

Upper Bull Creek Stormwater Monitoring

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The City of Austin Stormwater Monitoring Program has been collecting stormwater quality samples on the Sam Hamilton Memorial Reserve since March of 2007. These data are used to supplement monitoring of aquatic species in the area. Samples are collected at two locations (see Figure 1). Monitoring at the upstream site (WT1) is ongoing. Sample collection at the monitoring site below the pond on the property (WT2) was discontinued in 2008.

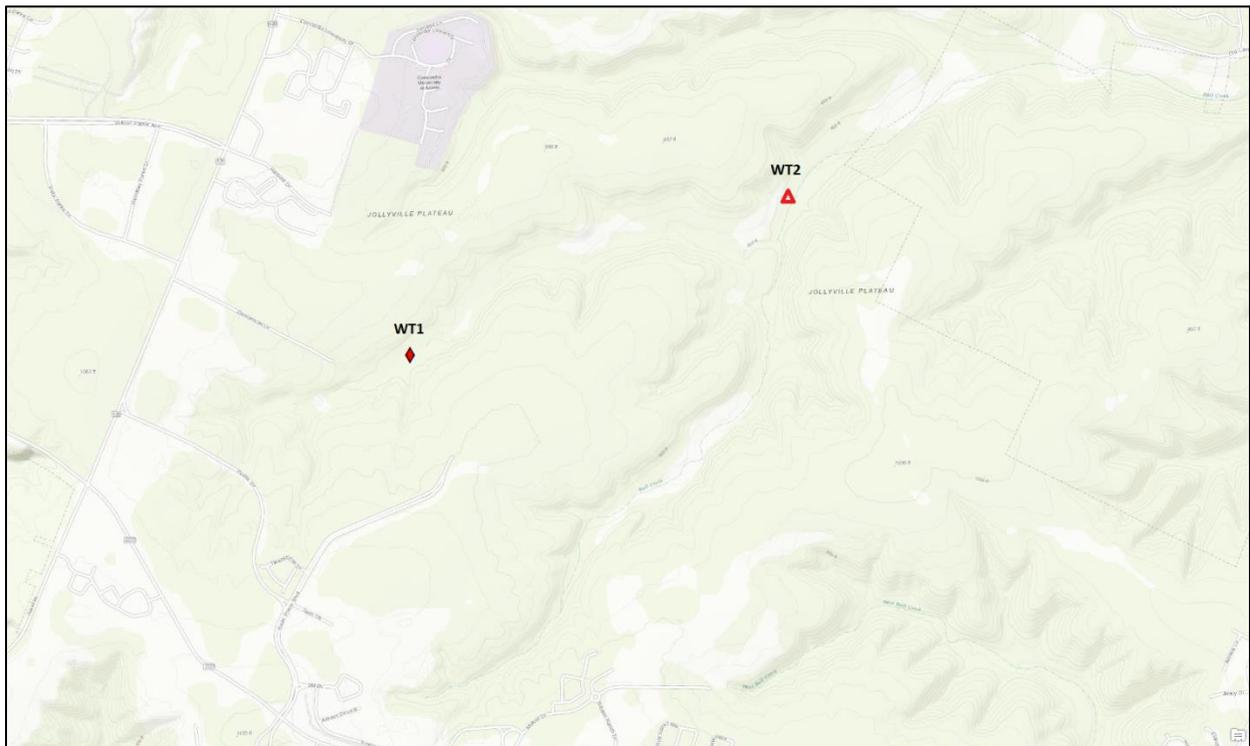


Figure 1: Stormwater sampling locations on upper Bull Creek.

Mean, maximum and minimum event mean concentrations (EMCs) for the two sites are presented in Table 1. Concentrations at WT2 are generally lower than the concentrations at WT1. This is likely due to the pond on the property acting like a wet pond stormwater control, reducing the overall pollutant load. However, significant development has occurred in the watershed of these sites; since sampling at WT2 was discontinued we cannot say if the higher concentrations at WT1 may be due to increased development.

Table 2: Mean, maximum and minimum EMCs at two stormwater monitoring stations on upper Bull Creek.

	WT1				WT2			
	Count	Mean	Max	Min	Count	Mean	Max	Min
TSS (mg/L)	23	114.9	494.0	4.5	6	28.1	64.1	13.9
VSS (mg/L)		16.6	52.6	1.3		6.1	10.1	3.8
TN (mg/L)		1.36	2.11	0.62		0.61	0.85	0.28
NO ₃ +NO ₂ (mg/L)		0.601	1.260	0.314		0.143	0.229	0.028
TKN (mg/L)		0.77	1.79	0.18		0.49	0.62	0.20
NH ₃ (mg/L)		0.028	0.096	0.003		0.034	0.073	0.010
TP (mg/L)		0.110	0.267	0.004		0.062	0.149	0.015
DP (mg/L)		0.012	0.037	0.001		0.019	0.052	0.001
COD (mg/L)		30.6	74.7	8.0		12.9	18.7	10.5
TOC (mg/L)		6.04	11.51	2.40		3.80	5.41	2.92
Zn (µg/L)		8.20	33.10	0.85		3.76	6.63	2.27
Pb (µg/L)		1.6	7.9	0.0		0.5	1.5	0.2
Cu (µg/L)		1.43	4.53	0.35		0.71	1.38	0.10
Cd (µg/L)		0.331	0.500	0.013		0.051	0.148	0.021