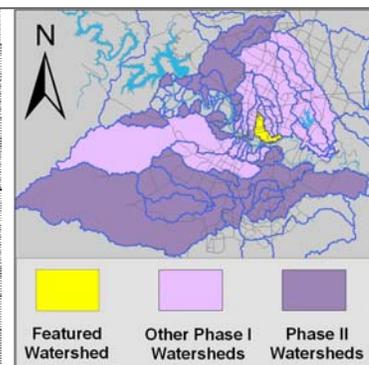


# Boggy Creek (North) Watershed

## Summary Sheet

Catchment	Total area	6 square miles			
	Area in recharge	none			
	Creek length	8 miles			
	Receiving water	Colorado River			
Demographics	2000 population	23,372			
	2030 projected population	35,728			
	30 year projected % increase	53 %			
Land Use	Impervious cover (2003 estimate)	42.36 %			
Overall EII Scores	2000	2003	2006	2009	
	<b>56</b>	<b>58</b>	<b>57</b>	<b>61</b>	



### Flow Regime\* for Sample Sites on Boggy 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
2754	North Boggy at Manor	B	B	B	B	B	B	B	B	n	B	B	B	B	B	B
837	North Boggy at Nile Street	B	B	B	B	B	B	B	B	n	B	B	B	B	B	B
493	North Boggy at Delwau Lane	B	B	B	B	n	n	n	B	n	n	n	n	B	B	B

\* 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 Boggy Creek (North)

2009 data summary	Parameter	Mean	Max	Min	Discussion
Physicochemical	D.O. mg/l	7.2	11.3	3.6	Most values within normal range with some low concentrations
	pH st.units	7.8	8.1	7.4	Within normal range
	Cond uS/cm	515	656	341	Trend of increasing conductivity from mouth site to upstream site
Nutrients	NH <sub>3</sub> mg/l	0.02	0.121	0.005	Generally above average concentrations but not very high
	NO <sub>3</sub> mg/l	0.06	0.247	0.004	Generally above average concentrations but not very high
	Ortho P mg/l	0.08	0.15	0.03	Within normal range
Sediment Load	TSS mg/l	1.9	10.6	0.5	Generally above average concentrations but not very high
	Turbidity ntu	2	3	1	Within normal range
Biology	E.Coli /100ml	609	1553	93	Chronically high concentrations
	Benthic Macs	Average or below average metric scores. Largely a pollution-tolerant community			
	Diatoms	Good diversity and Cymbella richness at the downstream site (493), however diversity decreases progressively at upstream sites. Despite this, upstream sites do maintain a lower percent of motile taxa.			

### Index scores\* for Boggy Creek (North) 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
BOG1	493	North Boggy Creek @ Delwau Lane	2000	67	88	82	79	23	30	29	31	62
BOG2	837	North Boggy Creek @ Nile Street	2000	62	88	78	62	20	23	33	13	56
BOG3	784	North Boggy Creek @ Airport Road	2000	39	88	64	73	41	19	29	9	54
BOG3	853	Unnamed Trib of N. Boggy @ Banton Rd	2000		88		48	24	23	33	13	46
BOG1	493	North Boggy Creek @ Delwau Lane	2003	67	88	82	58	47	37	42	31	63
BOG2	837	North Boggy Creek @ Nile Street	2003	52	88	62	75	47	26	30	22	58
BOG3	2754	North Boggy Creek @ Manor Rd	2003	51	88	45	56	54	26	23	28	53
BOG1	493	North Boggy Creek @ Delwau Lane	2006		85		71	36	50	37	62	61
BOG2	837	North Boggy Creek @ Nile Street	2006	57	85	65	66	51	52	43	61	63
BOG3	2754	North Boggy Creek @ Manor Rd	2006	52	85	25	63	48	38	25	51	52
BOG1	493	North Boggy Creek @ Delwau Lane	2009	71	87	41	79	39	75	53	96	65
BOG2	837	North Boggy Creek @ Nile Street	2009	61	87	30	47	49	65	46	84	57
BOG3	2754	North Boggy Creek @ Manor Rd	2009	64	87	25	67	57	65	49	80	61

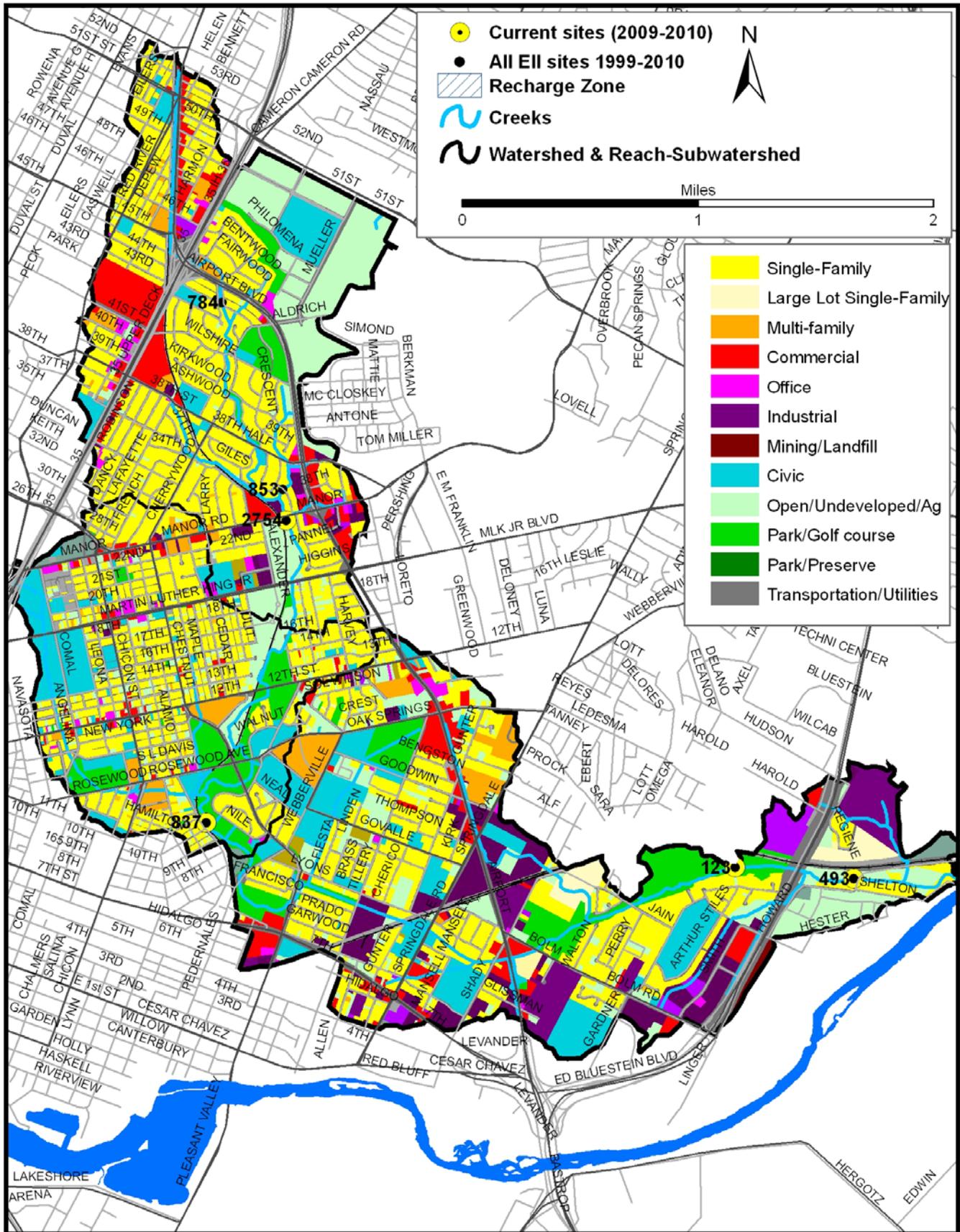
\* blank cells indicate parameter was not collected, blank row indicate site was dropped

\*\*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

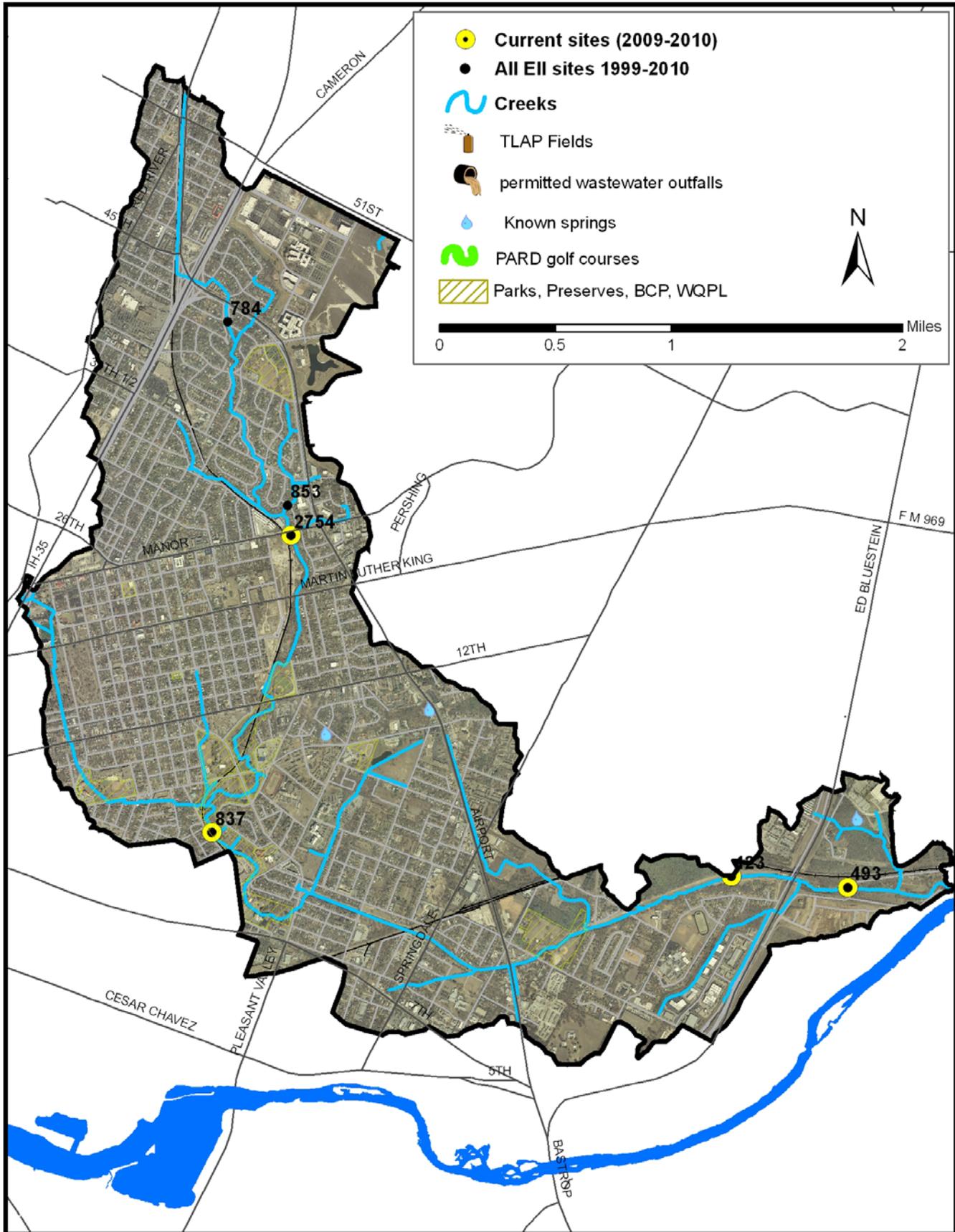
# Boggy Creek (North) Watershed

## Land Use Map



# Boggy Creek (North) Watershed

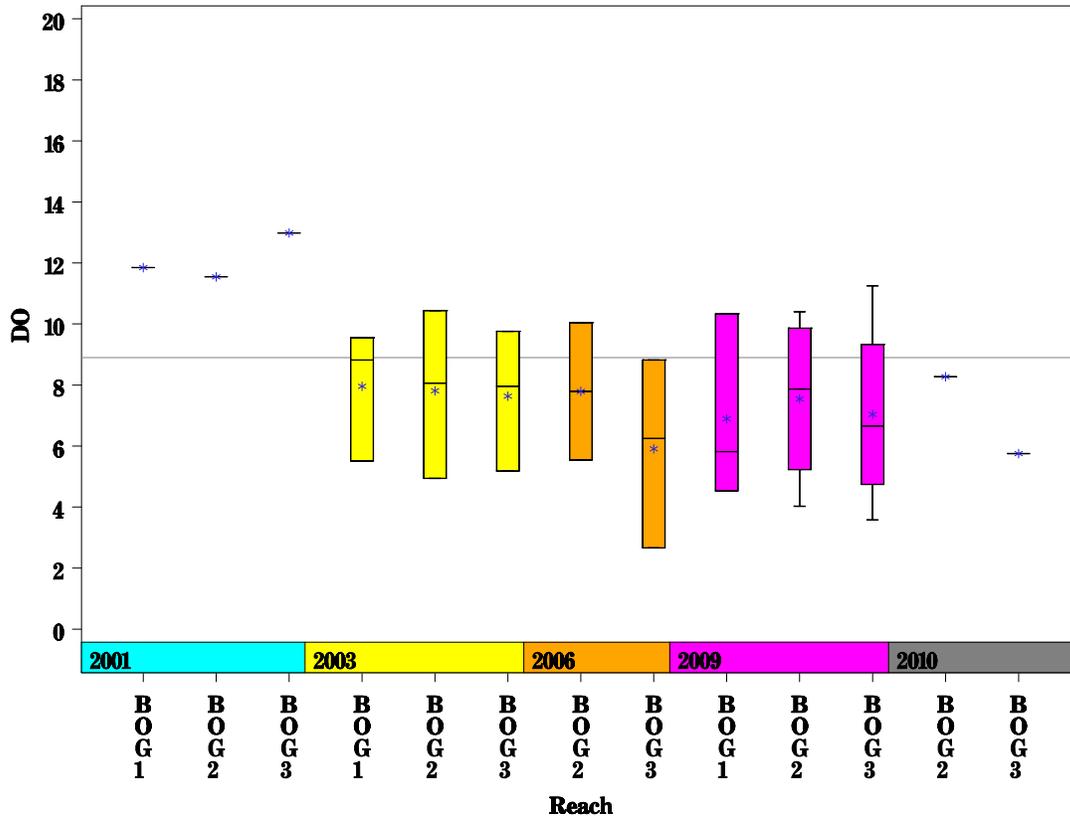
## Aerial Map



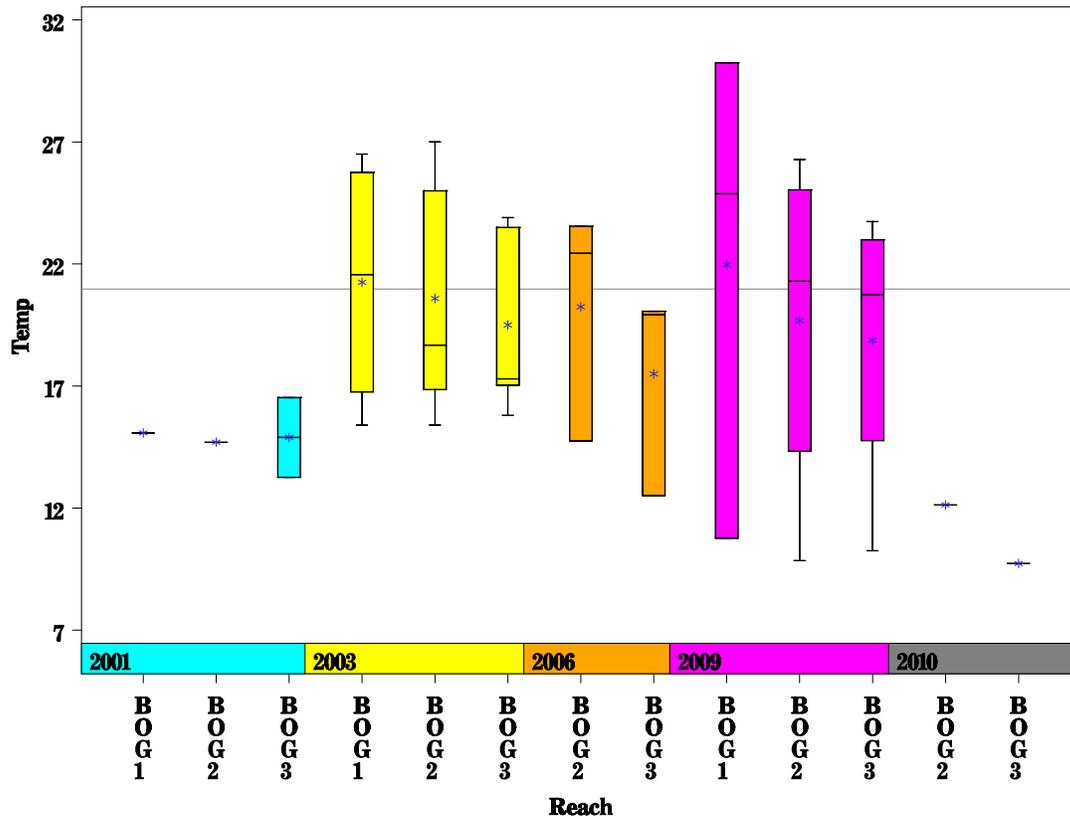
# Boggy Creek (North) Watershed

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

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



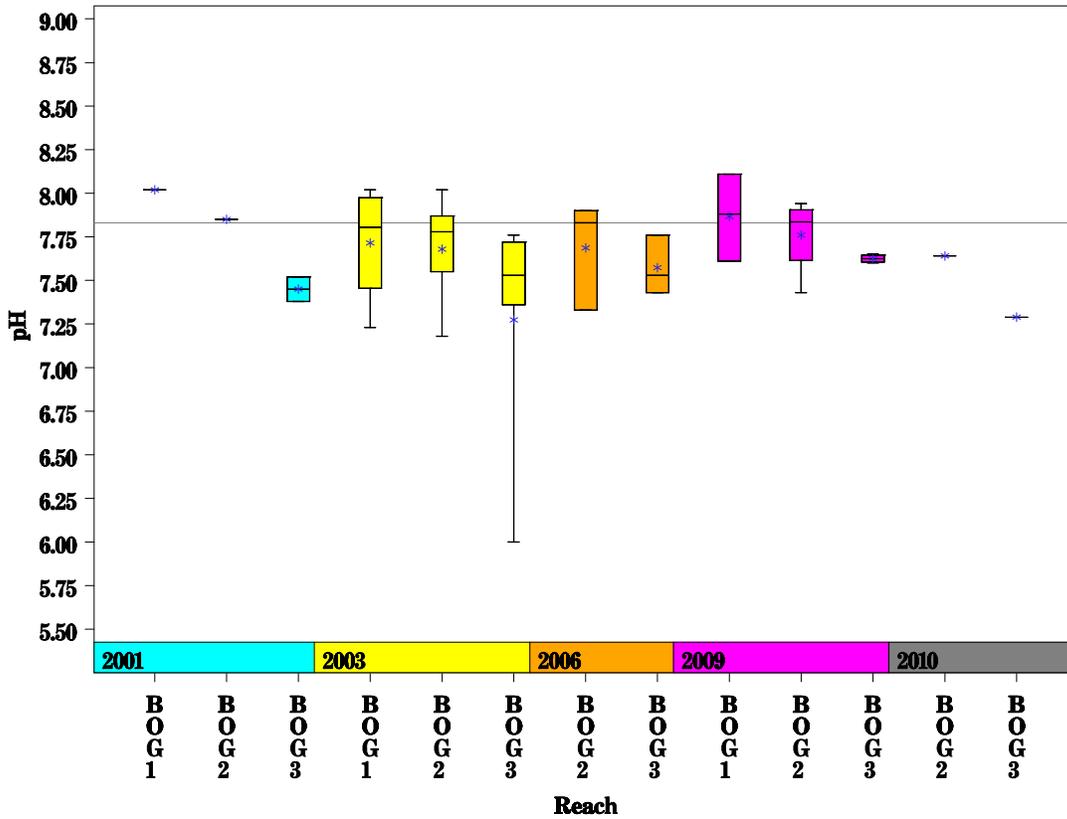
Parameter = WATER TEMPERATURE Unit = Deg C Watershed = Boggy Creek



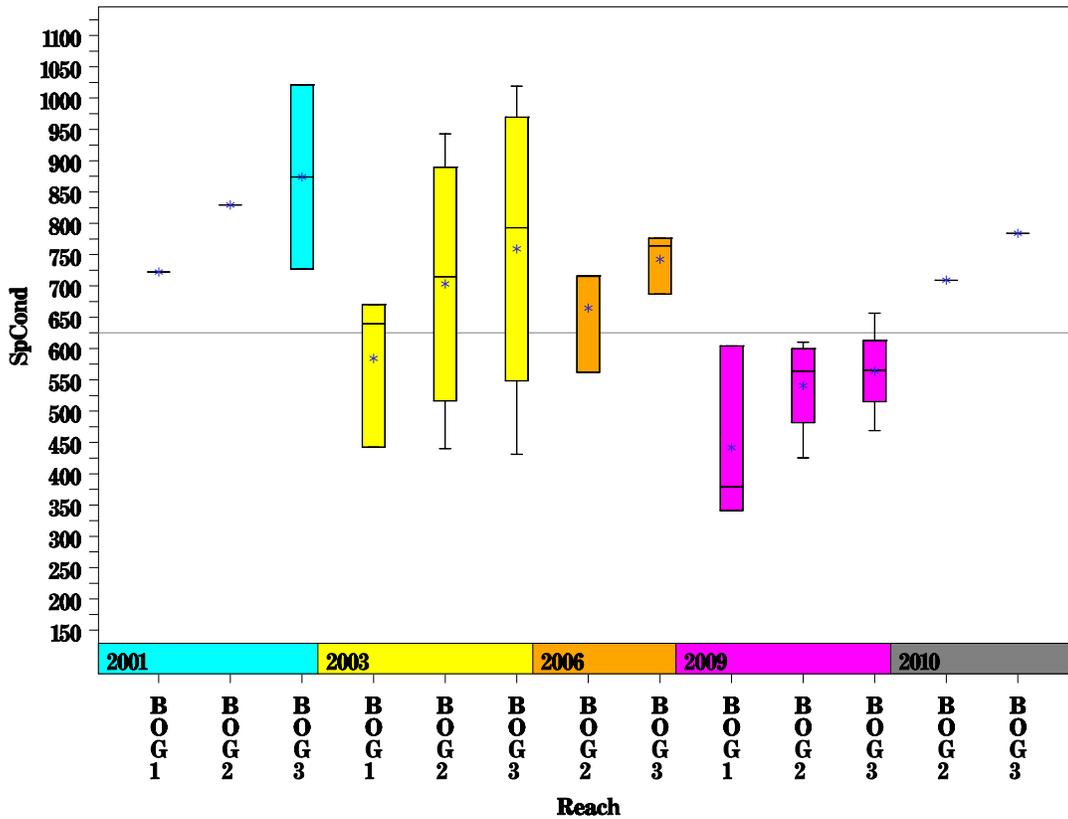
# Boggy Creek (North) Watershed

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

Parameter = PH Unit = Standard units Watershed = Boggy Creek



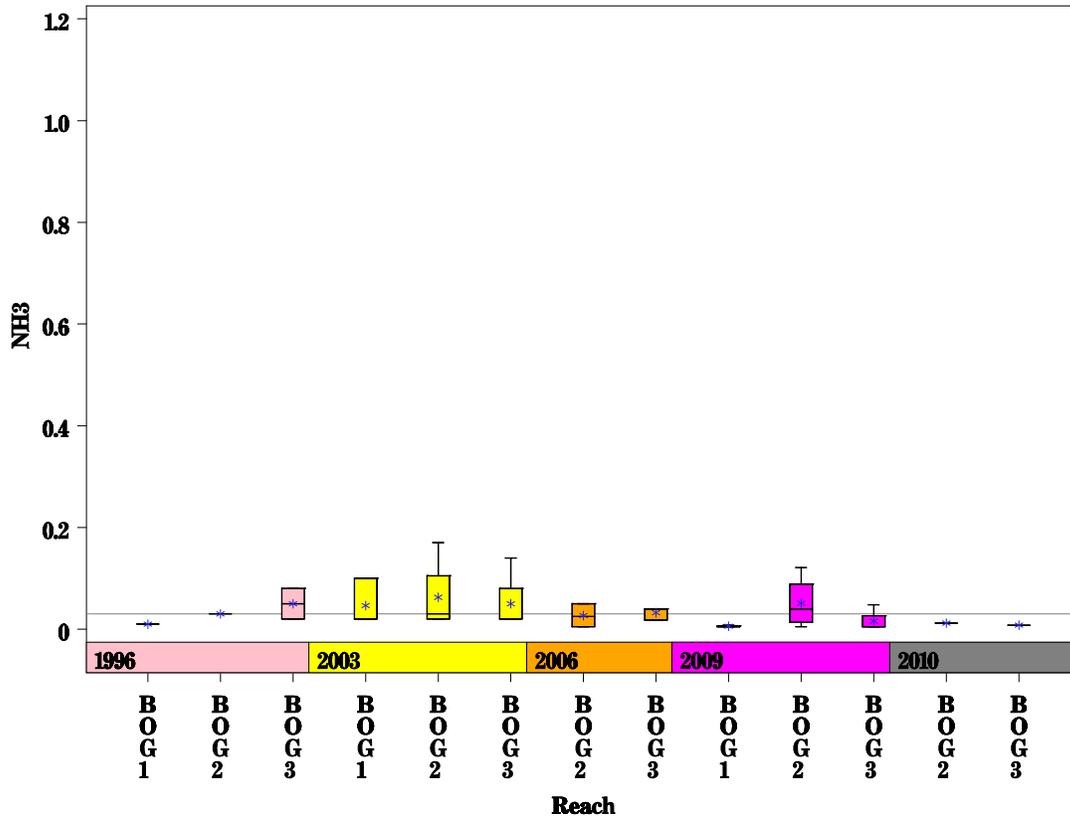
Parameter = CONDUCTIVITY Unit = uS/cm Watershed = Boggy Creek



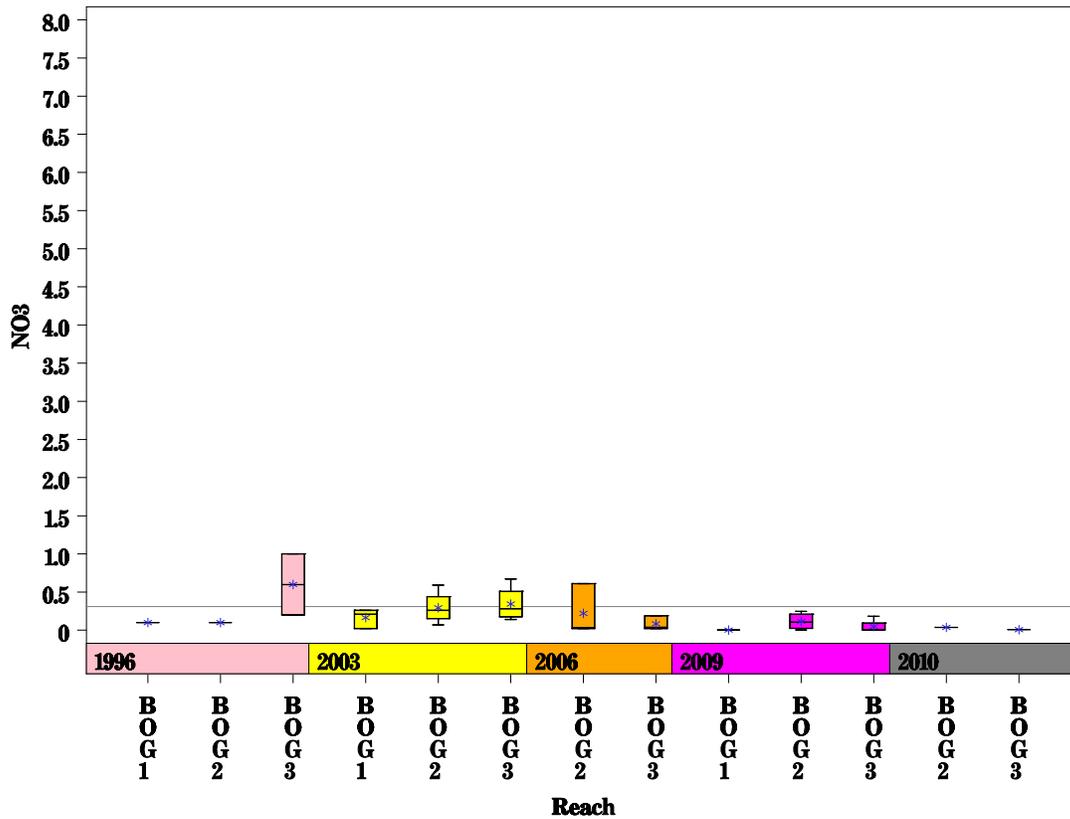
# Boggy Creek (North) Watershed

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

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



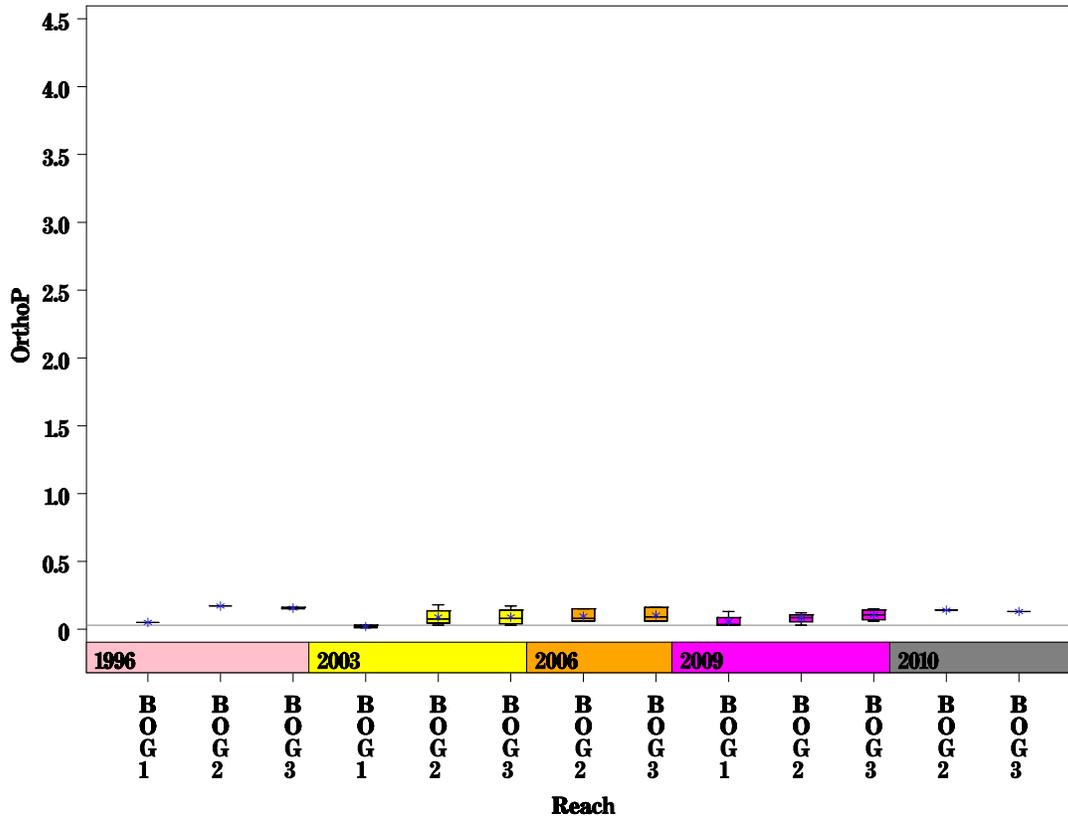
Parameter = NITRATE AS N Unit = MG/L Watershed = Boggy Creek



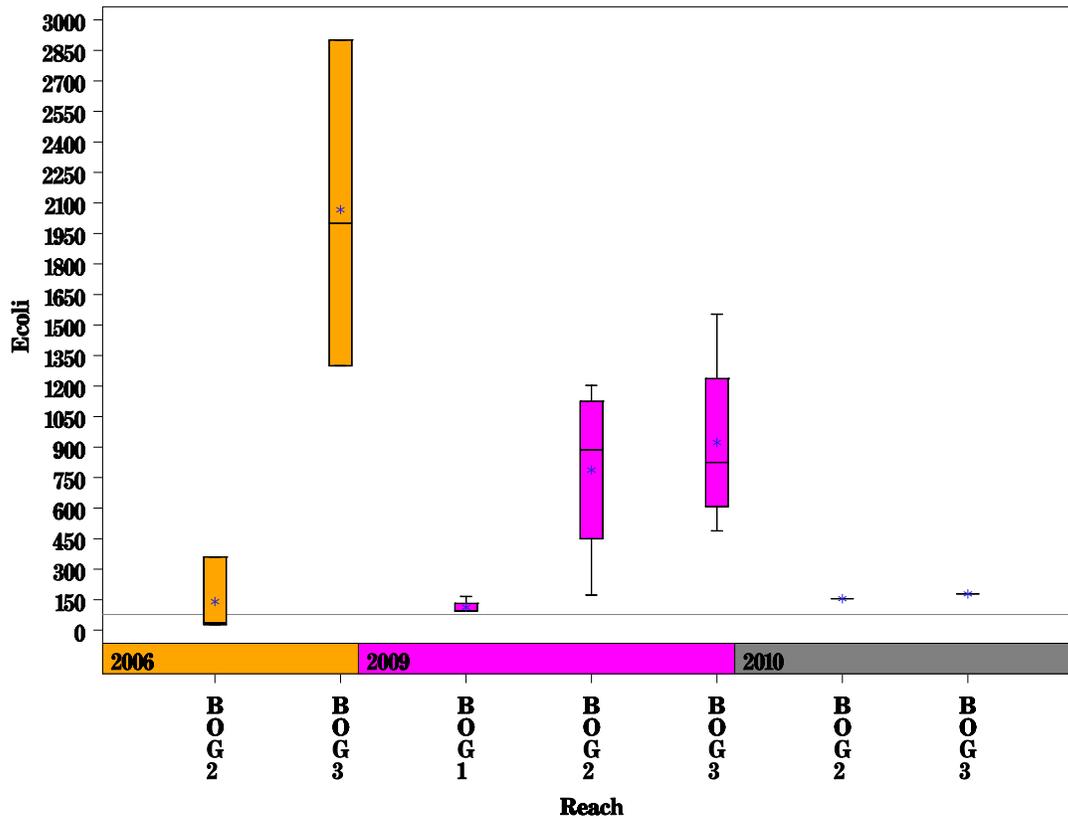
# Boggy Creek (North) Watershed

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

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



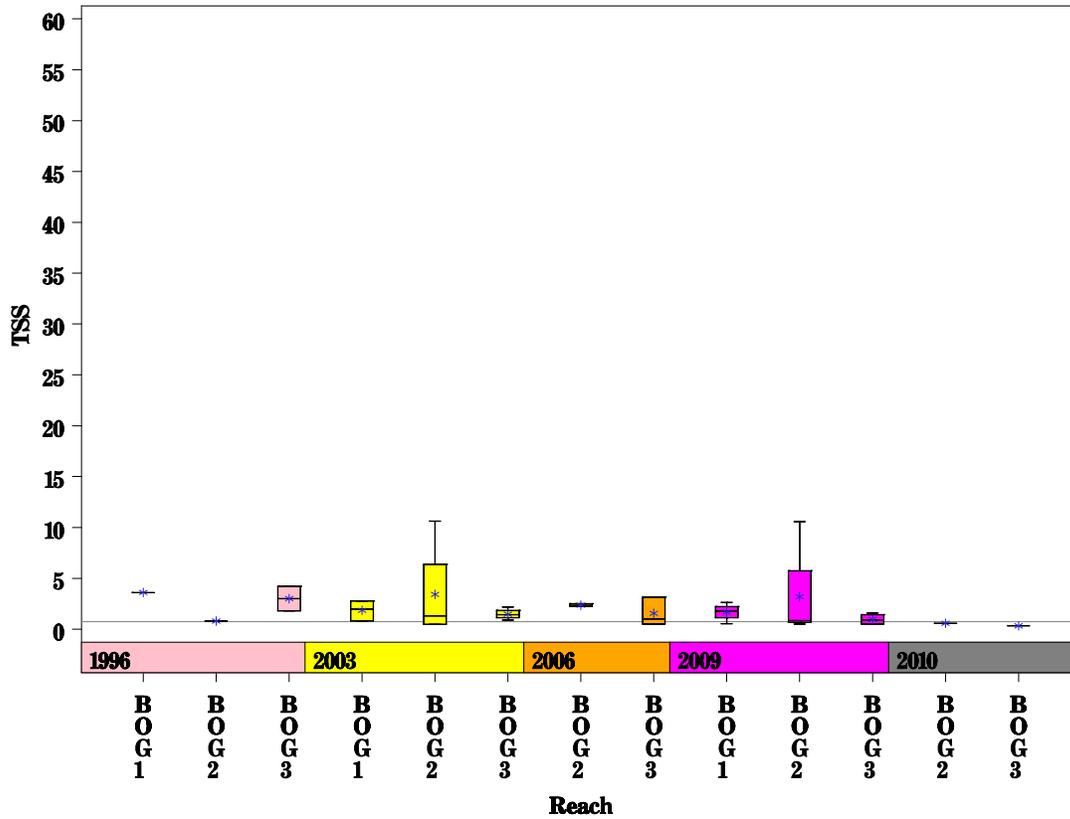
Parameter = E COLI BACTERIA Unit = MPN/dL Watershed = Boggy Creek



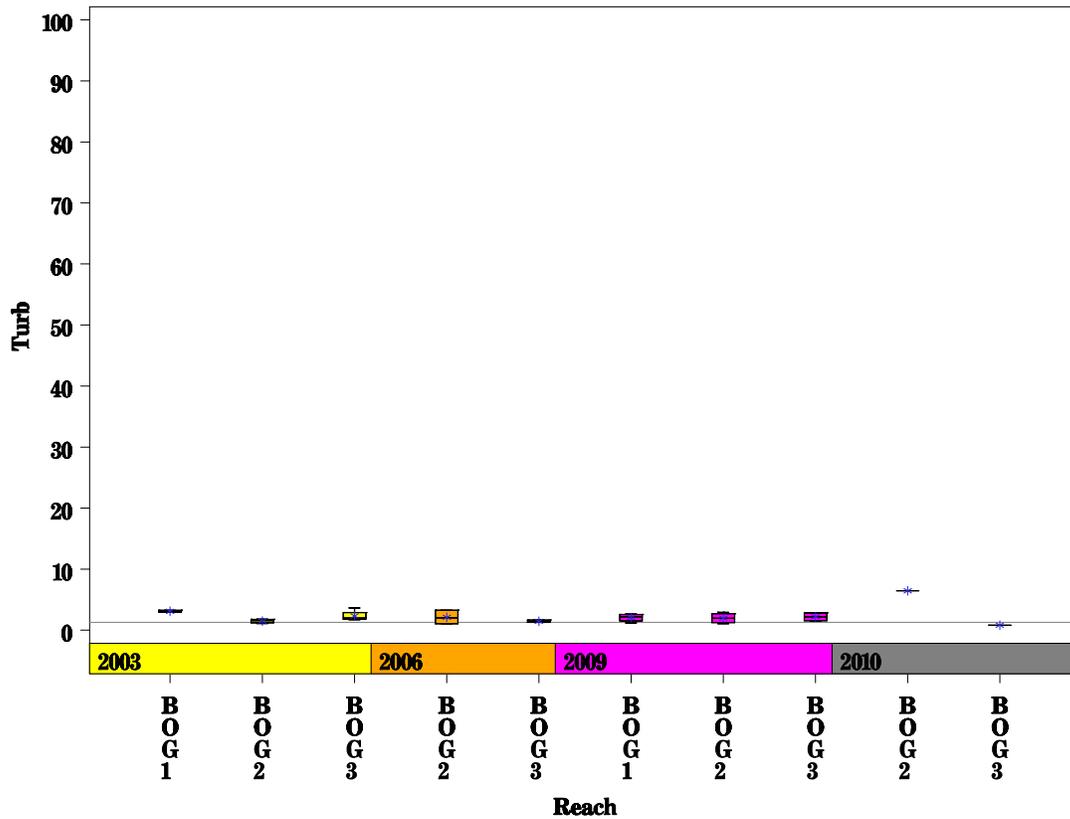
# Boggy Creek (North) Watershed

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

Parameter = TOTAL SUSPENDED SOLIDS Unit = MG/L Watershed = Boggy Creek

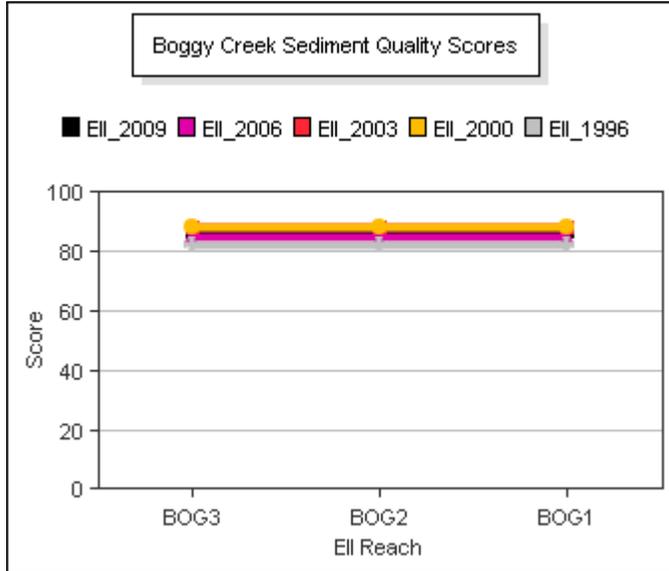
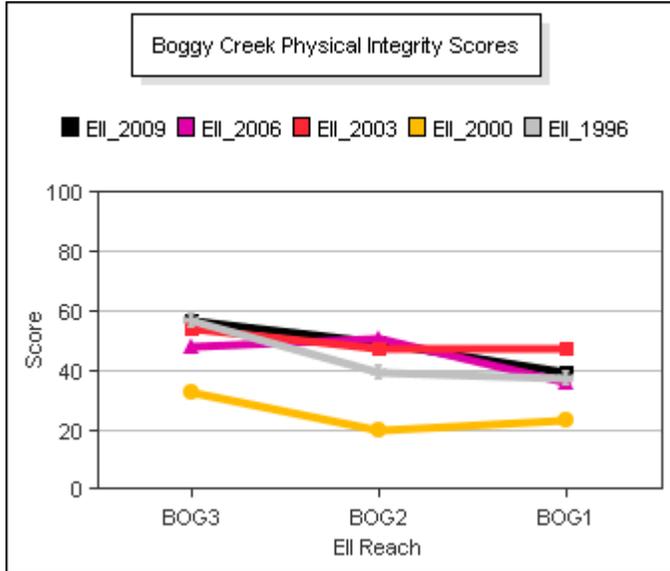
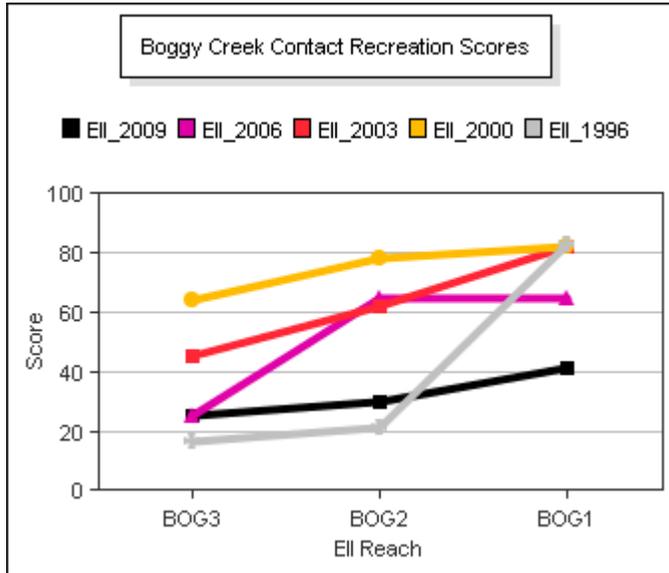
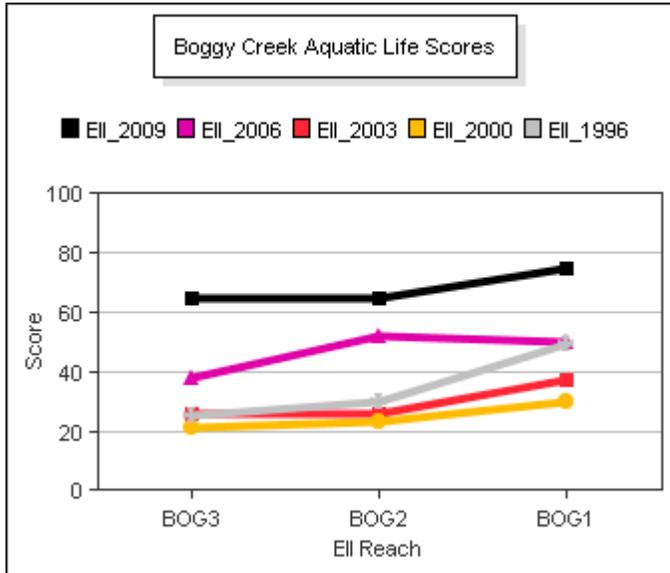
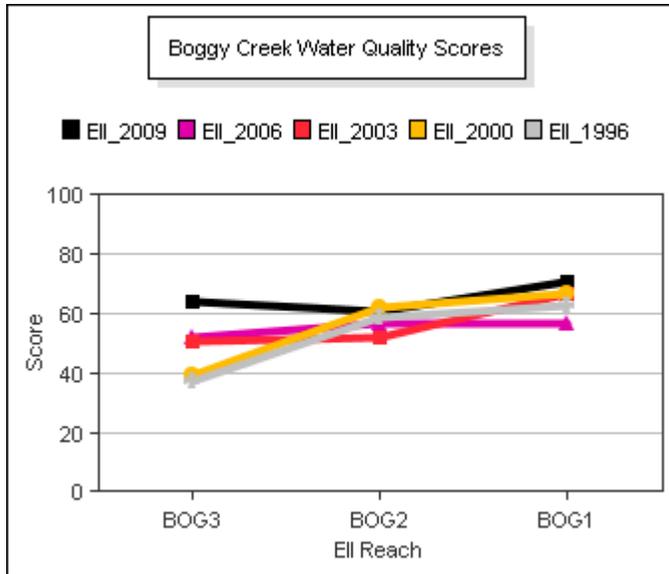
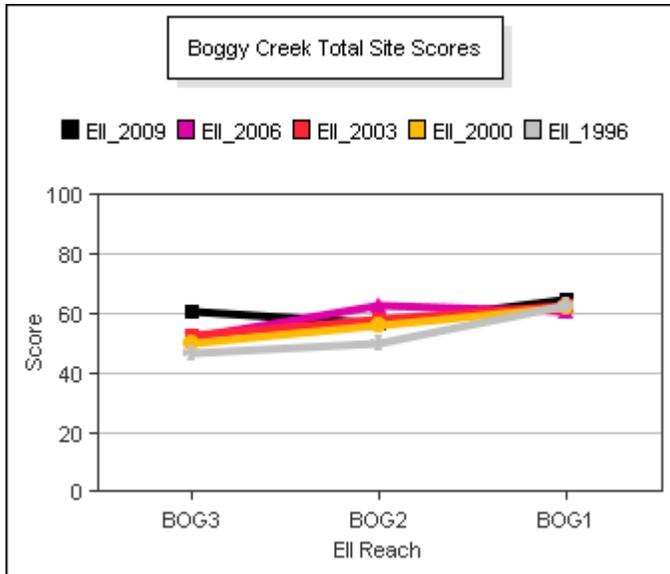


Parameter = TURBIDITY Unit = NTU Watershed = Boggy Creek



# Boggy Creek (North) Watershed

## Score Summary – Reach scores for each sample year



# Boggy Creek (North) Watershed

## Site Photographs



493\_t00-ds-02\_13\_2001



493-t00-ds-05-29-2009



784\_t00-ds-02\_13\_2001



784\_t00-us-02\_13\_2001



837\_t00-ds-02\_13\_2001



837\_t00-ds-07\_06\_2006

# Boggy Creek (North) Watershed

## Site Photographs



837\_t00-us1-07\_06\_2006



837-t00-ur-06-02-2009



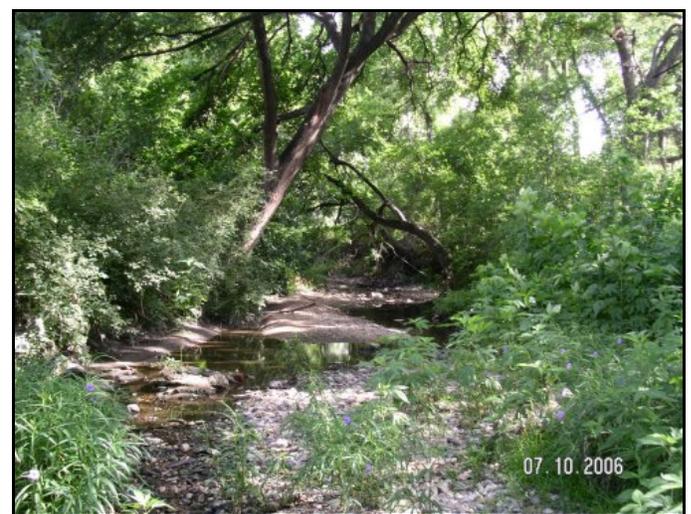
853\_t00-ds-02\_13\_2001



853\_t00-us-02\_13\_2001



2754\_t00-us-03\_14\_2003



2754\_t00-us1-07\_10\_2006

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