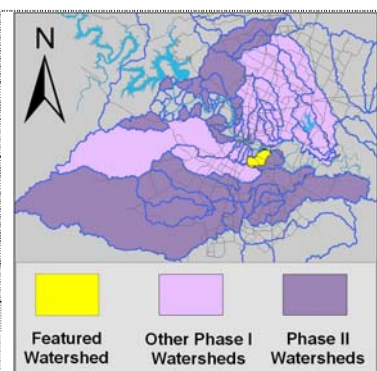


# Country Club Creek Watershed

## Summary Sheet

Catchment	Total area	5 square miles			
	Area in recharge	none			
	Creek length	7 miles			
	Receiving water	Colorado River			
Demographics	2000 population	14,620			
	2030 projected population	15,903			
	30 year projected % increase	9 %			
Land Use	Impervious cover (2003 est.)	East 18.96 %		West 30.47 %	
Overall EII Scores	west 2000 east	west 2003 east	west 2006 east	west 2009 east	
	60	55	54	47	51 42 51 47



### Flow Regime\* for Sample Sites on Country Club (East and West) Creek

Site #	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	Oct WQ	Dec WQ
1475	E. Country Club at ACC						B	n	n		B	n	n	n	n	B
848	E. Country Club below Grove	B	B	B	B	B										
850	W. Country Club at E. Oltorf	B	B	B	B	B	B	B	B	n	B	B	B	B	B	B
1474	W. Country Club at Krieg Field	B	B	B	B	n	n	n	n	n	n	n	n	n	n	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 Country Club (East and West) Creek

Summary of 2009 Data for Country Club (East and West) Creek					
2009 Summary	Parameter	Mean	Max	Min	Discussion
Physicochemical	D.O. mg/l	7.0	10.4	5.9	Generally below average, but within normal range
	pH st.units	7.7	8	7.6	Within normal range
	Cond uS/cm	893	1326	646	Generally elevated conductivity, especially in East Country Club
Nutrients	NH <sub>3</sub> mg/l	0.06	0.426	0.005	Some elevated concentrations in West Country Club
	NO <sub>3</sub> mg/l	0.07	0.27	0.004	Within normal range
	Ortho P mg/l	0.12	0.22	0.05	Within normal range
Sediment Load	TSS mg/l	3.9	8.0	1.1	Chronically elevated concentrations
	Turbidity ntu	3.1	4.5	1.7	Chronically elevated levels
Biology	E.Coli /100ml	427	2420	27	Generally higher than average concentrations with a few very high
	Benthic Macs	Lack of reliable baseflow at mouth sites lower overall score. Generally low diversity and pollution-tolerant			
	Diatoms	Country Club West (site 850) had low Cymbella richness, but good percent motile taxa and good diversity at a small riffle that maintains suitable habitat and reliable flow. CC East site (1475) dry during survey.			

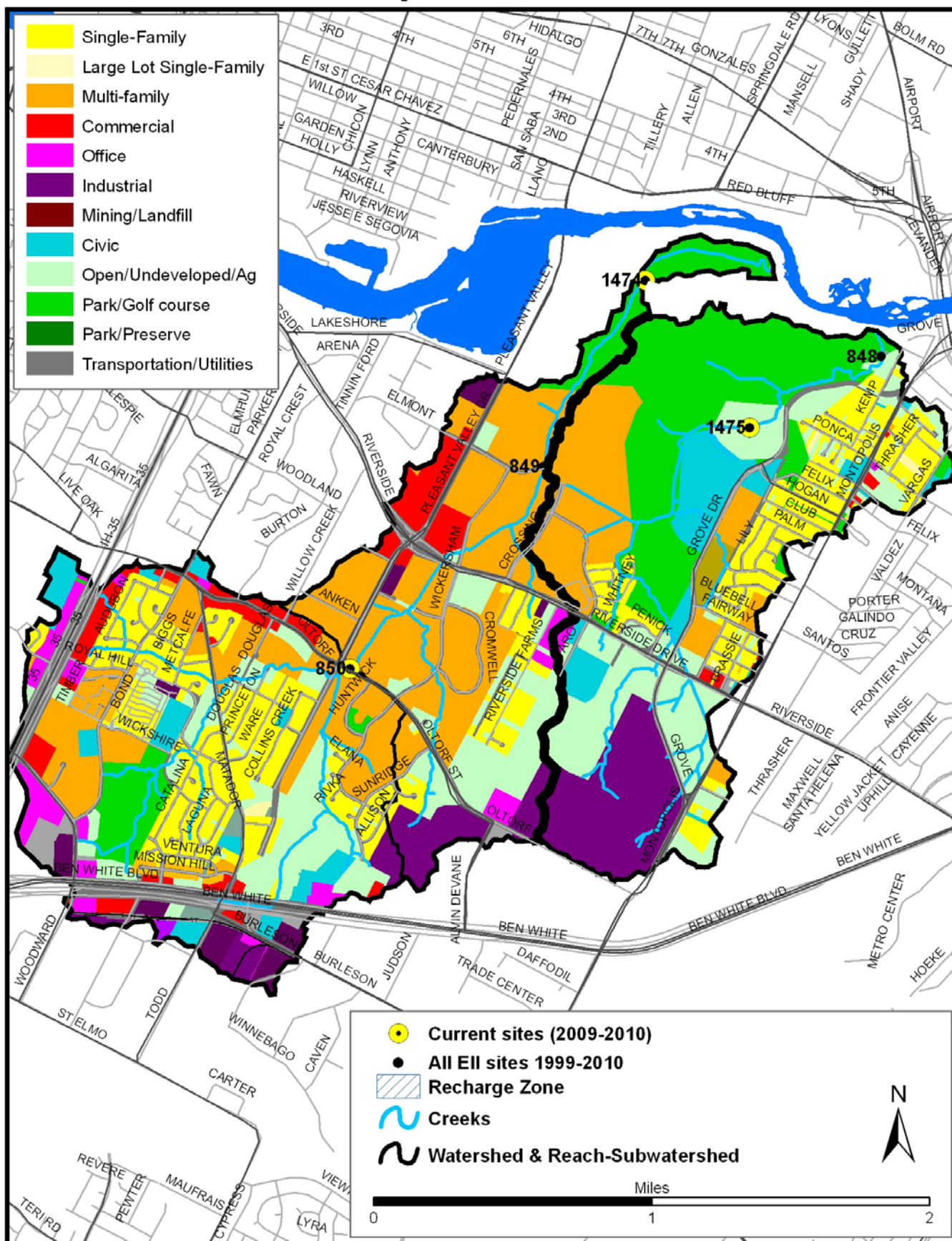
### Index scores\* for Country Club (East and West) sites by year

Reach	Site	Site Name	Year	Water Quality	Sediment**	Contact Recreation	Non-Contact Recreation	Physical Integrity	Aquatic Life	Benthic subindex	Diatom subindex	Total EII Score
CCE1	848	East Country Club Below Grove Dr	2000		87		53	31	48	53	43	55
CCW1	1474	West Country Club @ Krieg Fields	2000	52	87	72	78	52	43	44	42	64
CCW2	850	West Country Club @ East Oltorf	2000	54	87	73	71	28	22	29	14	56
CCE1	848	East Country Club Below Grove Dr	2003	31	70	59	58	33	29	20	37	47
CCW1	1474	West Country Club @ Krieg Fields	2003	50	70	57	81	57	49	35	63	61
CCW2	850	West Country Club @ East Oltorf	2003	48	70	51	54	55	42	36	48	53
CCE1	1475	East Country Club @ ACC	2006	54	85	43	45	24				42
CCW1	1474	West Country Club @ Krieg Fields	2006		66		53	52				43
CCW2	850	West Country Club @ East Oltorf	2006	58	66	39	78	59	46	41	51	58
CCE1	1475	East Country Club @ ACC	2009	50	79	25	45	60	23	23		47
CCW1	1474	West Country Club @ Krieg Fields	2009	55	69	28	58	53				44
CCW2	850	West Country Club @ East Oltorf	2009	50	69	34	78	57	64	43	84	59

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

\*\*sediment samples only collected at the downstream site

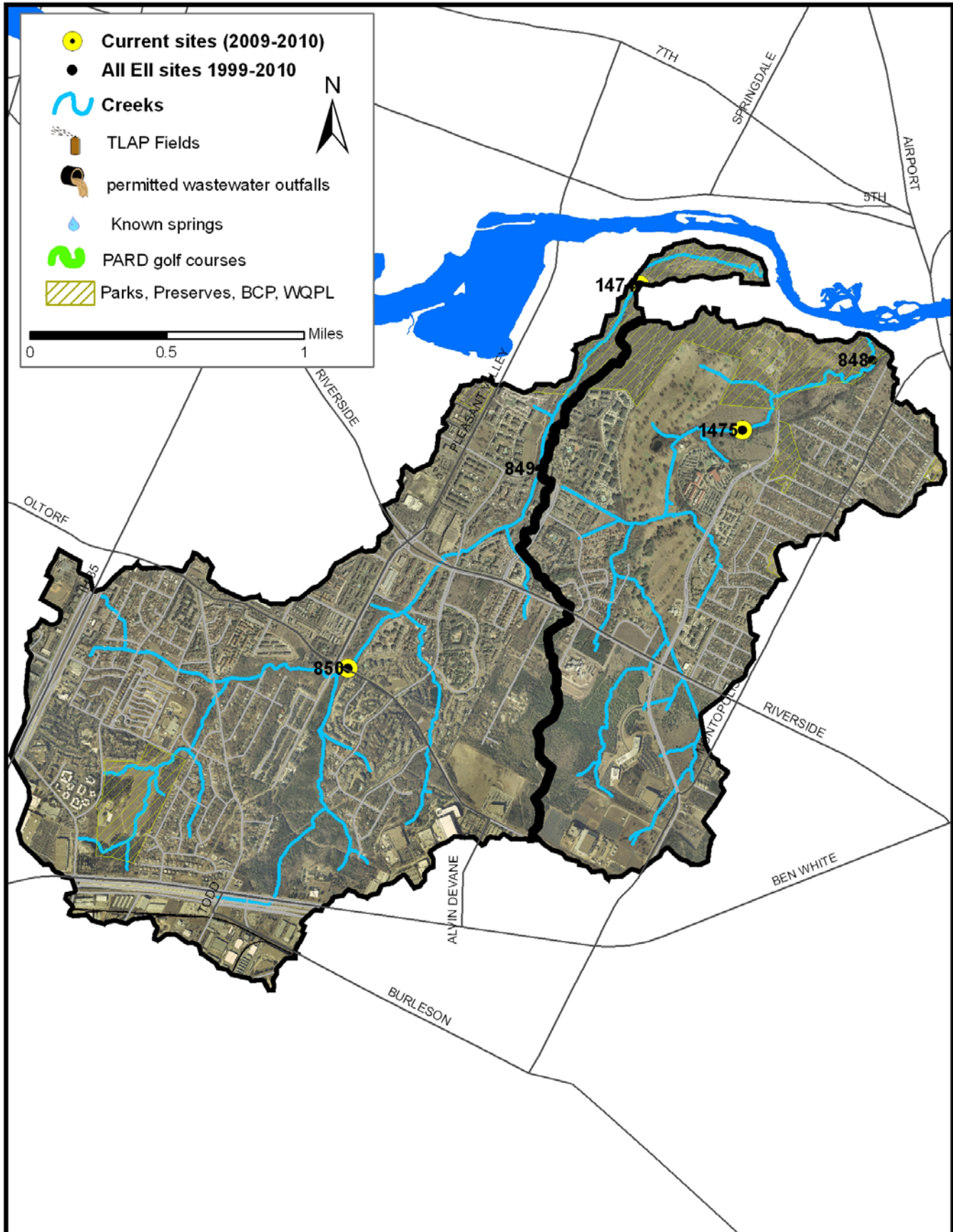
100-87.5 Excellent 87.5-75 V. Good 75-62.5 Good 62.5-50 Fair 50-37.5 Marginal 37.5-25 Poor 25-12.5 Bad 12.5-0 V. Bad





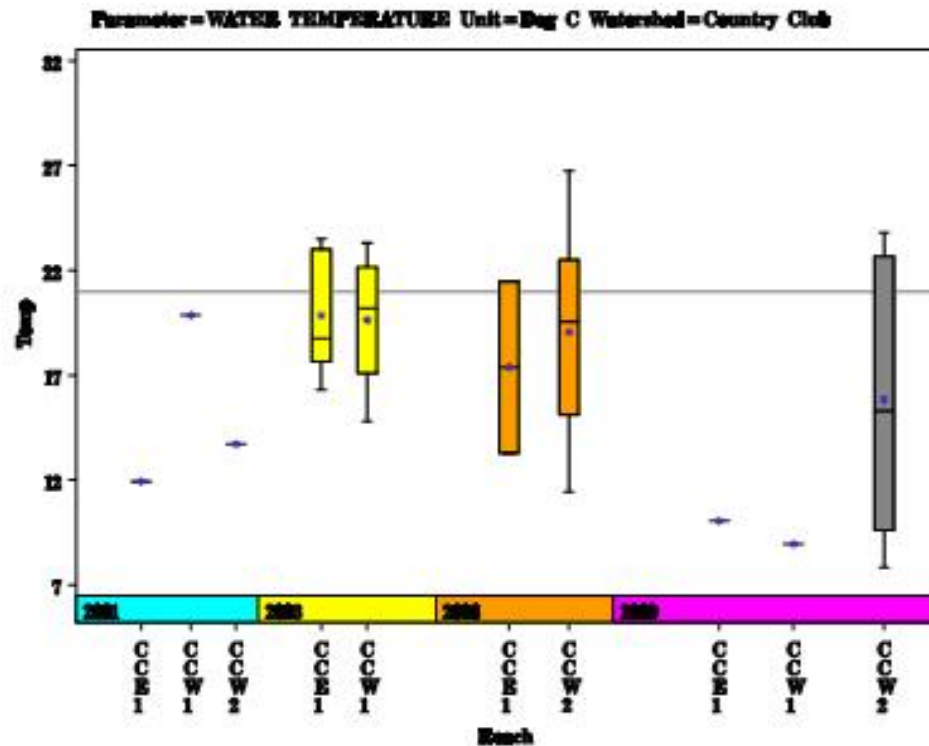
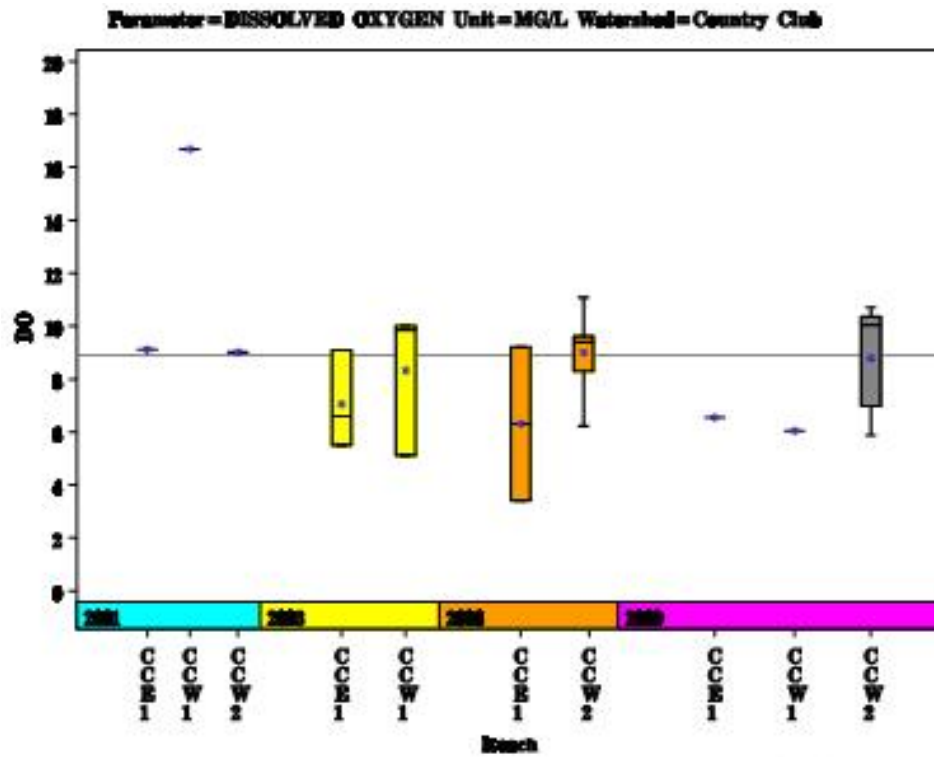
# Country Club Creek Watershed

## Aerial Map



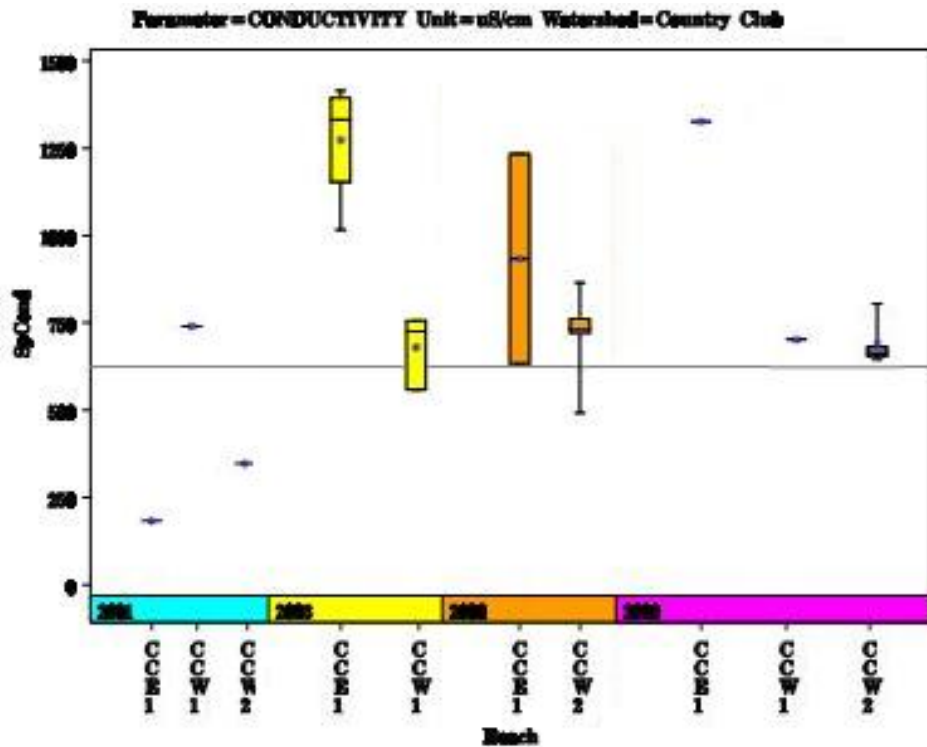
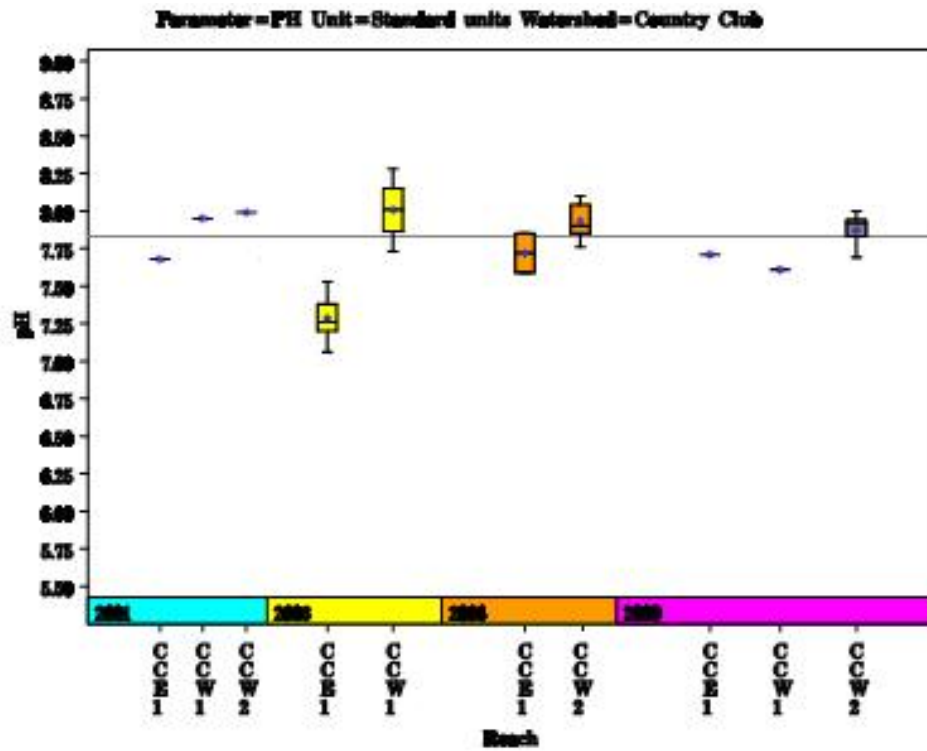
# Country Club Creek Watershed

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



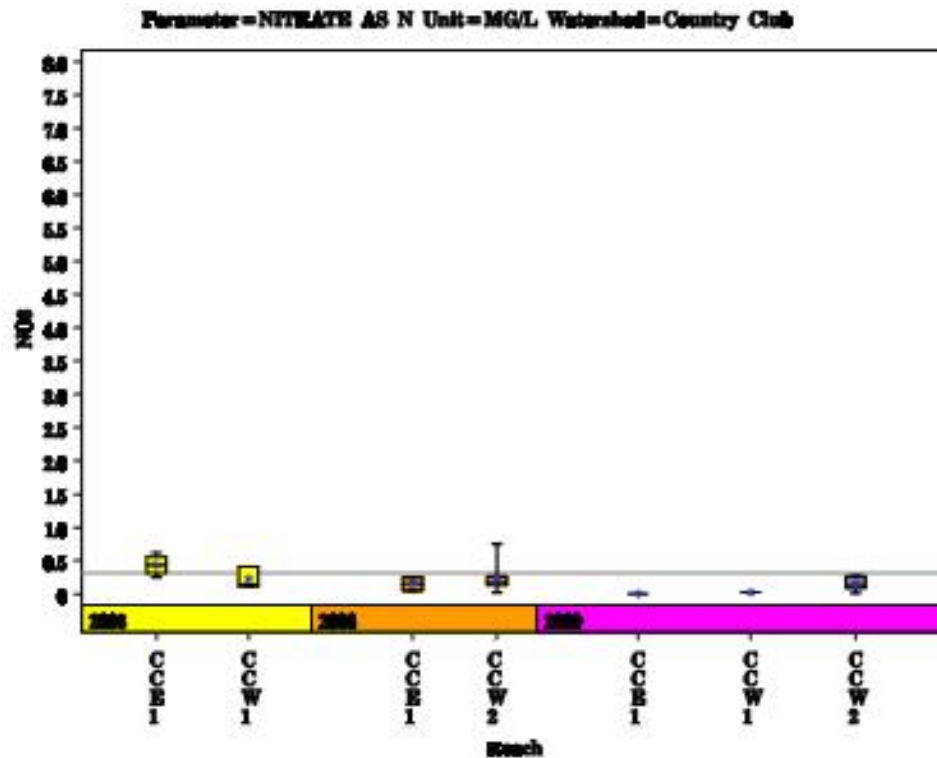
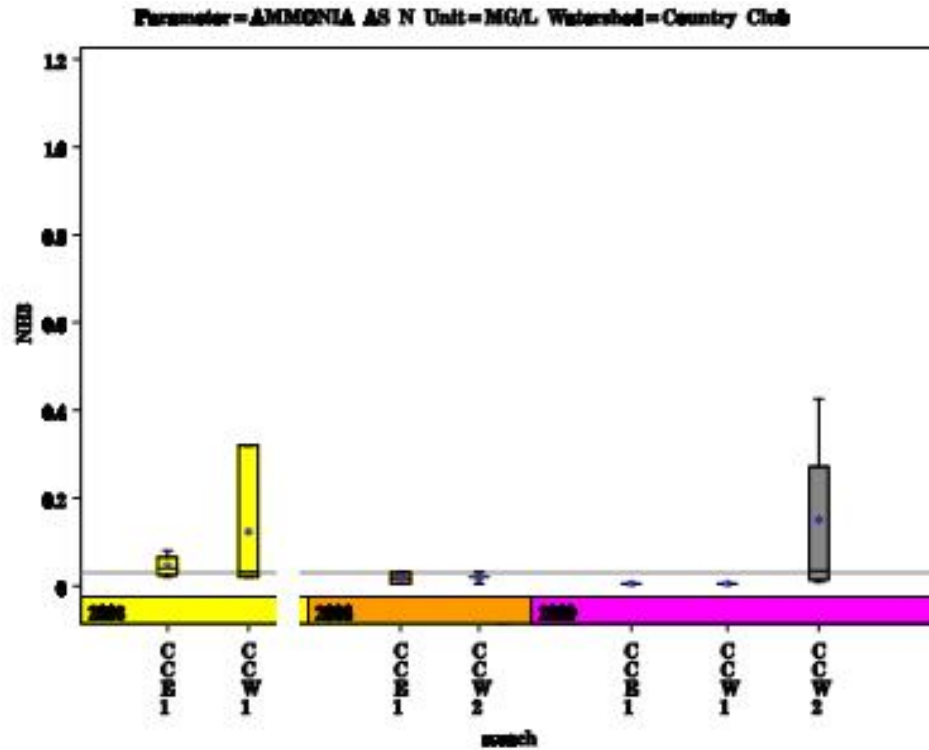
# Country Club Creek Watershed

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



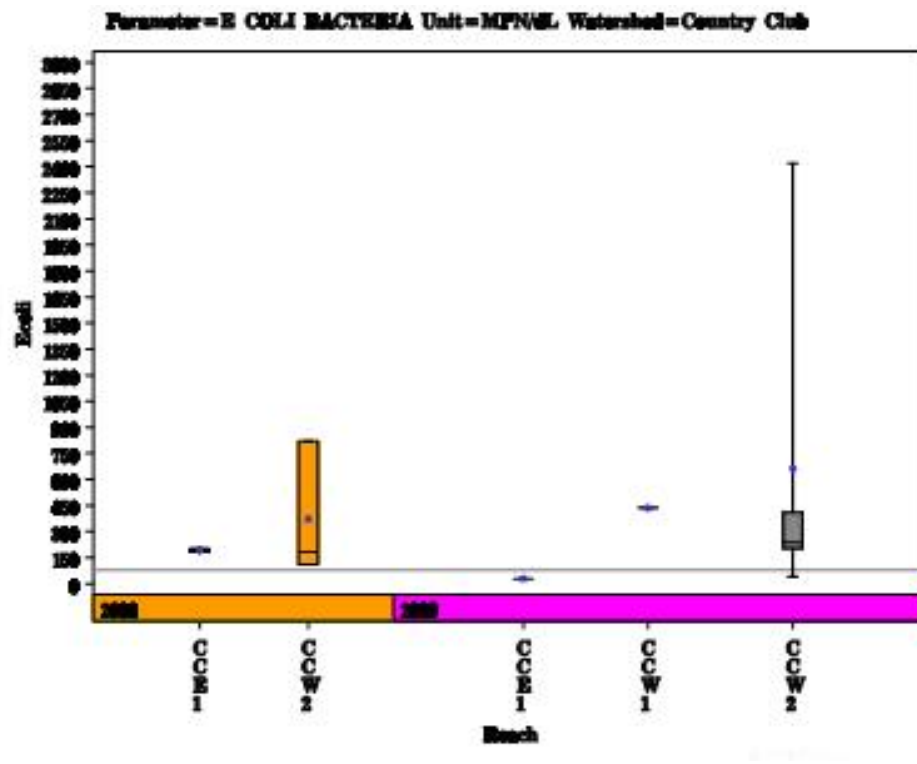
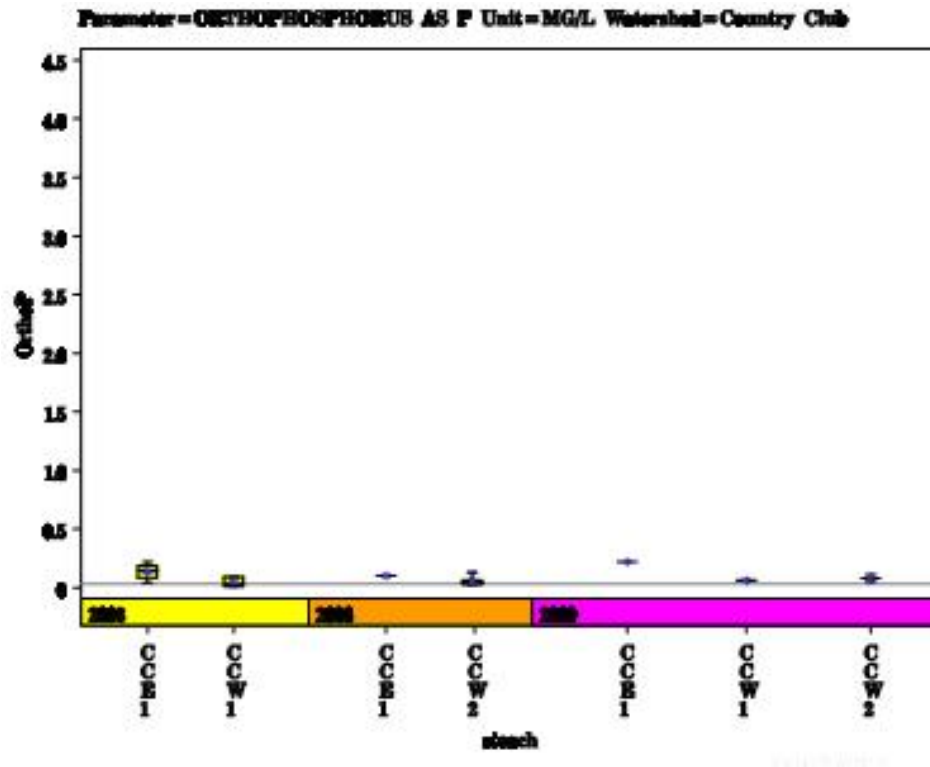
# Country Club Creek Watershed

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



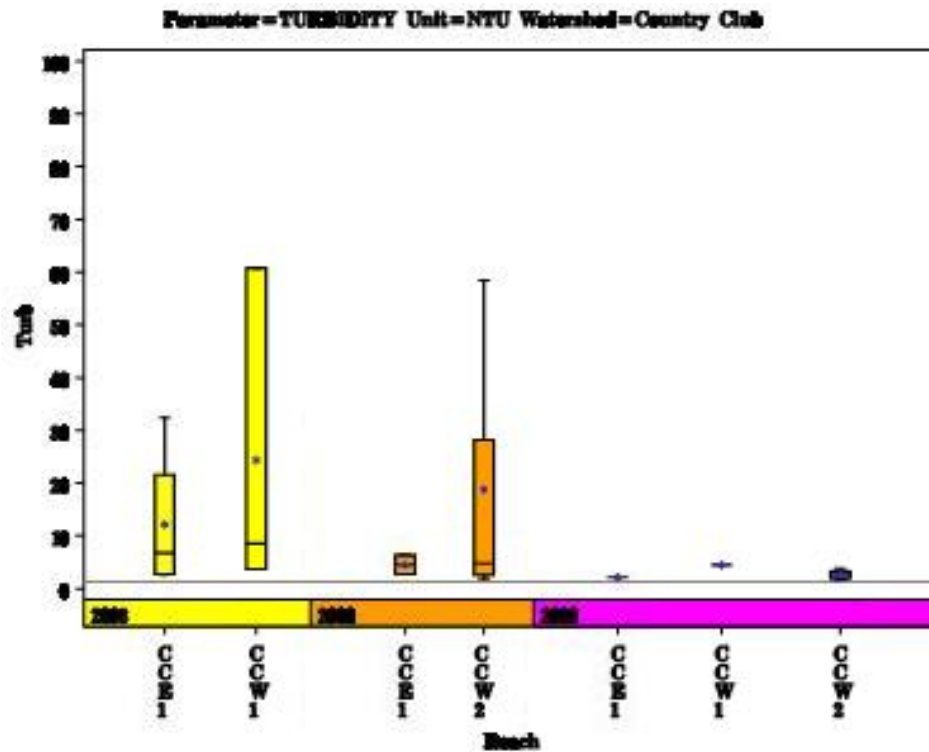
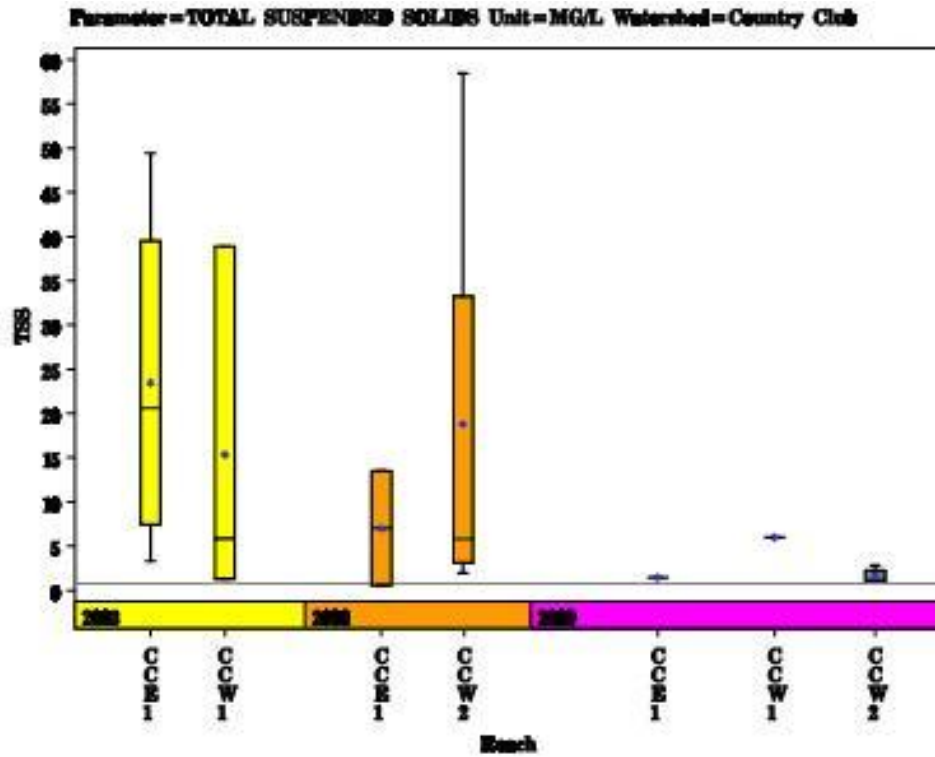
# Country Club Creek Watershed

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



# Country Club Creek Watershed

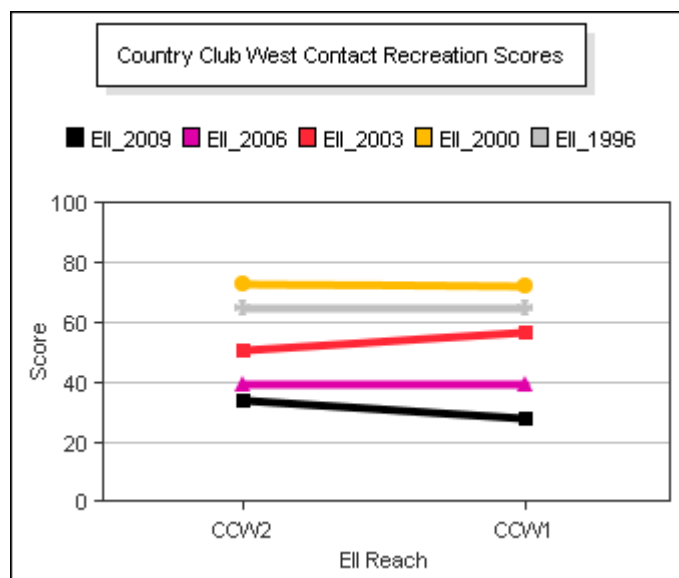
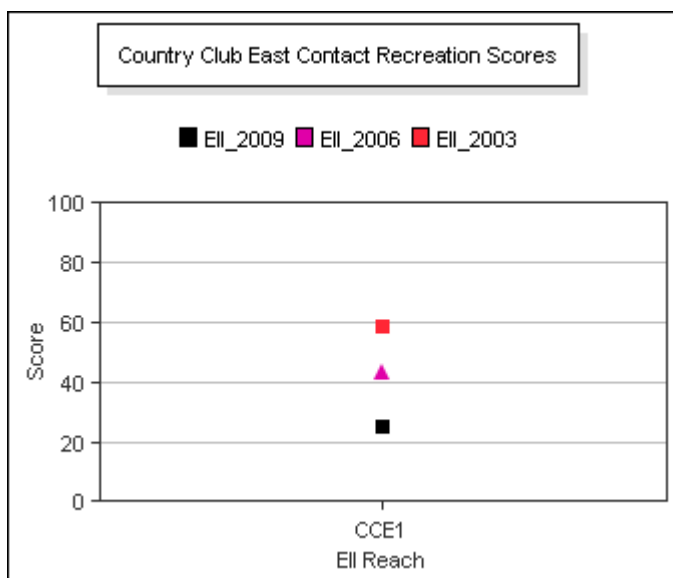
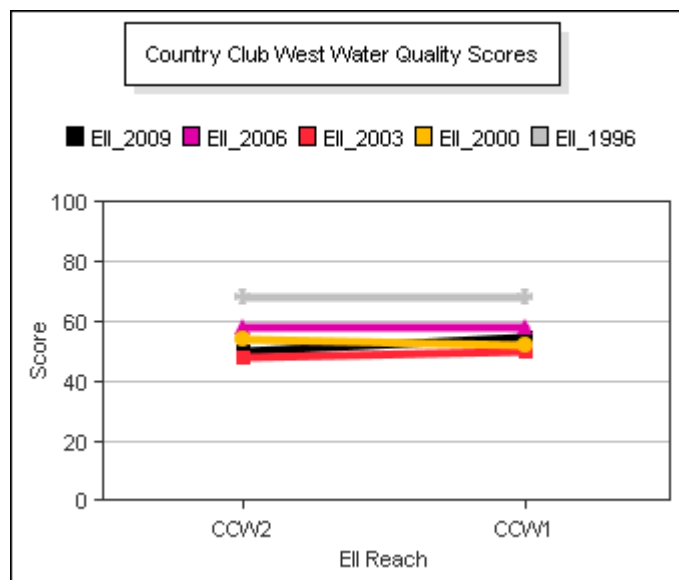
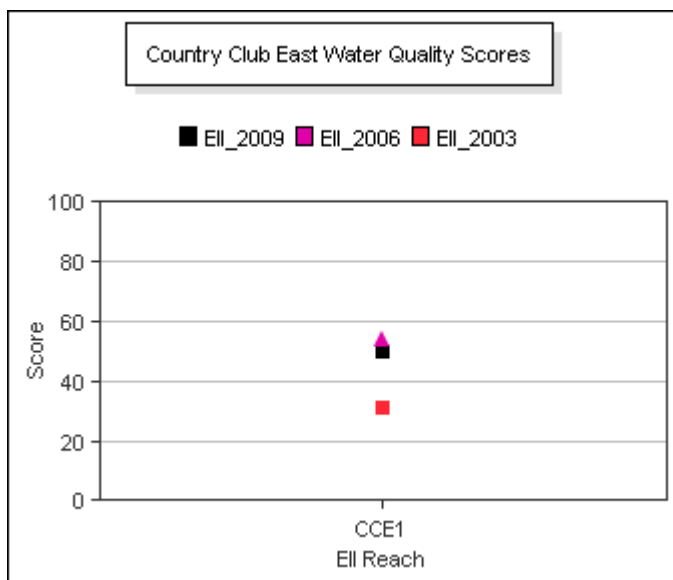
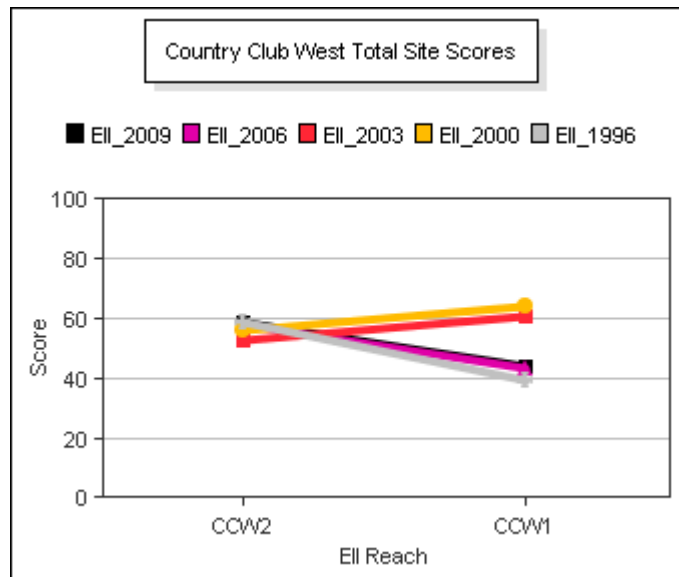
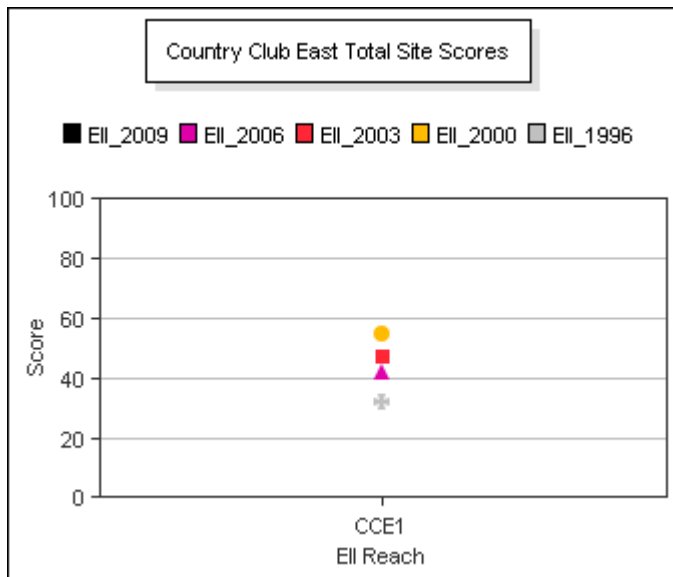
Data Summary Graphs – Total Suspended Solids and Turbidity (Downstream to Upstream by Year)





# Country Club Creek Watershed

Score Summary – Reach scores for each sample year



# Country Club Creek Watershed

## Site Photographs



1475\_t00-us-07\_06\_2006



1475-t00-us-05-29-2009



848\_t00-ds-12\_14\_2000



848\_t00-us-12\_14\_2000



848\_t00-ds-03\_13\_2003



848\_t00-us-03\_13\_2003



# Country Club Creek Watershed

## Site Photographs



849\_t00-ds-02\_16\_2001



849\_t00-us-02\_16\_2001



850\_t00-us-12\_14\_2000



850-t00-ur-06-01-2009



1474\_t00-us-07\_06\_2006



1474-t00-us-05-29-2009

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