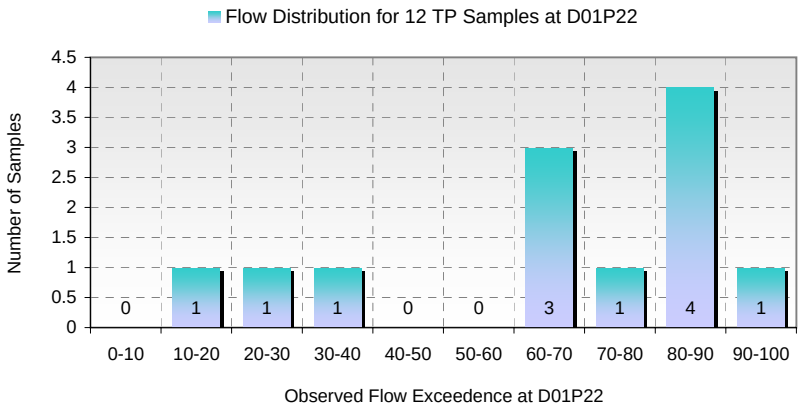
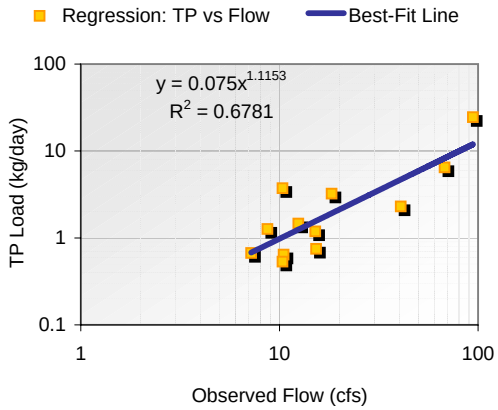
Appendix E. Load Duration Analyses

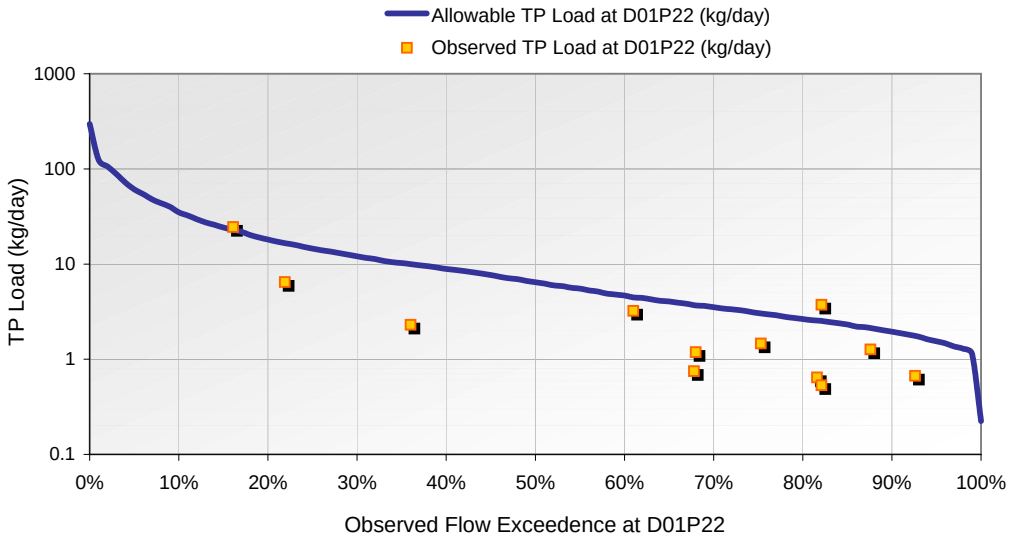
TP at D01P22 (mg/L) -vs- Flow at D01P22 (cfs)

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

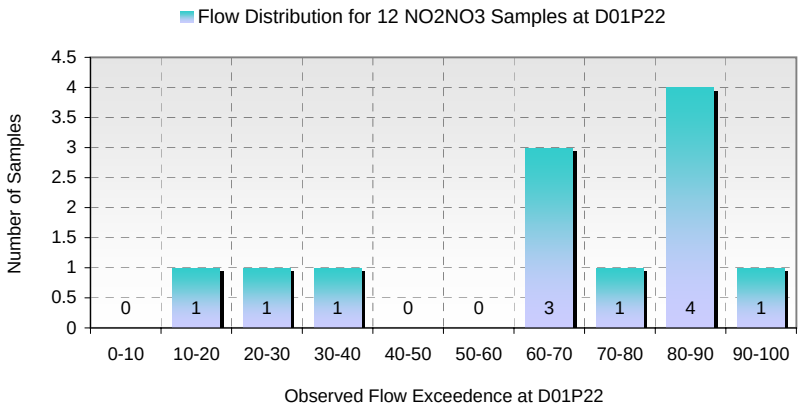


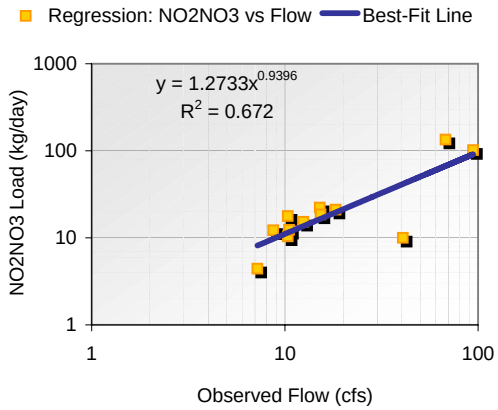
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	12-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Observed Load (kg/day)	Estimated Reduction (%)
0-10	0	249.22	61	No Data	No Data
10-20	1	98.92	24	24	1.0%
20-30	1	59.32	15	6	0.0%
30-40	1	41.90	10	2	0.0%
40-50	0	31.39	8	No Data	No Data
50-60	0	22.53	6	No Data	No Data
60-70	3	16.52	4	1	0.0%
70-80	1	12.46	3	1	0.0%
80-90	4	9.46	2	1	0.0%
90-100	1	6.31	2	1	0.0%

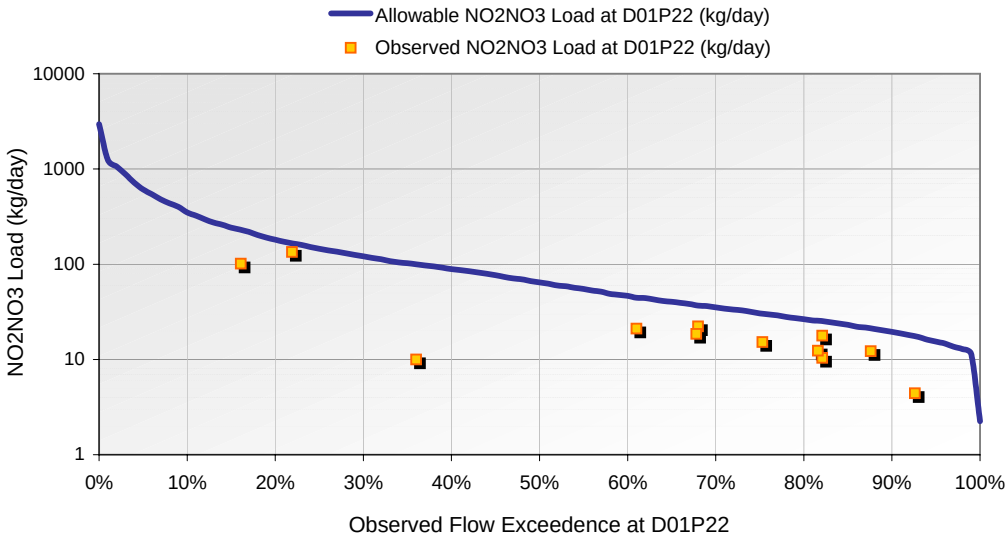
NO2NO3 at D01P22 (mg/L) -vs- Flow at D01P22 (cfs)

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

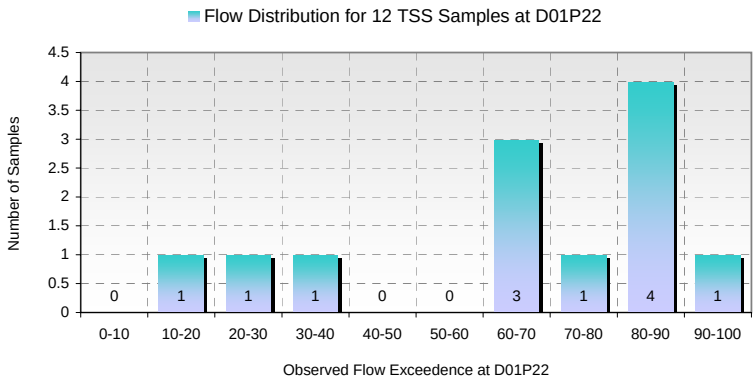


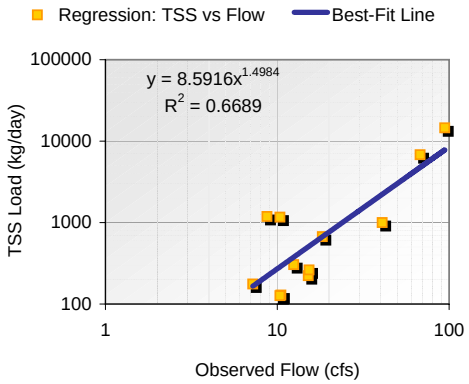
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	12-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Observed Load (kg/day)	Estimated Reduction (%)
0-10	0	249.22	610	No Data	No Data
10-20	1	98.92	242	102	0.0%
20-30	1	59.32	145	135	0.0%
30-40	1	41.90	103	10	0.0%
40-50	0	31.39	77	No Data	No Data
50-60	0	22.53	55	No Data	No Data
60-70	3	16.52	40	21	0.0%
70-80	1	12.46	30	15	0.0%
80-90	4	9.46	23	12	0.0%
90-100	1	6.31	15	4	0.0%

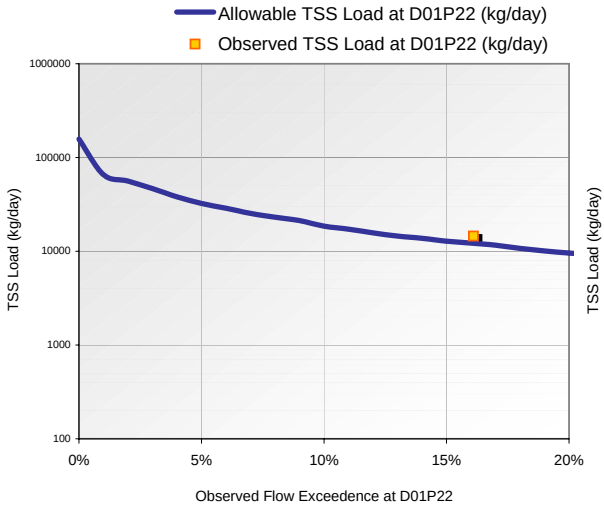
TSS at D01P22 (mg/L) -vs- Flow at D01P22 (cfs)

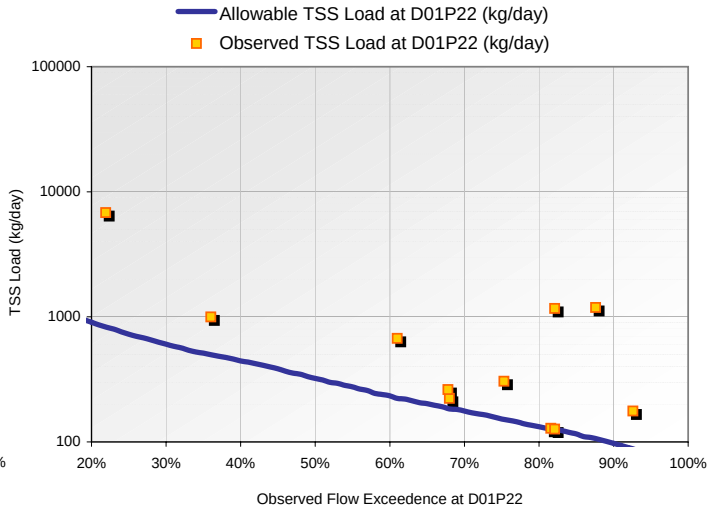
1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis



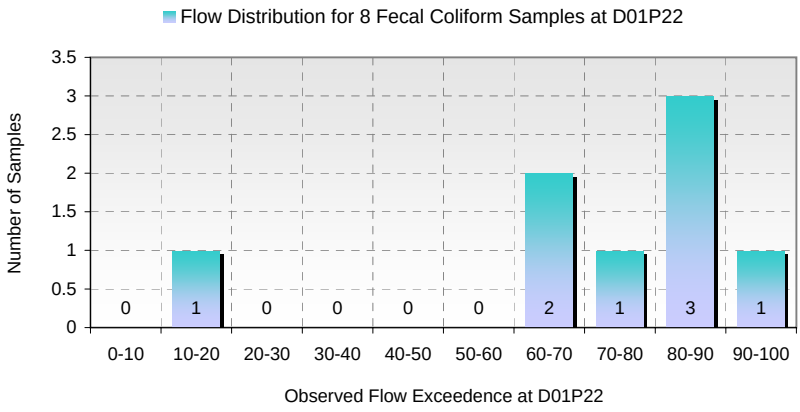


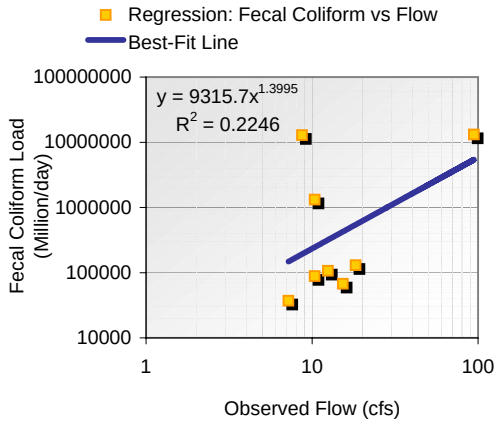
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	12-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Observed Load (kg/day)	Estimated Reduction (%)
0-10	0	249.22	32,316	No Data	No Data
10-20	1	98.92	12,827	14,537	11.8%
20-30	1	59.32	726	6,809	89.3%
30-40	1	41.90	513	999	48.7%
40-50	0	31.39	384	No Data	No Data
50-60	0	22.53	276	No Data	No Data
60-70	3	16.52	202	262	23.0%
70-80	1	12.46	152	305	50.0%
80-90	4	9.46	116	647	82.1%
90-100	1	6.31	77	176	56.3%

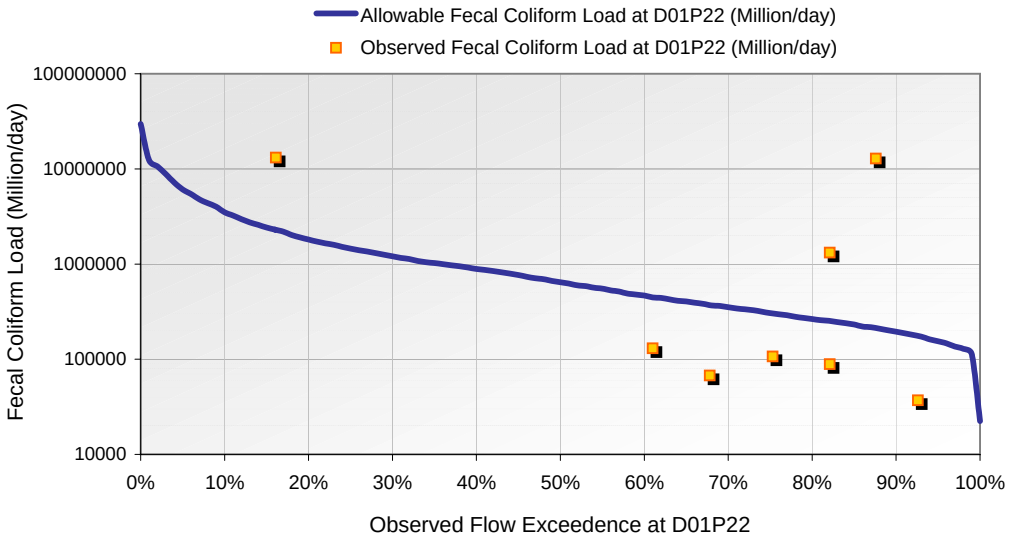
Fecal Coliform at D01P22 (MPN/100mL) -vs- Flow at D01P22 (cfs)

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

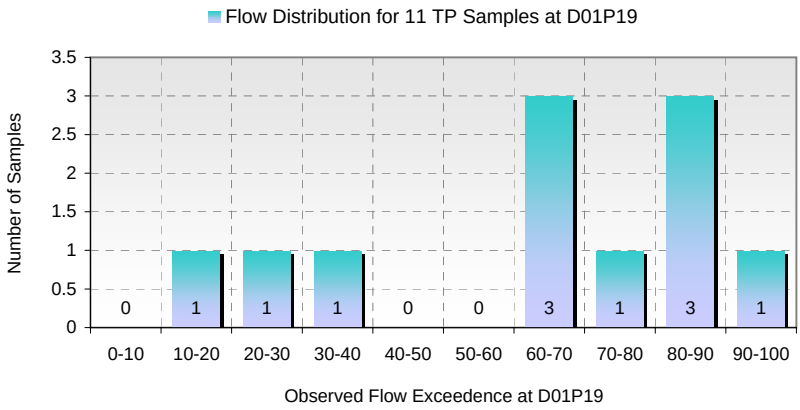


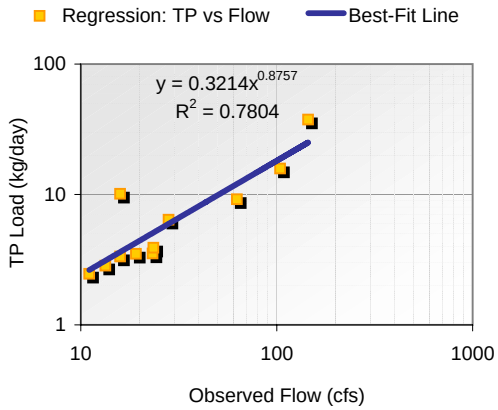
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	8-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Observed Load (Million/day)	Estimated Reduction (%)
0-10	0	249.22	6,097,375	No Data	No Data
10-20	1	98.92	2,420,212	13,152,254	81.6%
20-30	0	59.32	1,451,319	No Data	No Data
30-40	0	41.90	1,025,109	No Data	No Data
40-50	0	31.39	767,913	No Data	No Data
50-60	0	22.53	551,134	No Data	No Data
60-70	2	16.52	404,165	98,726	0.0%
70-80	1	12.46	304,961	106,736	0.0%
80-90	3	9.46	231,476	1,318,312	82.4%
90-100	1	6.31	154,317	37,036	0.0%

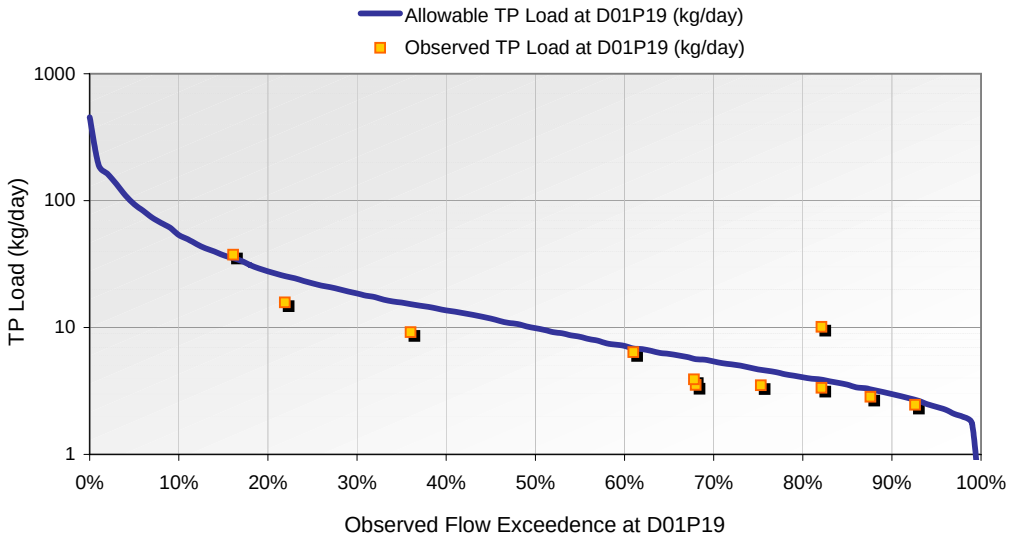
TP at D01P19 (mg/L) -vs- Flow at D01P19 (cfs)

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

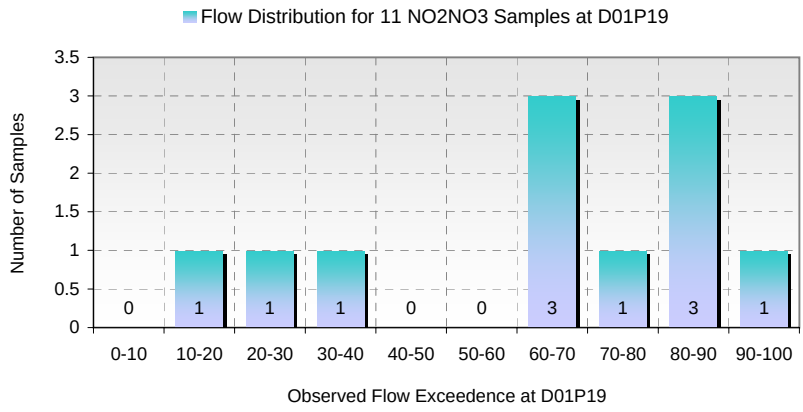


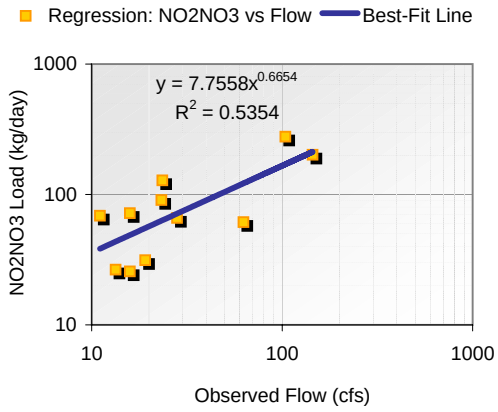
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	11-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Observed Load (kg/day)	Estimated Reduction (%)
0-10	0	382.17	94	No Data	No Data
10-20	1	151.70	37	38	1.0%
20-30	1	90.97	22	16	0.0%
30-40	1	64.25	16	9	0.0%
40-50	0	48.13	12	No Data	No Data
50-60	0	34.54	8	No Data	No Data
60-70	3	25.33	6	4	0.0%
70-80	1	19.11	5	4	0.0%
80-90	3	14.51	4	3	0.0%
90-100	1	9.67	2	2	3.8%

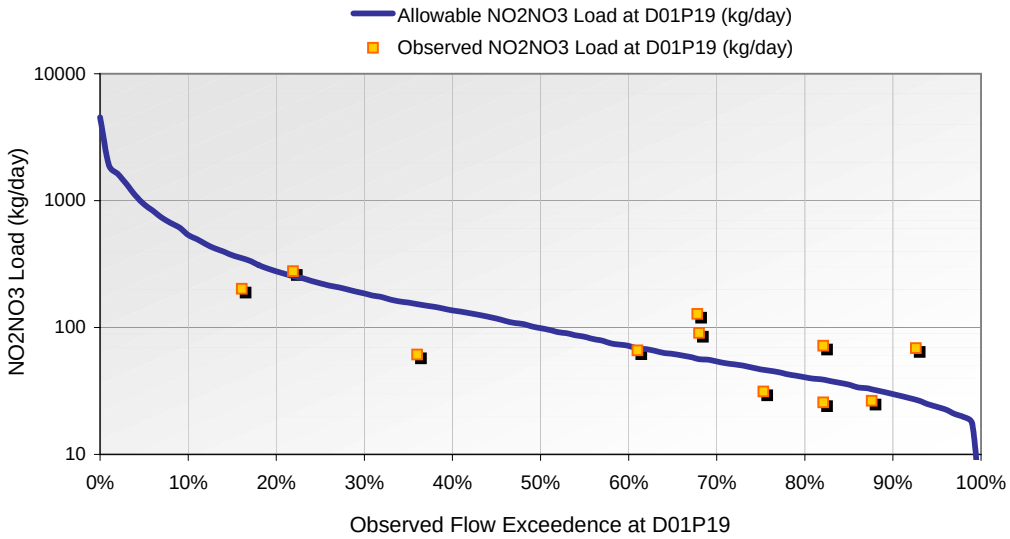
NO2NO3 at D01P19 (mg/L) -vs- Flow at D01P19 (cfs)

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

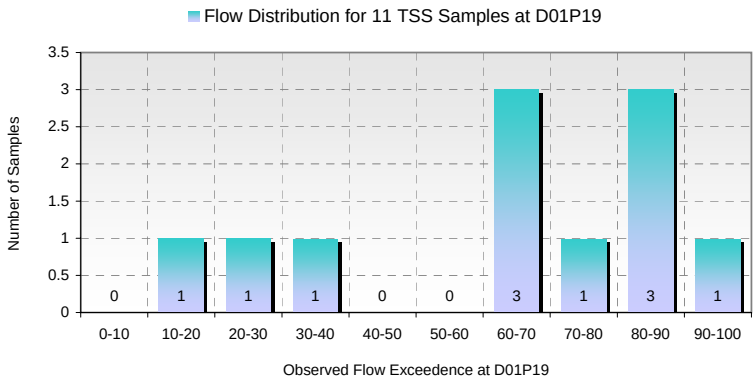


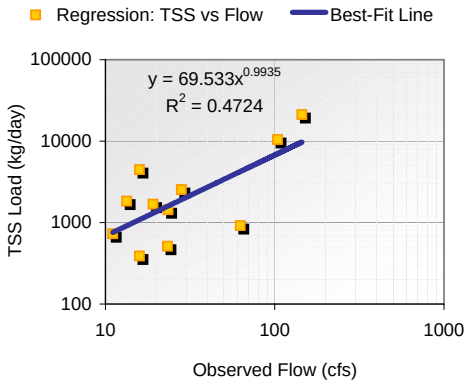
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	11-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Observed Load (kg/day)	Estimated Reduction (%)
0-10	0	382.17	935	No Data	No Data
10-20	1	151.70	371	202	0.0%
20-30	1	90.97	223	278	19.8%
30-40	1	64.25	157	61	0.0%
40-50	0	48.13	118	No Data	No Data
50-60	0	34.54	85	No Data	No Data
60-70	3	25.33	62	90	31.5%
70-80	1	19.11	47	31	0.0%
80-90	3	14.51	35	26	0.0%
90-100	1	9.67	24	69	65.6%

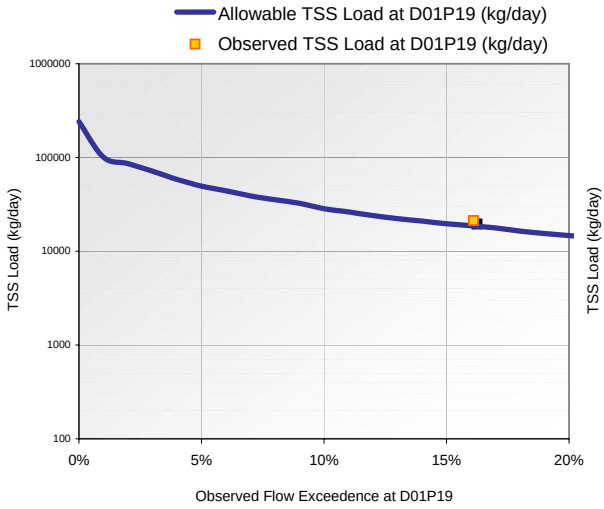
TSS at D01P19 (mg/L) -vs- Flow at D01P19 (cfs)

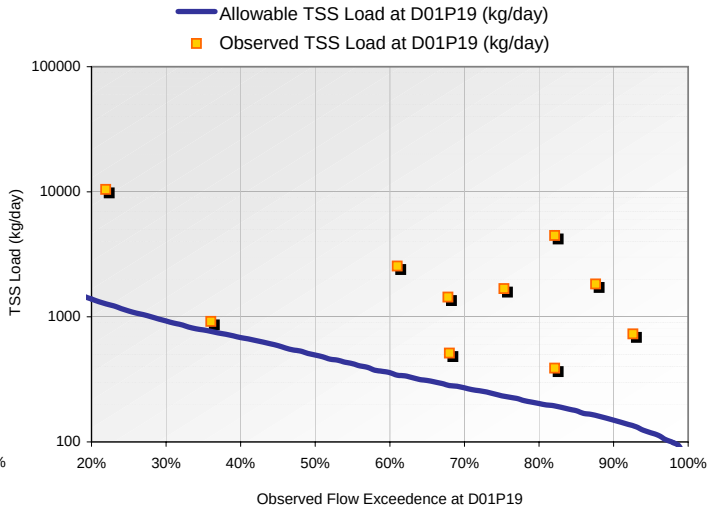
1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis



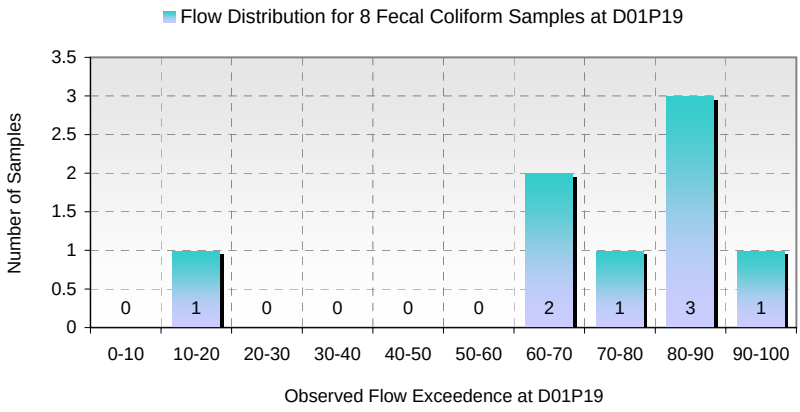


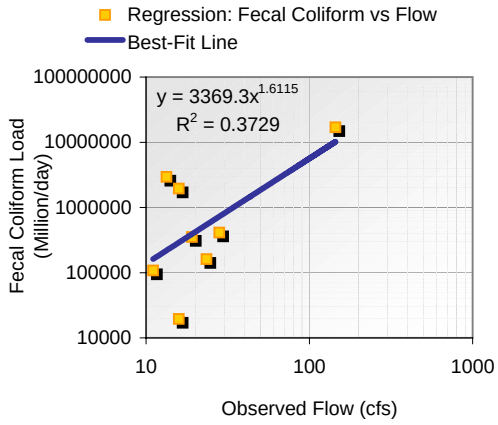
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	11-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Observed Load (kg/day)	Estimated Reduction (%)
0-10	0	382.17	49,556	No Data	No Data
10-20	1	151.70	19,670	21,230	7.3%
20-30	1	90.97	1,113	10,442	89.3%
30-40	1	64.25	786	920	14.5%
40-50	0	48.13	589	No Data	No Data
50-60	0	34.54	423	No Data	No Data
60-70	3	25.33	310	1,437	78.4%
70-80	1	19.11	234	1,684	86.1%
80-90	3	14.51	177	1,830	90.3%
90-100	1	9.67	118	730	83.8%

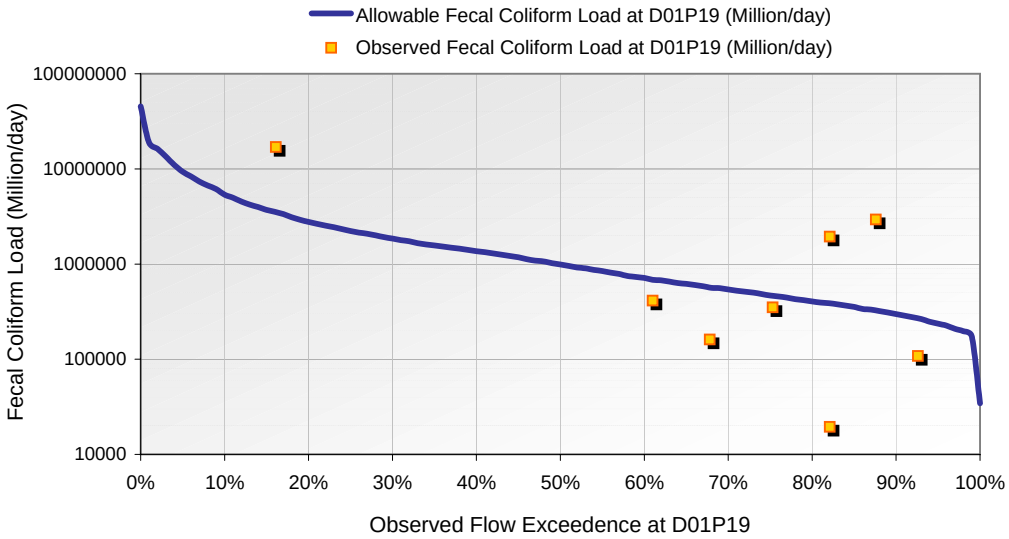
Fecal Coliform at D01P19 (MPN/100mL) -vs- Flow at D01P19 (cfs)

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

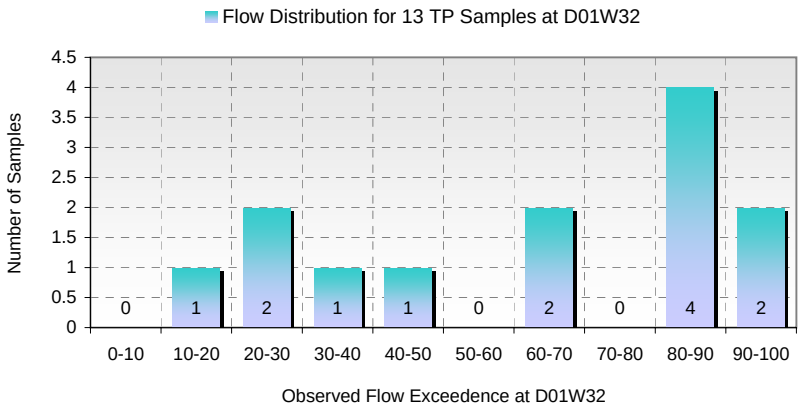


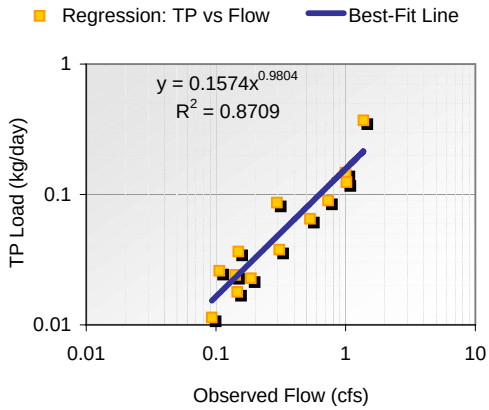
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	8-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Observed Load (Million/day)	Estimated Reduction (%)
0-10	0	382.17	9,350,195	No Data	No Data
10-20	1	151.70	3,711,343	16,984,169	78.1%
20-30	0	90.97	2,225,566	No Data	No Data
30-40	0	64.25	1,571,982	No Data	No Data
40-50	0	48.13	1,177,578	No Data	No Data
50-60	0	34.54	845,152	No Data	No Data
60-70	2	25.33	619,778	286,675	0.0%
70-80	1	19.11	467,651	350,738	0.0%
80-90	3	14.51	354,964	1,943,849	81.7%
90-100	1	9.67	236,642	108,179	0.0%

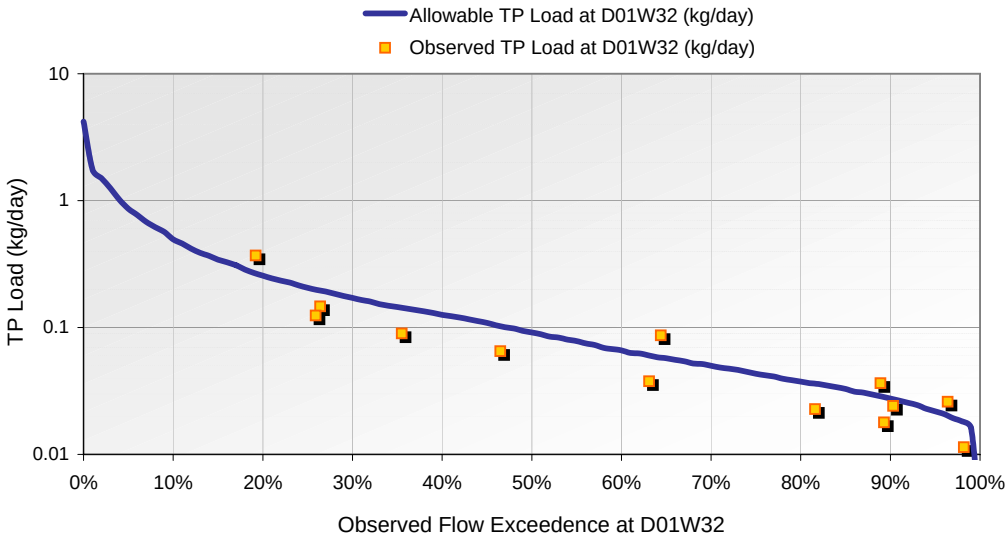
TP at D01W32 (mg/L) -vs- Flow at D01W32 (cfs)

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

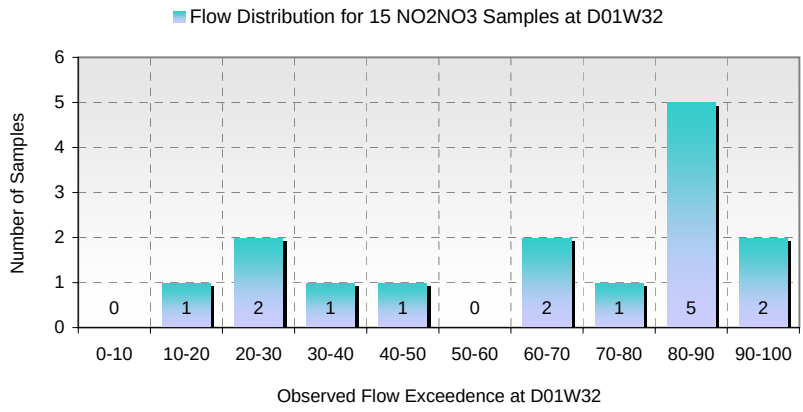


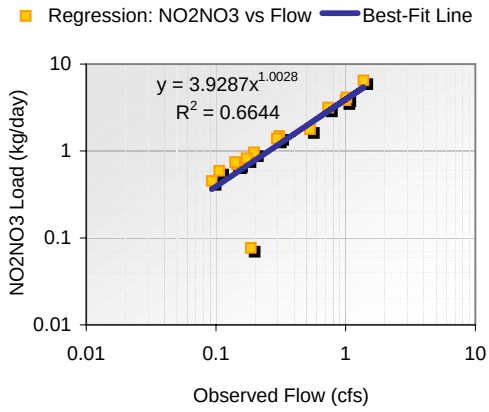
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	13-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Observed Load (kg/day)	Estimated Reduction (%)
0-10	0	4.41	1	No Data	No Data
10-20	1	1.75	0	0	7.3%
20-30	2	1.05	0	0	0.0%
30-40	1	0.74	0	0	0.0%
40-50	1	0.56	0	0	0.0%
50-60	0	0.40	0	No Data	No Data
60-70	2	0.29	0	0	7.9%
70-80	0	0.22	0	No Data	No Data
80-90	4	0.17	0	0	0.0%
90-100	2	0.11	0	0	0.0%

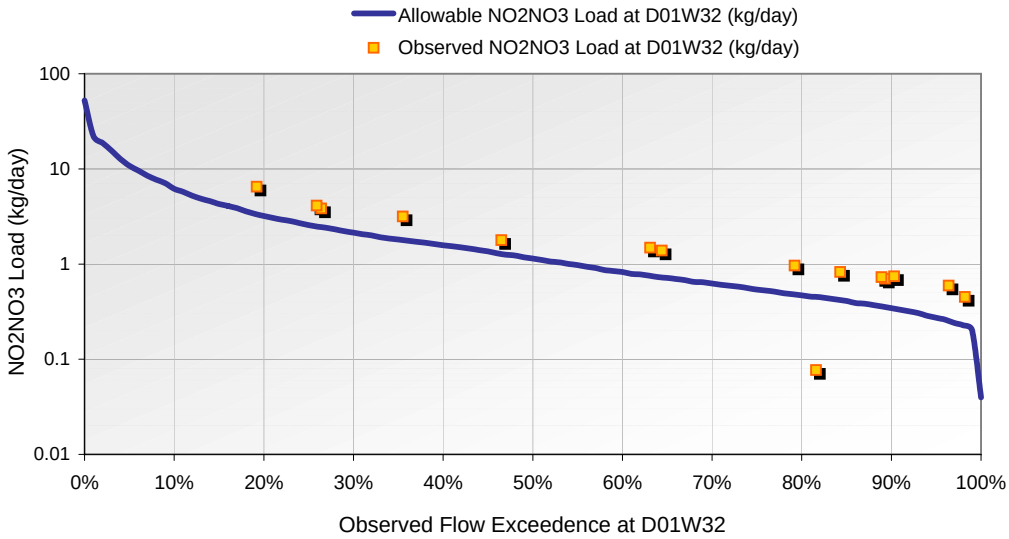
NO2NO3 at D01W32 (mg/L) -vs- Flow at D01W32 (cfs)

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

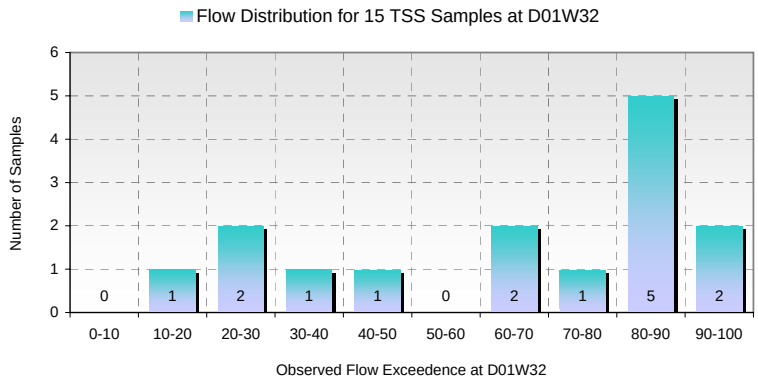


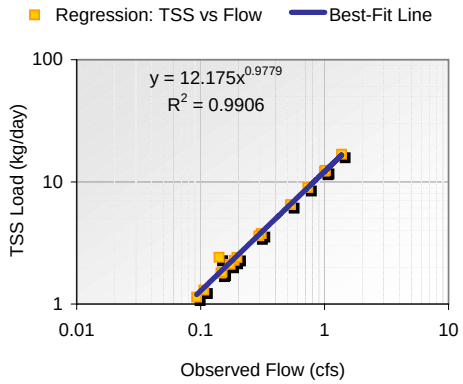
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	15-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Observed Load (kg/day)	Estimated Reduction (%)
0-10	0	4.41	11	No Data	No Data
10-20	1	1.75	4	6	34.0%
20-30	2	1.05	3	4	35.5%
30-40	1	0.74	2	3	42.6%
40-50	1	0.56	1	2	23.7%
50-60	0	0.40	1	No Data	No Data
60-70	2	0.29	1	1	50.2%
70-80	1	0.22	1	1	43.9%
80-90	5	0.17	0	1	43.8%
90-100	2	0.11	0	1	47.7%

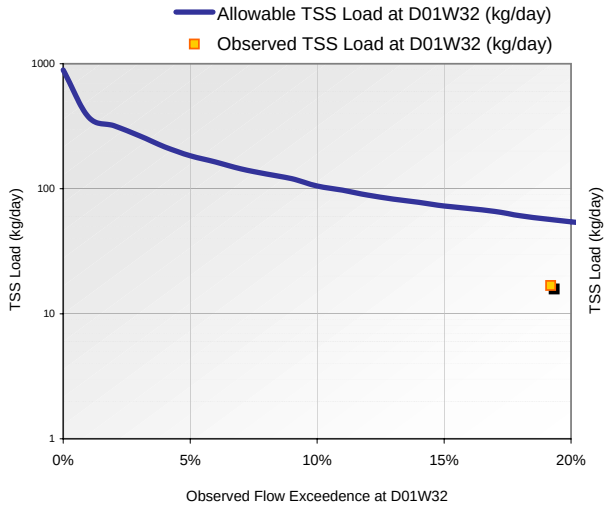
TSS at D01W32 (mg/L) -vs- Flow at D01W32 (cfs)

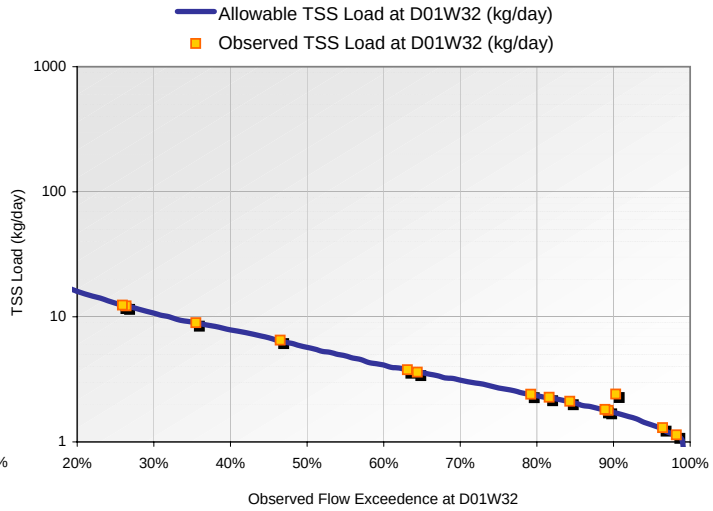
1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis



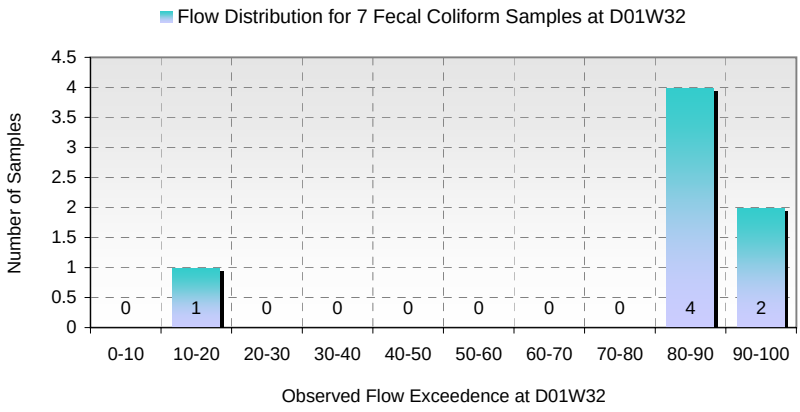


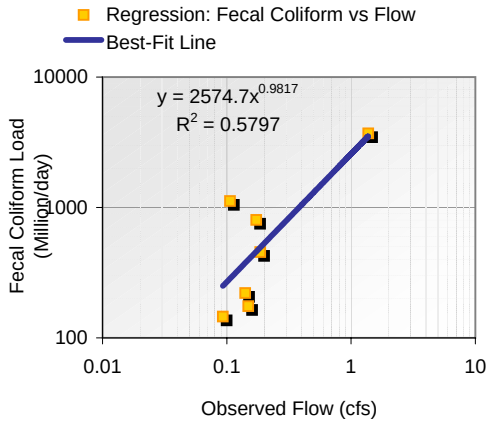
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	15-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Observed Load (kg/day)	Estimated Reduction (%)
0-10	0	4.41	183	No Data	No Data
10-20	1	1.75	73	17	0.0%
20-30	2	1.05	13	12	0.0%
30-40	1	0.74	9	9	0.0%
40-50	1	0.56	7	7	0.0%
50-60	0	0.40	5	No Data	No Data
60-70	2	0.29	4	4	3.1%
70-80	1	0.22	3	2	0.0%
80-90	5	0.17	2	2	3.1%
90-100	2	0.11	1	1	0.0%

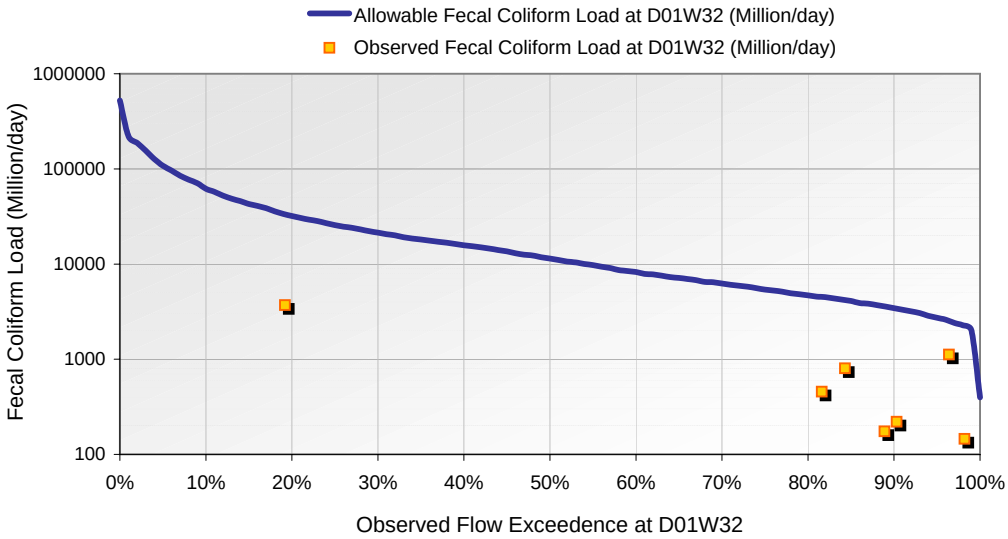
Fecal Coliform at D01W32 (MPN/100mL) -vs- Flow at D01W32 (cfs)

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

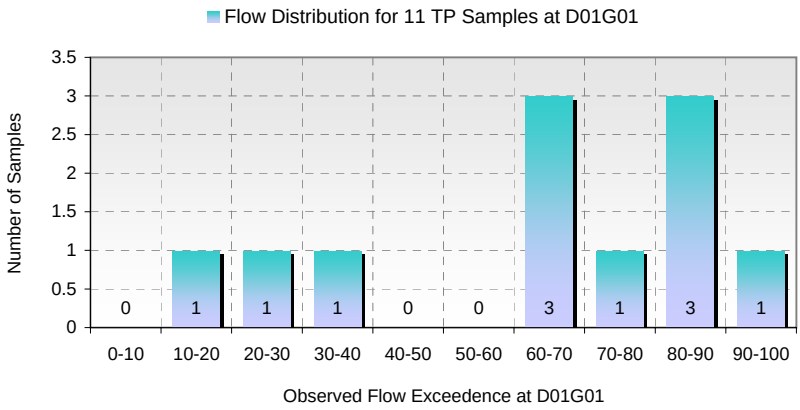


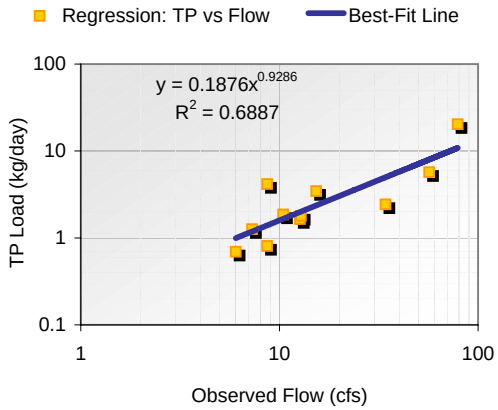
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	7-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Observed Load (Million/day)	Estimated Reduction (%)
0-10	0	4.41	107,931	No Data	No Data
10-20	1	1.75	42,841	3,699	0.0%
20-30	0	1.05	25,690	No Data	No Data
30-40	0	0.74	18,146	No Data	No Data
40-50	0	0.56	13,593	No Data	No Data
50-60	0	0.40	9,756	No Data	No Data
60-70	0	0.29	7,154	No Data	No Data
70-80	0	0.22	5,398	No Data	No Data
80-90	4	0.17	4,097	338	0.0%
90-100	2	0.11	2,732	632	0.0%

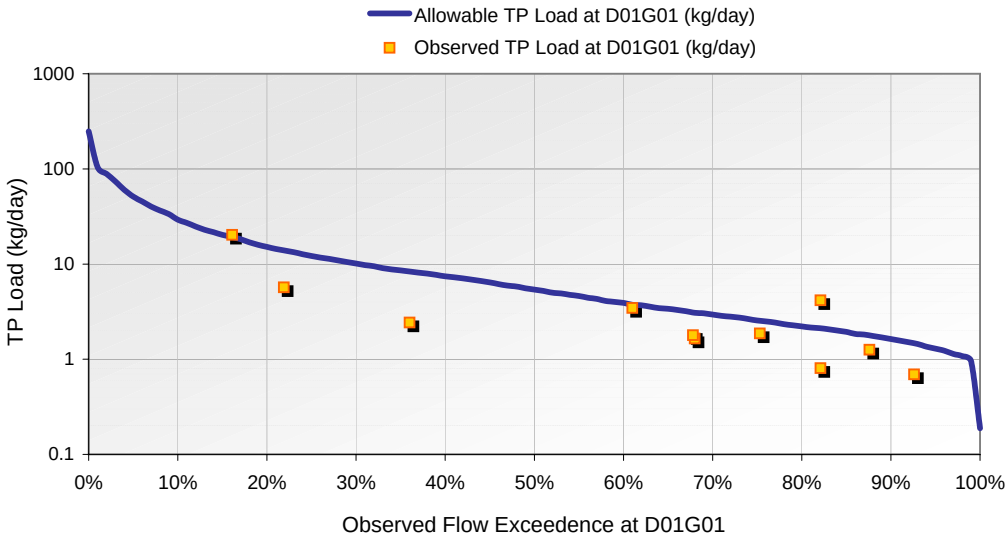
TP at D01G01 (mg/L) -vs- Flow at D01G01 (cfs)

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

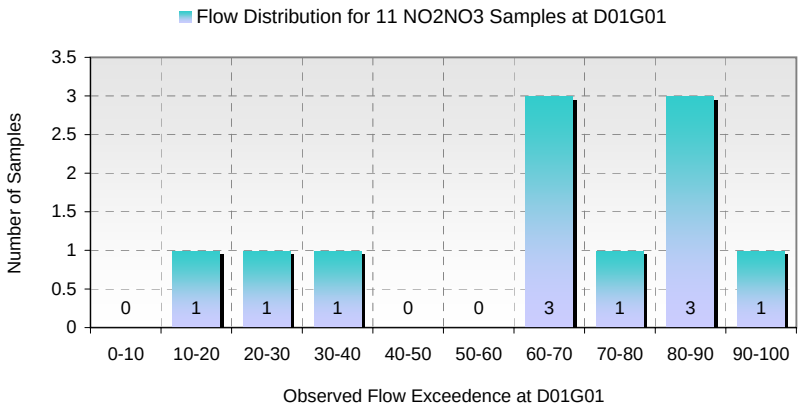


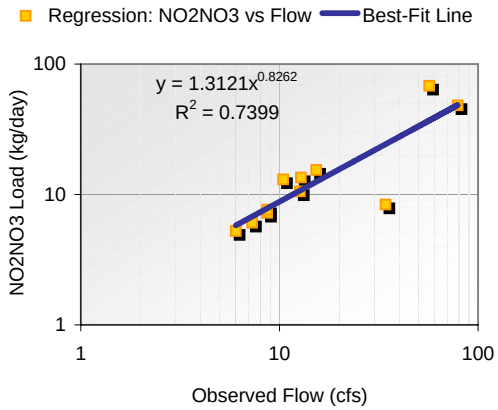
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	11-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Observed Load (kg/day)	Estimated Reduction (%)
0-10	0	208.69	51	No Data	No Data
10-20	1	82.84	20	20	0.1%
20-30	1	49.67	12	6	0.0%
30-40	1	35.09	9	2	0.0%
40-50	0	26.28	6	No Data	No Data
50-60	0	18.86	5	No Data	No Data
60-70	3	13.83	3	2	0.0%
70-80	1	10.44	3	2	0.0%
80-90	3	7.92	2	1	0.0%
90-100	1	5.28	1	1	0.0%

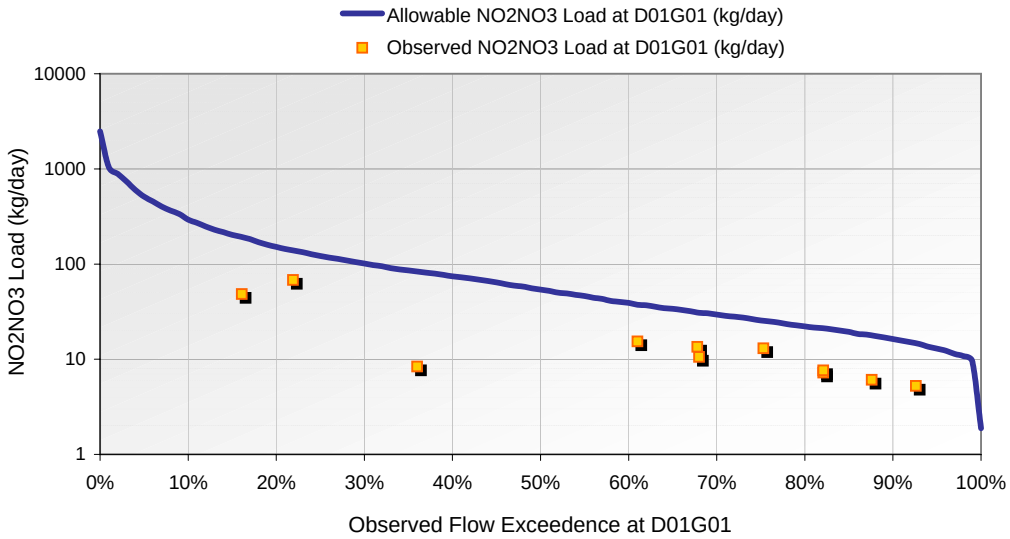
NO2NO3 at D01G01 (mg/L) -vs- Flow at D01G01 (cfs)

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

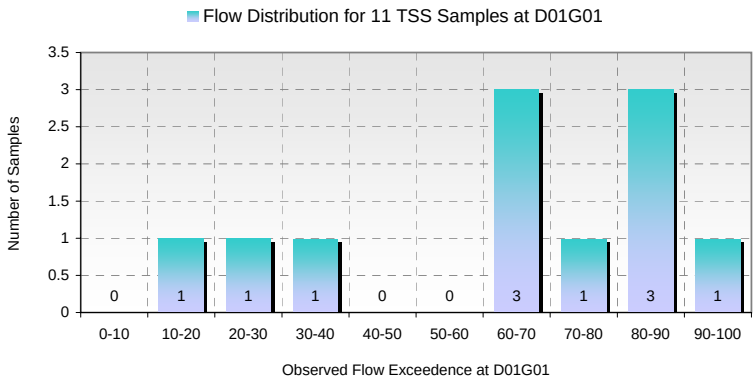


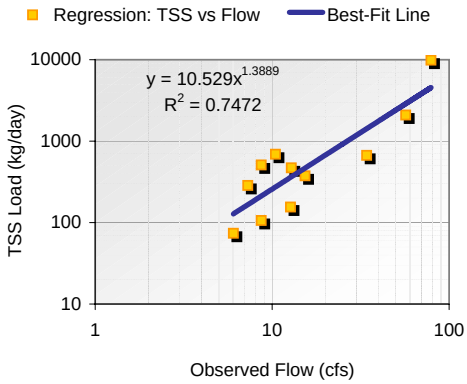
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	11-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Observed Load (kg/day)	Estimated Reduction (%)
0-10	0	208.69	511	No Data	No Data
10-20	1	82.84	203	48	0.0%
20-30	1	49.67	122	68	0.0%
30-40	1	35.09	86	8	0.0%
40-50	0	26.28	64	No Data	No Data
50-60	0	18.86	46	No Data	No Data
60-70	3	13.83	34	13	0.0%
70-80	1	10.44	26	13	0.0%
80-90	3	7.92	19	7	0.0%
90-100	1	5.28	13	5	0.0%

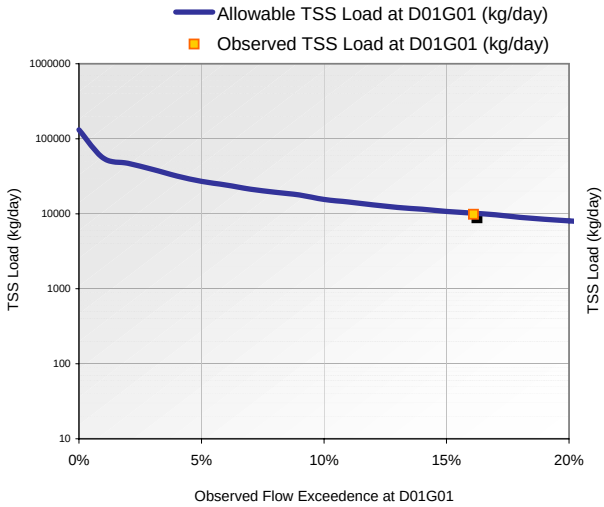
TSS at D01G01 (mg/L) -vs- Flow at D01G01 (cfs)

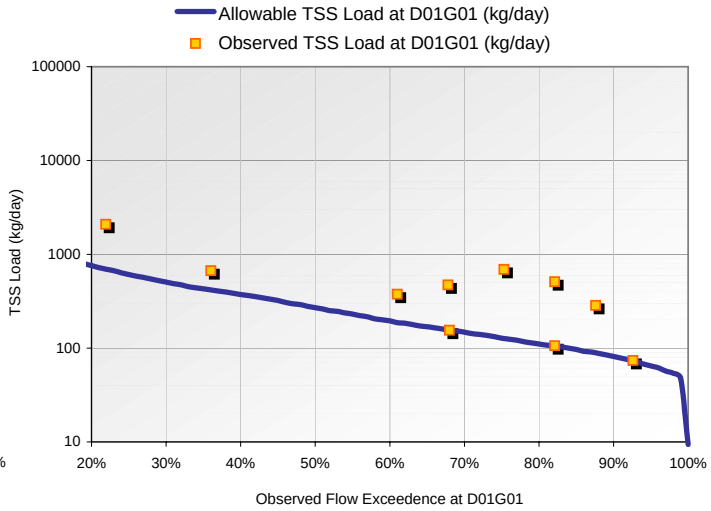
1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis



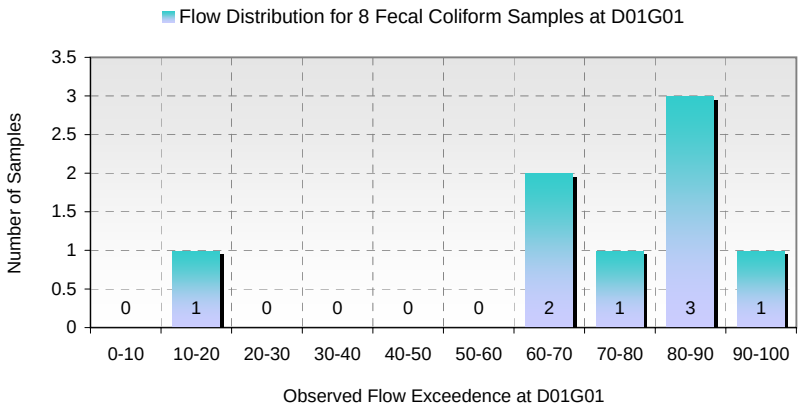


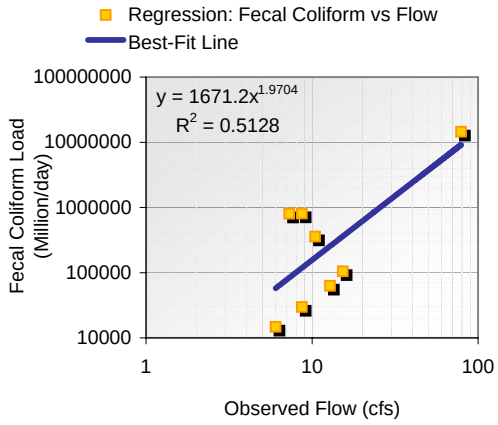
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	11-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Observed Load (kg/day)	Estimated Reduction (%)
0-10	0	208.69	27,061	No Data	No Data
10-20	1	82.84	10,741	9,854	0.0%
20-30	1	49.67	608	2,086	70.9%
30-40	1	35.09	429	669	35.9%
40-50	0	26.28	322	No Data	No Data
50-60	0	18.86	231	No Data	No Data
60-70	3	13.83	169	375	54.9%
70-80	1	10.44	128	689	81.5%
80-90	3	7.92	97	286	66.1%
90-100	1	5.28	65	74	12.5%

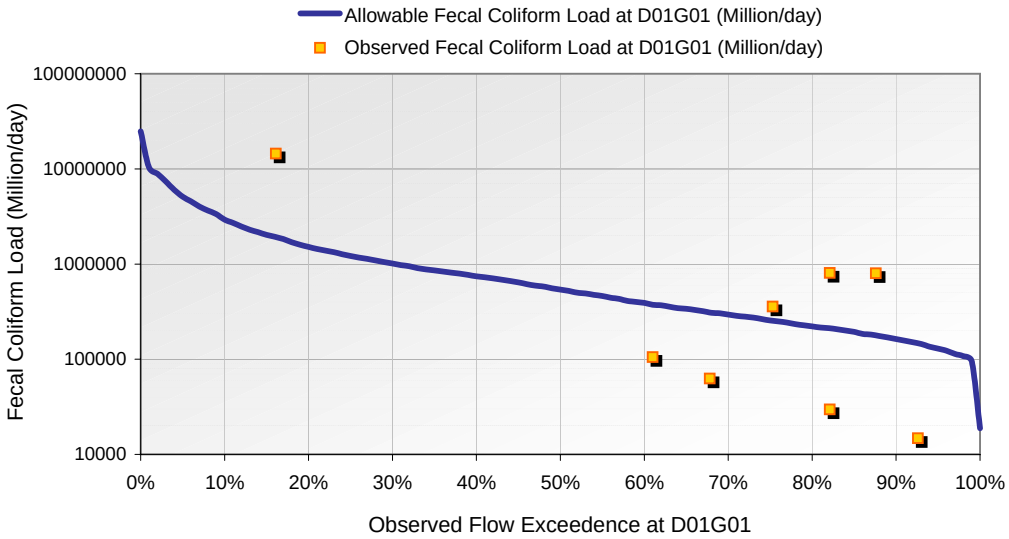
Fecal Coliform at D01G01 (MPN/100mL)] -vs- [2: Flow at D01G01 (cfs)

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

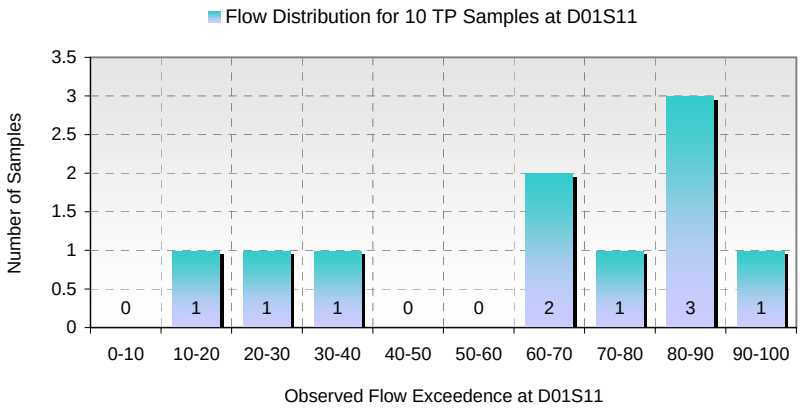


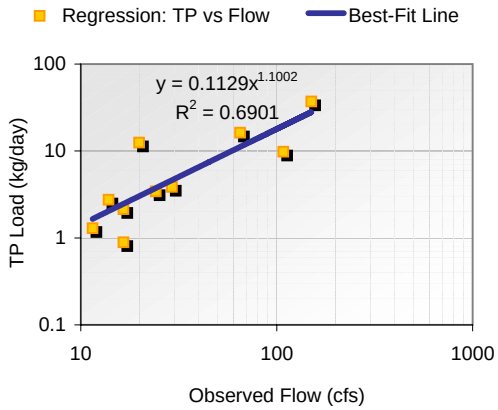
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	8-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Observed Load (Million/day)	Estimated Reduction (%)
0-10	0	208.69	5,105,781	No Data	No Data
10-20	1	82.84	2,026,621	14,491,249	86.0%
20-30	0	49.67	1,215,296	No Data	No Data
30-40	0	35.09	858,399	No Data	No Data
40-50	0	26.28	643,030	No Data	No Data
50-60	0	18.86	461,505	No Data	No Data
60-70	2	13.83	338,437	83,932	0.0%
70-80	1	10.44	255,366	357,512	28.6%
80-90	3	7.92	193,832	801,234	75.8%
90-100	1	5.28	129,221	14,768	0.0%

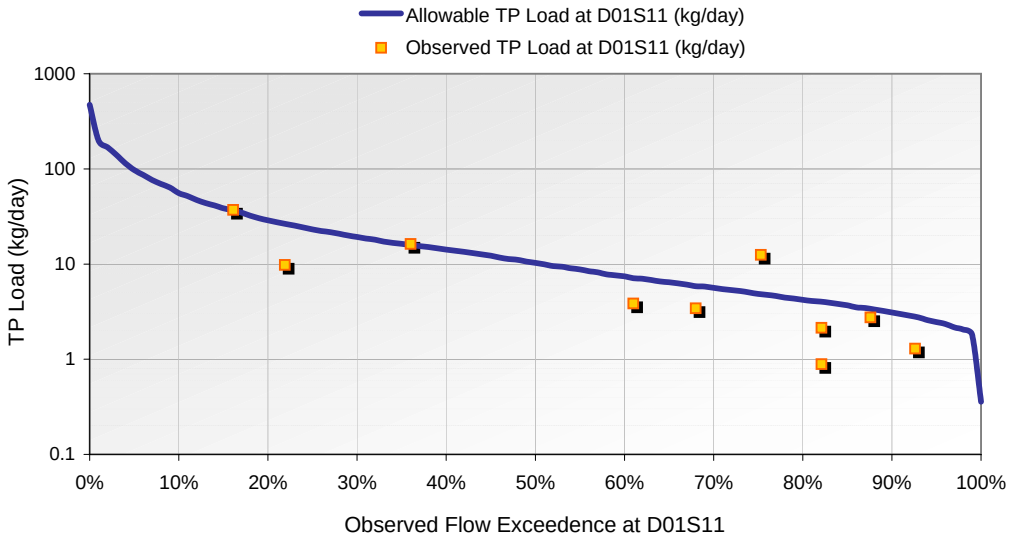
TP at D01S11 (mg/L) -vs- Flow at D01S11 (cfs)

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

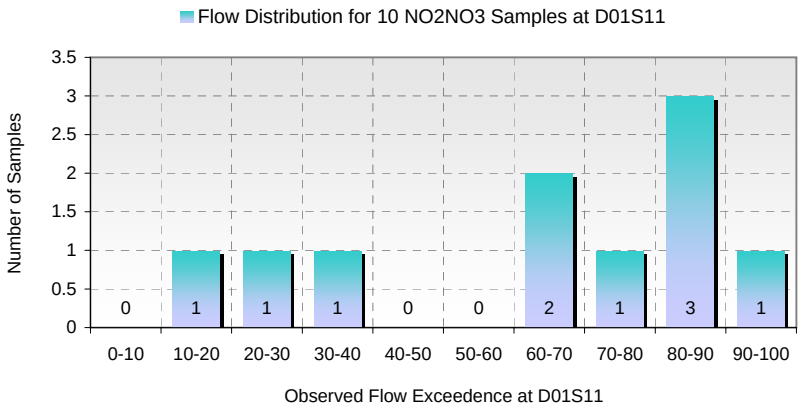


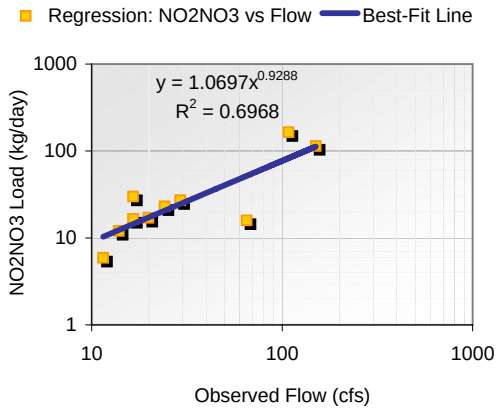
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	10-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Observed Load (kg/day)	Estimated Reduction (%)
0-10	0	397.20	97	No Data	No Data
10-20	1	157.66	39	37	0.0%
20-30	1	94.54	23	10	0.0%
30-40	1	66.78	16	16	0.0%
40-50	0	50.02	12	No Data	No Data
50-60	0	35.90	9	No Data	No Data
60-70	2	26.33	6	4	0.0%
70-80	1	19.87	5	12	61.1%
80-90	3	15.08	4	2	0.0%
90-100	1	10.05	2	1	0.0%

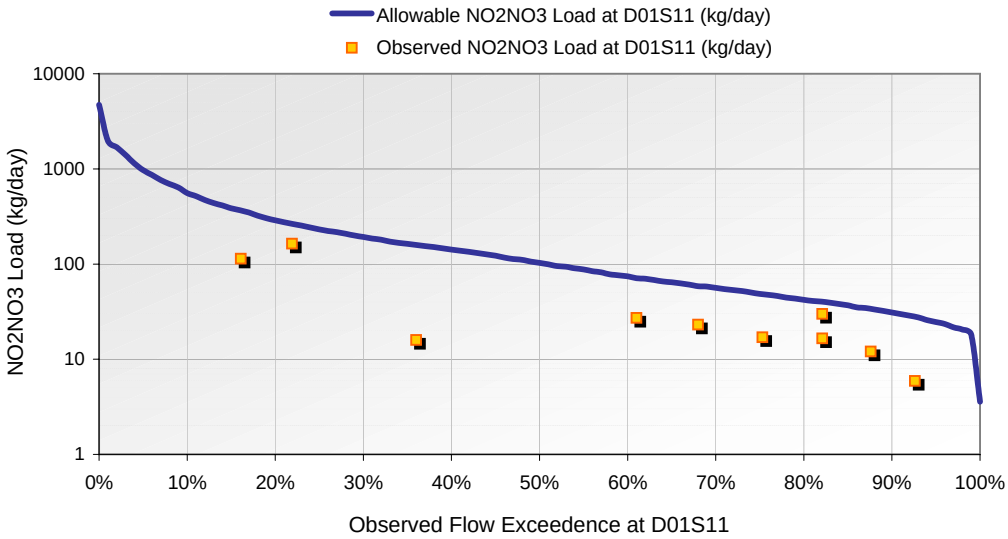
NO2NO3 at D01S11 (mg/L) -vs- Flow at D01S11 (cfs)

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

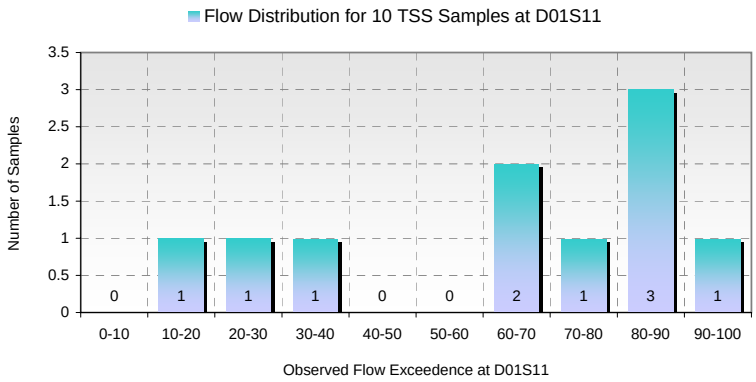


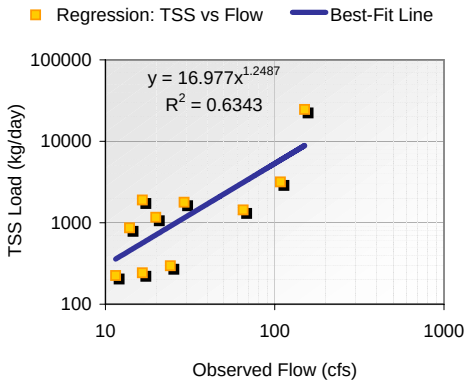
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	10-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Observed Load (kg/day)	Estimated Reduction (%)
0-10	0	397.20	972	No Data	No Data
10-20	1	157.66	386	114	0.0%
20-30	1	94.54	231	164	0.0%
30-40	1	66.78	163	16	0.0%
40-50	0	50.02	122	No Data	No Data
50-60	0	35.90	88	No Data	No Data
60-70	2	26.33	64	25	0.0%
70-80	1	19.87	49	17	0.0%
80-90	3	15.08	37	17	0.0%
90-100	1	10.05	25	6	0.0%

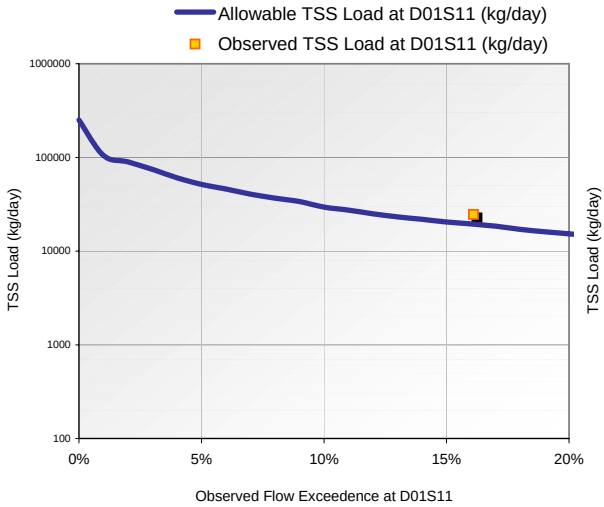
TSS at D01S11 (mg/L) -vs- Flow at D01S11 (cfs)

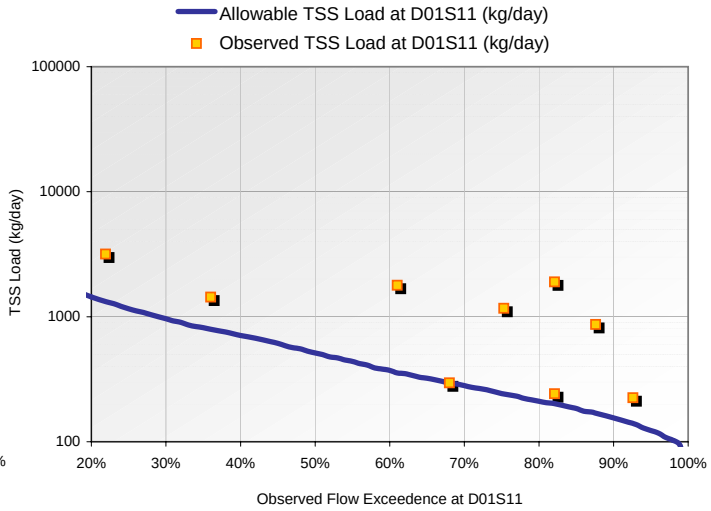
1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis



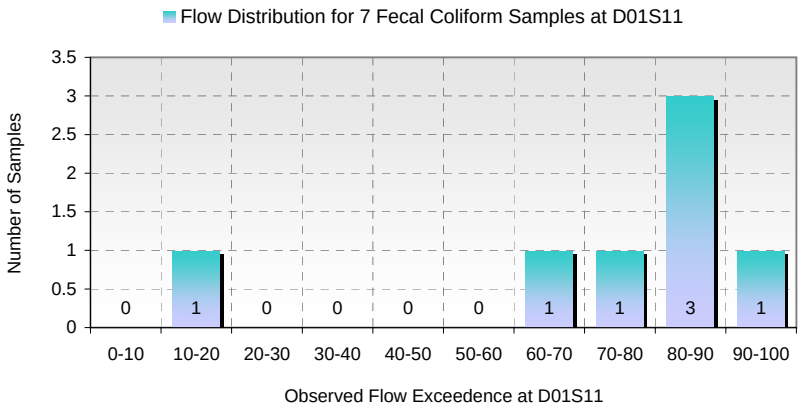


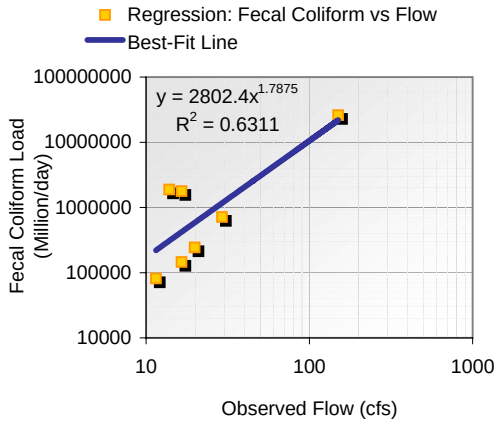
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	10-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Observed Load (kg/day)	Estimated Reduction (%)
0-10	0	397.20	51,505	No Data	No Data
10-20	1	157.66	20,444	24,639	17.0%
20-30	1	94.54	1,157	3,176	63.6%
30-40	1	66.78	817	1,434	43.0%
40-50	0	50.02	612	No Data	No Data
50-60	0	35.90	439	No Data	No Data
60-70	2	26.33	322	1,041	69.1%
70-80	1	19.87	243	1,167	79.2%
80-90	3	15.08	184	866	78.7%
90-100	1	10.05	123	225	45.3%

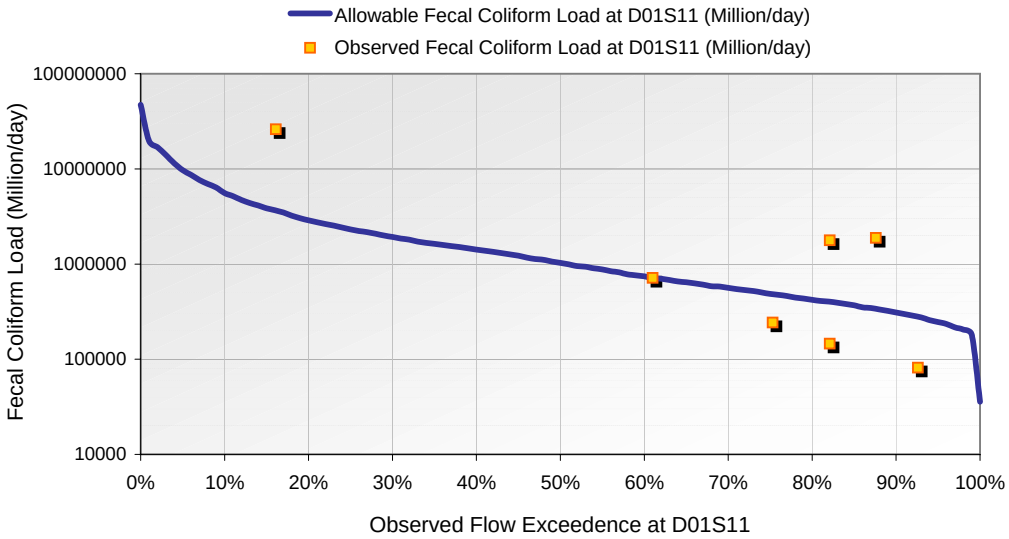
Fecal Coliform at D01S11 (MPN/100mL) -vs- Flow at D01S11 (cfs)

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

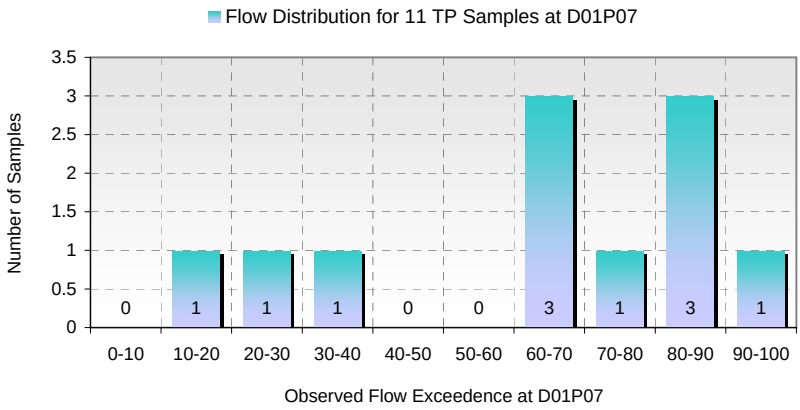


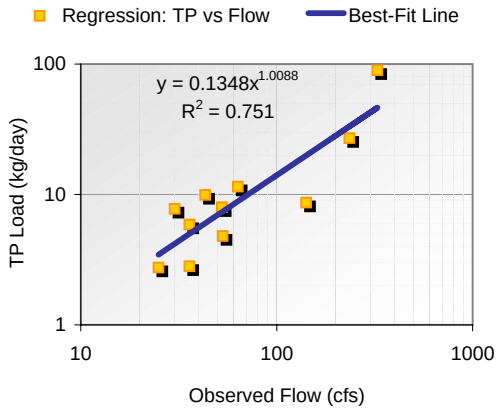
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	7-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Observed Load (Million/day)	Estimated Reduction (%)
0-10	0	397.20	9,717,908	No Data	No Data
10-20	1	157.66	3,857,298	26,110,400	85.2%
20-30	0	94.54	2,313,091	No Data	No Data
30-40	0	66.78	1,633,803	No Data	No Data
40-50	0	50.02	1,223,888	No Data	No Data
50-60	0	35.90	878,389	No Data	No Data
60-70	1	26.33	644,152	714,423	9.8%
70-80	1	19.87	486,042	243,021	0.0%
80-90	3	15.08	368,923	1,777,859	79.2%
90-100	1	10.05	245,949	81,514	0.0%

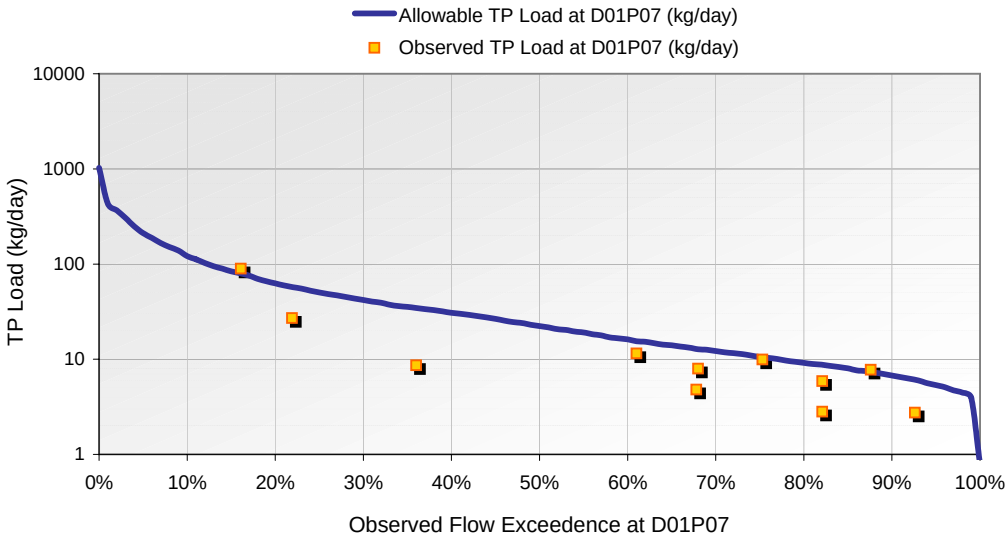
TP at D01P07 (mg/L) -vs- Flow at D01P07 (cfs)

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

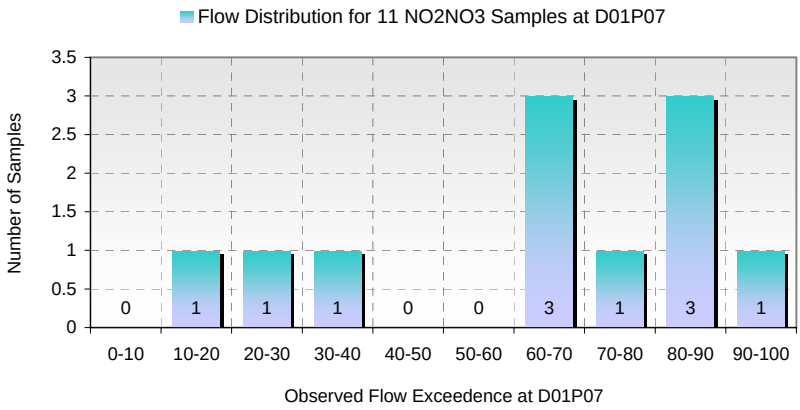


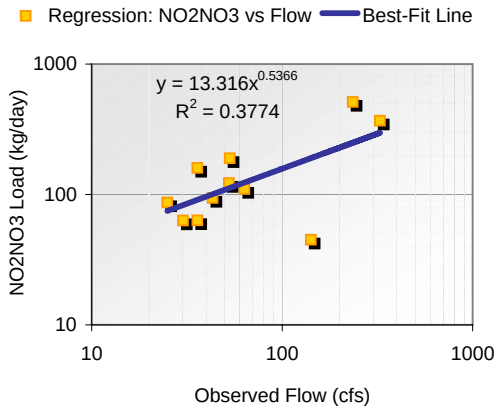
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	11-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Observed Load (kg/day)	Estimated Reduction (%)
0-10	0	862.95	211	No Data	No Data
10-20	1	342.53	84	89	6.3%
20-30	1	205.40	50	27	0.0%
30-40	1	145.08	35	9	0.0%
40-50	0	108.68	27	No Data	No Data
50-60	0	78.00	19	No Data	No Data
60-70	3	57.20	14	8	0.0%
70-80	1	43.16	11	10	0.0%
80-90	3	32.76	8	6	0.0%
90-100	1	21.84	5	3	0.0%

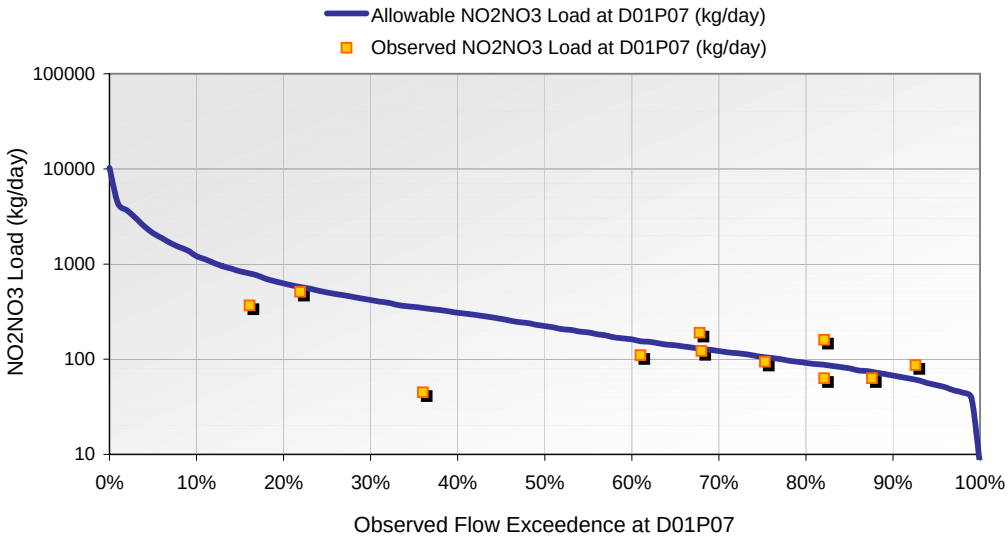
NO2NO3 at D01P07 (mg/L) -vs- Flow at D01P07 (cfs)

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

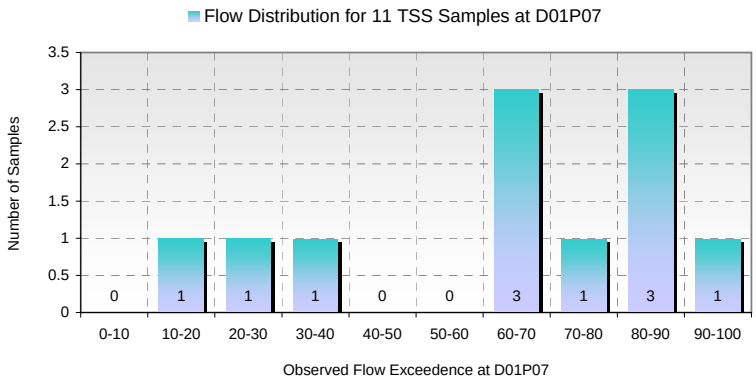


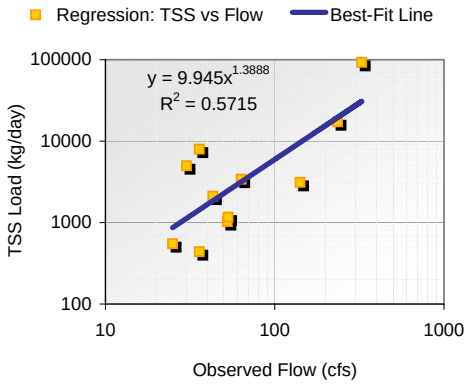
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	11-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Observed Load (kg/day)	Estimated Reduction (%)
0-10	0	862.95	2,111	No Data	No Data
10-20	1	342.53	838	368	0.0%
20-30	1	205.40	503	512	1.8%
30-40	1	145.08	355	45	0.0%
40-50	0	108.68	266	No Data	No Data
50-60	0	78.00	191	No Data	No Data
60-70	3	57.20	140	122	0.0%
70-80	1	43.16	106	94	0.0%
80-90	3	32.76	80	63	0.0%
90-100	1	21.84	53	87	38.4%

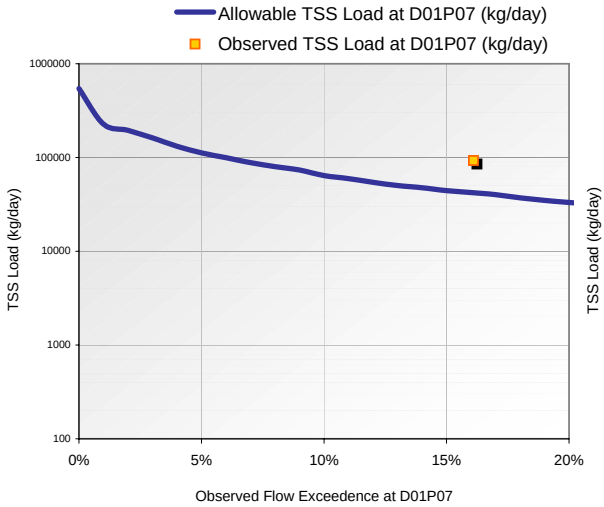
TSS at D01P07 (mg/L) -vs- Flow at D01P07 (cfs)

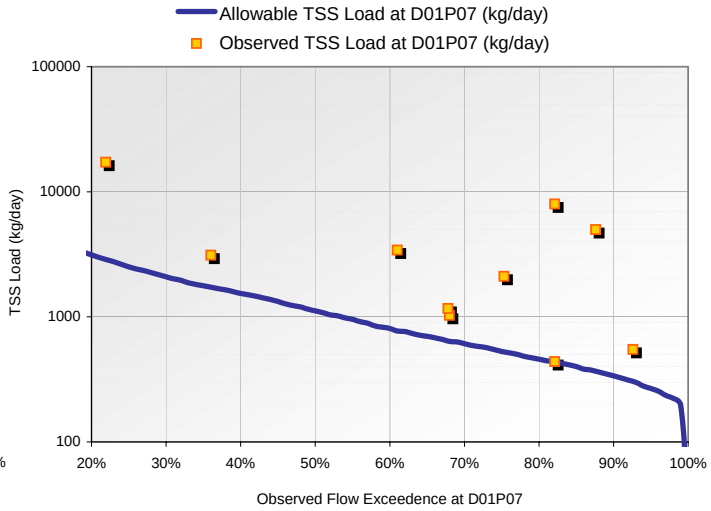
1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis



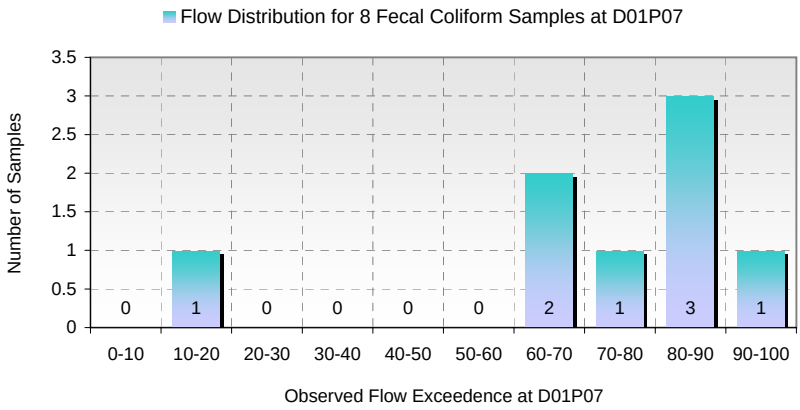


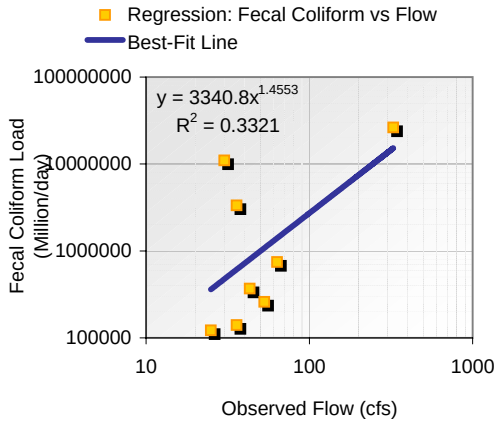
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	11-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Observed Load (kg/day)	Estimated Reduction (%)
0-10	0	862.95	111,897	No Data	No Data
10-20	1	342.53	44,415	92,679	52.1%
20-30	1	205.40	2,513	17,251	85.4%
30-40	1	145.08	1,775	3,114	43.0%
40-50	0	108.68	1,329	No Data	No Data
50-60	0	78.00	954	No Data	No Data
60-70	3	57.20	700	1,168	40.1%
70-80	1	43.16	528	2,112	75.0%
80-90	3	32.76	401	4,981	92.0%
90-100	1	21.84	267	550	51.4%

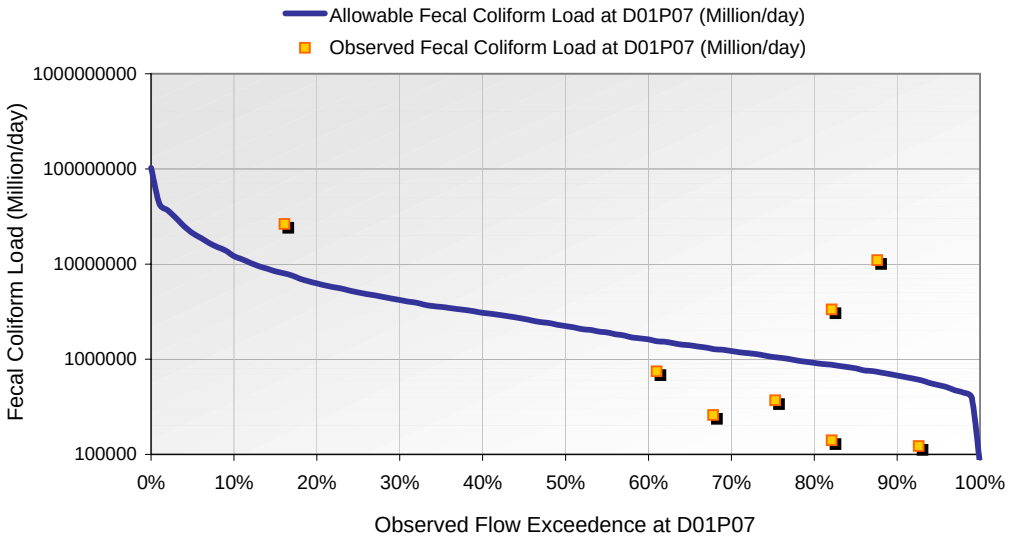
Fecal Coliform at D01P07 (MPN/100mL) -vs- Flow at D01P07 (cfs)

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

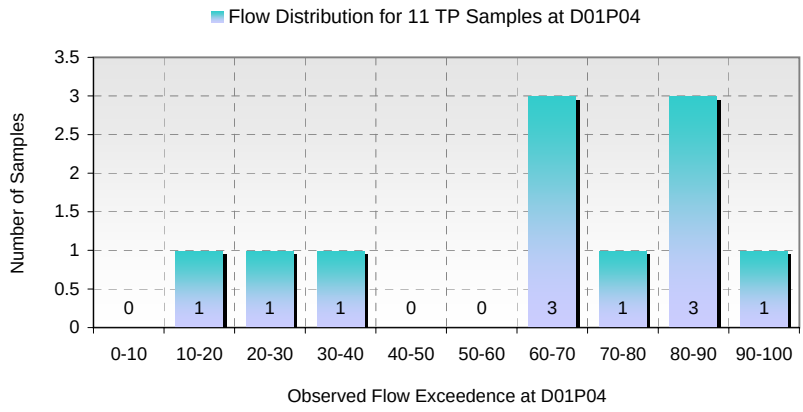


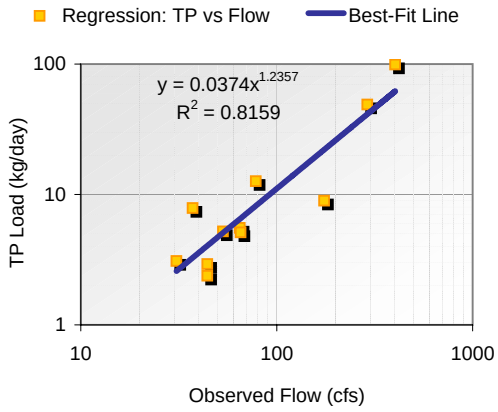
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	8-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Observed Load (Million/day)	Estimated Reduction (%)
0-10	0	862.95	21,112,670	No Data	No Data
10-20	1	342.53	8,380,184	26,365,711	68.2%
20-30	0	205.40	5,025,312	No Data	No Data
30-40	0	145.08	3,549,524	No Data	No Data
40-50	0	108.68	2,658,962	No Data	No Data
50-60	0	78.00	1,908,346	No Data	No Data
60-70	2	57.20	1,399,454	502,277	0.0%
70-80	1	43.16	1,055,952	369,583	0.0%
80-90	3	32.76	801,505	3,335,789	76.0%
90-100	1	21.84	534,337	122,134	0.0%

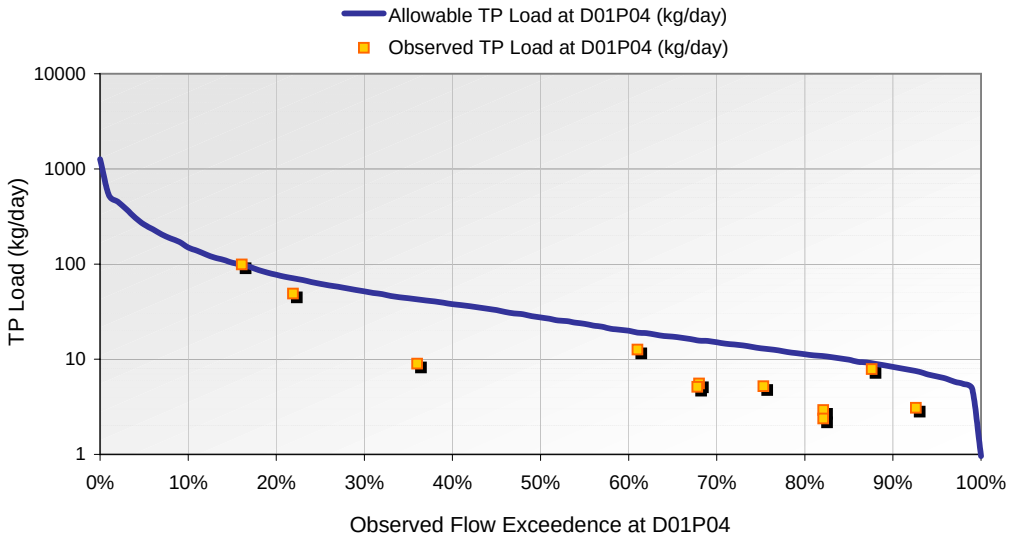
TP at D01P04 (mg/L) -vs- Flow at D01P04 (cfs)

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

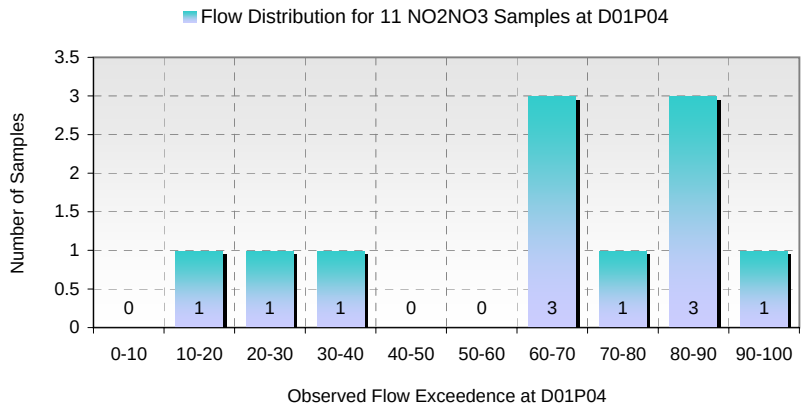


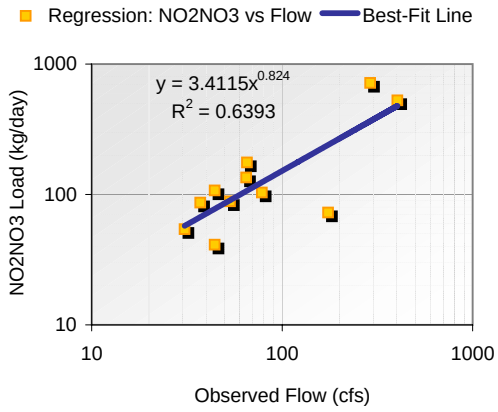
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	11-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Observed Load (kg/day)	Estimated Reduction (%)
0-10	0	1,064.51	260	No Data	No Data
10-20	1	422.53	103	99	0.0%
20-30	1	253.38	62	49	0.0%
30-40	1	178.97	44	9	0.0%
40-50	0	134.07	33	No Data	No Data
50-60	0	96.22	24	No Data	No Data
60-70	3	70.56	17	6	0.0%
70-80	1	53.24	13	5	0.0%
80-90	3	40.41	10	3	0.0%
90-100	1	26.94	7	3	0.0%

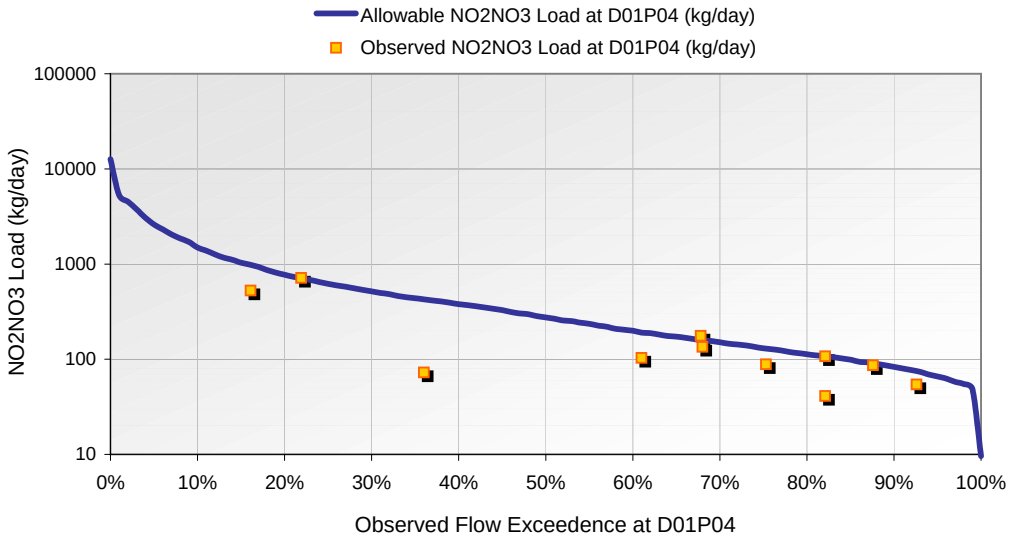
NO2NO3 at D01P04 (mg/L) -vs- Flow at D01P04 (cfs)

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

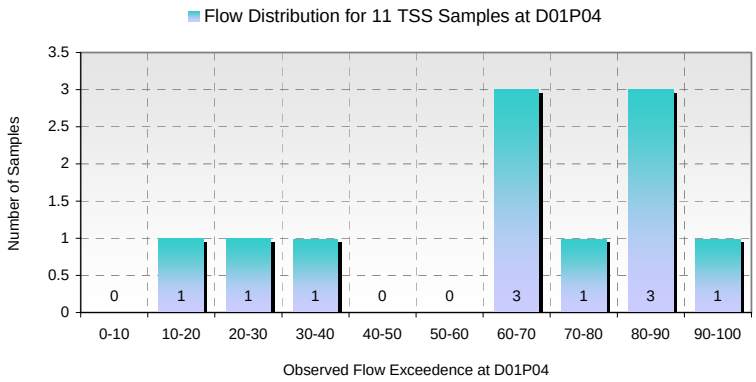


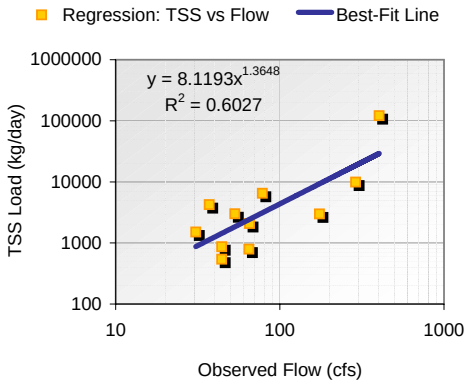
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	11-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Observed Load (kg/day)	Estimated Reduction (%)
0-10	0	1,064.51	2,604	No Data	No Data
10-20	1	422.53	1,034	527	0.0%
20-30	1	253.38	620	716	13.5%
30-40	1	178.97	438	73	0.0%
40-50	0	134.07	328	No Data	No Data
50-60	0	96.22	235	No Data	No Data
60-70	3	70.56	173	135	0.0%
70-80	1	53.24	130	89	0.0%
80-90	3	40.41	99	86	0.0%
90-100	1	26.94	66	54	0.0%

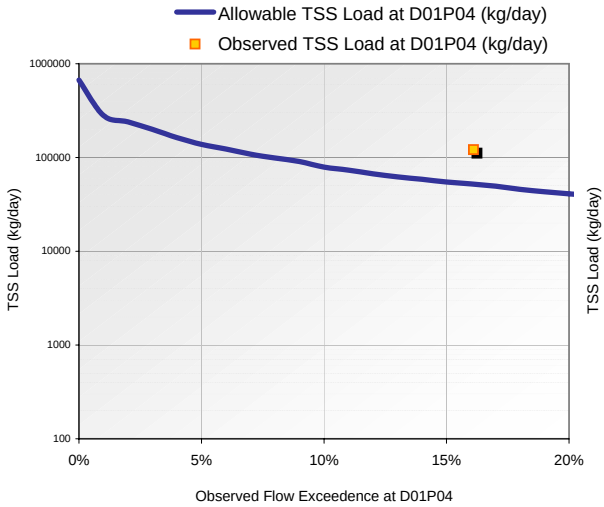
TSS at D01P04 (mg/L) -vs- Flow at D01P04 (cfs)

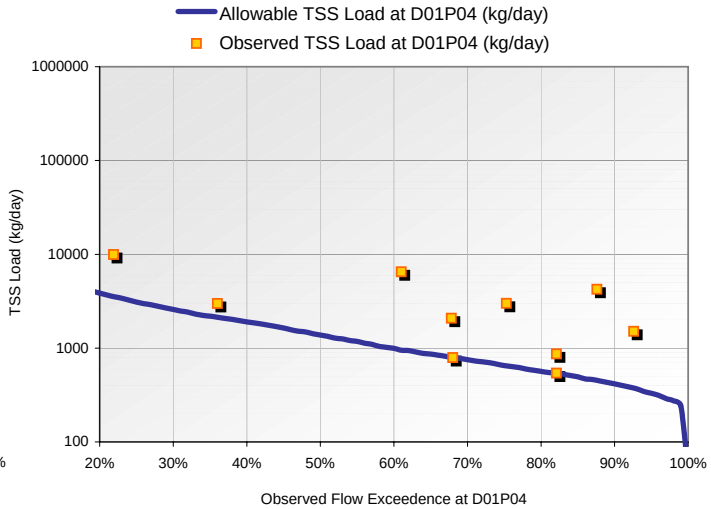
1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis



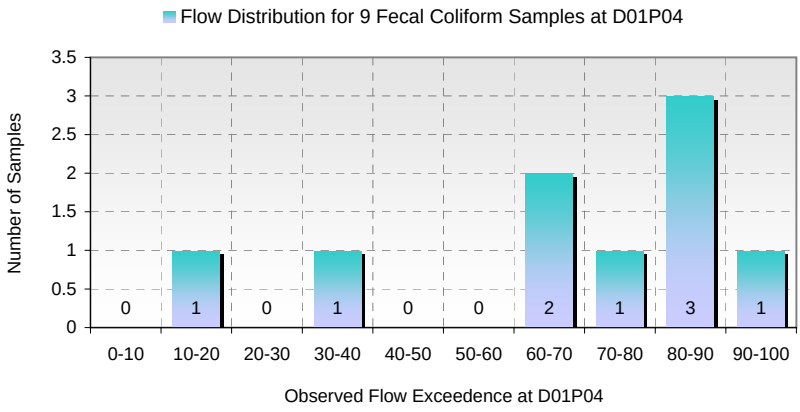


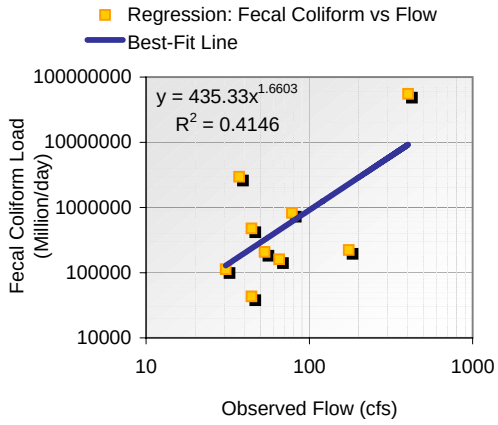
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	11-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Observed Load (kg/day)	Estimated Reduction (%)
0-10	0	1,064.51	138,034	No Data	No Data
10-20	1	422.53	54,789	121,226	54.8%
20-30	1	253.38	3,100	9,931	68.8%
30-40	1	178.97	2,189	2,988	26.7%
40-50	0	134.07	1,640	No Data	No Data
50-60	0	96.22	1,177	No Data	No Data
60-70	3	70.56	863	2,081	58.5%
70-80	1	53.24	651	2,996	78.3%
80-90	3	40.41	494	866	42.9%
90-100	1	26.94	330	1,507	78.1%

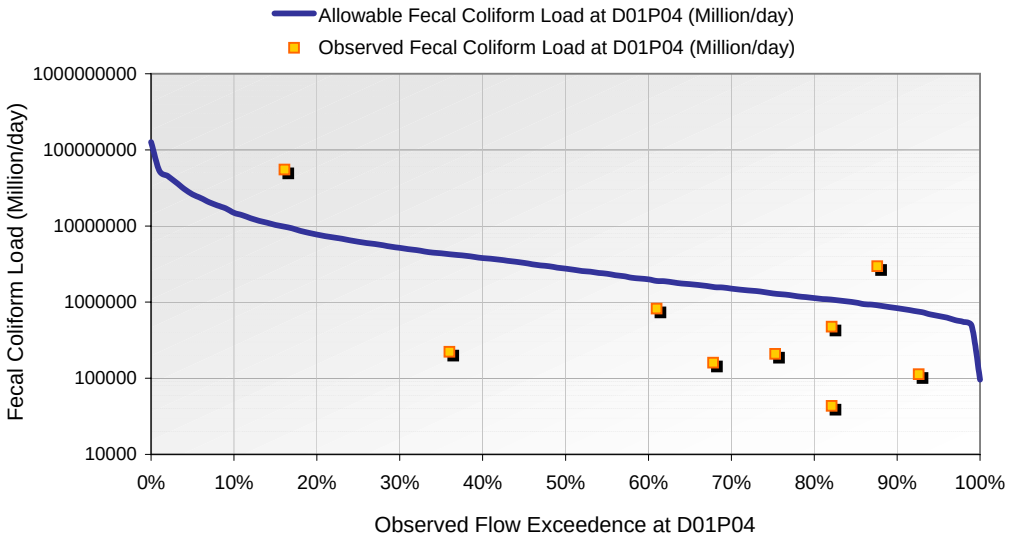
Fecal Coliform at D01P04 (MPN/100mL) -vs- Flow at D01P04 (cfs)

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

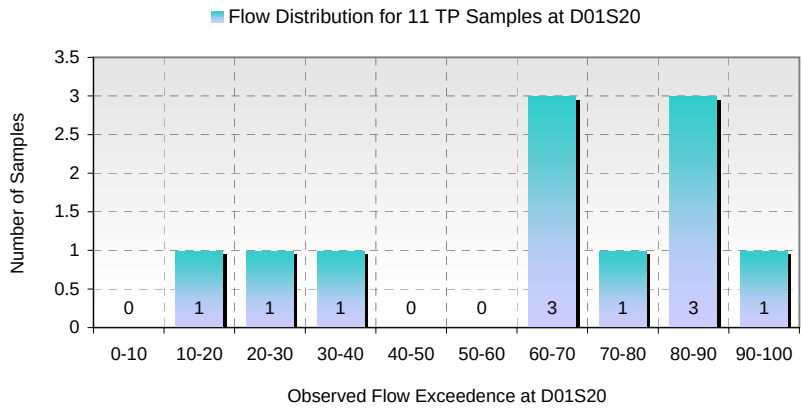


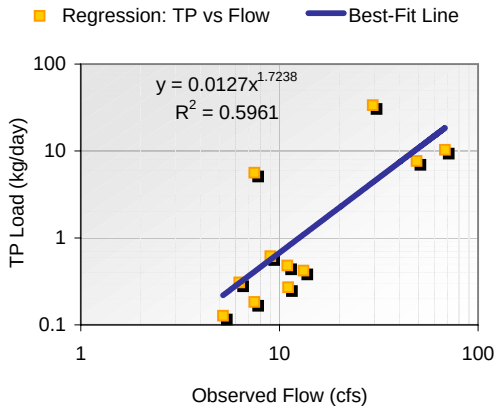
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	9-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Observed Load (Million/day)	Estimated Reduction (%)
0-10	0	1,064.51	26,044,058	No Data	No Data
10-20	1	422.53	10,337,584	55,192,373	81.3%
20-30	0	253.38	6,199,098	No Data	No Data
30-40	1	178.97	4,378,603	221,975	0.0%
40-50	0	134.07	3,280,029	No Data	No Data
50-60	0	96.22	2,354,088	No Data	No Data
60-70	2	70.56	1,726,331	491,690	0.0%
70-80	1	53.24	1,302,595	208,415	0.0%
80-90	3	40.41	988,717	476,467	0.0%
90-100	1	26.94	659,145	112,996	0.0%

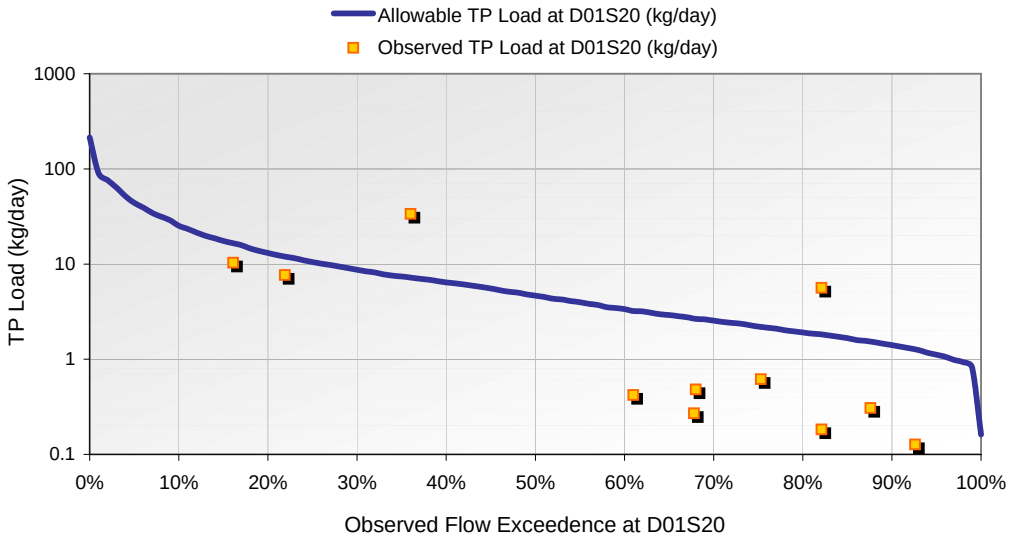
TP at D01S20 (mg/L) -vs- Flow at D01S20 (cfs)

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

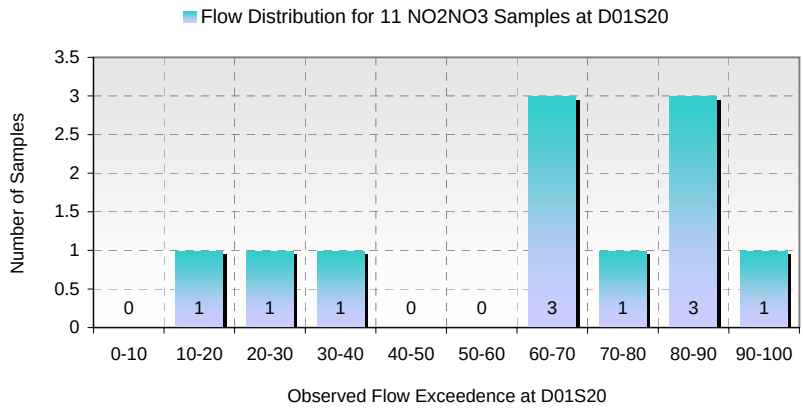


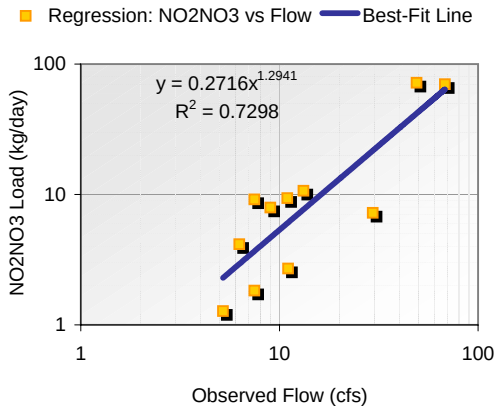
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	11-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Observed Load (kg/day)	Estimated Reduction (%)
0-10	0	179.94	44	No Data	No Data
10-20	1	71.42	17	10	0.0%
20-30	1	42.83	10	8	0.0%
30-40	1	30.25	7	34	78.0%
40-50	0	22.66	6	No Data	No Data
50-60	0	16.26	4	No Data	No Data
60-70	3	11.93	3	0	0.0%
70-80	1	9.00	2	1	0.0%
80-90	3	6.83	2	0	0.0%
90-100	1	4.55	1	0	0.0%

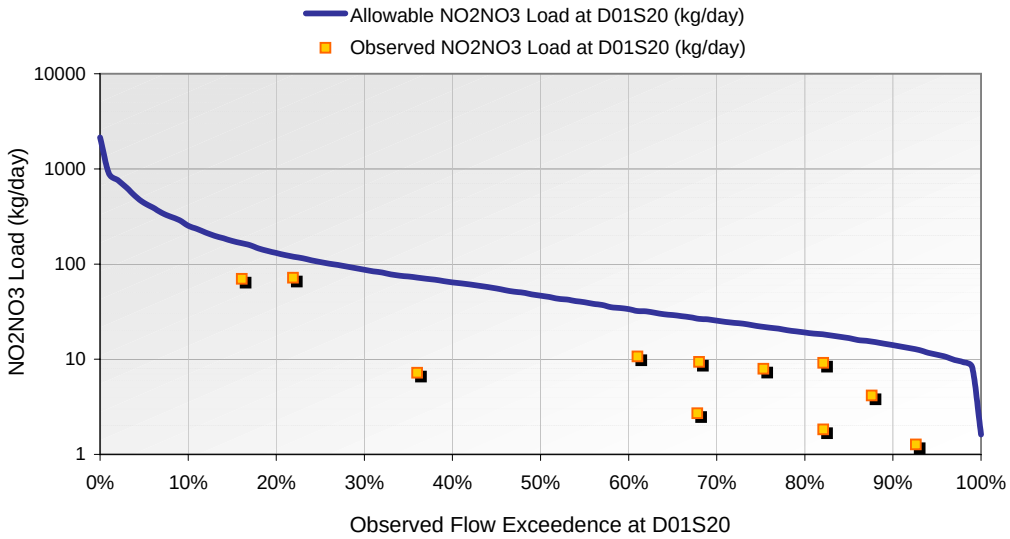
NO2NO3 at D01S20 (mg/L) -vs- Flow at D01S20 (cfs)

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

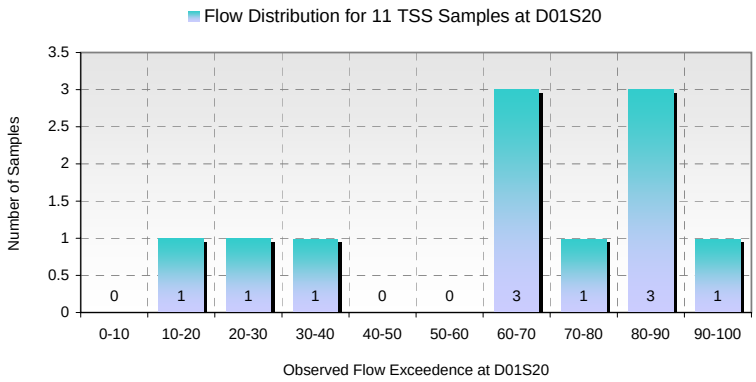


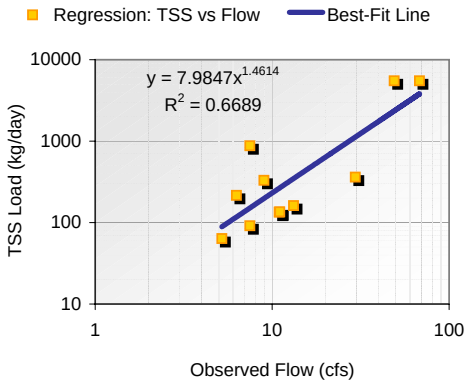
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	11-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Observed Load (kg/day)	Estimated Reduction (%)
0-10	0	179.94	440	No Data	No Data
10-20	1	71.42	175	70	0.0%
20-30	1	42.83	105	72	0.0%
30-40	1	30.25	74	7	0.0%
40-50	0	22.66	55	No Data	No Data
50-60	0	16.26	40	No Data	No Data
60-70	3	11.93	29	9	0.0%
70-80	1	9.00	22	8	0.0%
80-90	3	6.83	17	4	0.0%
90-100	1	4.55	11	1	0.0%

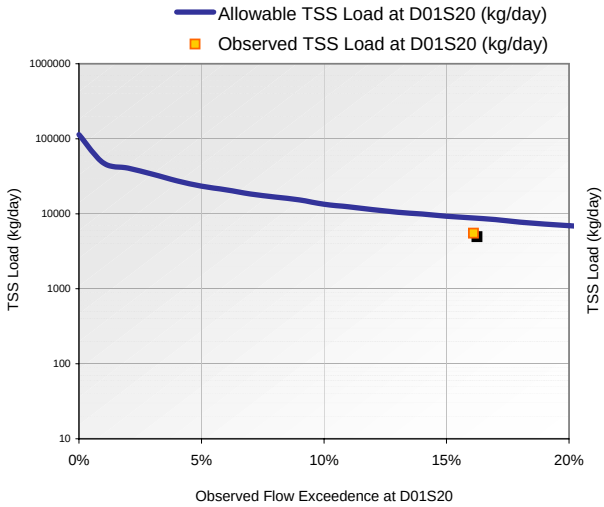
TSS at D01S20 (mg/L) -vs- Flow at D01S20 (cfs)

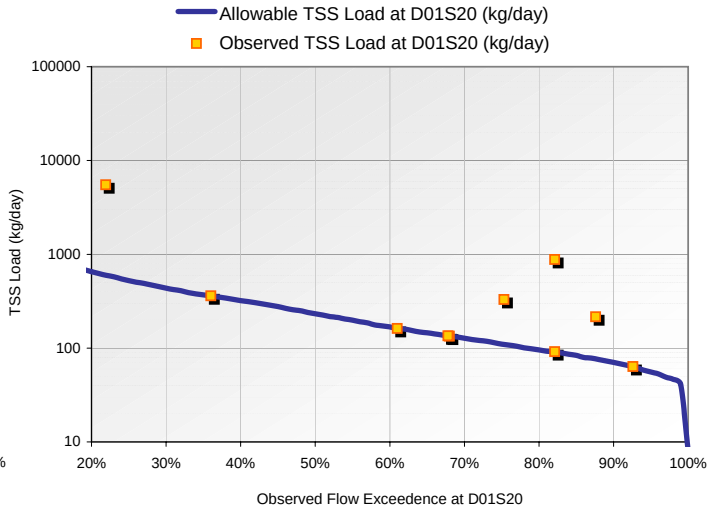
1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis



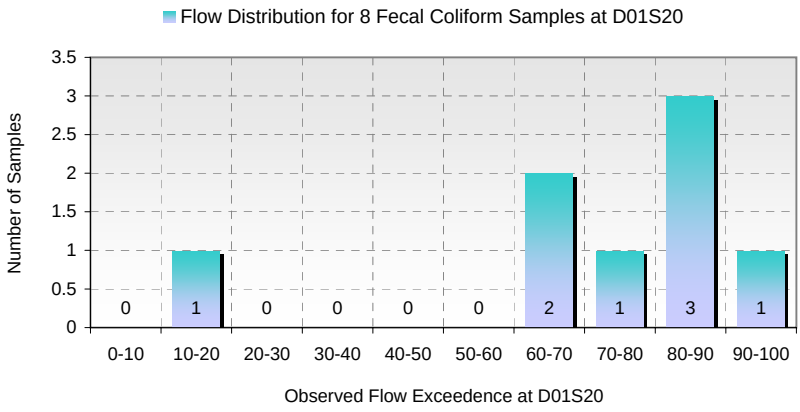


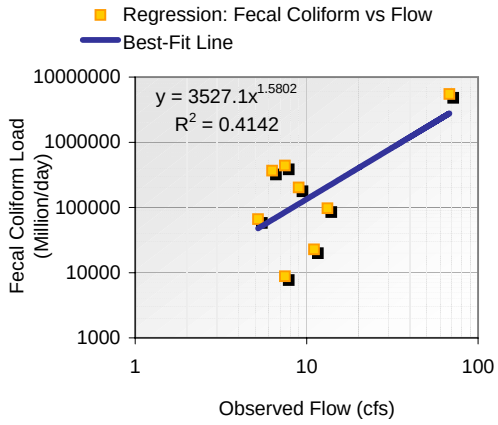
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	11-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Observed Load (kg/day)	Estimated Reduction (%)
0-10	0	179.94	23,333	No Data	No Data
10-20	1	71.42	9,261	5,498	0.0%
20-30	1	42.83	524	5,516	90.5%
30-40	1	30.25	370	361	0.0%
40-50	0	22.66	277	No Data	No Data
50-60	0	16.26	199	No Data	No Data
60-70	3	11.93	146	135	0.0%
70-80	1	9.00	110	330	66.7%
80-90	3	6.83	84	215	61.2%
90-100	1	4.55	56	64	12.5%

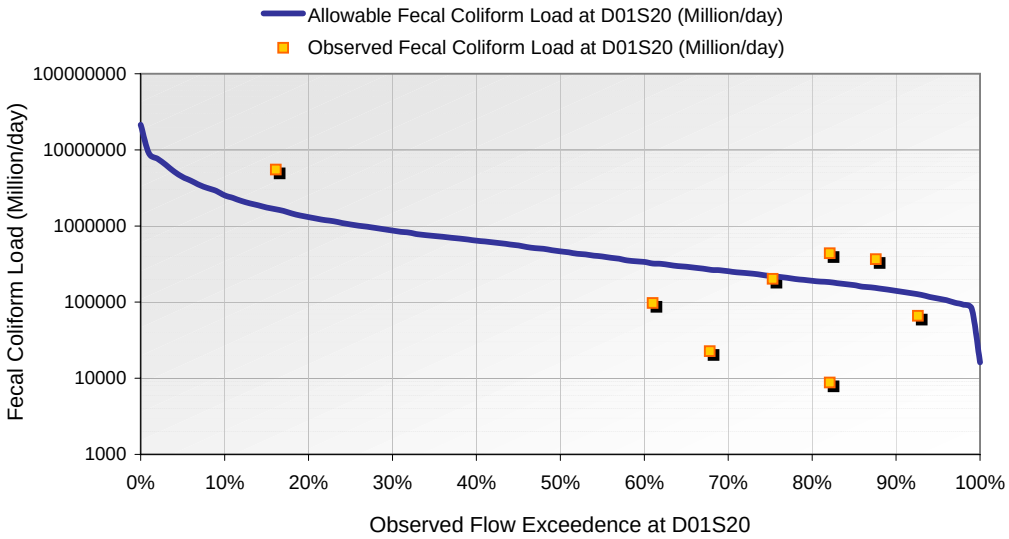
Fecal Coliform at D01S20 (MPN/100mL) -vs- Flow at D01S20 (cfs)

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

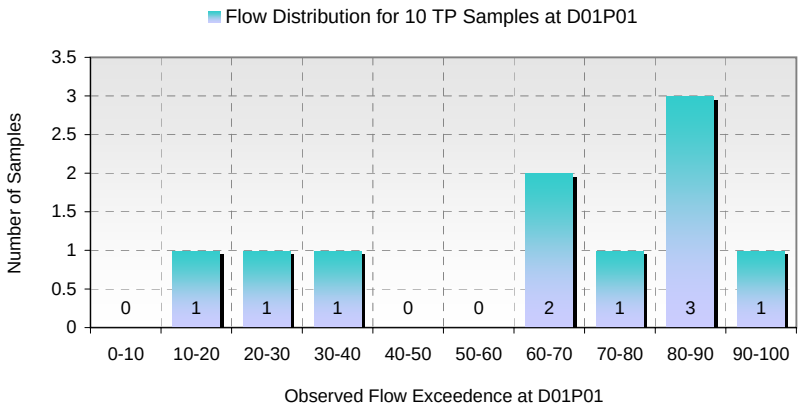


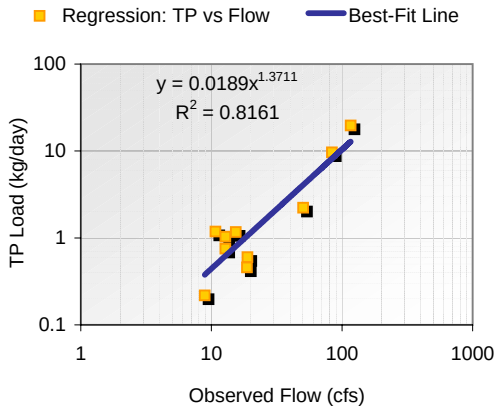
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	8-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Observed Load (Million/day)	Estimated Reduction (%)
0-10	0	179.94	4,402,452	No Data	No Data
10-20	1	71.42	1,747,451	5,497,826	68.2%
20-30	0	42.83	1,047,887	No Data	No Data
30-40	0	30.25	740,153	No Data	No Data
40-50	0	22.66	554,452	No Data	No Data
50-60	0	16.26	397,932	No Data	No Data
60-70	2	11.93	291,817	59,913	0.0%
70-80	1	9.00	220,189	202,574	0.0%
80-90	3	6.83	167,131	366,203	54.4%
90-100	1	4.55	111,421	66,216	0.0%

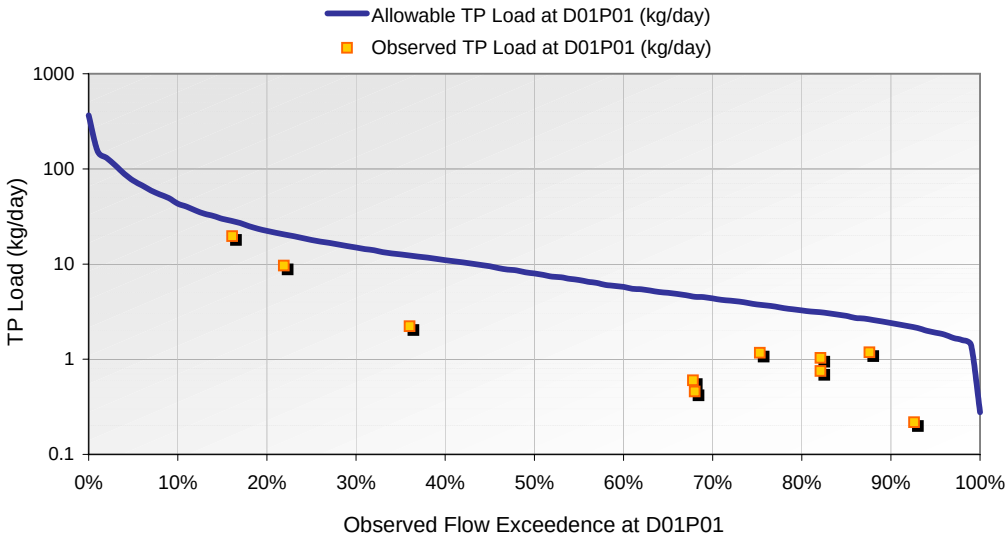
TP at D01P01 (mg/L) -vs- Flow at D01P01 (cfs)

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

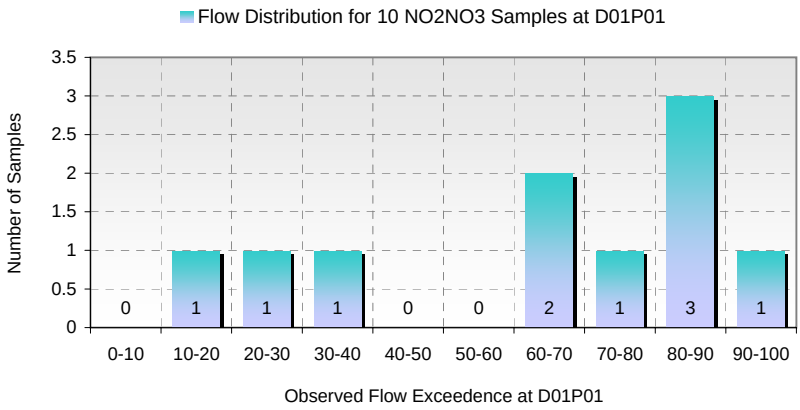


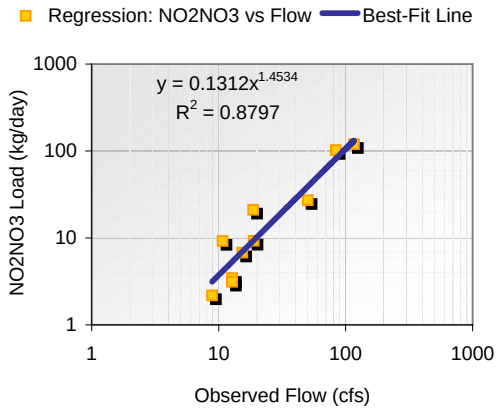
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	10-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Observed Load (kg/day)	Estimated Reduction (%)
0-10	0	307.58	75	No Data	No Data
10-20	1	122.09	30	20	0.0%
20-30	1	73.21	18	10	0.0%
30-40	1	51.71	13	2	0.0%
40-50	0	38.74	9	No Data	No Data
50-60	0	27.80	7	No Data	No Data
60-70	2	20.39	5	1	0.0%
70-80	1	15.38	4	1	0.0%
80-90	3	11.68	3	1	0.0%
90-100	1	7.78	2	0	0.0%

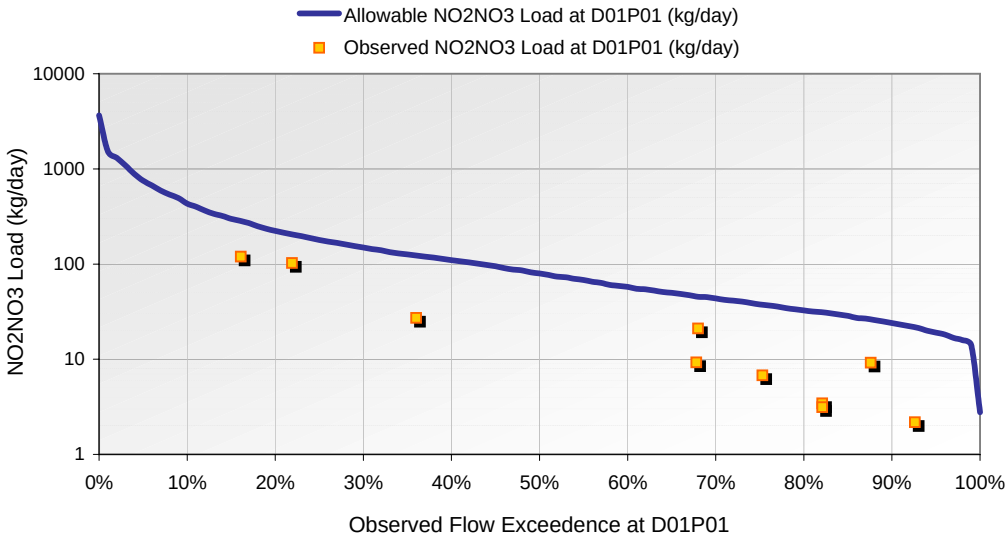
NO2NO3 at D01P01 (mg/L) -vs- Flow at D01P01 (cfs)

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

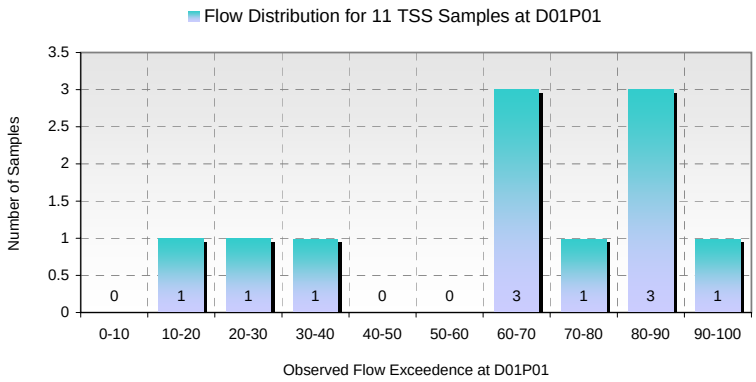


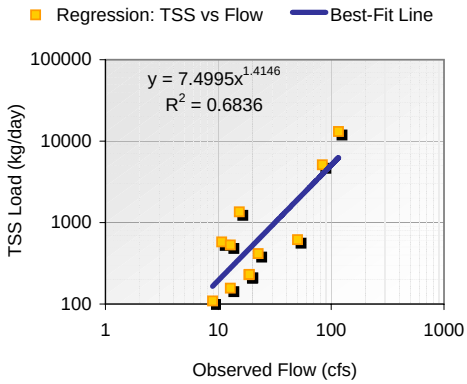
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	10-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Observed Load (kg/day)	Estimated Reduction (%)
0-10	0	307.58	753	No Data	No Data
10-20	1	122.09	299	120	0.0%
20-30	1	73.21	179	102	0.0%
30-40	1	51.71	127	27	0.0%
40-50	0	38.74	95	No Data	No Data
50-60	0	27.80	68	No Data	No Data
60-70	2	20.39	50	15	0.0%
70-80	1	15.38	38	7	0.0%
80-90	3	11.68	29	3	0.0%
90-100	1	7.78	19	2	0.0%

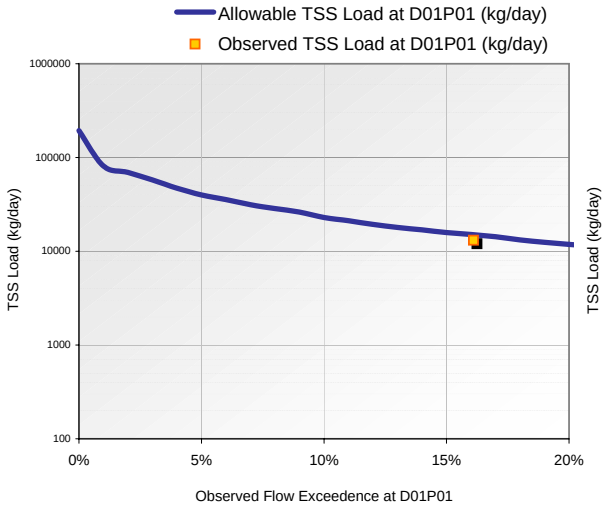
TSS at D01P01 (mg/L) -vs- Flow at D01P01 (cfs)

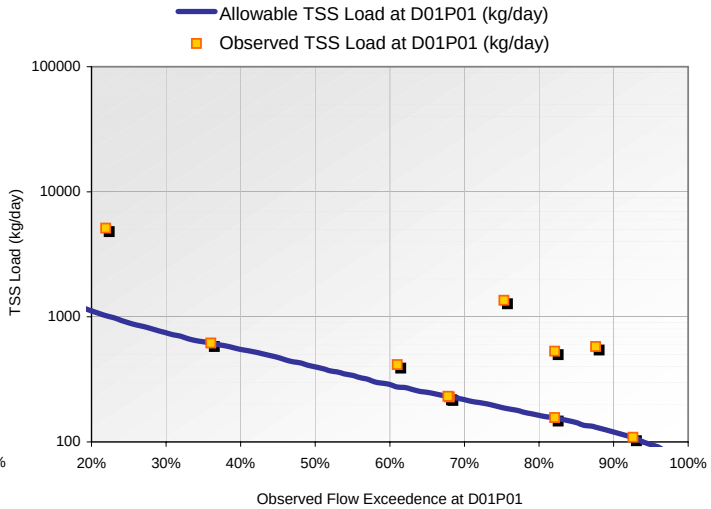
1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis



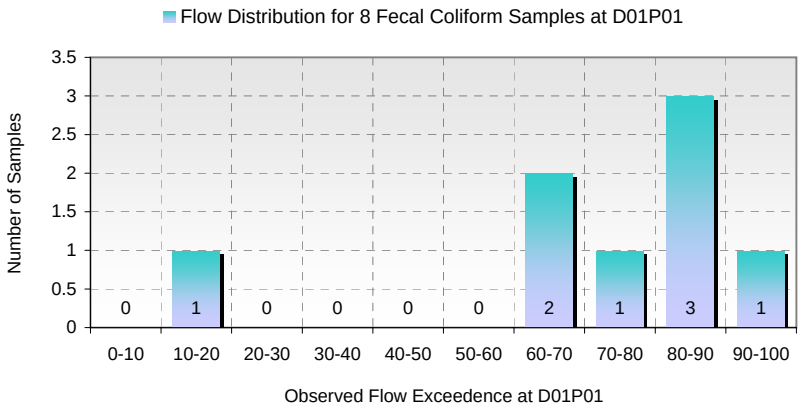


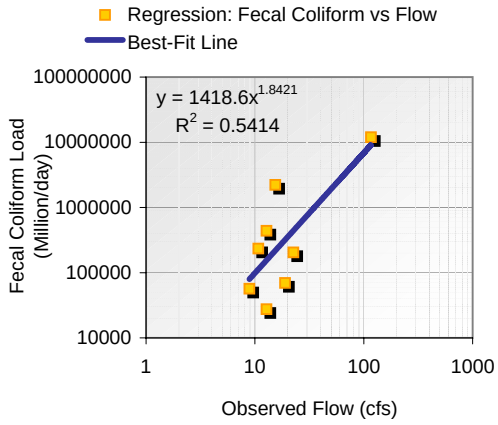
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	11-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Observed Load (kg/day)	Estimated Reduction (%)
0-10	0	307.58	39,884	No Data	No Data
10-20	1	122.09	15,831	13,100	0.0%
20-30	1	73.21	896	5,124	82.5%
30-40	1	51.71	633	617	0.0%
40-50	0	38.74	474	No Data	No Data
50-60	0	27.80	340	No Data	No Data
60-70	3	20.39	249	231	0.0%
70-80	1	15.38	188	1,355	86.1%
80-90	3	11.68	143	532	73.1%
90-100	1	7.78	95	109	12.5%

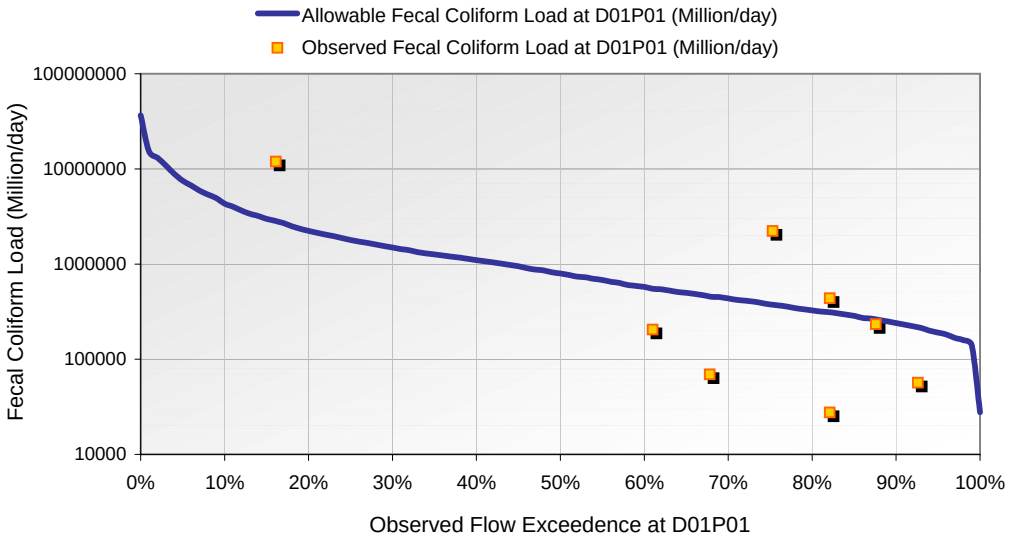
Fecal Coliform at D01P01 (MPN/100mL) -vs- Flow at D01P01 (cfs)

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

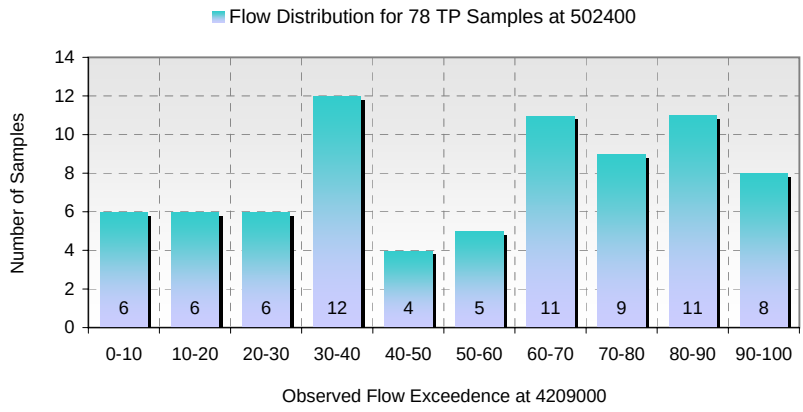


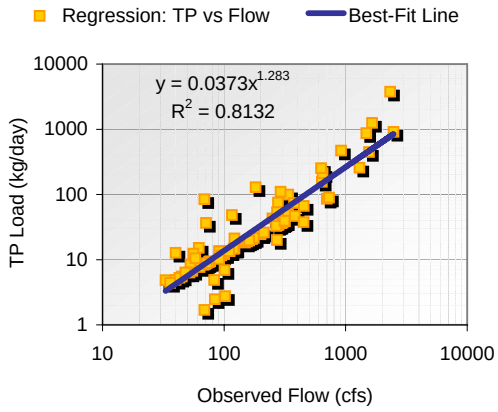
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	8-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Observed Load (Million/day)	Estimated Reduction (%)
0-10	0	307.58	7,525,289	No Data	No Data
10-20	1	122.09	2,986,989	11,960,652	75.0%
20-30	0	73.21	1,791,196	No Data	No Data
30-40	0	51.71	1,265,174	No Data	No Data
40-50	0	38.74	947,747	No Data	No Data
50-60	0	27.80	680,201	No Data	No Data
60-70	2	20.39	498,814	137,038	0.0%
70-80	1	15.38	376,378	2,220,629	83.1%
80-90	3	11.68	285,684	234,080	0.0%
90-100	1	7.78	190,456	56,593	0.0%

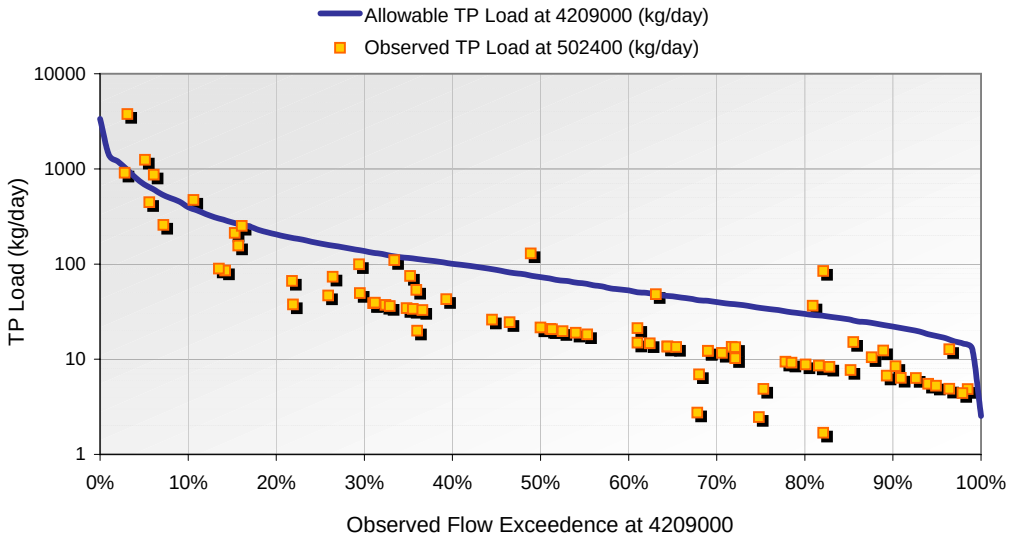
TP at 502400 (mg/L) -vs- Flow at 4209000 (cfs)

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

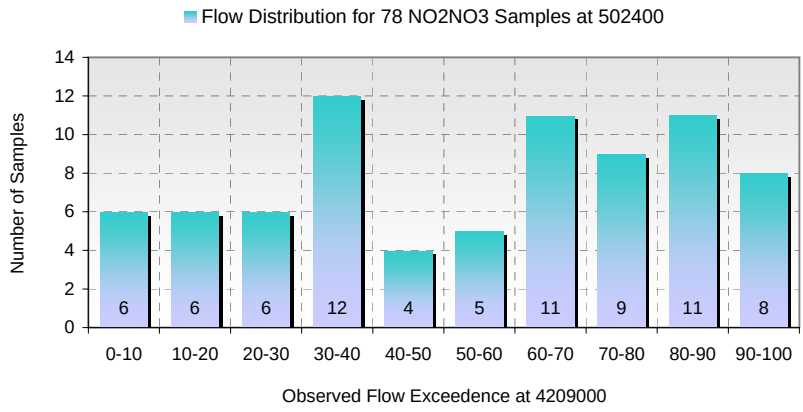


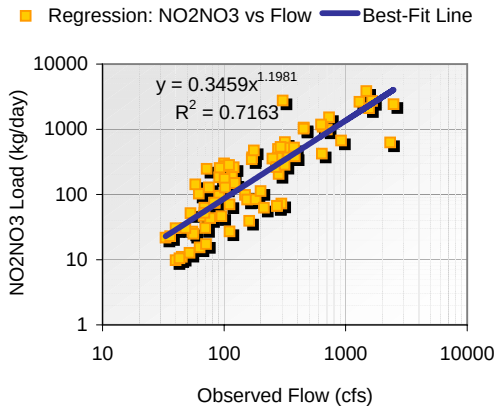
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	78-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Observed Load (kg/day)	Estimated Reduction (%)
0-10	6	1,659.50	690	890	22.4%
10-20	6	658.70	274	184	0.0%
20-30	6	395.00	164	58	0.0%
30-40	12	279.00	116	38	0.0%
40-50	4	209.00	87	25	0.0%
50-60	5	150.00	62	20	0.0%
60-70	11	110.00	46	14	0.0%
70-80	9	83.00	35	9	0.0%
80-90	11	63.00	26	9	0.0%
90-100	8	42.00	17	5	0.0%

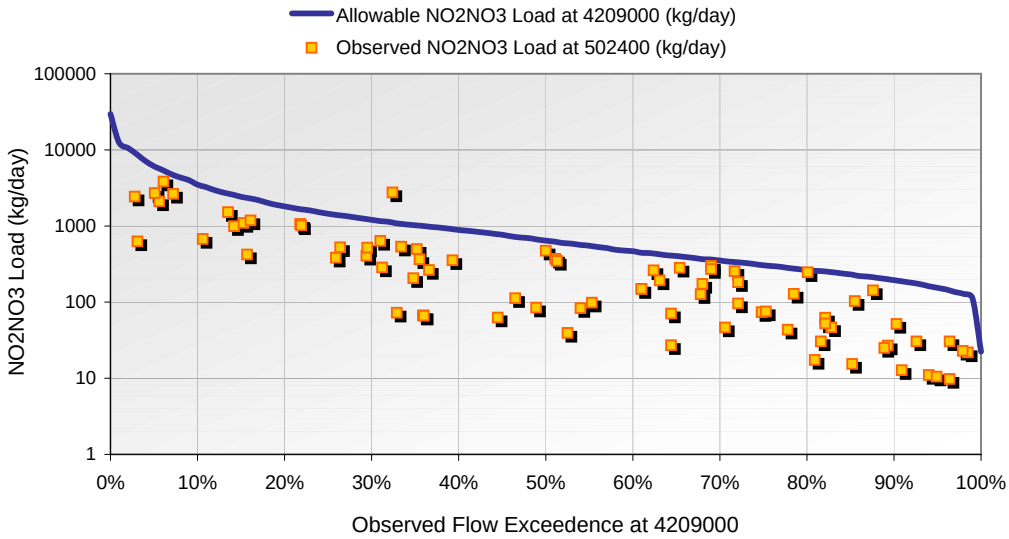
NO2NO3 at 502400 (mg/L) -vs- Flow at 4209000 (cfs)

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis

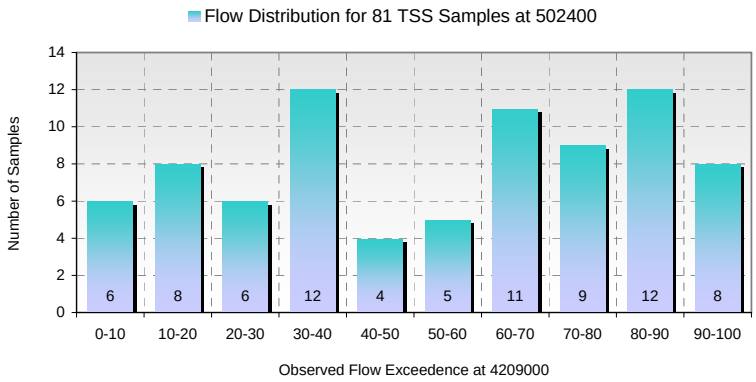


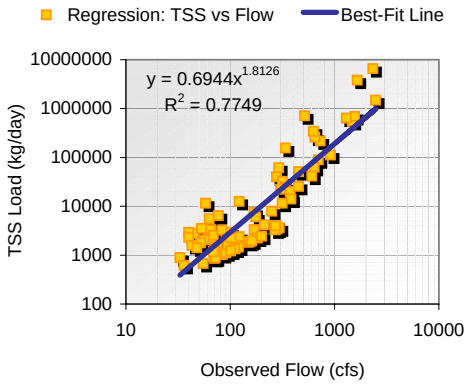
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	78-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Observed Load (kg/day)	Estimated Reduction (%)
0-10	6	1,659.50	6,090	2,533	0.0%
10-20	6	658.70	2,417	1,043	0.0%
20-30	6	395.00	1,450	522	0.0%
30-40	12	279.00	1,024	320	0.0%
40-50	4	209.00	767	99	0.0%
50-60	5	150.00	550	98	0.0%
60-70	11	110.00	404	173	0.0%
70-80	9	83.00	305	96	0.0%
80-90	11	63.00	231	47	0.0%
90-100	8	42.00	154	17	0.0%

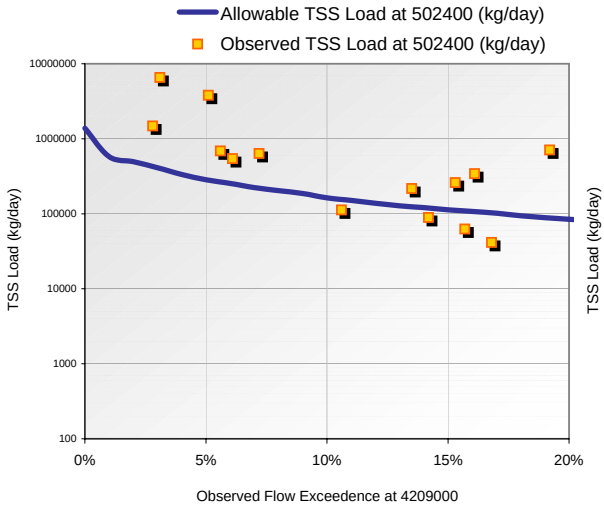
TSS at 502400 (mg/L) -vs- Flow at 4209000 (cfs)

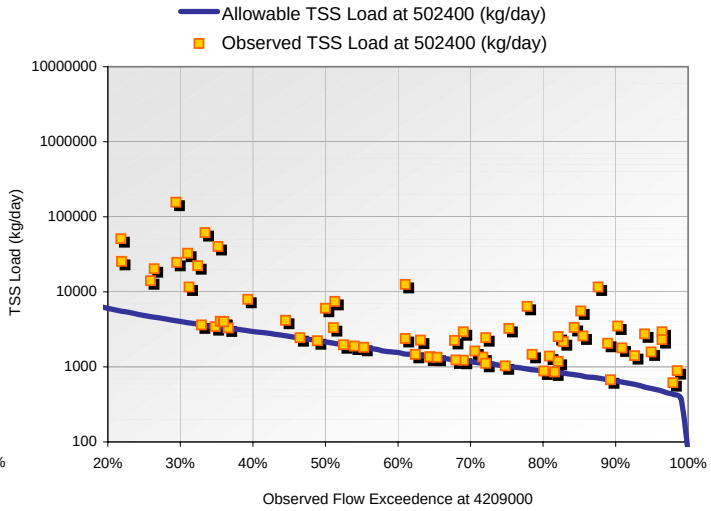
1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis



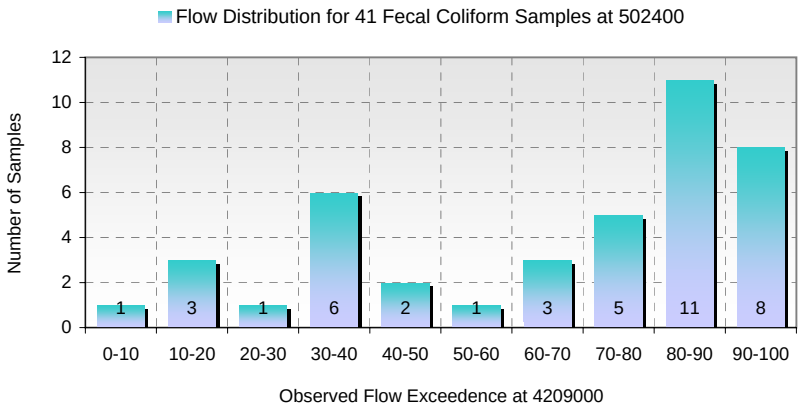


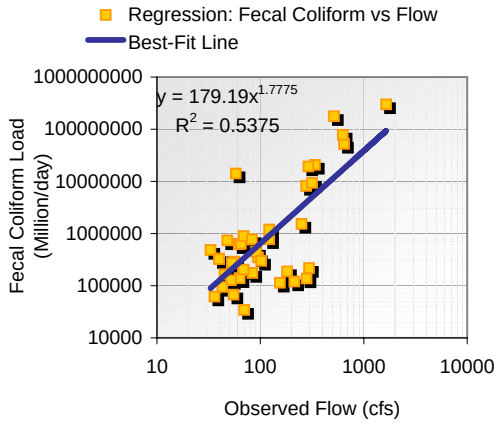
3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	81-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (kg/day)	Observed Load (kg/day)	Estimated Reduction (%)
0-10	6	1,659.50	284,206	1,083,735	73.8%
10-20	8	658.70	112,809	164,289	31.3%
20-30	6	395.00	4,832	25,085	80.7%
30-40	12	279.00	3,413	6,001	43.1%
40-50	4	209.00	2,557	3,308	22.7%
50-60	5	150.00	1,835	1,969	6.8%
60-70	11	110.00	1,346	1,468	8.3%
70-80	9	83.00	1,015	1,468	30.8%
80-90	12	63.00	771	2,347	67.2%
90-100	8	42.00	514	1,680	69.4%

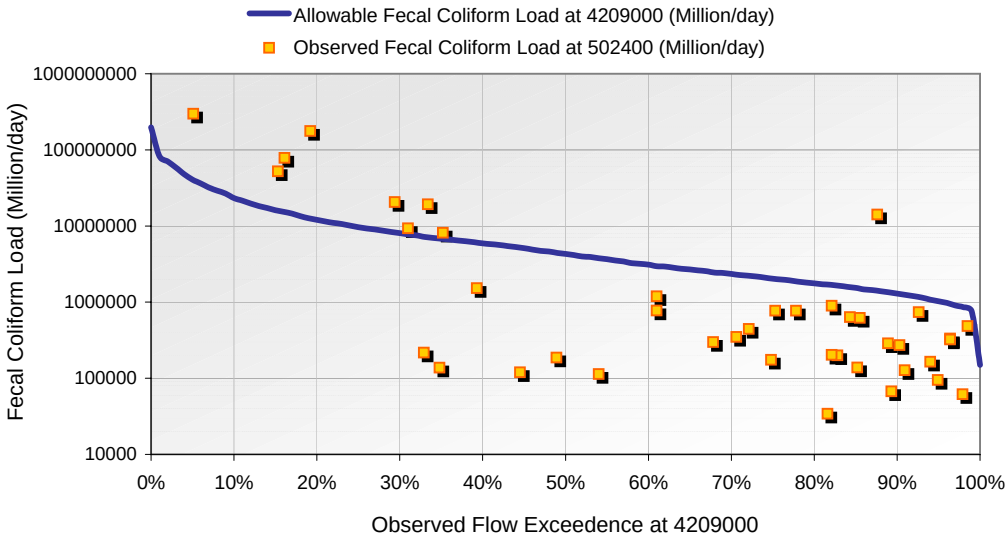
Fecal Coliform at 502400 (MPN/100mL) -vs- Flow at 4209000 (cfs)

1. Data Assessment and Trend Confirmation





2. Load Exceedence Analysis



3. Estimated TMDL Loads by Flow Exceedence Range

Flow Exceedence Ranges	41-Sample Distribution	Median Observed Flow (cfs)	Allowable Load (Million/day)	Observed Load (Million/day)	Estimated Reduction (%)
0-10	1	1,659.50	40,600,921	298,726,874	86.4%
10-20	3	658.70	16,115,593	78,358,922	79.4%
20-30	1	395.00	9,663,973	20,673,563	53.3%
30-40	6	279.00	6,825,946	4,845,443	0.0%
40-50	2	209.00	5,113,343	153,437	0.0%
50-60	1	150.00	3,669,863	113,766	0.0%
60-70	3	110.00	2,691,233	776,054	0.0%
70-80	5	83.00	2,030,658	445,277	0.0%
80-90	11	63.00	1,541,343	272,304	0.0%
90-100	8	42.00	1,027,562	244,046	0.0%