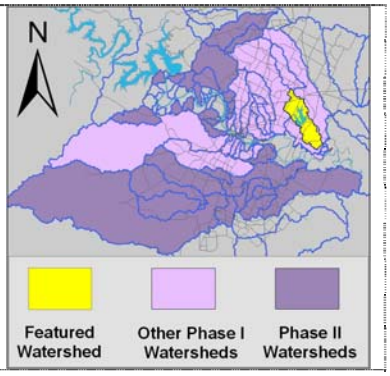
Decker Creek Watershed

Summary Sheet

Catchment	Total area	17 sq. miles			
	Area in recharge	0			
	Creek length	12 miles			
	Receiving water	Colorado River			
Demographics	2000 population	3,156			
	2030 projected population	12,341			
	30 year projected % increase	391 %			
Land Use	Impervious cover (2003 estimate)	17.19 %			
Overall EII Scores	1999	2002	2005	2008	2009
	63	65	62	60	68



Flow Regime* for Sample Sites on Decker Creek

Site # upstream to downstream	Site Name	2002					2005					2008					2009				
		Feb WQ	Feb Bio	May WQ	Aug WQ	Nov WQ	Mar WQ	Jun WQ	Jun Bio	Sep WQ	Dec WQ	Feb WQ	May WQ	Jun Bio	Sep WQ	Dec WQ	Feb WQ	Jun WQ	Jun-Bio	Oct WQ	Dec WQ
1196	Decker Cr at Lindell Ln	B	B	B	B	B	B	n	n	n	n	B	B	n	n	n	B	B	B	B	B
1197	Decker Cr. at FM 973	B																			
1974	Decker Cr. at Gilbert			B	B	B	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 = site not visited

Summary of 2009 data for Decker Creek

2009 Summary	Parameter	Mean	Max	Min	Discussion
Physicochemical	**D.O.** mg/l	7.7	11.9	4.4	Generally within normal range, with some below average concentrations
	pH st.units	7.9	8.2	7.6	Generally within normal range
	Cond uS/cm	654	753	554	Generally within normal range
Nutrients	**NH_3** mg/l	0.01	0.049	0.005	Generally within normal range
	NO_3 mg/l	0.01	0.041	0.004	Generally low or within normal range
	Ortho P mg/l	0.04	0.07	0.02	Generally low or within normal range
Sediment Load	**TSS** mg/l	26.2	62.7	0.5	Generally elevated concentrations throughout the watershed
	Turbidity ntu	27.7	74.3	4.7	Generally elevated levels throughout the watershed
Biology	**E.Coli** /100ml	453	2420	8	Within normal range, with two high concentration samples at site 1196
	Benthic Macs	Reliable baseflow at site 1974 supports excellent benthic community. Site 1196 largely pollution-intolerant			
	Diatoms	Good diversity and low % motile taxa at site 1974. Site 1196 not sampled due to lack of suitable substrate			

Index scores* for Decker Creek Sites by Year

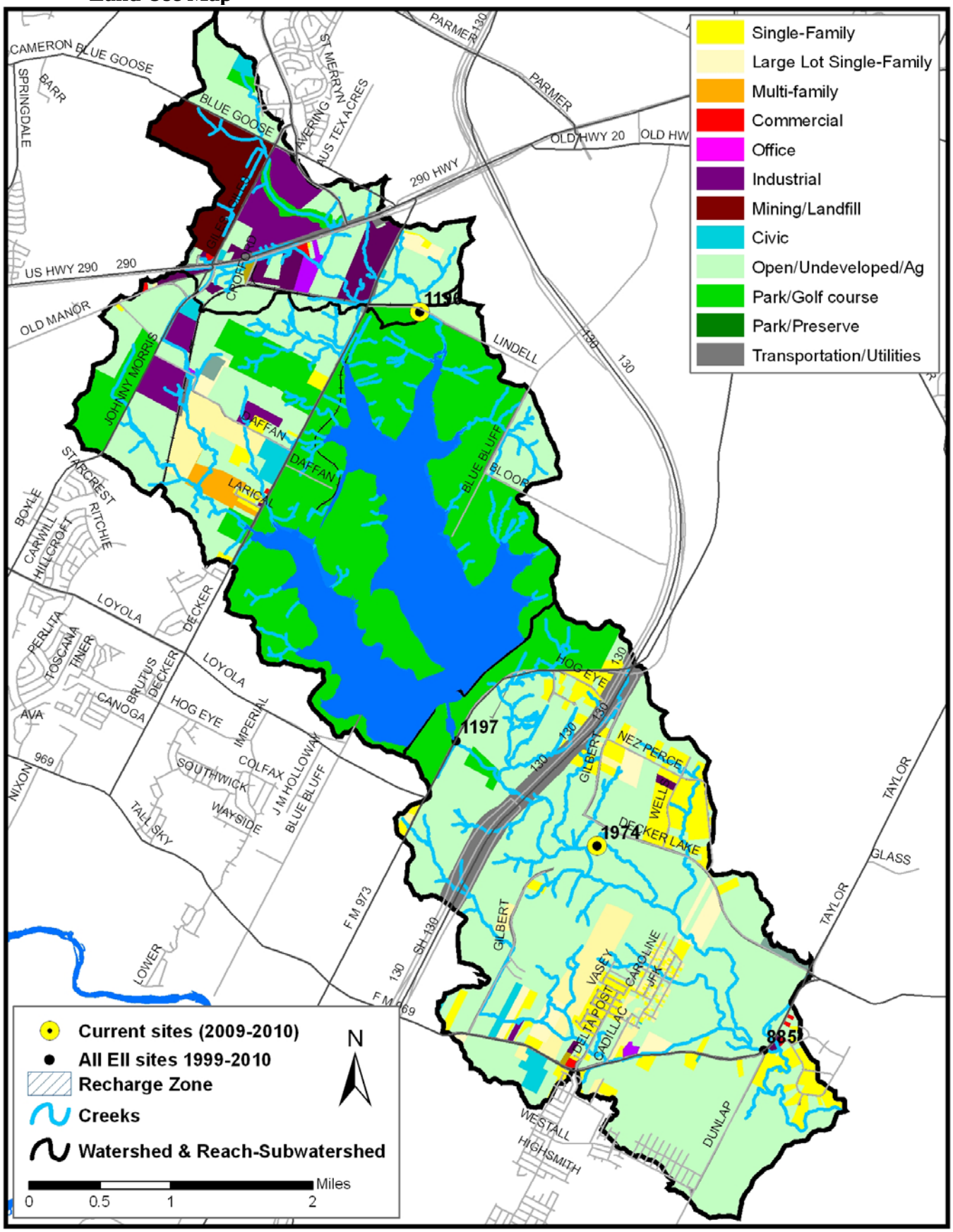
Reach	Site	Site Name	Year	Water Quality	Sediment**	Contact Recreation	Non-Contact Recreation	Physical Integrity	Aquatic Life	Benthic subindex	Diatom subindex	**Total EII Score**
DKR1	1999	Decker Cove	1999	46	84	74	73	50				55
DKR1	1197	Decker Creek @ FM973	1999	63	84	94	82	81	79	74	83	81
DKR3	1196	Decker Creek @ Lindell Lane	1999	51	84	84	31	66				53
DKR1	1197	Decker Creek @ FM973	2002	70	93	99	68	56				64
DKR3	1196	Decker Creek @ Lindell Lane	2002	54	93	87	66	55	40	51	29	66
DKR1	1974	Decker Creek @ Gilbert Road	2005	60	83	93	86	68	74	90	57	77
DKR3	1196	Decker Creek @ Lindell Lane	2005	40	83	47	43	62				46
DKR1	1974	Decker Creek @ Gilbert Road	2008	62	81	94	68	45	79	85	72	72
DKR3	1196	Decker Creek @ Lindell Lane	2008	51	81	70	28	60				48
DKR1	1974	Decker Creek @ Gilbert Road	2009	62	82	70	65	63	99	98	100	74
DKR3	1196	Decker Creek @ Lindell Lane	2009	65	82	46	61	53	65	65		62

* 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

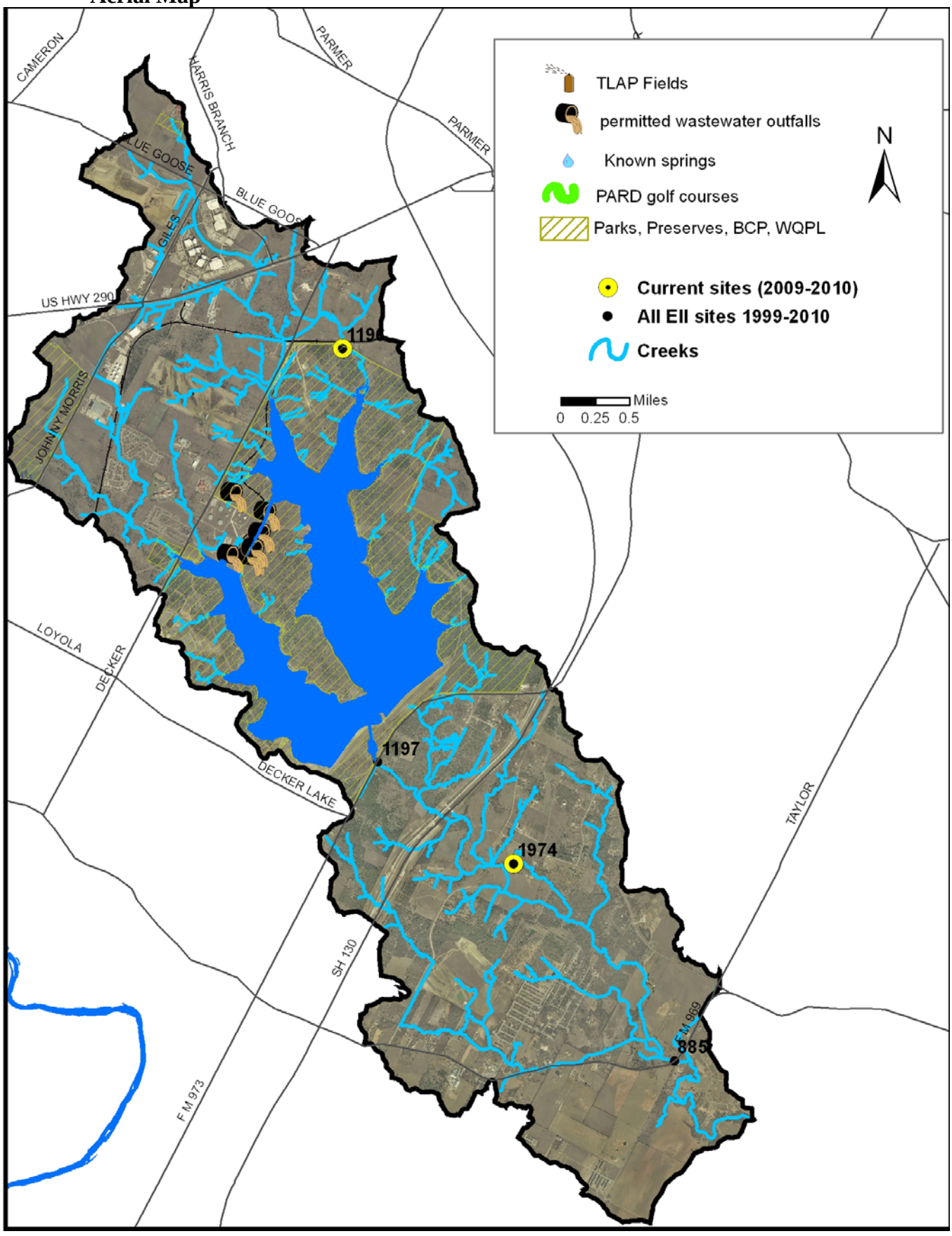
Decker Creek Watershed

Land Use Map



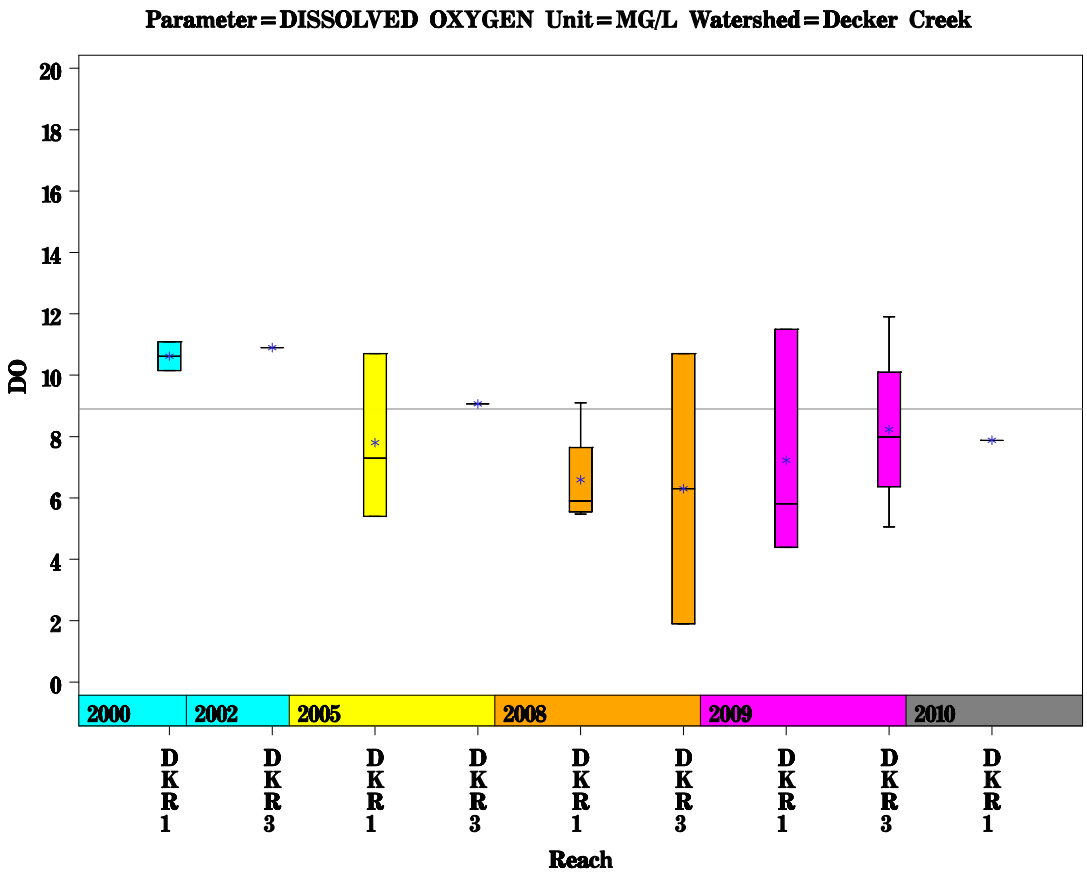
Decker Creek Watershed

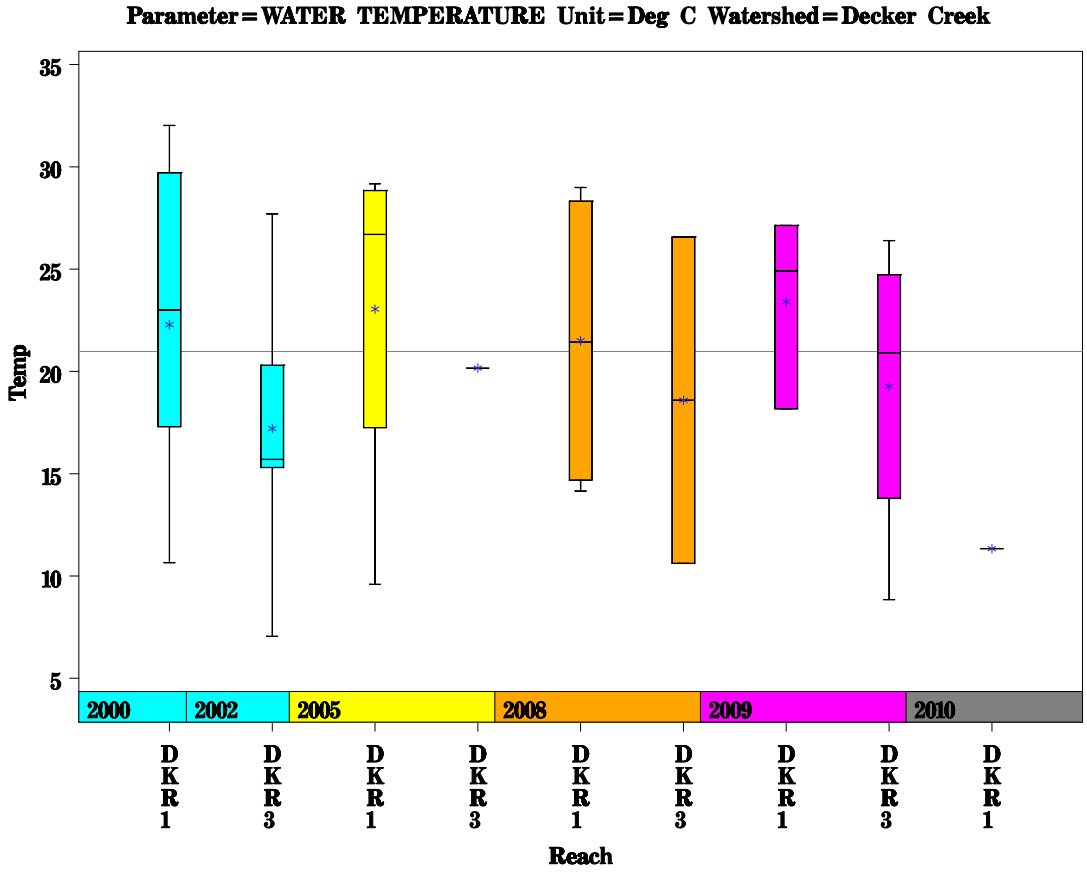
Aerial Map



Decker Creek Watershed

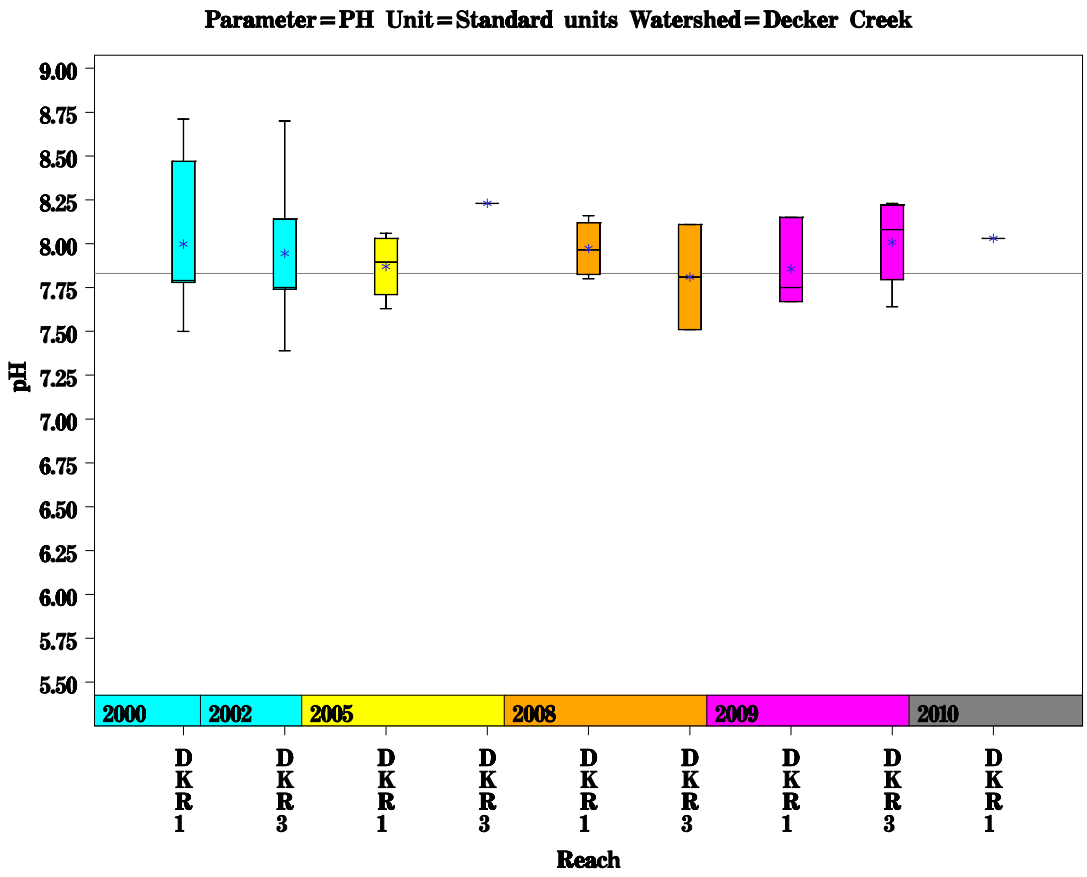
Data Summary Graphs – Dissolved Oxygen and Temperature (Downstream to Upstream by Year)

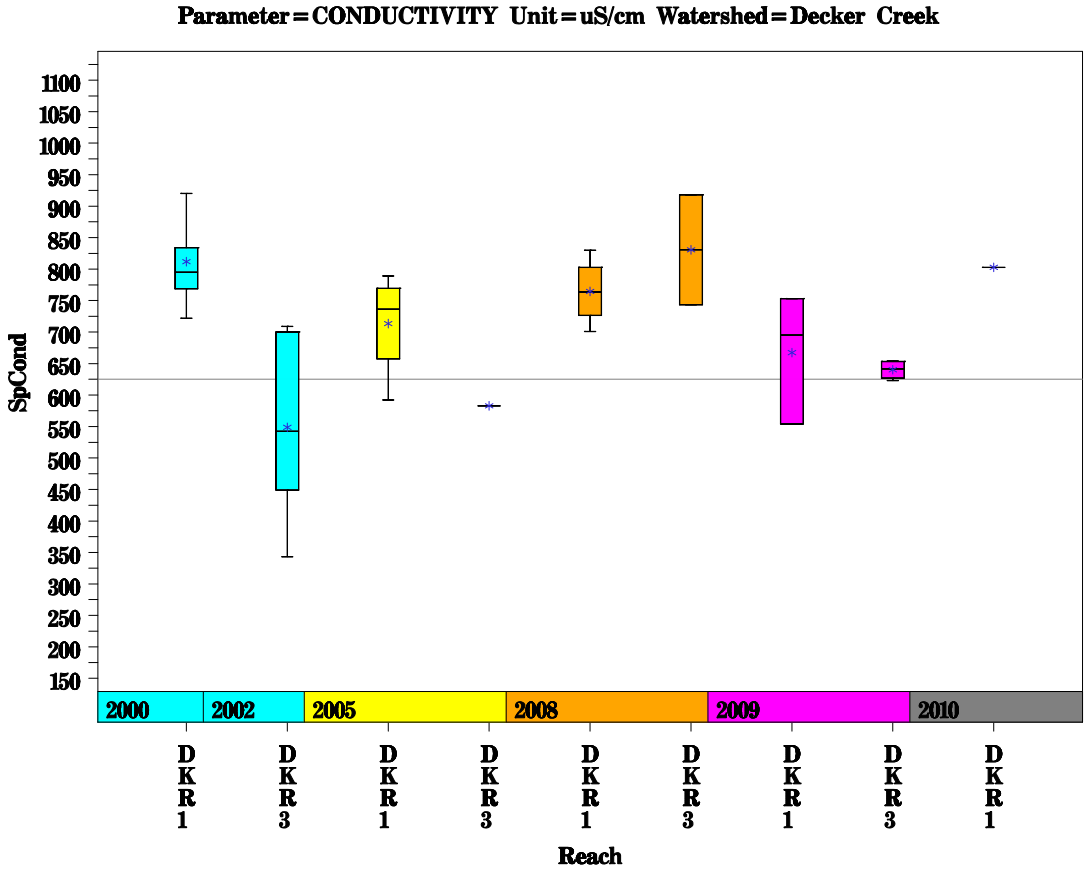




Decker Creek Watershed

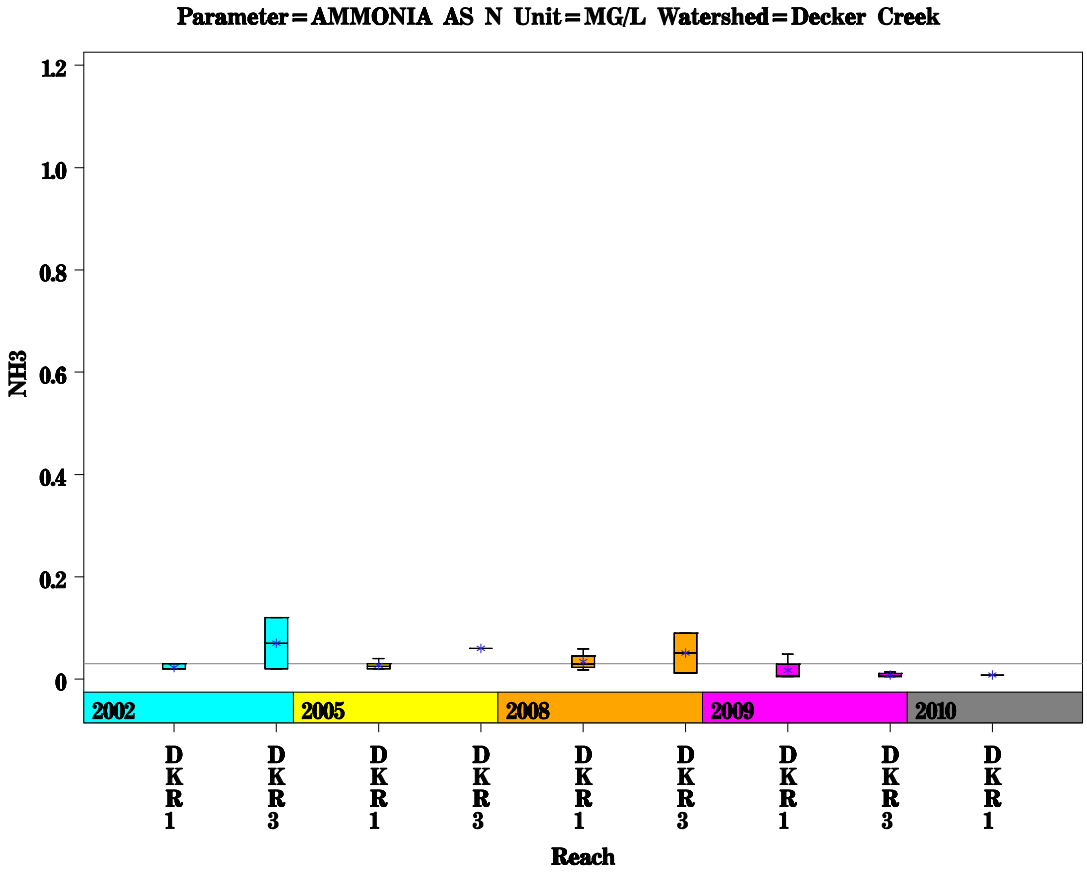
Data Summary Graphs – pH and Conductivity (Downstream to Upstream by Year)

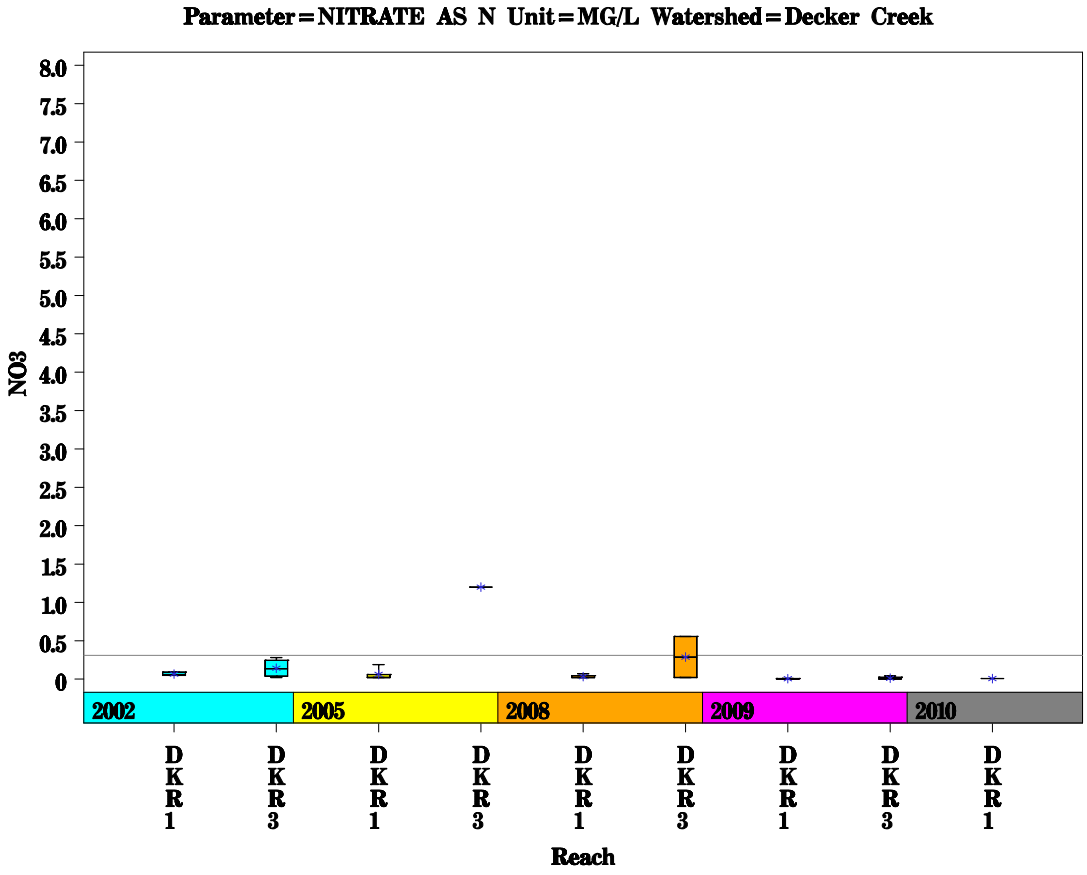




Decker Creek Watershed

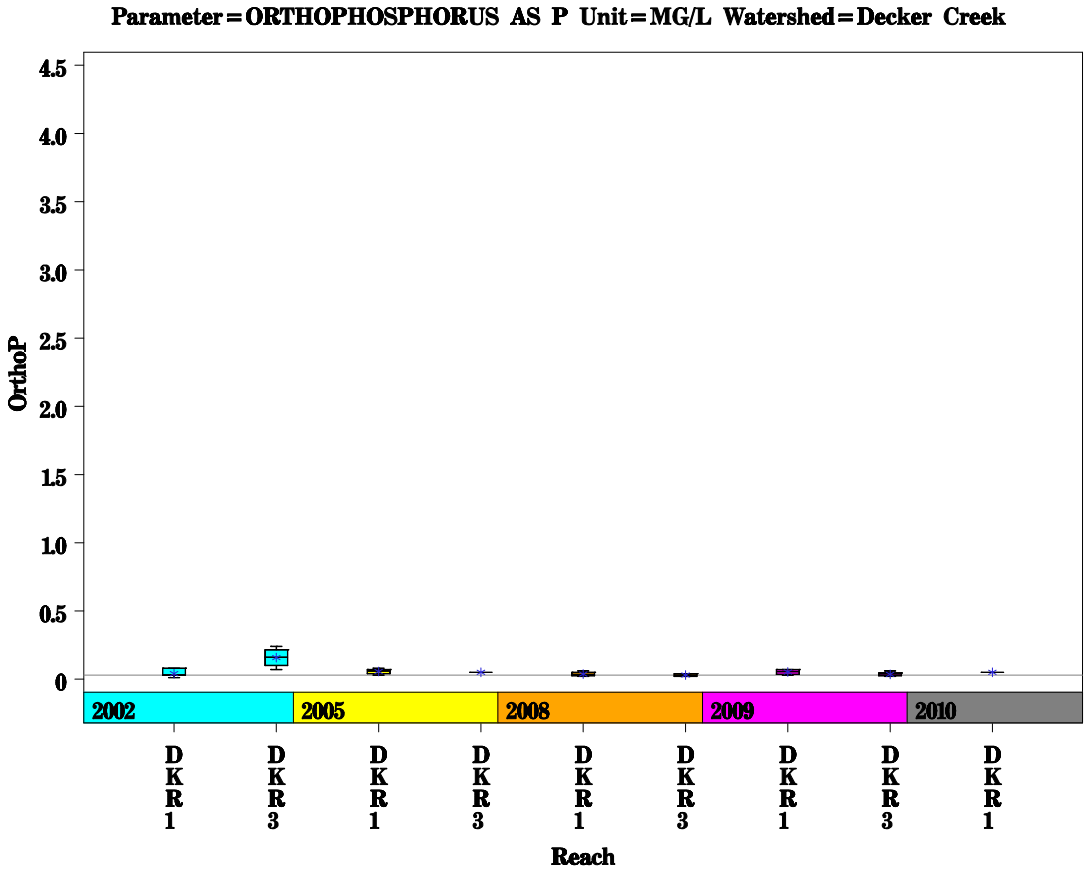
Data Summary Graphs – Ammonia and Nitrate/Nitrite (Downstream to Upstream by Year)

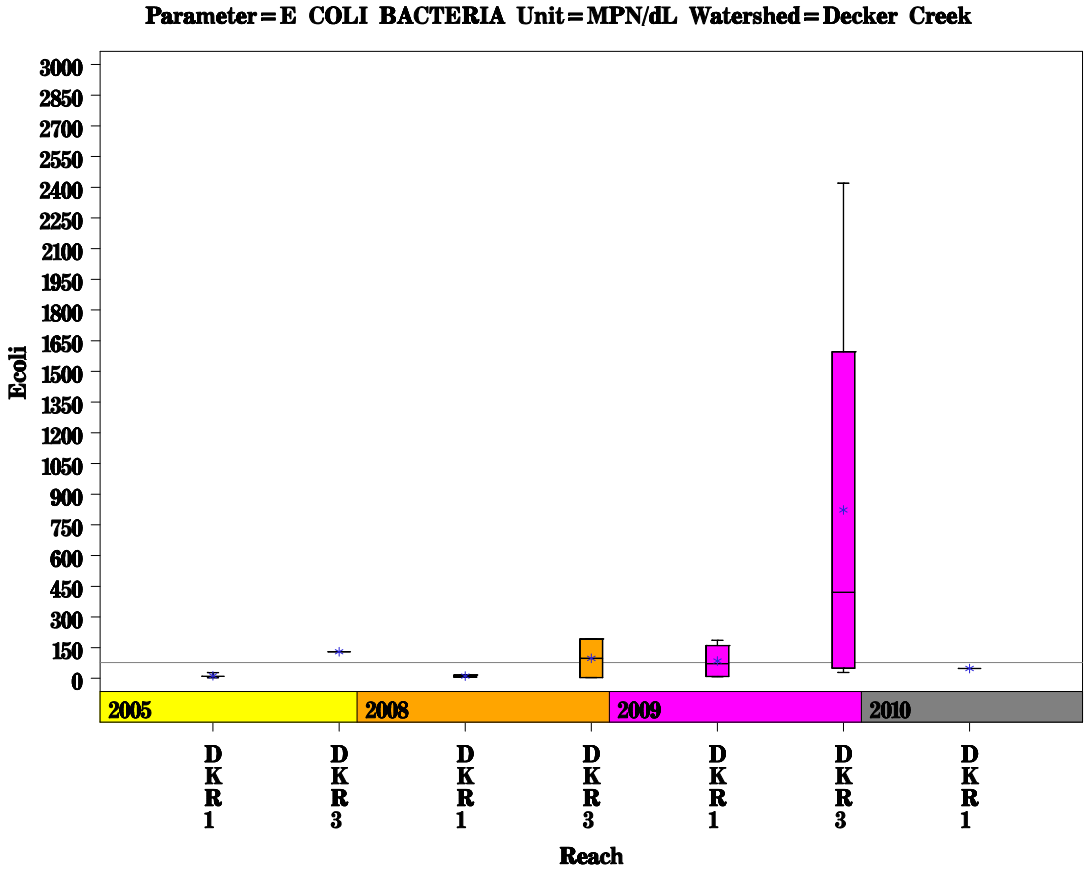




Decker Creek Watershed

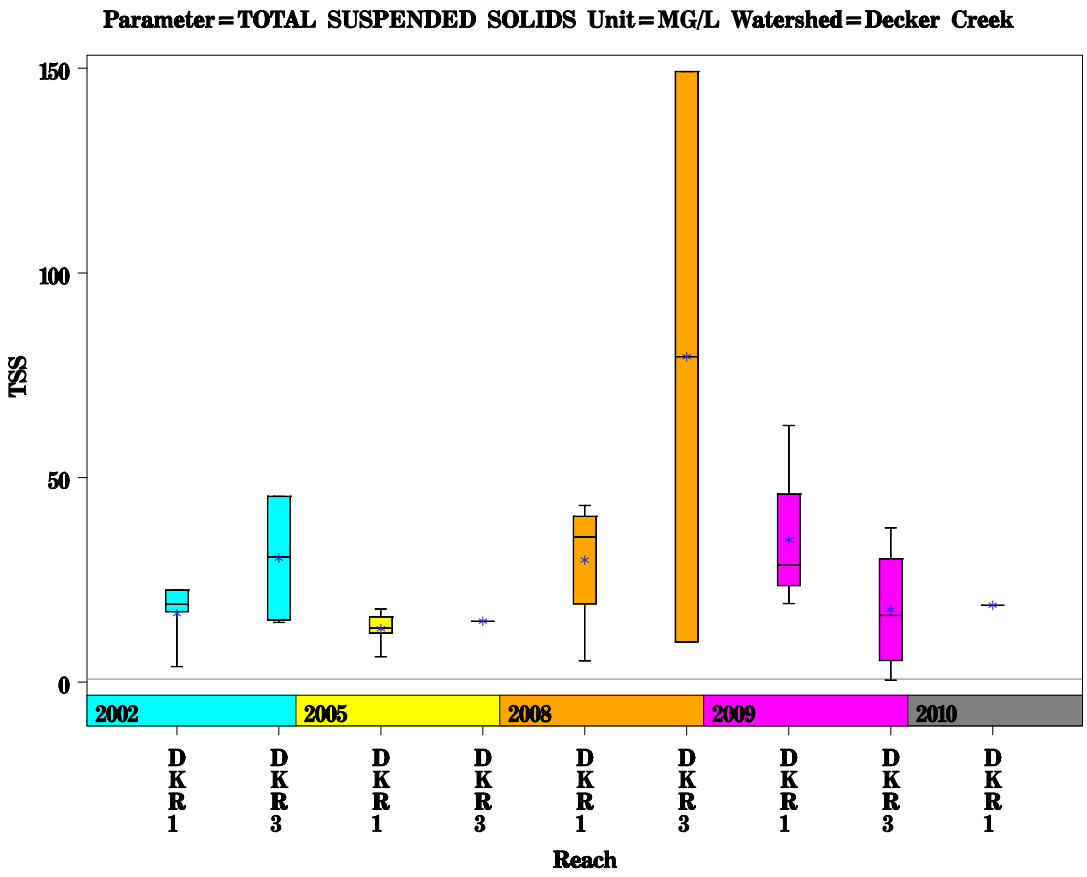
Data Summary Graphs – Orthophosphate and *E.coli* (Downstream to Upstream by Year)

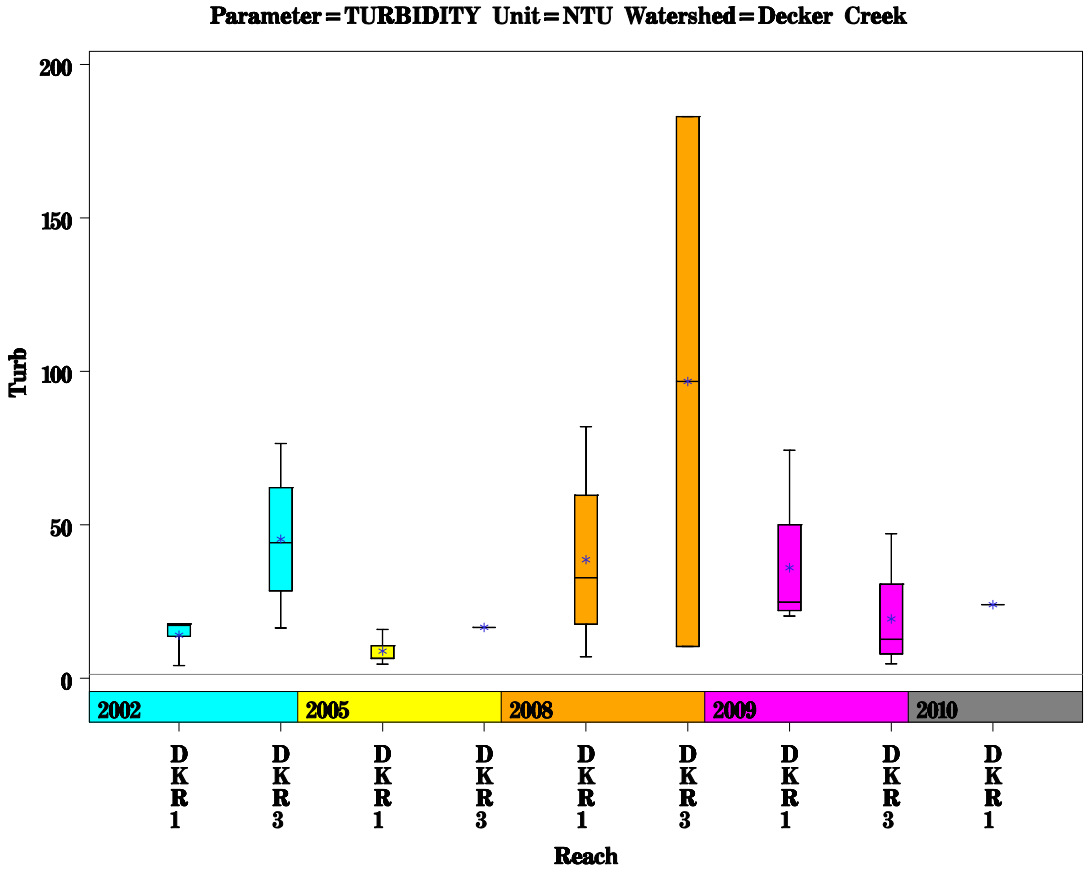




Decker Creek Watershed

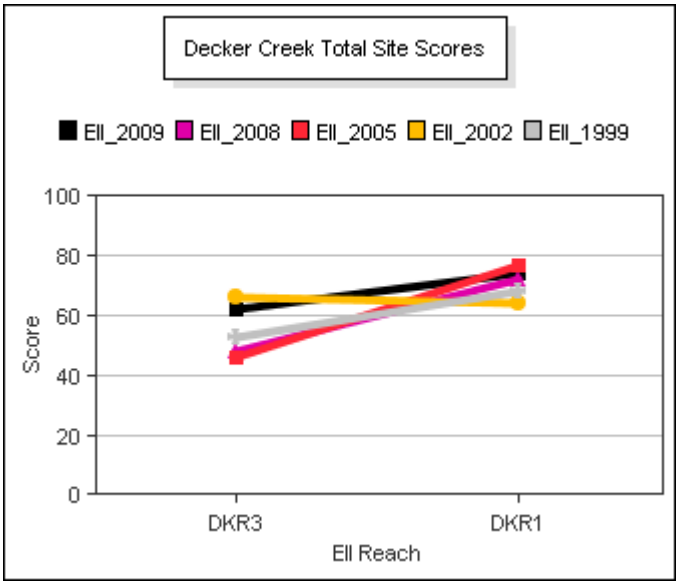
Data Summary Graphs – Total Suspended Solids and Turbidity (Downstream to Upstream by Year)

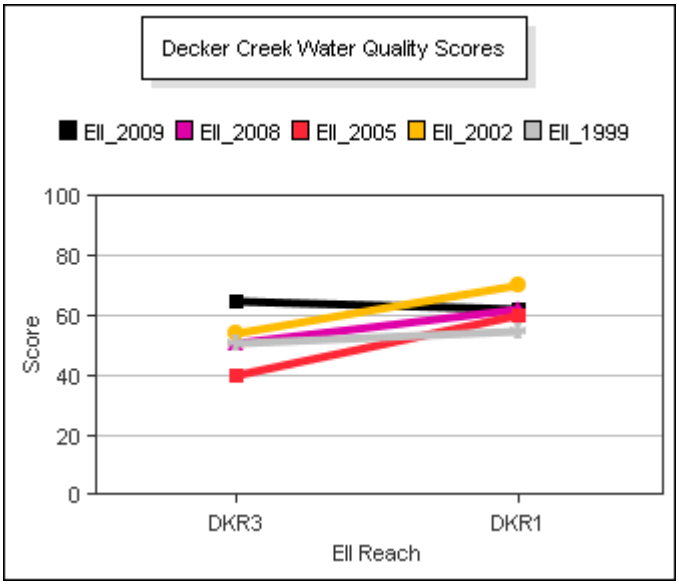


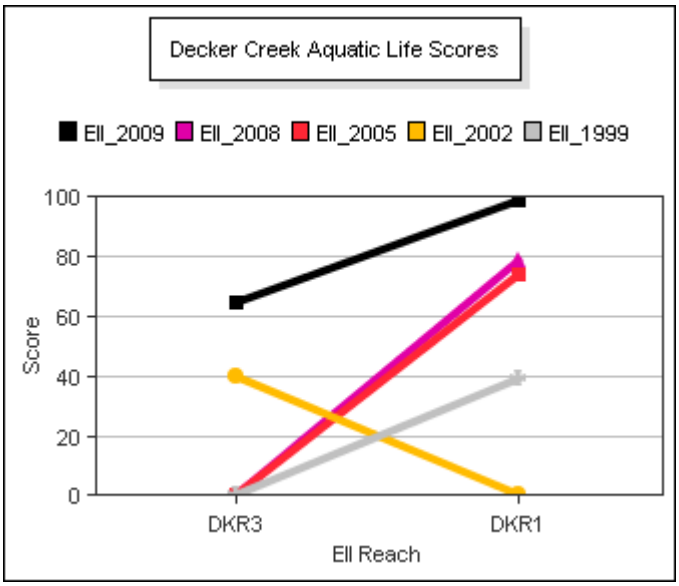


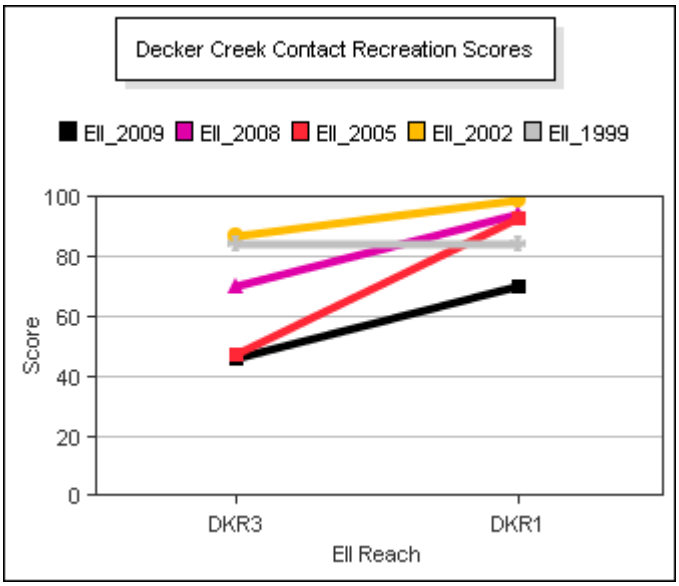
Decker Creek Watershed

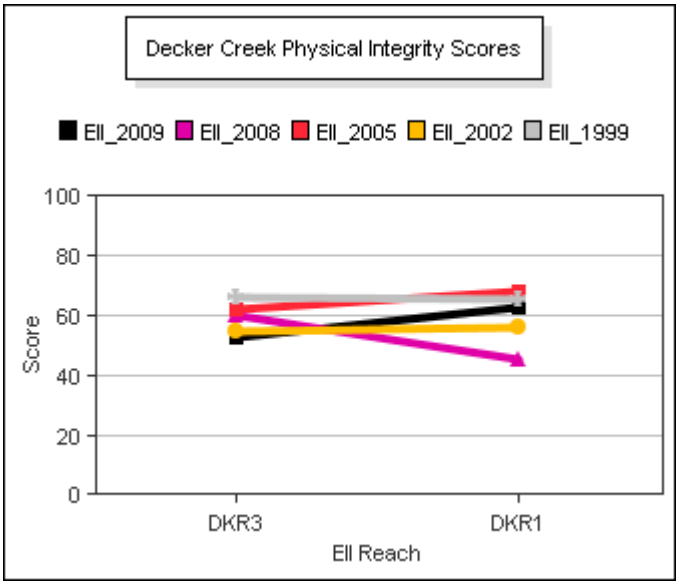
Score Summary – Reach scores for each sample year

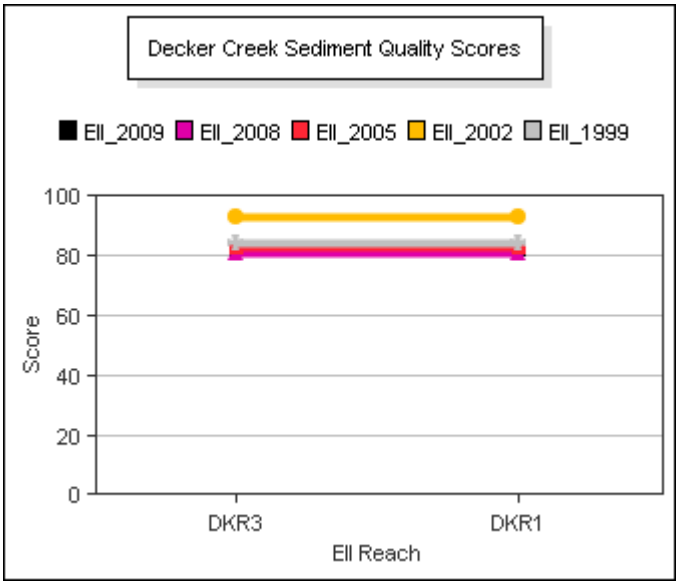












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1196_t00-us-03_27_2002

1196_t00-ur-06_17_2008

1196_t00-ds-06_17_2008

1196_t00-ds-05_28_2009

1196_t00-us-05_28_2009

Decker Creek Watershed
Site Photographs

1974_t00-ds-06_17_2005

1974_t00-us-06_17_2005

1974_t00-ur-06_18_2008

1974_t00-ds-06_18_2008

1974_t00-ds-05_28_2009

1974_t00-ur-05_28_2009

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