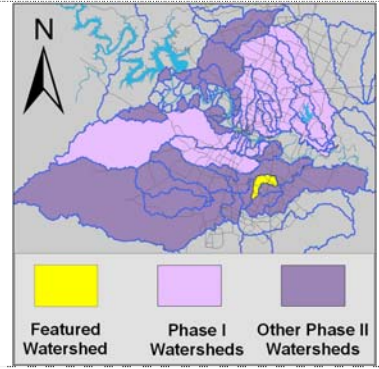


# Cottonmouth Creek Watershed

## Summary Sheet

Catchment	Total area	5 sq. miles				
	Area in recharge	0				
	Creek length	7 miles				
Demographics	Receiving water	Onion Creek				
	2000 population	420				
	2030 projected population	3,312				
Land Use	30 year projected % increase	689 %				
	Impervious cover (2003 estimate)	7.3 %				
Overall EII Scores	1999	2002	2005	2008	2010	2012
	56	56	53	68	71	66



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

Site #	Site Name	2002					2005					2008					2010				2011	2012		
		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	Mar WQ	May WQ	May Bio	Oct WQ	Dec WQ	Mar WQ	May Bio	
1205	Colton-Bluff Spg	n		n	n																			
1206	DG Collins	B	B	n	B	B	B	B	n	n	B	B	n	n	n	B	B	B	B	n	B	B	B	
1207	Colton Rd	B	B	n	n	B	B	n	B	n	n													

\* 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 Cottonmouth Creek

Summary	Parameter	Mean	Max	Min	Discussion
Physicochemical	D.O. mg/l	6.3	7.5	5.2	Within normal range.
	pH st.units	8.02	8.16	7.87	Within normal range.
	Cond uS/cm	779	781	776	Within normal range.
Nutrients	NH <sub>3</sub> mg/l	0.009	0.010	0.008	Generally low.
	NO <sub>3</sub> mg/l	1.283	1.76	0.806	Within normal range.
	Ortho P mg/l	0.048	0.048	0.048	Within normal range.
Sediment Load	TSS mg/l	2.8	2.8	2.8	Within normal range.
	Turbidity ntu	2.81	2.81	2.81	Within normal range.
Biology	E.Coli /100ml	47	72	22	Generally low.

**Benthic Macroinvertebrates and Diatoms:** evaluations are provided in the introduction of this report

### Index scores\* for Cottonmouth 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
CTM1	1205	Cottonmouth Creek @ Colton-Bluff Springs	1999	65	83	99	65	58				62
CTM1	1206	Cottonmouth Creek @ Dee Gabriel Collins	1999	48	83	96	77	56				60
CTM1	1207	Cottonmouth Creek @ Colton Road	1999	53	83	68	32	33				45
CTM1	1205	Cottonmouth Creek @ Colton-Bluff Springs	2002		64		72	55				48
CTM1	1206	Cottonmouth Creek @ Dee Gabriel Collins	2002	40	64	65	78	62	29	40	18	56
CTM1	1207	Cottonmouth Creek @ Colton Road	2002	48	64	92	52	57	34	45	23	58
CTM1	1206	Cottonmouth Creek @ Dee Gabriel Collins	2005	36	68	37	57	51	44	39	49	49
CTM1	1207	Cottonmouth Creek @ Colton Road	2005	53	68	45	59	61	61		61	58
CTM1	1206	Cottonmouth Creek @ Dee Gabriel Collins	2008	67	81	47	77	68	65	65		68
CTM1	1206	Cottonmouth Creek @ Dee Gabriel Collins	2010	65	76	86	73	54	71	74	68	71
CTM1	1206	Cottonmouth Creek @ Dee Gabriel Collins	2012	49	82	69	67	62	68	97	38	66

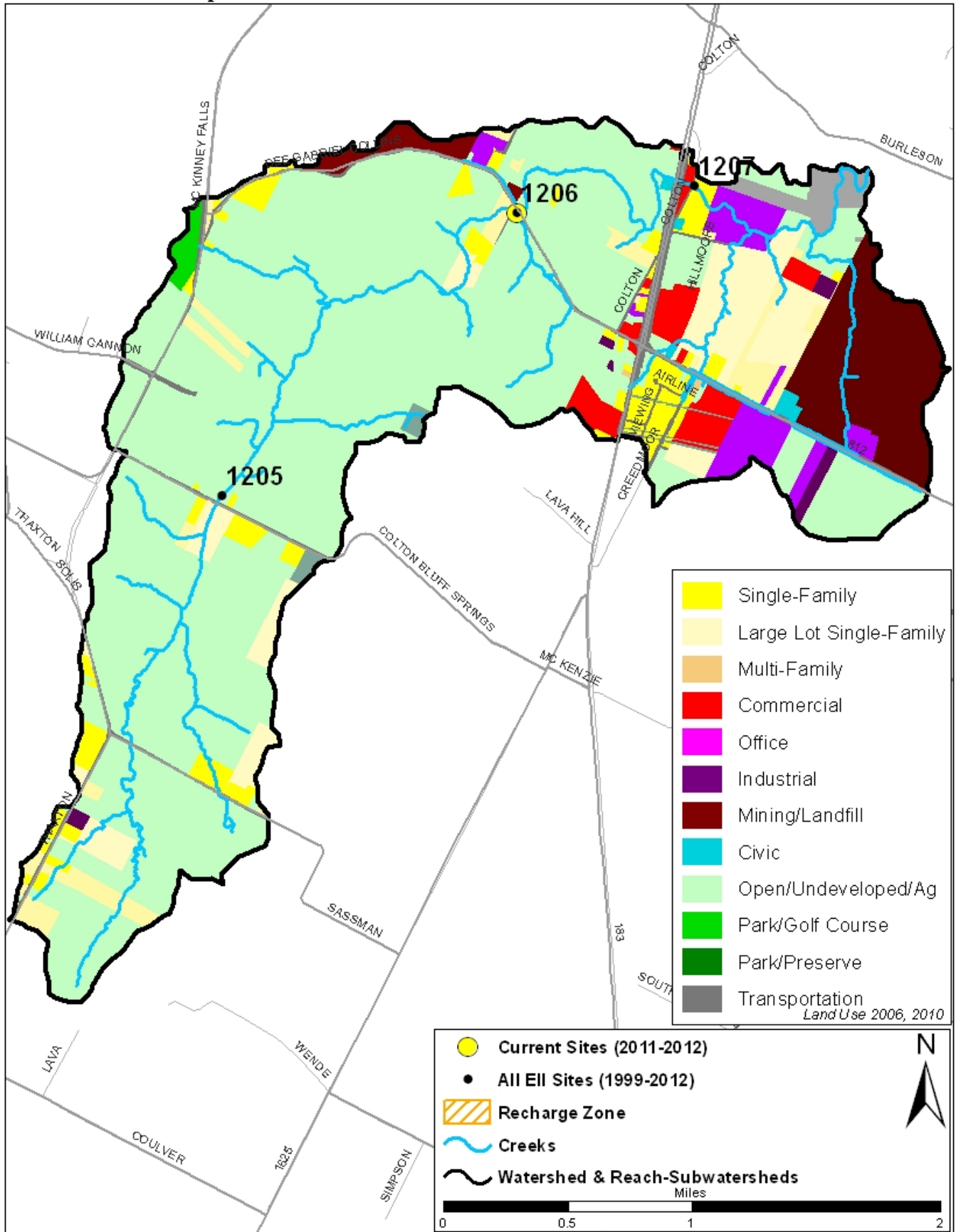
\* blank cells indicate parameter was not collected, blank row indicate site was dropped

\*\*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

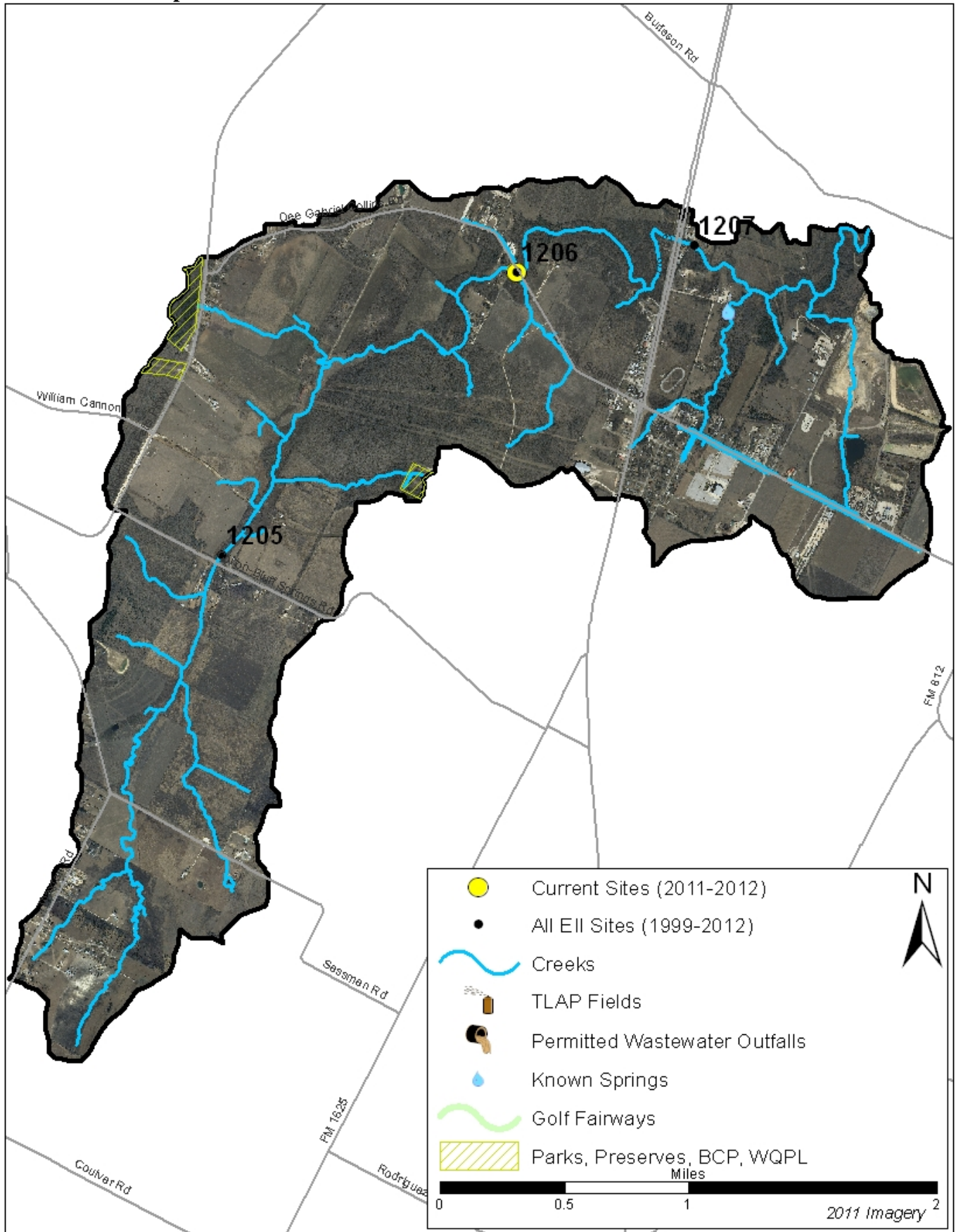
# Cottonmouth Creek Watershed

## Land Use Map



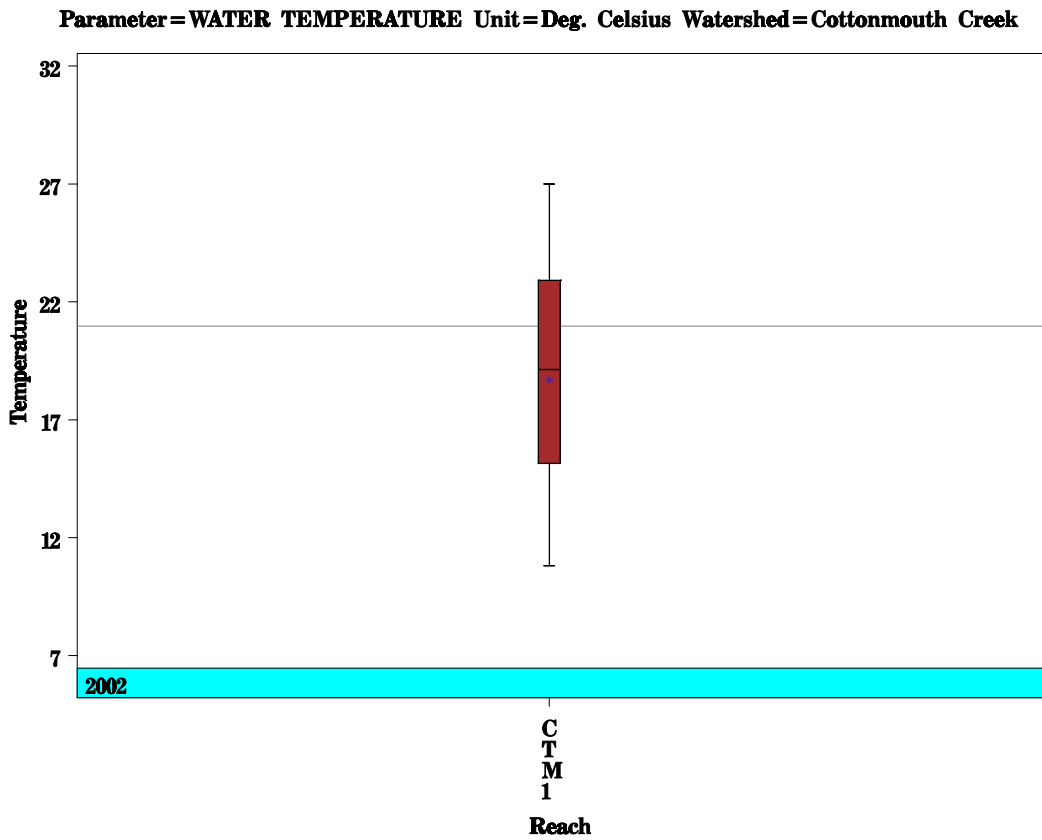
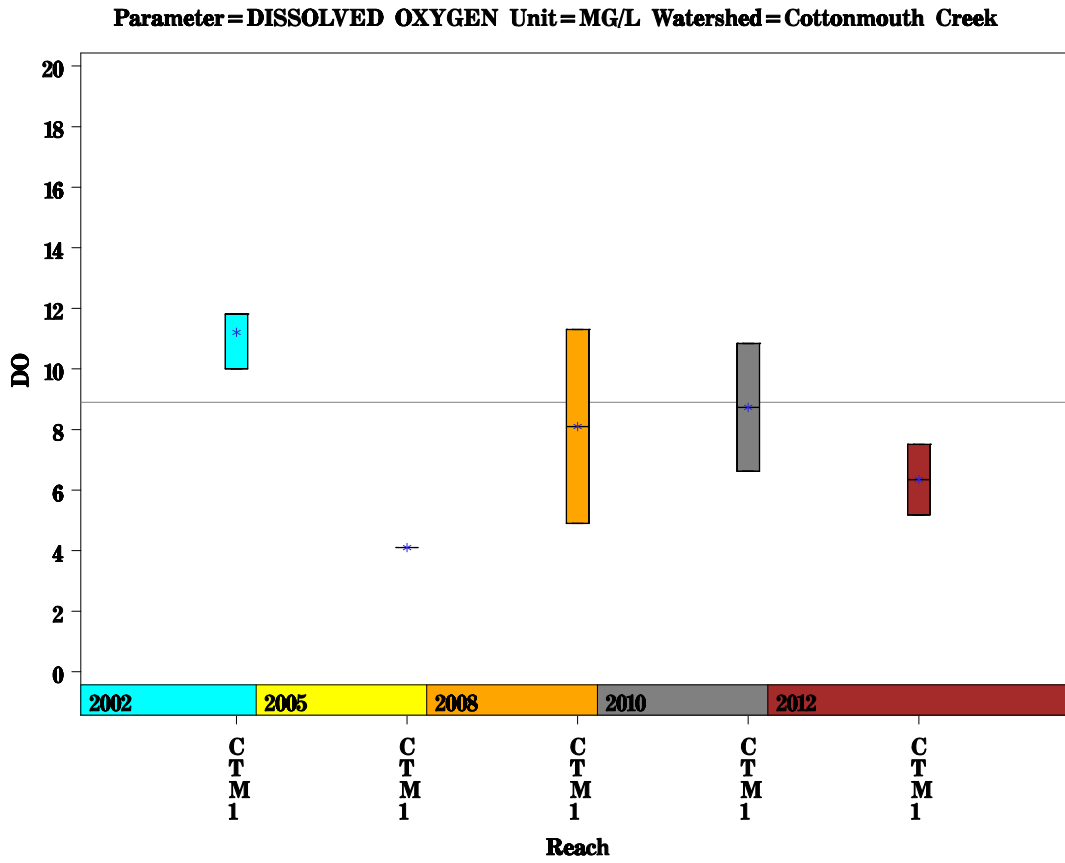
# Cottonmouth Creek Watershed

## Aerial Map



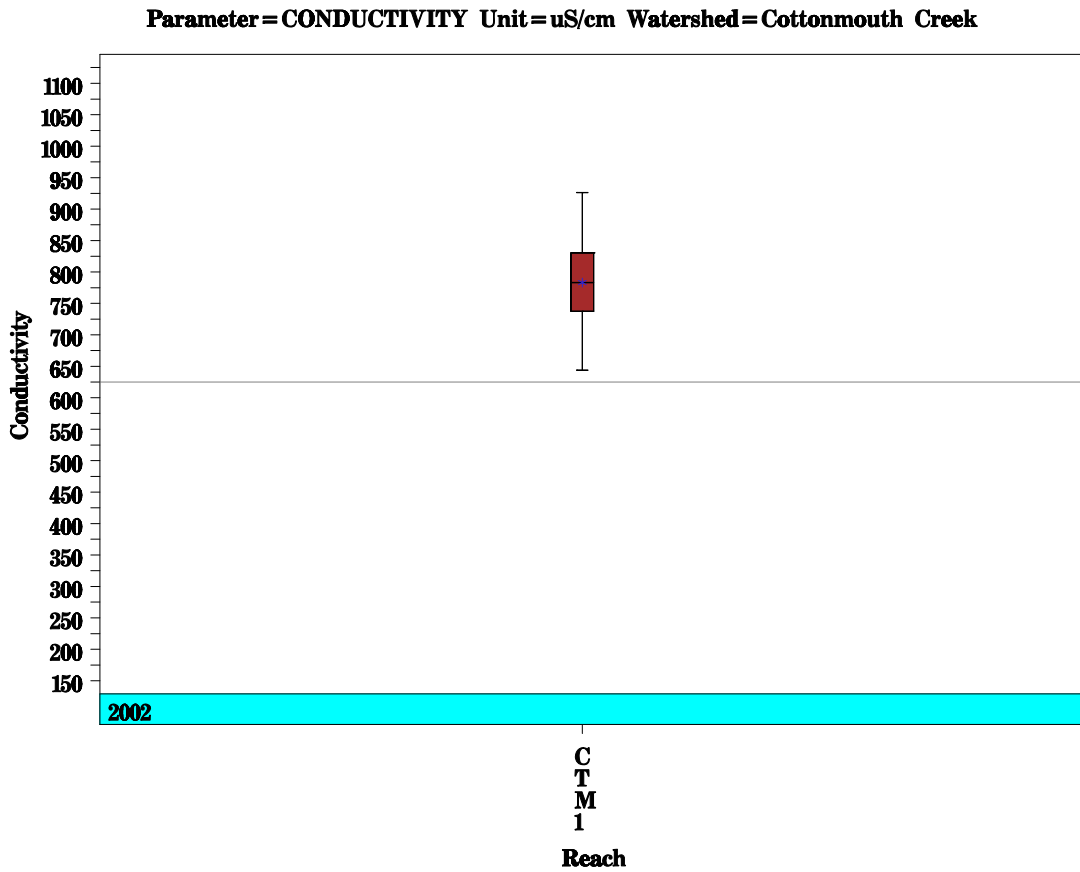
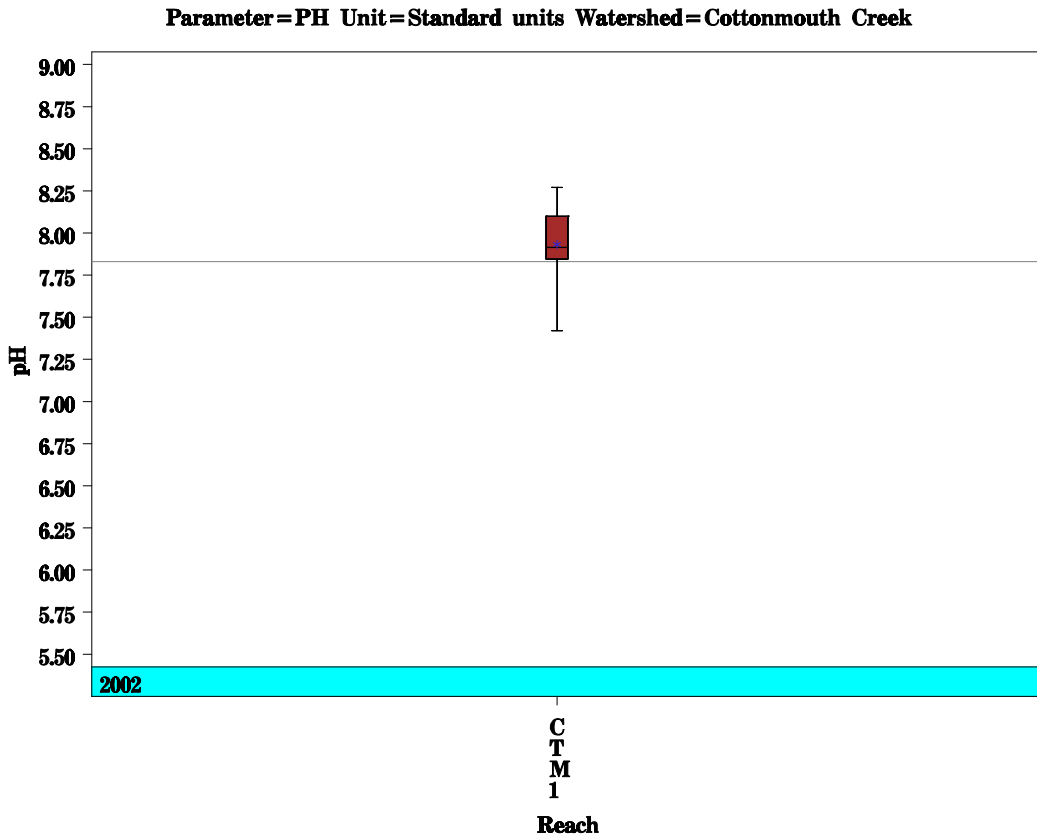
# Cottonmouth Creek Watershed

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



# Cottonmouth Creek Watershed

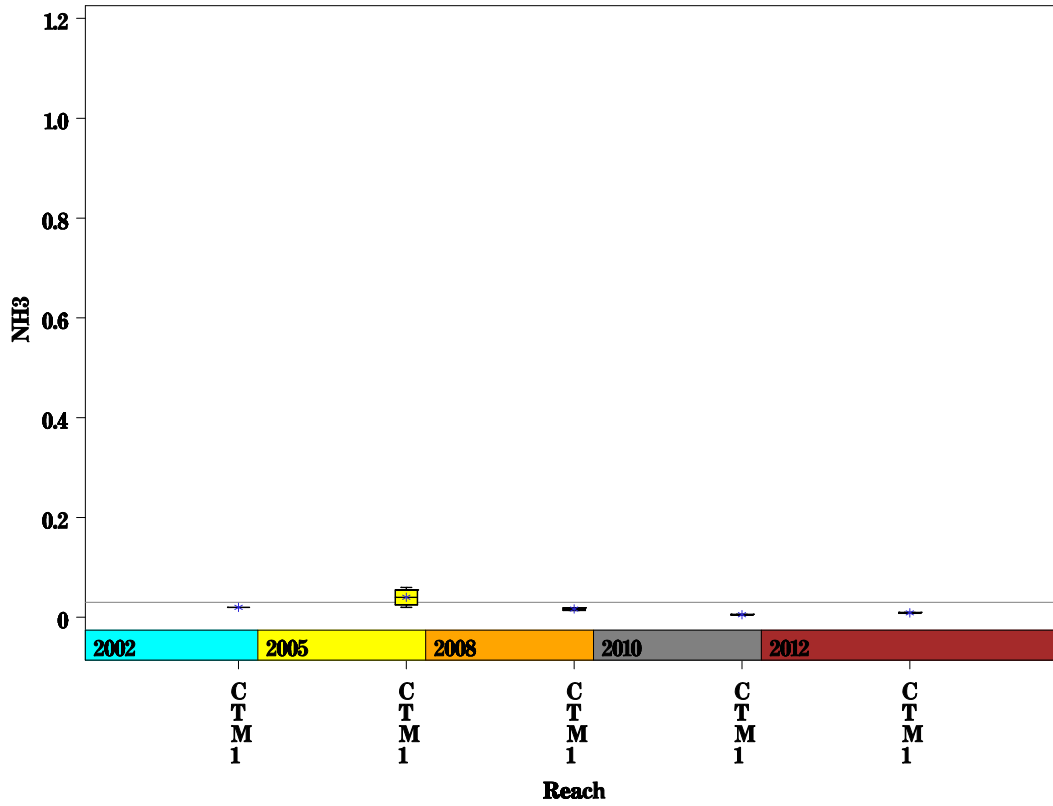
Data Summary Graphs – pH and Conductivity (Downstream to Upstream by Year)



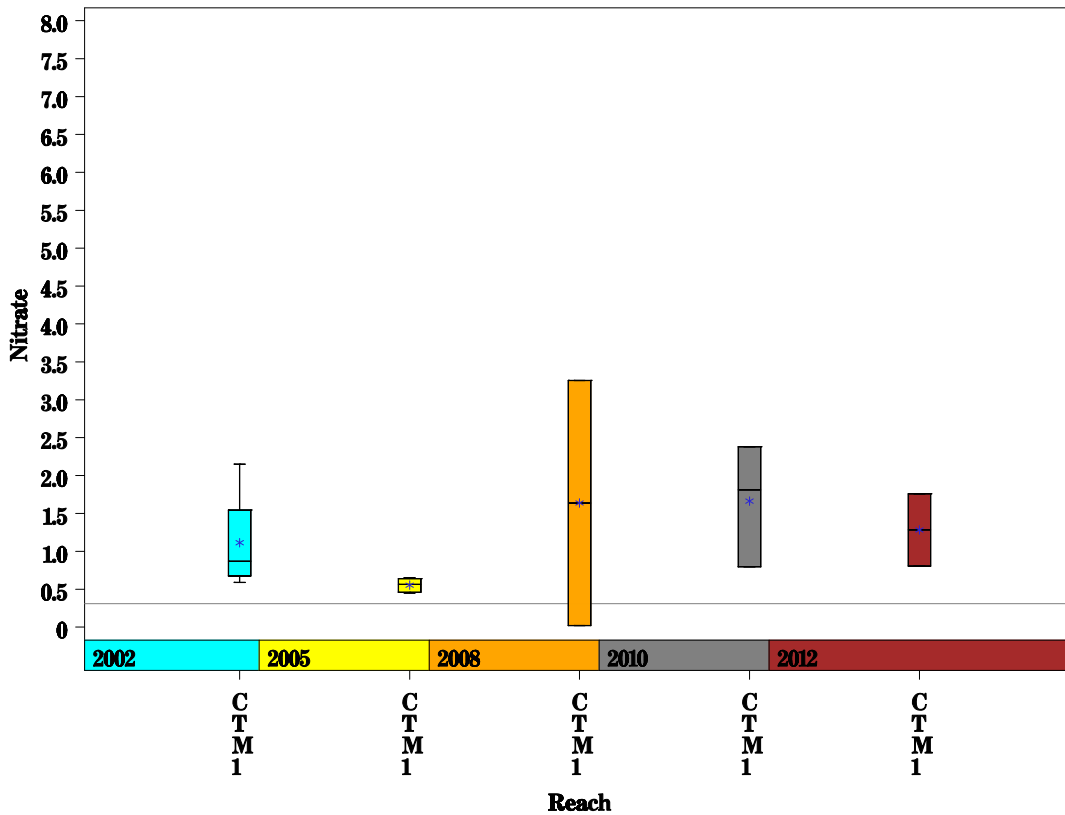
# Cottonmouth Creek Watershed

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

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

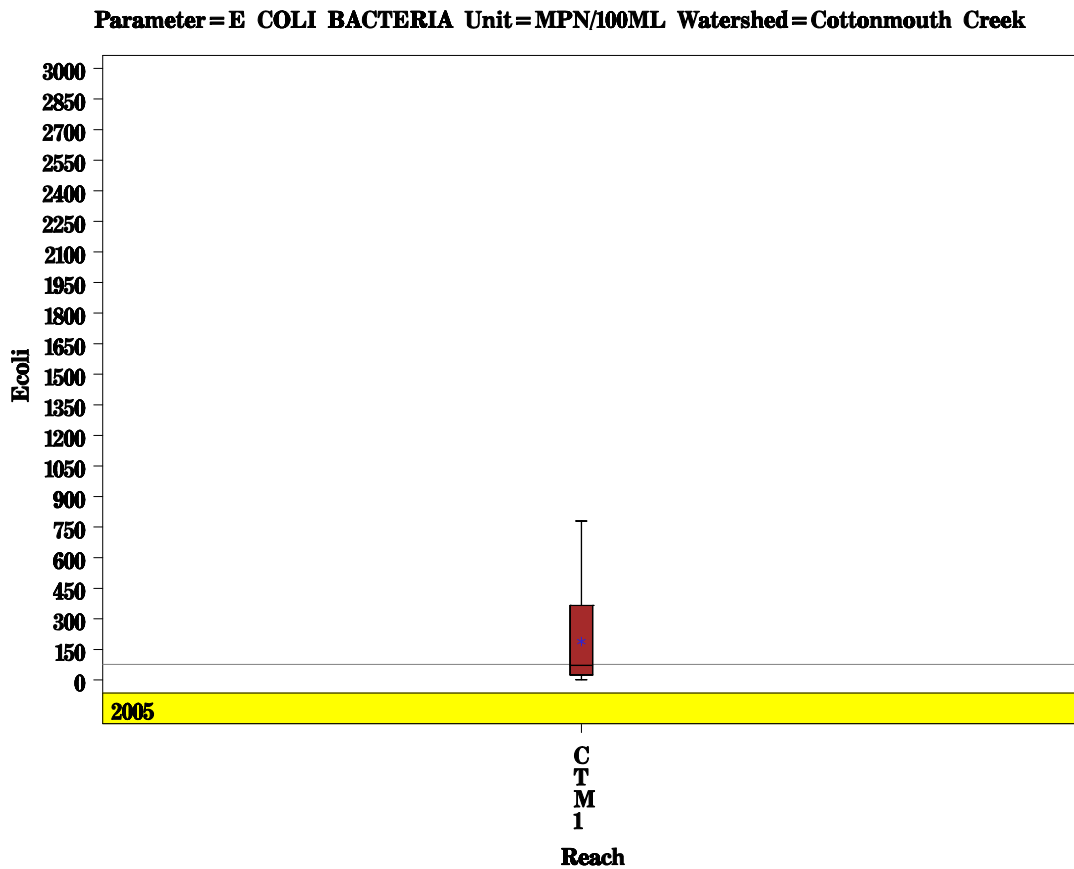
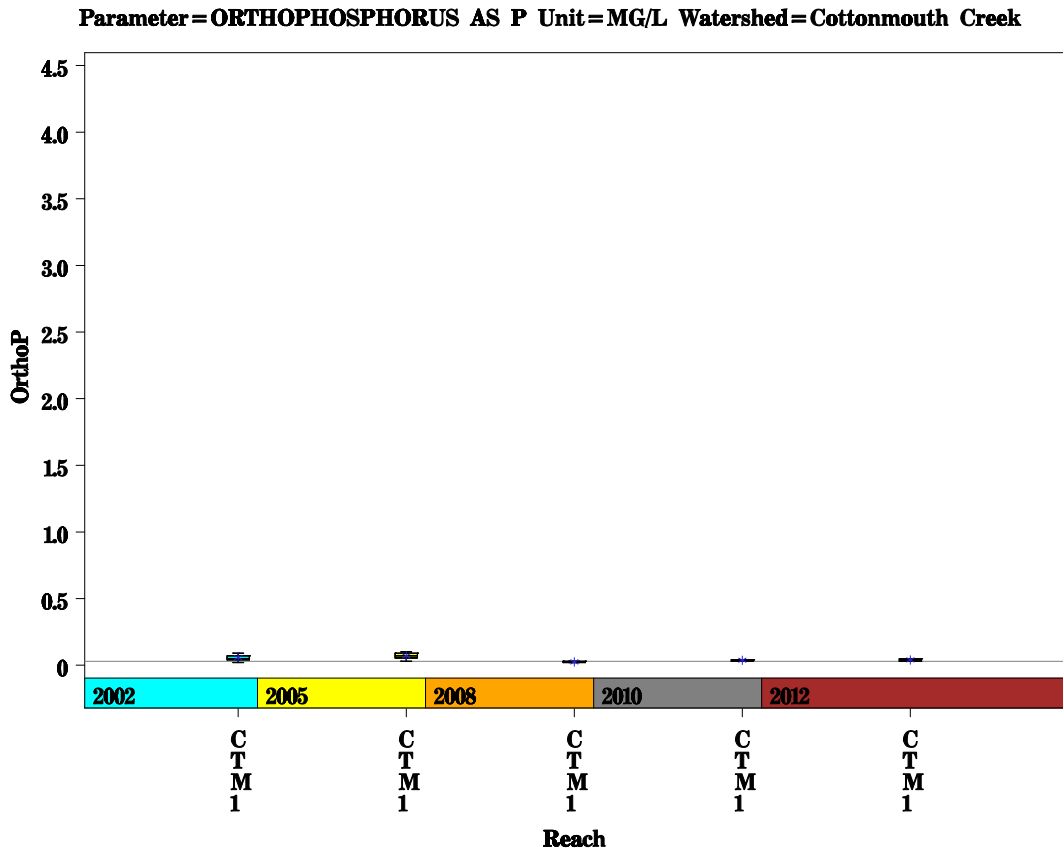


Parameter=NITRATE AS N Unit=MG/L Watershed=Cottonmouth Creek



# Cottonmouth Creek Watershed

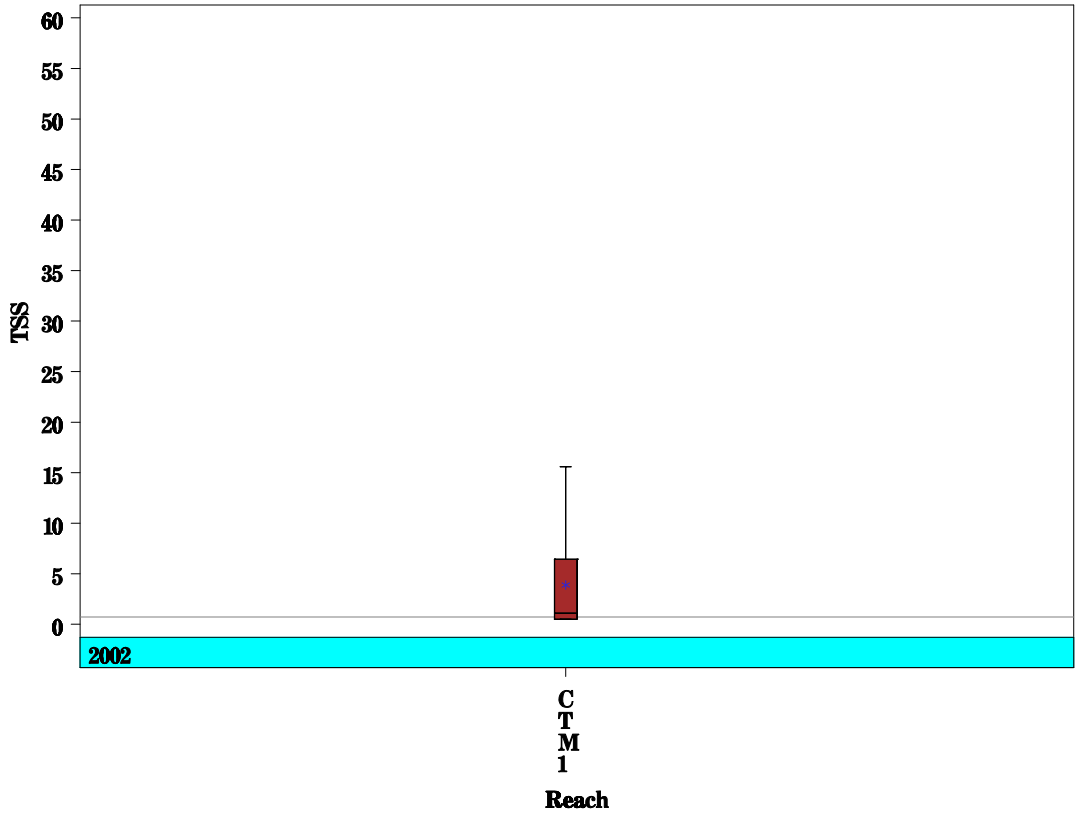
Data Summary Graphs – Orthophosphate and E.coli (Downstream to Upstream by Year)



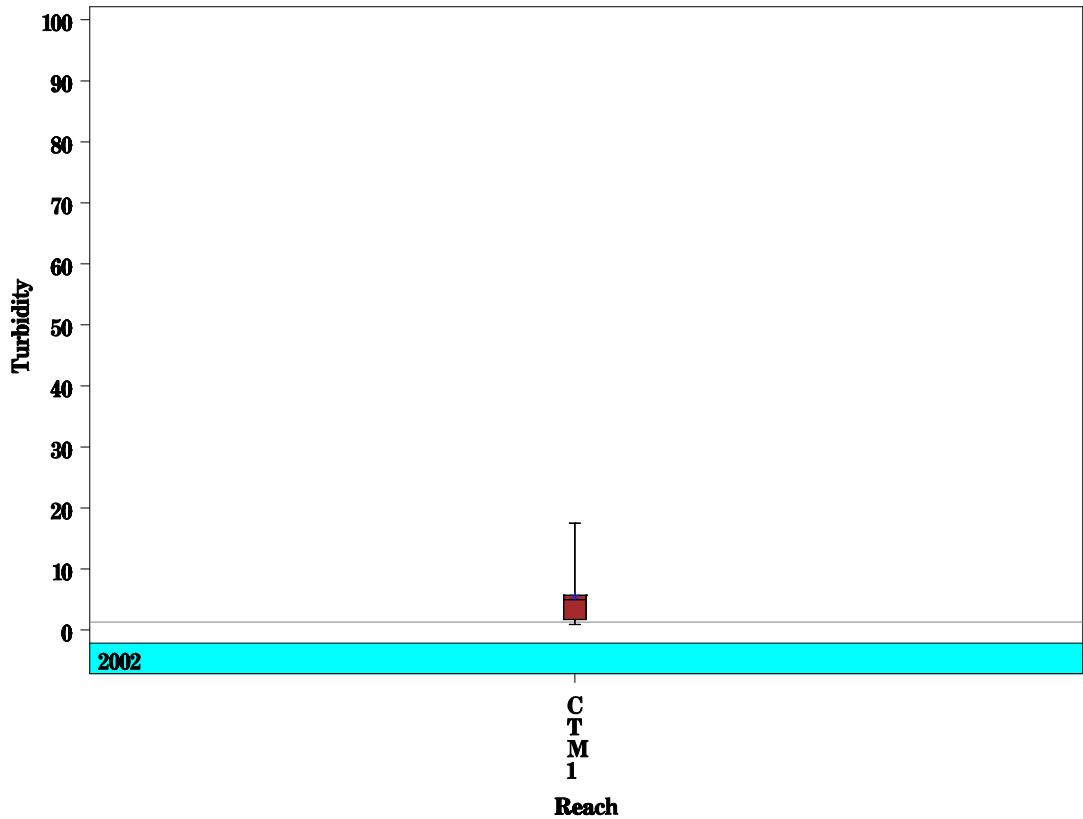
# Cottonmouth Creek Watershed

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

Parameter = TOTAL SUSPENDED SOLIDS Unit = MG/L Watershed = Cottonmouth Creek



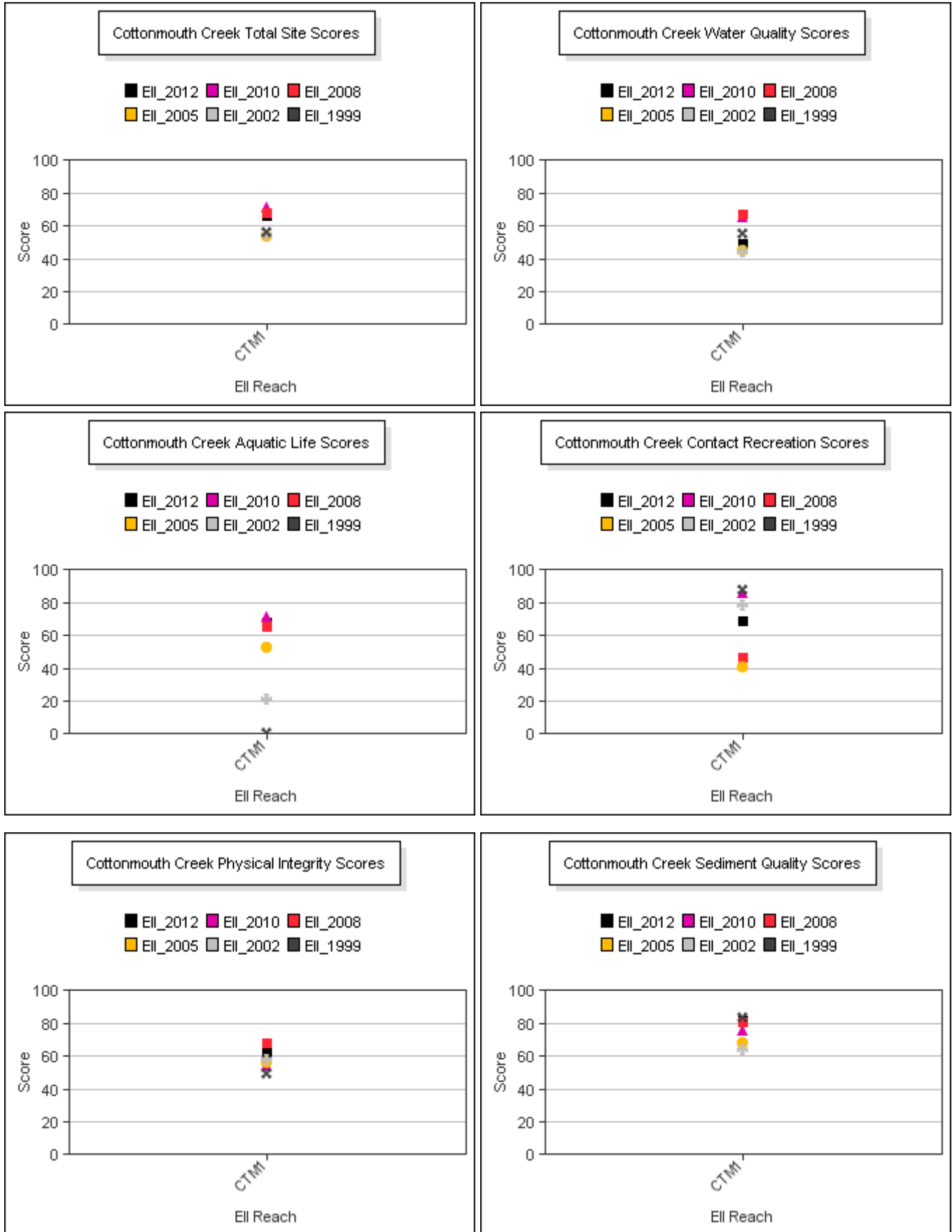
Parameter = TURBIDITY Unit = NTU Watershed = Cottonmouth Creek





# Cottonmouth Creek Watershed

## Score Summary – Reach scores for each sample year



# Cottonmouth Creek Watershed

## Site Photographs



1205\_t00-ds1-06\_20\_2000



1205\_t00-ds-03\_28\_2002



1207\_t00-ds-03\_28\_2002



1207\_t00-us-06\_15\_2005



1207\_t00-ds-06\_15\_2005



1207\_t00-ur-06\_15\_2005



# Cottonmouth Creek Watershed

## Site Photographs



1206\_t00-ds-06\_20\_2000



1206\_t00-ds-03\_28\_2002



1206\_t00-us-06\_15\_2005



1206\_t0-ds-06\_17\_2008



1206\_00-us-05\_18\_2010



1206\_00-ds-05\_18\_2010

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