

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	2011
	63	65	62	60	68	61

Flow Regime* for Sample Sites on Decker Creek

Site #	Site Name	2005					2008					2009					2010		2011				
		Mar	Jun	Jun	Sep	Dec	Feb	May	Jun	Sep	Dec	Feb	May	May	Oct	Dec	Dec	Mar	Jun	Jun	Sep		
		WQ	WQ	Bio	WQ	WQ	WQ	WQ	Bio	WQ	WQ	WQ	WQ	WQ	Bio	WQ	WQ	WQ	WQ	WQ	Bio	WQ	
1196	Lindell	B	n	n	n	n	B	B	n	n	n	B	B	B	B	B	n	n	n	n	n		
1974	Gilbert	B	B	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 = not visited

Summary of 2011 data for Decker Creek

Summary	Parameter	Mean	Max	Min	Discussion
Physicochemical	D.O. mg/l	6.8	7.9	6.3	Within normal range.
	pH st.units	7.97	8.05	7.80	Within normal range.
	Cond uS/cm	847	879	832	Above average values, but within normal range.
Nutrients	NH ₃ mg/l	0.025	0.045	0.008	Within normal range.
	NO ₃ mg/l	0.013	0.020	0.008	Within normal range.
	Ortho P mg/l	0.077	0.110	0.050	Within normal range.
Sediment Load	TSS mg/l	25.3	36.4	18.8	Consistently high readings.
	Turbidity ntu	23.85	26.92	20.68	Consistently high readings.
Biology	E.Coli /100ml	20	48	5	Generally low.
Benthic Macroinvertebrates and Diatoms: evaluations are provided in the introduction of this report					

Index scores* for Decker Creek sites by year

Reach	Site	Site Name	Year	Water Quality	Sediment**	Contact Recreation	Non-Contact Rec.	Physical Integrity	Aquatic Life	Benthic subindex	Diatom subindex	Total EII Score
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 Rd	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 Rd	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 Rd	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
DKR1	1974	Decker Creek @ Gilbert Rd	2011	57	79	86	73	61	70	100	40	71
DKR3	1196	Decker Creek @ Lindell Lane	2011		79		27	53				40

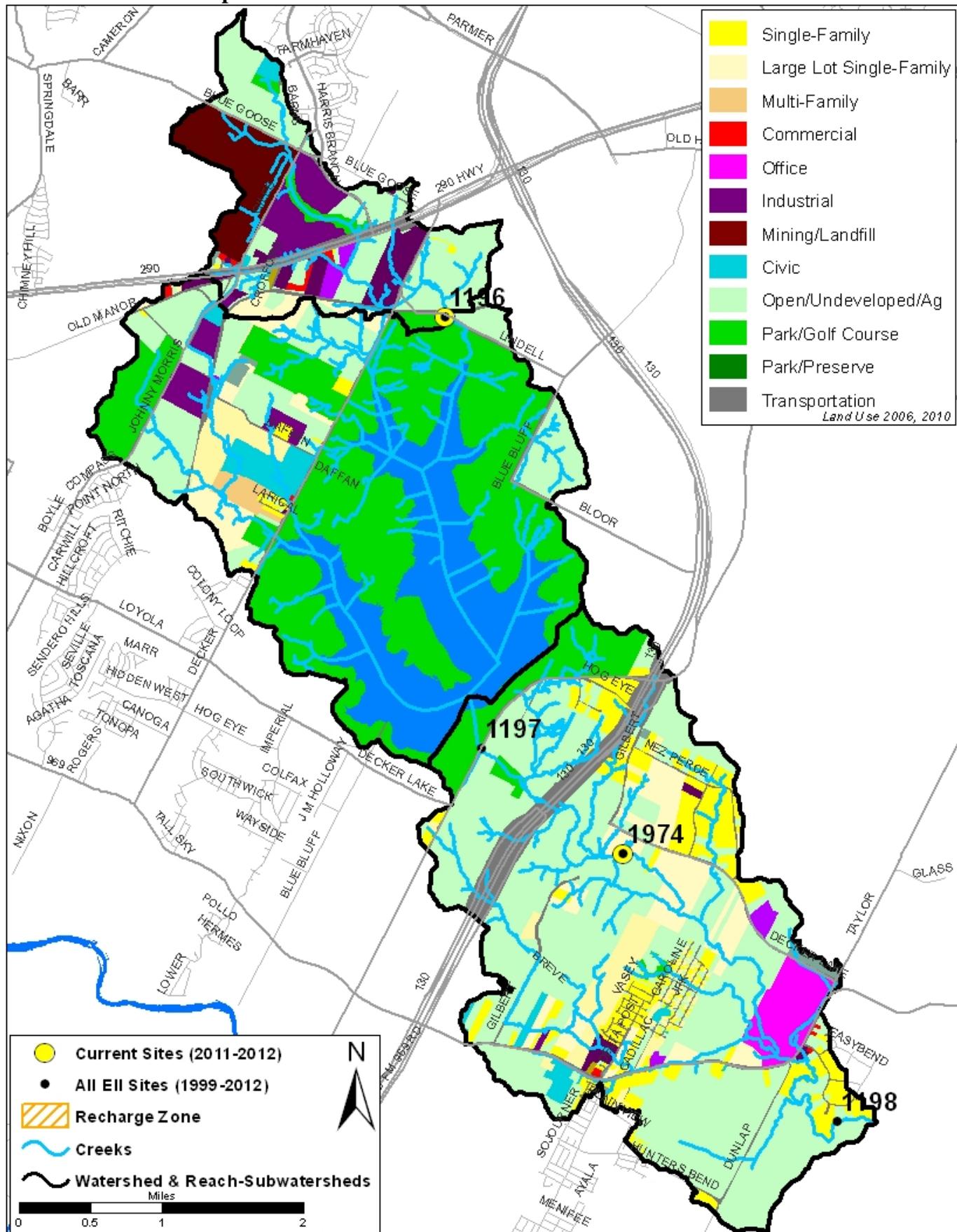
* blank cells indicate parameter was not collected, blank row indicate site was dropped

**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

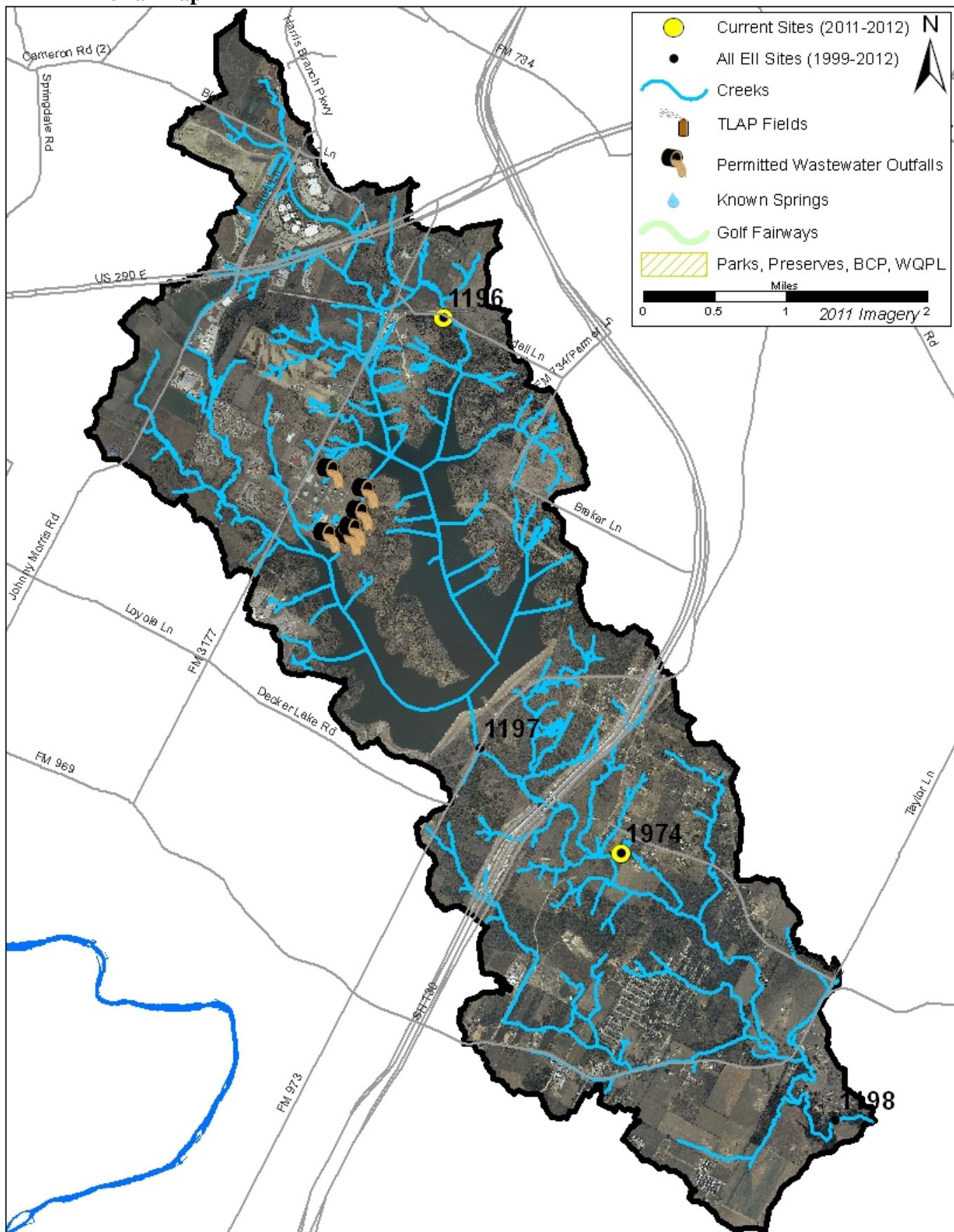
Decker Creek Watershed

Land Use Map



Decker Creek Watershed

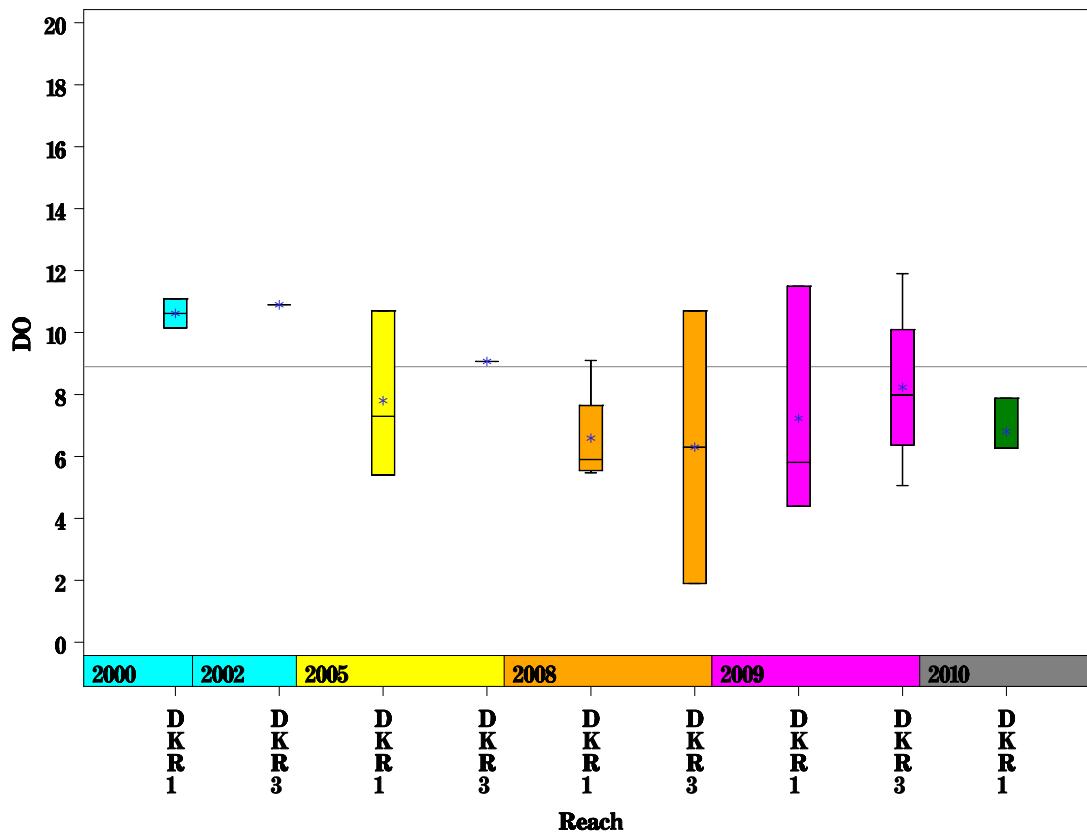
Aerial Map



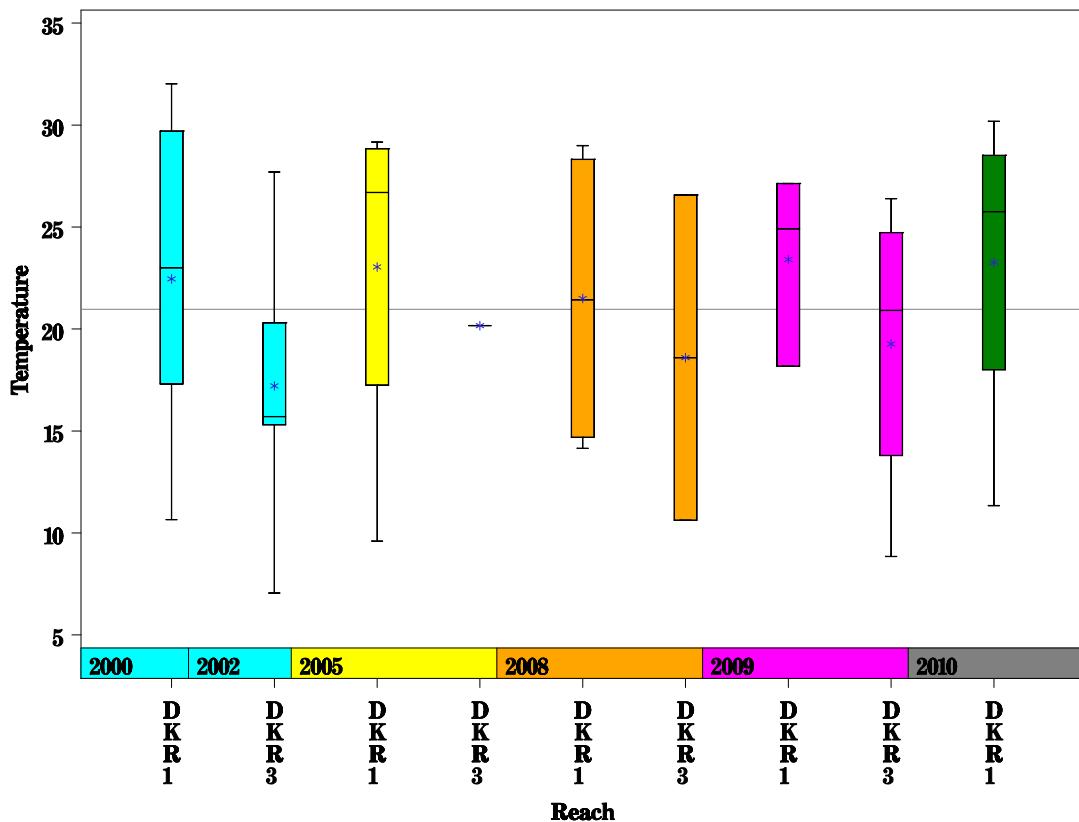
Decker Creek Watershed

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

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



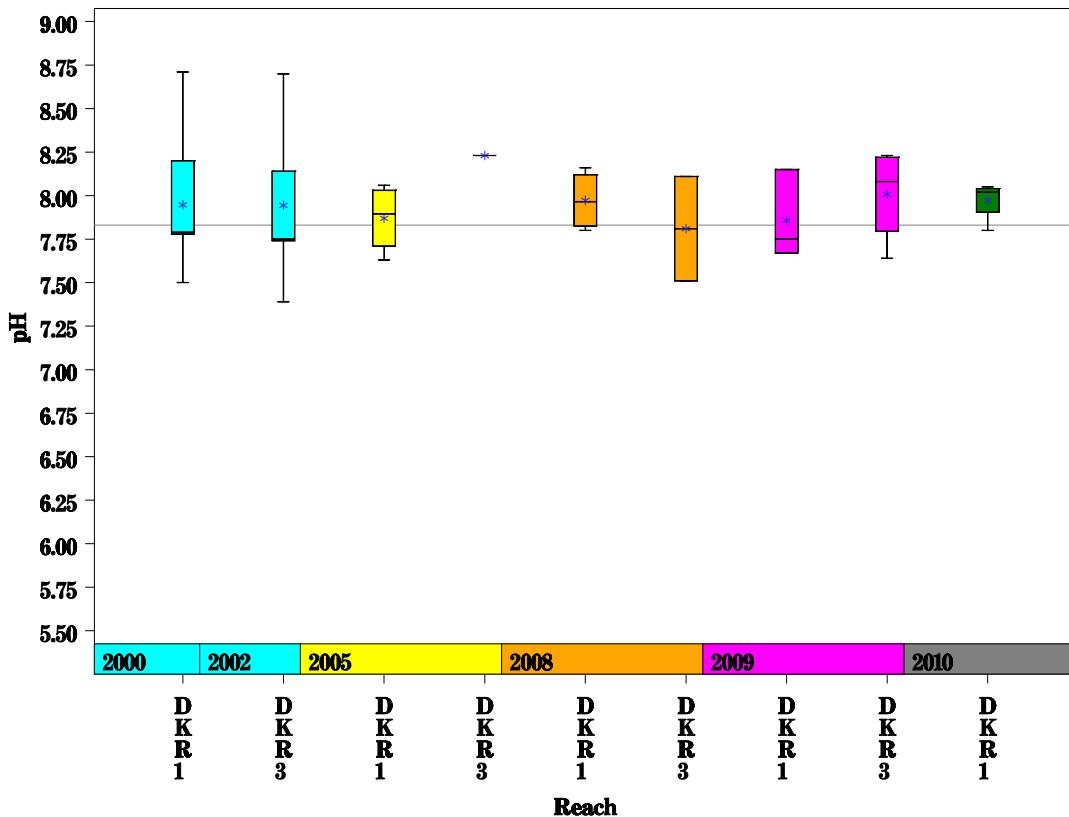
Parameter = WATER TEMPERATURE Unit = Deg. Celsius Watershed = Decker Creek



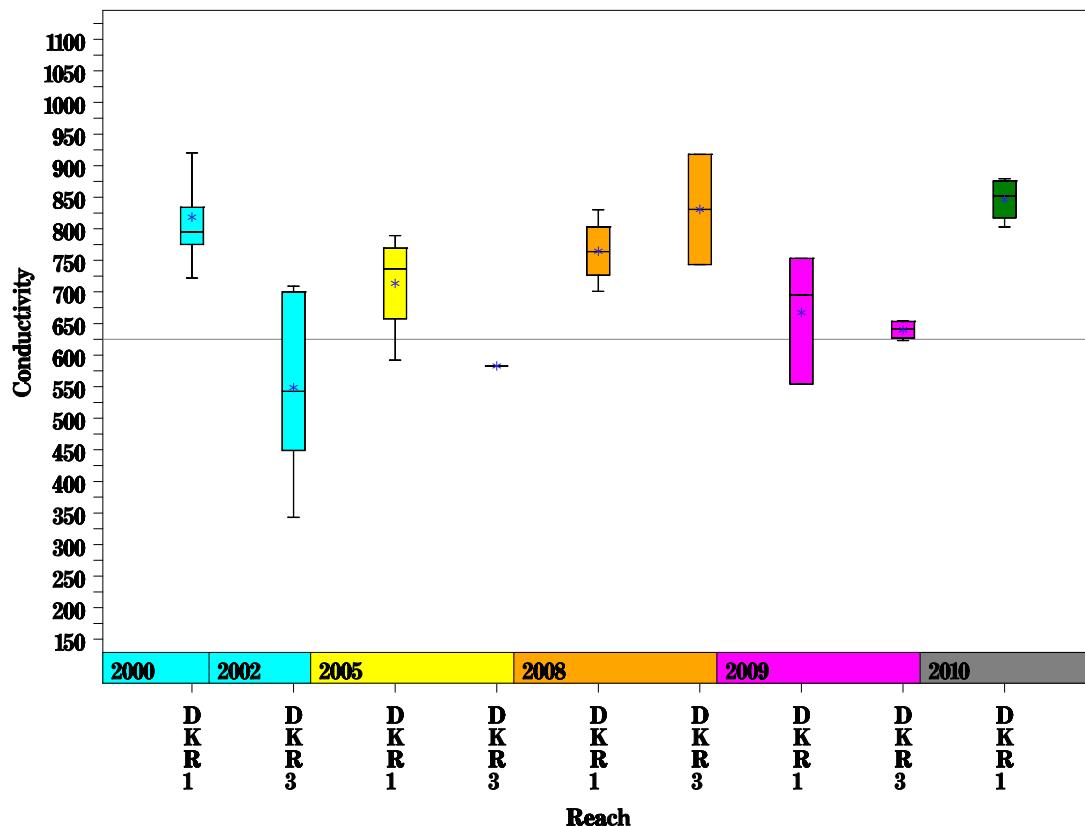
Decker Creek Watershed

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

Parameter=PH Unit=Standard units Watershed=Decker Creek

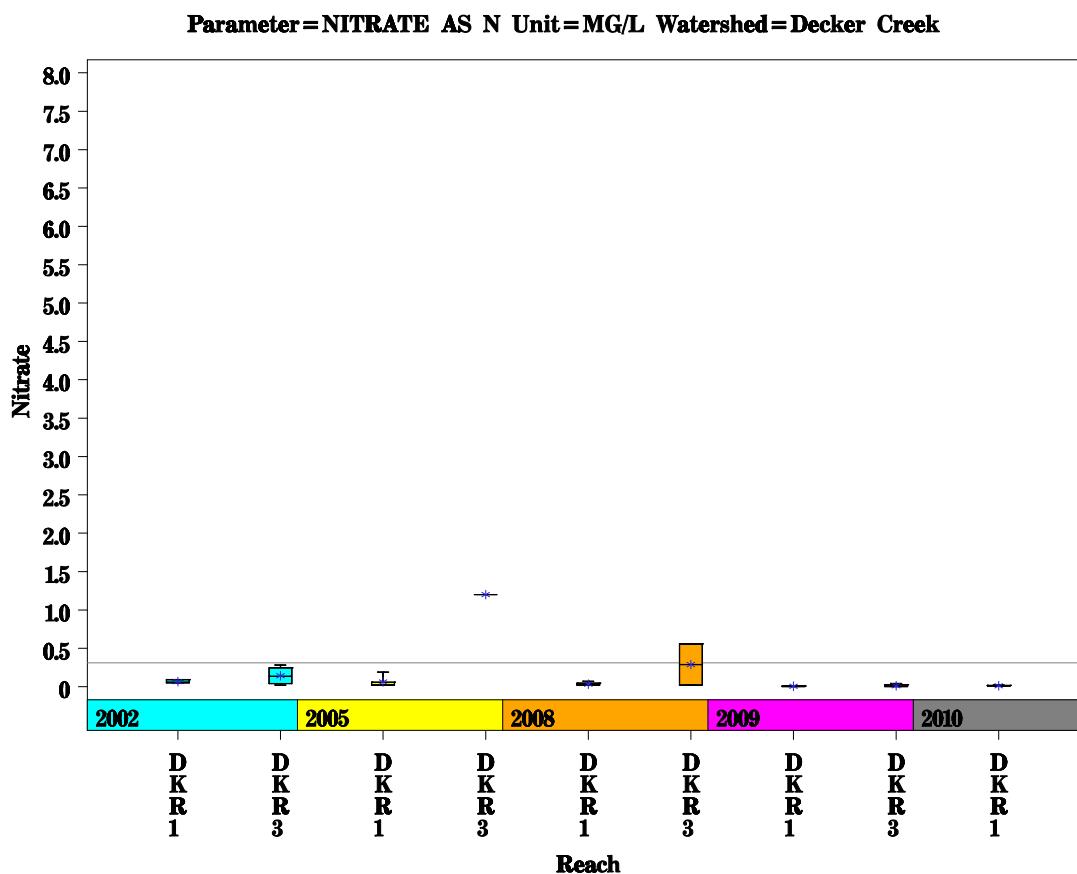
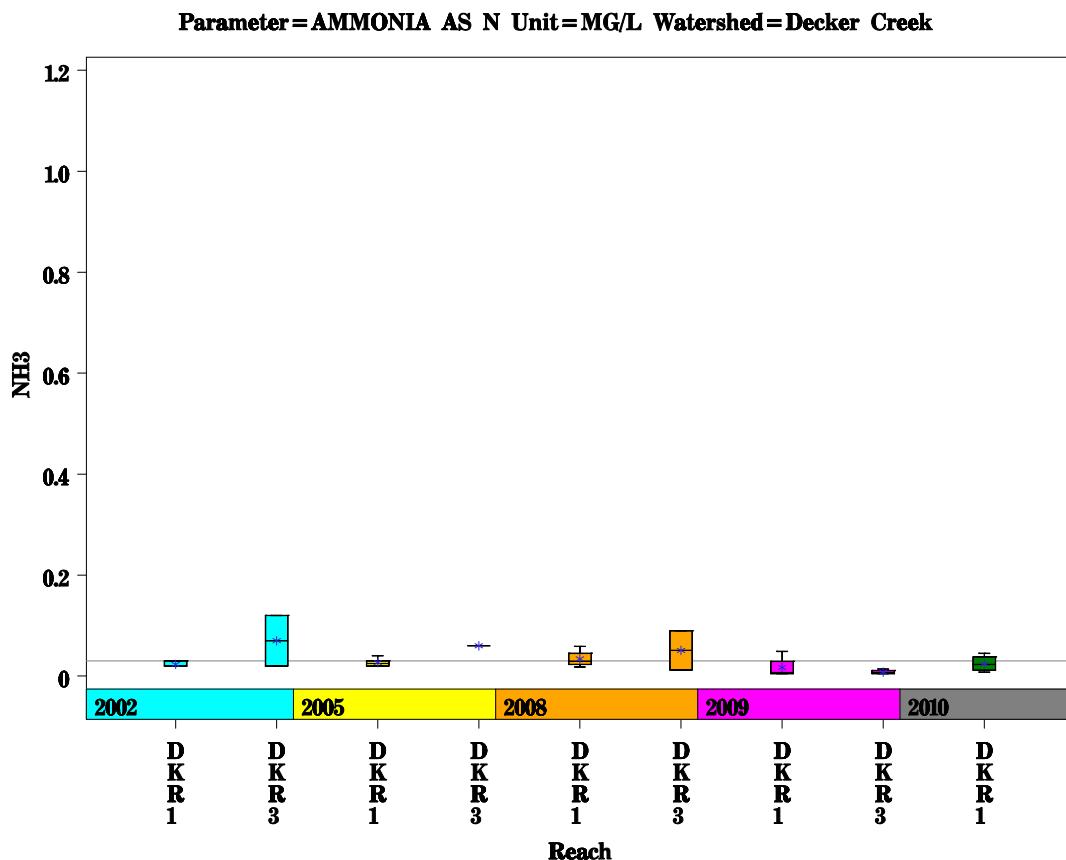


Parameter=CONDUCTIVITY Unit=uS/cm Watershed=Decker Creek



Decker Creek Watershed

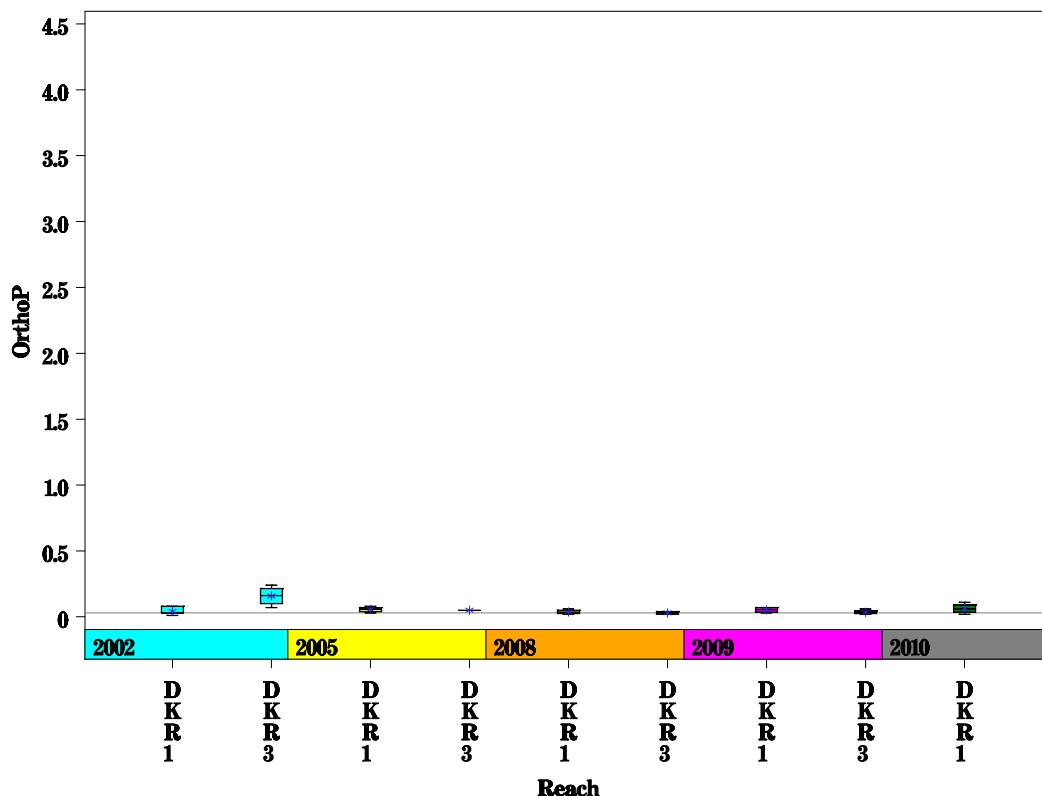
Data Summary Graphs – Ammonia and Nitrate/Nitrite (Downstream to Upstream by Year)



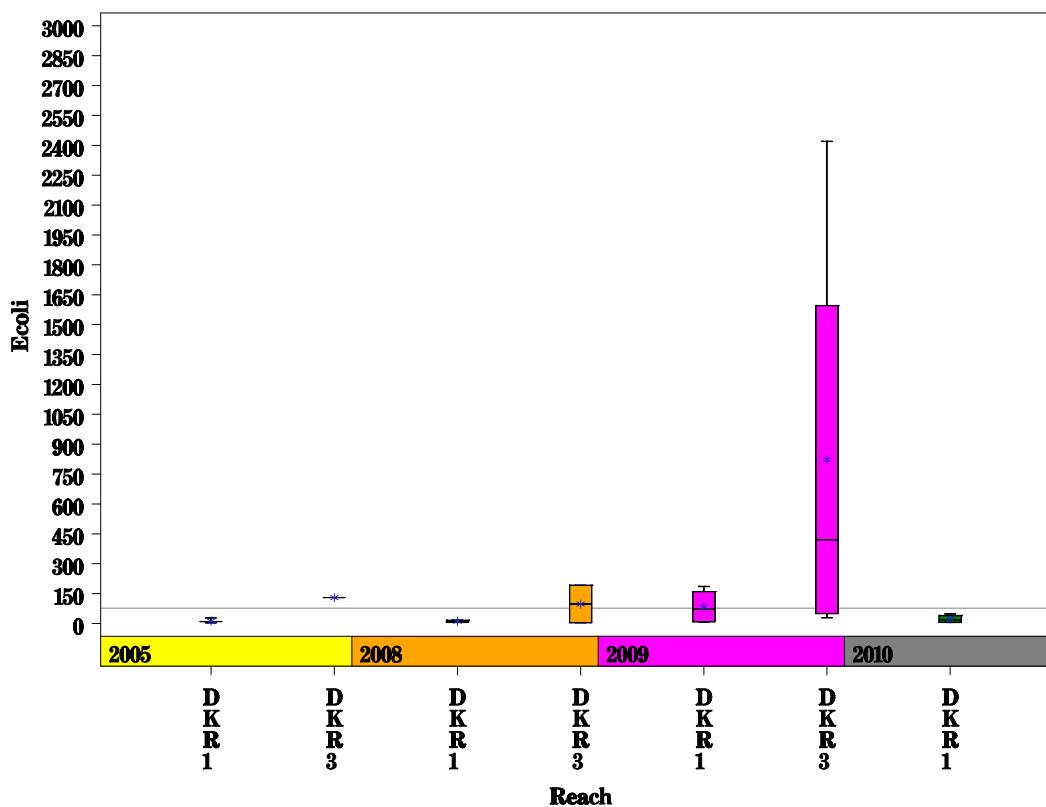
Decker Creek Watershed

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

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

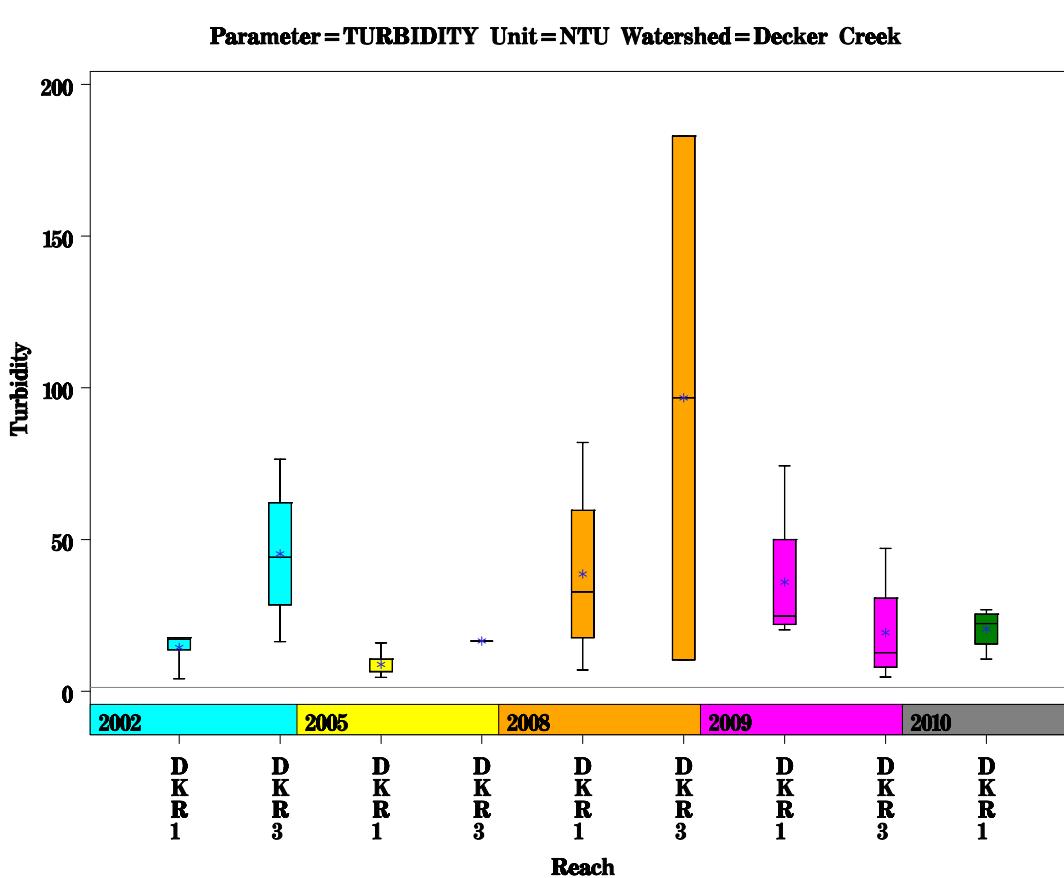
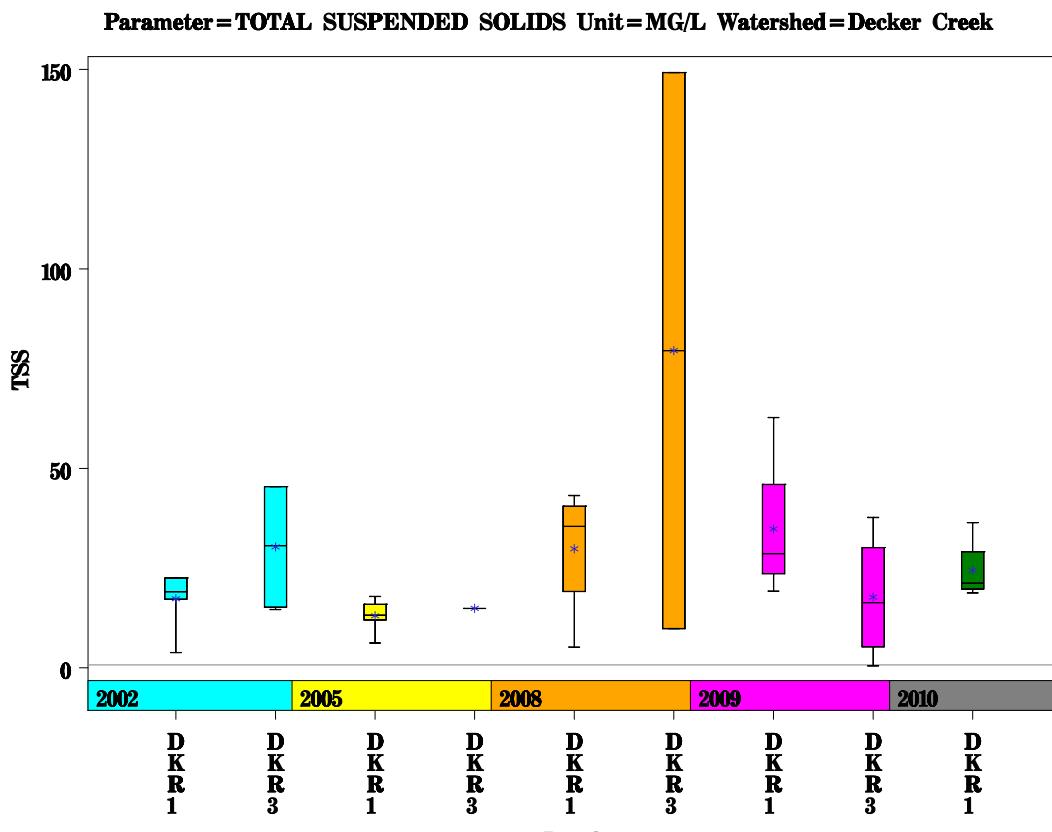


Parameter=E COLI BACTERIA Unit=MPN/100ML Watershed=Decker Creek



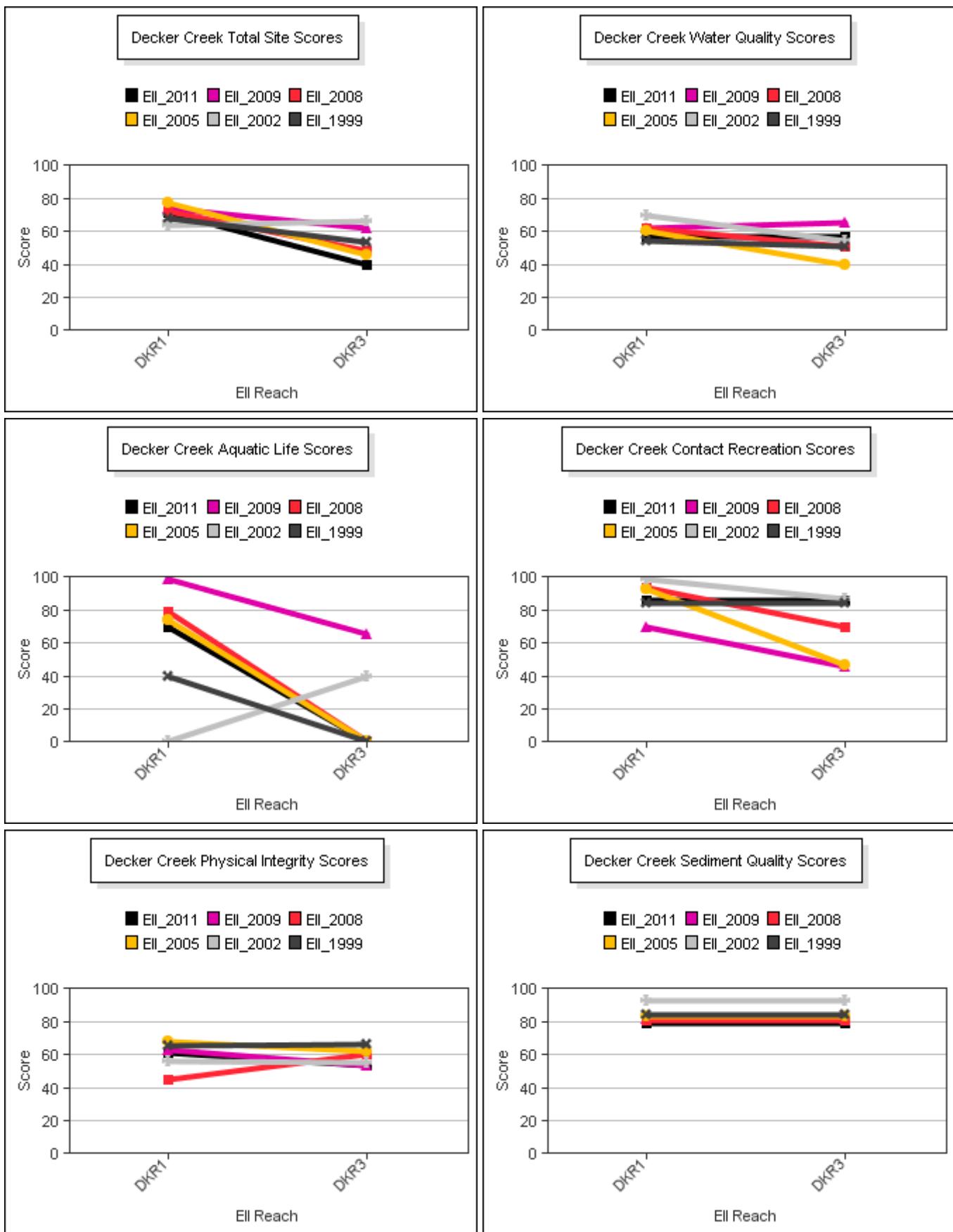
Decker Creek Watershed

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



Decker Creek Watershed

Score Summary – Reach scores for each sample year



Decker Creek Watershed

Site Photographs



1196_t00-ds-03_27_2002



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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