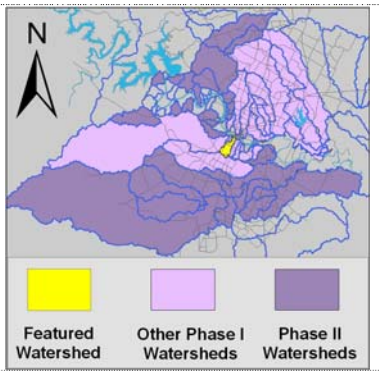
West Bouldin Creek Watershed

Summary Sheet

Catchment	Total area	3 square miles		
	Area in recharge	none		
	Creek length	4 miles		
	Receiving water	Town lake		
Demographics	2000 population	16,951		
	2030 projected population	19,337		
	30 year projected % increase	14 %		
Land Use	Impervious cover (2003 estimate)	45.85 %		
Overall EII Scores	2000	2003	2006	2009
	54	53	56	55



Flow Regime* for Sample Sites on West Bouldin Creek Upstream to Downstream

Site # upstream to downstream	Site Name	2003					2006					2009				
		Feb WQ	Mar Bio	May WQ	Sep WQ	Dec WQ	Feb WQ	May WQ	Jul Bio	Aug WQ	Nov WQ	Feb WQ	Jun WQ	Jun Bio	Jun-July WQ	Dec WQ
3856	W. Bouldin at Cardinal & Locke						B	B	B	n	n	B	B	B	B	B
846	W. Bouldin at South Austin Park	B	B	n	n	n						B	B	B	B	B
3854	W. Bouldin at Oltorf						B	B	B	B	B	B	B	B	S	B
845	W. Bouldin at Guerro Park	B	B	n	n	n						B	B	B	B	B
878	W. Bouldin at Jewell	B	B	B	B	B						B	B	B	B	B
2794	W. Bouldin at Post Oak	n	B	n	n	n	n	n	n	n	n	n	n	n	n	n

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

Summary of 2009 Data for West Bouldin Creek

2009 Summary	Parameter	Mean	Max	Min	Discussion
Physicochemical	**D.O.** mg/l	11.5	13.9	6.8	Generally high values with an increasing trend from headwaters to mouth
	pH st.units	8.2	8.4	7.8	Generally within normal range
	Cond uS/cm	686	826	529	Within normal range with an increasing trend from mouth to headwaters
Nutrients	**NH_3** mg/l	0.005	0.005	0.005	Generally low or within normal range
	NO_3 mg/l	0.24	0.822	0.004	Generally within normal range
	Ortho P mg/l	0.05	0.08	0.02	Generally within normal range
Sediment Load	**TSS** mg/l	3.3	8.6	0.9	Generally within normal range with a few above average values
	Turbidity ntu	1.7	3.4	0.9	Generally within normal range with a few above average values
Biology	**E.Coli** /100ml	687	1986	99	Chronically elevated with increasing trend from headwaters to mouth
	Benthic Macs	Degraded community with low diversity and dominance of pollution tolerant taxa			
	Diatoms	Generally above average or average metrics with a higher percent motile taxa at site 3854			

Index Scores* for West Bouldin Creek Sites by Year

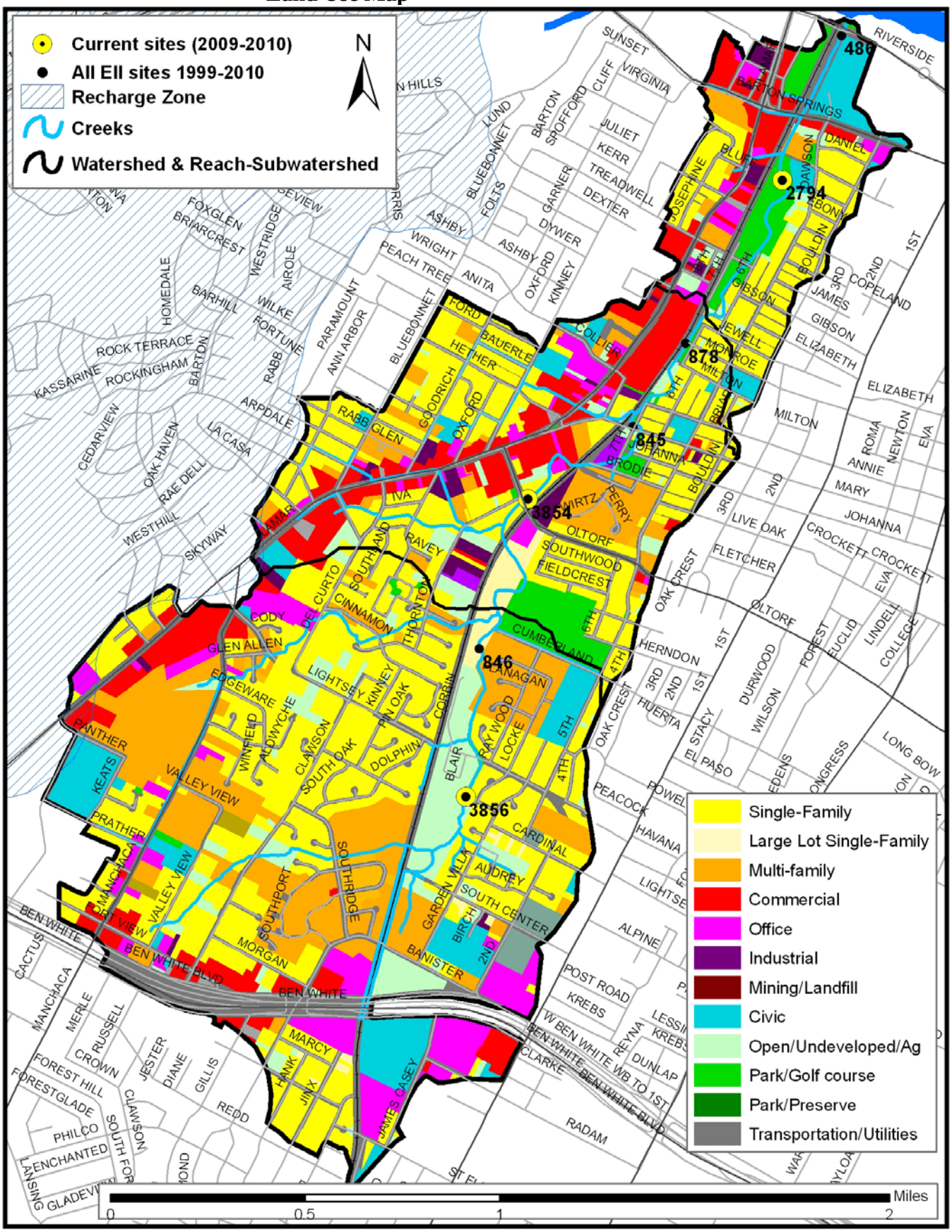
Reach	Site	Site Name	Year	Water Quality	Sediment**	Contact Recreation	Non-Contact Recreation	Physical Integrity	Aquatic Life	Benthic subindex	Diatom subindex	Total EII Score
WBO1	486	West Bouldin Creek @ Riverside Dr	2000		80		40	19				35
WBO2	845	West Bouldin Creek @ Guerrero Park	2000	75	80	95	52	30	26	25	26	60
WBO2	878	West Bouldin Creek @ Jewell	2000	67	80	73	38	34	28	29	26	53
WBO3	846	West Bouldin @ South Austin Park	2000	60	80	76	46	44	31	25	36	56
WBO1	2794	West Bouldin @ Post Oak	2003		57		73	74	28	26	29	58
WBO2	845	West Bouldin Creek @ Guerrero Park	2003	56	57	25	80	44	29	26	31	49
WBO2	878	West Bouldin Creek @ Jewell	2003	69	57	83	58	40	31	27	34	56
WBO3	846	West Bouldin @ South Austin Park	2003	38	57	54	66	52	24	18	29	49
WBO1	2794	West Bouldin @ Post Oak	2006		52		62	75				47
WBO2	3854	West Bouldin Creek @ Oltorf St	2006	58	52	48	77	52	69	82	56	59
WBO3	3856	West Bouldin @ Cardinal	2006	55	52	54	76	55	55	35	74	58
WBO1	2794	West Bouldin @ Post Oak	2009		70		45	65				45
WBO2	3854	West Bouldin Creek @ Oltorf St	2009	58	70	28	73	51	77	66	88	60
WBO3	3856	West Bouldin @ Cardinal	2009	59	70	40	73	56	61	22	99	60

* 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

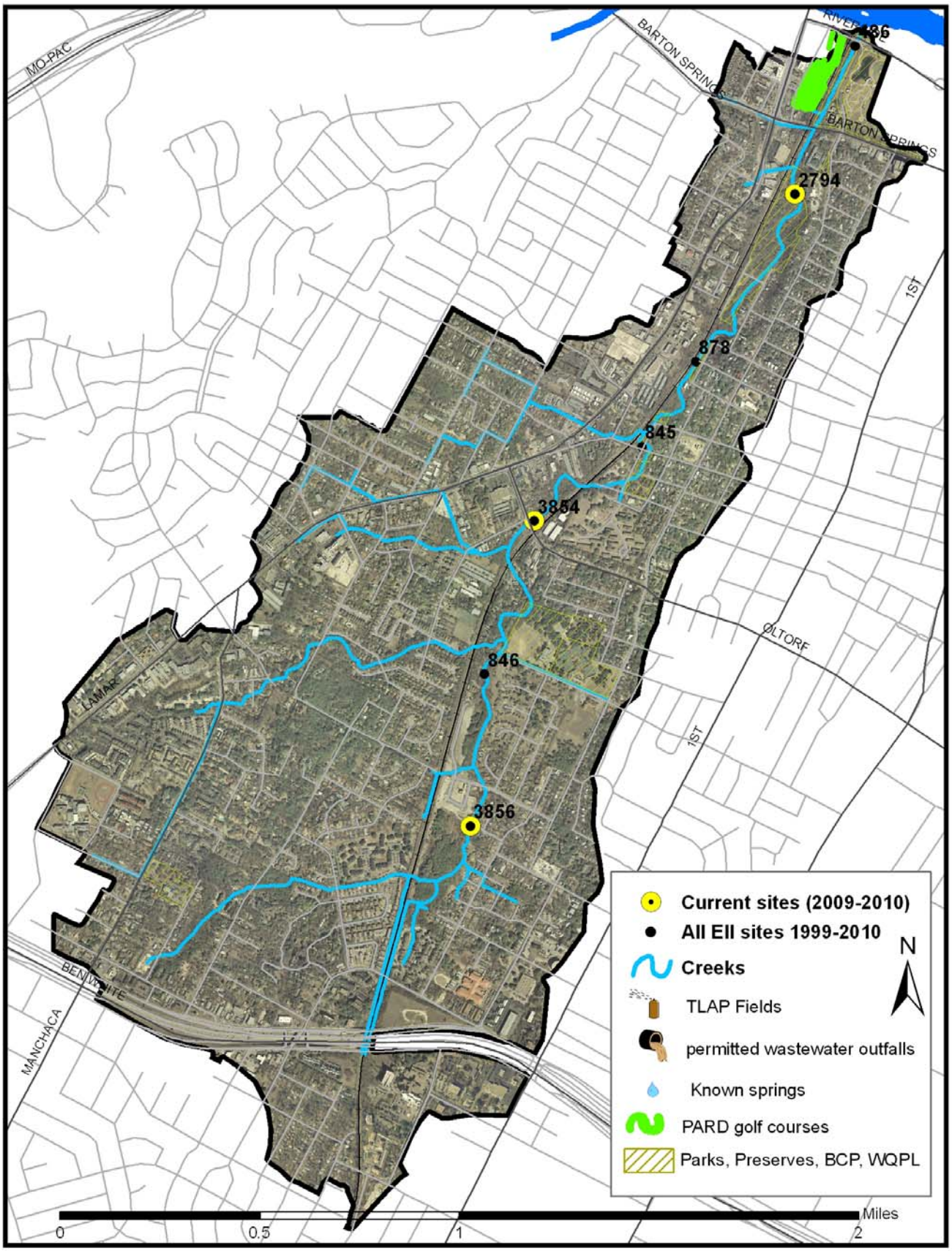
West Bouldin Creek Watershed

Land Use Map



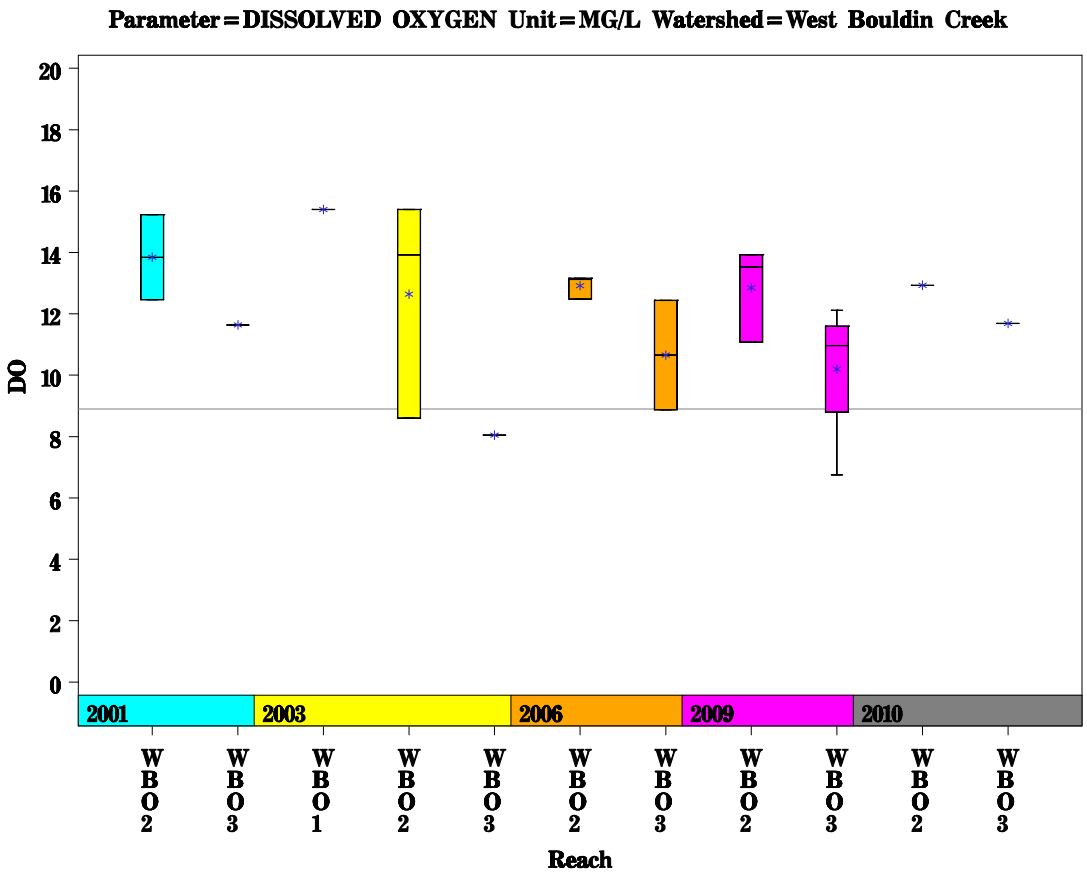
West Bouldin Creek Watershed

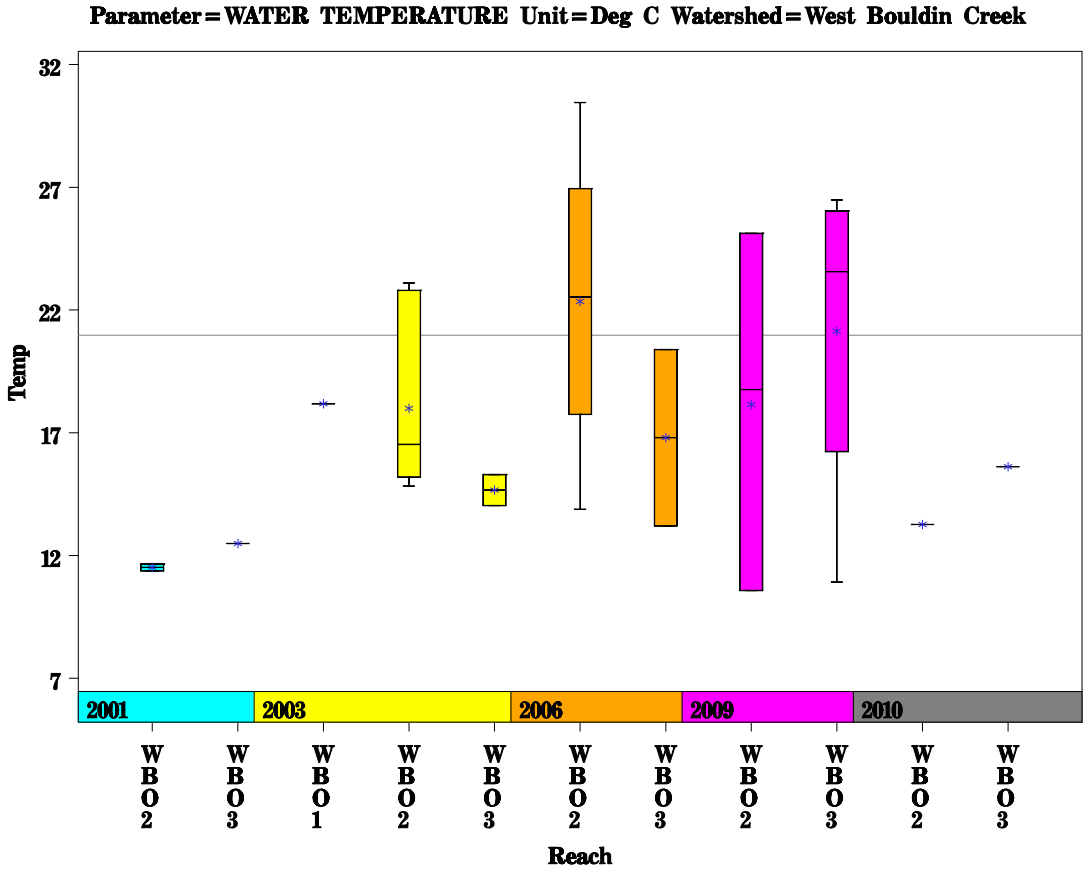
Aerial Map



West Bouldin Creek Watershed

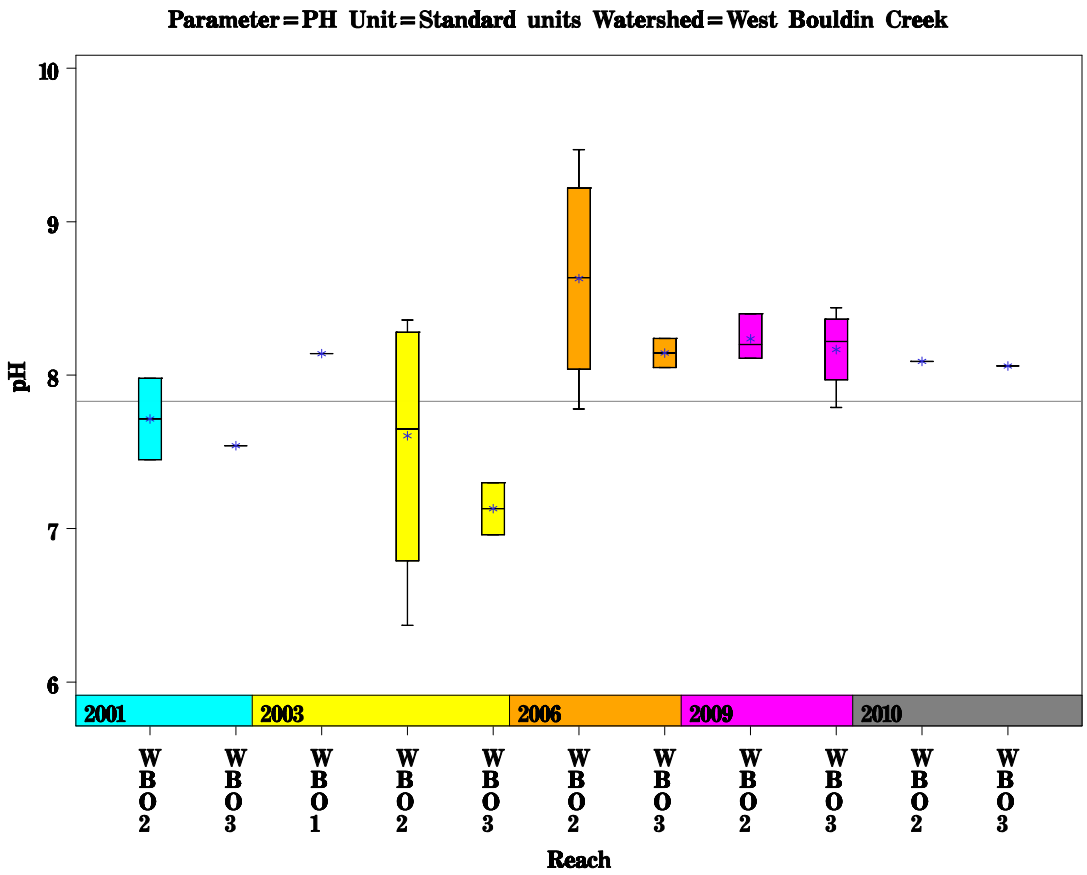
Data Summary Graphs – Dissolved Oxygen and Temperature (Downstream to Upstream by Year)

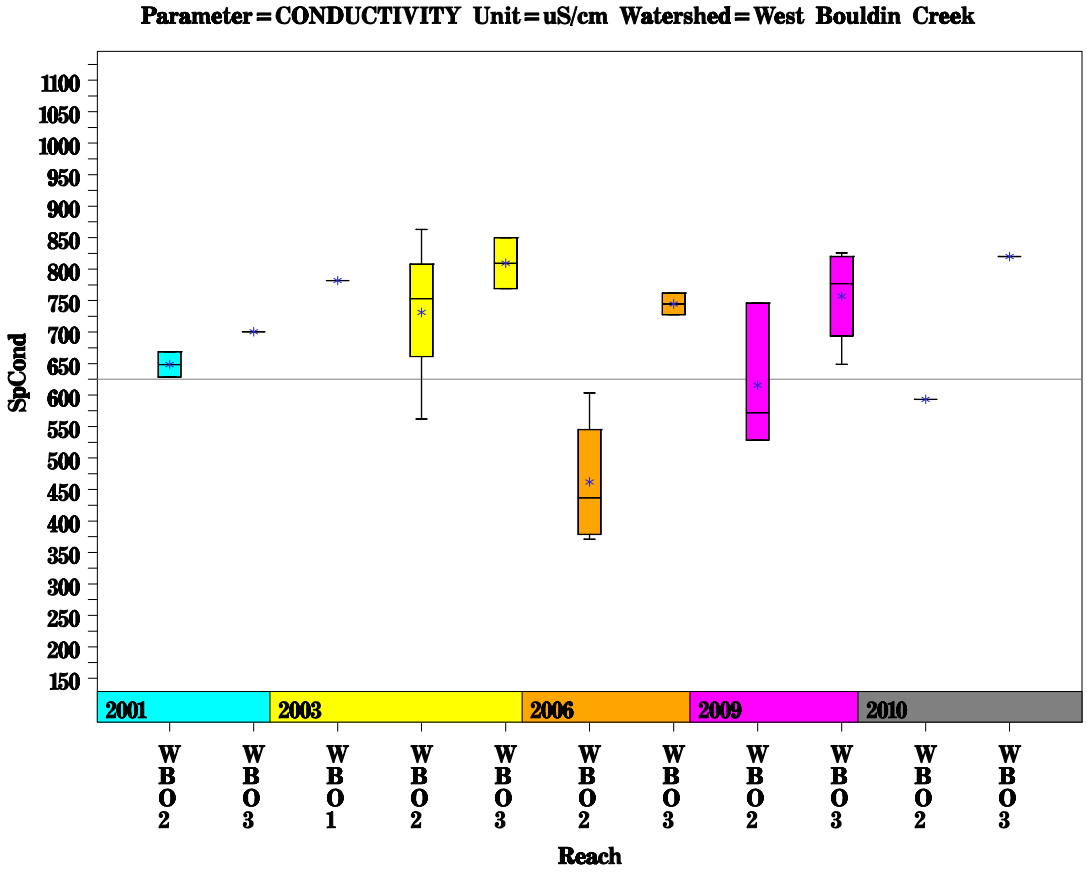




West Bouldin Creek Watershed

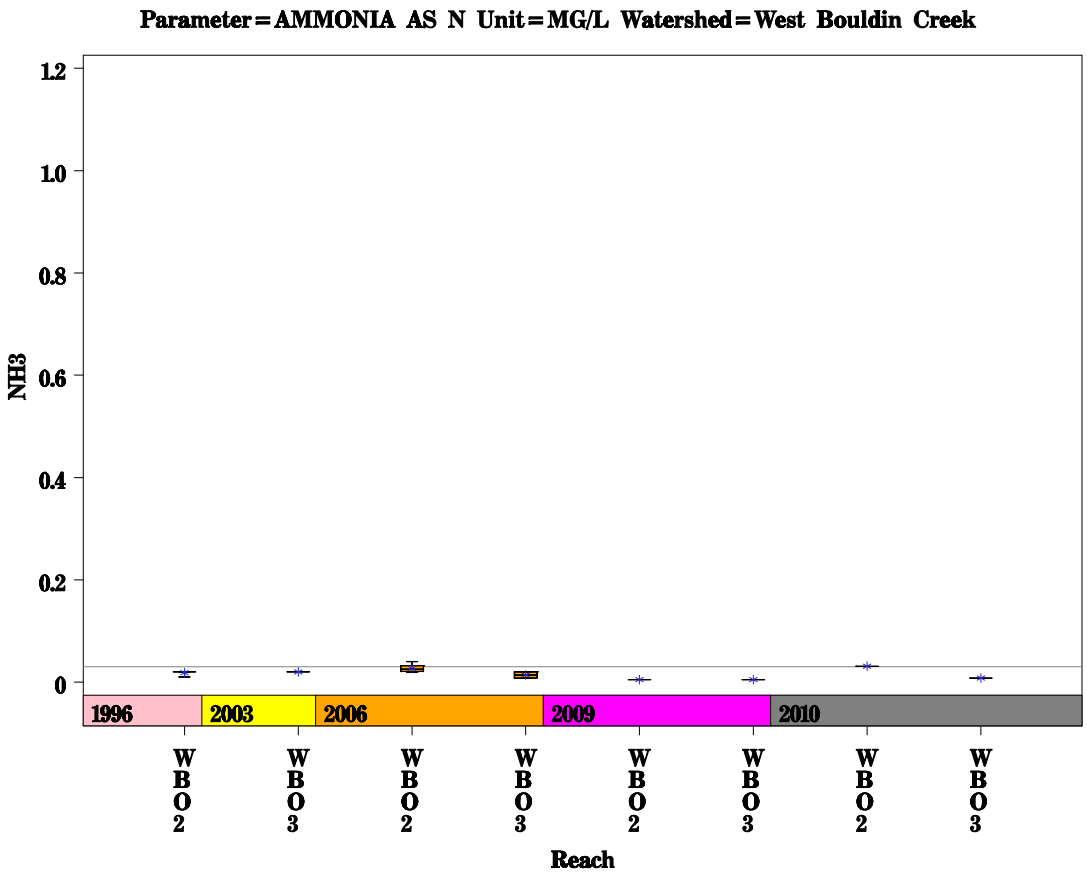
Data Summary Graphs – pH and Conductivity (Downstream to Upstream by Year)

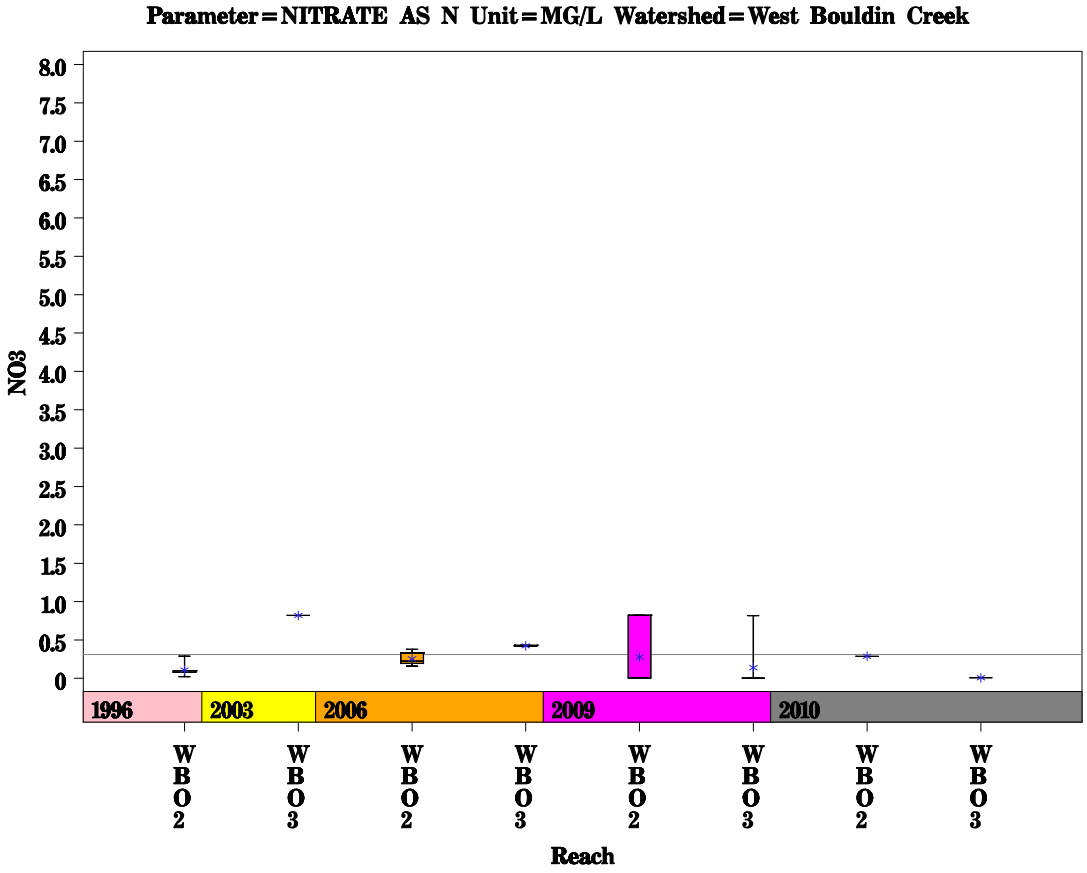




West Bouldin Creek Watershed

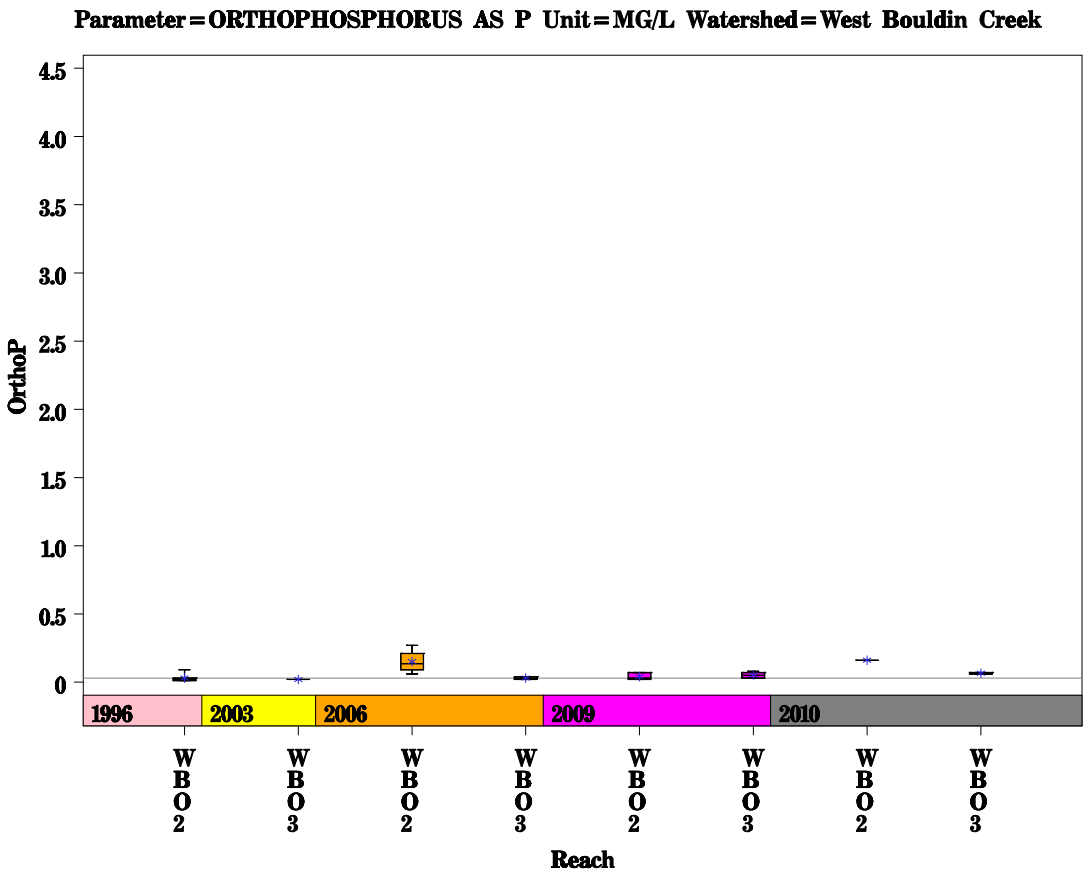
Data Summary Graphs – Ammonia and Nitrate/Nitrite (Downstream to Upstream by Year)

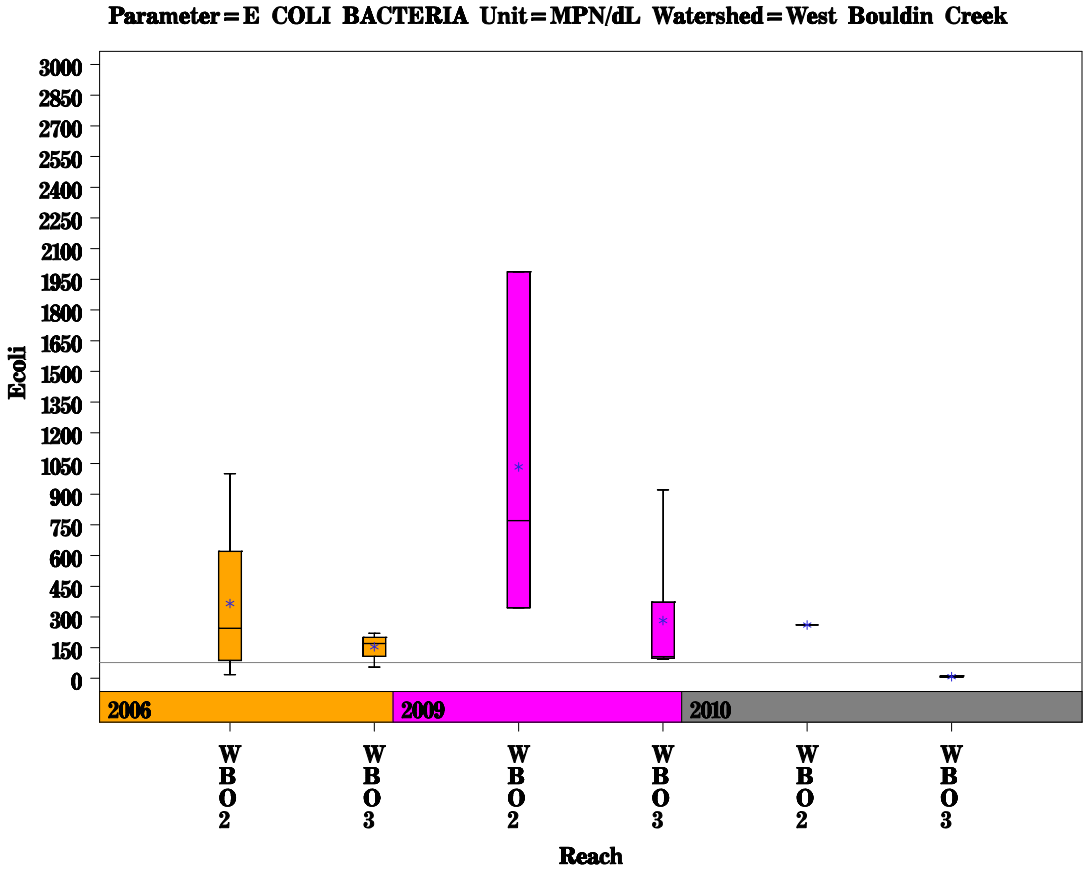




West Bouldin Creek Watershed

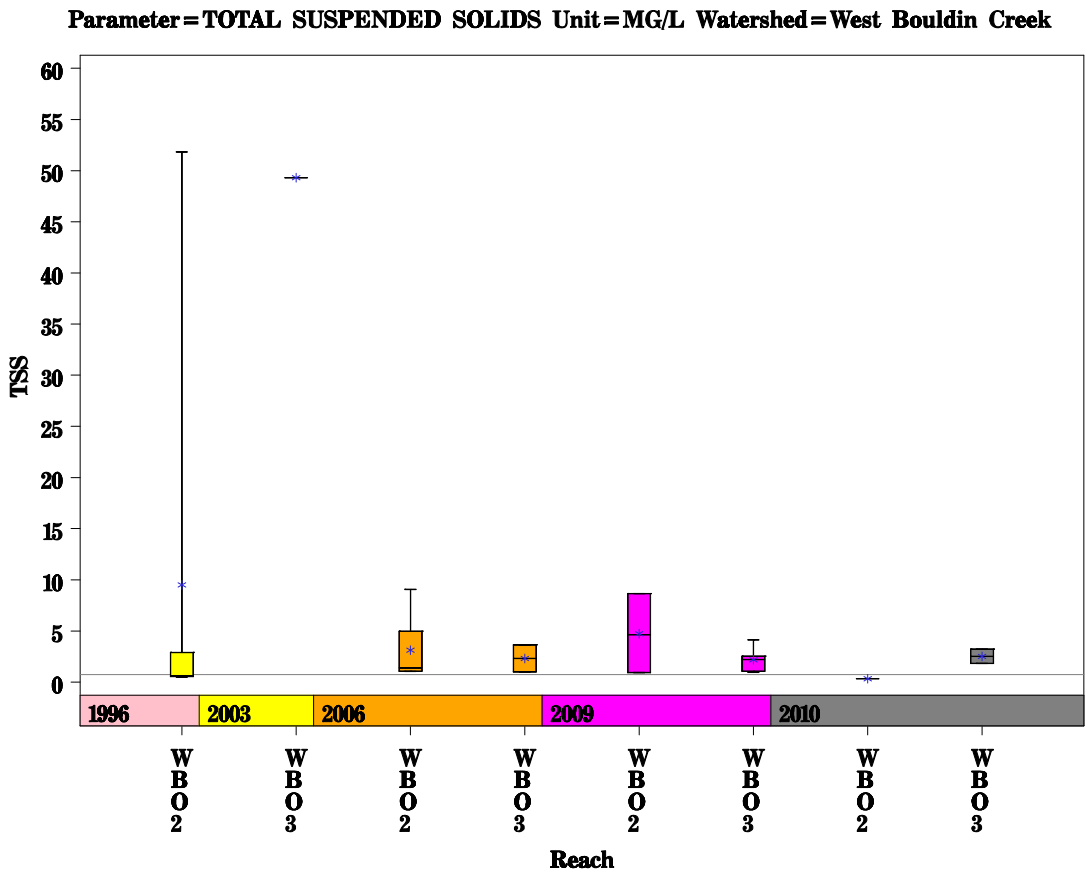
Data Summary Graphs – Orthophosphate and *E.coli* (Downstream to Upstream by Year)

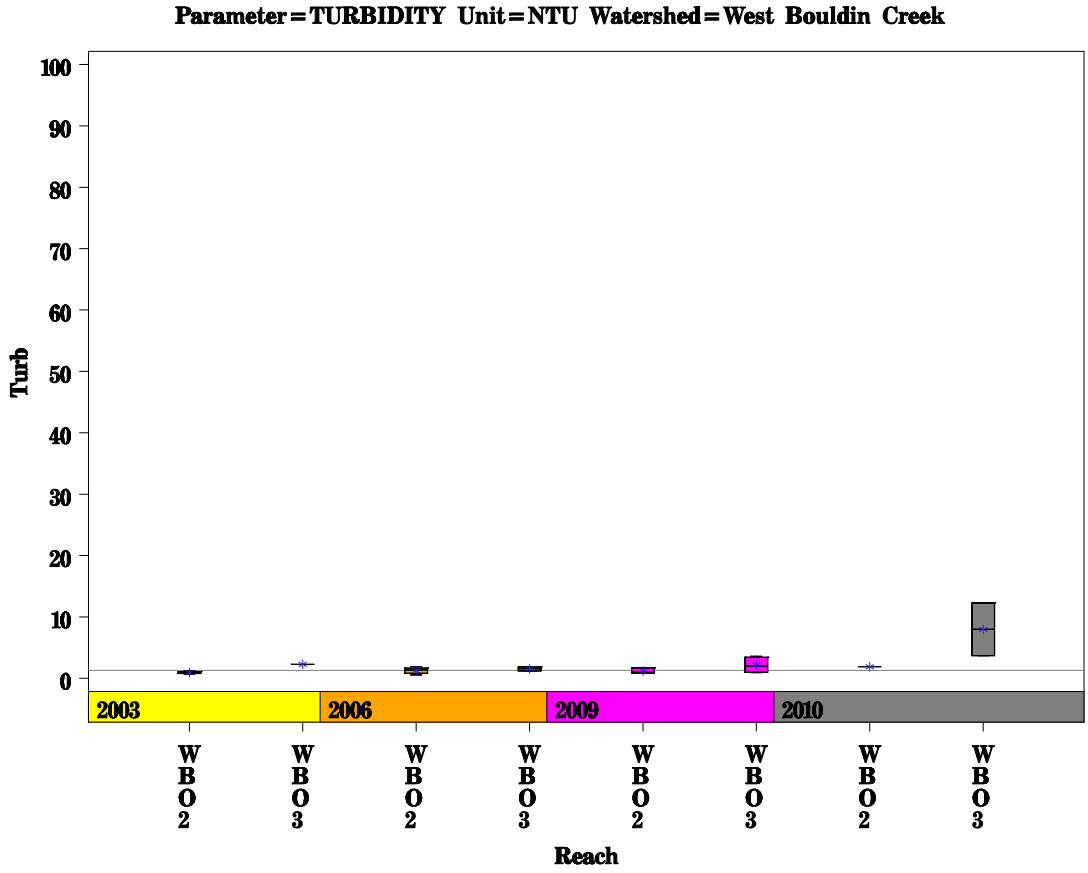




West Bouldin Creek Watershed

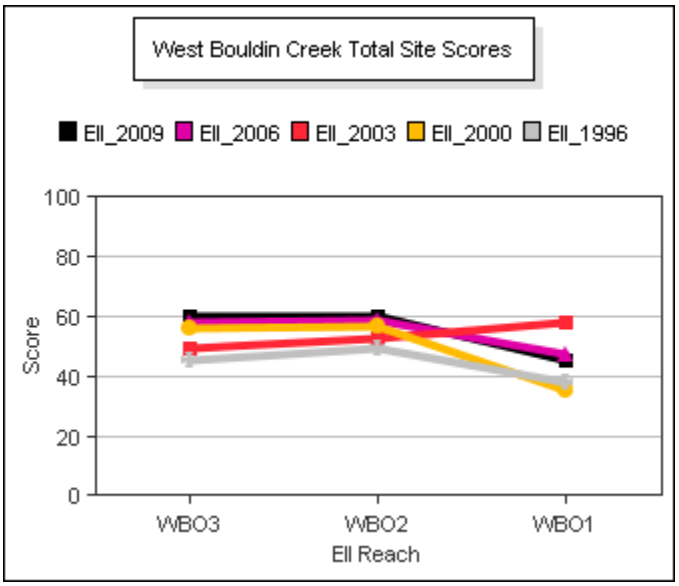
Data Summary Graphs – Total Suspended Solids and Turbidity (Downstream to Upstream by Year)

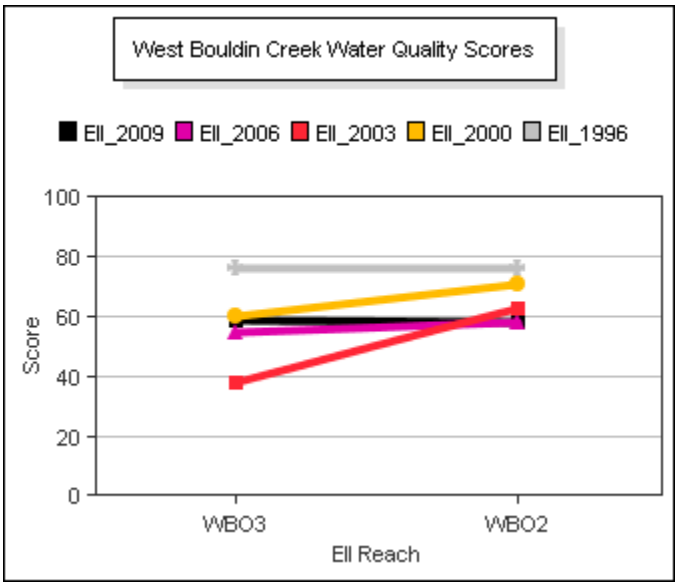


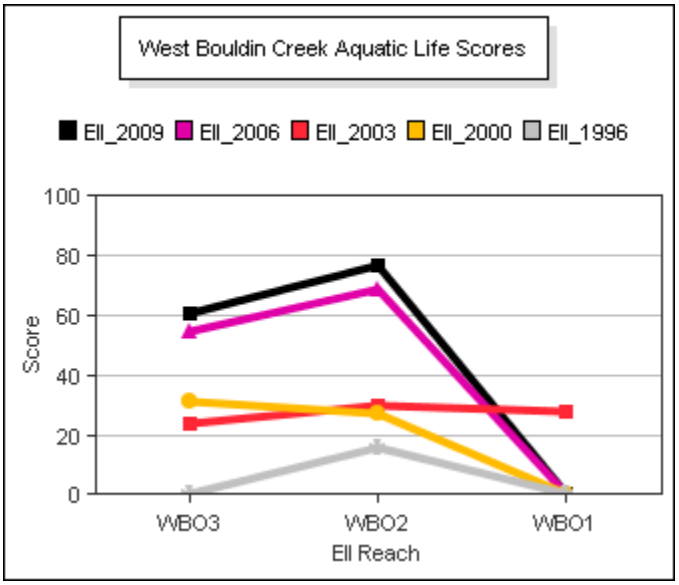


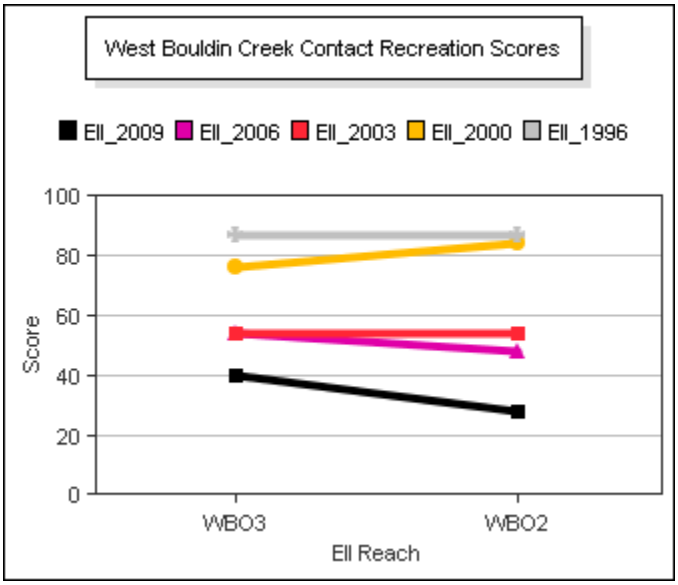
West Bouldin Creek Watershed

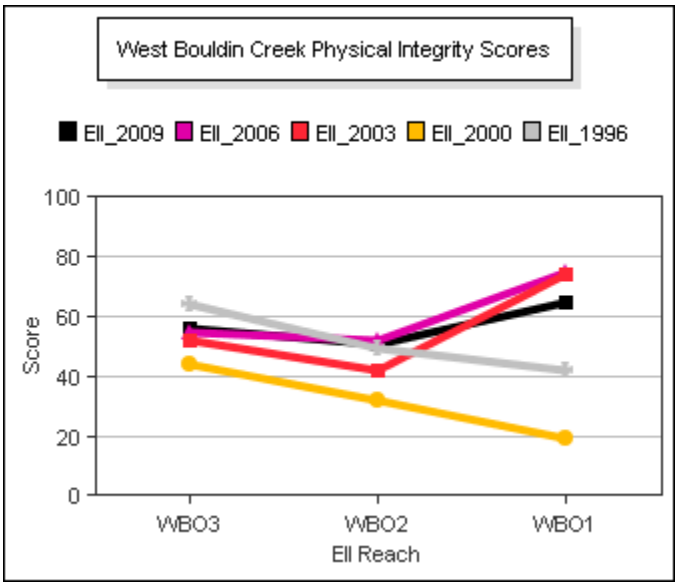
Score Summary – Reach scores for each sample year

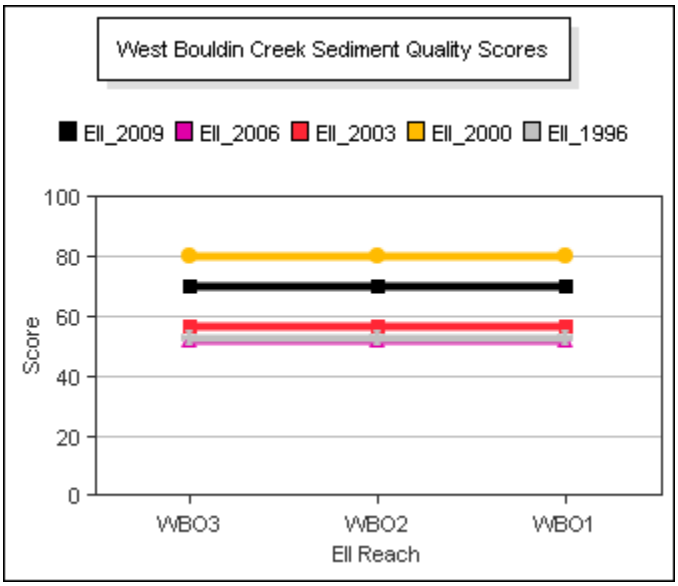












West Bouldin Creek Watershed

Site Photographs

3856_t00-us-06_03_2009

3856_t00-ds-06_03_2009

846_t00-us-03_10_2003

846_t00-ds-03_10_2003

3856_t00-us1-07_05_2006

3854_t00-ds-07_11_2006

West Bouldin Creek Watershed

Site Photographs

845_t00-us-03_10_2003

845_t00-ds-03_10_2003

878_t00-ur-02_12_2001

878_t00-ds-12_18_2000

2794_t00-us-06_03_2009

2794_t00-ds-07_11_2006

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