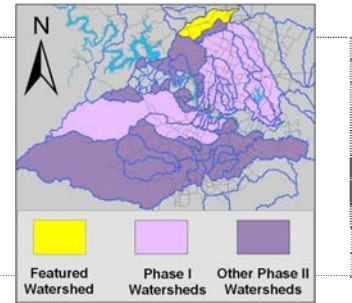


# Lake Creek Watershed

## Summary Sheet

Catchment	Total area	21 sq. miles				
	Area in recharge	19.7 sq. miles				
	Creek length	16 miles				
Demographics	Receiving water	Brushy Creek				
	2000 population	44,727				
	2030 projected population	101,823				
	30 year projected % increase	128 %				
Land Use	Impervious cover (2003 estimate)	16.57 %				
Overall EII Scores	2001	2004	2007	2010	2012	
	71	68	66	70	63	



### Flow Regime\* for Sample Sites on Lake Creek

Site #	Site Name	2004						2007						2010				2011		2012			
		Mar	May	Jun	Oct	Dec		Feb	May	Jun	Jul	Sep	Dec		Mar	May	May	Oct	Dec		Mar	Apr	
		WQ	WQ	Bio	WQ	WQ	WQ	WQ	WQ	Bio	Bio	WQ	WQ	WQ	WQ	WQ	Bio	WQ	WQ	WQ	WQ	Bio	
1100	DS Meadowheath	B	B	B	B	B	B	B	B		B	B	B	B	B	B	B	B	B	B	B	B	
1120	Robinson Ranch	B	B	B	B	B	B																
1099	Deep Wood	B	B	B	B	B	B																
3978	Shadowbrook							B	B	S			B	B	B	B	B	B	B	B	B	B	n
1098	Sugar Berry	B	B	B	B	B	B	B	B	S			B	B	B	B	B	B	B	B	B	B	n
1119	Robinson	B	B	B	B	B	B																

\* B = baseflow n = no flow storm = storm flow blue = Samples were taken grey = Samples were not taken blank = not visited

### Summary of 2012 Data for Lake Creek

Summary	Parameter	Mean	Max	Min	Discussion
Physicochemical	D.O. mg/l	10.8	12.3	9.2	Above average to high values.
	pH st.units	8.20	8.85	7.78	Several high values at upstream sites, decreasing downstream.
	Cond uS/cm	584	830	384	Within normal range, generally higher at headwaters.
Nutrients	NH <sub>3</sub> mg/l	0.023	0.069	0.008	Within normal range.
	NO <sub>3</sub> mg/l	1.326	3.990	0.008	Some above average values, but within normal range.
	Ortho P mg/l	0.539	1.440	0.004	Chronically high values at site 1100, decreasing downstream.
Sediment Load	TSS mg/l	2.2	3.9	1.0	Within normal range.
	Turbidity ntu	3.00	7.43	0.60	Within normal range, some above average values.
Biology	E.Coli /100ml	313	1414	18	Mostly within normal range with some high values at site 3978.
	Benthic Macroinvertebrates and Diatoms: evaluations are provided in the introduction of this report				

### Index scores\* for Lake Creek Sites by Year

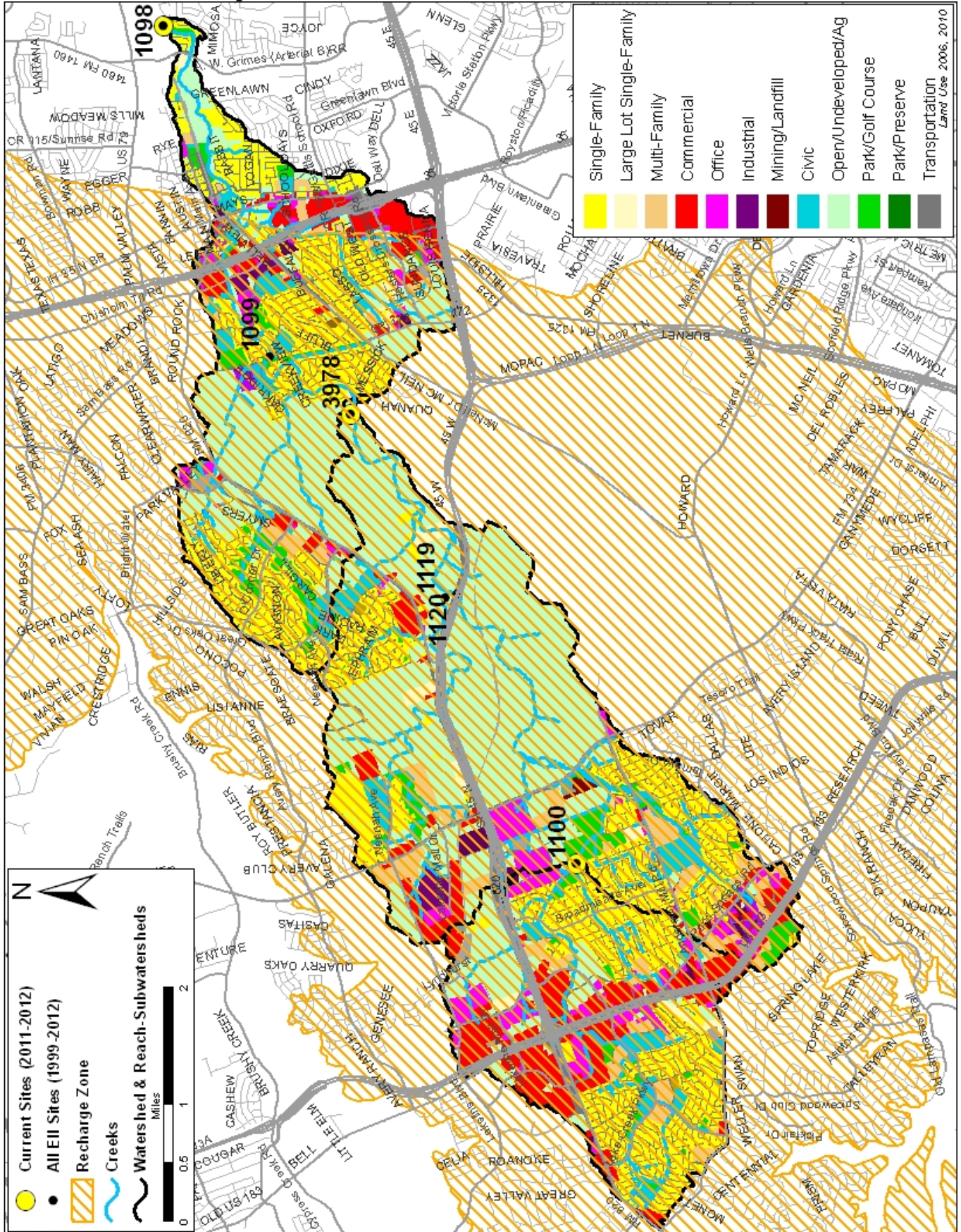
Reach	Site	Site Name	Year	Water Quality	Sediment**	Contact Rec.	Non-Contact Rec.	Physical Integrity	Aquatic Life	Benthic subindex	Diatom subindex	Total EII Score
DVS1	1119	Davis Spring Branch Crk @ Robinson Ranch	1998	66	74	98	93	82	76	65	86	82
LKC1	1098	Lake Creek @ Sugar Berry Cove	1998	55	74	75	68	71	63	79	46	68
LKC2	1099	Lake Creek @ Deep Wood Drive	1998	53	74	84	62	63	46	40	51	64
LKC3	1100	Lake Creek DS of Meadowheath Drive	1998	49	74	90	69	71	54	68	39	68
LKC3	1120	Lake Creek @ Robinson Ranch	1998	55	74	93	78	83	57	59	54	73
DVS1	1119	Davis Spring Branch Crk @ Robinson Ranch	2001	56	84	97	98	95	68	73	62	79
LKC1	1098	Lake Creek @ Sugar Berry Cove	2001	54	84	89	71	86	45	69	20	68
LKC2	1099	Lake Creek @ Deep Wood Drive	2001	48	84	85	73	59	32	45	19	61
LKC3	1100	Lake Creek DS of Meadowheath Drive	2001	27	84	79	69	54	78	100	56	63
LKC3	1120	Lake Creek @ Robinson Ranch	2001	47	84	83	81	83	67	75	58	70
DVS1	1119	Davis Spring Branch Crk @ Robinson Ranch	2004	51	76	54	90	89	79	79	78	73
LKC1	1098	Lake Creek @ Sugar Berry Cove	2004	46	76	43	88	86	78	93	63	70
LKC2	1099	Lake Creek @ Deep Wood Drive	2004	48	76	53	78	56	76	84	67	65
LKC3	1100	Lake Creek DS of Meadowheath Drive	2004	44	76	60	73	45	85	85		64
LKC3	1120	Lake Creek @ Robinson Ranch	2004	52	76	72	84	72	55	59	50	69
LKC1	1098	Lake Creek @ Sugar Berry Cove	2007	55	81	50	75	70	87	93	80	70
LKC2	3978	Lake Creek @ Shadowbrook Club	2007	48	81	48	76	67	76	88	63	66
LKC3	1100	Lake Creek DS of Meadowheath Drive	2007	46	81	59	55	55	74	95	52	62
LKC1	1098	Lake Creek @ Sugar Berry Cove	2010	57	69	60	97	86	85	93	77	76
LKC2	3978	Lake Creek @ Shadowbrook Club	2010	62	69	59	98	84	89	96	82	77
LKC3	1100	Lake Creek DS of Meadowheath Drive	2010	47	69	60	64	43	65	61	69	58
LKC1	1098	Lake Creek @ Sugar Berry Cove	2012	65	84	42	48	74	72	74	70	64
LKC2	3978	Lake Creek @ Shadowbrook Club	2012	55	84	31	31	66	59	62	56	54
LKC3	1100	Lake Creek DS of Meadowheath Drive	2012	47	84	65	89	74	65	85	44	71

\* 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



# Lake Creek Watershed

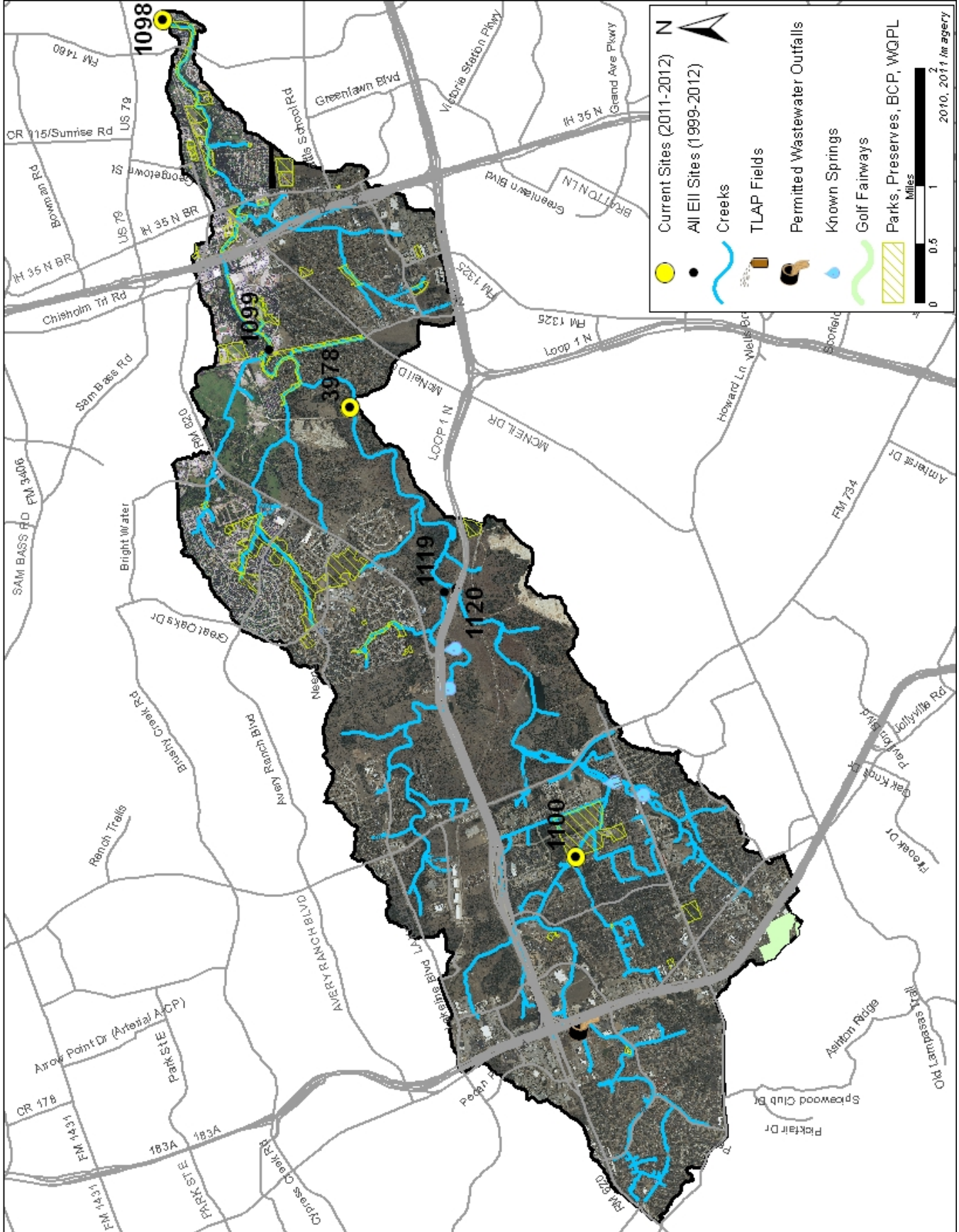
## Land Use Map





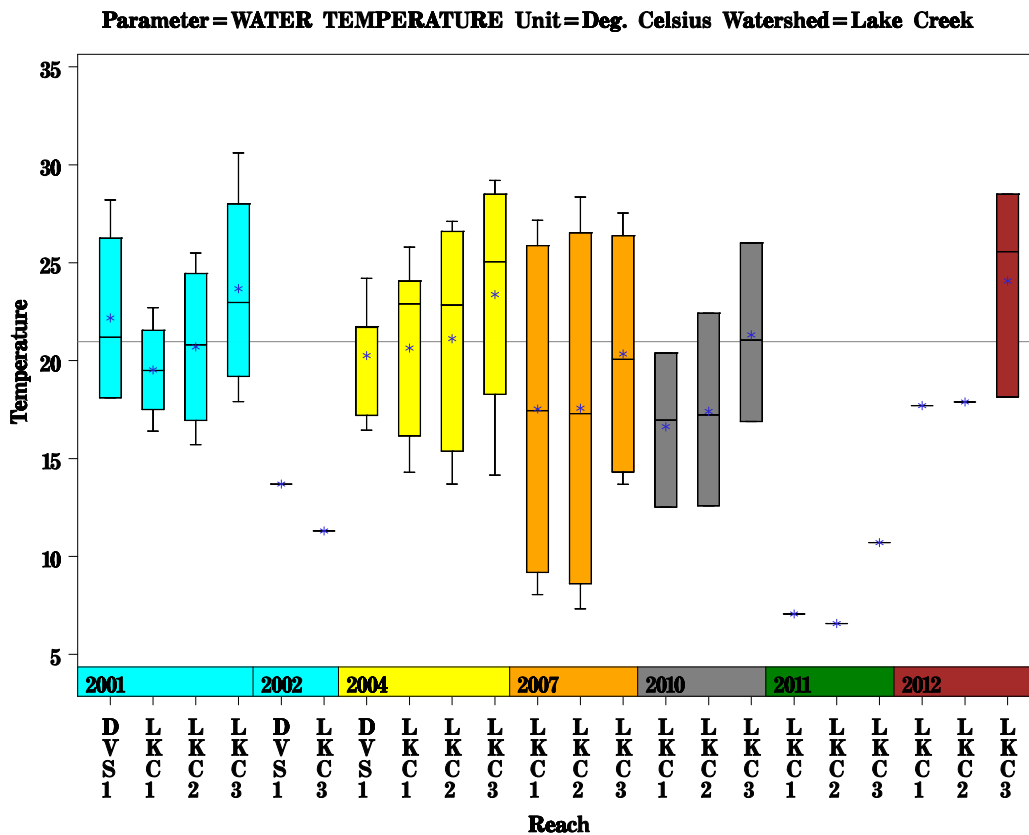
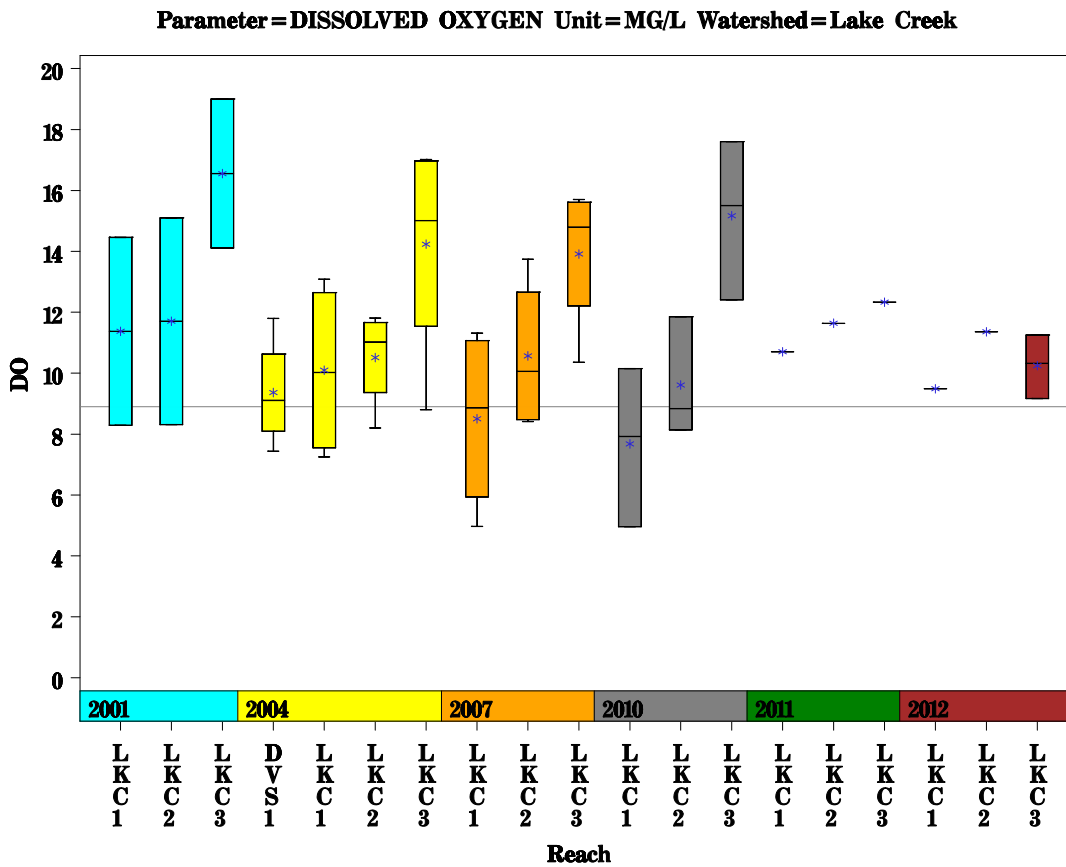
# Lake Creek Watershed

## Aerial Map



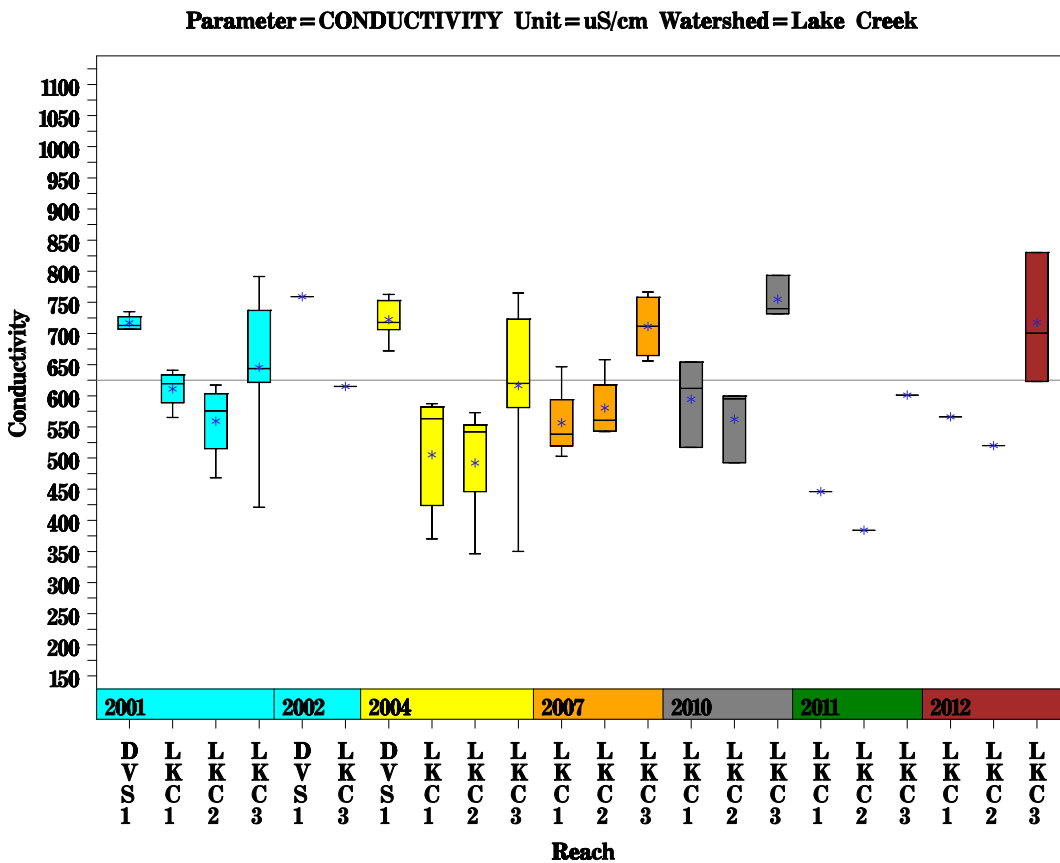
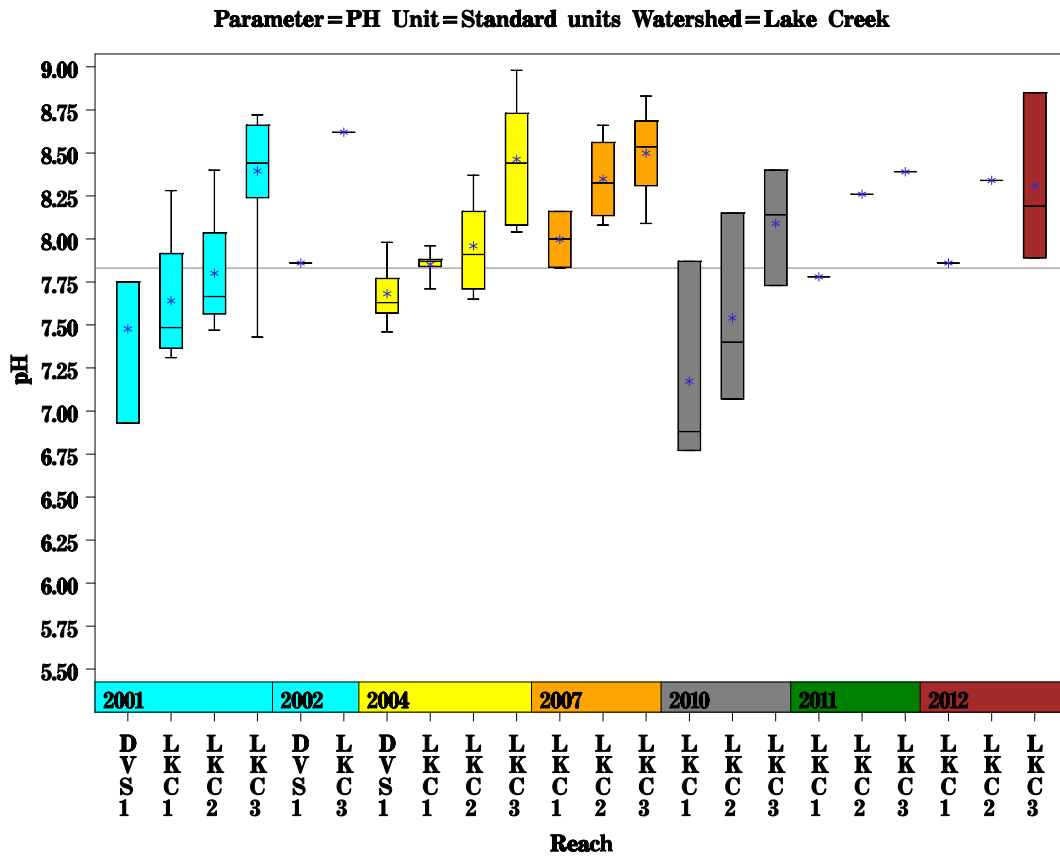
# Lake Creek Watershed

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



# Lake Creek Watershed

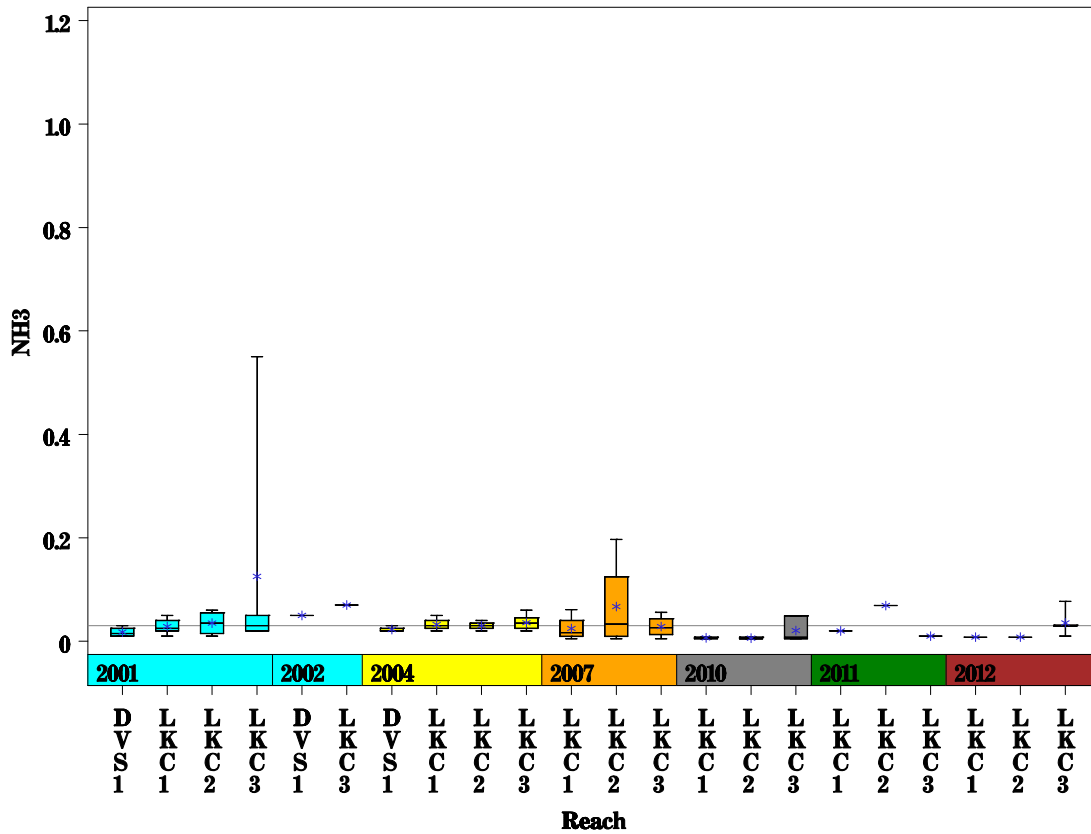
Data Summary Graphs – pH and Conductivity (Downstream to Upstream by Year)



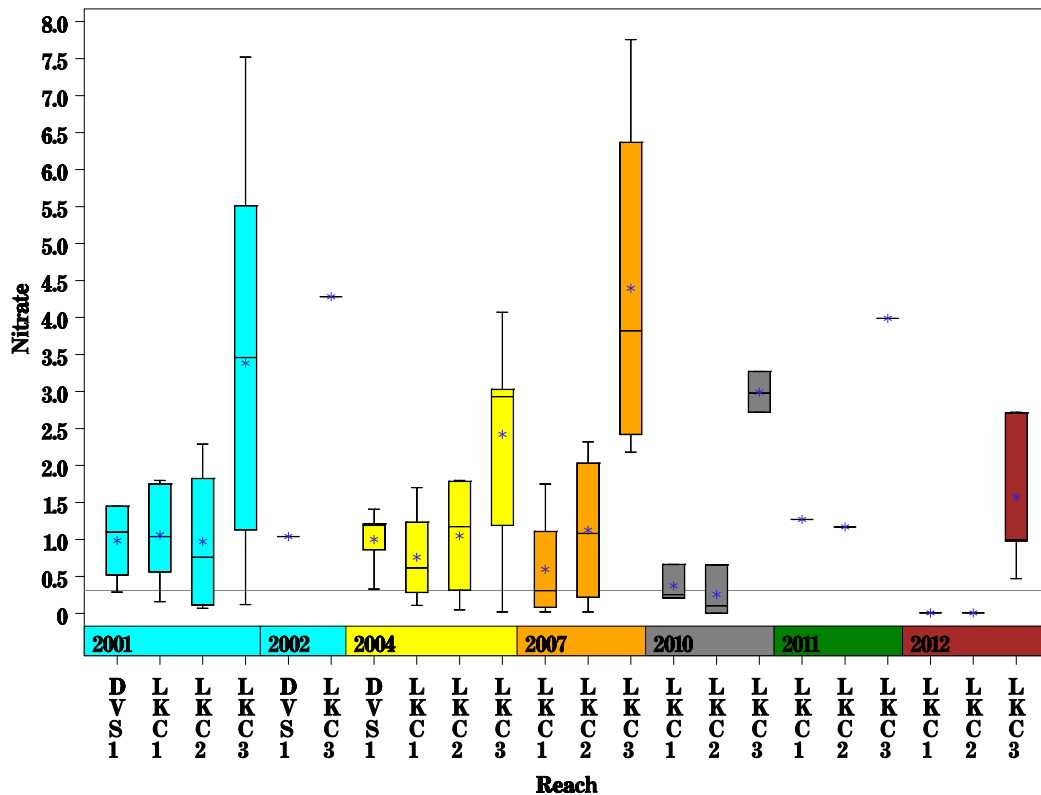
# Lake Creek Watershed

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

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

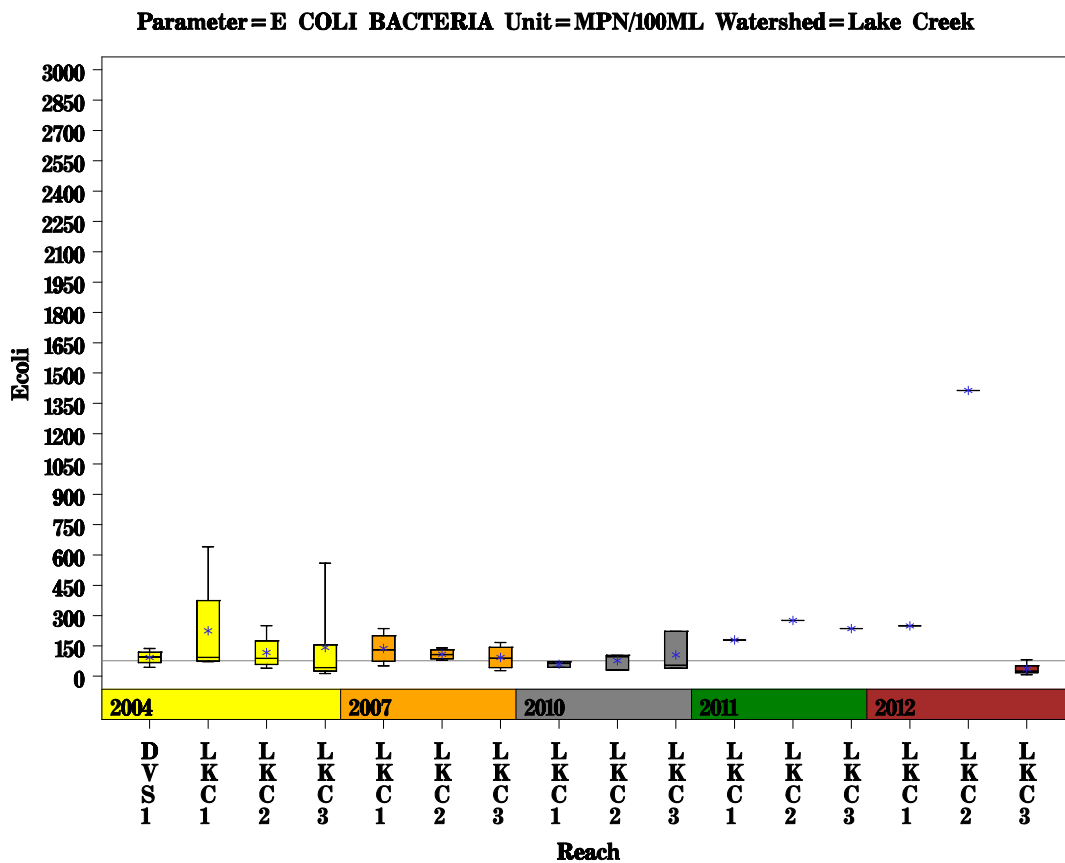
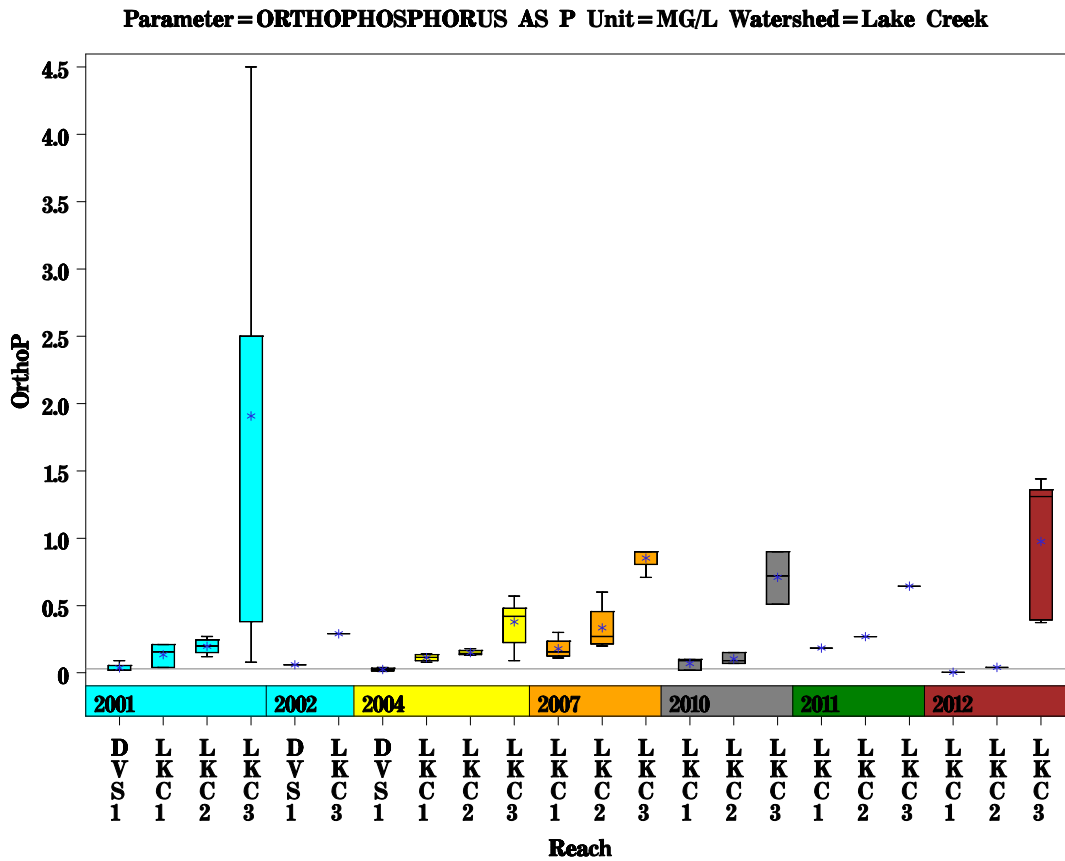


Parameter=NITRATE AS N Unit=MG/L Watershed=Lake Creek



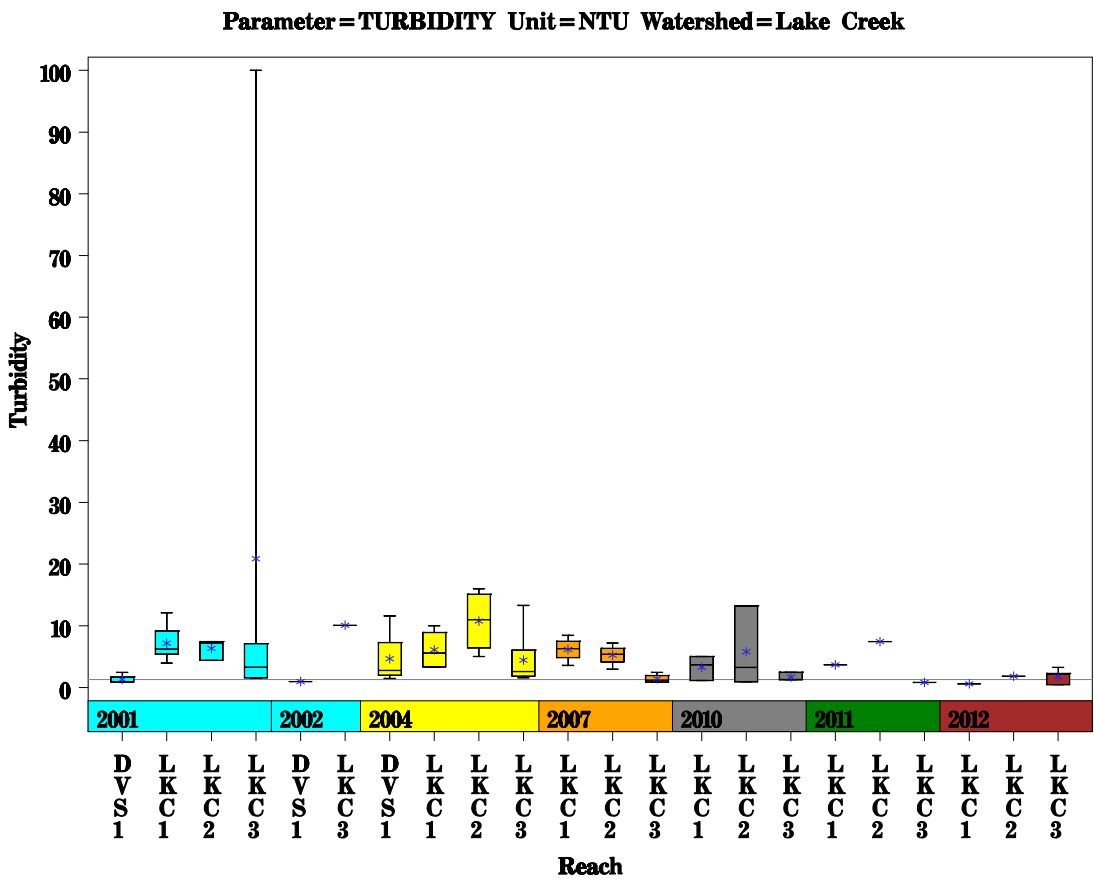
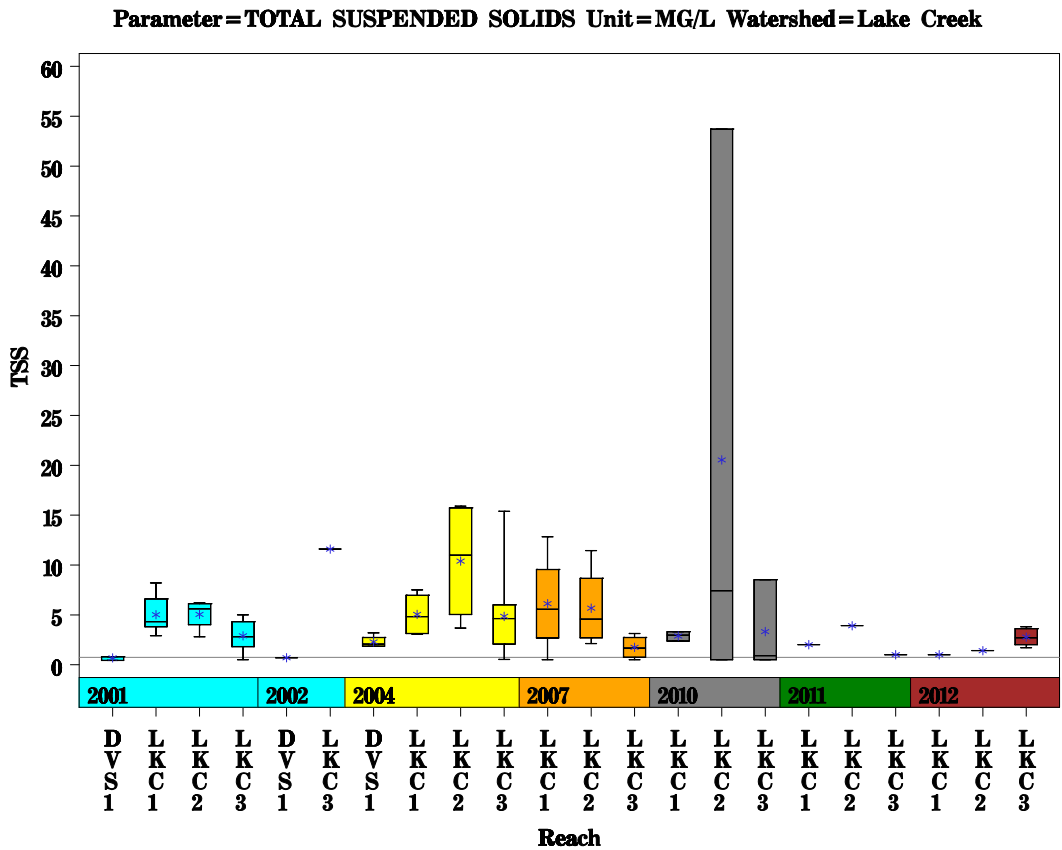
# Lake Creek Watershed

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



# Lake Creek Watershed

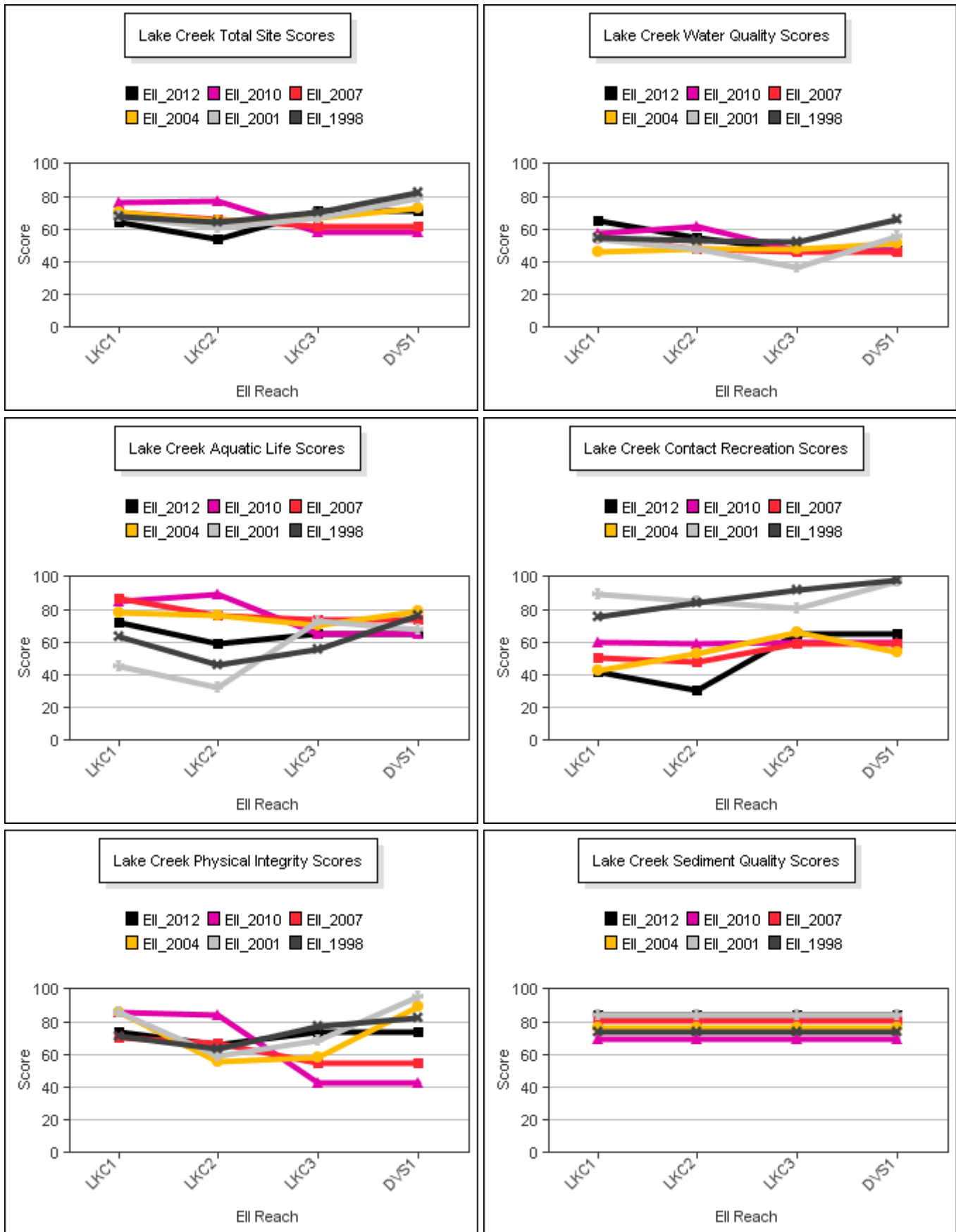
Data Summary Graphs – Total Suspended Solids and Turbidity (Downstream to Upstream by Year)





# Lake Creek Watershed

## Score Summary – Reach scores for each sample year



# Lake Creek Watershed

## Site Photographs



1100\_00-us-05\_27\_2010



1100\_00-ds-05\_27\_2010



1119\_t00-us-05\_18\_2004



1119\_t00-ds-05\_18\_2004



1120\_t00-us-05\_18\_2004



1120\_t00-ds-05\_18\_2004



# Lake Creek Watershed

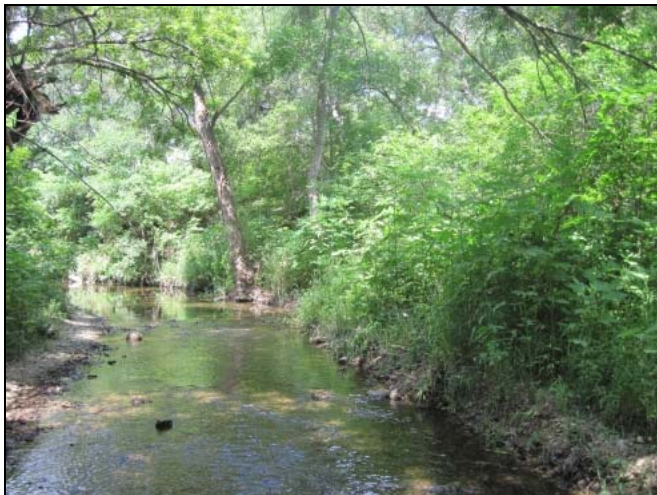
## Site Photographs



3978\_00-us-05\_24\_2010



3978\_00-ds-05\_24\_2010



1098\_00-us-05\_24\_2010



1098\_00-ds-05\_24\_2010



1099\_t00-us-05\_18\_2004



1099\_t00-ds-05\_18\_2004

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