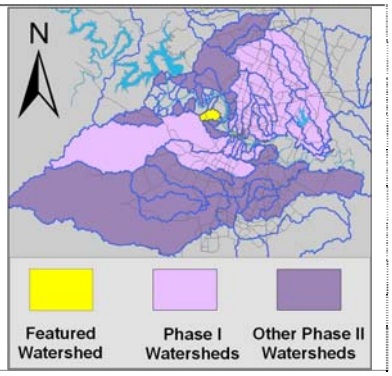
Bee Creek Watershed

Summary Sheet

Catchment	Total area	3.3 sq. miles		
	Area in recharge	none		
	Creek length	3 miles		
	Receiving water	Lake Austin		
Demographics	2000 population	2,037		
	2030 projected population	10,984		
	30 year projected % increase	439 %		
Land Use	Impervious cover (2003 estimate)	14.76 %		
Overall EII Scores	2001	2004	2007	2010
	78	**75**	**81**	**80**



Flow Regime* for Sample Sites on Bee Creek

Site # upstream to downstream	Site Name	2001				2004					2007					2010			
		Mar WQ	Jun WQ	Sep WQ	Dec WQ	Mar WQ	May Bio	Jun WQ	Oct WQ	Dec WQ	Feb WQ	May WQ	Jun Bio	Sep WQ	Dec WQ	Mar WQ	May WQ	May Bio	Oct WQ
1104	Bee at Loop 360	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	n	B	B
322	Bee at Road Runner	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
319	Bee at Lake Austin	B	B	B	B	B	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 = site not visited

Summary of 2010 Data for Bee Creek

2010 Summary	Parameter	Mean	Max	Min	Discussion
Physicochemical	**D.O.** mg/l	8.7	11.0	7.4	Consistently within normal range
	pH st.units	8.1	8.8	7.6	Generally within normal range with a increasing trend downstream
	Cond uS/cm	833	930	741	Above average, concentrations high at site 1104, decreasing downstream
Nutrients	**NH_3** mg/l	0.01	0.03	0.01	Generally within normal range with some higher concentrations at site 1104
	NO_3 mg/l	1.49	3.30	0.36	Chronically elevated and generally increasing over time
	Ortho P mg/l	0.02	0.04	0.02	Generally within normal range or lower
Sediment Load	**TSS** mg/l	0.6	1.0	0.5	Generally within normal range
	Turbidity ntu	0.7	2.9	0.2	Generally within normal range
Biology	**E.Coli** /100ml	44	101	4	Generally within normal range or lower
	Benthic Macs	Generally average metric values, but good diversity and several pollution-intolerant taxa			
	Diatoms	Generally above average metrics with high diversity and good pollution tolerance index values			

Index scores* for Bee Creek Sites by Year

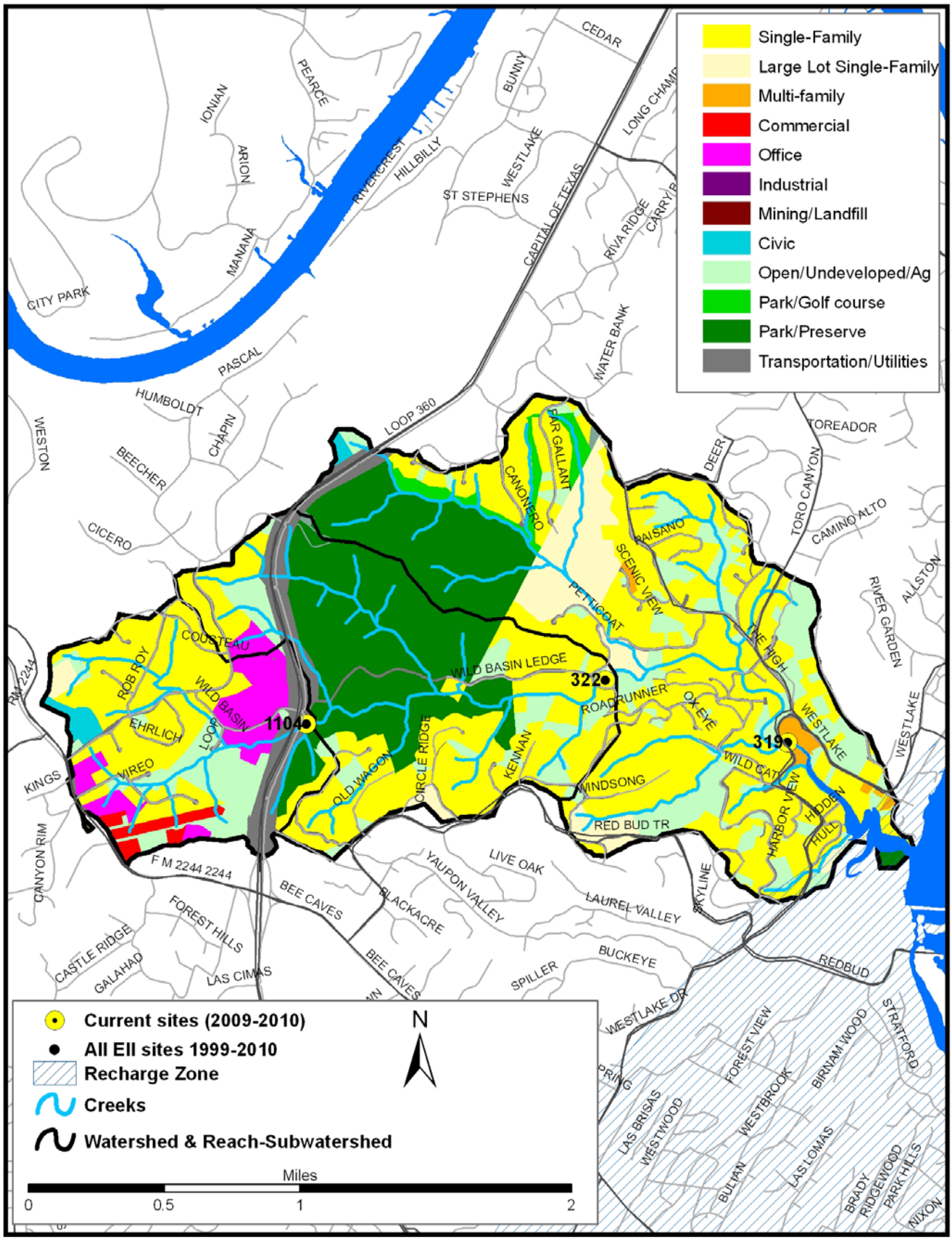
Reach	Site	Site Name	Year	Water Quality	Sediment**	Contact Rec	Non Contact Rec	Physical Integrity	Aquatic Life	Benthic subindex	Diatom subindex	**Total Site Score**
BEE1	319	Bee Creek @ Lake Austin	1998	70	85	97	85	68	76	65	86	80
BEE2	322	Bee Creek @ Road Runner Road	1998	63	85	83	92	86	87	74	100	83
BEE3	1104	Bee Creek @ Loop 360	1998	47	85	82	70	69	62	52	71	69
BEE1	319	Bee Creek @ Lake Austin	2001	60	94	93	84	70	64	43	85	74
BEE2	322	Bee Creek @ Road Runner Road	2001	58	94	86	88	69	83	75	91	76
BEE3	1104	Bee Creek @ Loop 360	2001	59	94	81	94	84	54	37	70	74
BEE1	319	Bee Creek @ Lake Austin	2004	63	85	60	87	81	87	83	91	77
BEE2	322	Bee Creek @ Road Runner Road	2004	61	85	62	94	79	76	54	97	76
BEE3	1104	Bee Creek @ Loop 360	2004	47	85	46	89	82	82	74	90	72
BEE1	319	Bee Creek @ Lake Austin	2007	68	88	81	95	80	90	84	96	84
BEE2	322	Bee Creek @ Road Runner Road	2007	65	88	79	98	79	87	75	98	83
BEE3	1104	Bee Creek @ Loop 360	2007	57	88	76	95	82	60	68	51	76
BEE1	319	Bee Creek @ Lake Austin	2010	63	85	81	100	76	94	87	100	83
BEE2	322	Bee Creek @ Road Runner Road	2010	66	85	85	91	77	85	72	97	82
BEE3	1104	Bee Creek @ Loop 360	2010	55	85	59	96	82	83	78	88	77

* 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

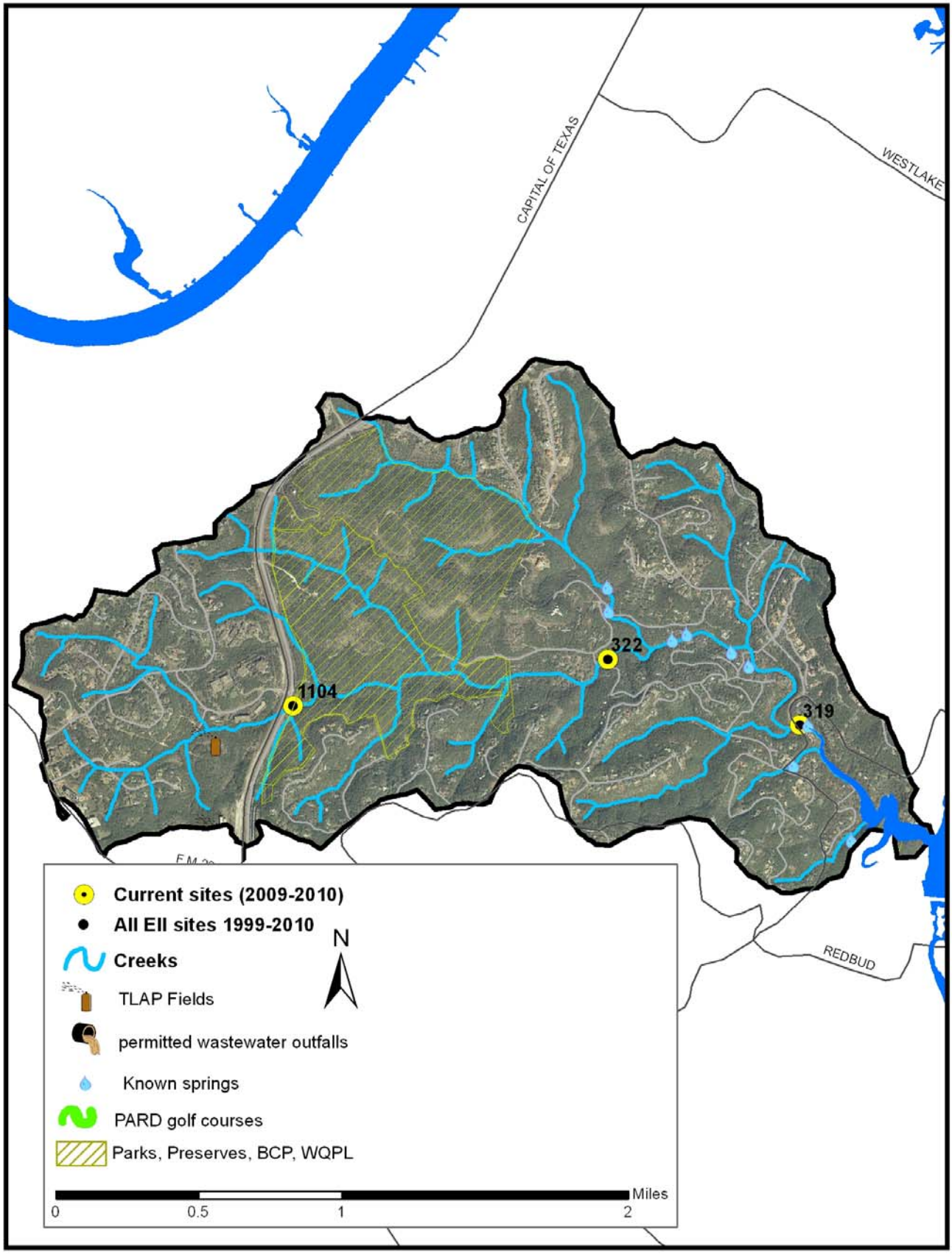
Bee Creek Watershed

Land Use Map



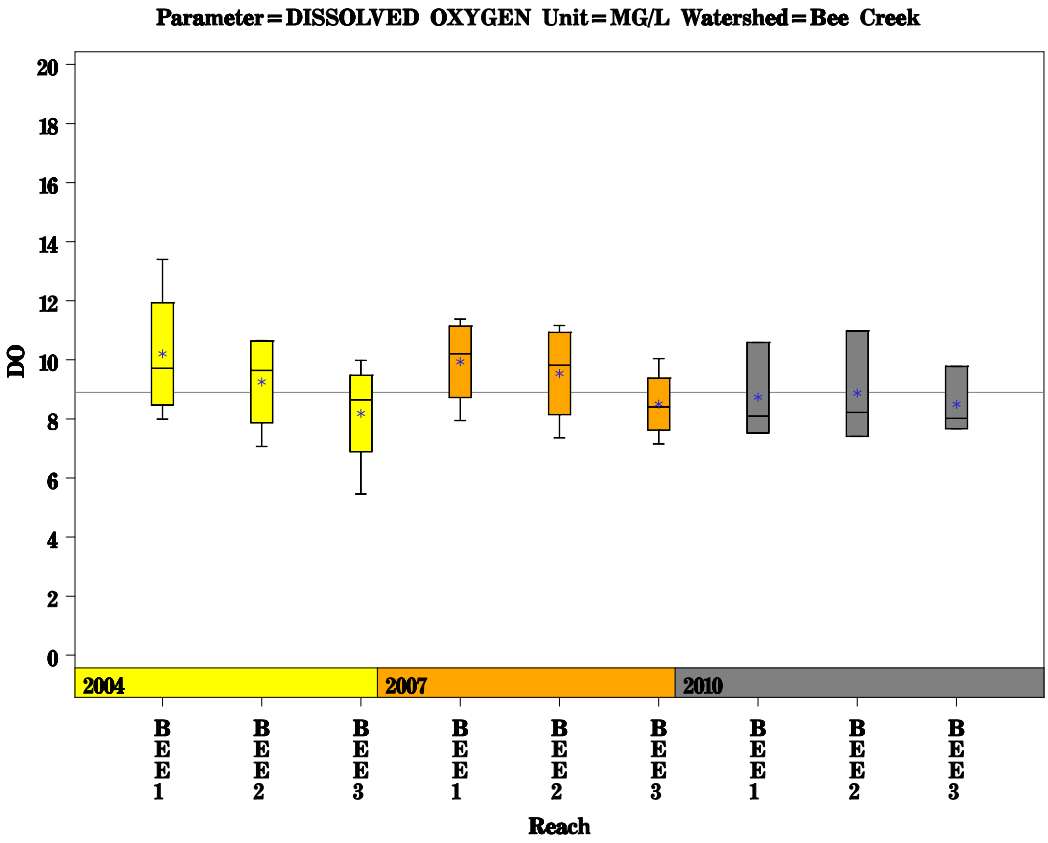
Bee Creek Watershed

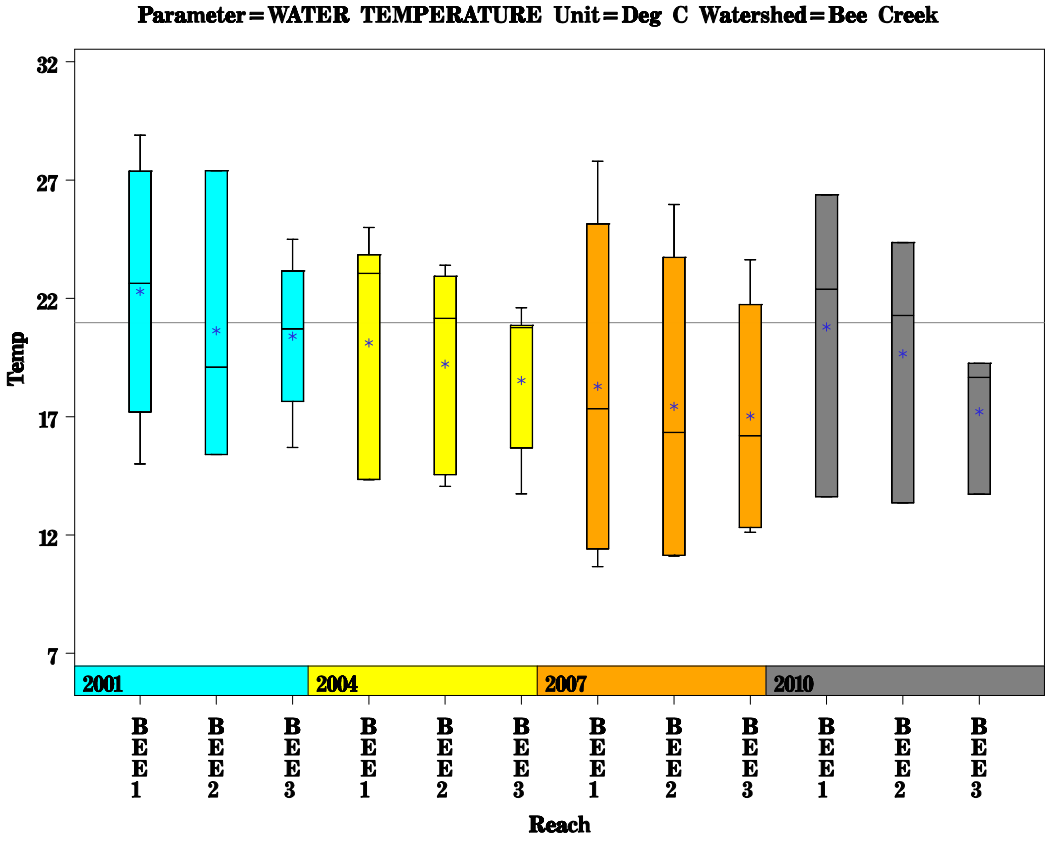
Aerial Map



Bee Creek Watershed

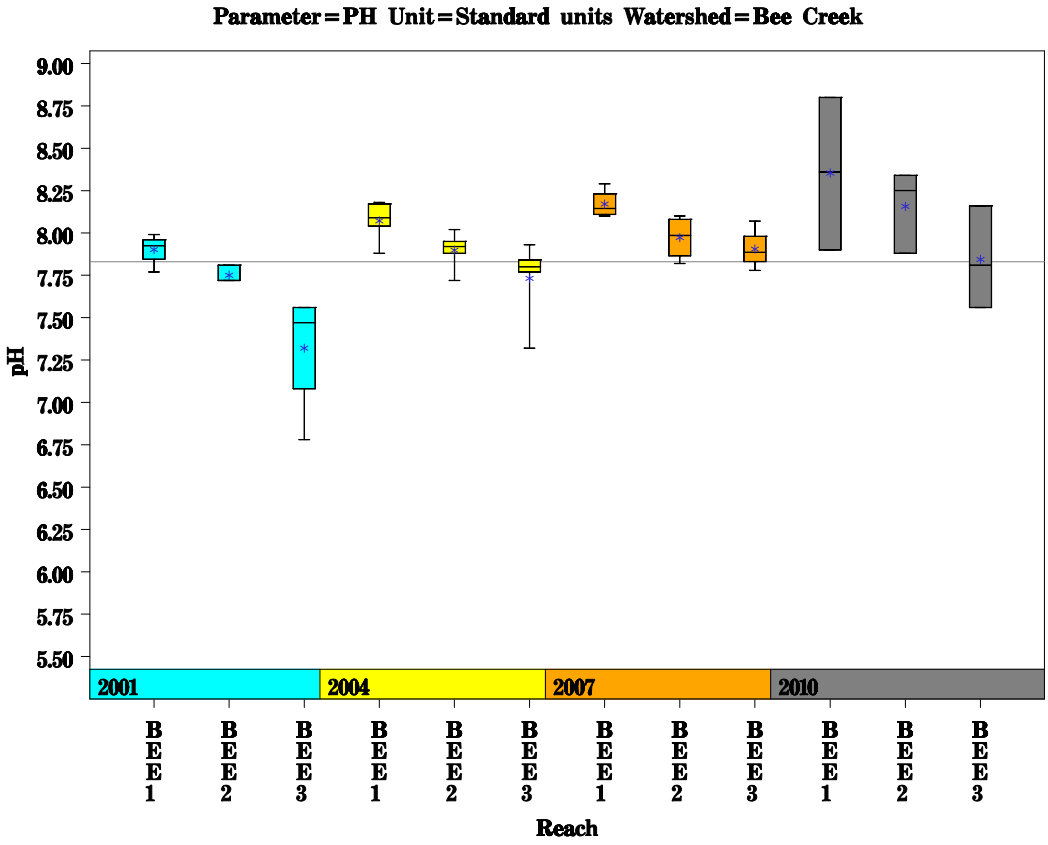
Data Summary Graphs – Dissolved Oxygen and Temperature (Downstream to Upstream by Year)

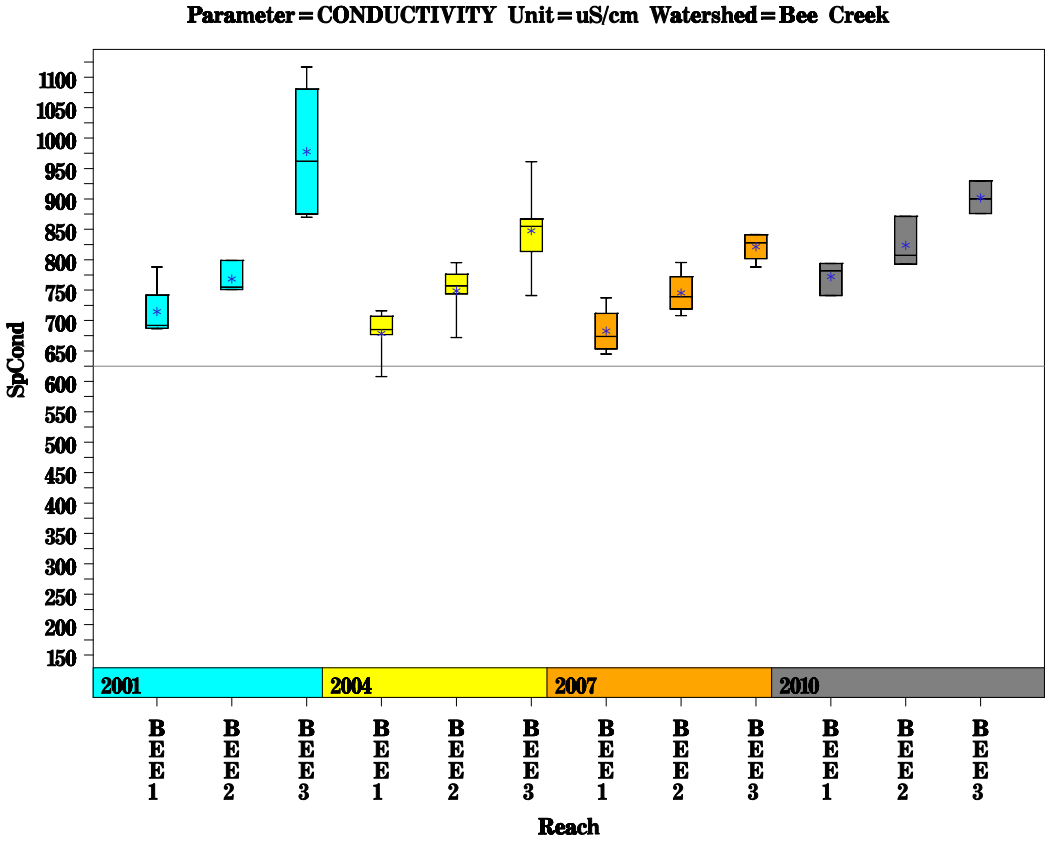




Bee Creek Watershed

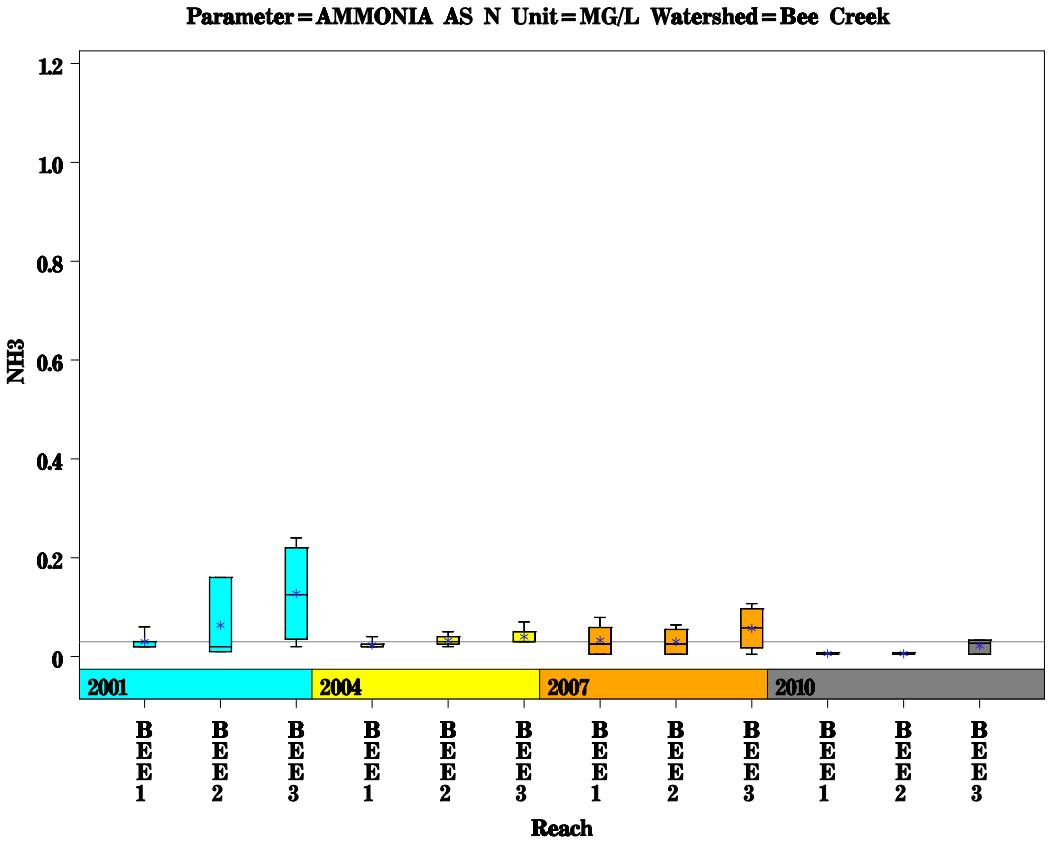
Data Summary Graphs – pH and Conductivity (Downstream to Upstream by Year)

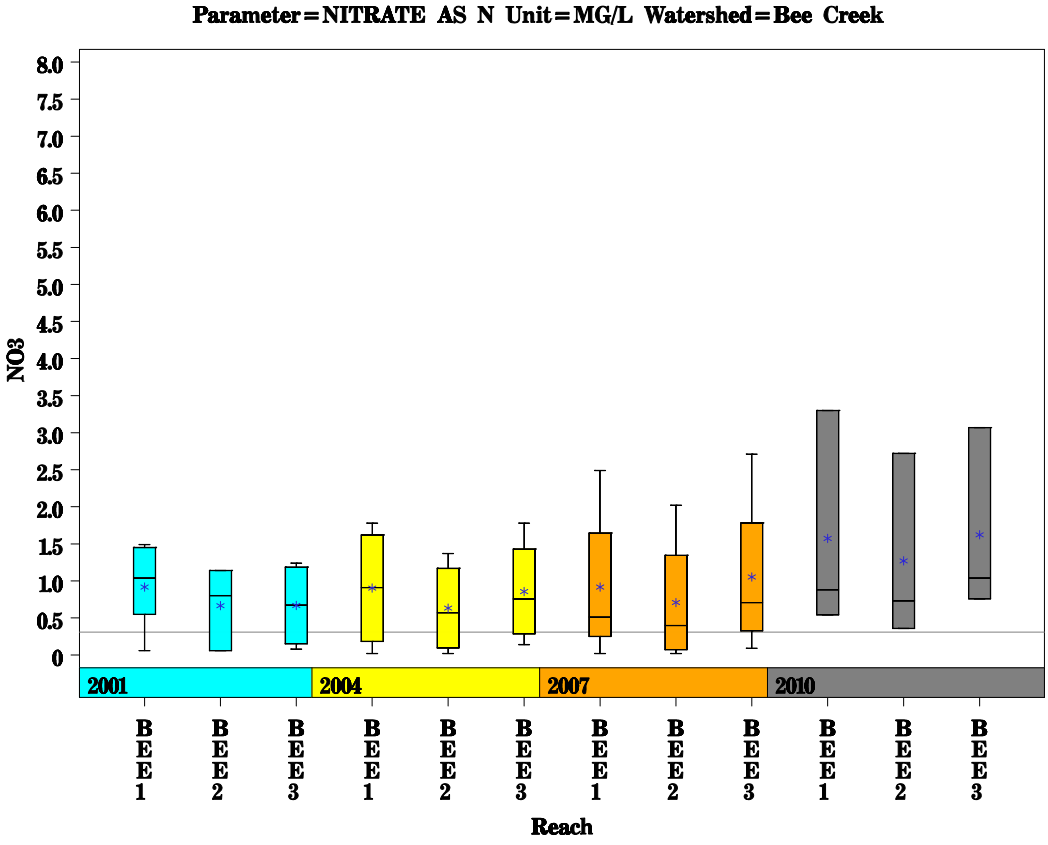




Bee Creek Watershed

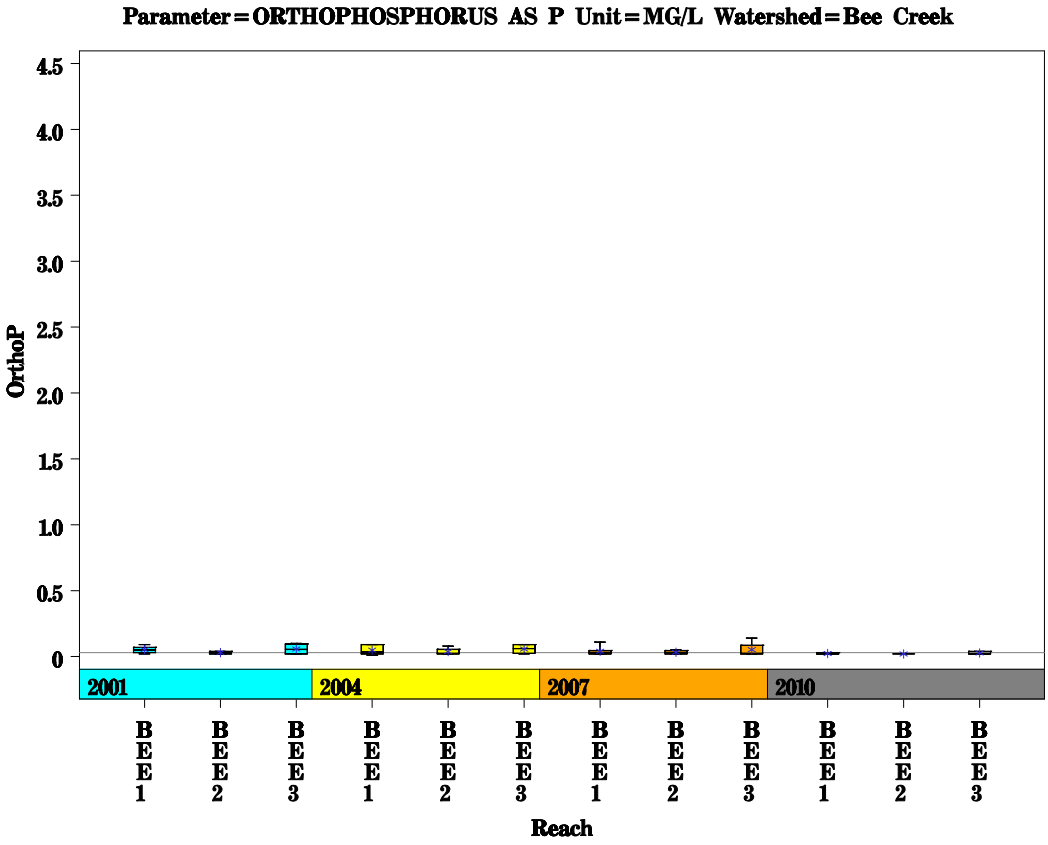
Data Summary Graphs – Ammonia and Nitrate/Nitrite (Downstream to Upstream by Year)

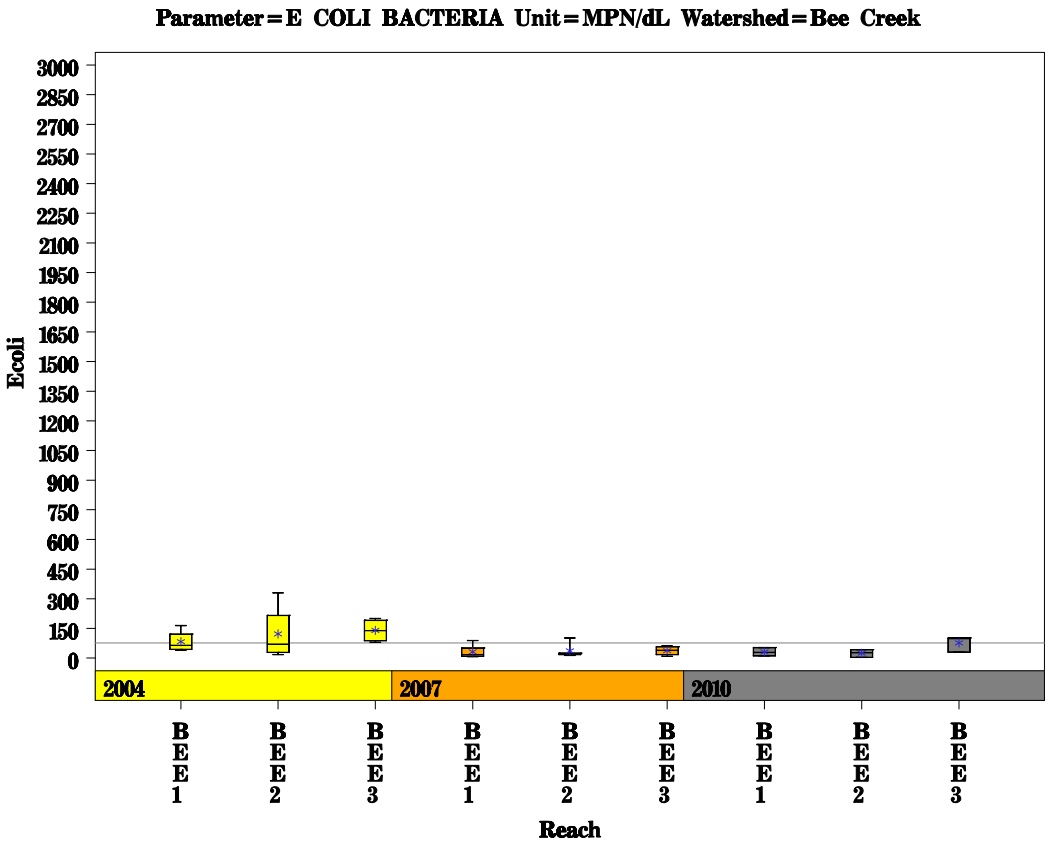




Bee Creek Watershed

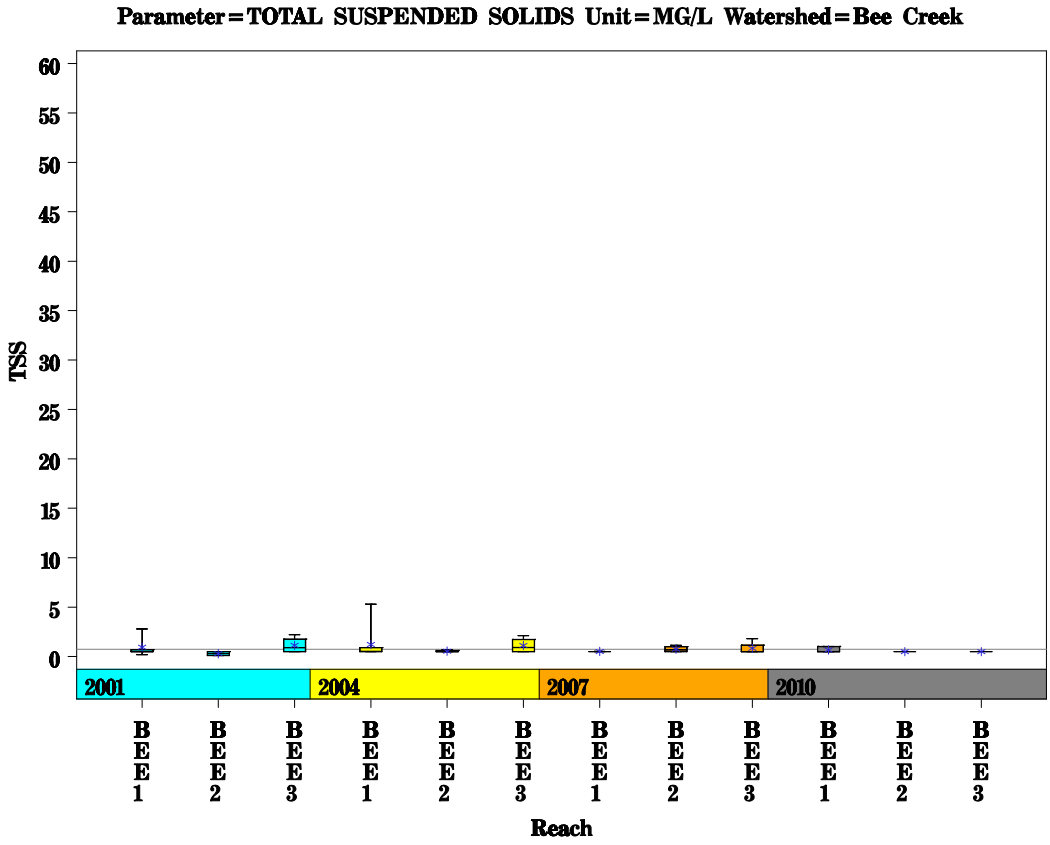
Data Summary Graphs – Orthophosphate and *E.coli* (Downstream to Upstream by Year)

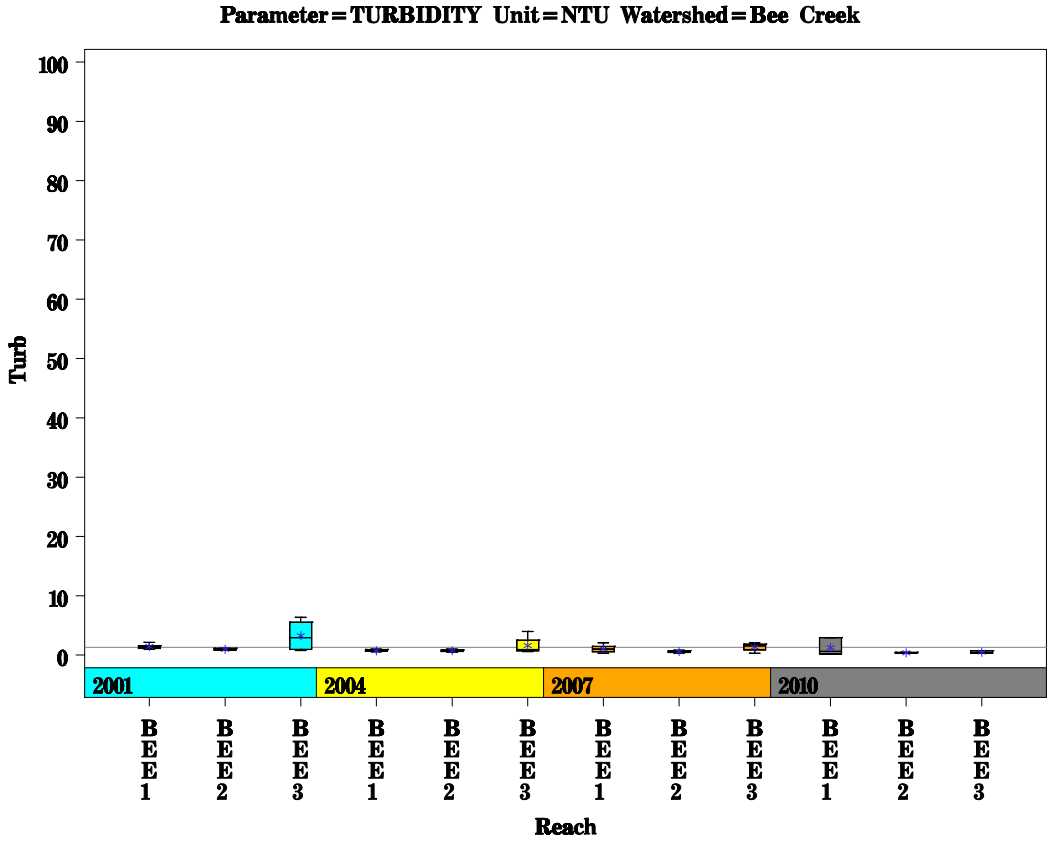




Bee Creek Watershed

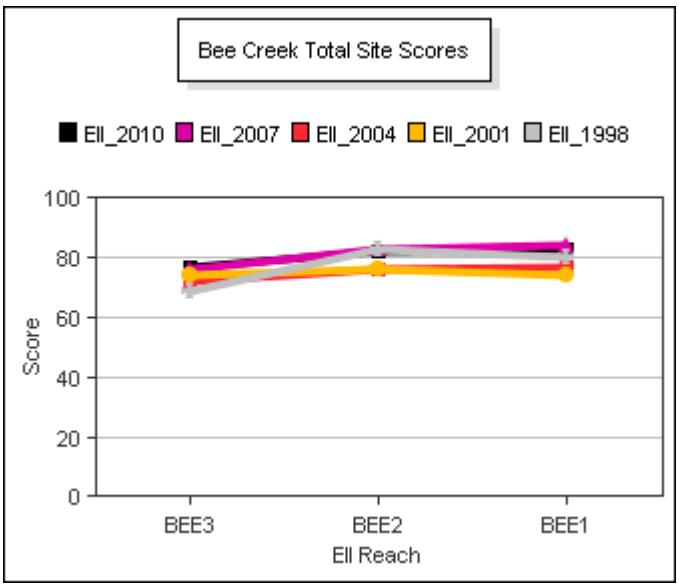
Data Summary Graphs – Total Suspended Solids and Turbidity (Downstream to Upstream by Year)

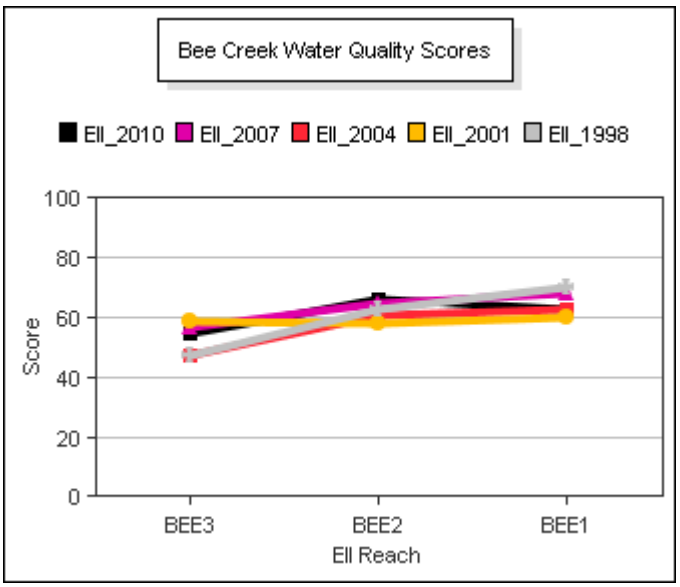


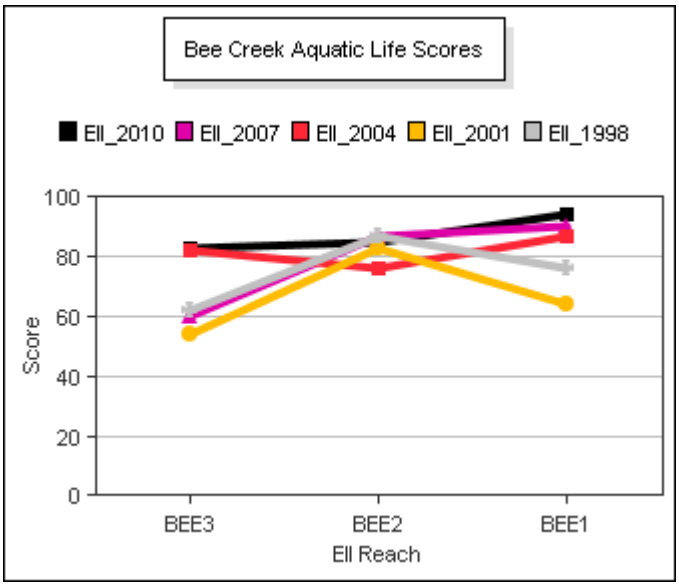


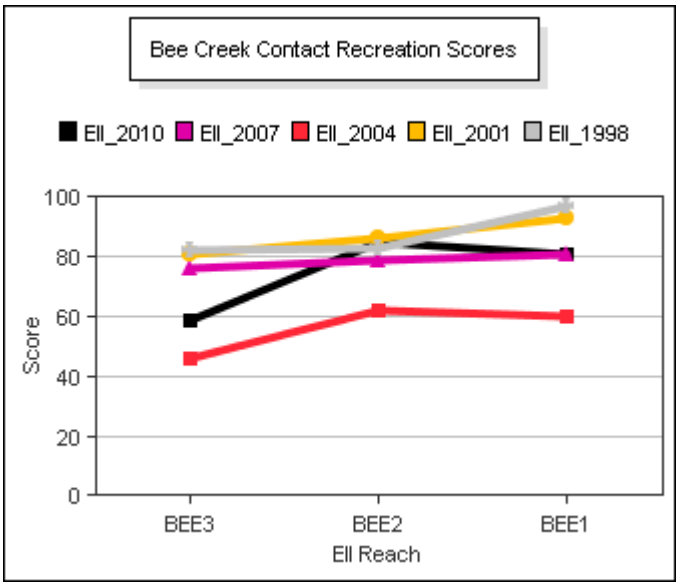
Bee Creek Watershed

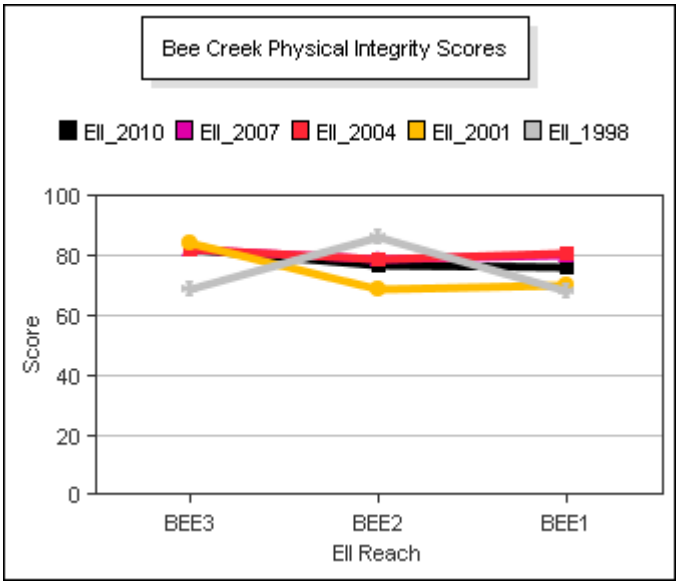
Score Summary – Reach scores for each sample year

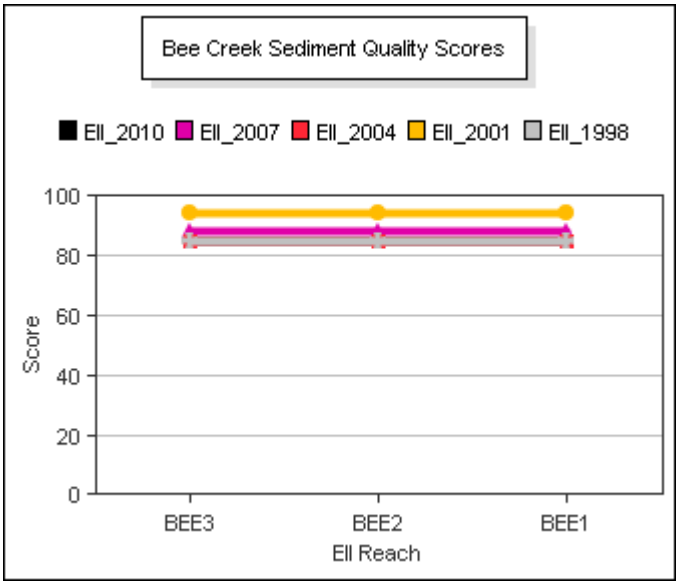












Bee Creek Watershed

Site Photographs

322_t00-us-05_21_2004

322_t00-ds-05_21_2004

322_us_06_18_2007

322_ds_06_18_2007

322_00-us-05_17_2010

322_00-ds-05_17_2010

Bee Creek Watershed

Site Photographs

1104_t00-us-05_21_2004

1104_ur_06_19_2007

319_t00-ds-05_21_2004

319_ds_07_13_2007

319_00-us-05_17_2010

319_00-ds-05_17_2010

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