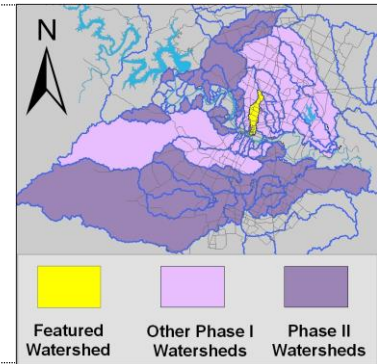


Waller Creek Watershed

Summary Sheet

Catchment	Total area	6 square miles				
	Area in recharge	none				
	Creek length	7 miles				
	Receiving water	Town Lake				
Demographics	2000 population	32,076				
	2030 projected population	42,264				
	30 year projected % increase	32 %				
Land Use	Impervious cover (2003 estimate)	49.98 %				
Overall EII Scores	2000	2003	2006	2009	2011	
	54	58	54	56	51	



Flow Regime* for Sample Sites on Waller Creek Upstream to Downstream

Site #	Site Name	2003						2006					2009					2010	2011				
		Feb	Mar	Mar	May	Sep	Dec	Feb	May	Jul	Aug	Nov	Feb	May	May	Jun	Oct	Dec	Dec	Mar	Jun	Jun	Sep
		WQ	WQ	Bio	WQ	WQ	WQ	WQ	WQ	Bio	WQ	WQ	WQ	WQ	Bio	Bio	WQ	WQ	WQ	WQ	WQ	Bio	WQ
780	51st	B	B	B	B	B	B	B	B	B	n	B	B	B	n		B	B	B	B	B	n	n
781	Shipe Pk	B	B	B	B	B	B																
624	23rd	B	B	B	B	B	B	B	B	B	B	B	B	B	B		B	B	B	B	B	B	B
38	ds Cesar Chavez	B	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 Waller Creek

Summary	Parameter	Mean	Max	Min	Discussion
Physicochemical	D.O. mg/l	6.4	9.3	3.9	Some low values at downstream sites.
	pH st.units	7.76	8.09	7.32	Mostly within normal range, some low values at site 38.
	Cond uS/cm	823	1059	599	Some high values at site 624, generally higher at downstream sites.
Nutrients	NH ₃ mg/l	0.095	0.459	0.008	High values at mouth site, generally increases from US to DS.
	NO ₃ mg/l	0.159	0.415	0.008	Within normal range.
	Ortho P mg/l	0.205	0.29	0.09	Generally above average, with high values at downstream sites.
Sediment Load	TSS mg/l	0.9	2.2	0.2	Within normal range.
	Turbidity ntu	3.45	7.18	1.00	Some above average values, but within normal range.
Biology	E.Coli /100ml	534	866	159	Mostly within normal range, some high values at site 780.
	Benthic Macroinvertebrates and Diatoms: evaluations are provided in the introduction of this report				

Index Scores* for Waller Creek Sites by Year

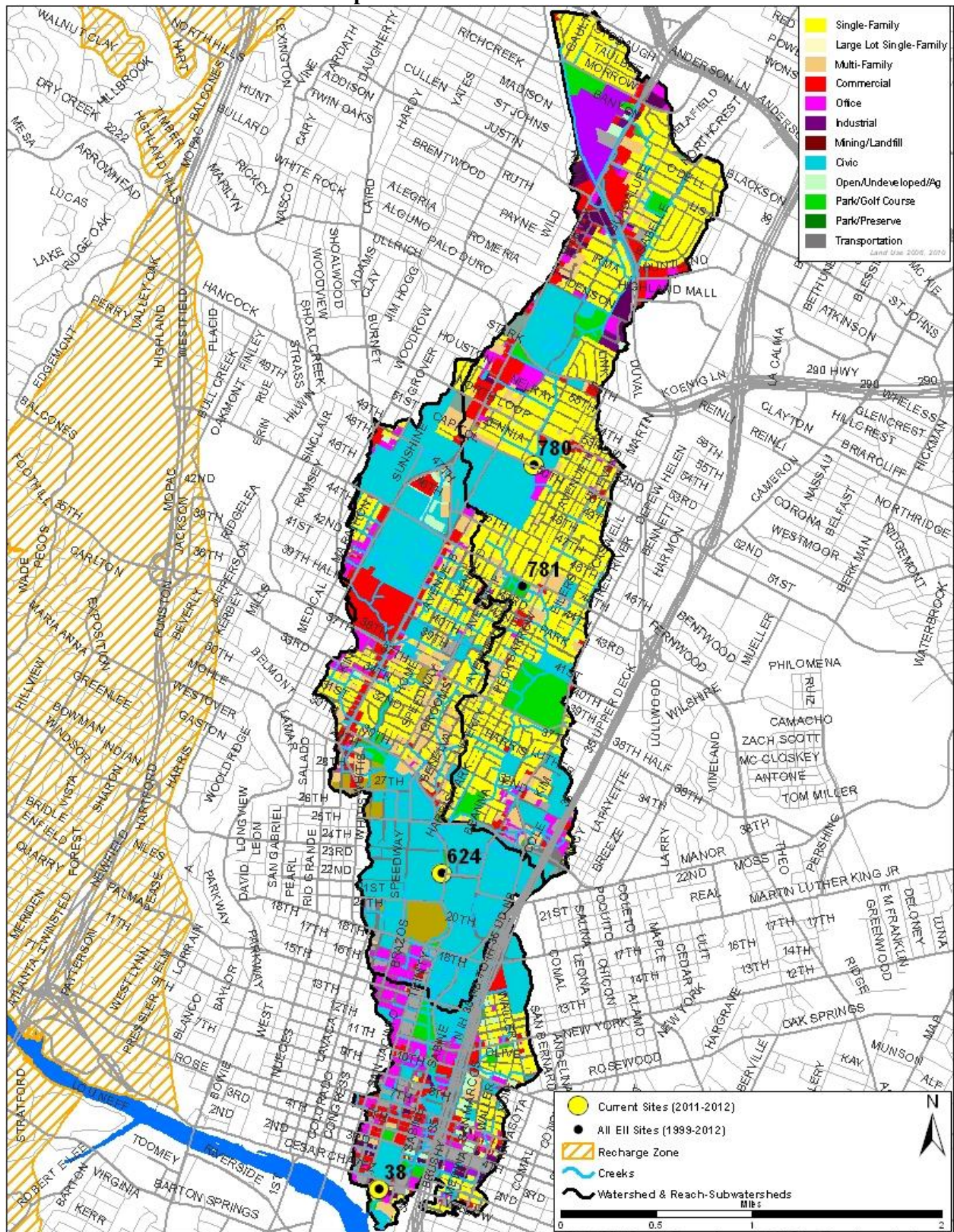
Reach	Site	Site Name	Year	Water Quality	Sediment**	Contact Rec.	Contact Rec.	Physical Integrity	Aquatic Life	Benthic subindex	Diatom subindex	Total EII Score
WLR1	38	Waller Creek DS of Cesar Chavez	1996	33	62	18	67	44	20	20	19	41
WLR2	624	Waller Creek Upstream of 23rd Street	1996	47	62	53	77	49	18	22	13	51
WLR3	780	Waller Creek @ 51st Street	1996	65	62	43	84	65	21	27	14	57
WLR3	781	Waller Creek @ Shipe Park	1996	55	62	30	74	66	19	21	16	51
WLR1	38	Waller Creek DS of Cesar Chavez	2000	41	63	63	59	27	28	22	34	47
WLR2	624	Waller Creek Upstream of 23rd Street	2000	40	63	49	80	49	35	31	38	53
WLR3	780	Waller Creek @ 51st Street	2000	68	63	69	71	45	29	38	20	58
WLR3	781	Waller Creek @ Shipe Park	2000	53	63	74	84	39	26	20	31	57
WLR1	38	Waller Creek DS of Cesar Chavez	2003	44	76	51	53	43	24	34	14	49
WLR2	624	Waller Creek Upstream of 23rd Street	2003	49	76	63	82	63	37	45	29	62
WLR3	780	Waller Creek @ 51st Street	2003	54	76	57	69	63	30	39	21	58
WLR3	781	Waller Creek @ Shipe Park	2003	58	76	69	80	60	36	34	37	63
WLR1	38	Waller Creek DS of Cesar Chavez	2006	38	61	26	68	48	45	30	59	48
WLR2	624	Waller Creek Upstream of 23rd Street	2006	41	61	33	87	68	37	45	28	55
WLR3	780	Waller Creek @ 51st Street	2006	59	61	32	90	64	44	49	39	58
WLR1	38	Waller Creek DS of Cesar Chavez	2009	49	62	29	62	44	78	73	83	54
WLR2	624	Waller Creek Upstream of 23rd Street	2009	54	62	25	81	76	79	86	71	63
WLR3	780	Waller Creek @ 51st Street	2009	57	62	25	58	59	49	24	74	52
WLR1	38	Waller Creek Ds of Cesar Chavez	2011	57	69	35	56	48	53	41	65	53
WLR2	624	Waller Creek Upstream of 23rd Street	2011	48	69	30	68	67	51	53	49	56
WLR3	780	Waller Creek @ 51st Street	2011	64	69	25	34	40	41	42	39	46

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

**sediment samples only collected at the downstream site

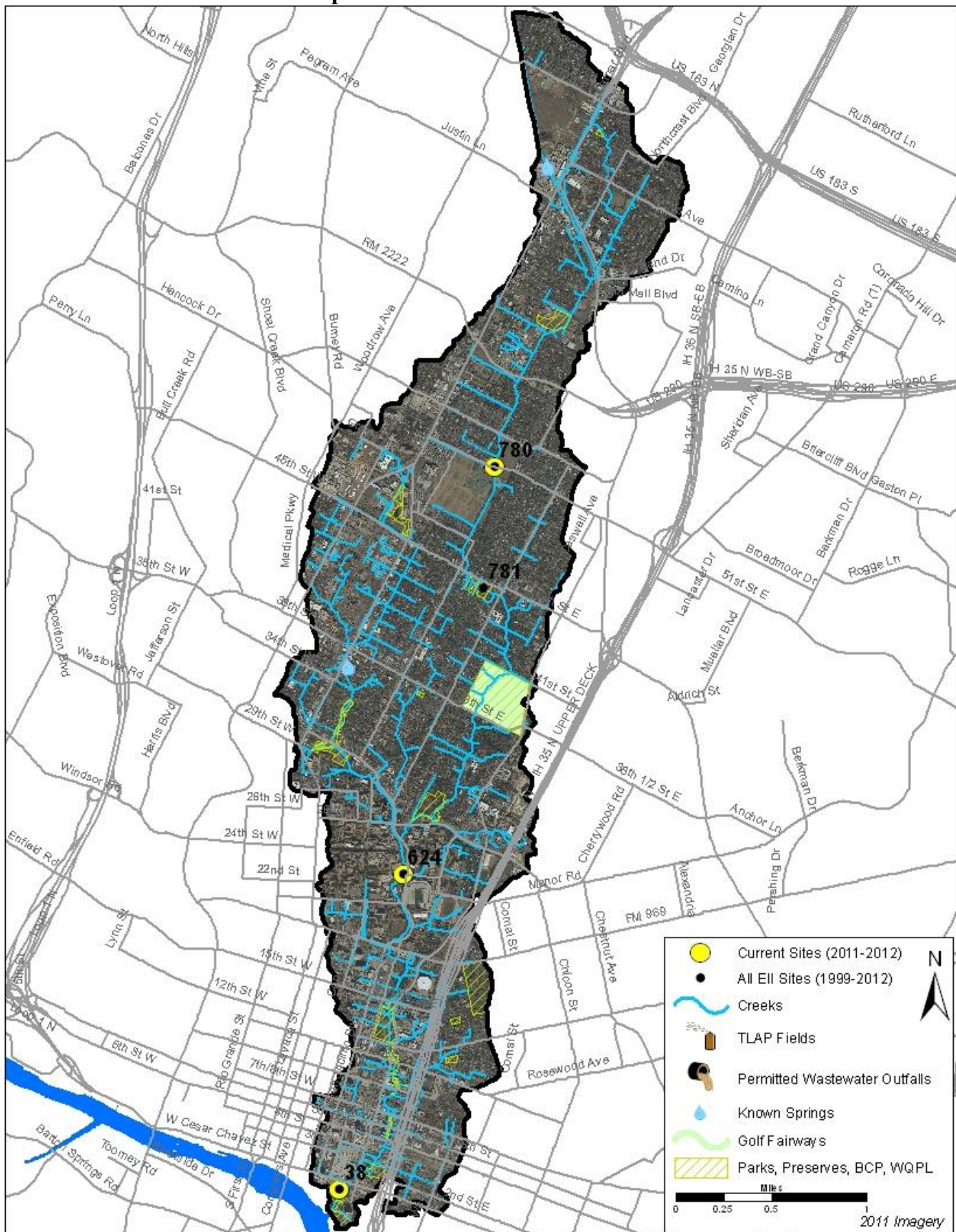
100-87.5 Excellent 87.5-75 V. Good 75-62.5 Good 62.5-50 Fair 50-37.5 Marginal 37.5-25 Poor 25-12.5 Bad 12.5-0 V. Bad

Land Use Map



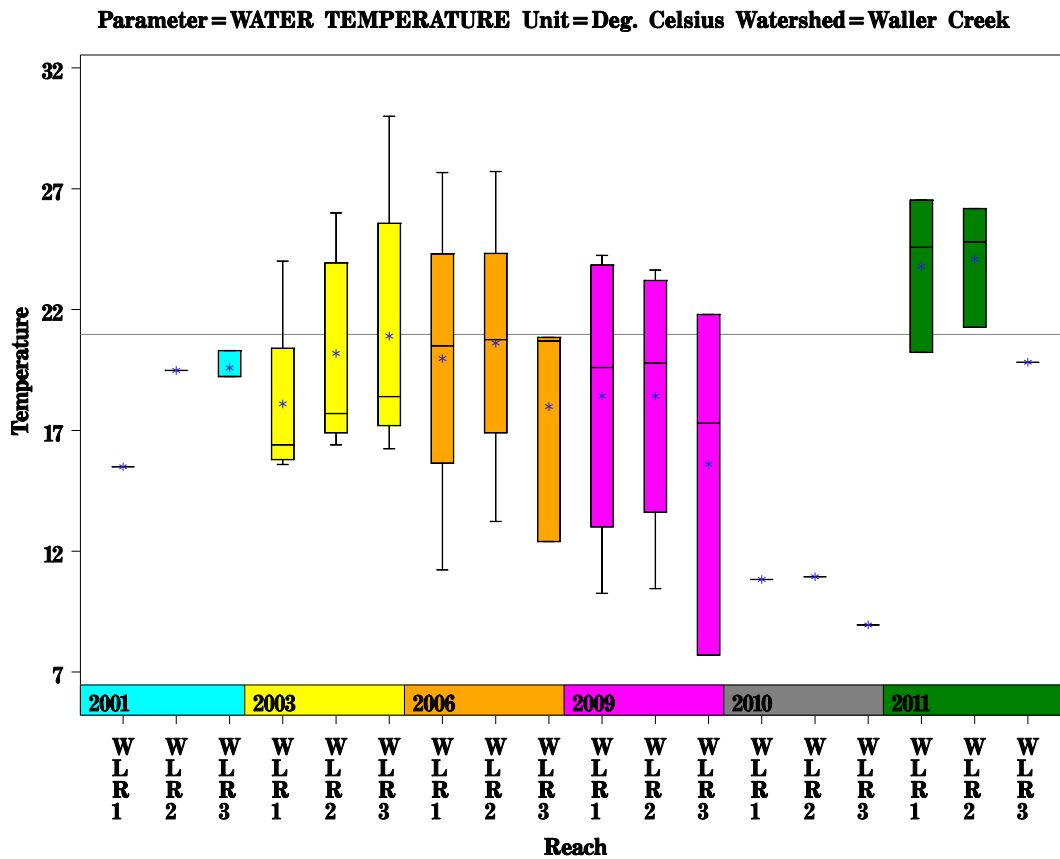
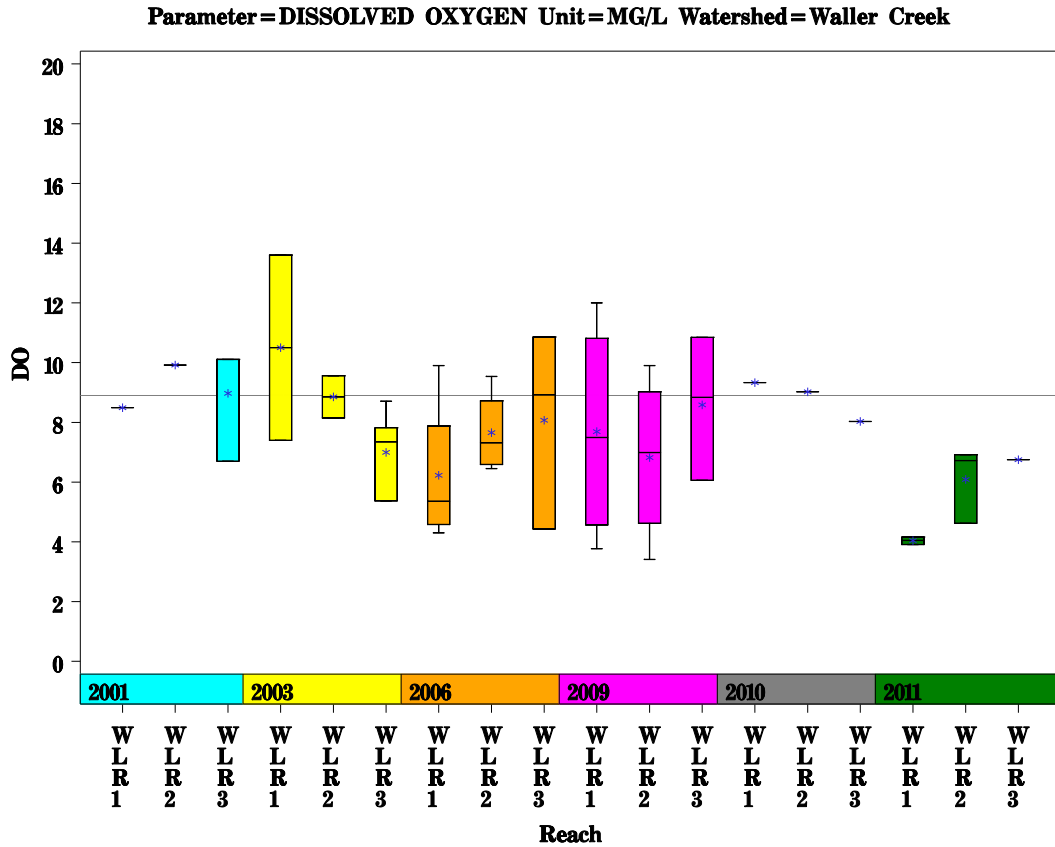
Waller Creek Watershed

Aerial Map



Waller Creek Watershed

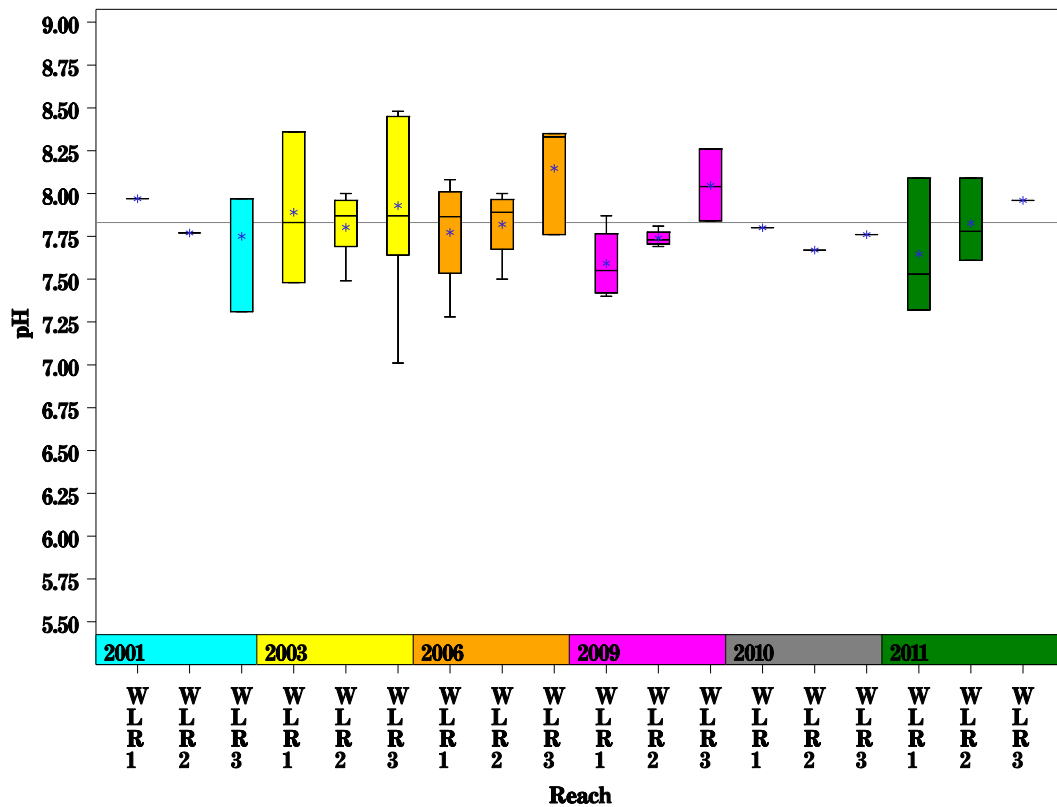
Data Summary Graphs – Dissolved Oxygen and Temperature (Downstream to Upstream by Year)



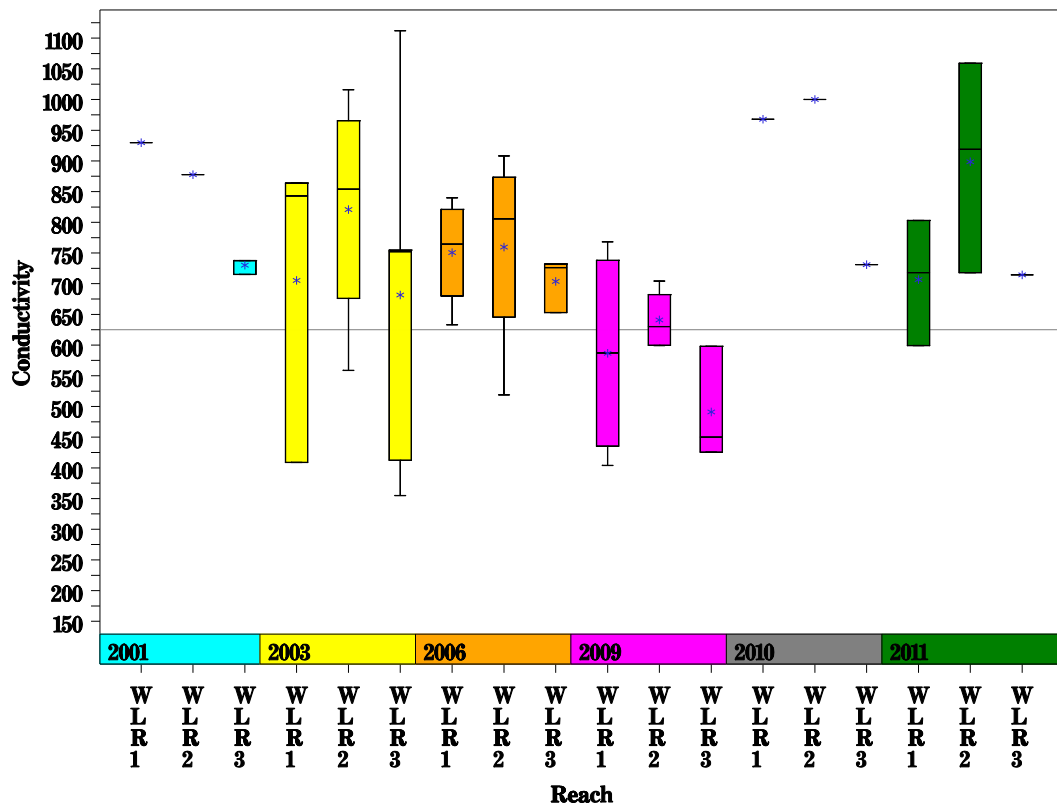
Waller Creek Watershed

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

Parameter=PH Unit=Standard units Watershed=Waller Creek



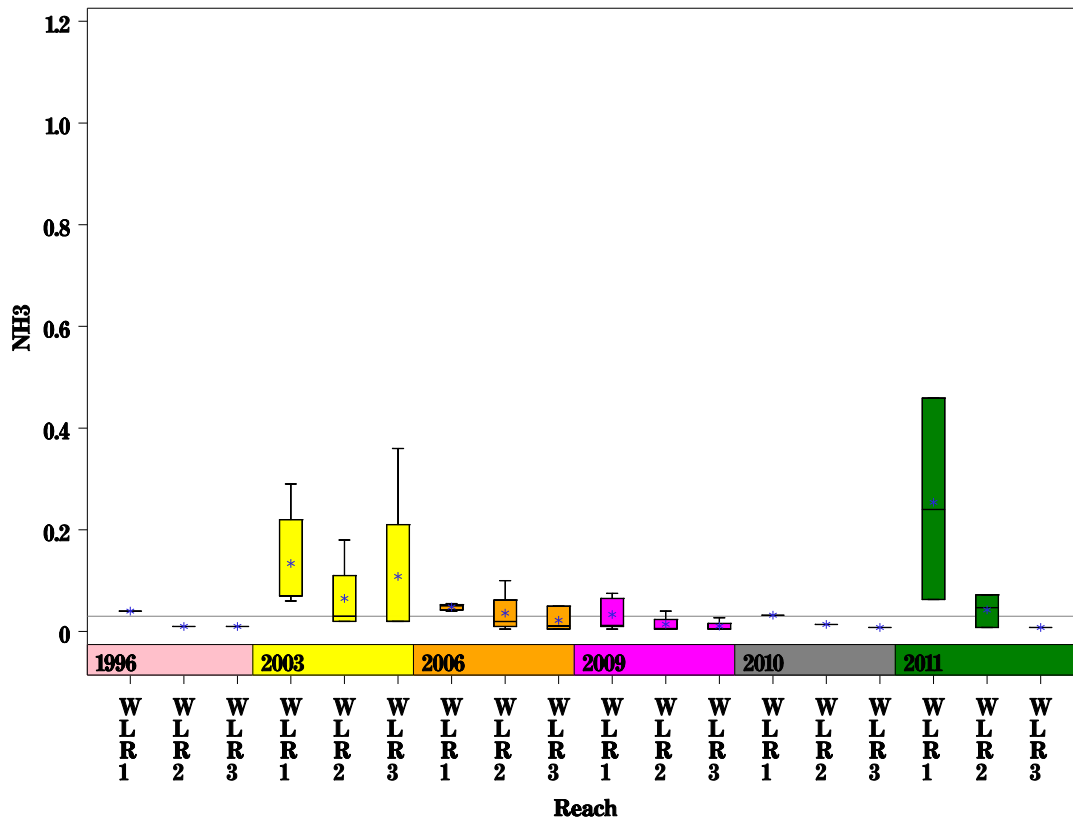
Parameter=CONDUCTIVITY Unit=uS/cm Watershed=Waller Creek



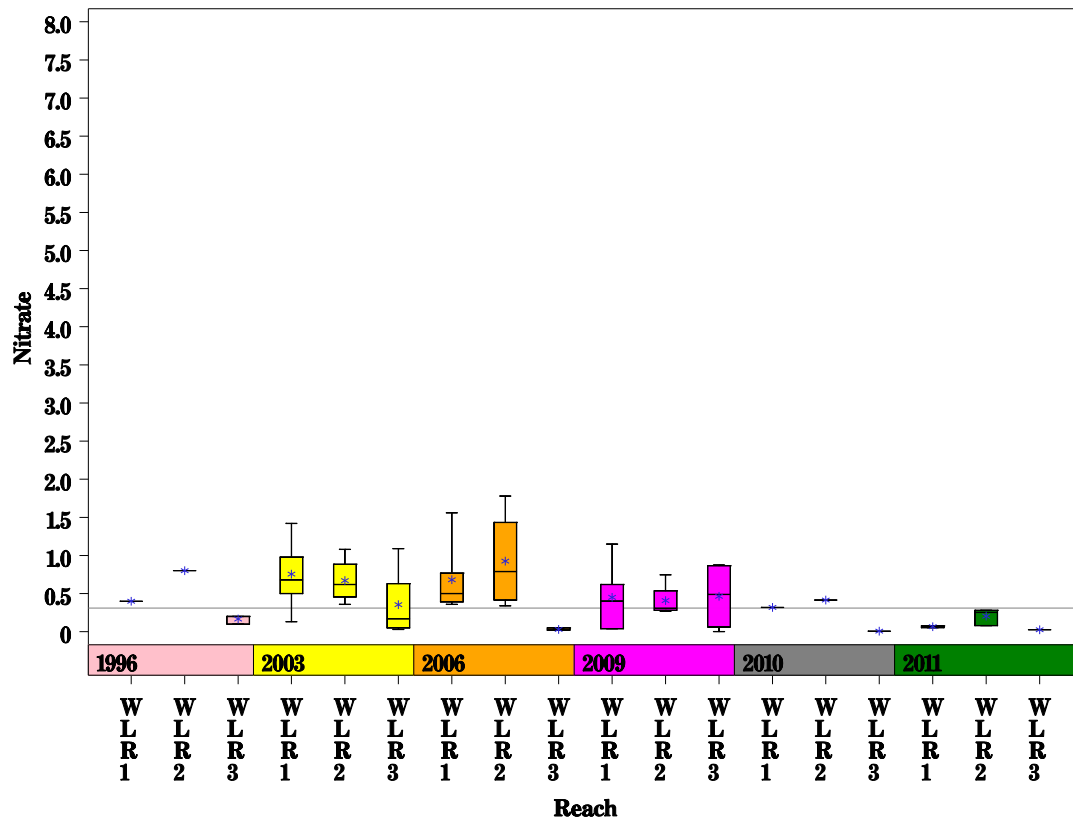
Waller Creek Watershed

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

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



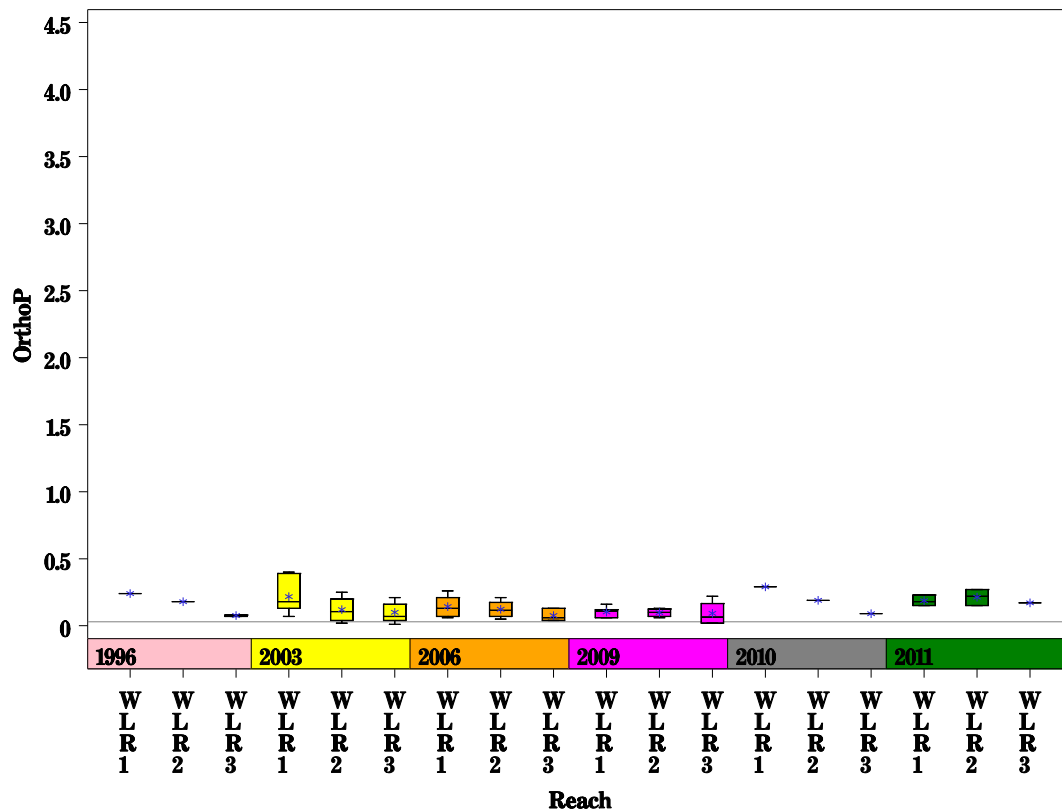
Parameter=NITRATE AS N Unit=MG/L Watershed=Waller Creek



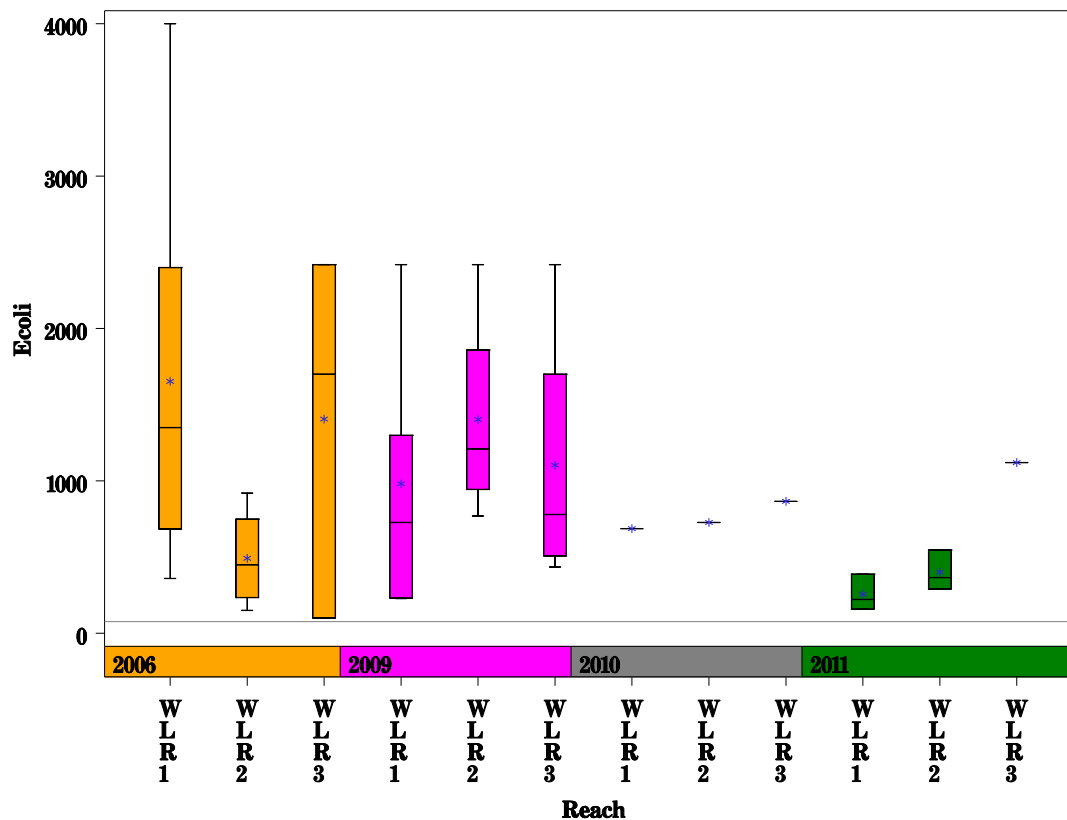
Waller Creek Watershed

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

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

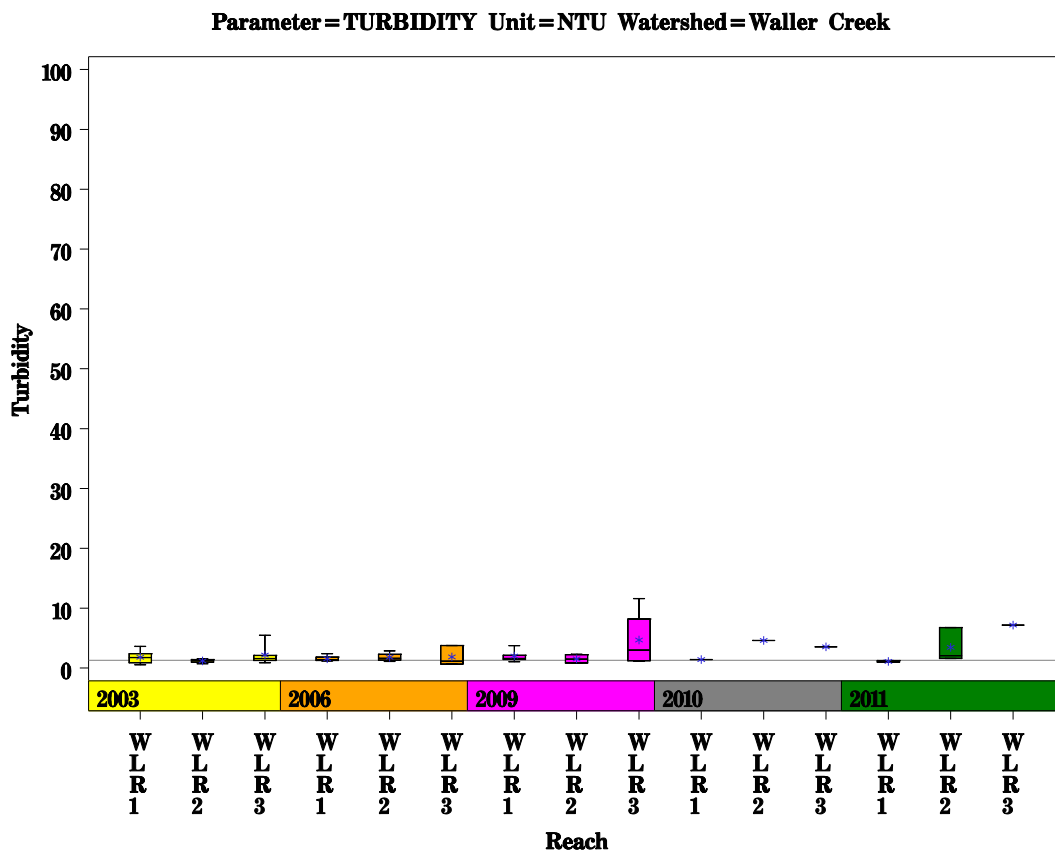
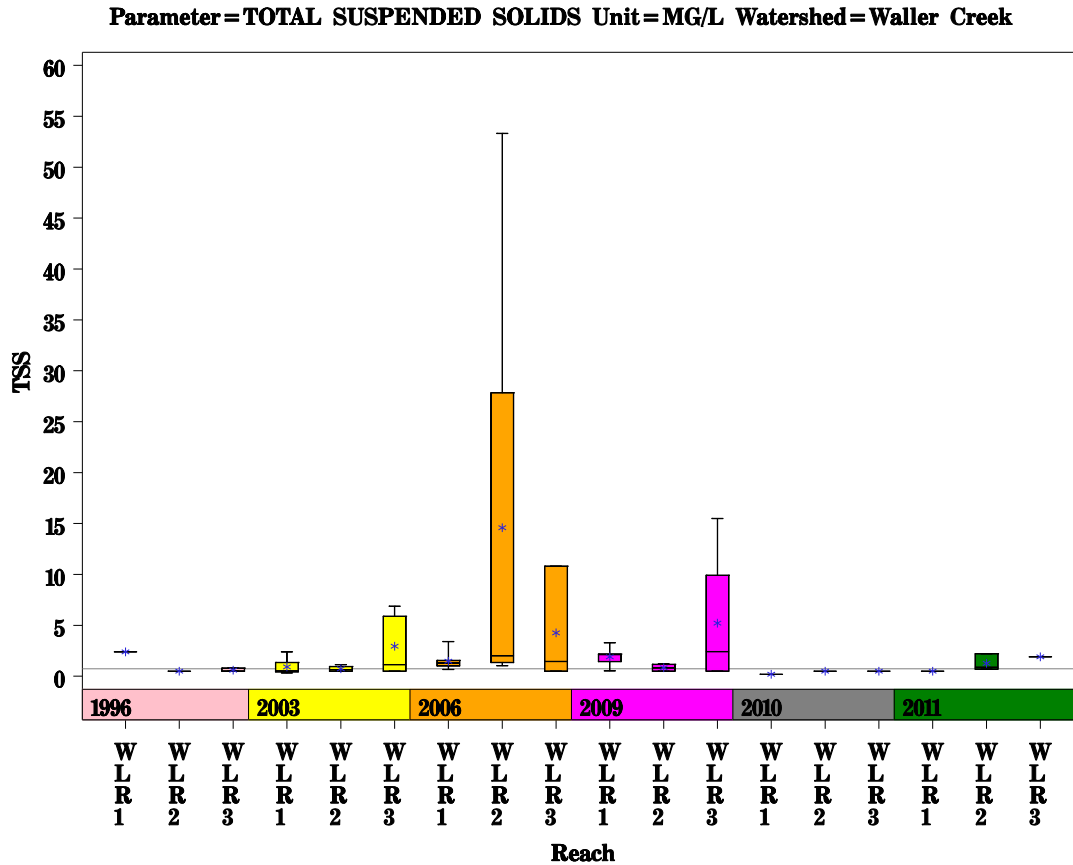


Parameter = E COLI BACTERIA Unit = MPN/100ML Watershed = Waller Creek



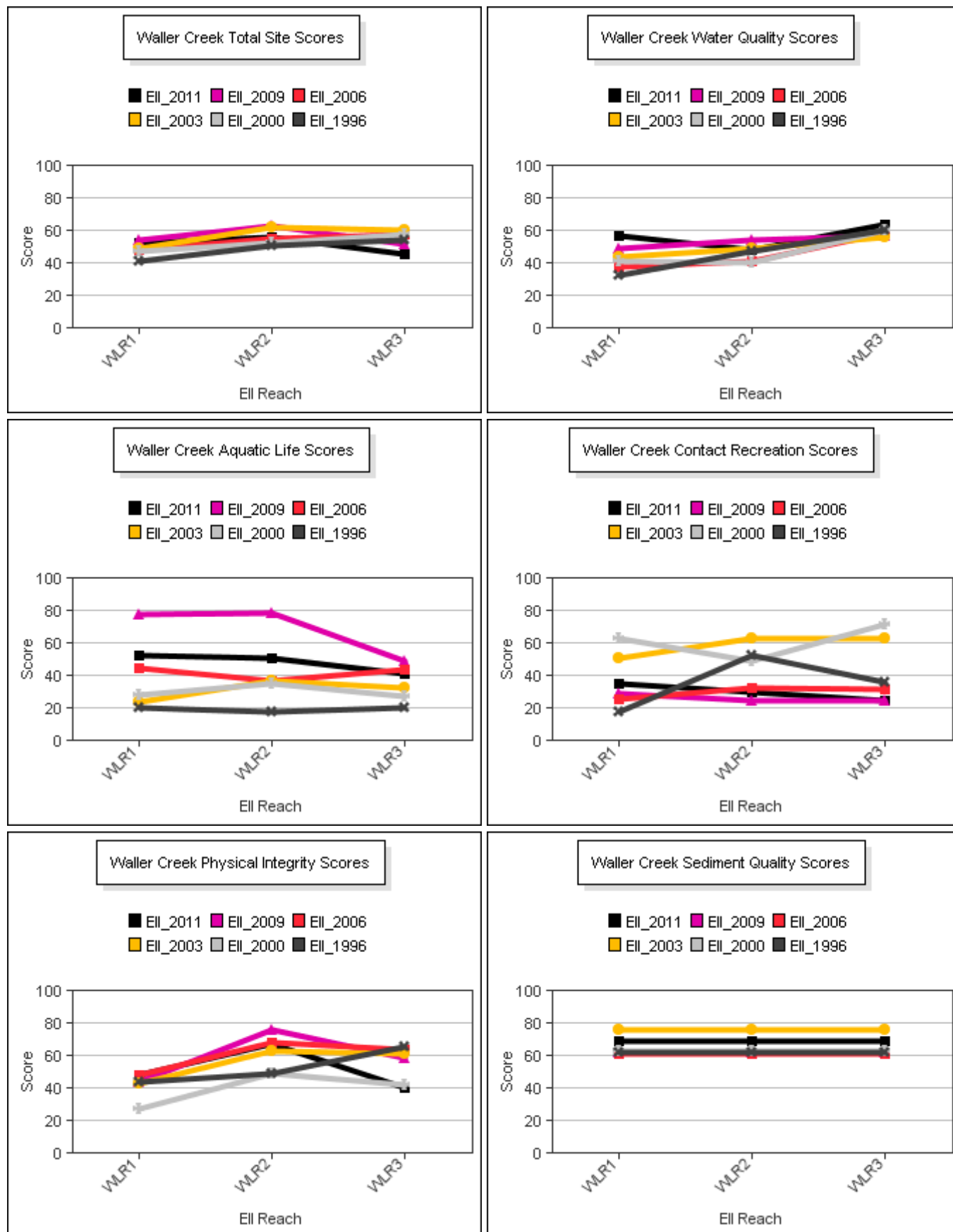
Waller Creek Watershed

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



Waller Creek Watershed

Score Summary – Reach scores for each sample year



Waller Creek Watershed

Site Photographs



780_t00-ds-02_21_2001



780_t00-ur-02_21_2001



780-t00-us-06-03-2009



780-t00-ds-06-03-2009



781_t00-ur-02_21_2001



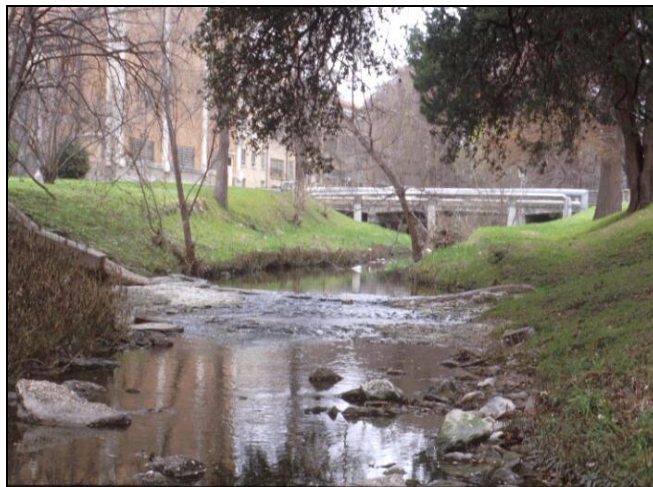
781_t00-us1-02_21_2001

Waller Creek Watershed

Site Photographs



624_t00-ds1-02_21_2001



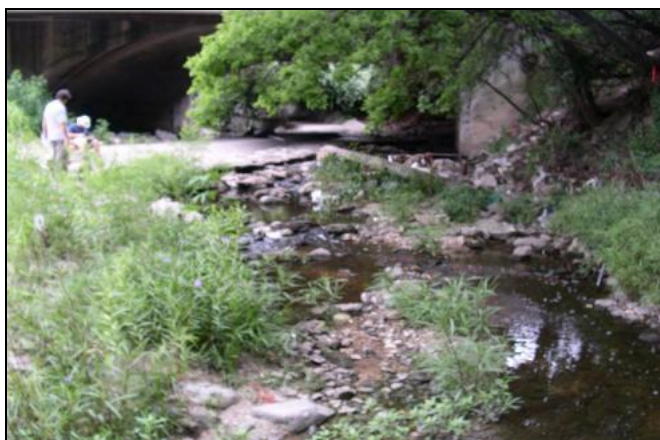
624_t00-us-03_13_2003



624_t00-us1-07_05_2006



624-t00-ds-05-28-2009



38-t00-us-05-29-2009



38-t00-ds-05-29-2009

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