83	16	0.0%
90-100	0	0.23	27	No Data	No Data

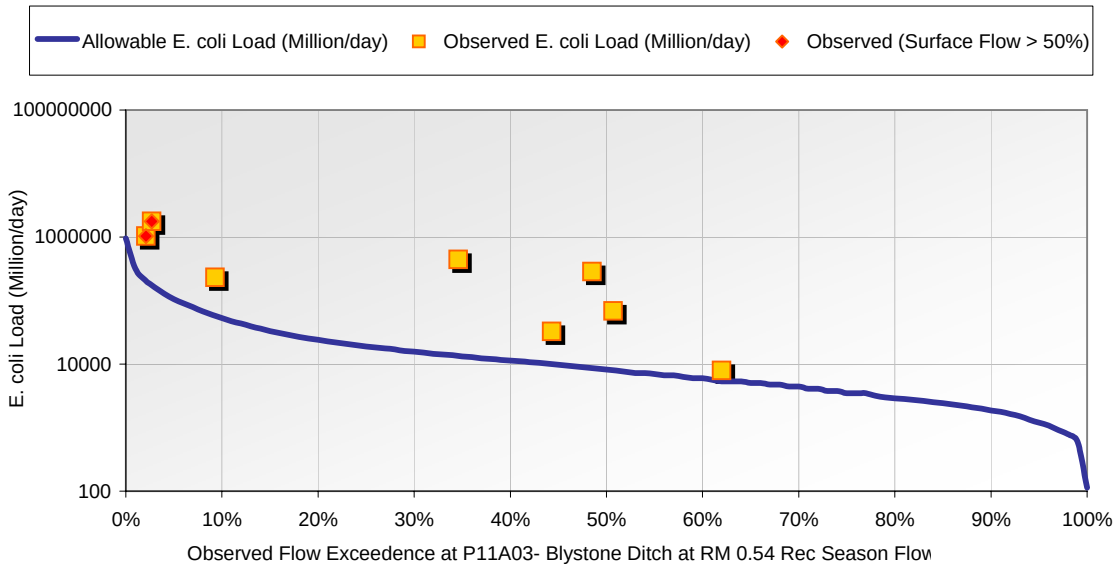
[74: E. coli at P11A03 (MPN/100mL)] -vs- [47: Flow at P11A03- Blystone Ditch at RM 0.54 Rec Season Flow (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

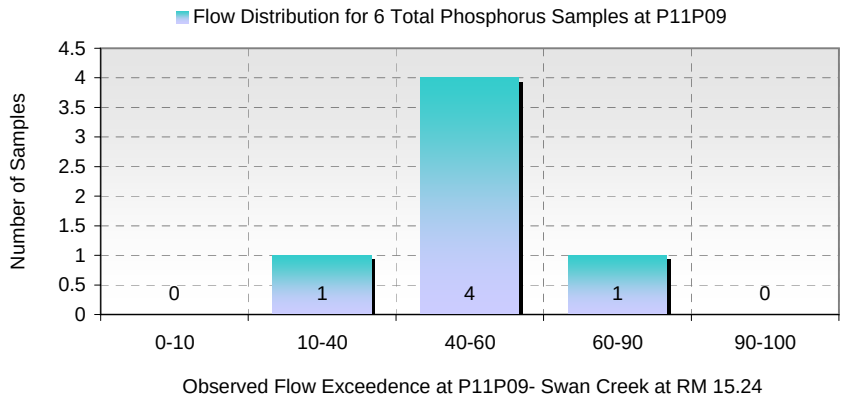


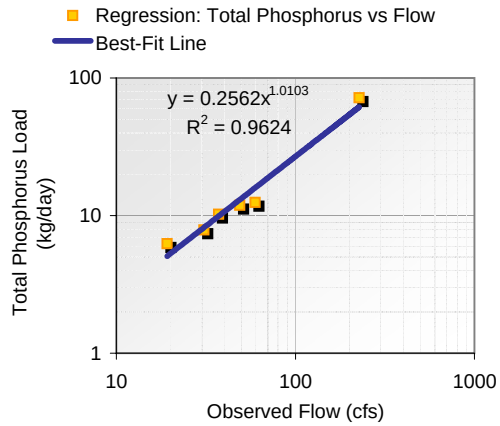
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	8-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Median Load (Million/day)	Estimated Reduction (%)
0-10	3	14.47	105,522	1,030,498	89.8%
10-40	1	2.60	18,956	445,281	95.7%
40-60	3	1.13	8,214	68,913	88.1%
60-90	1	0.48	3,475	7,930	56.2%
90-100	0	0.16	1,201	No Data	No Data

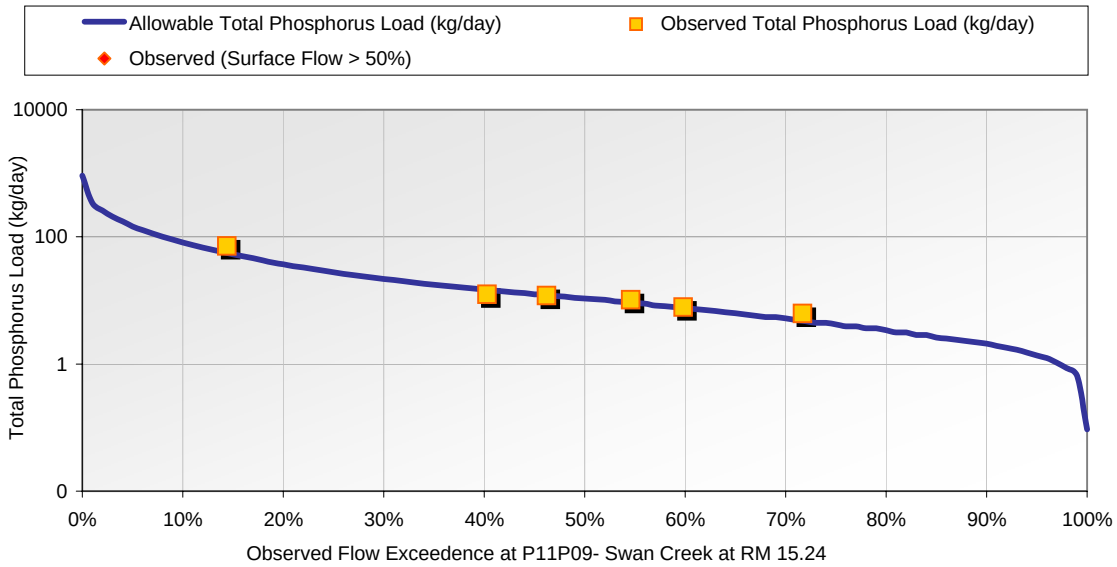
[68: Total Phosphorus at P11P09 (mg/L)] -vs- [18: Flow at P11P09- Swan Creek at RM 15.24 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

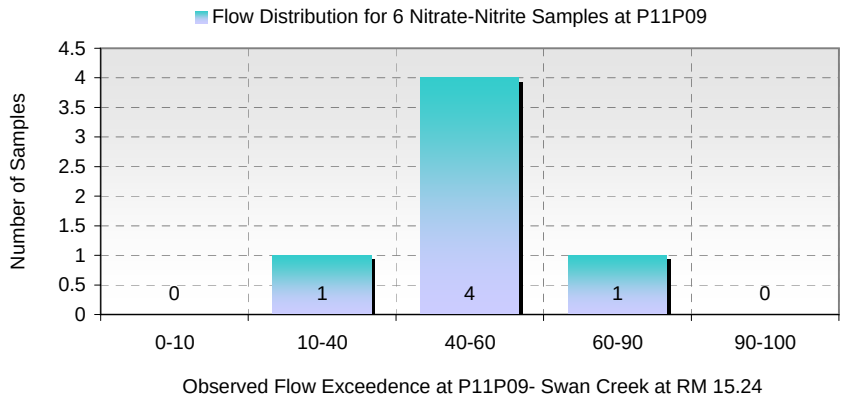


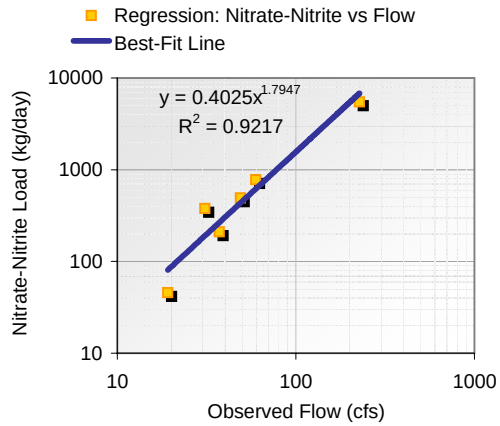
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	0	597.33	146.14	No Data	No Data
10-40	1	113.07	27.66	71.71	61.4%
40-60	4	43.73	10.70	11.06	3.2%
60-90	1	17.07	4.18	6.25	33.2%
90-100	0	5.55	1.36	No Data	No Data

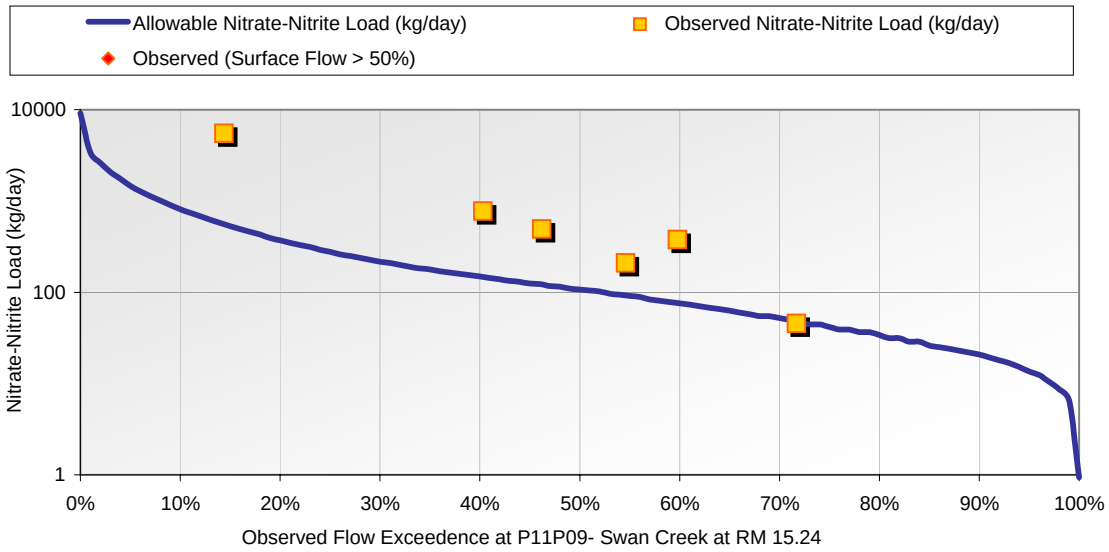
[67: Nitrate-Nitrite at P11P09 (mg/L)] -vs- [18: Flow at P11P09- Swan Creek at RM 15.24 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

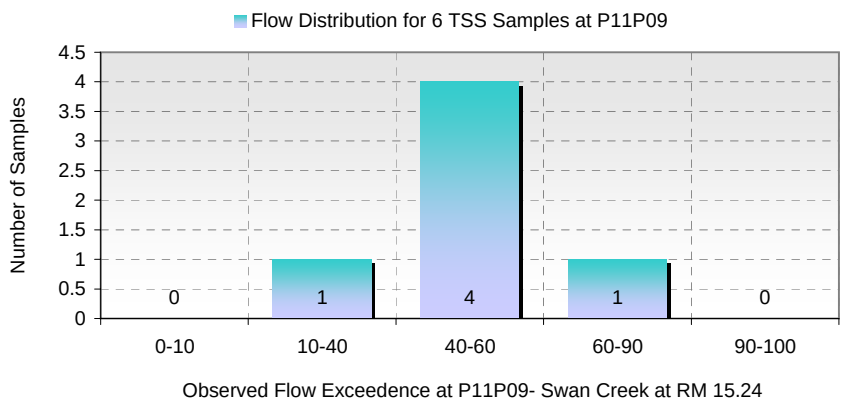


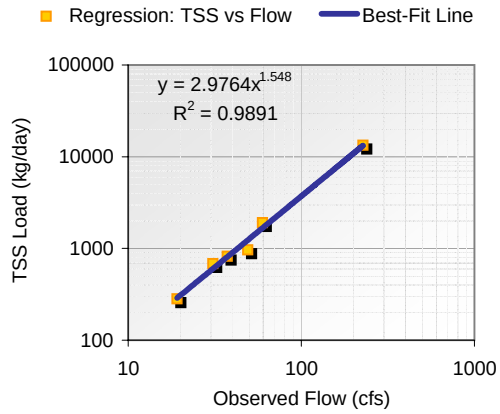
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	0	597.33	1461.4	No Data	No Data
10-40	1	113.07	276.6	5491.9	95.0%
40-60	4	43.73	107.0	435.9	75.5%
60-90	1	17.07	41.8	45.6	8.4%
90-100	0	5.55	13.6	No Data	No Data

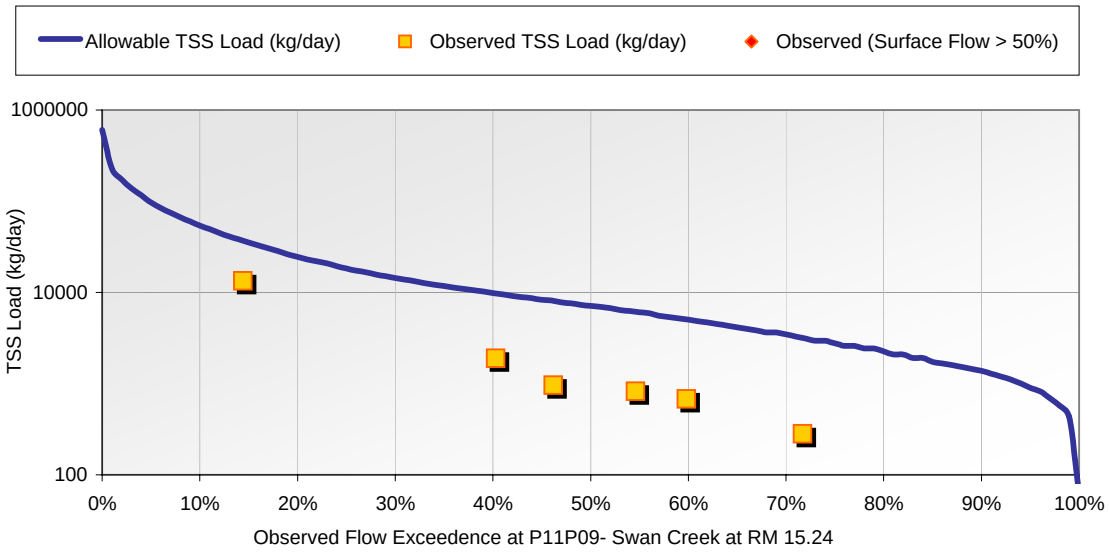
[69: TSS at P11P09 (mg/L)] -vs- [18: Flow at P11P09- Swan Creek at RM 15.24 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

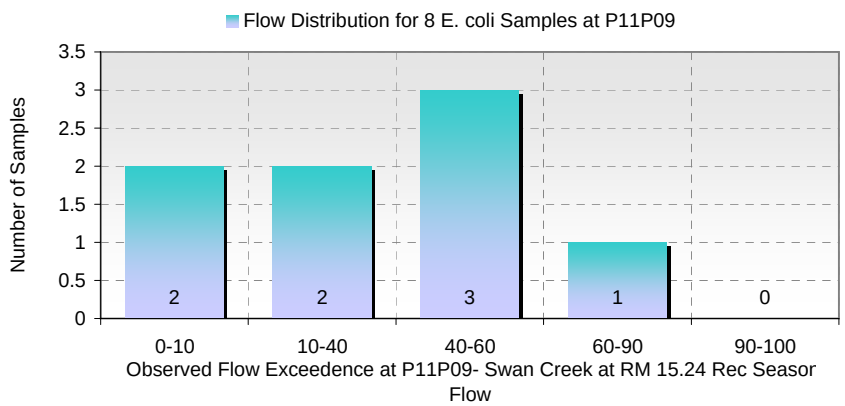


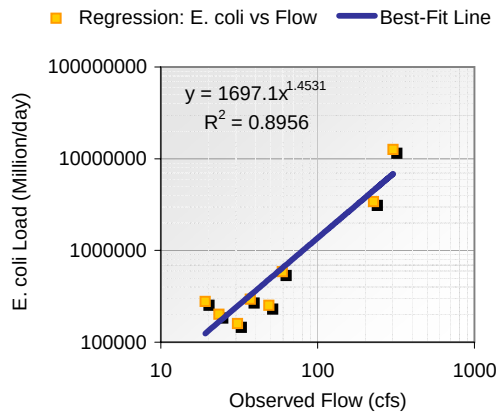
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	0	597.33	97,038	No Data	No Data
10-40	1	113.07	18,368	13,341	0.0%
40-60	4	43.73	7,105	891	0.0%
60-90	1	17.07	2,773	282	0.0%
90-100	0	5.55	901	No Data	No Data

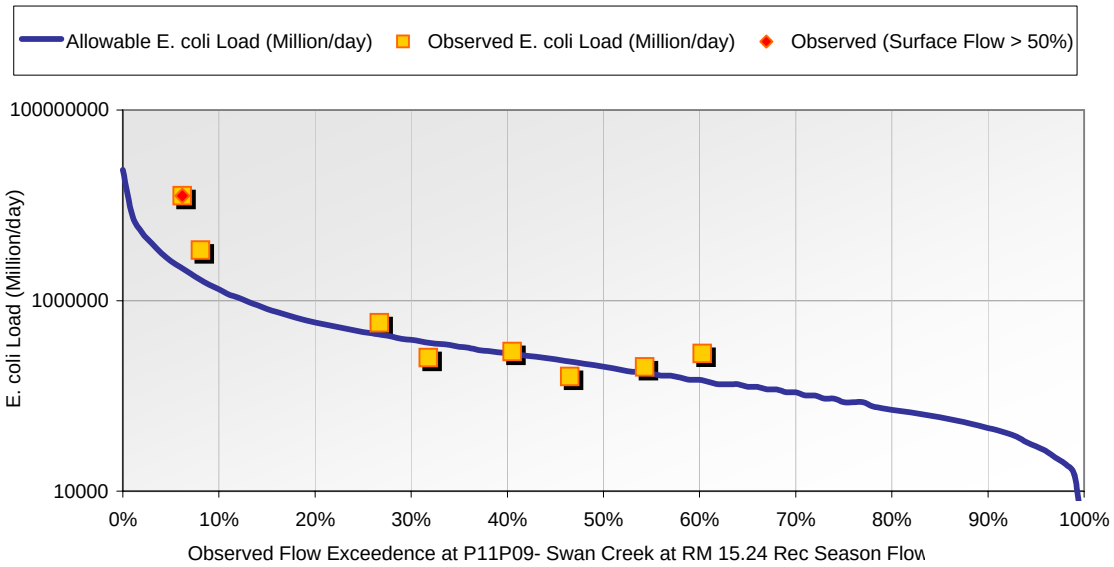
[70: E. coli at P11P09 (MPN/100mL)] -vs- [46: Flow at P11P09- Swan Creek at RM 15.24 Rec Season Flow (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

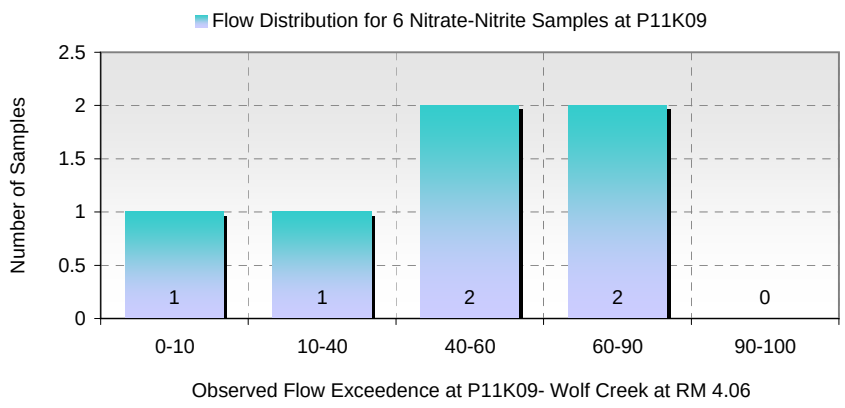


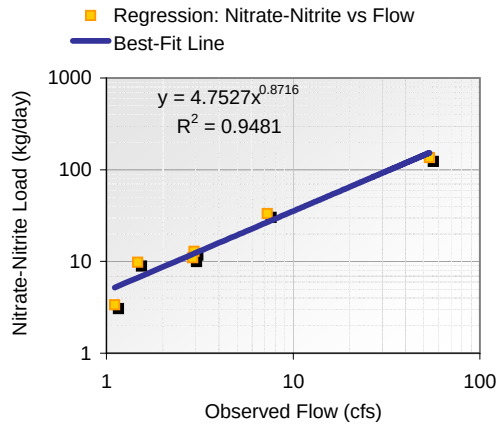
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	8-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Median Load (Million/day)	Estimated Reduction (%)
0-10	2	356.27	2,597,469	7,995,159	67.5%
10-40	2	64.00	466,612	418,335	0.0%
40-60	3	27.73	202,200	200,949	0.0%
60-90	1	11.73	85,548	277,154	69.1%
90-100	0	4.05	29,554	No Data	No Data

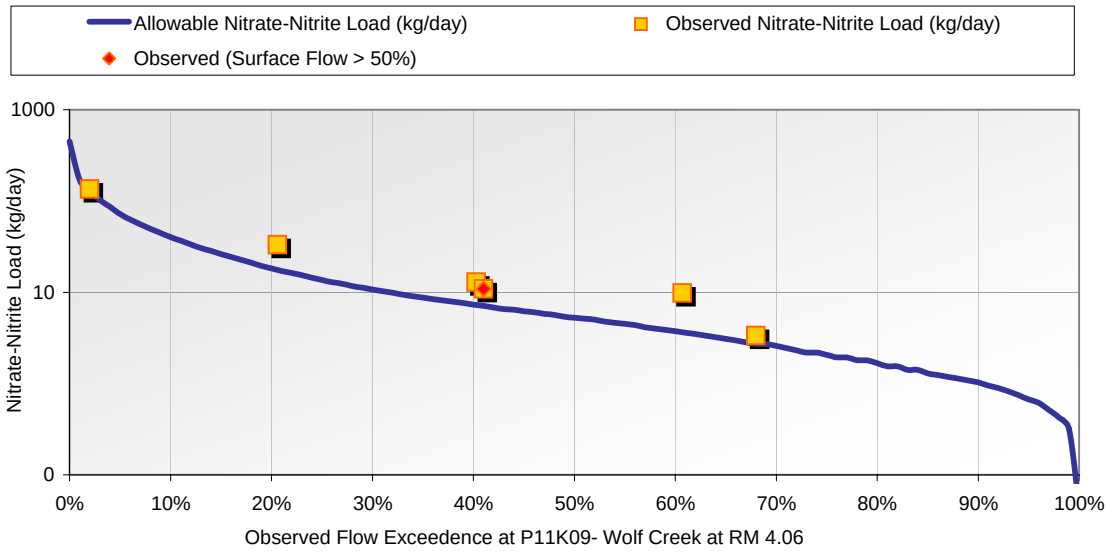
[75: Nitrate-Nitrite at P11K09 (mg/L)] -vs- [20: Flow at P11K09- Wolf Creek at RM 4.06 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

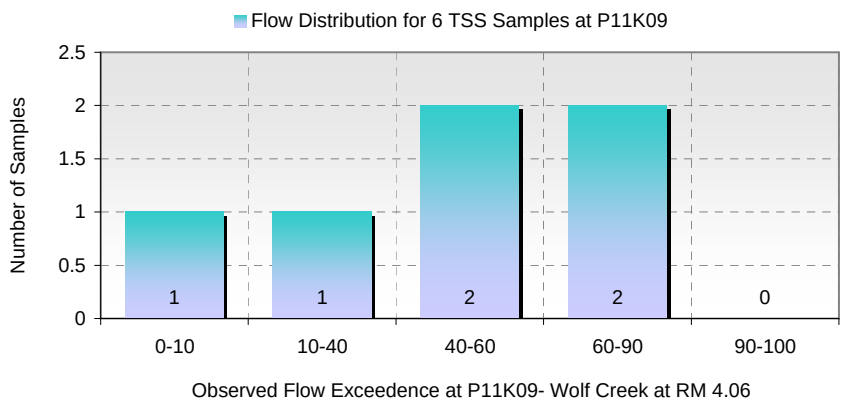


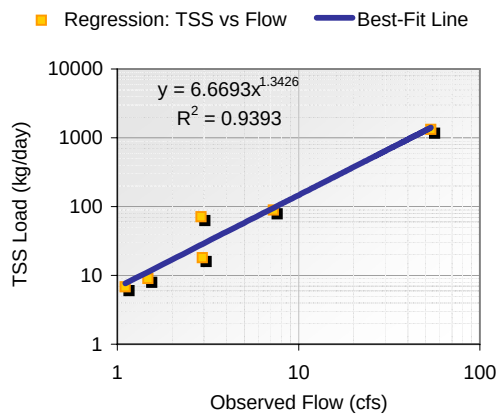
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	29.49	72.2	135.4	46.7%
10-40	1	5.58	13.7	33.3	58.9%
40-60	2	2.16	5.3	11.9	55.5%
60-90	2	0.84	2.1	6.6	68.7%
90-100	0	0.27	0.7	No Data	No Data

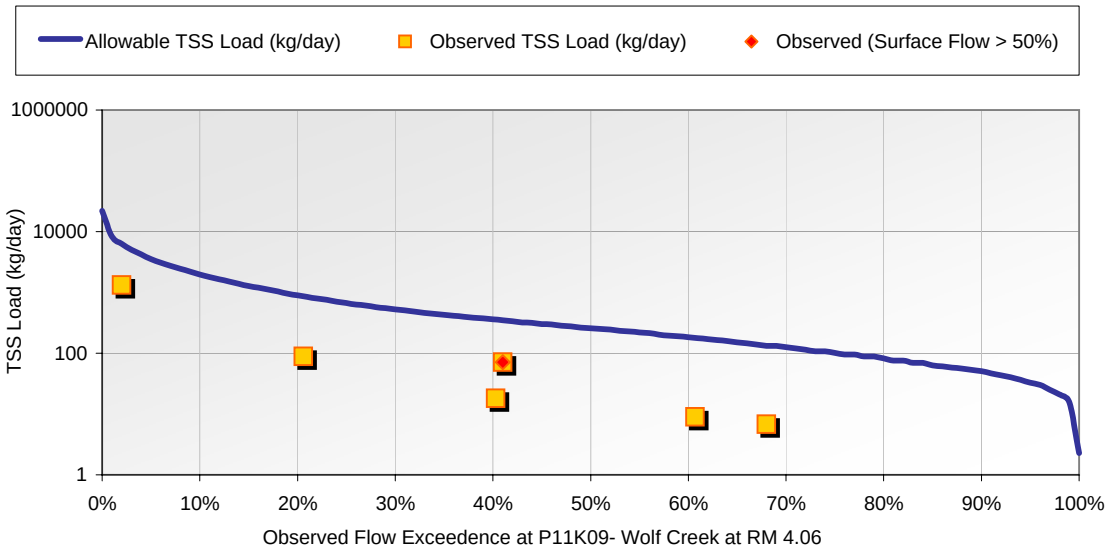
[76: TSS at P11K09 (mg/L)] -vs- [20: Flow at P11K09- Wolf Creek at RM 4.06 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

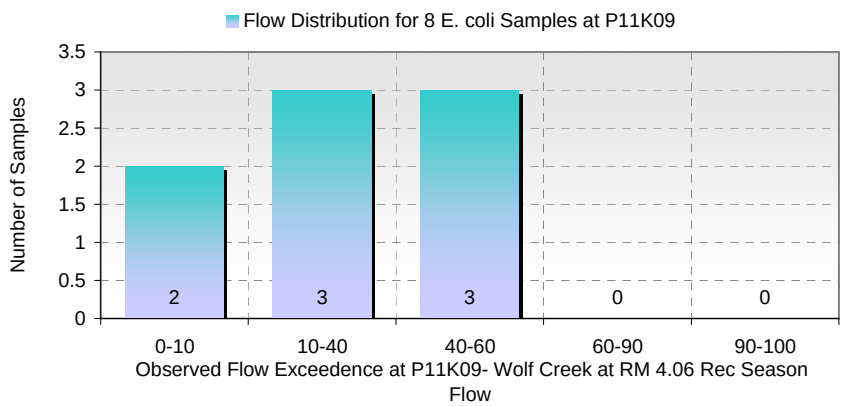


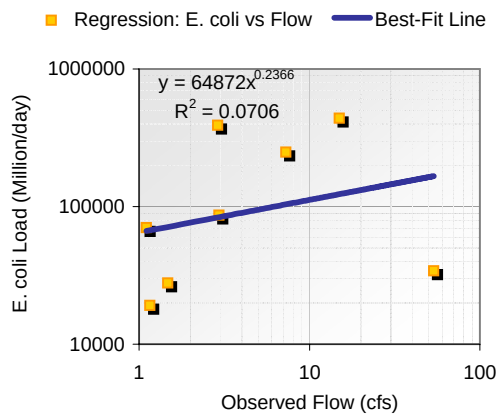
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	29.49	3,536	1,314	0.0%
10-40	1	5.58	669	89	0.0%
40-60	2	2.16	259	44	0.0%
60-90	2	0.84	101	8	0.0%
90-100	0	0.27	33	No Data	No Data

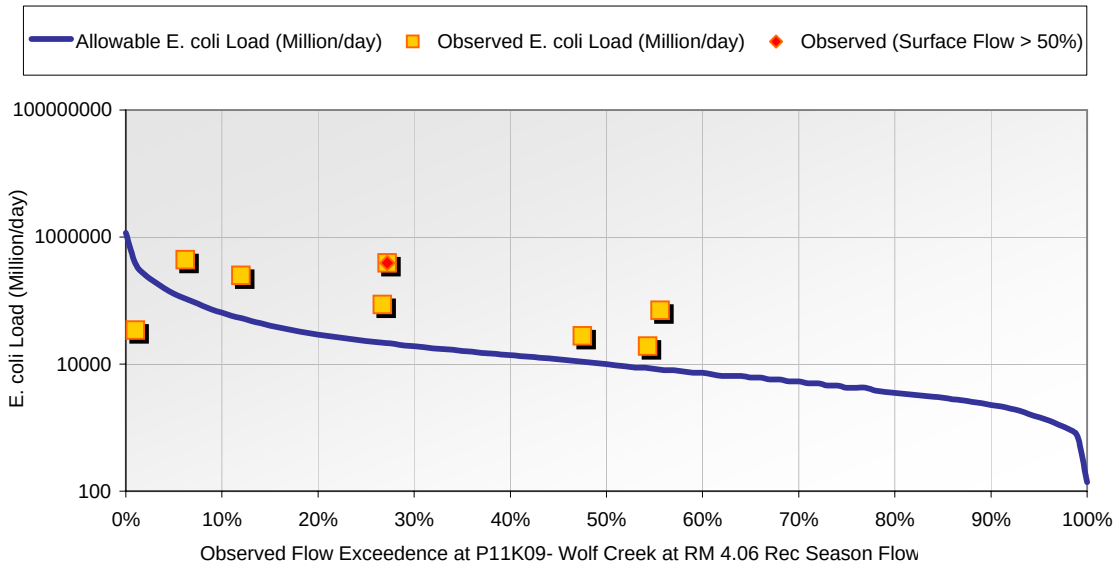
[77: E. coli at P11K09 (MPN/100mL)] -vs- [48: Flow at P11K09- Wolf Creek at RM 4.06 Rec Season Flow (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

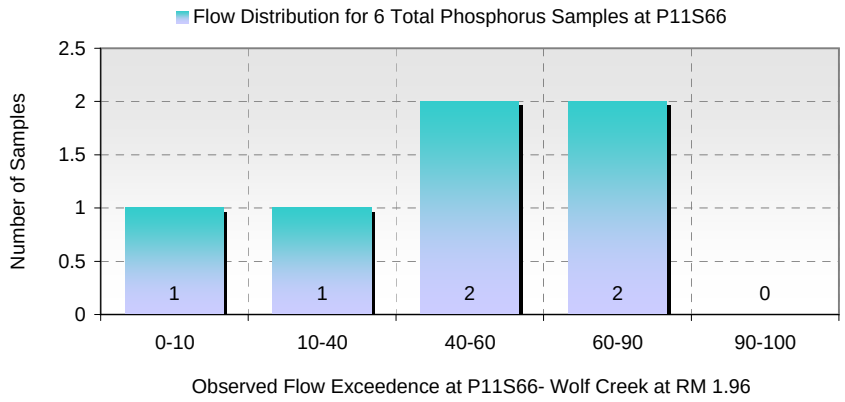


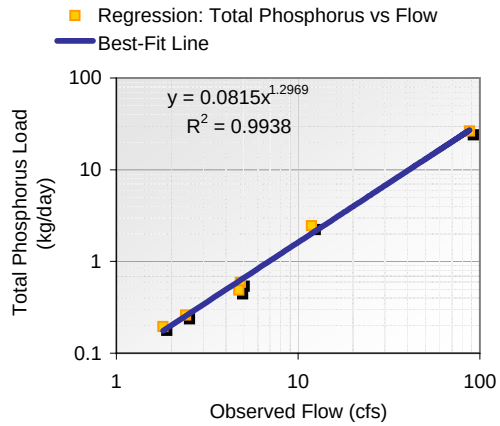
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	8-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Median Load (Million/day)	Estimated Reduction (%)
0-10	2	17.59	128,250	236,652	45.8%
10-40	3	3.16	23,039	248,945	90.7%
40-60	3	1.37	9,984	27,781	64.1%
60-90	0	0.58	4,224	No Data	No Data
90-100	0	0.20	1,459	No Data	No Data

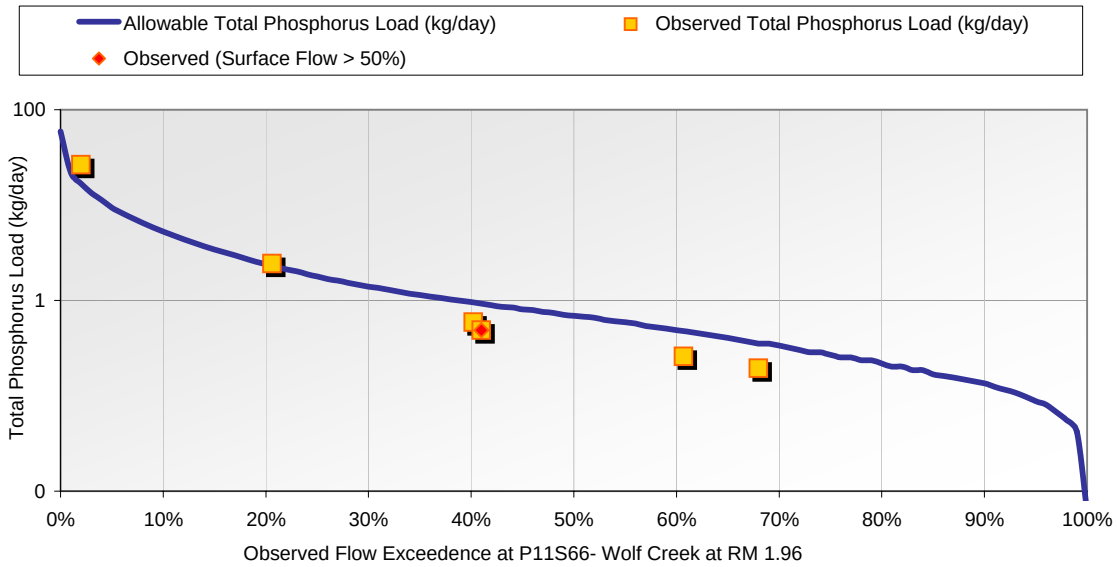
[79: Total Phosphorus at P11S66 (mg/L)] -vs- [21: Flow at P11S66- Wolf Creek at RM 1.96 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

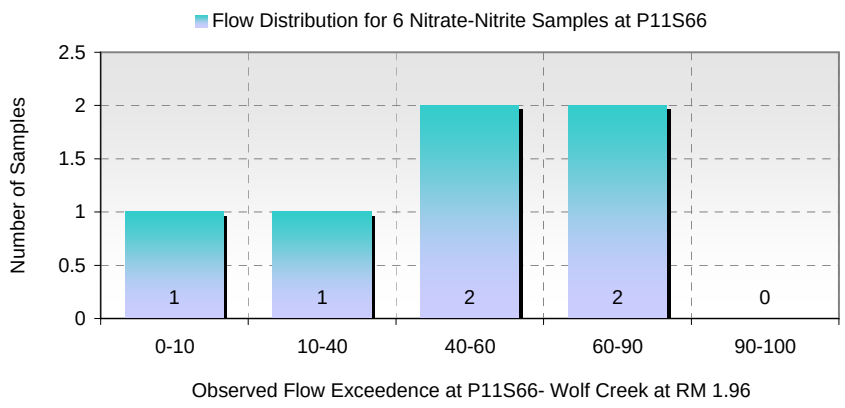


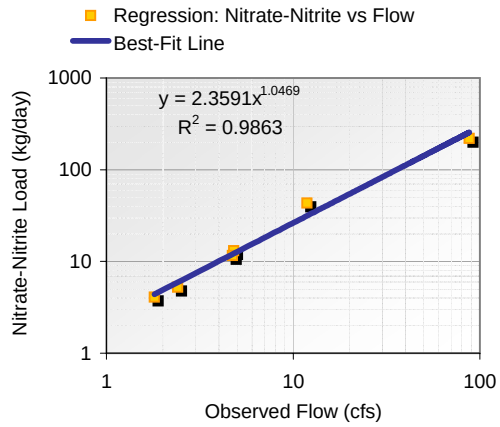
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	48.16	9.43	26.40	64.3%
10-40	1	9.12	1.78	2.44	26.8%
40-60	2	3.53	0.69	0.54	0.0%
60-90	2	1.38	0.27	0.23	0.0%
90-100	0	0.45	0.09	No Data	No Data

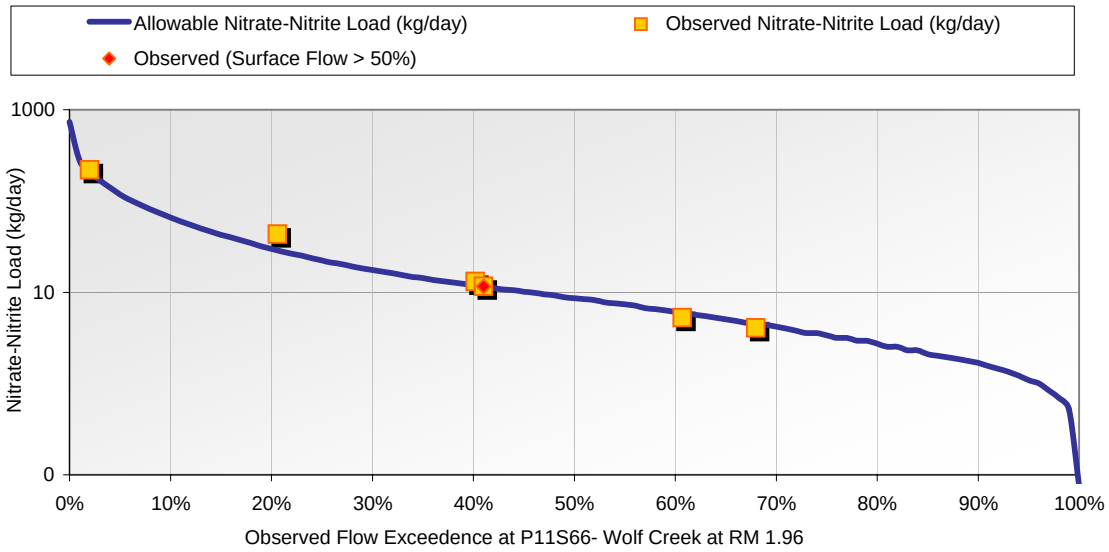
[78: Nitrate-Nitrite at P11S66 (mg/L)] -vs- [21: Flow at P11S66- Wolf Creek at RM 1.96 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

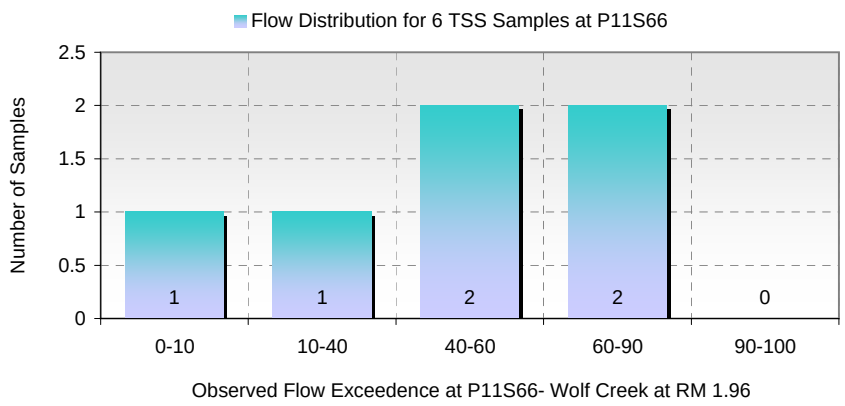


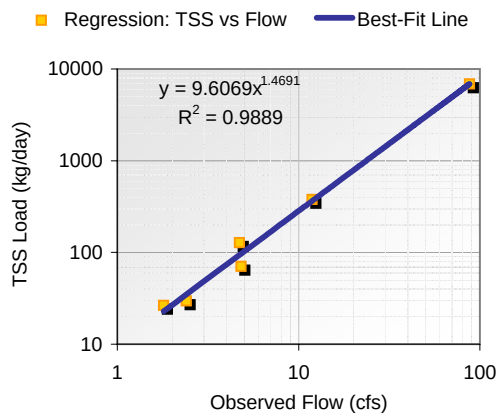
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	48.16	117.8	218.9	46.2%
10-40	1	9.12	22.3	43.3	48.4%
40-60	2	3.53	8.6	12.3	30.0%
60-90	2	1.38	3.4	4.7	27.7%
90-100	0	0.45	1.1	No Data	No Data

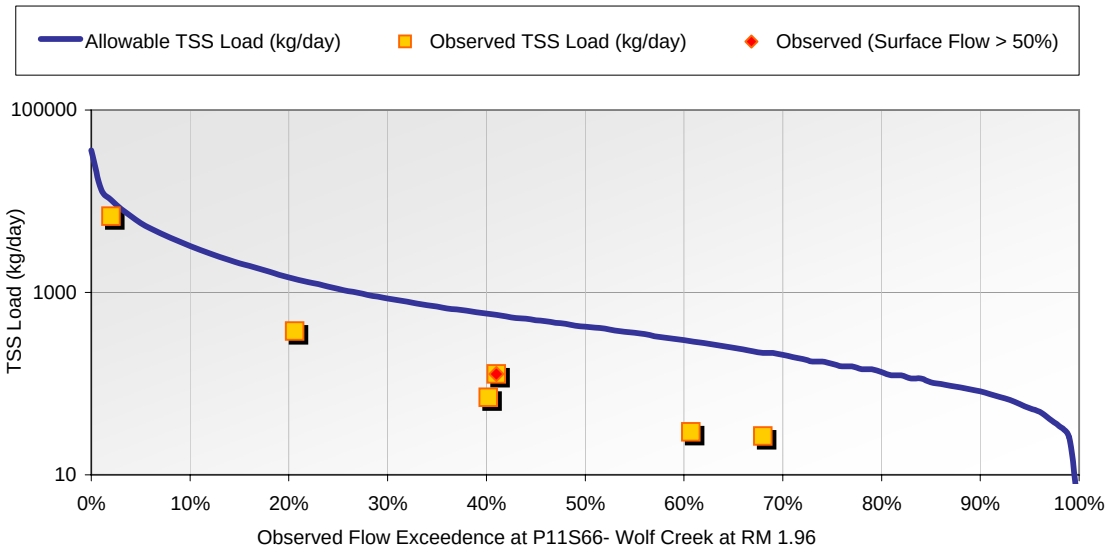
[80: TSS at P11S66 (mg/L)] -vs- [21: Flow at P11S66- Wolf Creek at RM 1.96 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

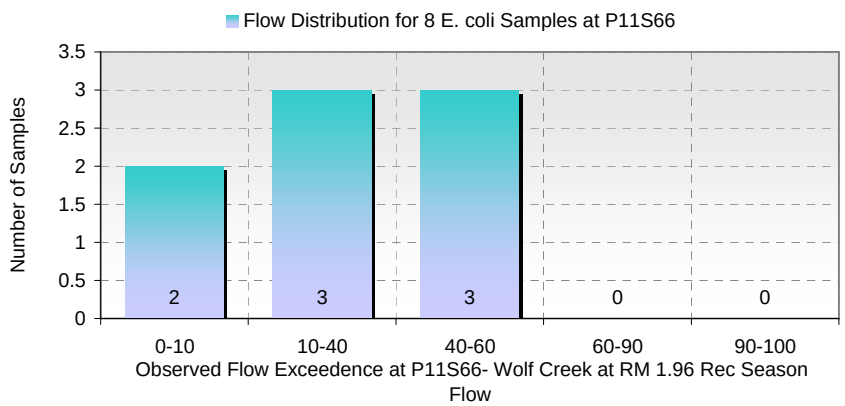


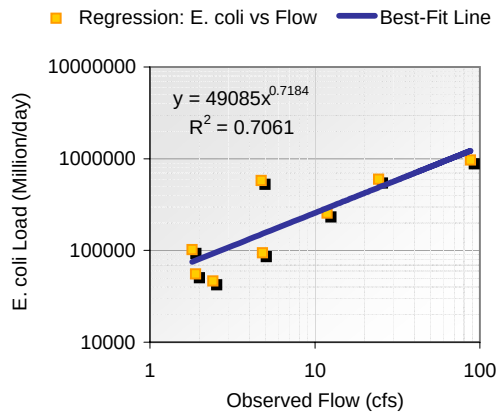
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	48.16	5,774	6,868	15.9%
10-40	1	9.12	1,093	377	0.0%
40-60	2	3.53	423	99	0.0%
60-90	2	1.38	165	28	0.0%
90-100	0	0.45	54	No Data	No Data

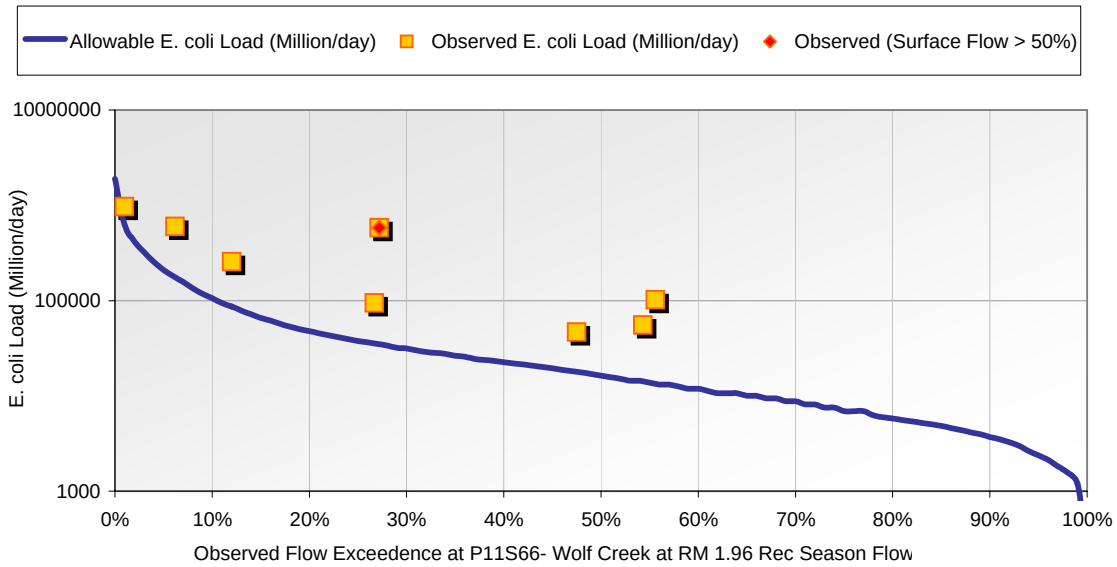
[81: E. coli at P11S66 (MPN/100mL)] -vs- [49: Flow at P11S66- Wolf Creek at RM 1.96 Rec Season Flow (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

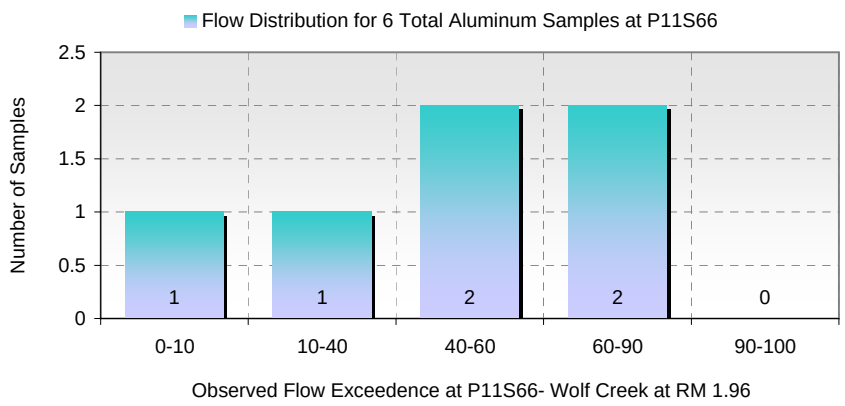


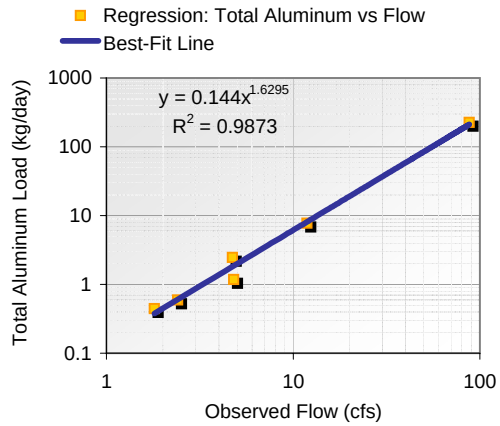
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	8-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Median Load (Million/day)	Estimated Reduction (%)
0-10	2	28.72	209,421	781,657	73.2%
10-40	3	5.16	37,621	255,517	85.3%
40-60	3	2.24	16,302	55,548	70.7%
60-90	0	0.95	6,897	No Data	No Data
90-100	0	0.33	2,383	No Data	No Data

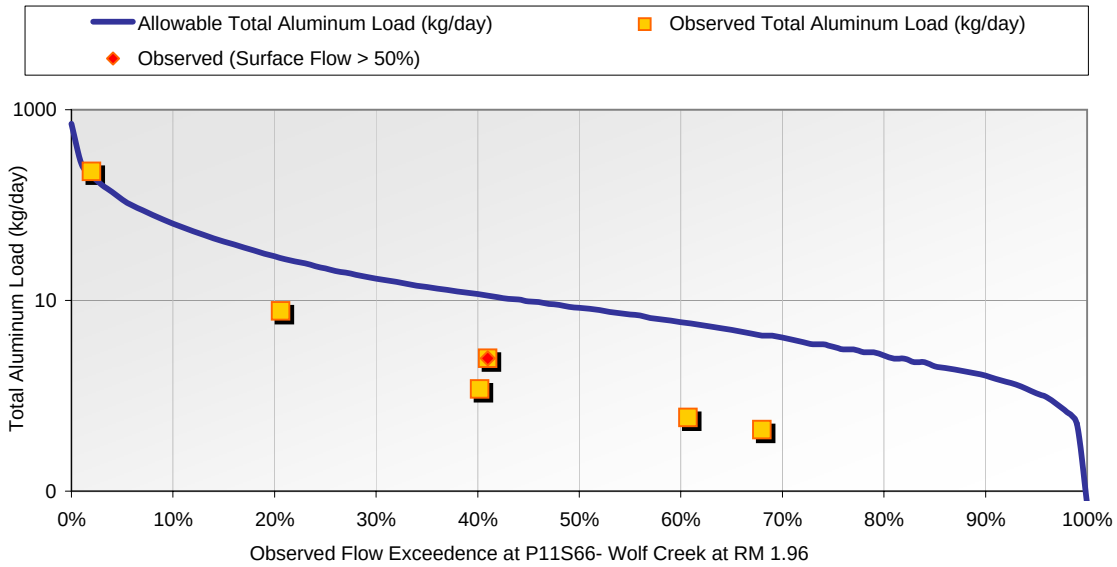
[82: Total Aluminum at P11S66 (µg/L)] -vs- [21: Flow at P11S66- Wolf Creek at RM 1.96 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

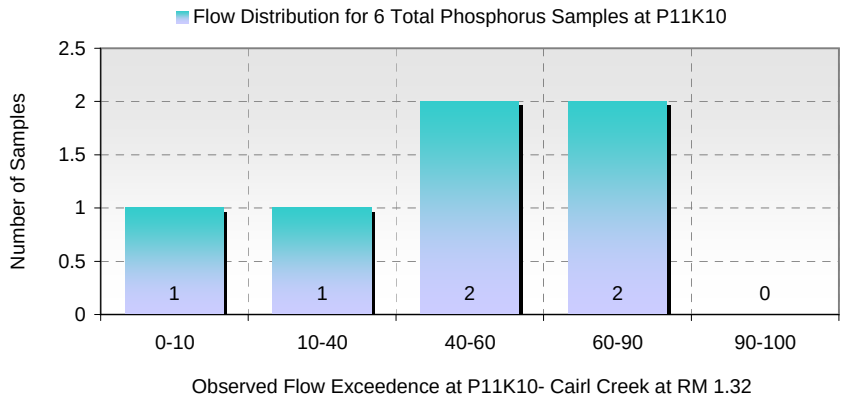


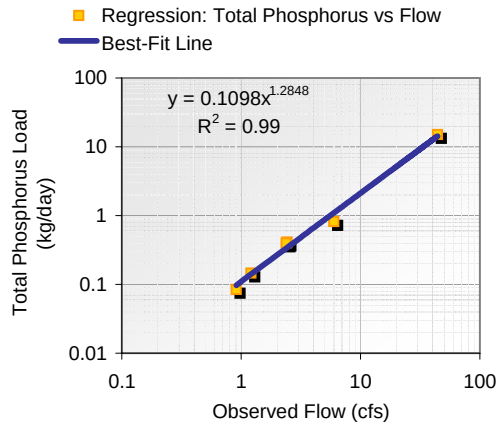
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	48.16	114.29	225.34	49.3%
10-40	1	9.12	21.63	7.72	0.0%
40-60	2	3.53	8.37	1.82	0.0%
60-90	2	1.38	3.27	0.52	0.0%
90-100	0	0.45	1.06	No Data	No Data

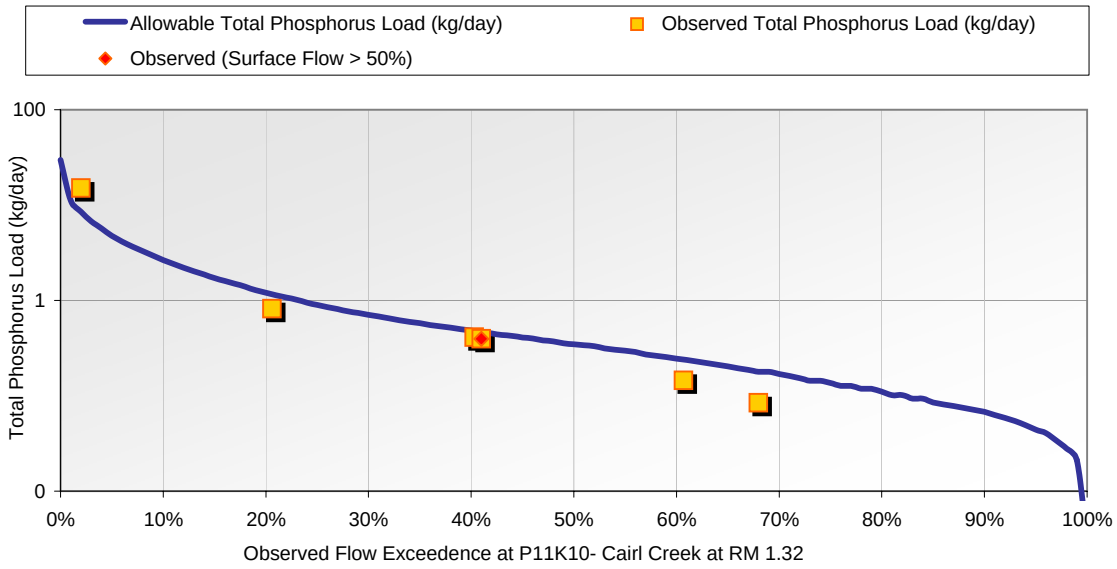
[90: Total Phosphorus at P11K10 (mg/L)] -vs- [23: Flow at P11K10- Cairl Creek at RM 1.32 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

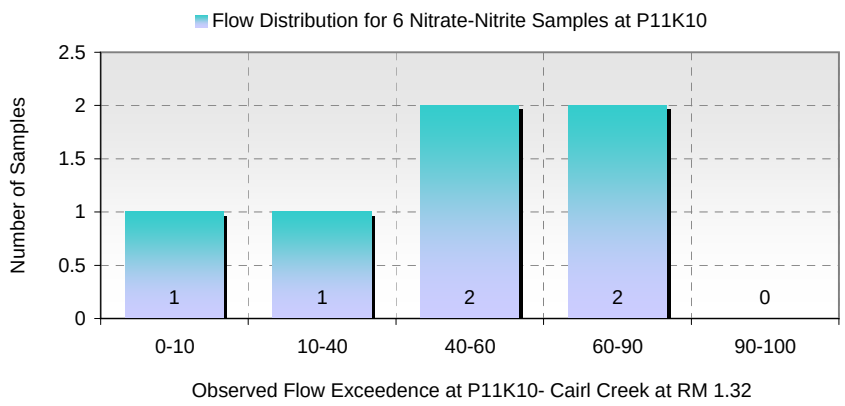


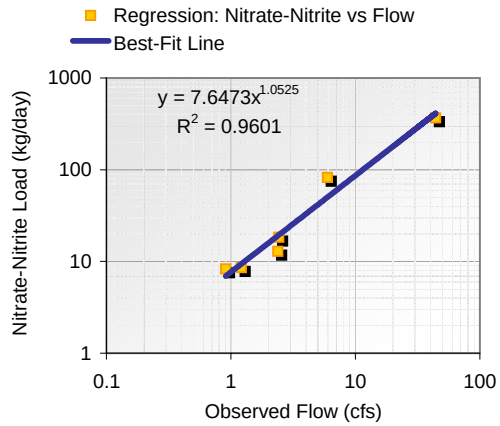
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	24.27	4.75	15.03	68.4%
10-40	1	4.59	0.90	0.82	0.0%
40-60	2	1.78	0.35	0.40	13.7%
60-90	2	0.69	0.14	0.12	0.0%
90-100	0	0.23	0.04	No Data	No Data

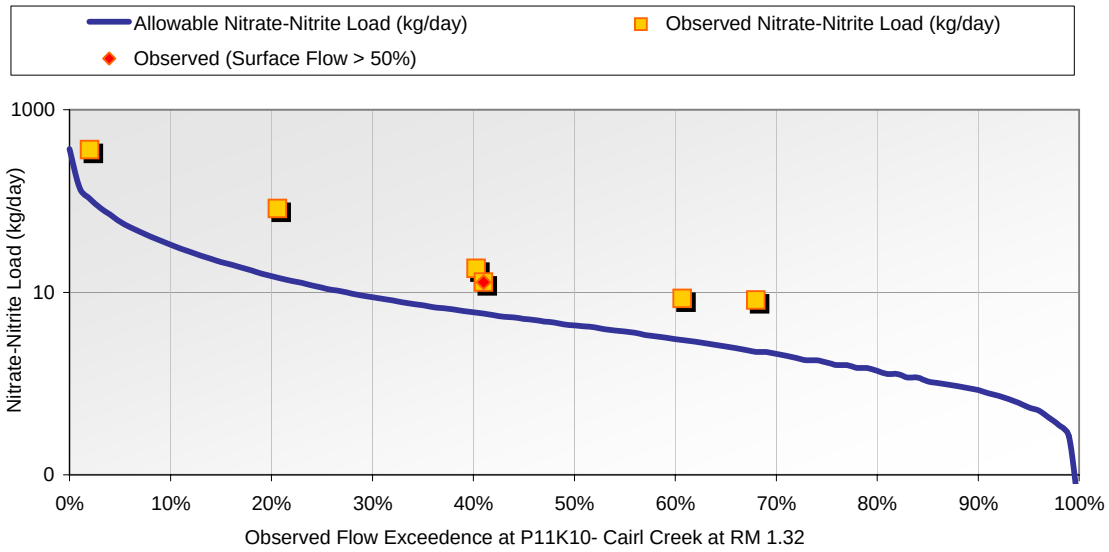
[89: Nitrate-Nitrite at P11K10 (mg/L)] -vs- [23: Flow at P11K10- Cairl Creek at RM 1.32 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

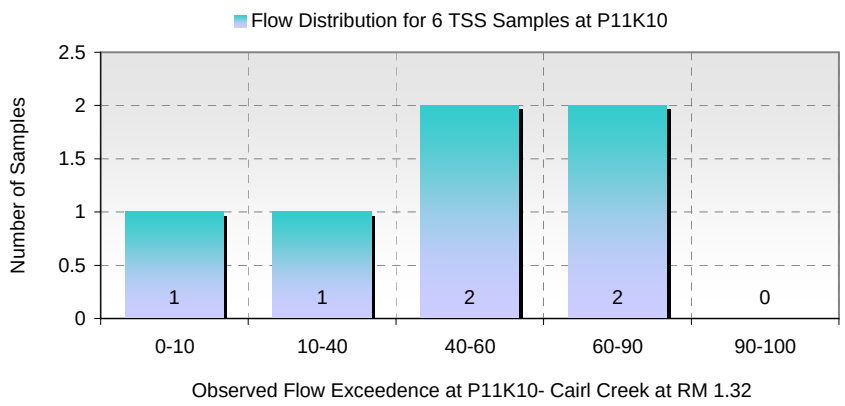


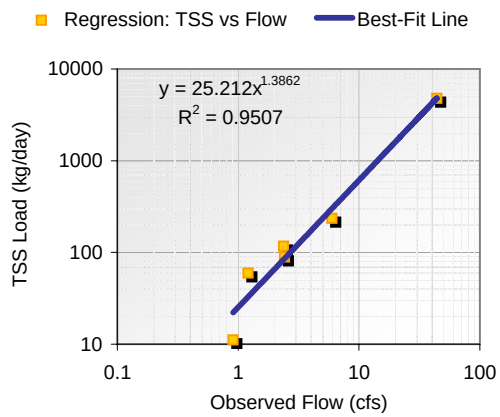
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	24.27	59.4	365.5	83.8%
10-40	1	4.59	11.2	82.5	86.4%
40-60	2	1.78	4.3	15.6	72.1%
60-90	2	0.69	1.7	8.4	79.8%
90-100	0	0.23	0.6	No Data	No Data

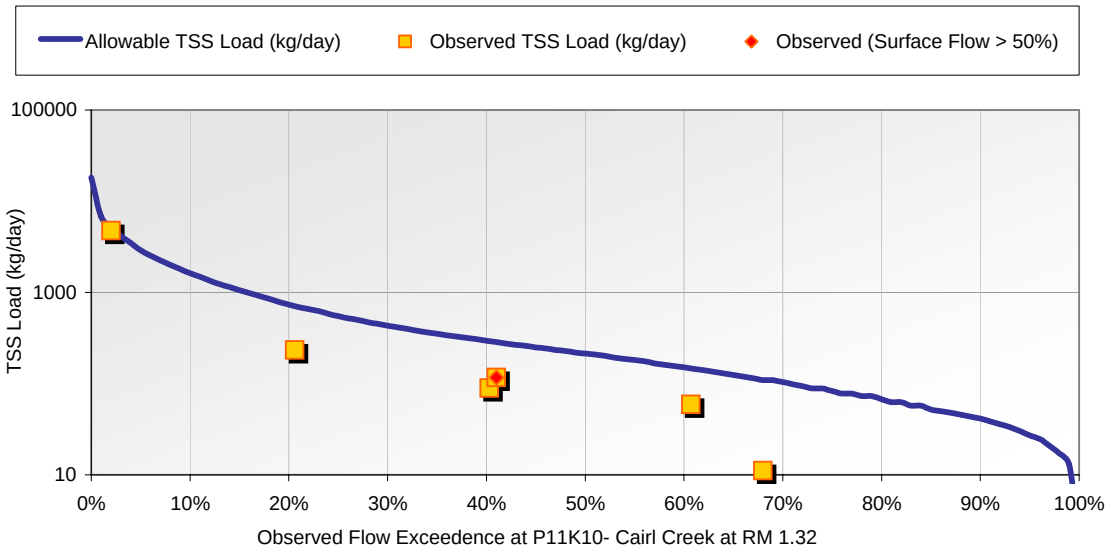
[91: TSS at P11K10 (mg/L)] -vs- [23: Flow at P11K10- Cairl Creek at RM 1.32 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

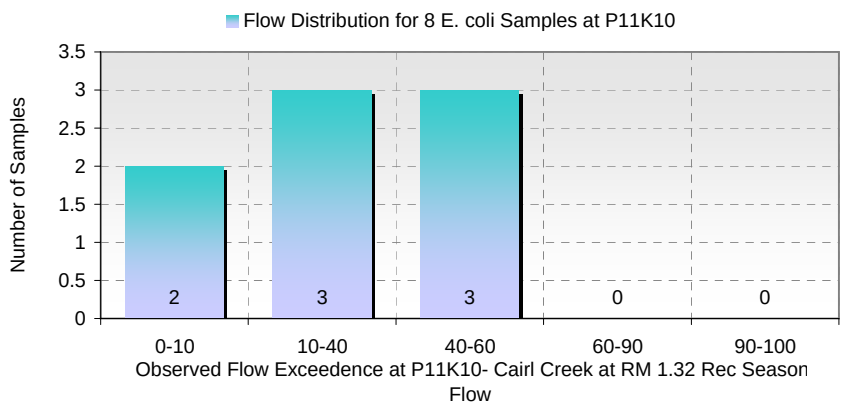


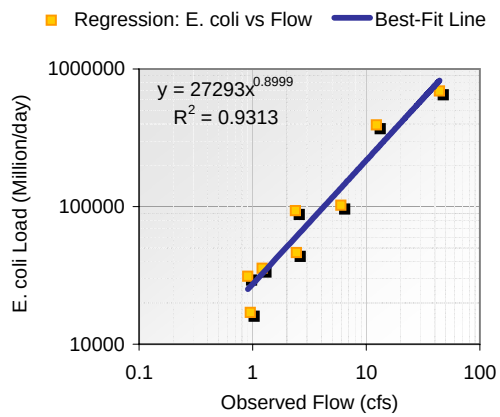
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	24.27	2,909	4,758	38.9%
10-40	1	4.59	551	234	0.0%
40-60	2	1.78	213	103	0.0%
60-90	2	0.69	83	35	0.0%
90-100	0	0.23	27	No Data	No Data

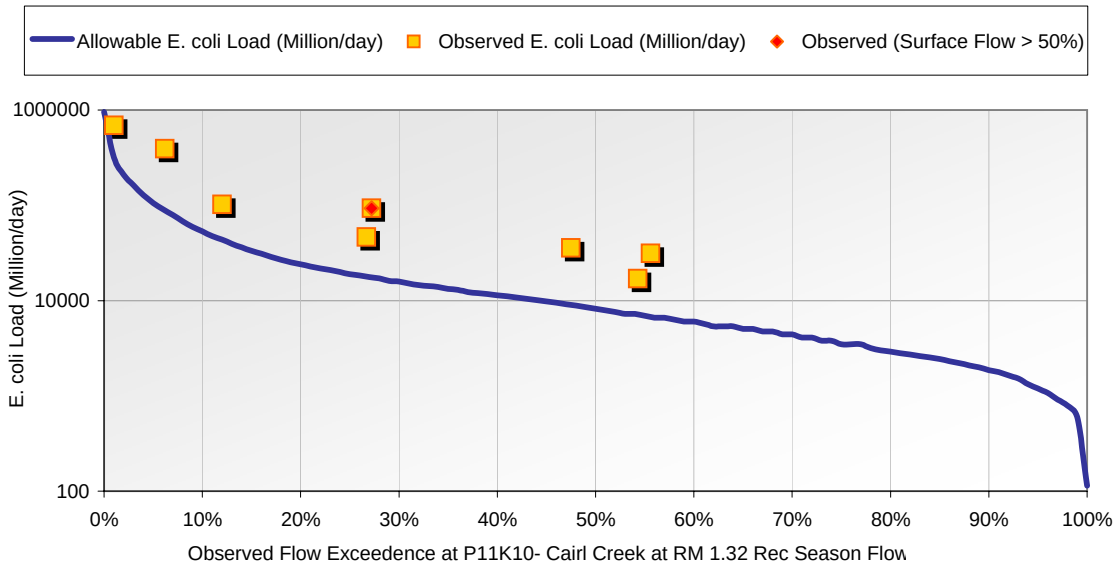
[92: E. coli at P11K10 (MPN/100mL)] -vs- [51: Flow at P11K10- Cairl Creek at RM 1.32 Rec Season Flow (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

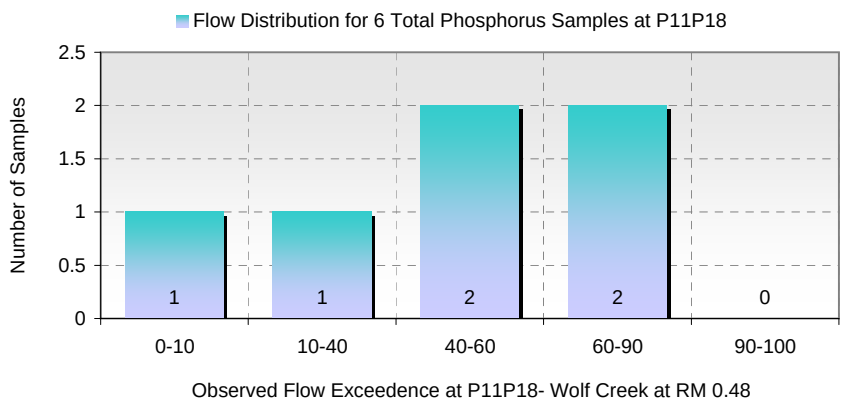


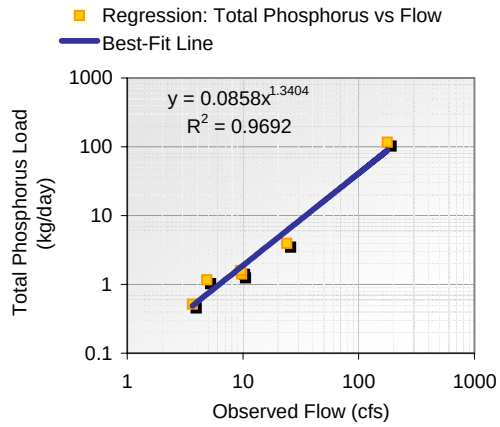
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	8-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Median Load (Million/day)	Estimated Reduction (%)
0-10	2	14.47	105,522	541,754	80.5%
10-40	3	2.60	18,956	93,297	79.7%
40-60	3	1.13	8,214	31,170	73.6%
60-90	0	0.48	3,475	No Data	No Data
90-100	0	0.16	1,201	No Data	No Data

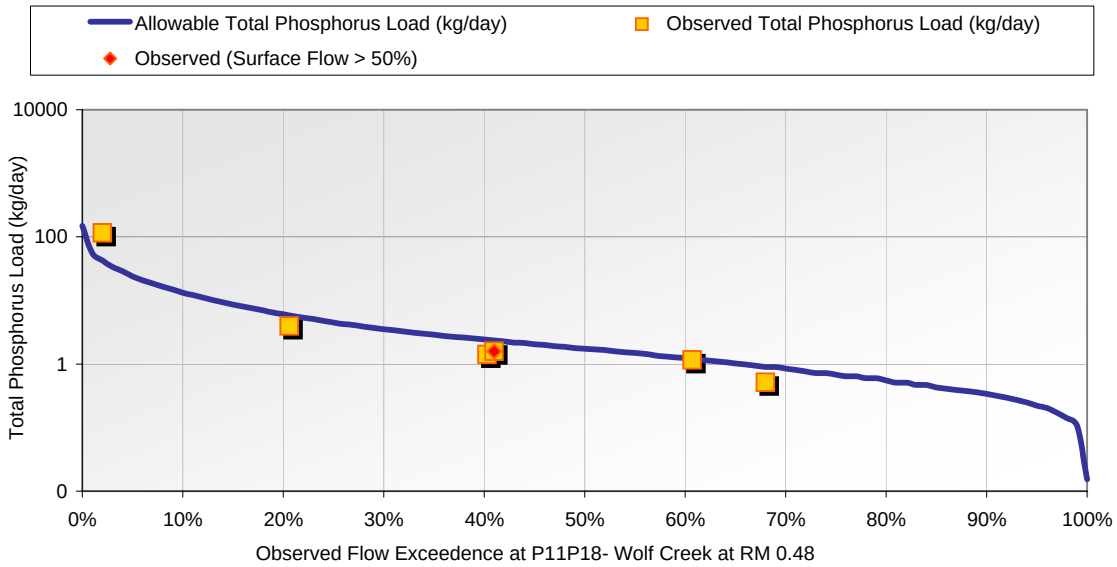
[84: Total Phosphorus at P11P18 (mg/L)] -vs- [22: Flow at P11P18- Wolf Creek at RM 0.48 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

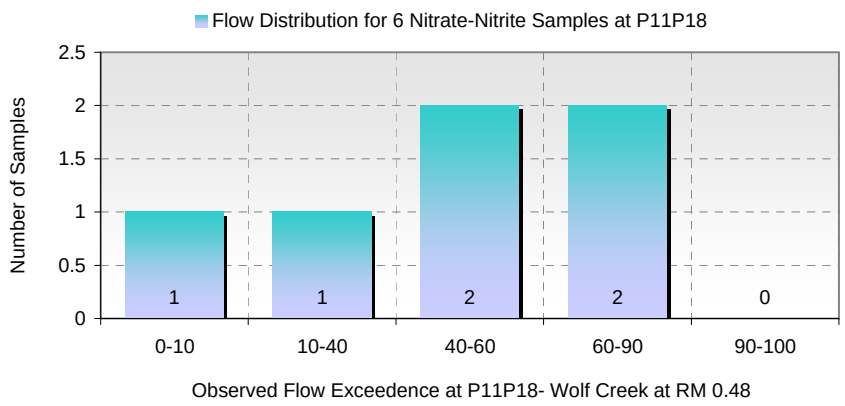


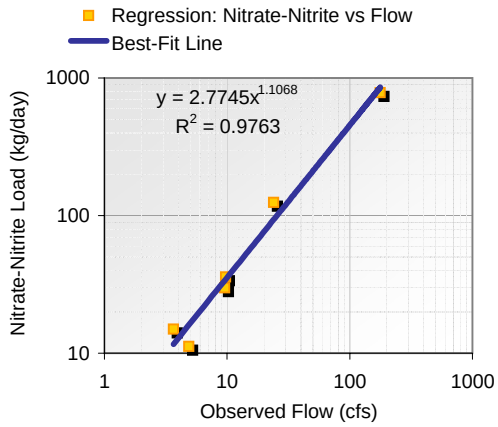
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	97.44	23.84	115.94	79.4%
10-40	1	18.44	4.51	3.94	0.0%
40-60	2	7.13	1.75	1.50	0.0%
60-90	2	2.78	0.68	0.84	18.4%
90-100	0	0.90	0.22	No Data	No Data

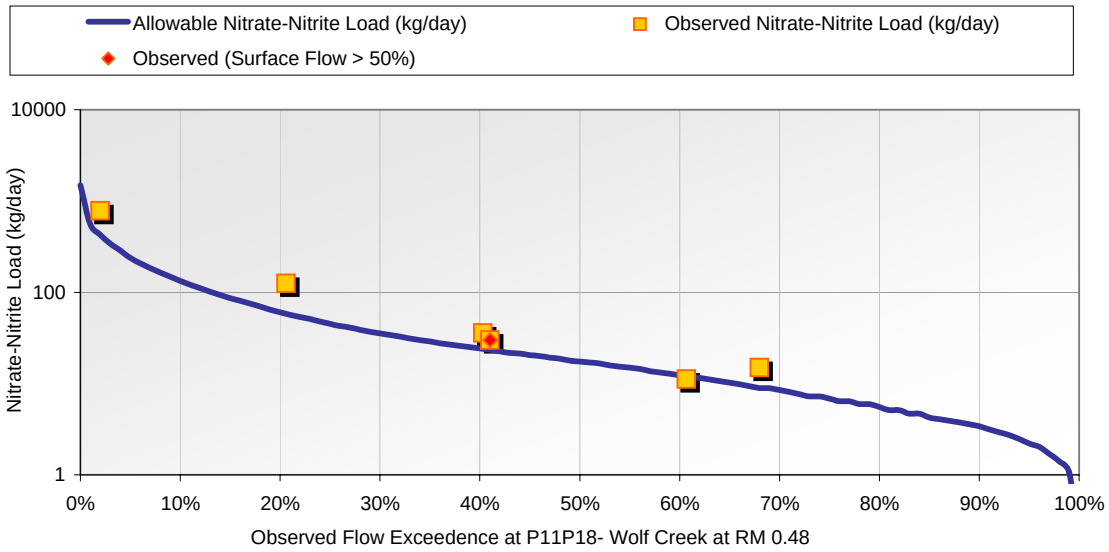
[83: Nitrate-Nitrite at P11P18 (mg/L)] -vs- [22: Flow at P11P18- Wolf Creek at RM 0.48 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

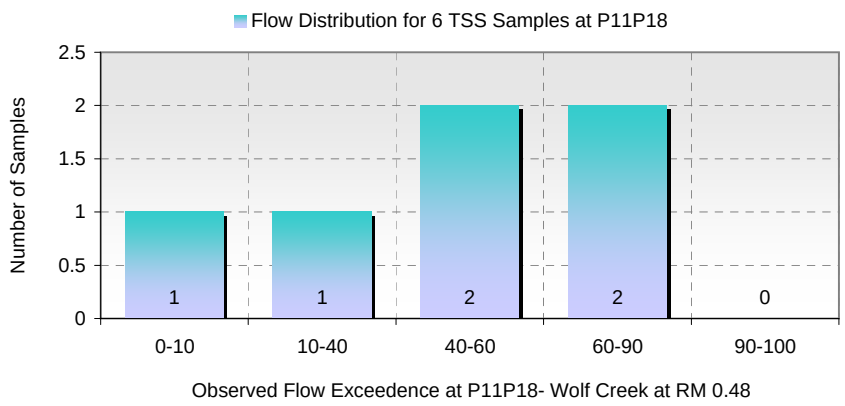


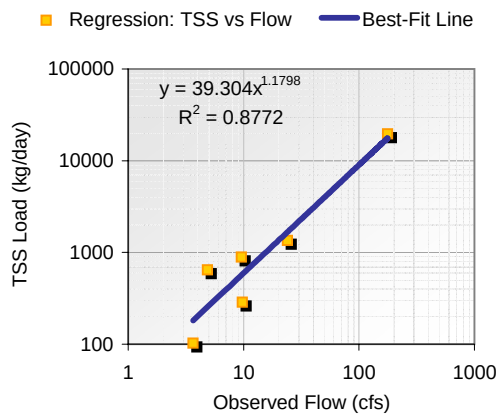
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	97.44	238.4	781.6	69.5%
10-40	1	18.44	45.1	124.5	63.8%
40-60	2	7.13	17.5	32.8	46.8%
60-90	2	2.78	6.8	13.1	47.9%
90-100	0	0.90	2.2	No Data	No Data

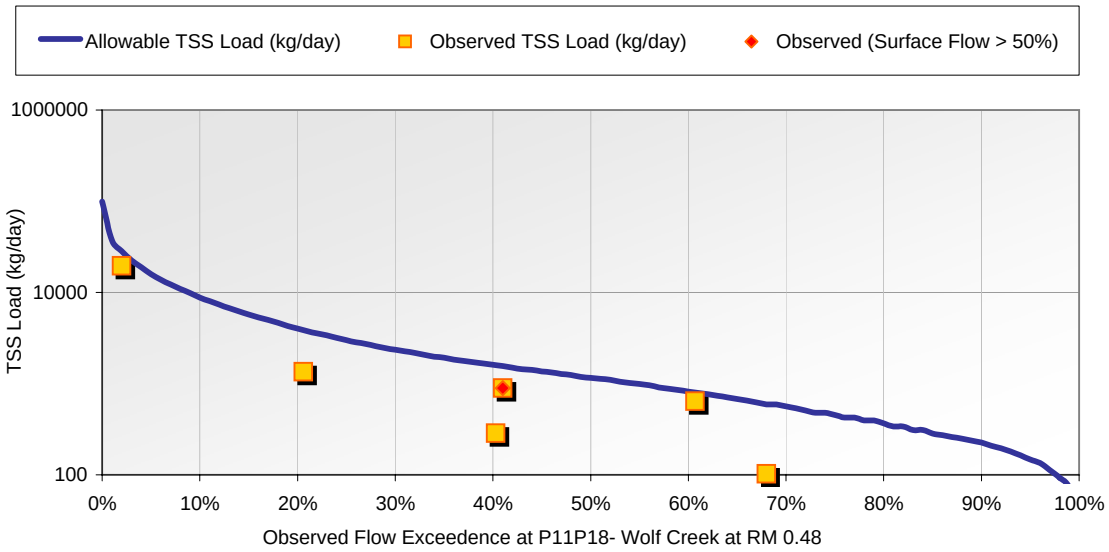
[85: TSS at P11P18 (mg/L)] -vs- [22: Flow at P11P18- Wolf Creek at RM 0.48 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

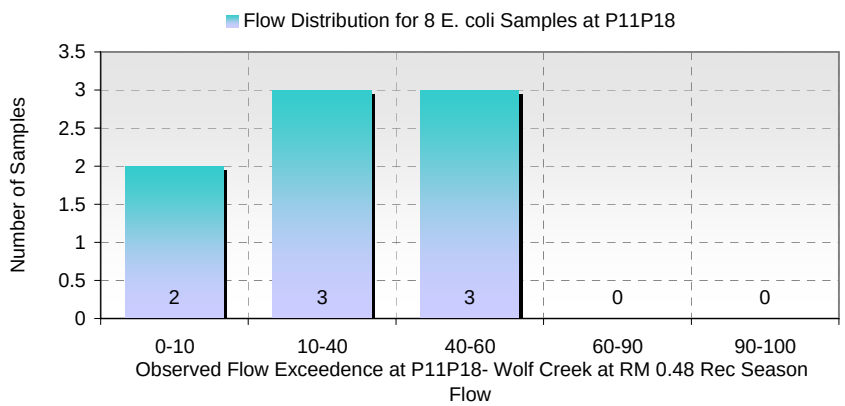


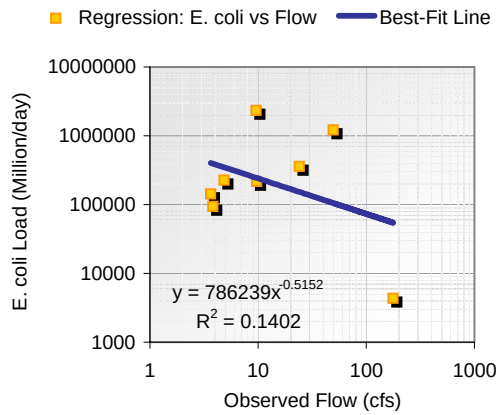
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	97.44	15,829	19,540	19.0%
10-40	1	18.44	2,996	1,351	0.0%
40-60	2	7.13	1,159	588	0.0%
60-90	2	2.78	452	373	0.0%
90-100	0	0.90	147	No Data	No Data

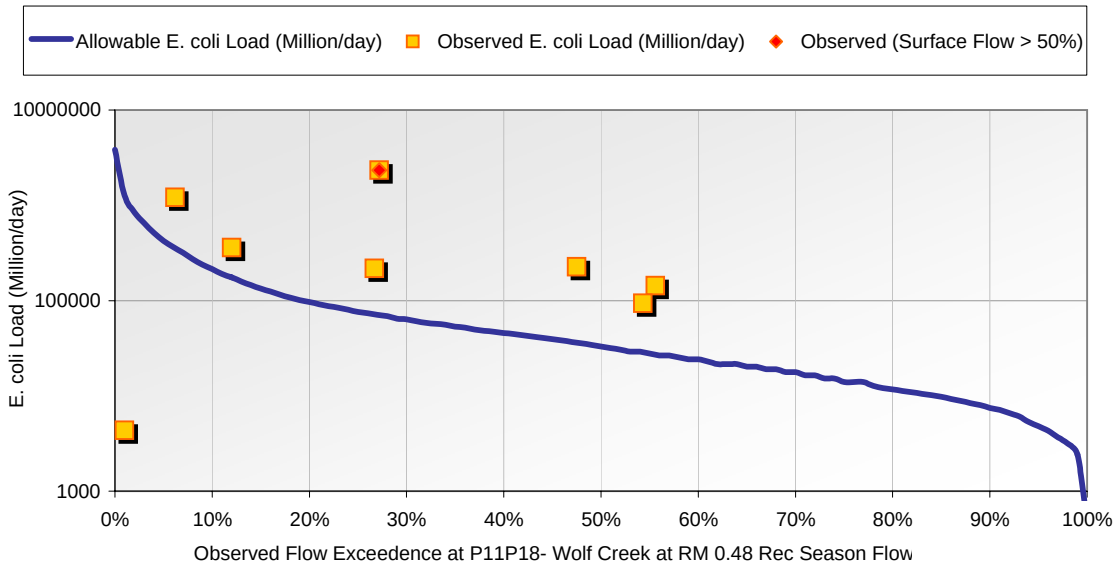
[86: E. coli at P11P18 (MPN/100mL)] -vs- [50: Flow at P11P18- Wolf Creek at RM 0.48 Rec Season Flow (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

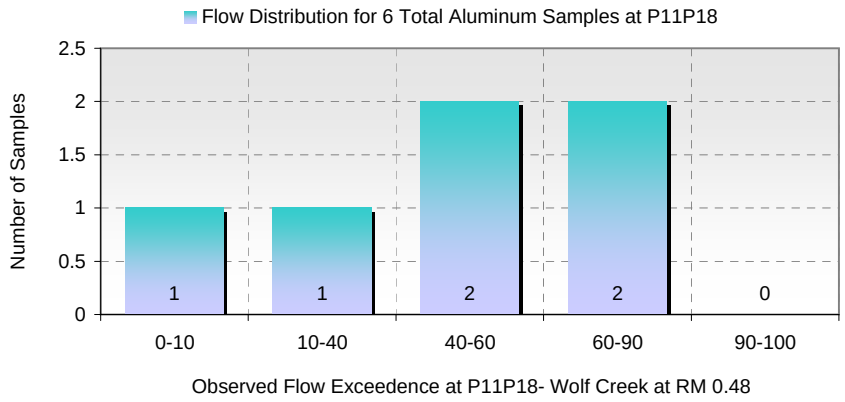


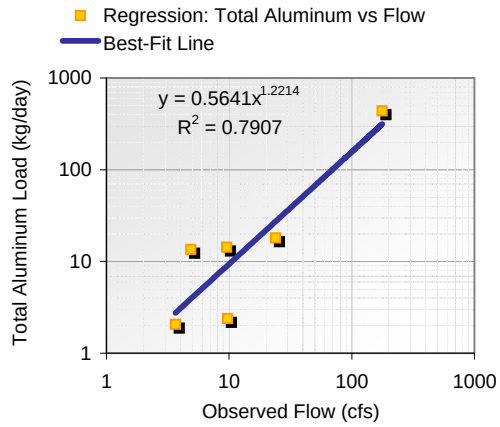
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	8-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Median Load (Million/day)	Estimated Reduction (%)
0-10	2	58.12	423,712	606,672	30.2%
10-40	3	10.44	76,116	358,359	78.8%
40-60	3	4.52	32,984	143,039	76.9%
60-90	0	1.91	13,955	No Data	No Data
90-100	0	0.66	4,821	No Data	No Data

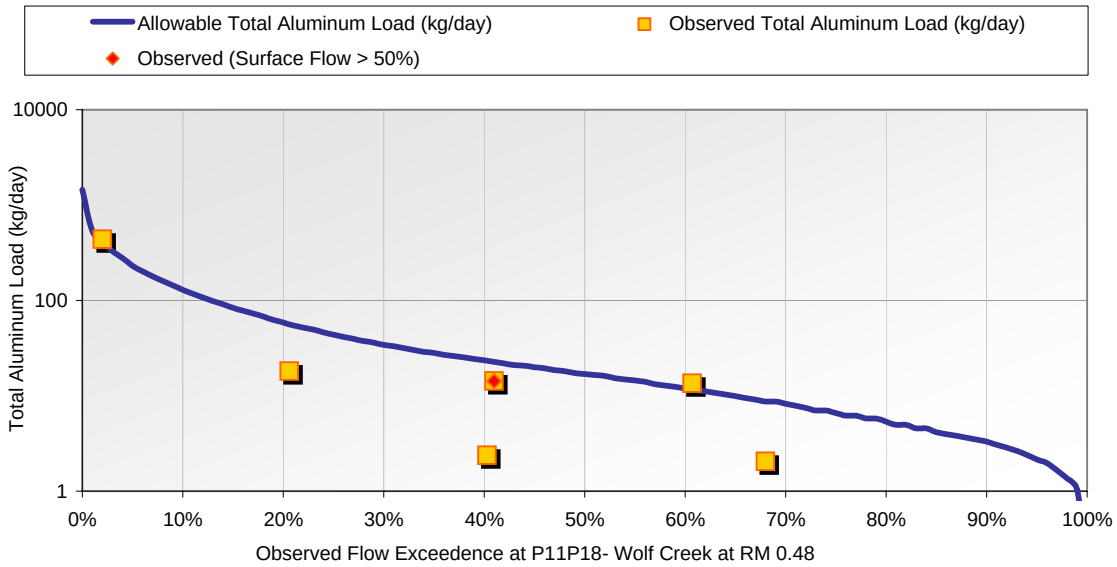
[87: Total Aluminum at P11P18 (µg/L)] -vs- [22: Flow at P11P18- Wolf Creek at RM 0.48 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

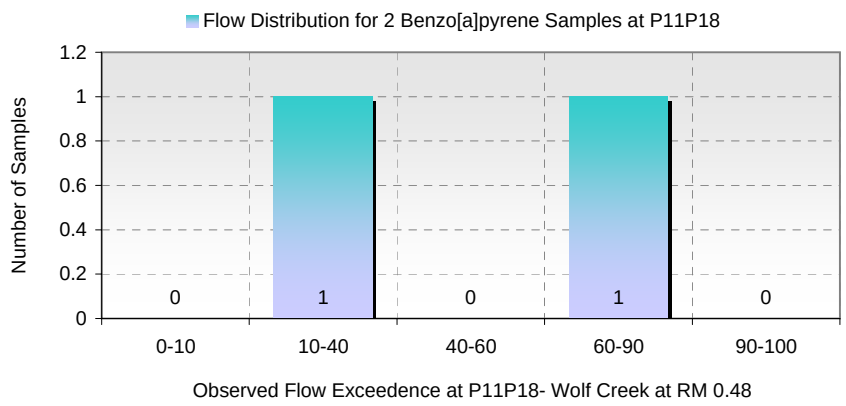


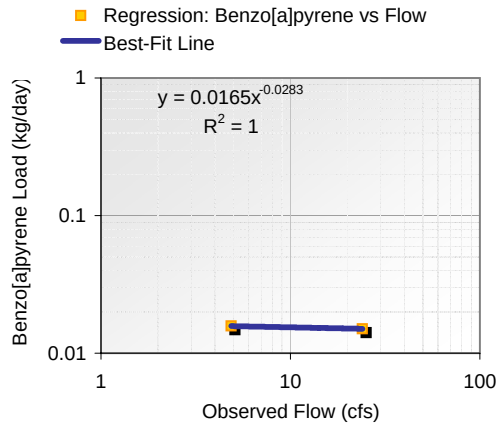
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	97.44	231.24	438.56	47.3%
10-40	1	18.44	43.77	18.09	0.0%
40-60	2	7.13	16.93	8.30	0.0%
60-90	2	2.78	6.61	7.79	15.2%
90-100	0	0.90	2.15	No Data	No Data

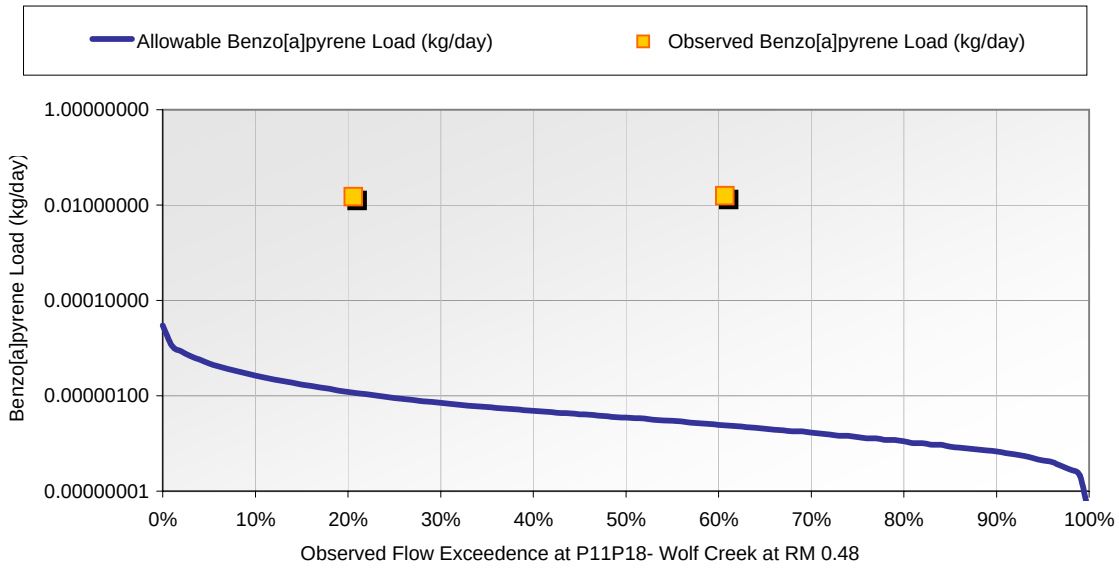
[88: Benzo[a]pyrene at P11P18 (µg/L)] -vs- [22: Flow at P11P18- Wolf Creek at RM 0.48 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

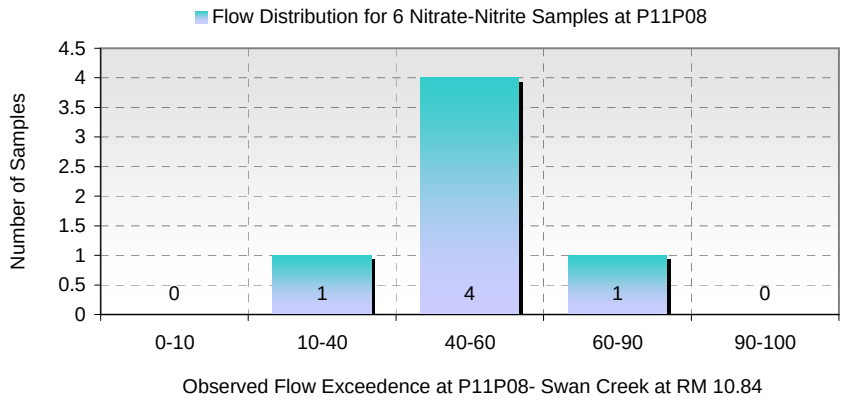


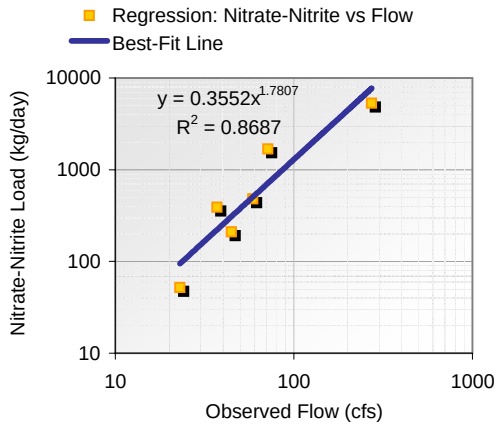
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	2-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	0	97.44	0.00000477	No Data	No Data
10-40	1	18.44	0.00000090	0.01503931	100.0%
40-60	0	7.13	0.00000035	No Data	No Data
60-90	1	2.78	0.00000014	0.01573423	100.0%
90-100	0	0.90	0.00000004	No Data	No Data

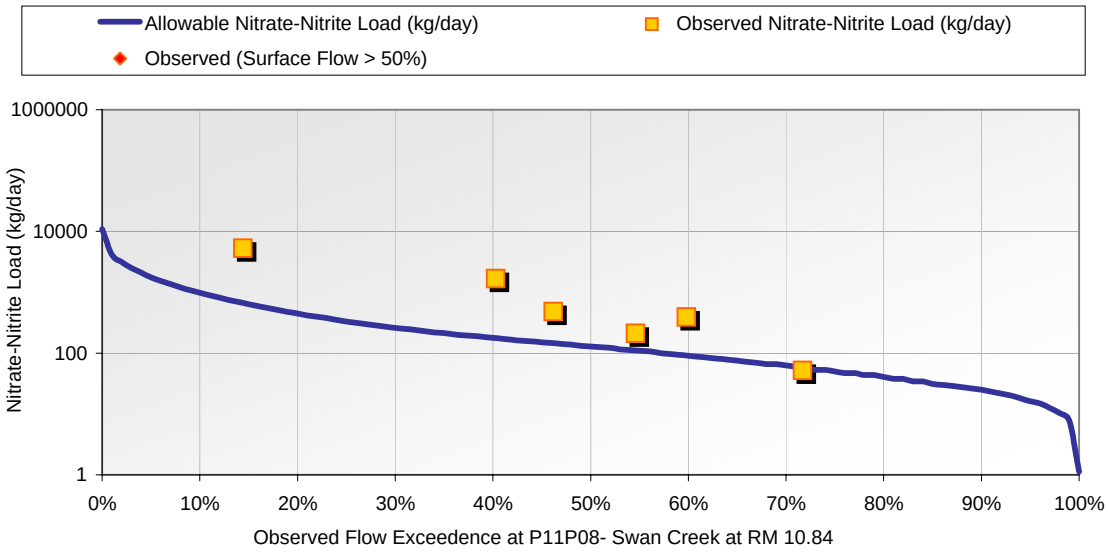
[93: Nitrate-Nitrite at P11P08 (mg/L)] -vs- [24: Flow at P11P08- Swan Creek at RM 10.84 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

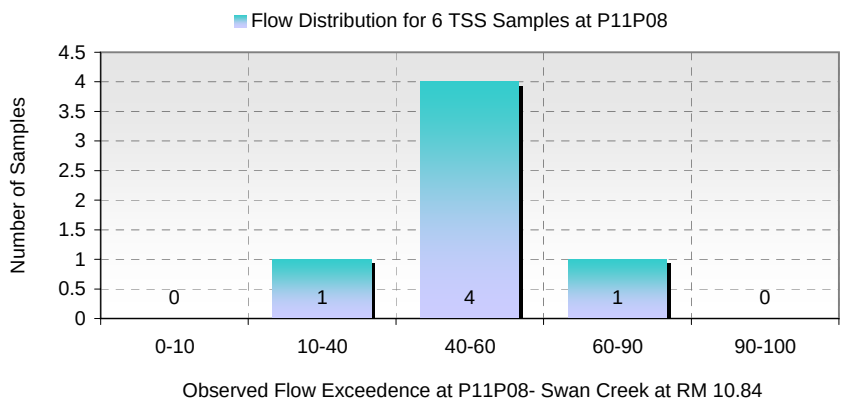


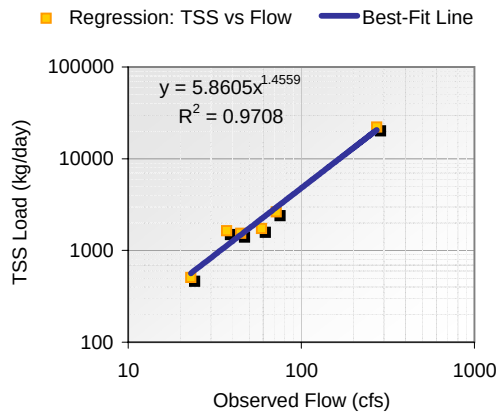
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	0	716.80	1753.7	No Data	No Data
10-40	1	135.68	332.0	5296.3	93.7%
40-60	4	52.48	128.4	434.4	70.4%
60-90	1	20.48	50.1	51.9	3.4%
90-100	0	6.66	16.3	No Data	No Data

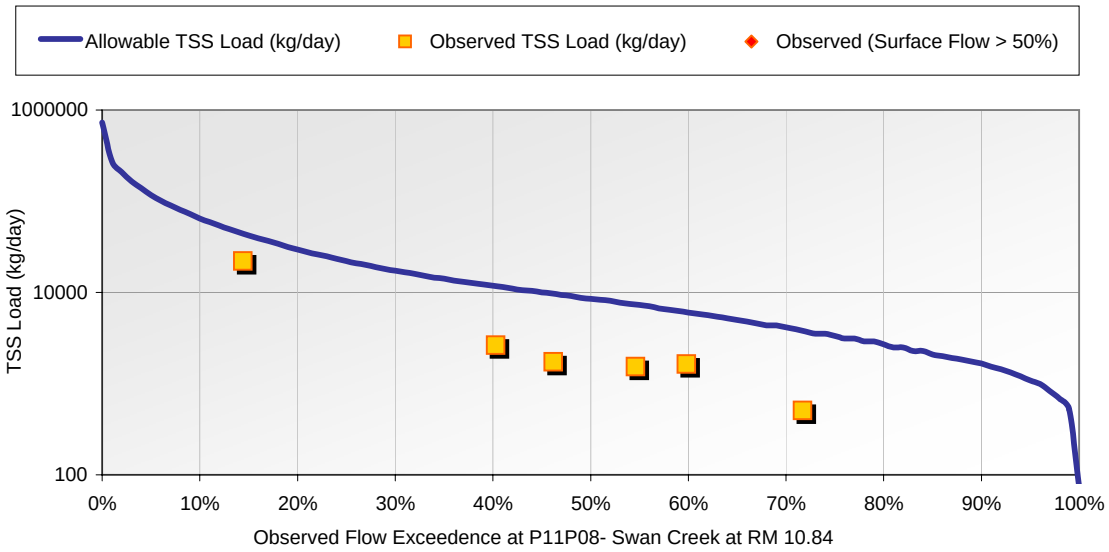
[94: TSS at P11P08 (mg/L)] -vs- [24: Flow at P11P08- Swan Creek at RM 10.84 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

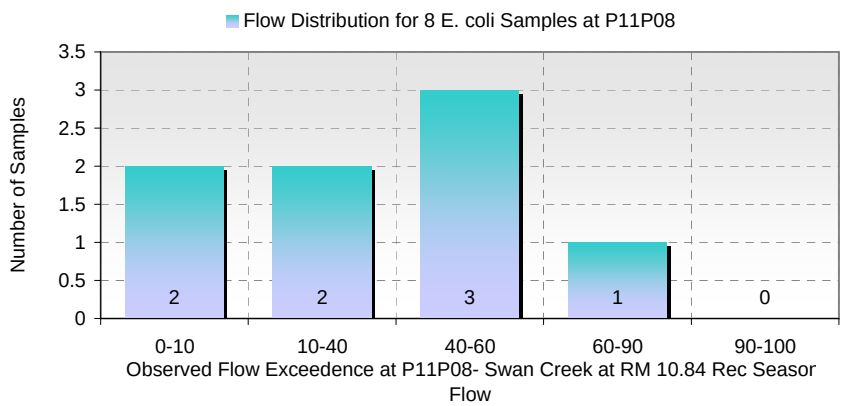


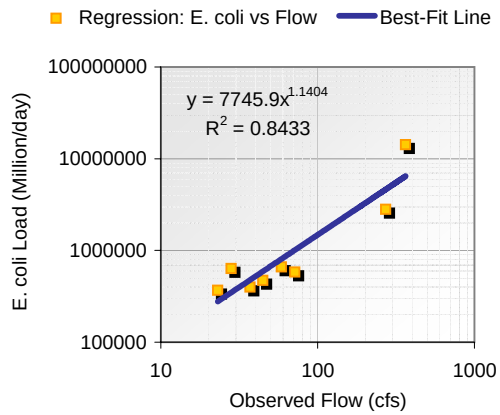
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	0	716.80	116,446	No Data	No Data
10-40	1	135.68	22,042	22,012	0.0%
40-60	4	52.48	8,526	1,682	0.0%
60-90	1	20.48	3,327	507	0.0%
90-100	0	6.66	1,081	No Data	No Data

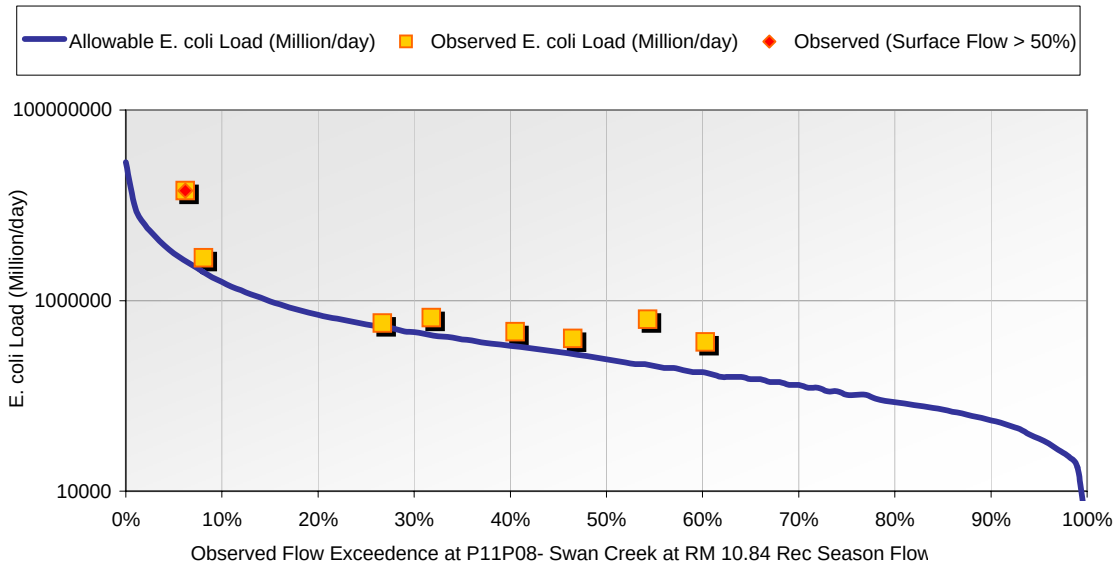
[95: E. coli at P11P08 (MPN/100mL)] -vs- [52: Flow at P11P08- Swan Creek at RM 10.84 Rec Season Flow (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

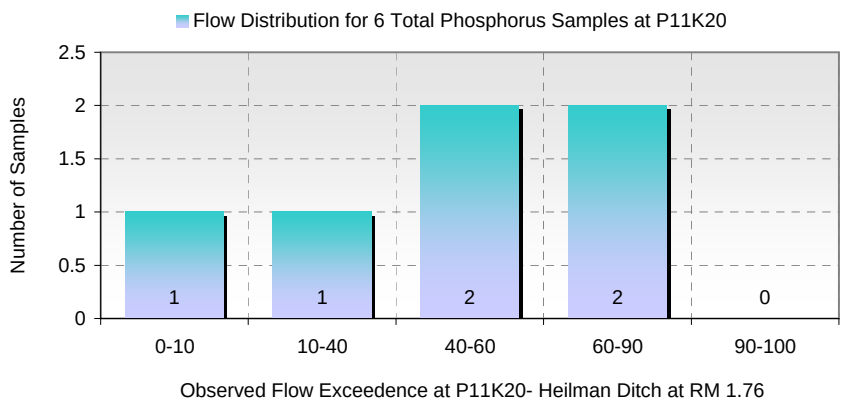


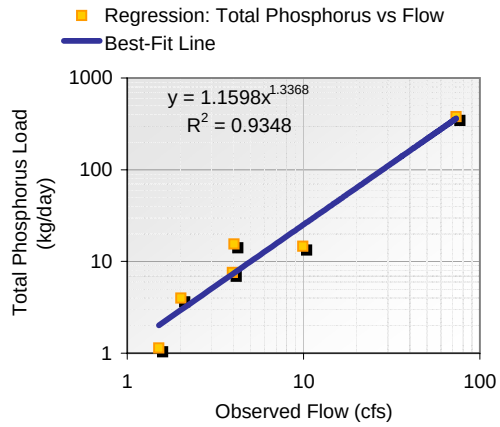
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	8-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Median Load (Million/day)	Estimated Reduction (%)
0-10	2	427.52	3,116,963	8,515,816	63.4%
10-40	2	76.80	559,935	620,691	9.8%
40-60	3	33.28	242,640	471,313	48.5%
60-90	1	14.08	102,658	366,406	72.0%
90-100	0	4.86	35,465	No Data	No Data

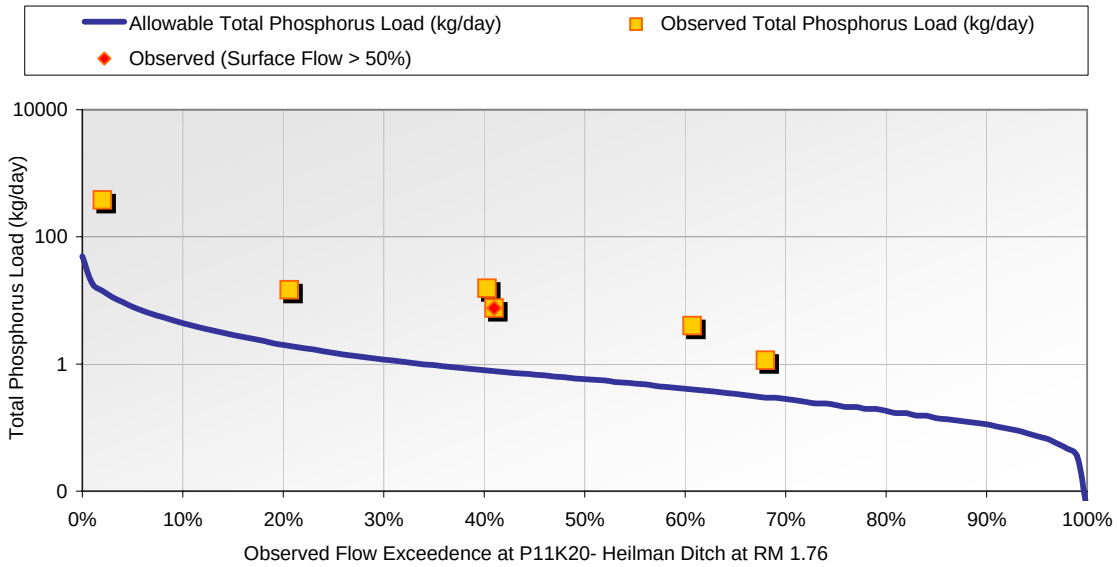
[112: Total Phosphorus at P11K20 (mg/L)] -vs- [28: Flow at P11K20- Heilman Ditch at RM 1.76 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

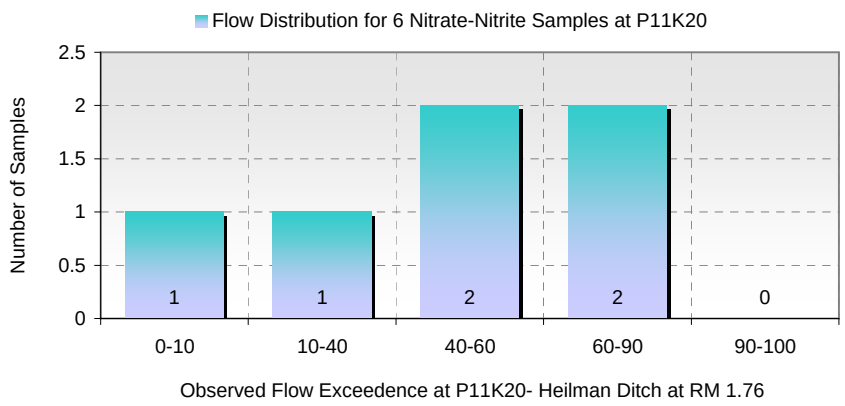


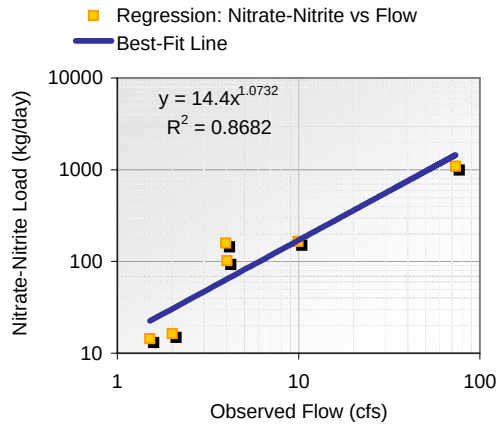
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	40.32	7.89	379.12	97.9%
10-40	1	7.63	1.49	14.59	89.8%
40-60	2	2.95	0.58	11.52	95.0%
60-90	2	1.15	0.23	2.57	91.2%
90-100	0	0.37	0.07	No Data	No Data

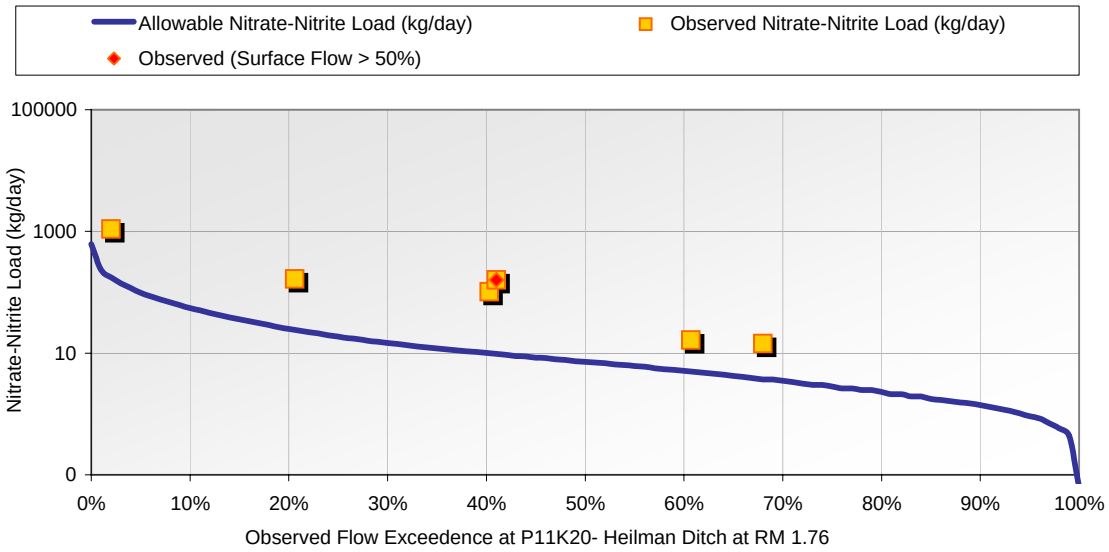
[111: Nitrate-Nitrite at P11K20 (mg/L)] -vs- [28: Flow at P11K20- Heilman Ditch at RM 1.76 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

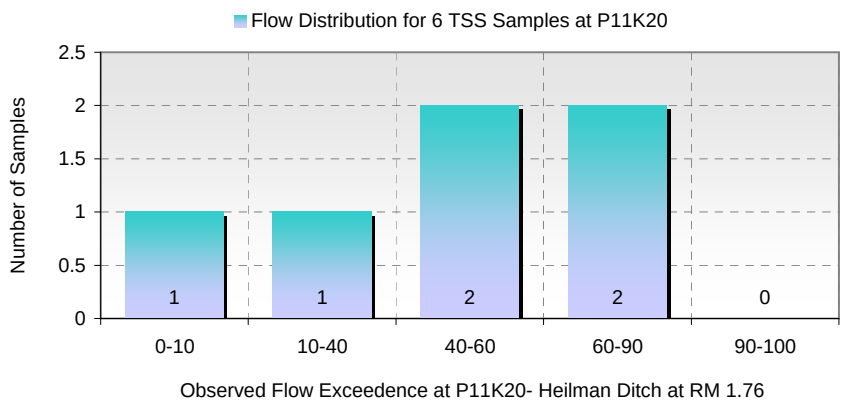


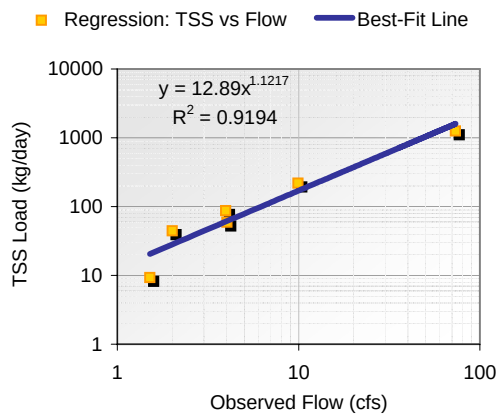
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	40.32	98.6	1087.0	90.9%
10-40	1	7.63	18.7	165.3	88.7%
40-60	2	2.95	7.2	130.2	94.5%
60-90	2	1.15	2.8	15.4	81.6%
90-100	0	0.37	0.9	No Data	No Data

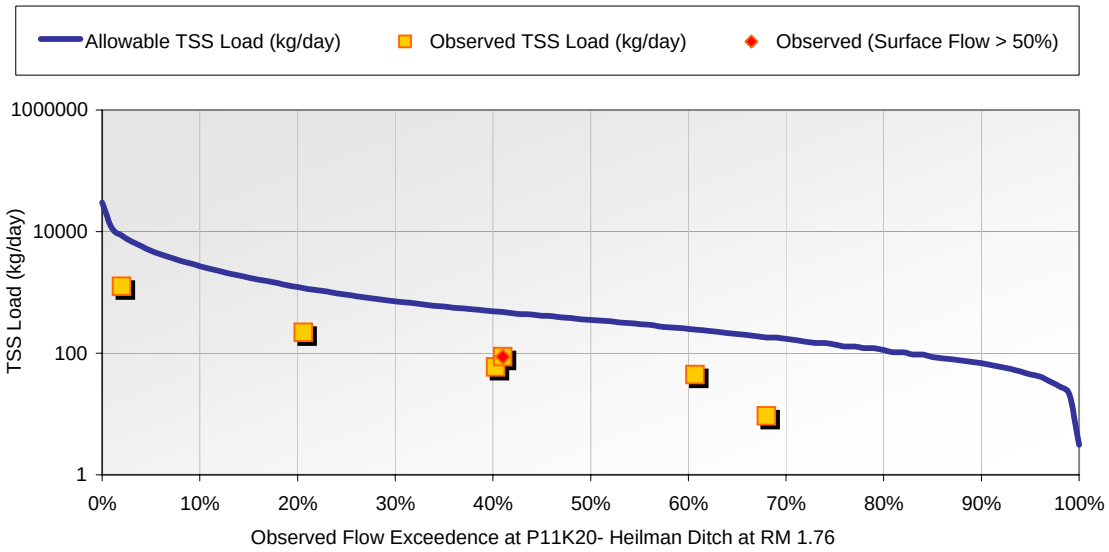
[113: TSS at P11K20 (mg/L)] -vs- [28: Flow at P11K20- Heilman Ditch at RM 1.76 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

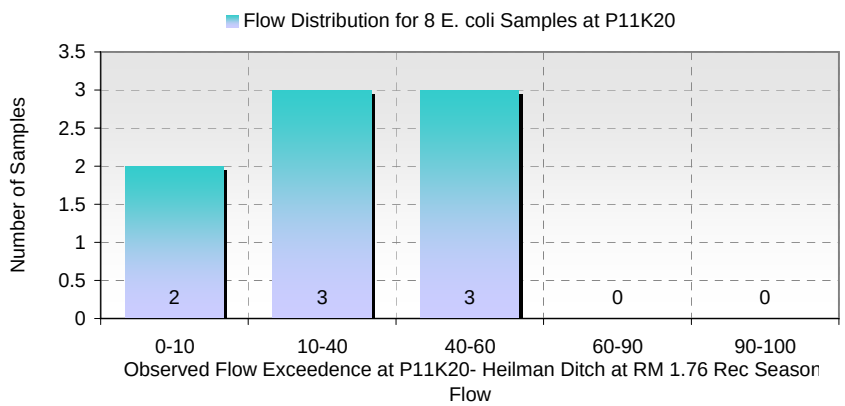


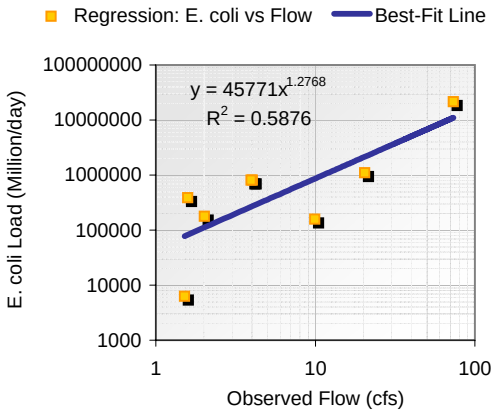
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	40.32	4,834	1,258	0.0%
10-40	1	7.63	915	219	0.0%
40-60	2	2.95	354	73	0.0%
60-90	2	1.15	138	27	0.0%
90-100	0	0.37	45	No Data	No Data

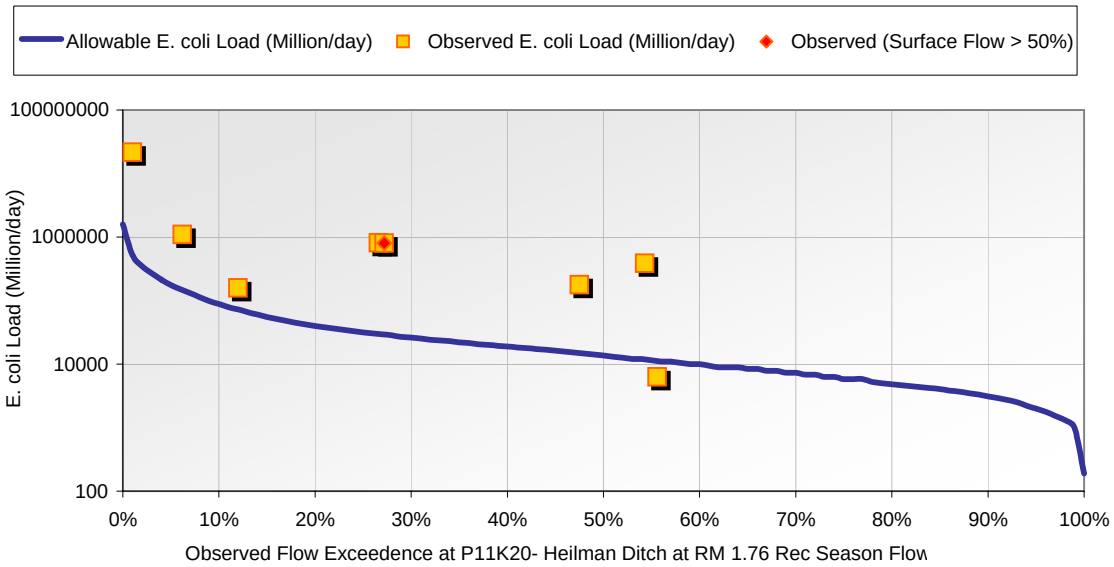
[114: E. coli at P11K20 (MPN/100mL)] -vs- [56: Flow at P11K20- Heilman Ditch at RM 1.76 Rec Season Flow (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

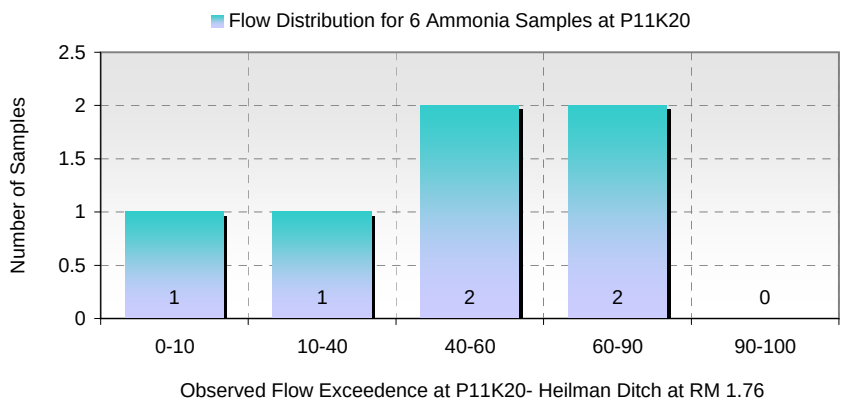


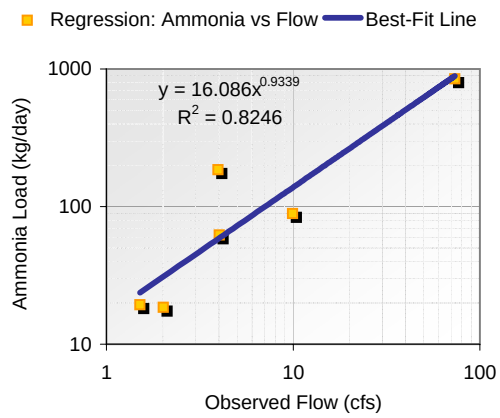
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	8-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Median Load (Million/day)	Estimated Reduction (%)
0-10	2	24.05	175,329	11,330,898	98.5%
10-40	3	4.32	31,496	804,146	96.1%
40-60	3	1.87	13,648	177,565	92.3%
60-90	0	0.79	5,774	No Data	No Data
90-100	0	0.27	1,995	No Data	No Data

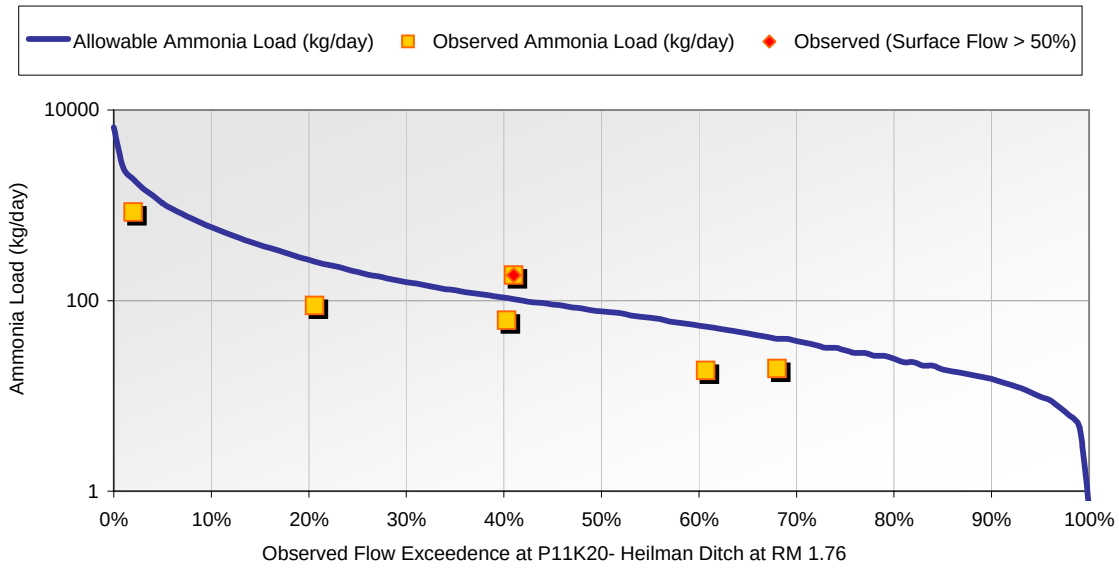
[116: Ammonia at P11K20 (mg/L)] -vs- [28: Flow at P11K20- Heilman Ditch at RM 1.76 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

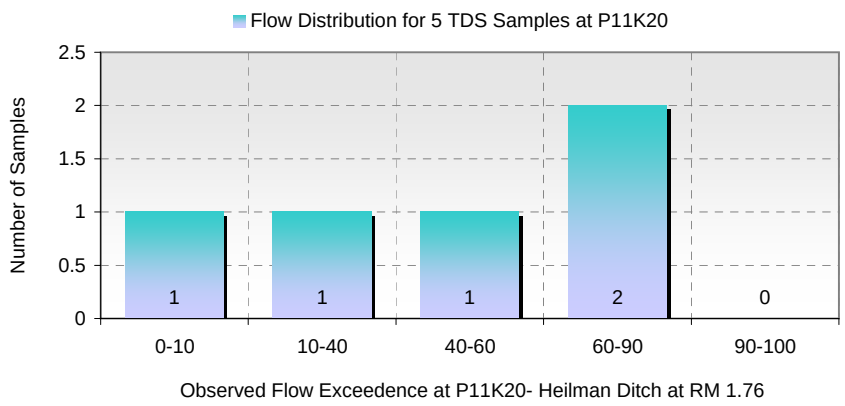


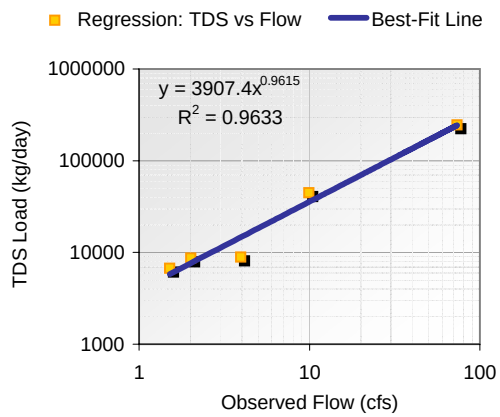
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	40.32	1,055.5	846.3	0.0%
10-40	1	7.63	199.8	88.7	0.0%
40-60	2	2.95	77.3	123.6	37.5%
60-90	2	1.15	30.2	18.9	0.0%
90-100	0	0.37	9.8	No Data	No Data

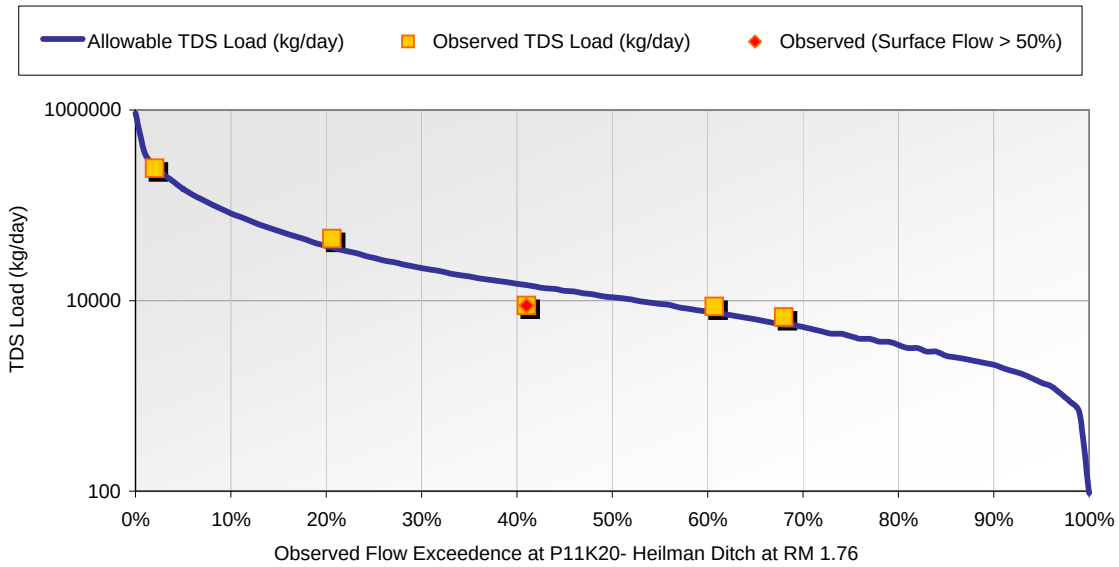
[117: TDS at P11K20 (mg/L)] -vs- [28: Flow at P11K20- Heilman Ditch at RM 1.76 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

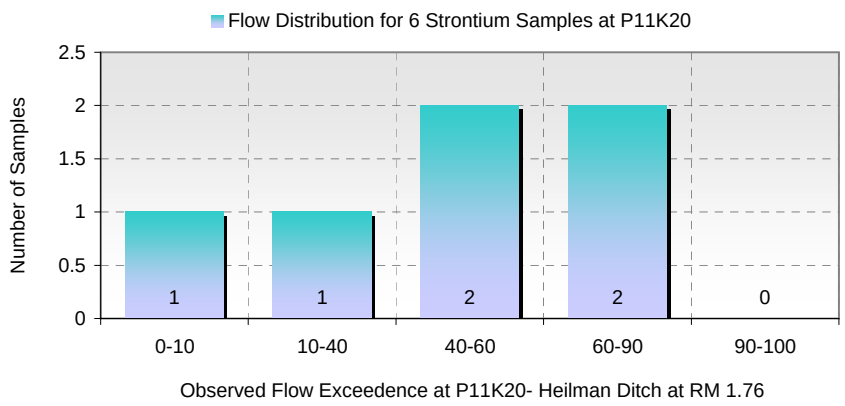


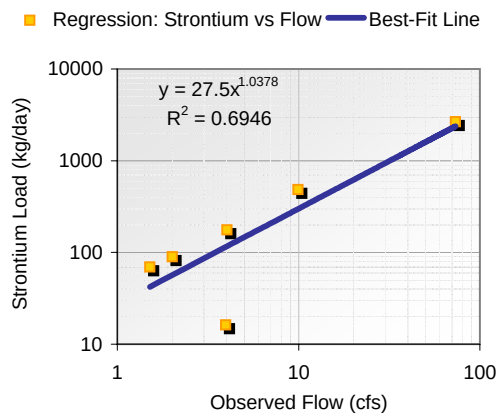
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	5-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	40.32	147,969	244,360	39.4%
10-40	1	7.63	28,008	44,729	37.4%
40-60	1	2.95	10,833	8,855	0.0%
60-90	2	1.15	4,228	7,707	45.1%
90-100	0	0.37	1,374	No Data	No Data

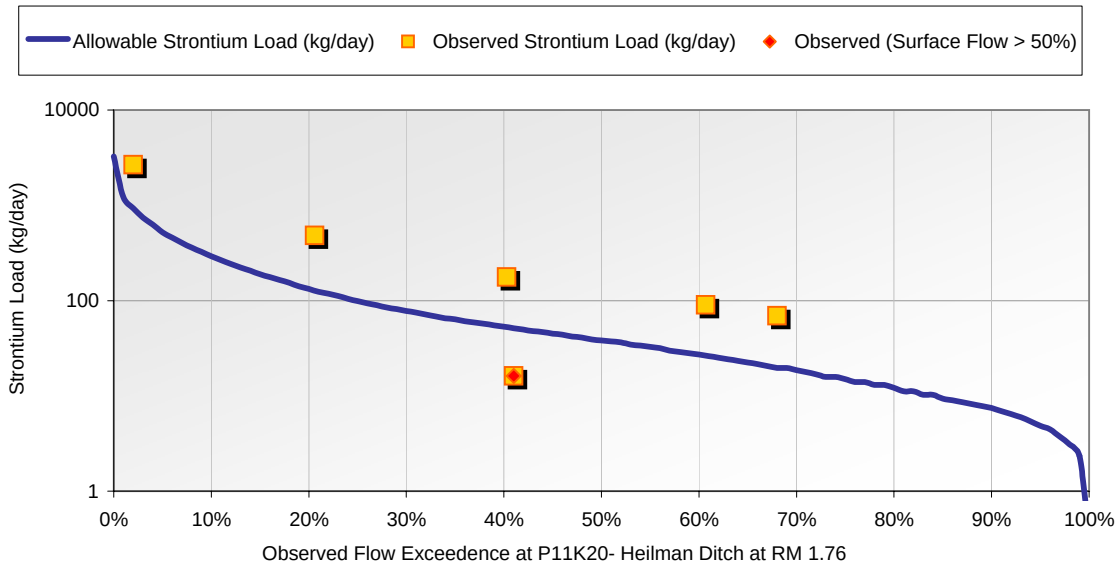
[115: Strontium at P11K20 (µg/L)] -vs- [28: Flow at P11K20- Heilman Ditch at RM 1.76 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

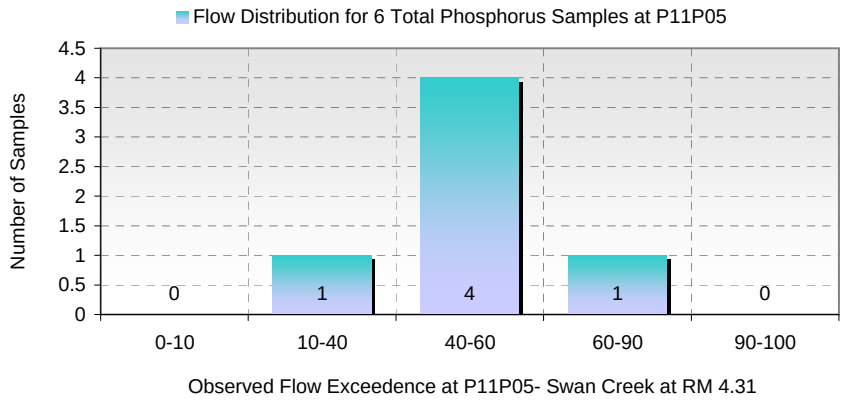


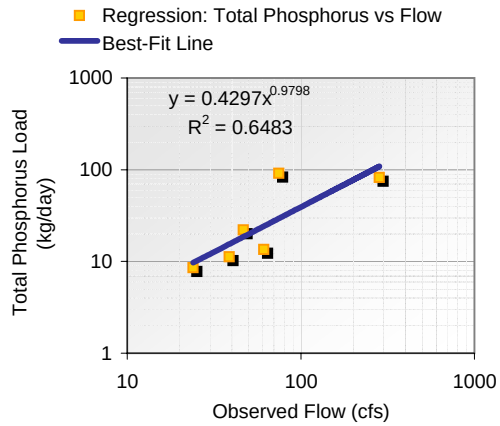
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	1	40.32	522.8	2,659.2	80.3%
10-40	1	7.63	99.0	483.8	79.5%
40-60	2	2.95	38.3	96.4	60.3%
60-90	2	1.15	14.9	79.5	81.2%
90-100	0	0.37	4.9	No Data	No Data

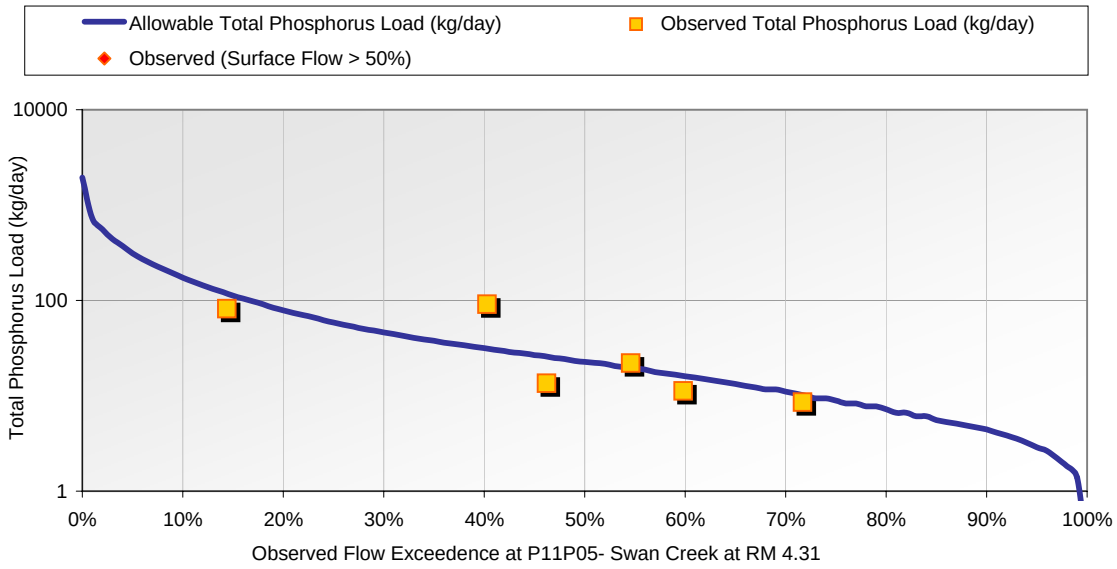
[97: Total Phosphorus at P11P05 (mg/L)] -vs- [25: Flow at P11P05- Swan Creek at RM 4.31 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

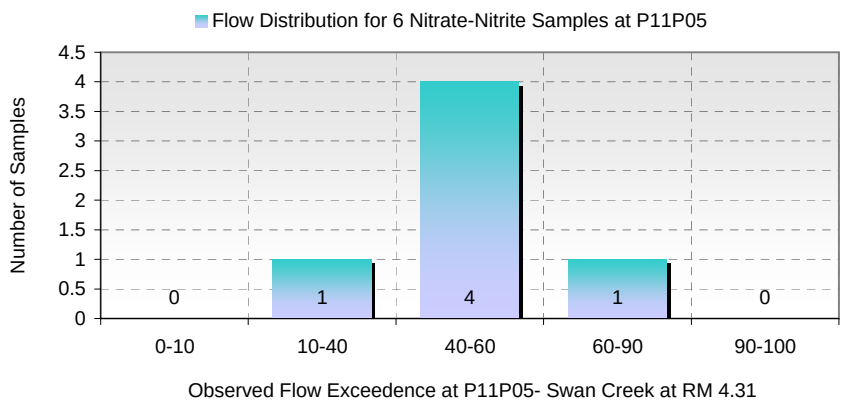


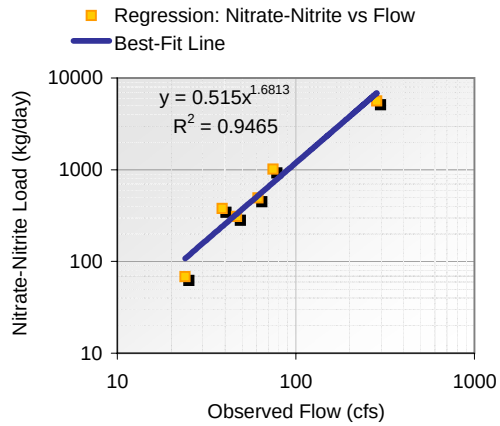
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	0	746.67	310.55	No Data	No Data
10-40	1	141.33	58.78	81.99	28.3%
40-60	4	54.67	22.74	17.77	0.0%
60-90	1	21.33	8.87	8.57	0.0%
90-100	0	6.93	2.88	No Data	No Data

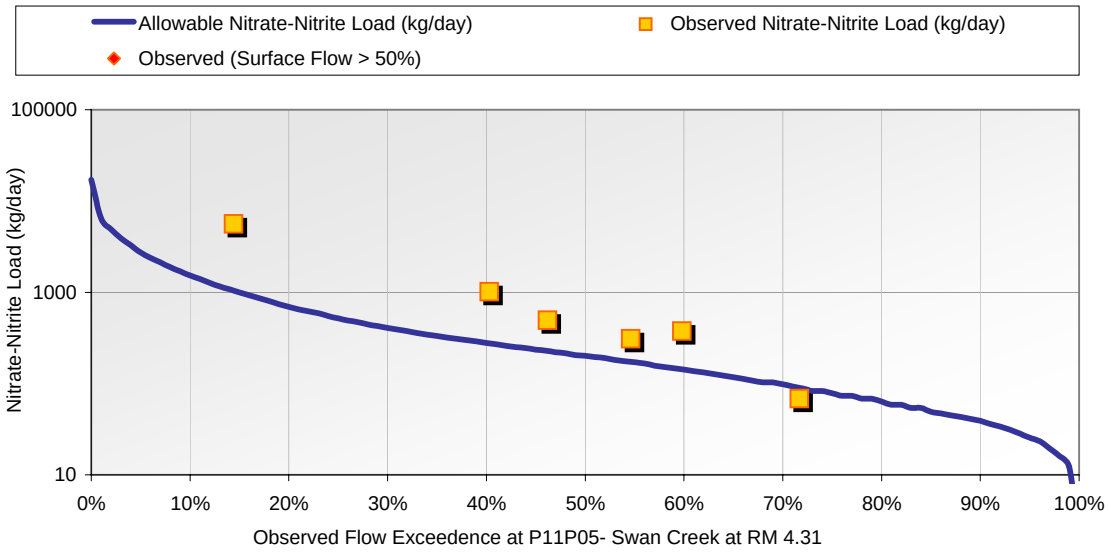
[96: Nitrate-Nitrite at P11P05 (mg/L)] -vs- [25: Flow at P11P05- Swan Creek at RM 4.31 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

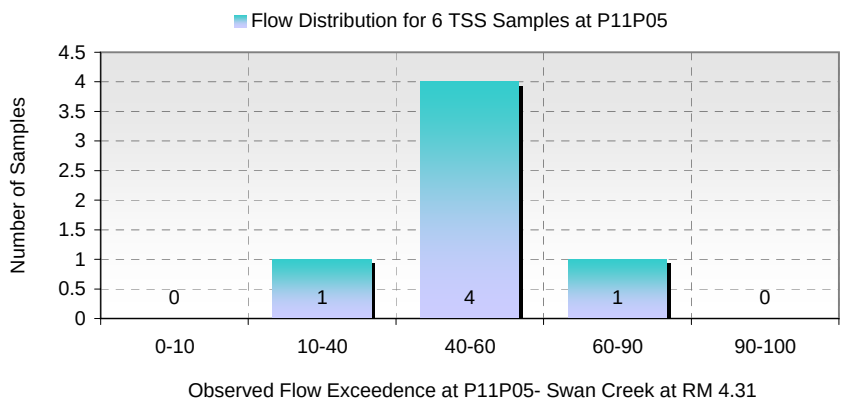


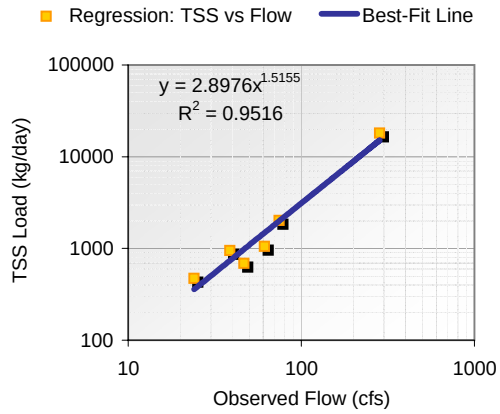
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	0	746.67	2740.2	No Data	No Data
10-40	1	141.33	518.7	5621.2	90.8%
40-60	4	54.67	200.6	435.1	53.9%
60-90	1	21.33	78.3	68.1	0.0%
90-100	0	6.93	25.4	No Data	No Data

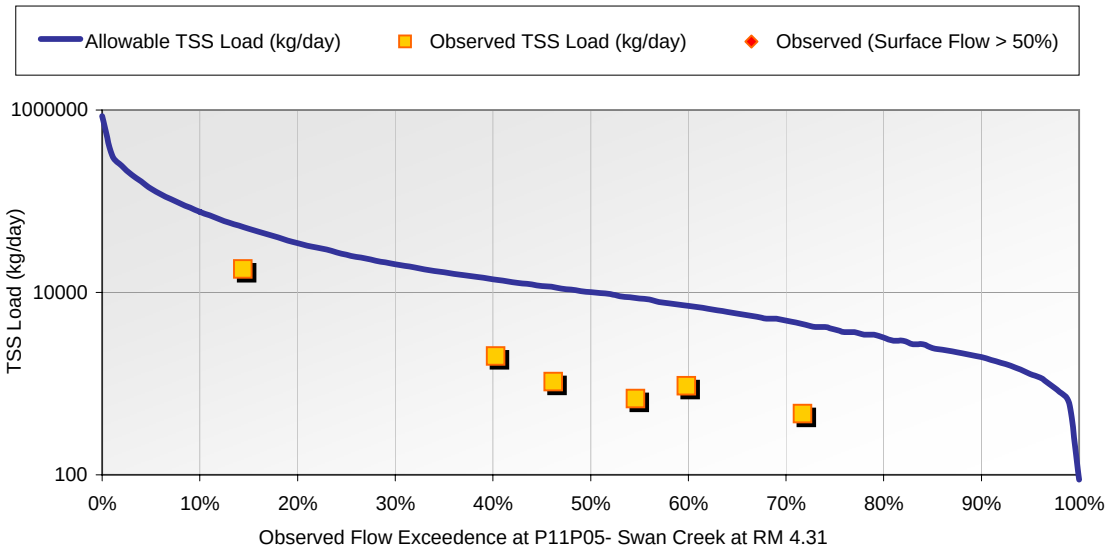
[98: TSS at P11P05 (mg/L)] -vs- [25: Flow at P11P05- Swan Creek at RM 4.31 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

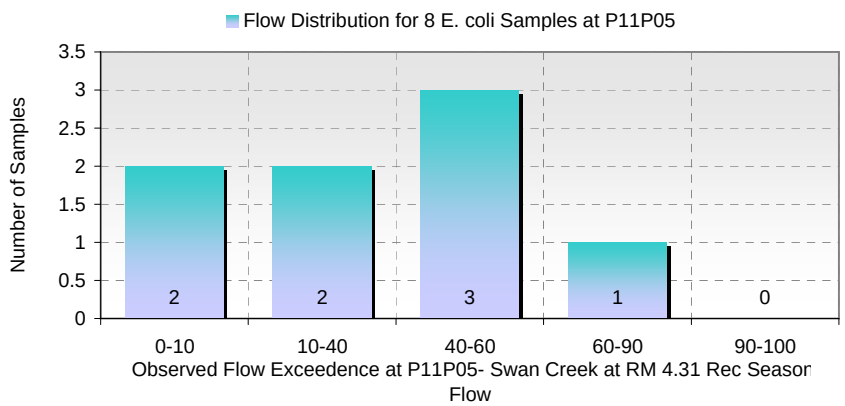


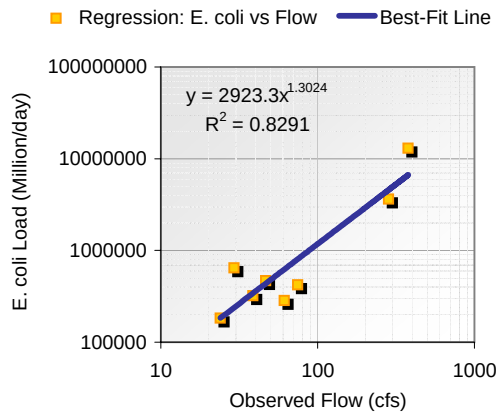
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	0	746.67	137,374	No Data	No Data
10-40	1	141.33	26,003	18,066	0.0%
40-60	4	54.67	10,058	998	0.0%
60-90	1	21.33	3,925	470	0.0%
90-100	0	6.93	1,276	No Data	No Data

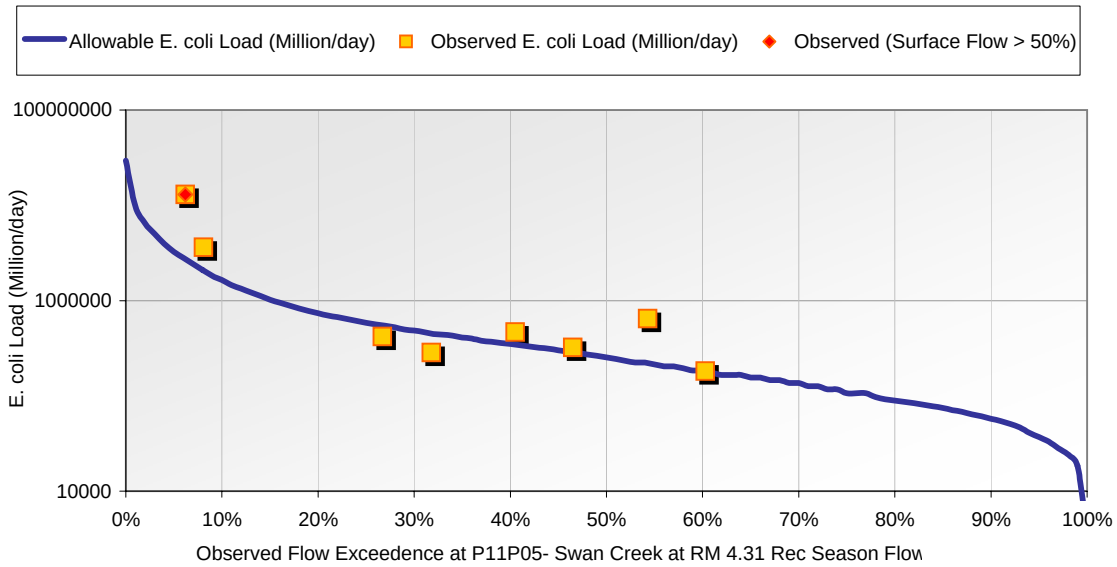
[99: E. coli at P11P05 (MPN/100mL)] -vs- [53: Flow at P11P05- Swan Creek at RM 4.31 Rec Season Flow (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

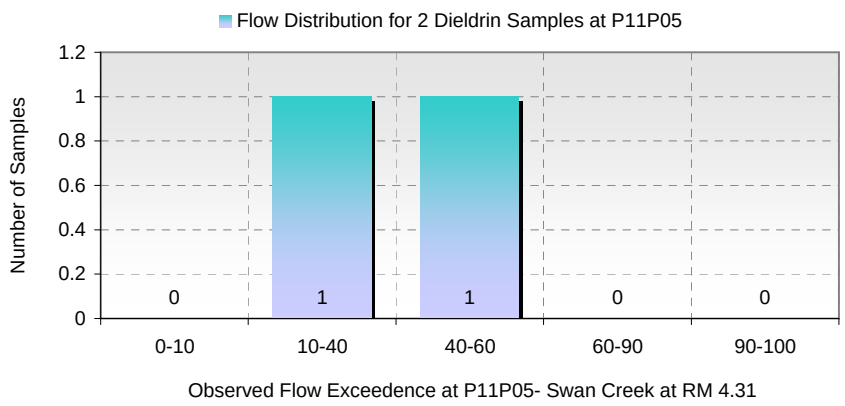


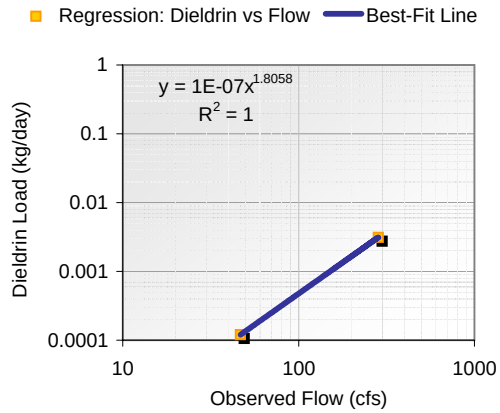
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	8-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Median Load (Million/day)	Estimated Reduction (%)
0-10	2	445.33	3,246,837	8,291,619	60.8%
10-40	2	80.00	583,266	352,636	0.0%
40-60	3	34.67	252,750	468,116	46.0%
60-90	1	14.67	106,935	182,029	41.3%
90-100	0	5.07	36,942	No Data	No Data

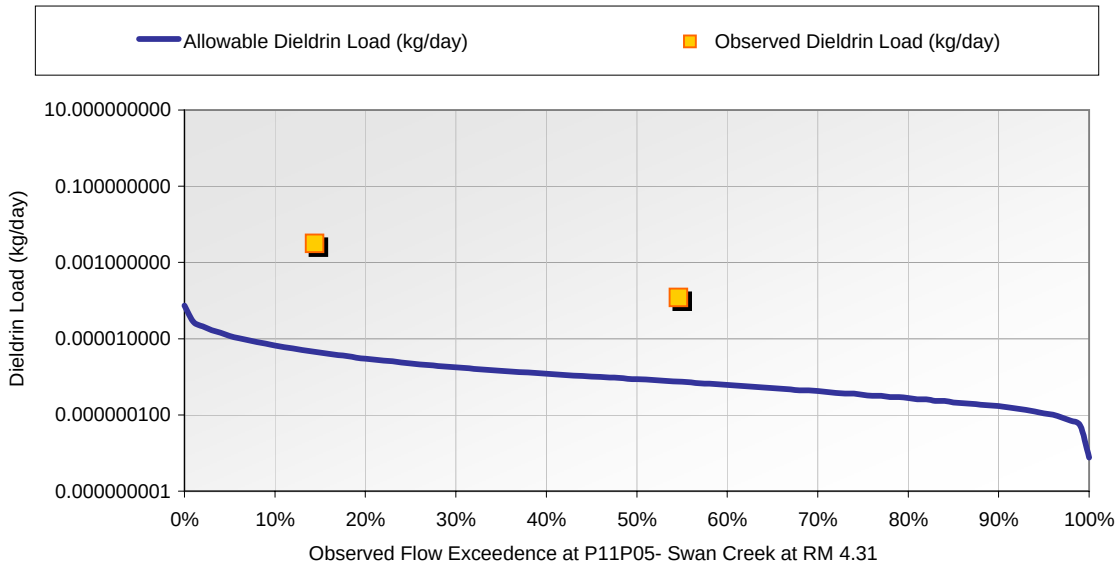
[100: Dieldrin at P11P05 (µg/L)] -vs- [25: Flow at P11P05- Swan Creek at RM 4.31 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

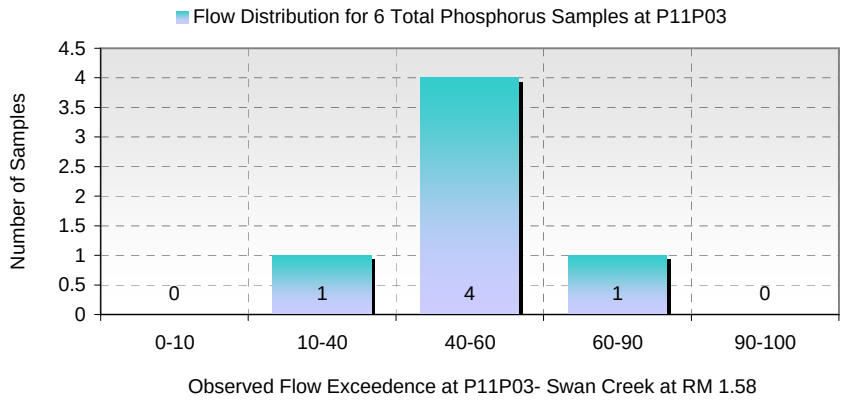


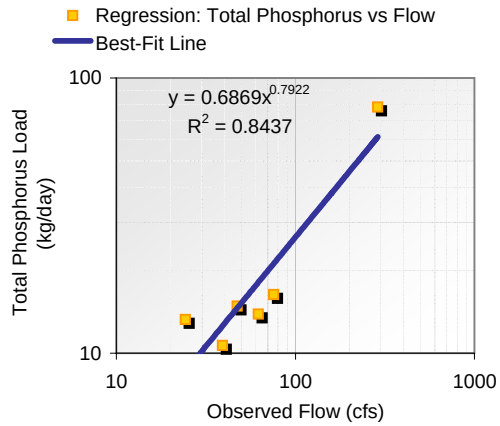
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	2-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	0	746.67	0.0000119	No Data	No Data
10-40	1	141.33	0.0000022	0.0031267	99.9%
40-60	1	54.67	0.0000009	0.0001199	99.3%
60-90	0	21.33	0.0000003	No Data	No Data
90-100	0	6.93	0.0000001	No Data	No Data

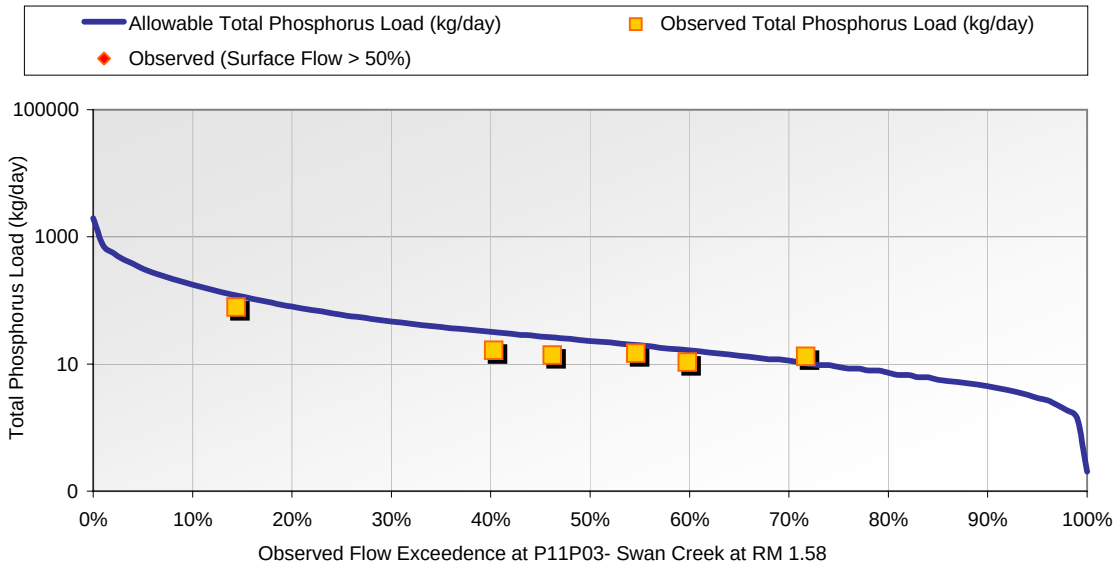
[102: Total Phosphorus at P11P03 (mg/L)] -vs- [26: Flow at P11P03- Swan Creek at RM 1.58 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

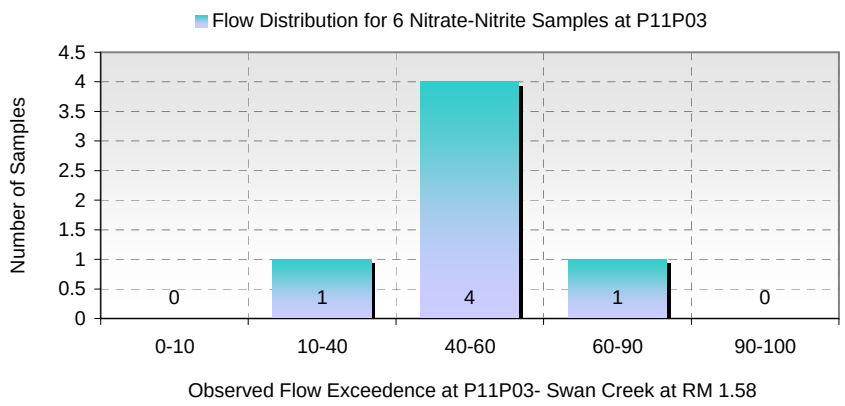


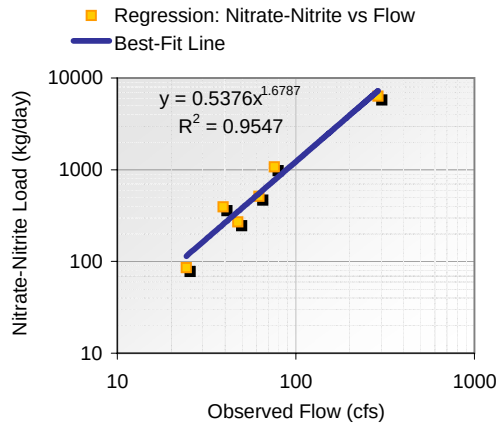
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	0	757.87	315.21	No Data	No Data
10-40	1	143.45	59.66	78.28	23.8%
40-60	4	55.49	23.08	14.35	0.0%
60-90	1	21.65	9.01	13.23	31.9%
90-100	0	7.04	2.93	No Data	No Data

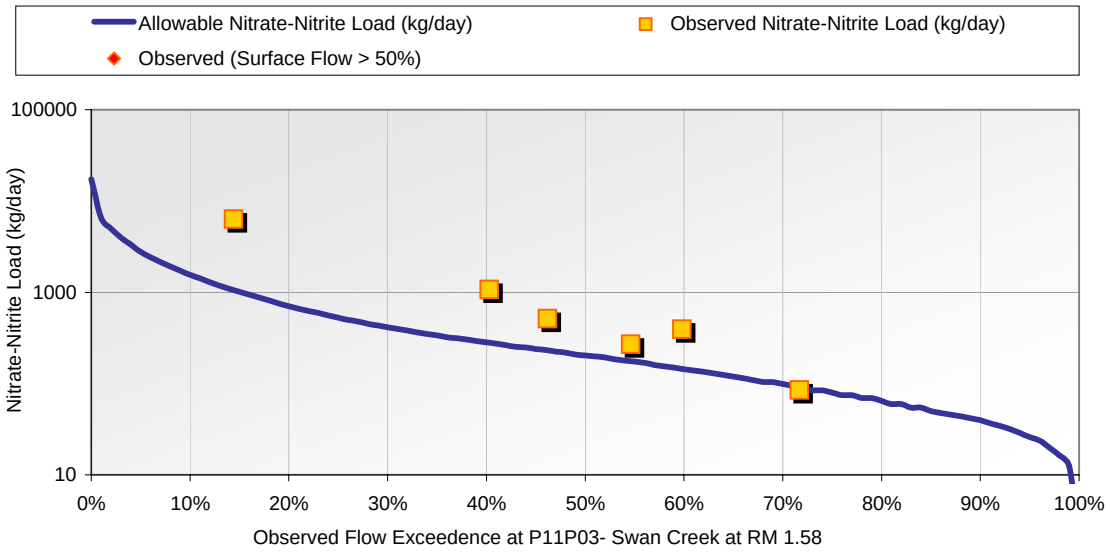
[101: Nitrate-Nitrite at P11P03 (mg/L)] -vs- [26: Flow at P11P03- Swan Creek at RM 1.58 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

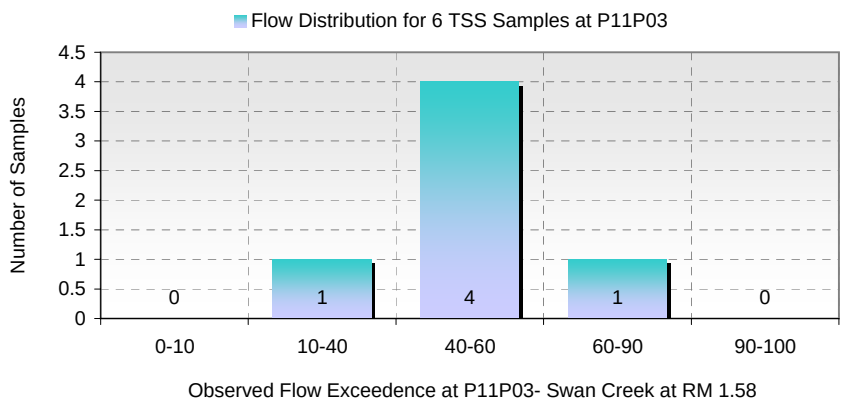


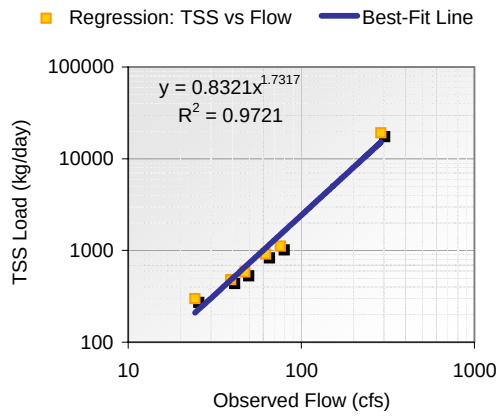
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	0	757.87	2781.3	No Data	No Data
10-40	1	143.45	526.5	6304.9	91.7%
40-60	4	55.49	203.6	452.2	55.0%
60-90	1	21.65	79.5	85.2	6.8%
90-100	0	7.04	25.8	No Data	No Data

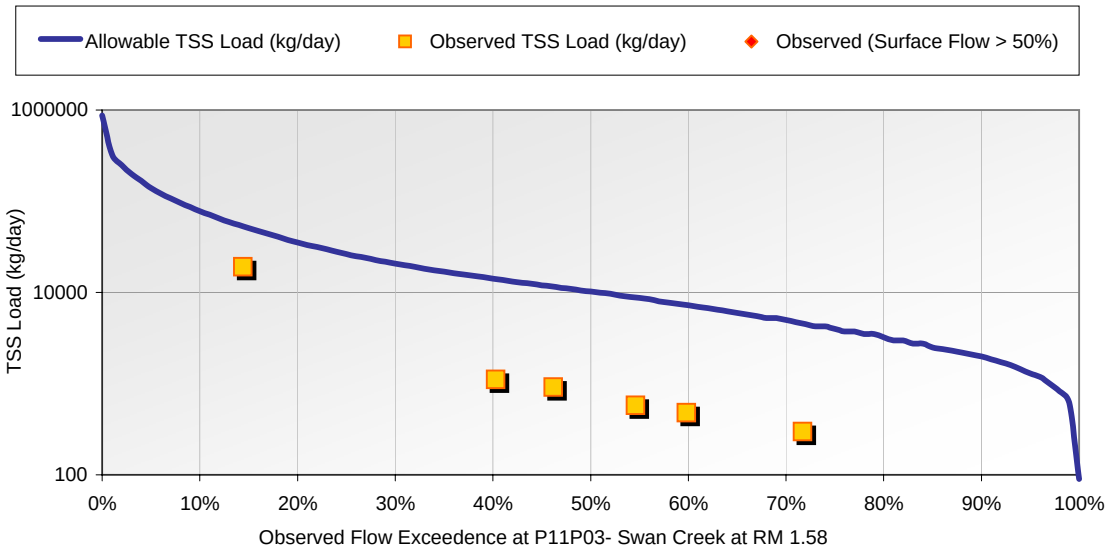
[103: TSS at P11P03 (mg/L)] -vs- [26: Flow at P11P03- Swan Creek at RM 1.58 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

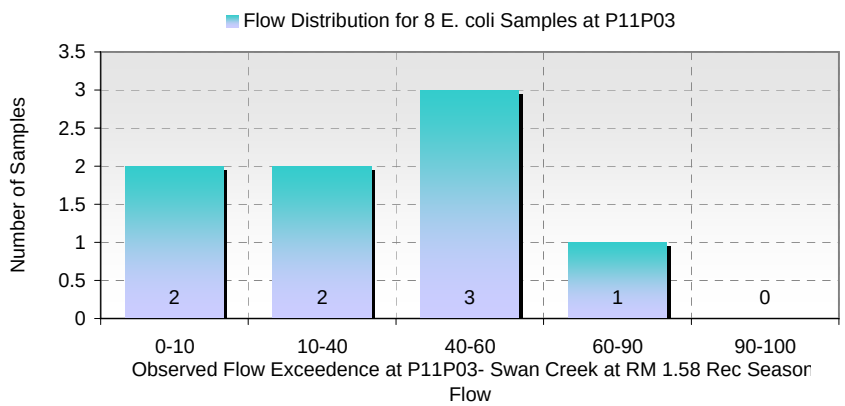


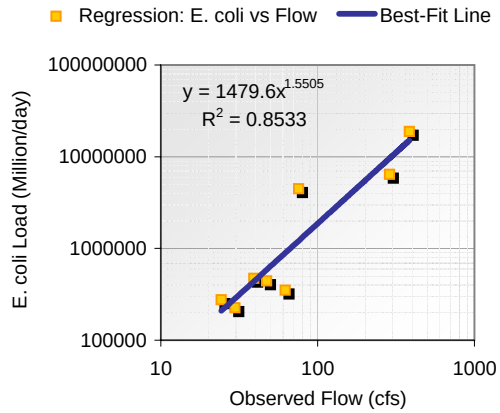
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	0	757.87	139,434	No Data	No Data
10-40	1	143.45	26,393	19,042	0.0%
40-60	4	55.49	10,209	747	0.0%
60-90	1	21.65	3,984	298	0.0%
90-100	0	7.04	1,295	No Data	No Data

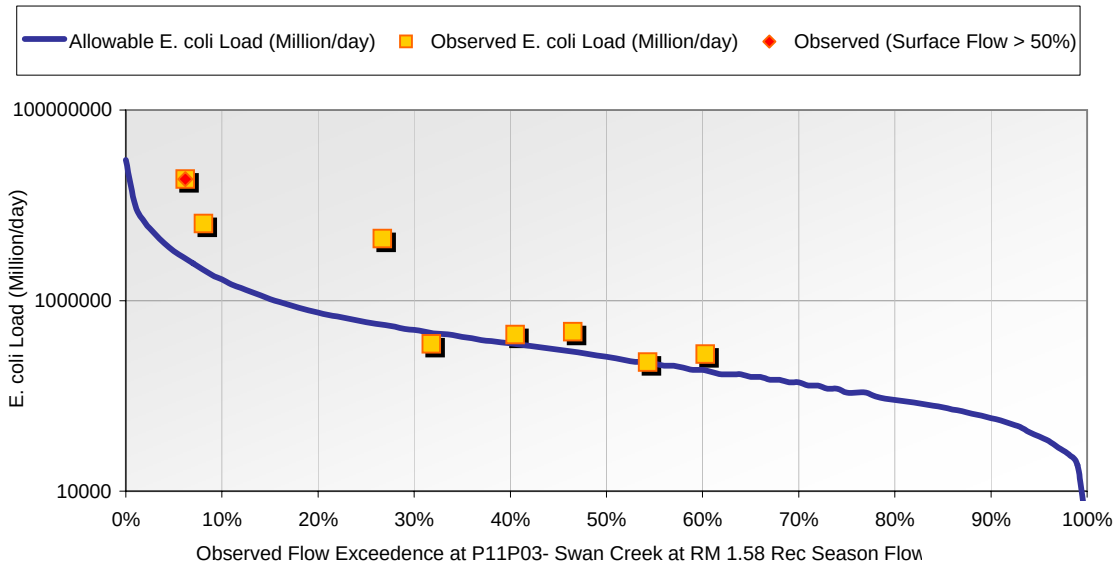
[104: E. coli at P11P03 (MPN/100mL)] -vs- [54: Flow at P11P03- Swan Creek at RM 1.58 Rec Season Flow (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

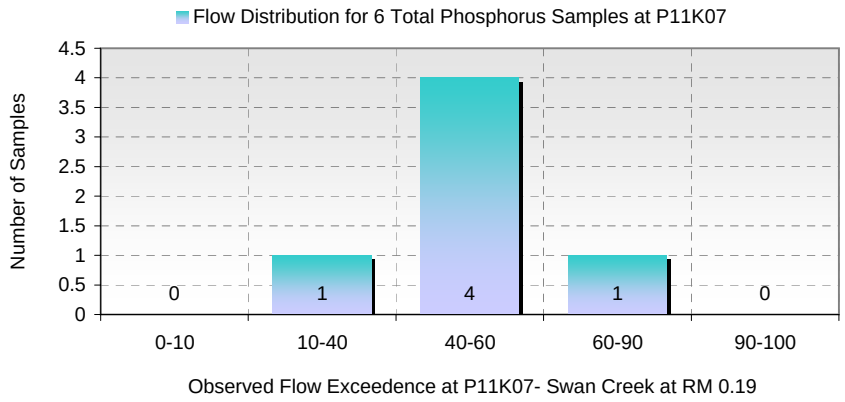


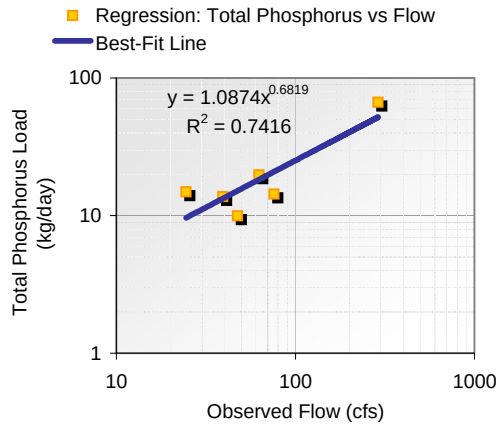
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	8-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Median Load (Million/day)	Estimated Reduction (%)
0-10	2	452.01	3,295,539	12,612,235	73.9%
10-40	2	81.20	592,015	2,400,183	75.3%
40-60	3	35.19	256,541	440,372	41.7%
60-90	1	14.89	108,539	274,159	60.4%
90-100	0	5.14	37,496	No Data	No Data

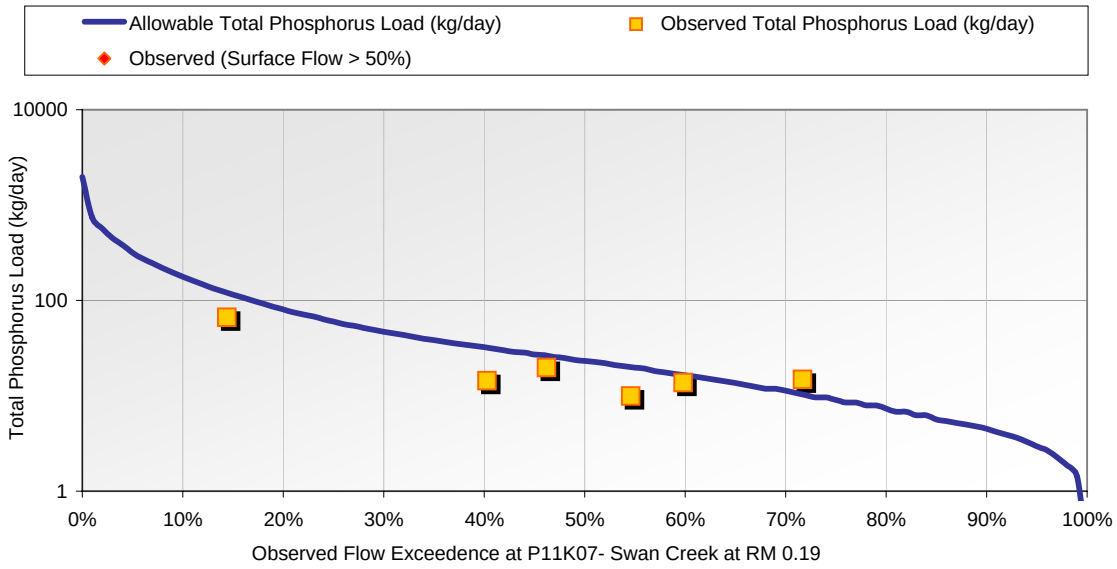
[106: Total Phosphorus at P11K07 (mg/L)] -vs- [27: Flow at P11K07- Swan Creek at RM 0.19 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

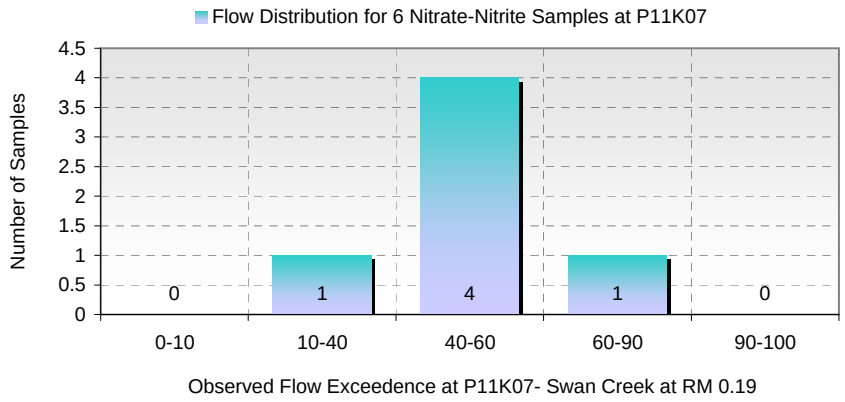


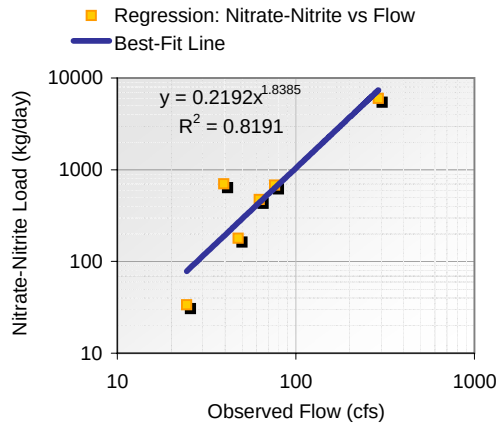
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	0	761.60	316.76	No Data	No Data
10-40	1	144.16	59.96	66.62	10.0%
40-60	4	55.76	23.19	14.05	0.0%
60-90	1	21.76	9.05	14.88	39.2%
90-100	0	7.07	2.94	No Data	No Data

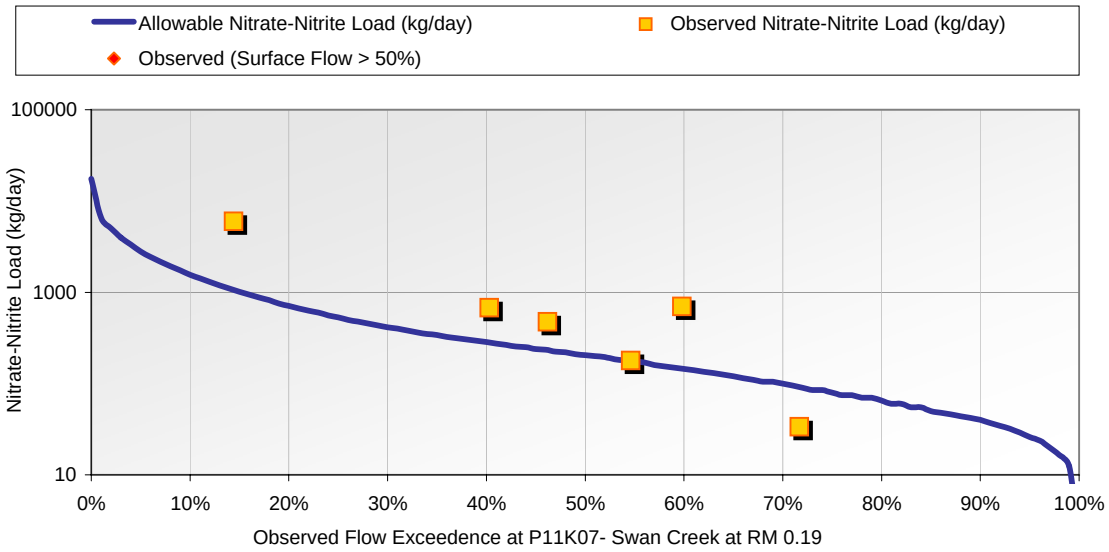
[105: Nitrate-Nitrite at P11K07 (mg/L)] -vs- [27: Flow at P11K07- Swan Creek at RM 0.19 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

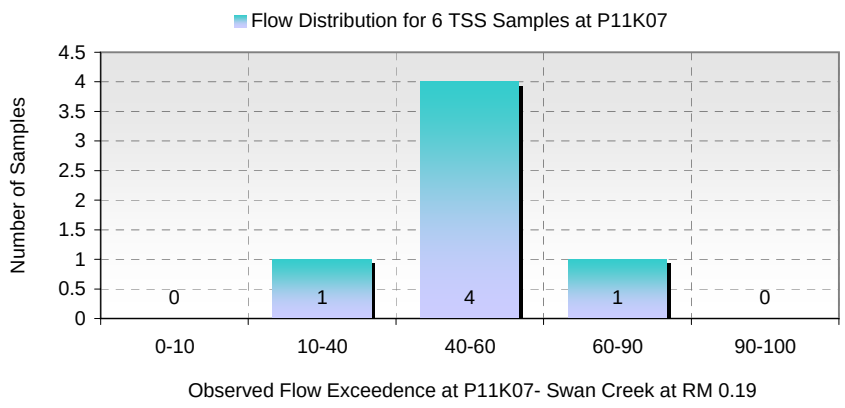


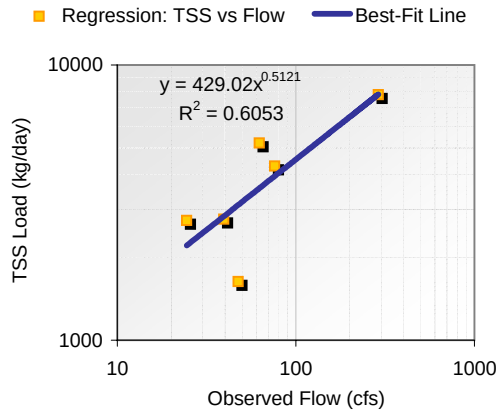
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	0	761.60	2795.0	No Data	No Data
10-40	1	144.16	529.0	5995.8	91.2%
40-60	4	55.76	204.6	575.6	64.4%
60-90	1	21.76	79.9	33.5	0.0%
90-100	0	7.07	26.0	No Data	No Data

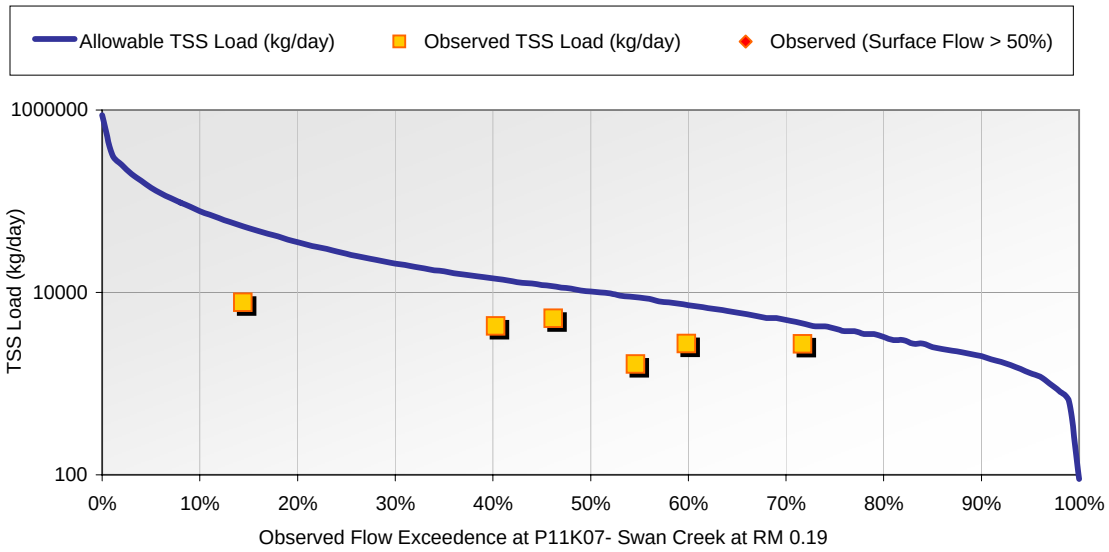
[107: TSS at P11K07 (mg/L)] -vs- [27: Flow at P11K07- Swan Creek at RM 0.19 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

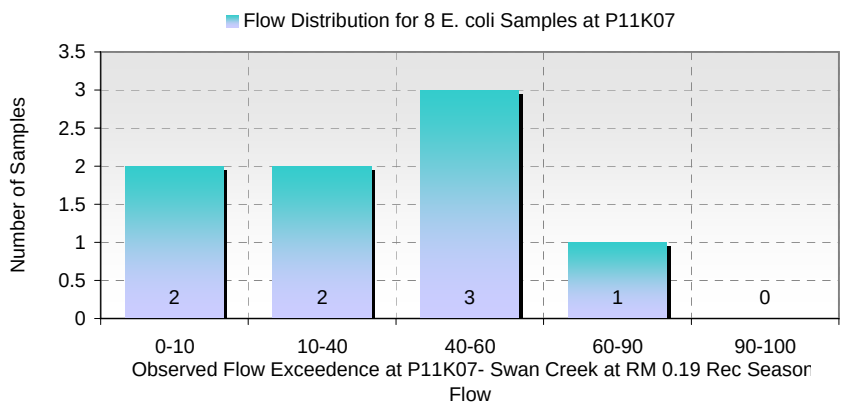


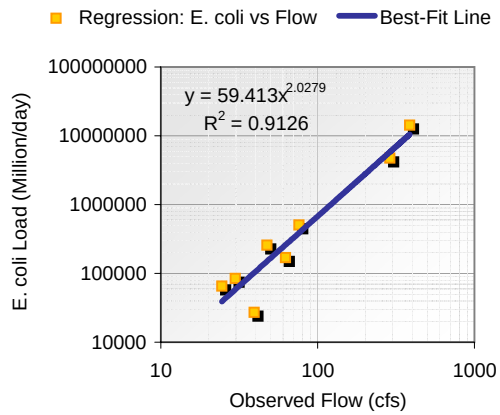
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	0	761.60	140,121	No Data	No Data
10-40	1	144.16	26,523	7,796	0.0%
40-60	4	55.76	10,259	3,518	0.0%
60-90	1	21.76	4,004	2,725	0.0%
90-100	0	7.07	1,301	No Data	No Data

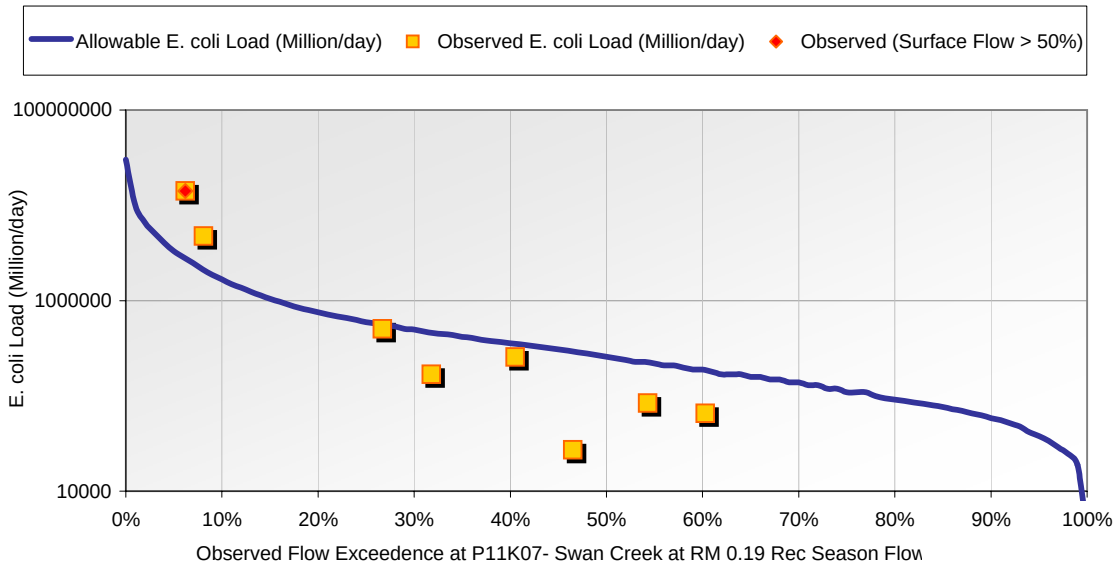
[108: E. coli at P11K07 (MPN/100mL)] -vs- [55: Flow at P11K07- Swan Creek at RM 0.19 Rec Season Flow (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

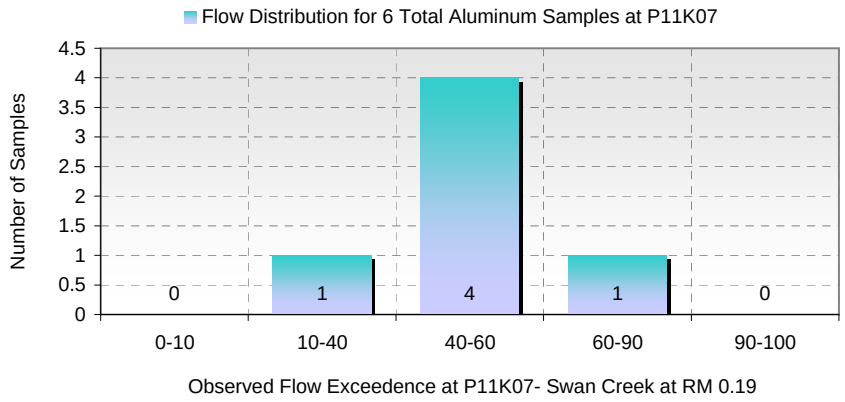


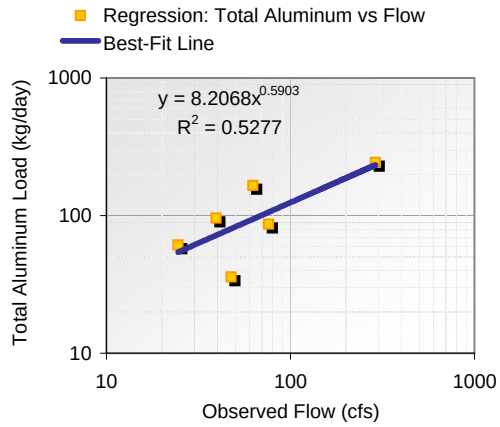
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	8-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Median Load (Million/day)	Estimated Reduction (%)
0-10	2	454.24	3,311,773	9,461,478	65.0%
10-40	2	81.60	594,931	335,731	0.0%
40-60	3	35.36	257,805	84,183	0.0%
60-90	1	14.96	109,074	65,284	0.0%
90-100	0	5.17	37,681	No Data	No Data

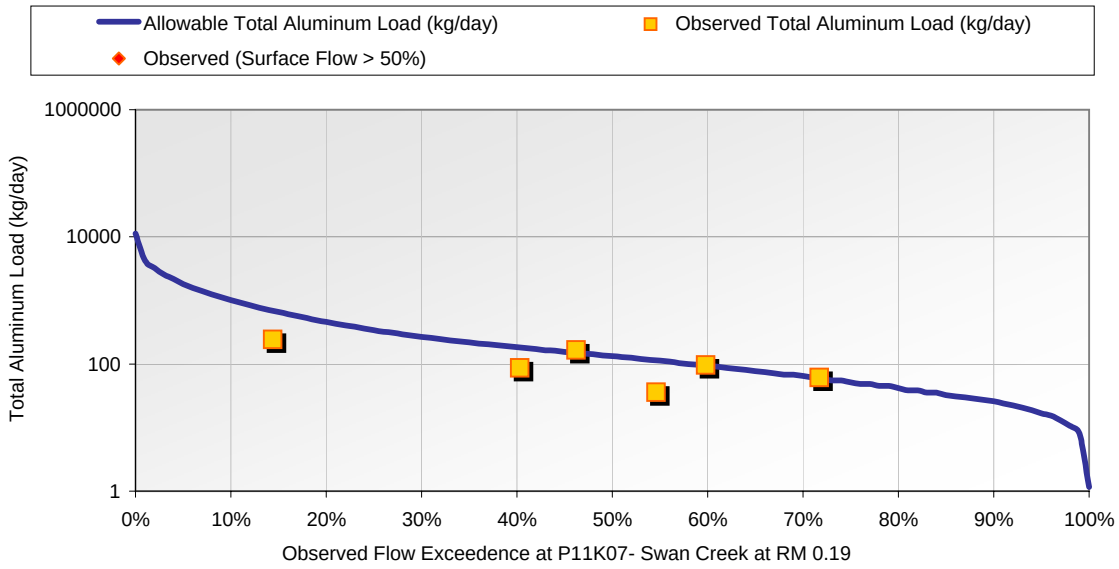
[110: Total Aluminum at P11K07 (µg/L)] -vs- [27: Flow at P11K07- Swan Creek at RM 0.19 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

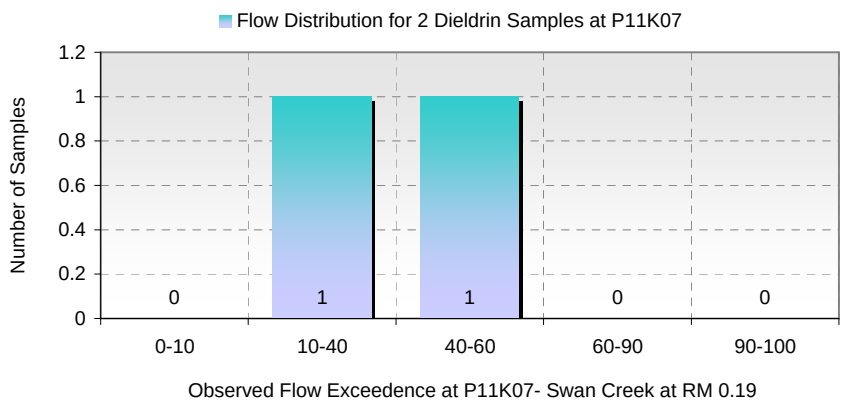


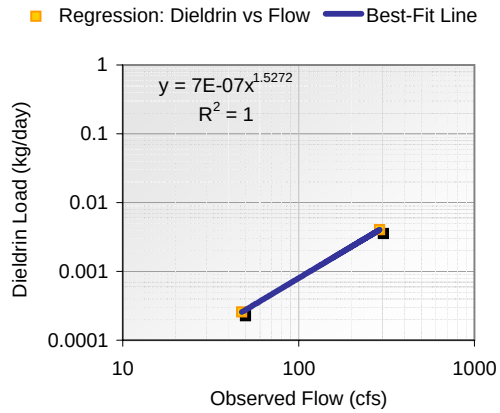
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	6-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	0	761.60	1,807.4	No Data	No Data
10-40	1	144.16	342.1	243.1	0.0%
40-60	4	55.76	132.3	91.1	0.0%
60-90	1	21.76	51.6	61.2	15.6%
90-100	0	7.07	16.8	No Data	No Data

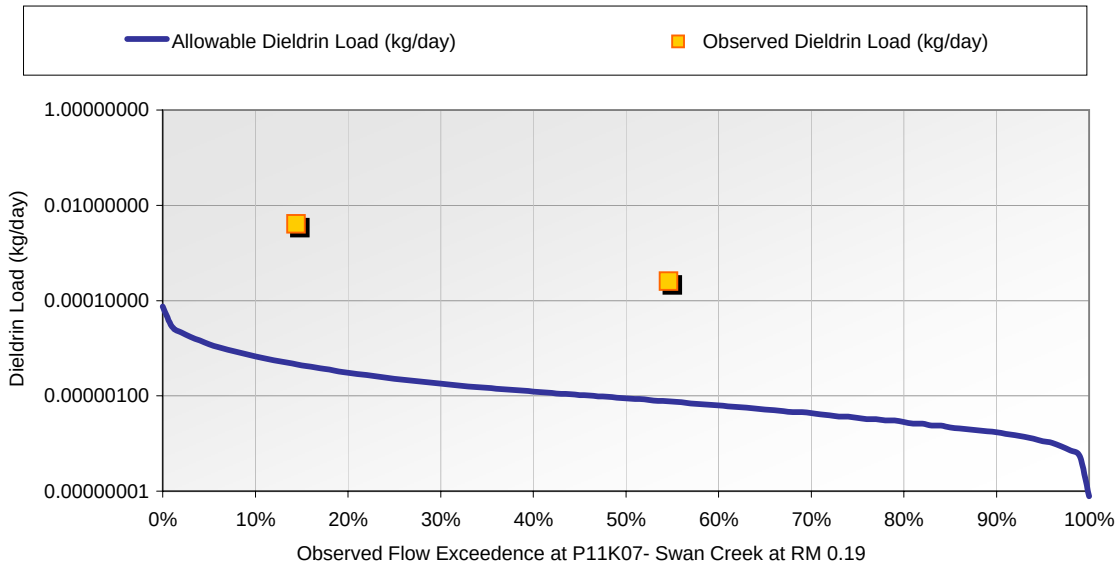
[109: Dieldrin at P11K07 (µg/L)] -vs- [27: Flow at P11K07- Swan Creek at RM 0.19 (cfs)]

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis



3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	2-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Median Load (kg/day)	Estimated Reduction (%)
0-10	0	761.60	0.0000121	No Data	No Data
10-40	1	144.16	0.0000023	0.0040397	99.9%
40-60	1	55.76	0.0000009	0.0002562	99.7%
60-90	0	21.76	0.0000003	No Data	No Data
90-100	0	7.07	0.0000001	No Data	No Data