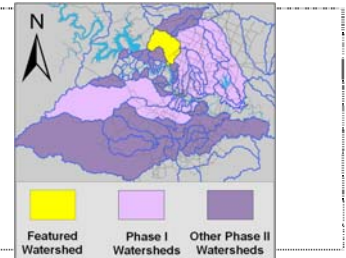


Bull Creek Watershed

Summary Sheet

Catchment	Total area	24.7 sq. miles				
	Area in recharge	16.3 sq. miles				
	Creek length	11 miles				
Demographics	Receiving water	Lake Austin				
	2000 population	43,709				
	2030 projected population	69,716				
	30 year projected % increase	60 %				
Land Use	Impervious cover (2003 estimate)	13.58 %				
Overall EII Scores	2001	2004	2007	2010	2012	
	76	81	85	82	80	



Flow Regime* for Sample Sites on Bull Creek

Site #	Site Name	2004						2007					2010				2011		2012				
		Mar	May	May	Jun	Oct	Dec	Feb	May	Jun	Sep	Dec	Mar	May	May	Oct	Dec	Mar	Apr	May			
		WQ	WQ	Bio	WQ	WQ	WQ	WQ	WQ	Bio	WQ	WQ	WQ	WQ	Bio	WQ	WQ	WQ	Bio	Bio			
151	Trib 6 @ BUL	B	B	B	B	B	B										B	B	B	B	B	B	B
1164	Tr. 5 D.S Hanks																B	B	B	B	B	B	B
349	U.S. Trib 7		B	B				B	B	S	B	B					B	B	B	B	B	B	B
920	St Eds U.S Dam	B	B	B	B	B	B	B	B	B	B	B					B	B	B	B	B	B	B
347	U.S WBL	B	B	B	B	B	B	B	B	S	B	B											
350	LOOP 360	B	B	B	B	B	B										B	B	B	B	B	B	B

* B = baseflow n = no flow storm = storm flow blue = Samples were taken grey = Samples were not taken blank = not visited

Summary of 2012 Data for Bull Creek

summary	Parameter	Mean	Max	Min	Discussion
Physicochemical	D.O. mg/l	7.7	12.3	3.4	Wide range, some high values in Dec, some low values in July/Sept.
	pH st.units	7.79	8.67	7.15	Wide range, some low values at upstream sites, high values at downstream sites.
	Cond uS/cm	734	1105	535	Mostly within range, but with high values at site 151.
Nutrients	NH ₃ mg/l	0.009	0.021	0.008	Generally low.
	NO ₃ mg/l	0.683	1.8	0.008	Within normal range.
	Ortho P mg/l	0.004	0.007	0.004	Consistently low.
Sediment Load	TSS mg/l	2.5	11.7	1.0	Mostly within normal range, some high values at upstream site 1164.
	Turbidity ntu	0.96	4.58	0.19	Within normal range.
Biology	E.Coli /100ml	132	1410	3	Generally low with some high values at site 350.
	Benthic Macroinvertebrates and Diatoms: evaluations are provided in the introduction of this report				

Index scores* for Bull Creek Sites by Year

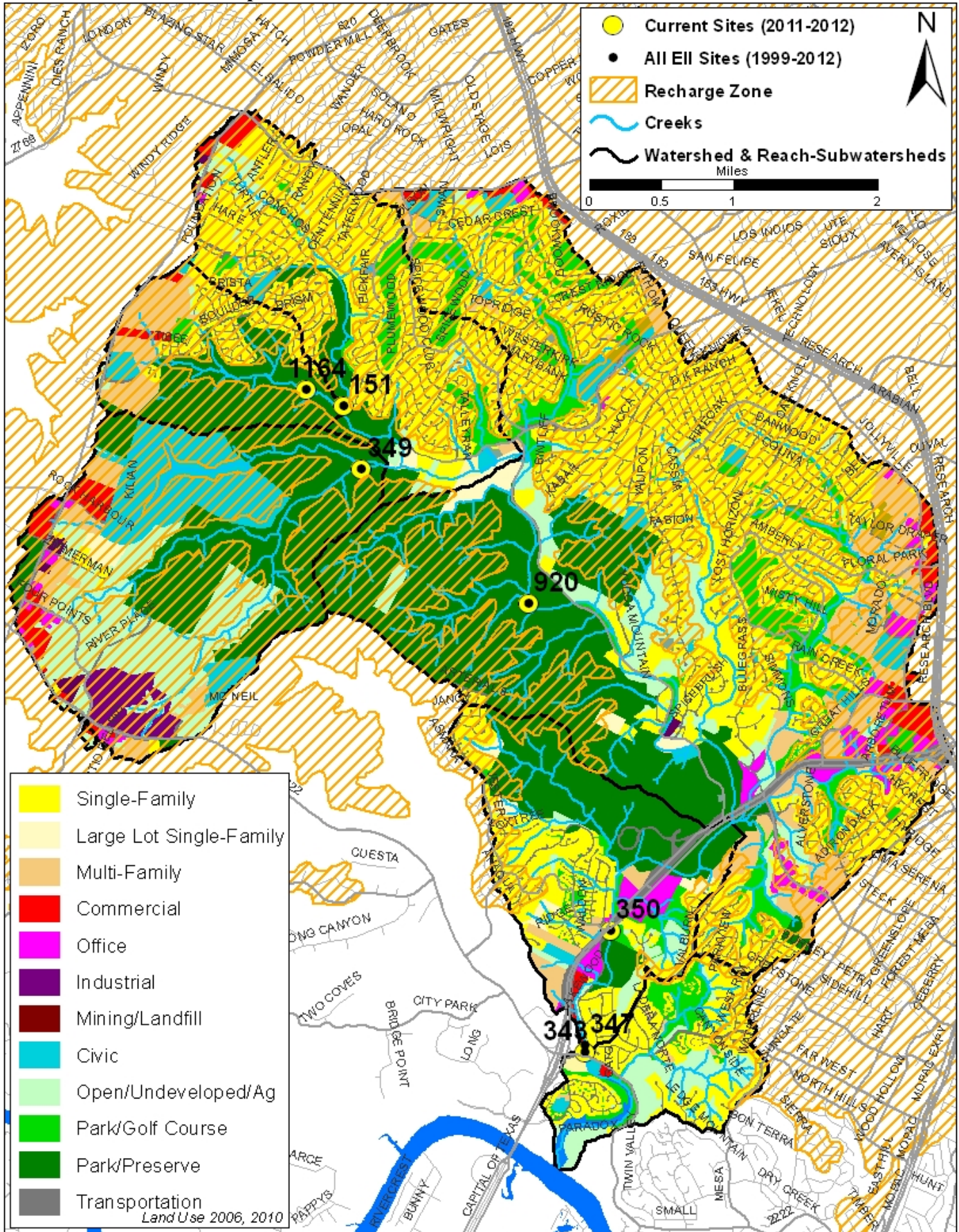
Reach	Site	Site Name	Year	Water Quality	Sediment ^{nt**}	Contact Rec.	Non-Contact Rec.	Physical Integrity	Aquatic Life	Benthic subindep _x	Diatom subindep _x	Total EII Score
BUL1	347	Bull Creek US of West Bull Creek	1996	70	88	97	90	79	95	95	95	87
BUL1	350	Bull Creek @ Loop 360 1st Crossing	1996	71	88	97	81	61	92	84	100	82
BUL2	920	Bull Creek @ St. Ed's Park US of dam	1996	63	88	75	93	82	90	91	89	82
BUL5	151	Trib 6 @ Bull Creek (EG)	1996	51	88	87	80	91	76	84	67	79
BUL1	347	Bull Creek US of West Bull Creek	2001	63	65	91	92	88	62	64	59	72
BUL1	350	Bull Creek @ Loop 360 1st Crossing	2001	59	65	87	83	58	87	91	82	70
BUL2	920	Bull Creek @ St. Ed's Park US of dam	2001	60	65	93	81	88	86	88	83	74
BUL5	151	Trib 6 @ Bull Creek (EG)	2001	44	65	92	93	81	83	99	66	73
BUL1	347	Bull Creek US of West Bull Creek	2004	62	84	63	93	88	96	94	97	81
BUL1	350	Bull Creek @ Loop 360 First Crossing	2004	73	84	67	89	80	97	94	100	82
BUL2	920	Bull Creek @ St. Ed's Park US of dam	2004	70	84	72	91	85	95	95	94	83
BUL5	151	Trib 6 @ Bull Creek (EG)	2004	60	84	66	99	87	80	83	77	79
BUL1	347	Bull Creek US of West Bull Creek	2007	69	81	63	91	78	92	84	100	79
BUL2	920	Bull Creek @ St. Ed's Park US of dam	2007	74	81	85	92	90	91	95	86	86
BUL3	349	Bull Creek US of Trib 7 (Franklin)	2007	89	81	93	98	83	98	97	99	90
BUL1	350	Bull Creek @ Loop 360 First Crossing	2010	68	67	71	96	74	93	85	100	78
BUL2	920	Bull Creek @ St. Ed's Park US of dam	2010	73	67	96	97	89	92	84	99	86
BUL3	349	Bull Creek US of Trib 7 (Franklin)	2010	91	67	92	100	93	93	94	92	89
BUL4	###	Trib 5 DS Hanks Tract Property Line	2010	73	67	87	93	73	82	73	90	79
BUL5	151	Trib 6 @ Bull Creek (EG)	2010	67	67	86	86	87	91	98	83	81
BUL1	350	Bull Creek @ Loop 360 First Crossing	2012	65	73	44	96	85	96	100	92	77
BUL2	920	Bull Creek @ St. Ed's Park US of dam	2012	67	73	69	98	92	96	100	92	83
BUL3	349	Bull Creek US of Trib 7 (Franklin)	2012	81	73	83	94	92	83	78	88	84
BUL4	###	Trib 5 DS Hanks Tract Property Line	2012	61	73	61	97	92	95	100	89	80
BUL5	151	Trib 6 @ Bull Creek (EG)	2012	55	73	75	80	92	97	100	94	79

* blank cells indicate parameter was not collected, blank row indicate site was dropped **sediment samples only collected at the downstream site

100-87.5 Excellent 87.5-75 V. Good 75-62.5 Good 62.5-50 Fair 50-37.5 Marginal 37.5-25 Poor 25-12.5 Bad 12.5-0 V. Bad

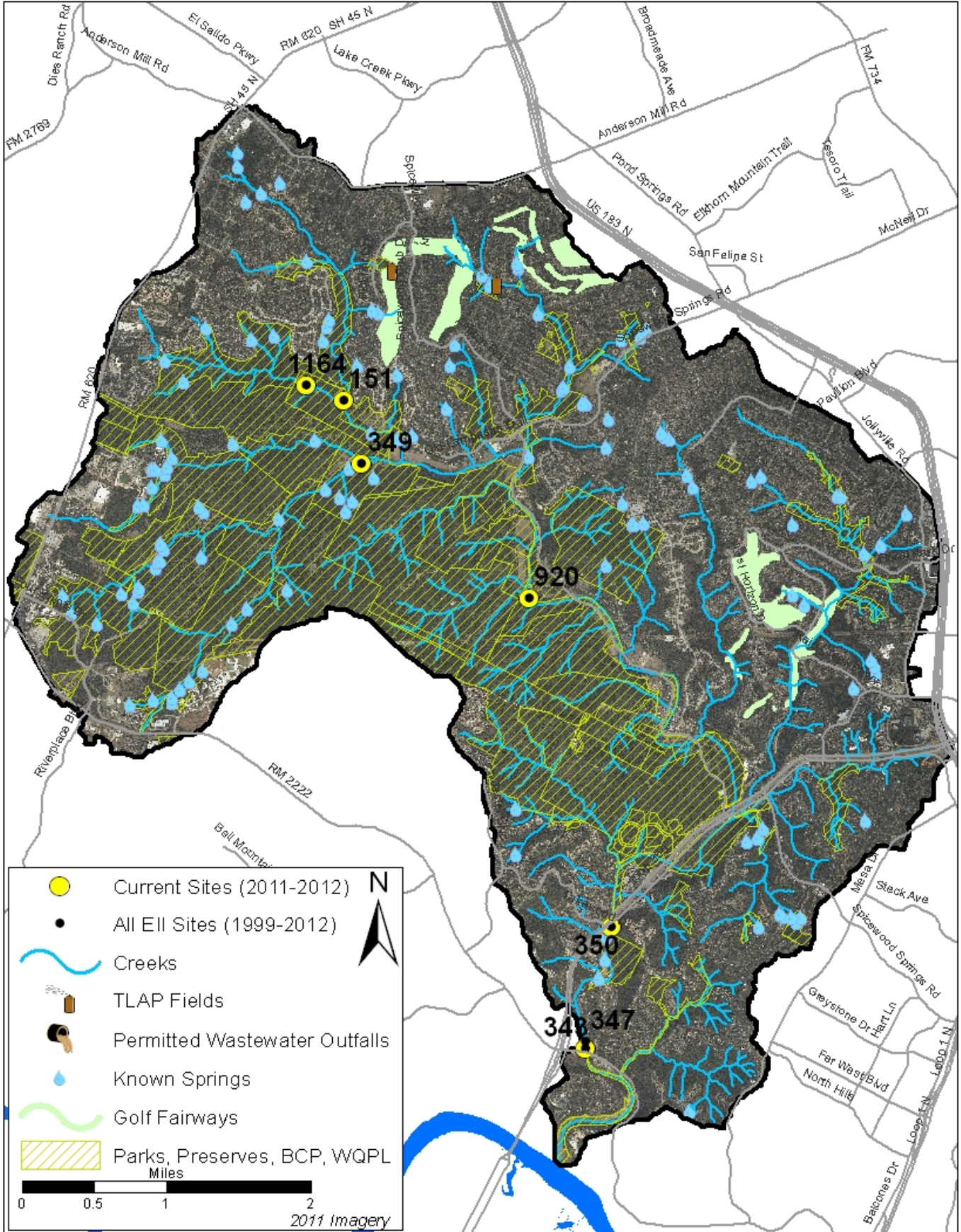
Bull Creek Watershed

Land Use Map



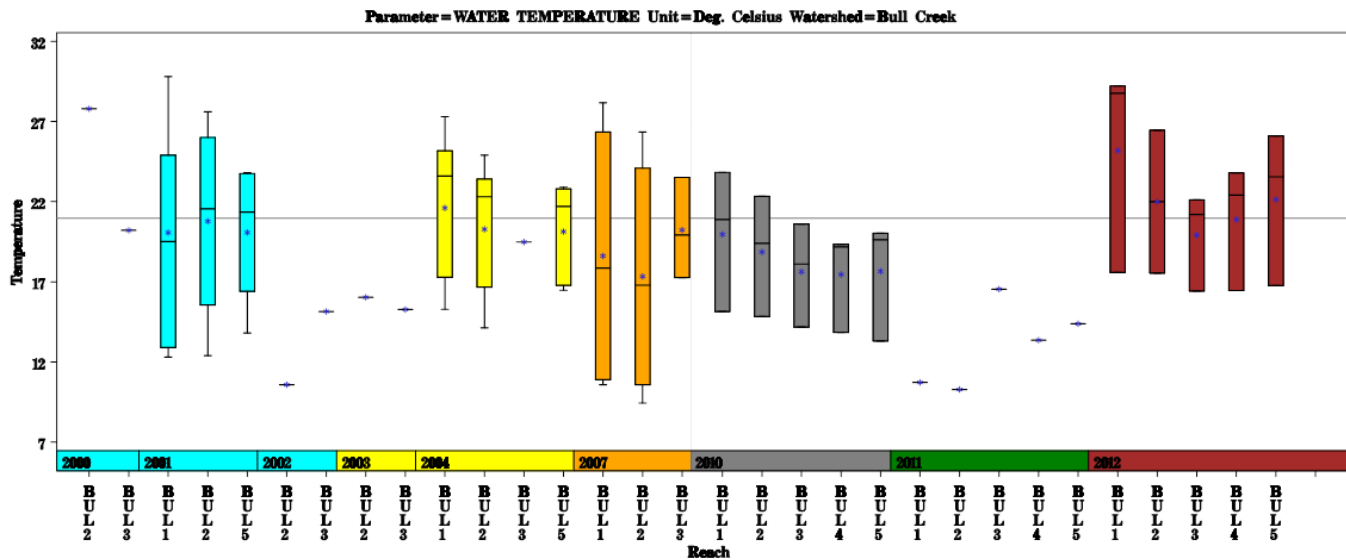
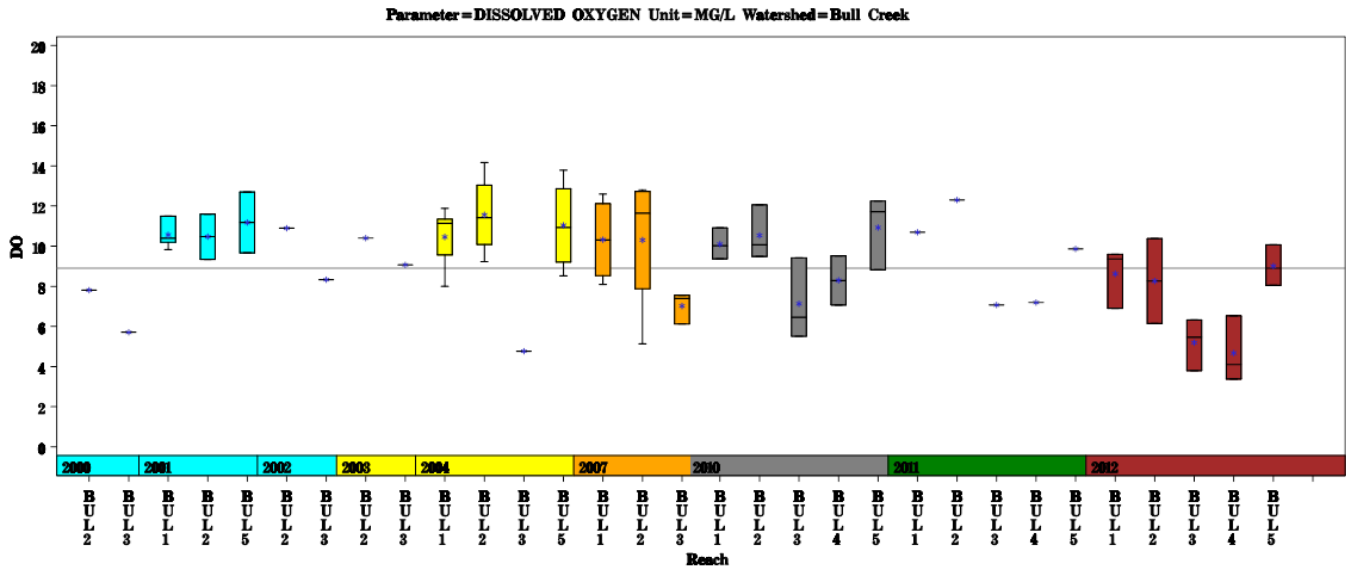
Bull Creek Watershed

Aerial Map



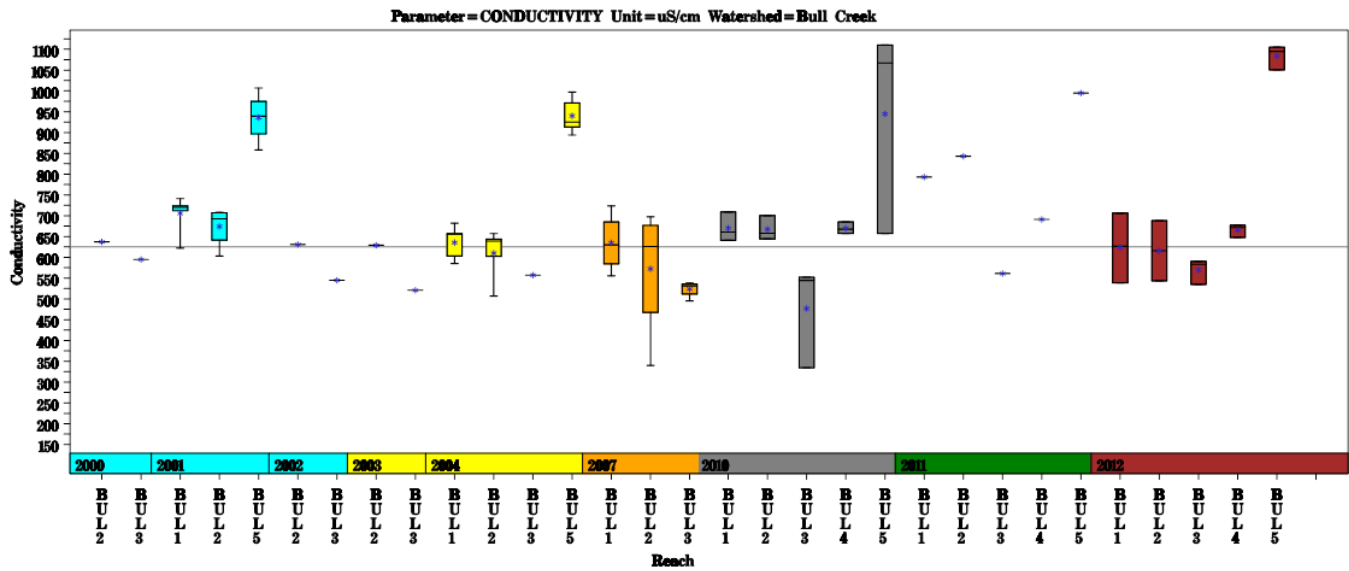
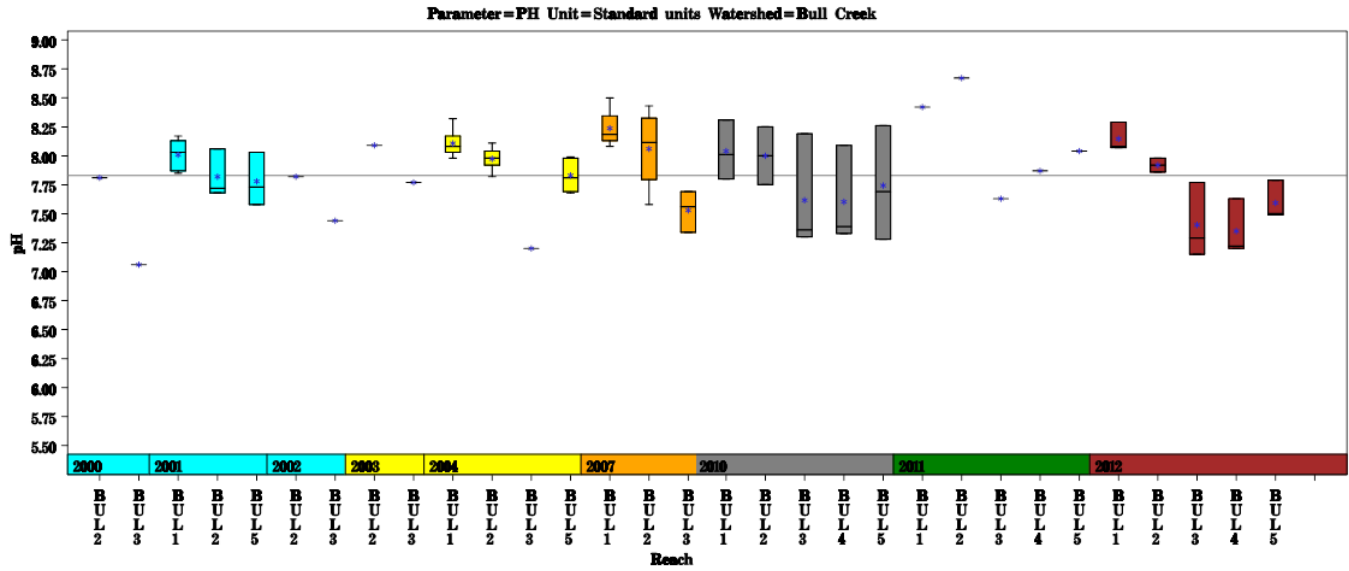
Bull Creek Watershed

Data Summary Graphs – Dissolved Oxygen and Temperature (Downstream to Upstream by Year)



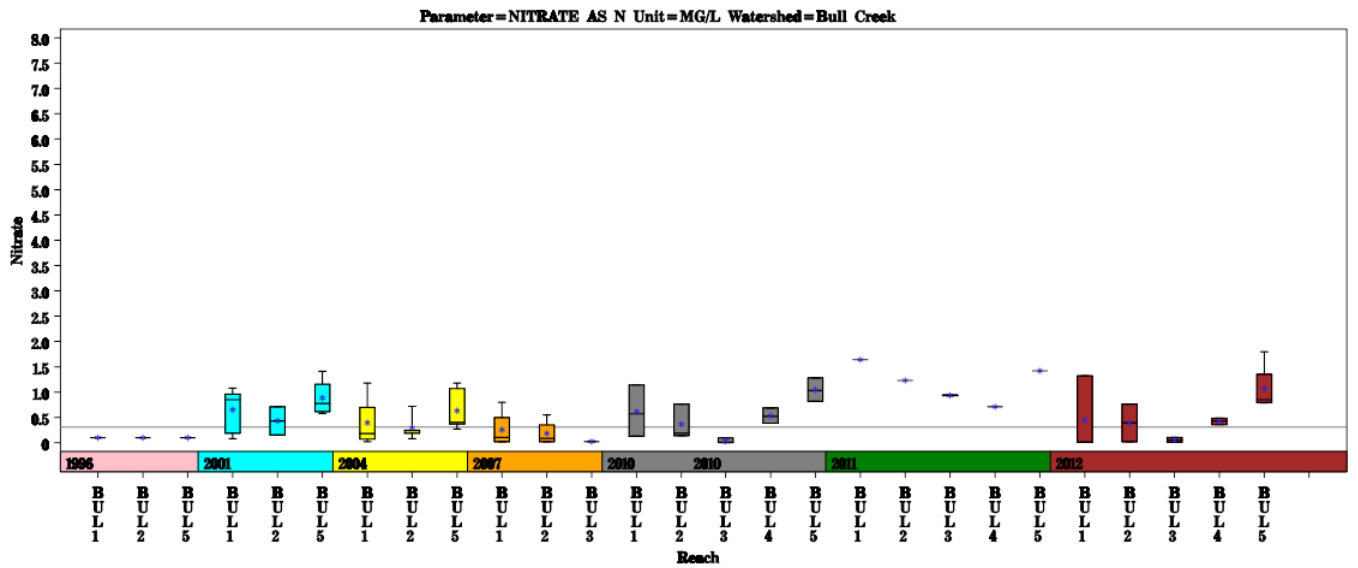
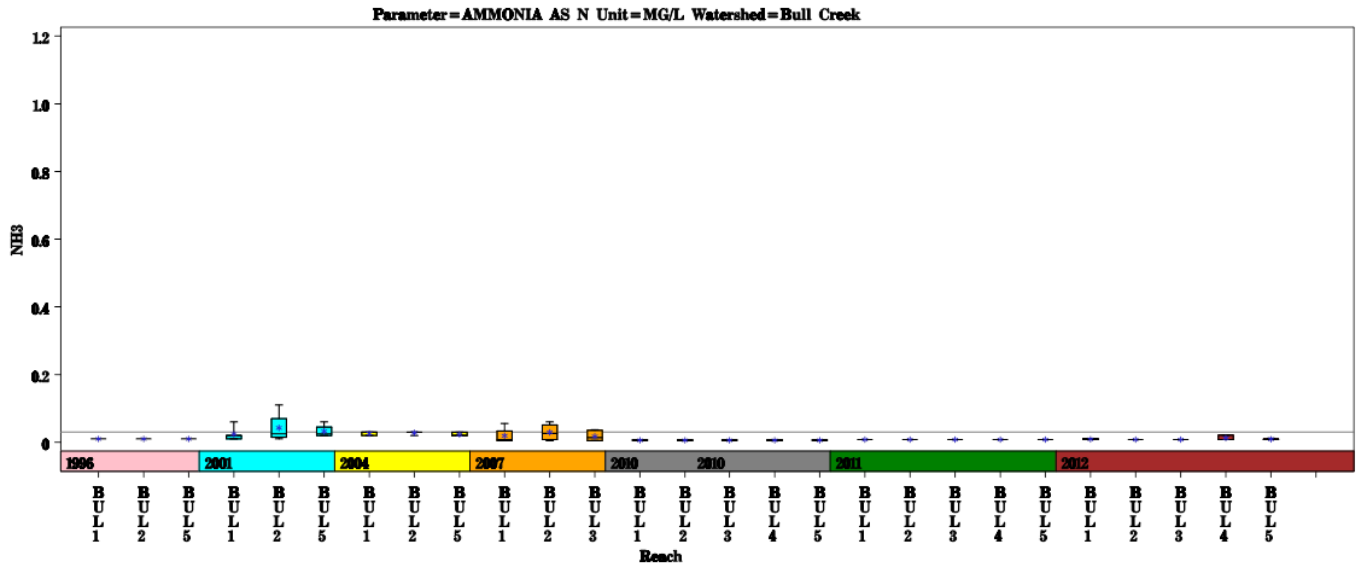
Bull Creek Watershed

Data Summary Graphs – pH and Conductivity (Downstream to Upstream by Year)



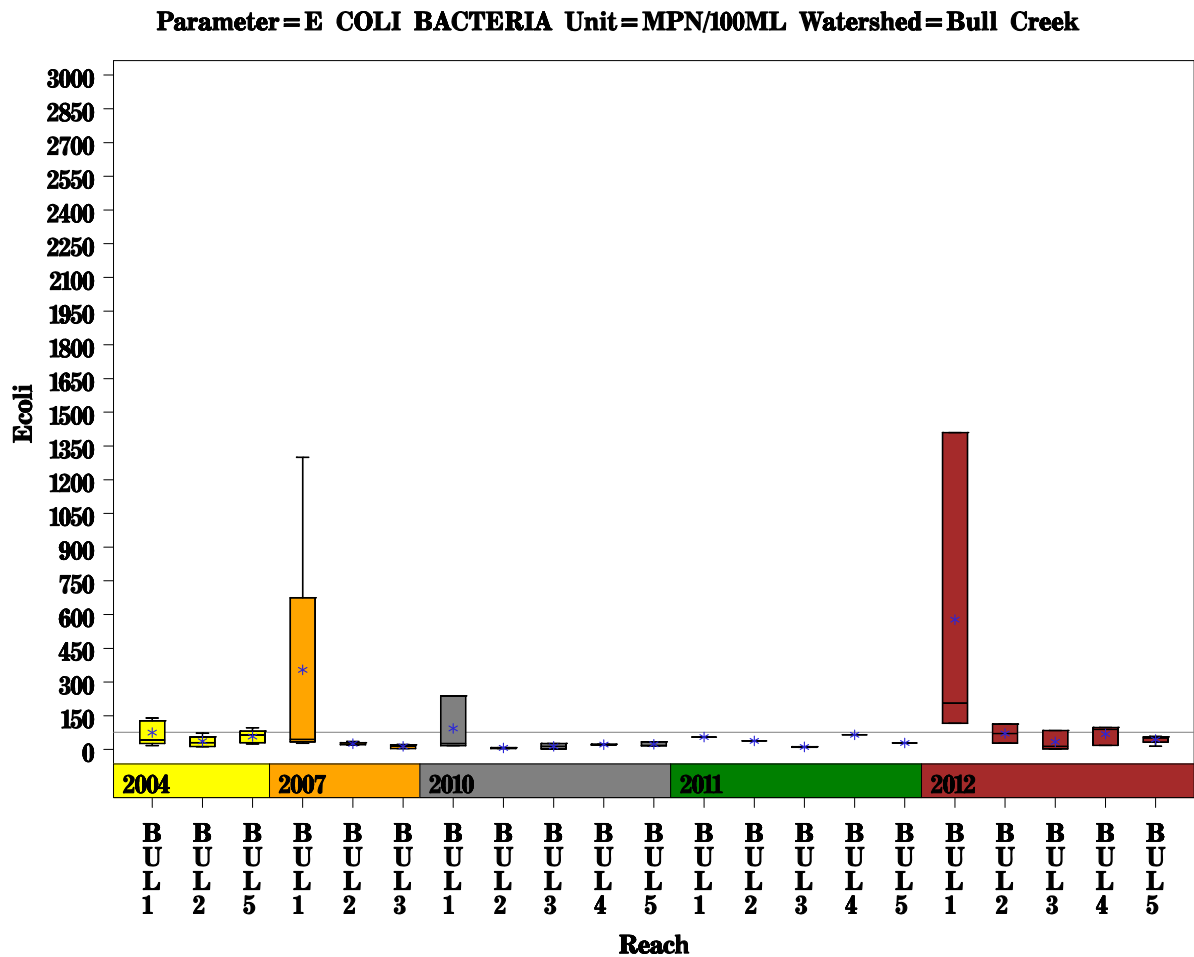
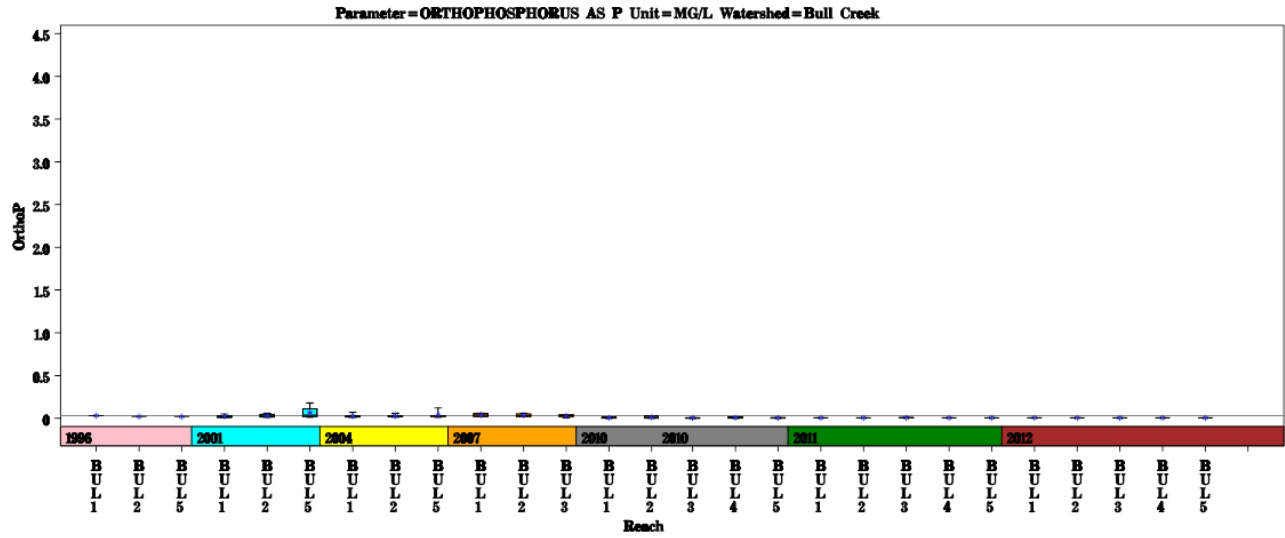
Bull Creek Watershed

Data Summary Graphs – Ammonia and Nitrate/Nitrite (Downstream to Upstream by Year)



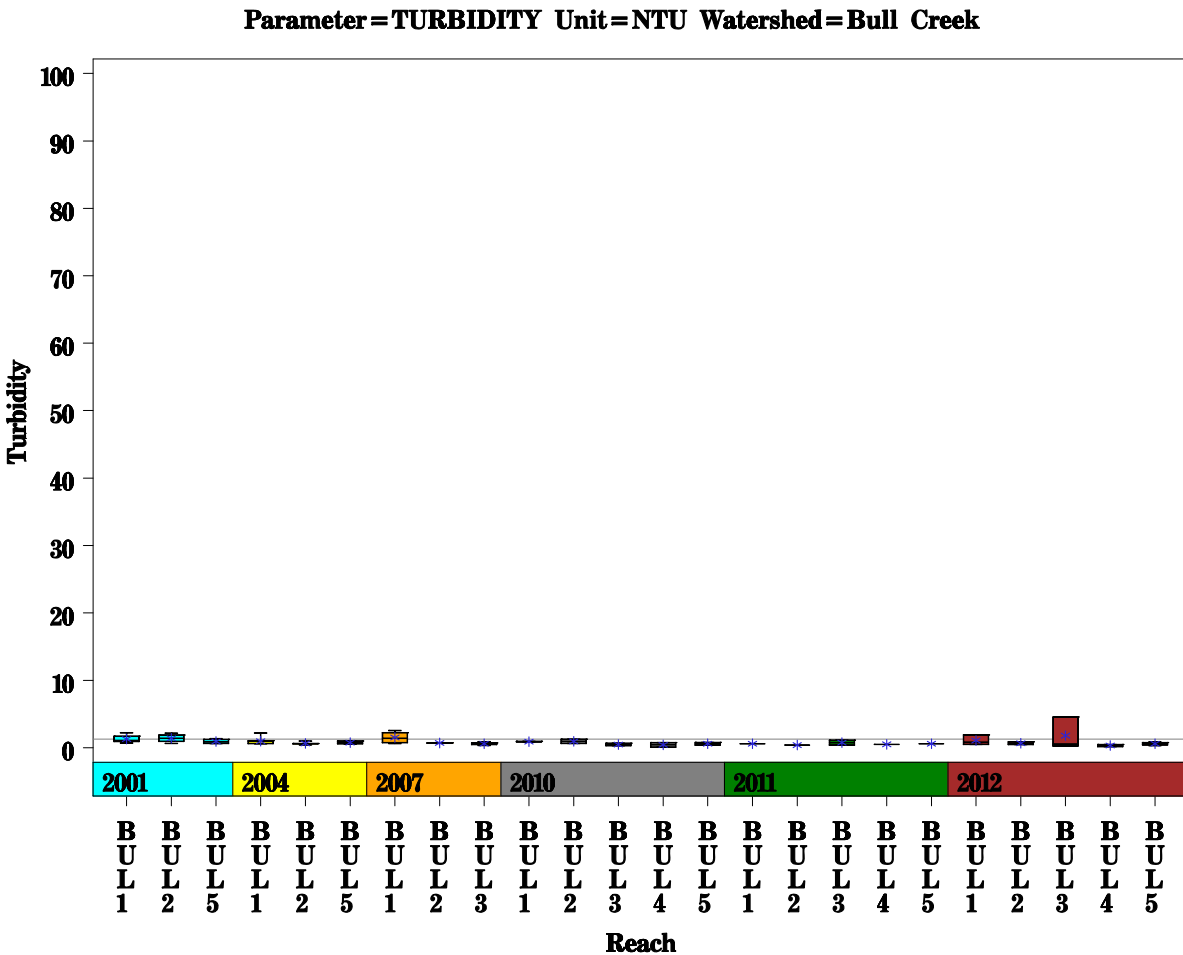
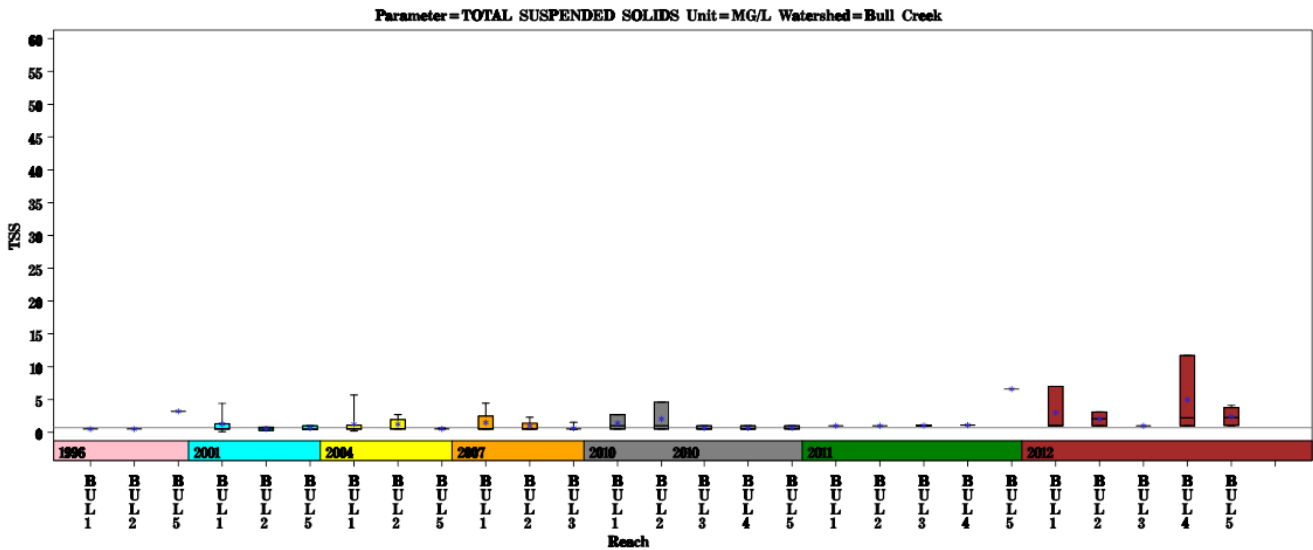
Bull Creek Watershed

Data Summary Graphs – Orthophosphate and E.coli (Downstream to Upstream by Year)



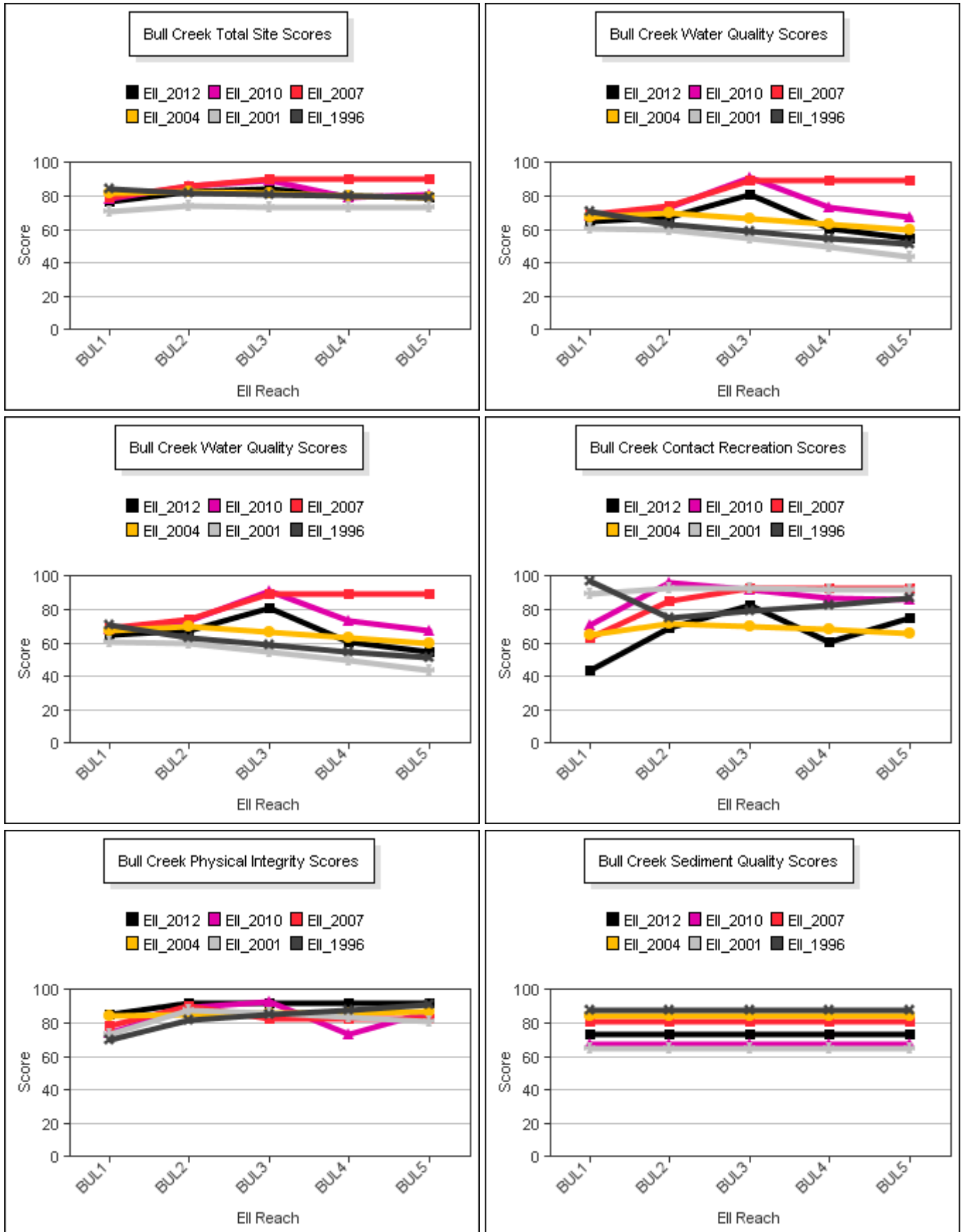
Bull Creek Watershed

Data Summary Graphs – Total Suspended Solids and Turbidity (Downstream to Upstream by Year)



Bull Creek Watershed

Score Summary – Reach scores for each sample year



Bull Creek Watershed

Site Photographs



1164_00-ur-05_26_2010



1164_00-ds-05_26_2010



151_00-us-05_26_2010



151_00-ds-05_26_2010



349_00-us-05_26_2010



349_00-ds-05_26_2010

Bull Creek Watershed

Site Photographs



920_00-us-05_26_2010



920_00-ds-05_26_2010



350_00-us-05_26_2010



350_00-ds-05_26_2010



347_us_06_18_2007



347_ds_06_18_2007

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