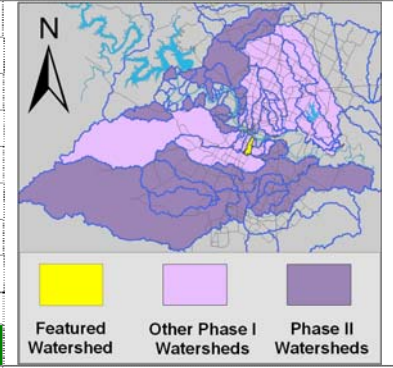


Blunn Creek Watershed

Summary Sheet

Catchment	Total area	1 square mile			
	Area in recharge	none			
	Creek length	3 miles			
Demographics	Receiving water	Town Lake			
	2000 population	6,000			
	2030 projected population	6,810			
Land Use	30 year projected % increase	14 %			
	Impervious cover (2003 estimate)	38.48 %			
Overall EII Scores	2000	2003	2006	2009	
	57	61	61	59	



Flow Regime* for Sample Sites on Blunn Creek

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-July Bio	Oct WQ	Dec WQ
362	Blunn at Longbow	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
364	Blunn above Big Stacy Pool	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
180	Blunn above Riverside Drive	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B

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

Summary of 2009 Data for Blunn Creek

2009 Summary	Parameter	Mean	Max	Min	Discussion
Physicochemical	D.O. mg/l	6.7	10.4	3.8	Typically below average with generally lower concentrations downstream
	pH st.units	7.7	7.9	7.3	Mouth site generally lower pH than mid-reach or headwater sites
	Cond uS/cm	765	988	605	Sporadically high, no apparent trend, but generally higher than average
Nutrients	NH ₃ mg/l	0.01	0.039	0.005	Within normal range
	NO ₃ mg/l	0.34	1.08	0.04	Generally within normal range with some concentrations above average
	Ortho P mg/l	0.07	0.15	0.02	Within normal range
Sediment Load	TSS mg/l	2.0	14.1	0.5	Generally higher than average concentrations
	Turbidity ntu	1.5	2.4	0.8	Within normal range
Biology	E.Coli /100ml	647	2420	66	Elevated concentrations with some values very high
	Benthic Maes	Generally a low diversity and pollution-tolerant community. Downstream site (180) degraded.			
	Diatoms	Upstream site (362) has excellent diversity and low percent motile taxa, and other good metric values; however, there is a trend for decreasing metrics for downstream sites. The most downstream site (180) has low Cymbella richness, a high percent motile taxa and poor pollution tolerance index.			

Index Scores* for Blunn 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
BLU1	180	Blunn @ Riverside Drive	2000	49	69	45	66	40	31	31	31	50
BLU2	364	Blunn Above Big Stacy Pool	2000	51	69	80	68	41	55	35	74	61
BLU3	362	Blunn @ Long Bow (Preserve at Little Bridge)	2000	47	69	78	73	47	44	29	58	60
BLU3	363	Blunn @ Willow Run	2000	49	69	90	49	28	48	38	58	56
BLU1	180	Blunn @ Riverside Drive	2003	47	71	73	63	67	37	44	30	60
BLU2	364	Blunn Above Big Stacy Pool	2003	51	71	48	72	47	40	43	37	55
BLU3	362	Blunn @ Long Bow (Preserve at Little Bridge)	2003	49	71	66	86	85	46	54	37	67
BLU1	180	Blunn @ Riverside Drive	2006	47	67	44	79	51	60	45	74	58
BLU2	364	Blunn Above Big Stacy Pool	2006	52	67	35	73	72	57	44	70	59
BLU3	362	Blunn @ Long Bow (Preserve at Little Bridge)	2006	55	67	39	94	79	70	53	87	67
BLU1	180	Blunn @ Riverside Drive	2009	58	63	37	63	50	45	24	66	53
BLU2	364	Blunn Above Big Stacy Pool	2009	53	63	31	81	43	69	53	85	57
BLU3	362	Blunn @ Long Bow (Preserve at Little Bridge)	2009	59	63	33	88	75	78	60	95	66

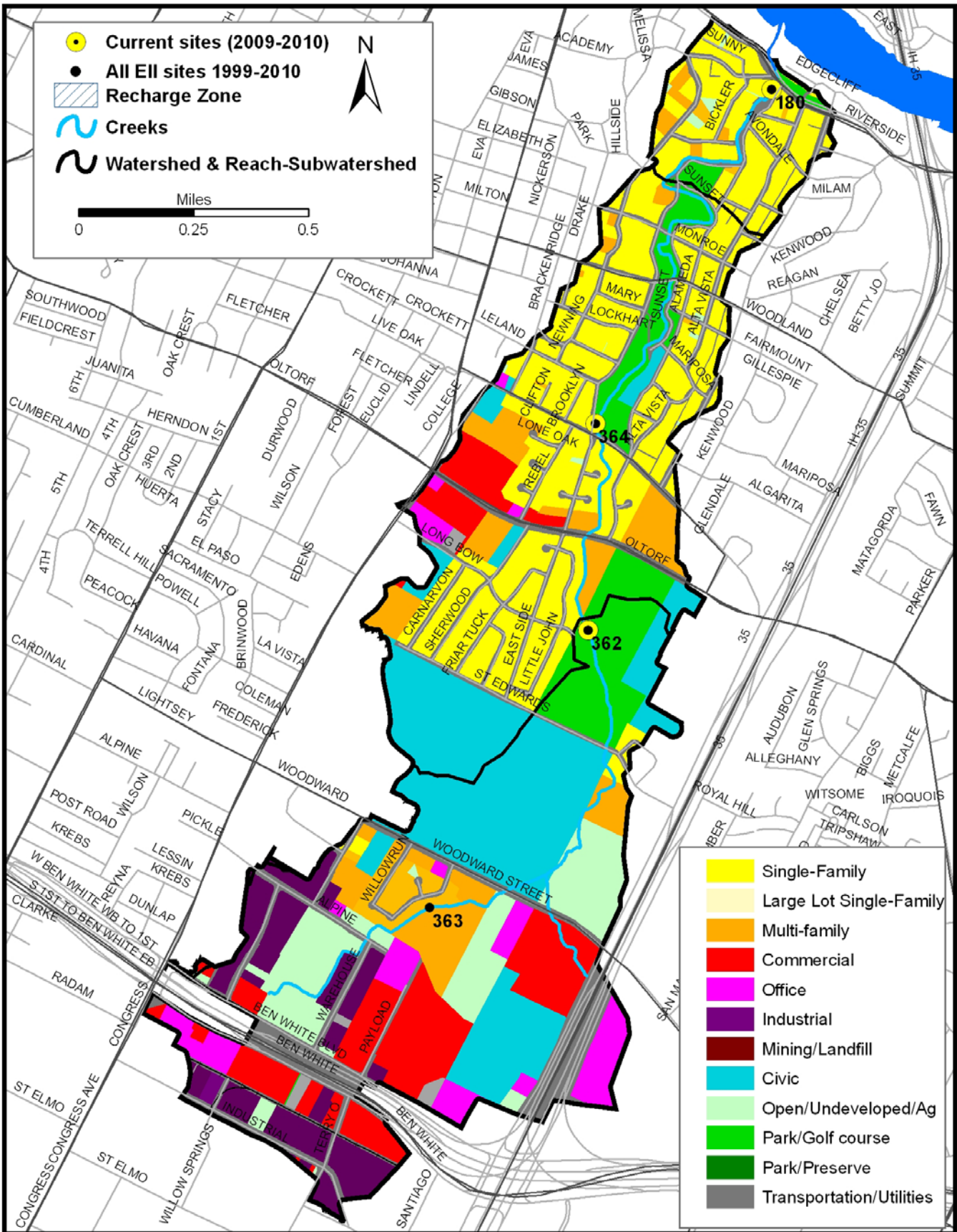
* blank cells indicate parameter was not collected, blank row indicate site was dropped

**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

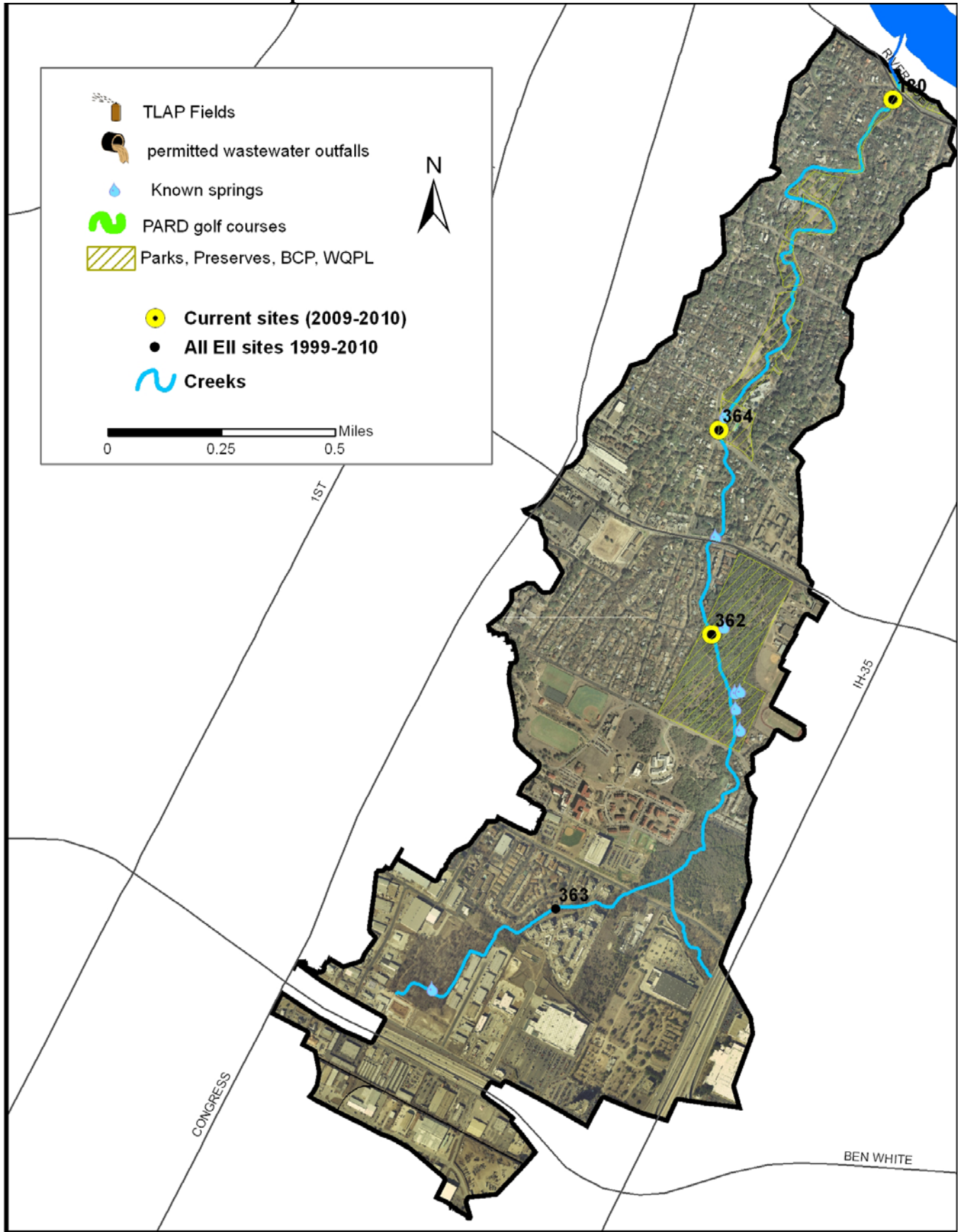
Blunn Creek Watershed

Land Use Map



Blunn Creek Watershed

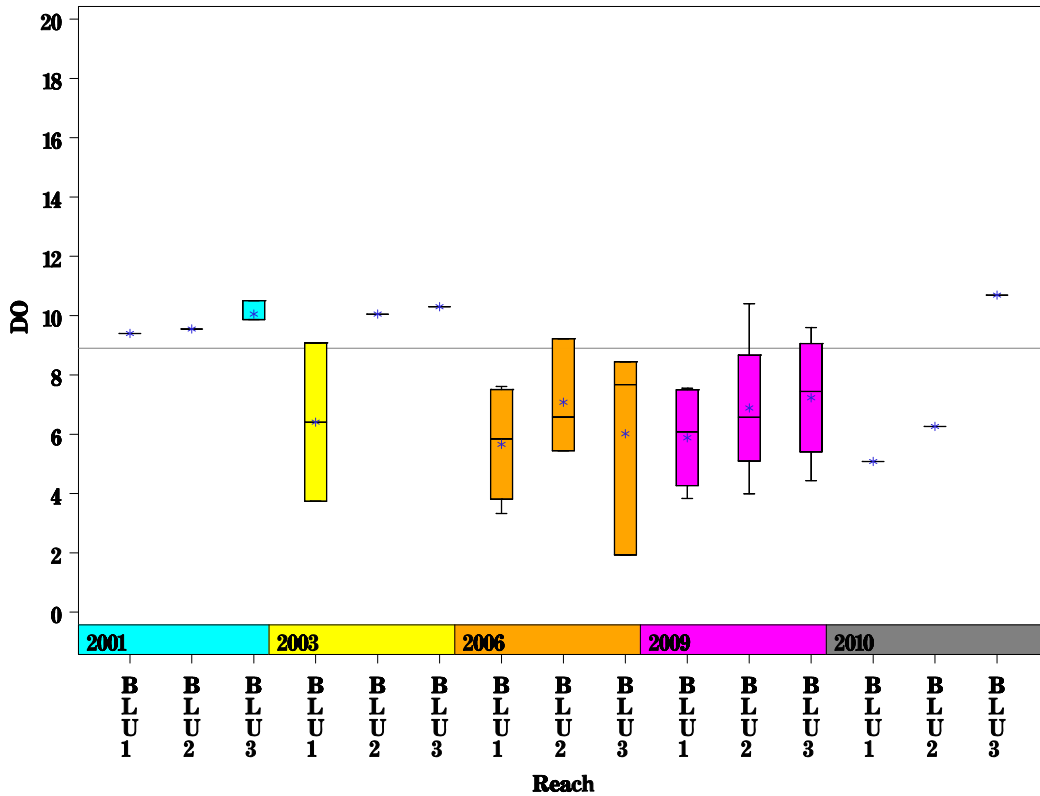
Aerial Map



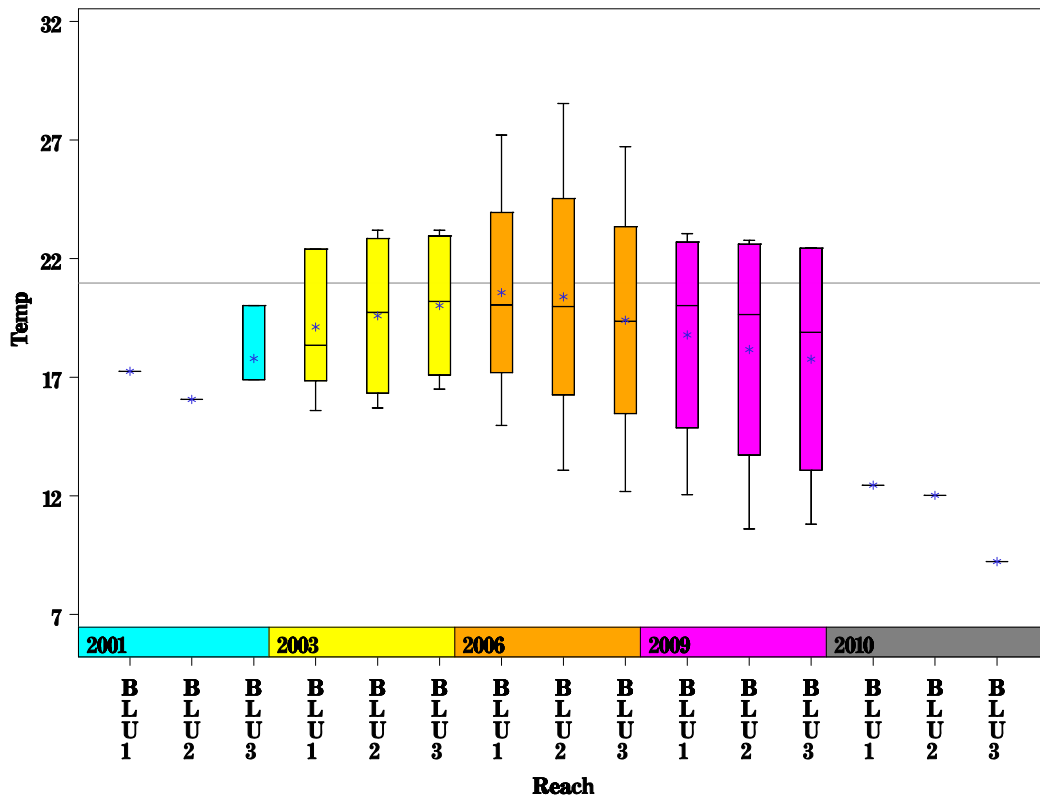
Blunn Creek Watershed

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

Parameter = DISSOLVED OXYGEN Unit = MG/L Watershed = Blunn Creek

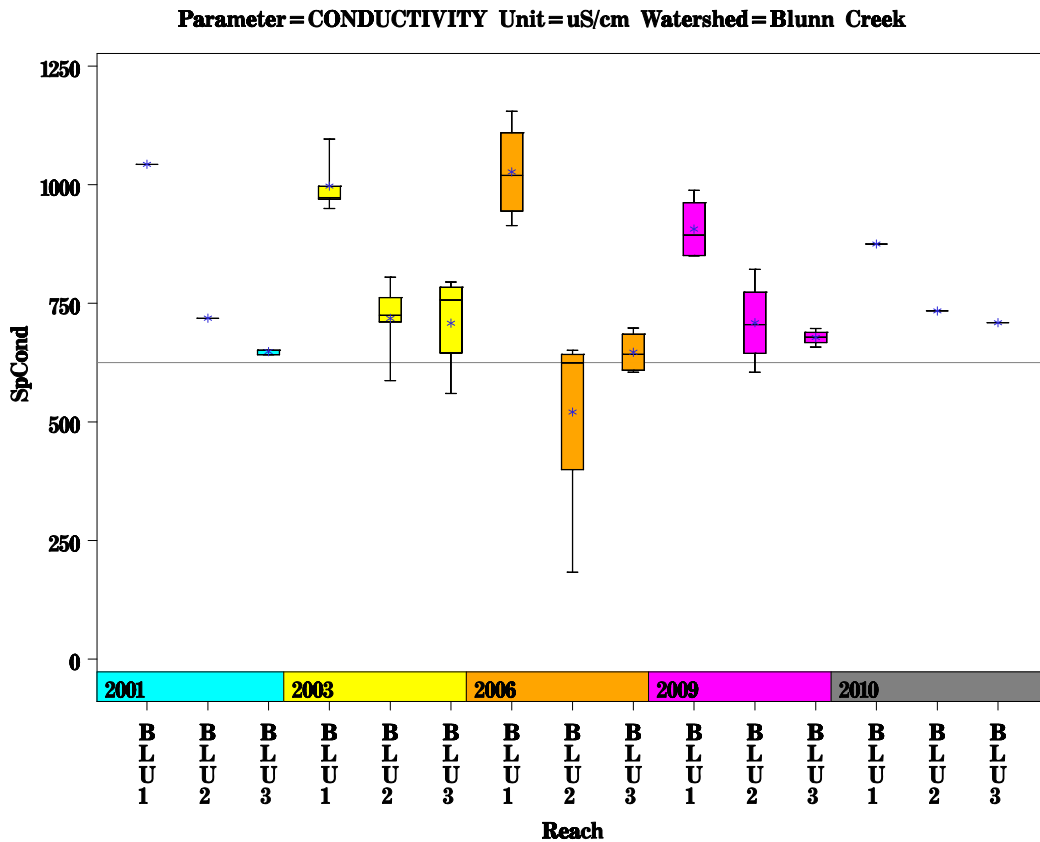
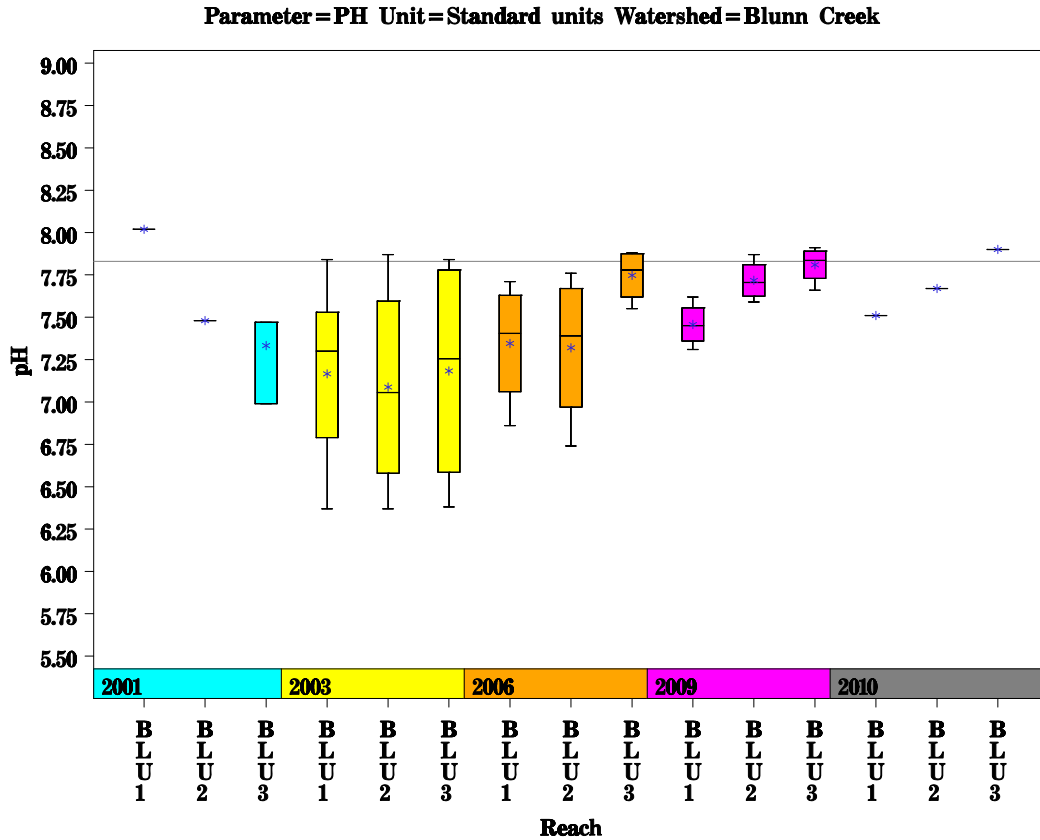


Parameter = WATER TEMPERATURE Unit = Deg C Watershed = Blunn Creek



Blunn Creek Watershed

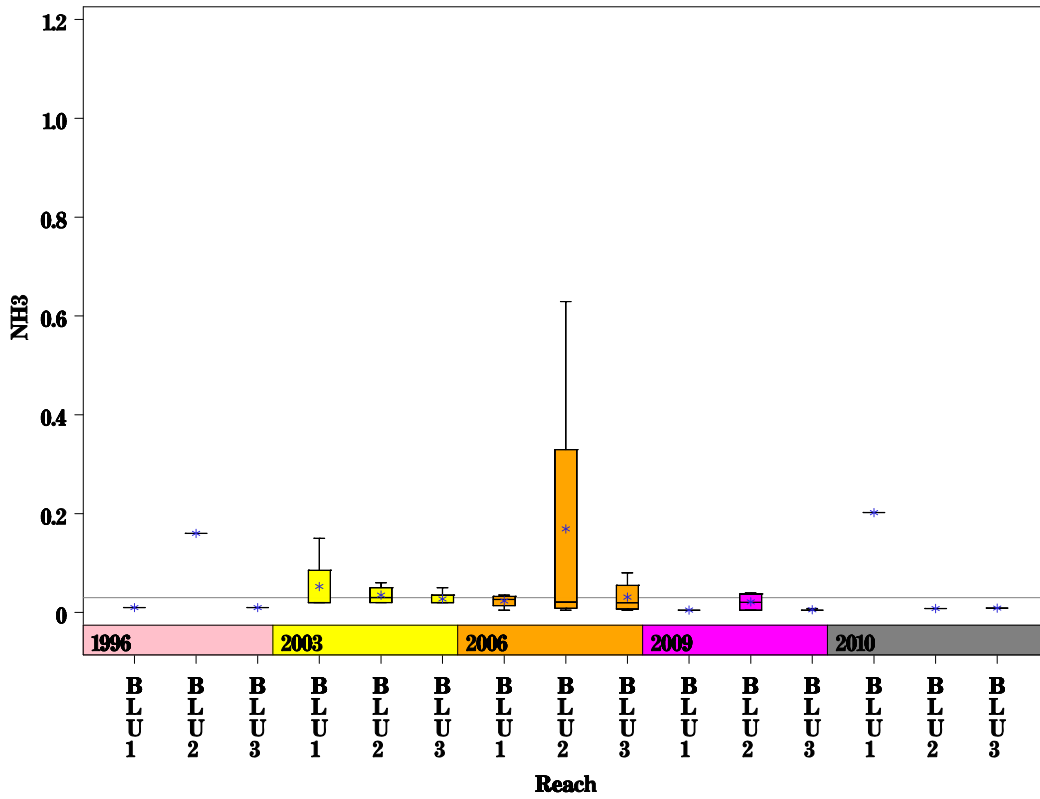
Data Summary Graphs – pH and Conductivity (Downstream to Upstream by Year)



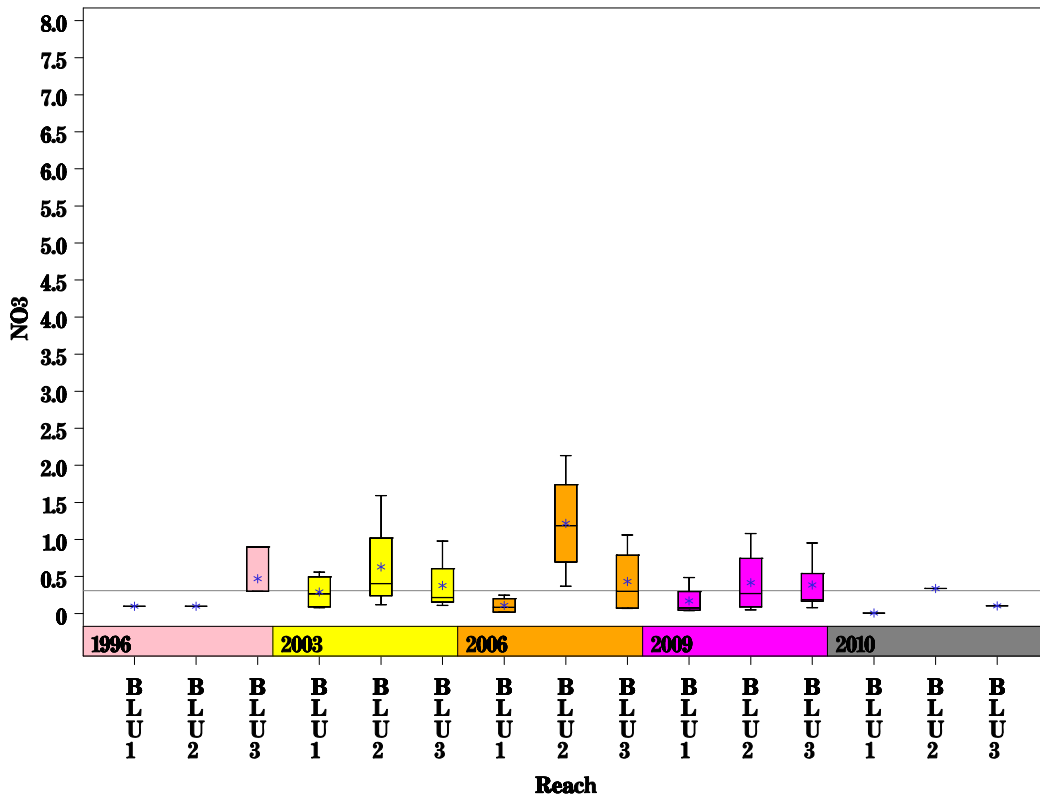
Blunn Creek Watershed

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

Parameter=AMMONIA AS N Unit=MG/L Watershed=Blunn Creek



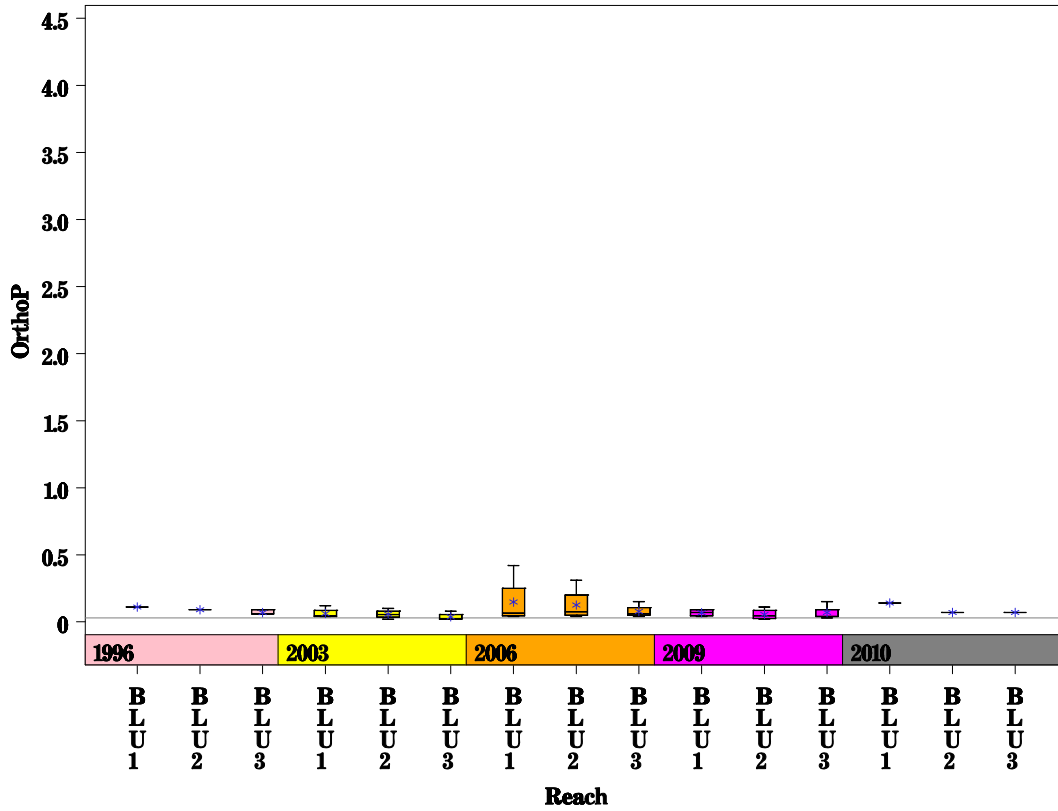
Parameter=NITRATE AS N Unit=MG/L Watershed=Blunn Creek



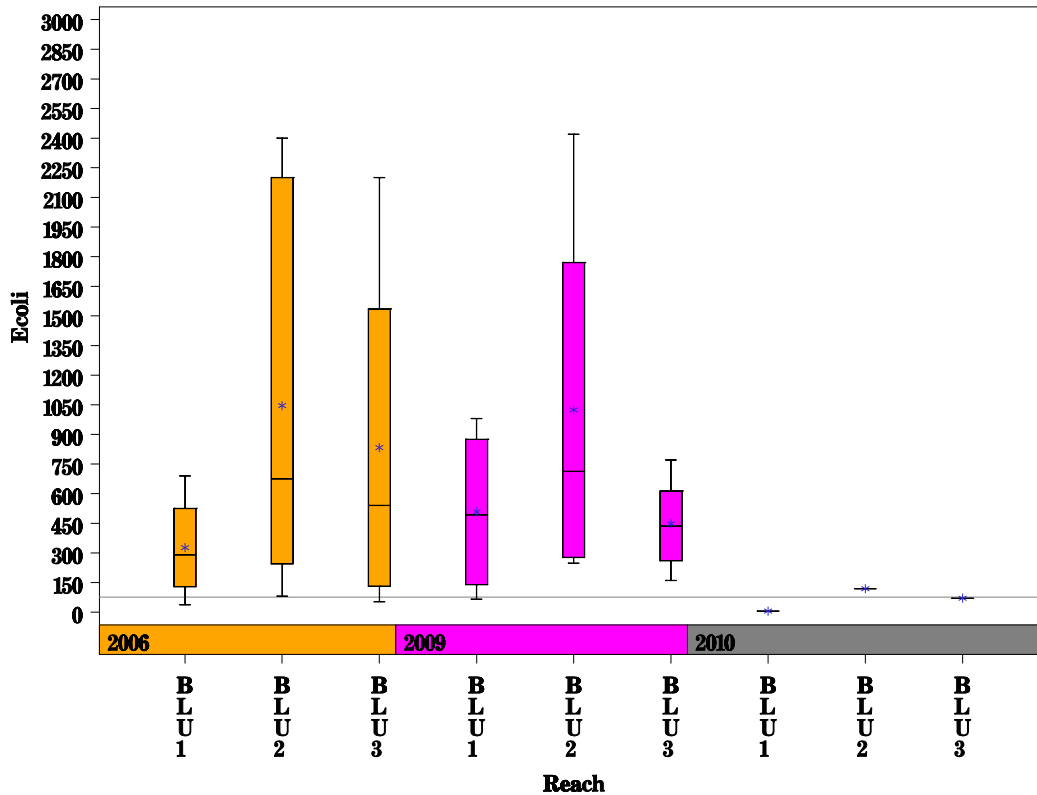
Blunn Creek Watershed

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

Parameter=ORTHOPHOSPHORUS AS P Unit=MG/L Watershed=Blunn Creek



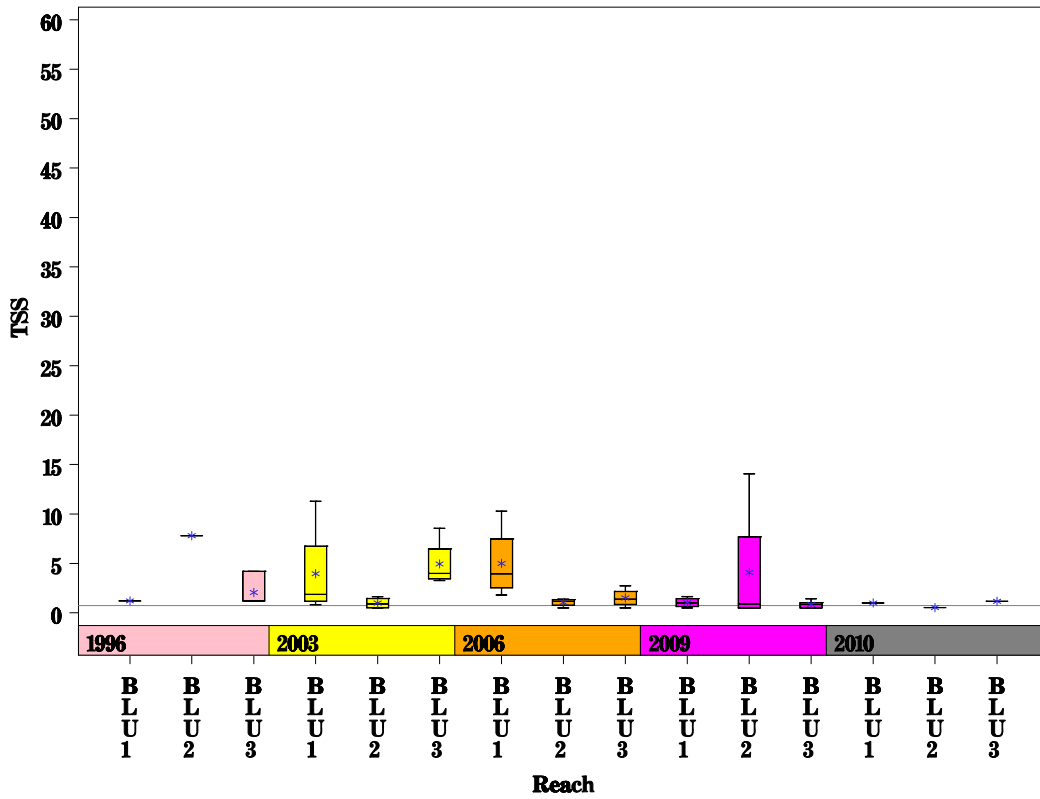
Parameter=E COLI BACTERIA Unit=MPN/dL Watershed=Blunn Creek



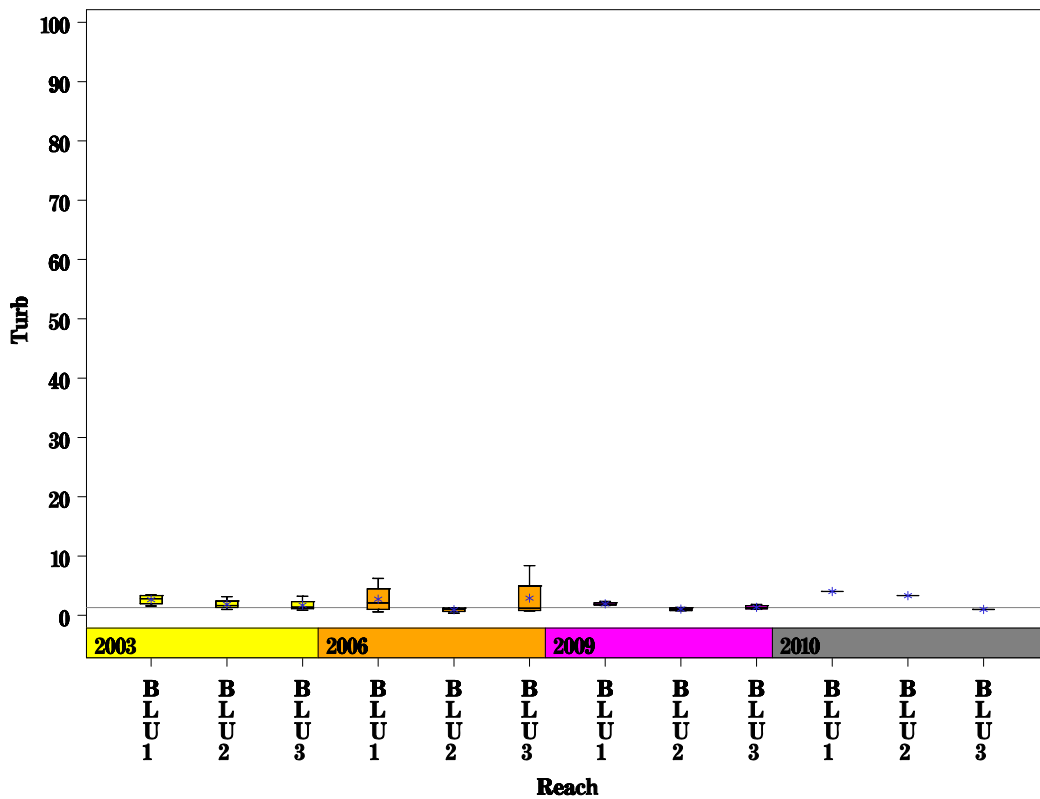
Blunn Creek Watershed

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

Parameter=TOTAL SUSPENDEED SOLIDS Unit=MG/L Watershed=Blunn Creek

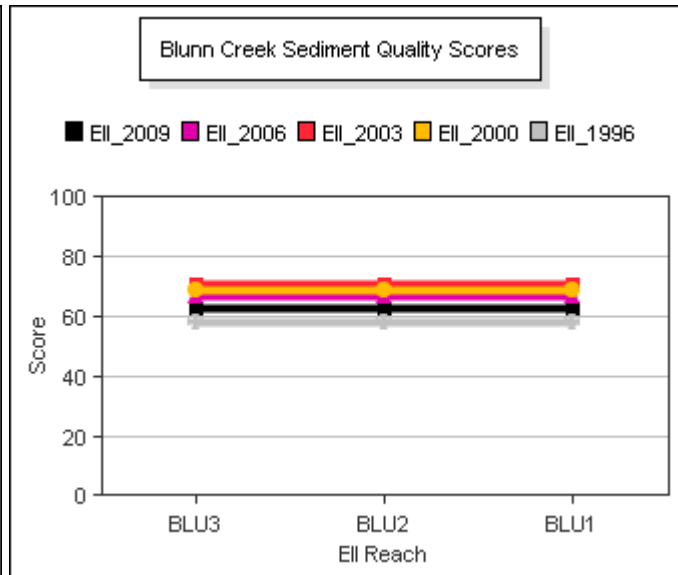
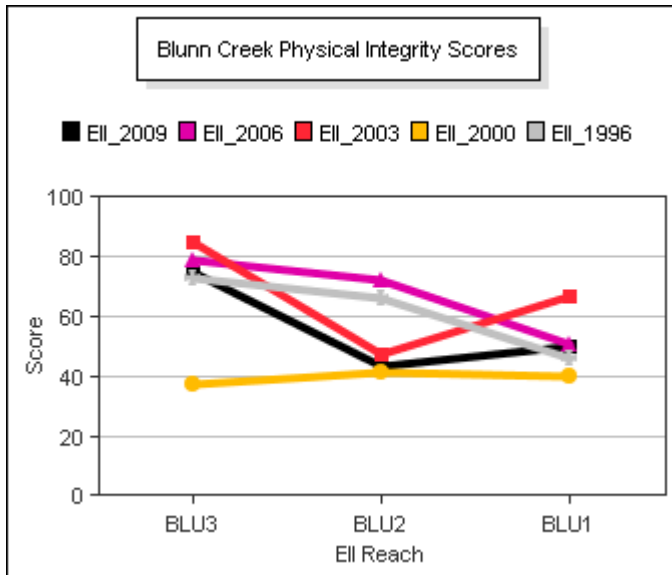
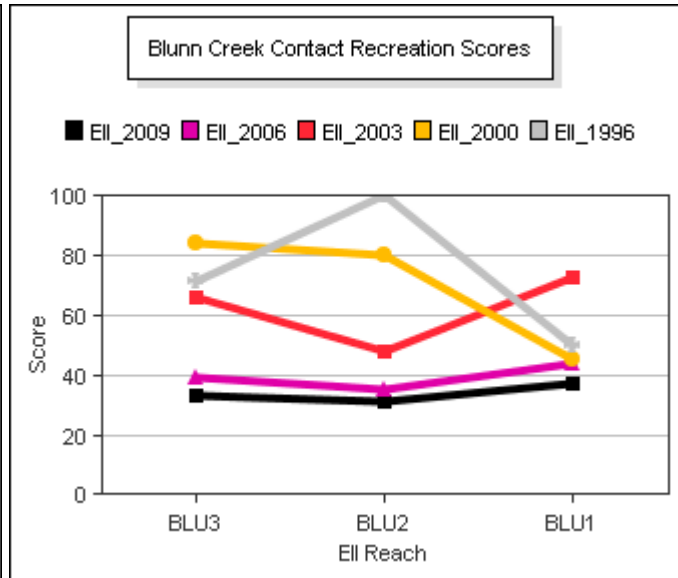
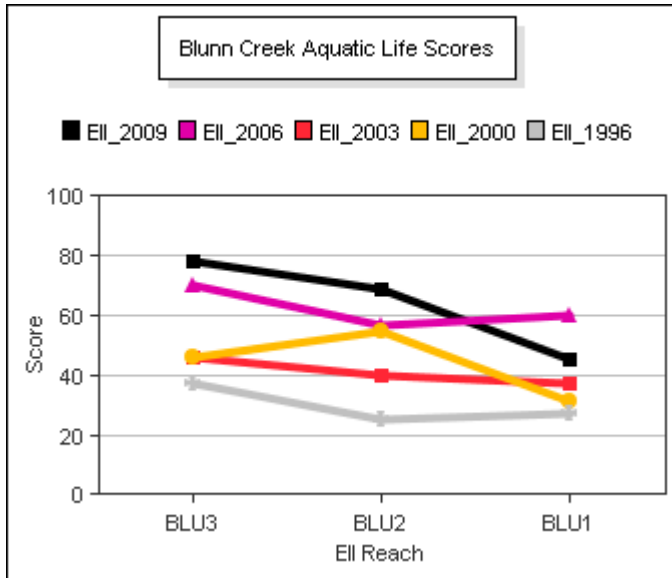
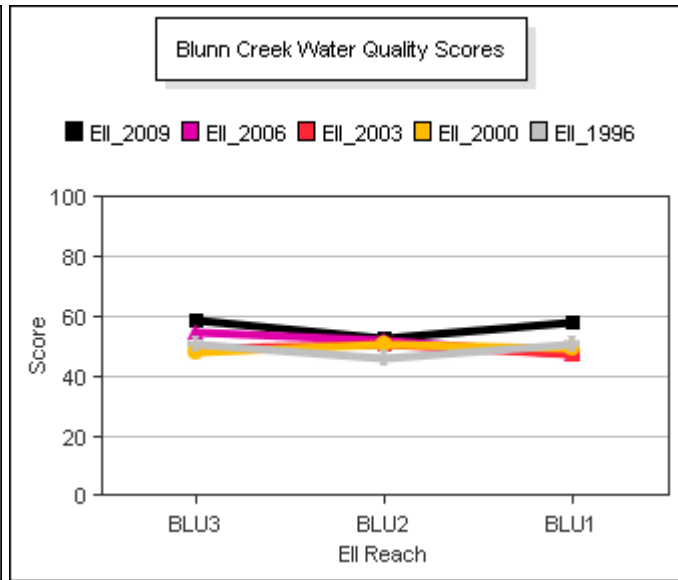
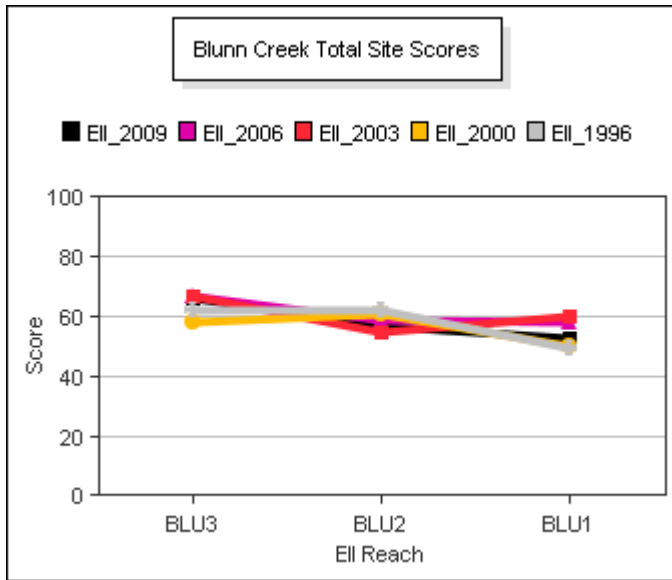


Parameter=TURBIDITY Unit=NTU Watershed=Blunn Creek



Blunn Creek Watershed

Score Summary – Reach scores for each sample year



Blunn Creek Watershed

Site Photographs



180_t00-ds-02_22_2001



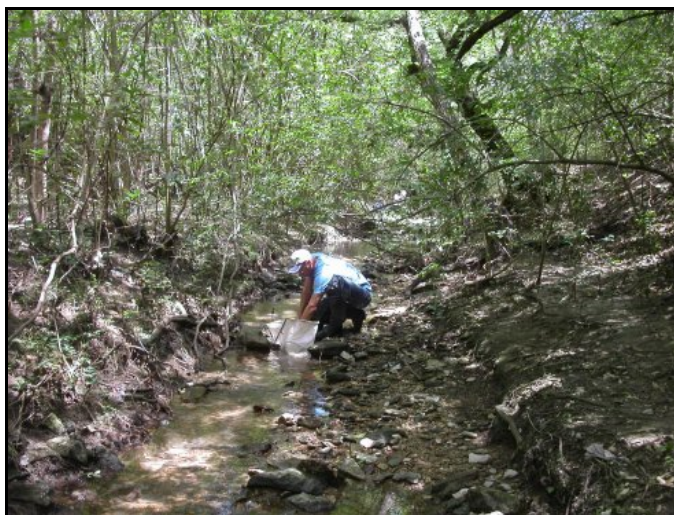
180_t00-ds-07_11_2006



180_t00-us-02_22_2001



180-t00-us-06-01-2009



362_t00-us-07_11_2006



362-t00-ur-06-01-2009

Blunn Creek Watershed

Site Photographs



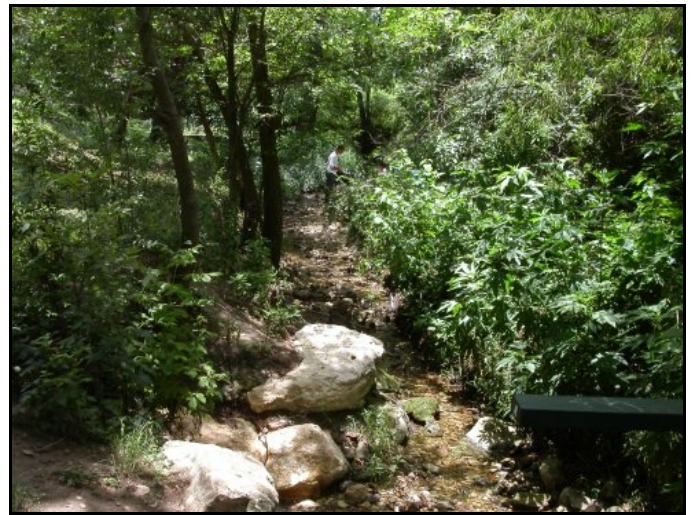
363_t00-ds-12_18_2000



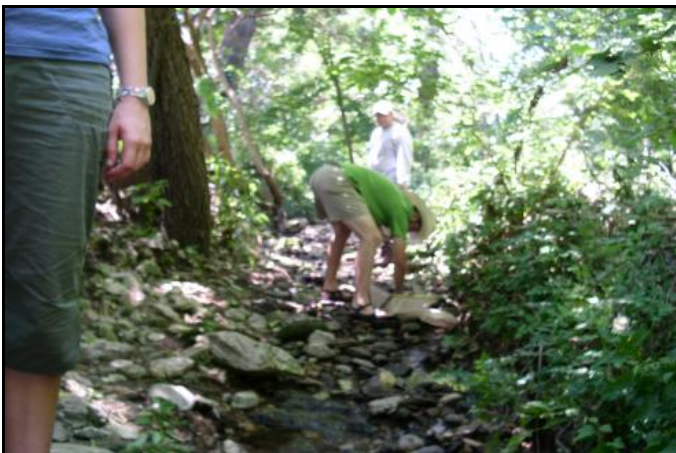
363_t00-us-12_18_2000



364_t00-us- 12_18_2000



364_t00-us1-07_05_2006



364-t00-ur-06-01-2009



364-t00-us-06-01-2009

This page left intentionally blank