

# FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Division of Environmental Assessment and Restoration, Bureau of Watershed Restoration

NORTHWEST DISTRICT • PENSACOLA BAY BASIN

## Final TMDL Report

### Appendix B: Bayou Chico (WBIDs 846 and 846C) and Middle Pensacola Bay (WBID 548D)

### Data Figures/Tables



June 7, 2013

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## B.1 Bayou Chico (WBIDs 846 and 846C) Data Presentation

Table B.1. Water Quality Stations in the Bayou Chico Watershed

Station	WBID	Location	Alias	Start	End
21FLPNS 33020213	846A	TMDL Wbid # 846A-4 Jones Cr @ Waycross Ave.	JO-1	2004	2004
21FLA 33020124	846A	JONES SWAMP CR AT END OF WAYCROSS AVE.	JO-2	1985	1985
21FLA 33020120	846A	JONES CREEK AT SR 289 A	JO-3A	1985	1989
21FLBFA 33020120	846A	JONES CREEK AT SR 289A	JO-3B	1989	1989
21FLA 33020123	846A	JONES CREEK N END MILLS AVE	JO-4	1969	1972
21FLPNS 33020211	846A	TMDL Wbid # 846A-2 Jones Cr @ Fairfield Dr	JO-5	2004	2009
21FLPNS 33020217	846A	TMDL Wbid # 846A-8 Jones Cr @ Beaver Dam on Decatar St	JO-6	2004	2004
21FLA 33020121	846A	JONES CREEK N END OF MILLS AVE	JO-7	1989	1989
21FLPNS 33020126	846A	Jones Creek abv Brigadier Rd. south of west PJC campus	JO-8	2009	2010
21FLPNS 33020216	846A	TMDL Wbid site 846A-7 Jones Cr @ gate by PJC west Campus	JO-9	2004	2004
21FLA 33020117	846A	JONES CREEK AT NEW CORRY ROAD	JO-10A	1971	1989
21FLPNS 33020117	846A	JONES CREEK AT NEW CORRY ROAD	JO-10B	2004	2004
21FLPNS 33020210	846A	TMDL Wbid # 846A-1 Jones Cr @ New Warrington Rd.	JO-11	2004	2009
21FLPNS 33020215	846A	TMDL Wbid # 846A-6 Jones Cr @ Southgate Shopping Plaza	JO-12	2004	2004
21FLA 33020122	846A	JONES CREEK BELOW WARRINGTON STP	JO-13	1980	1989
21FLA 33020118	846A	JONES CREEK AT OLD CORRY ROAD	JO-14	1970	1992
21FLBFA 33020118	846A	JONES CREEK AT OLD CORRY ROAD	JO-15	1989	2010
21FLA 33020119	846A	JONES CR W TIP N ARM BAYOU CHICO	JO-16	1989	1989
21FLPNS 33020224	846B	TMDL Wbid # 846B-7 Jackson Cr @ Corry Station & Prieto	JA-1	2004	2009
21FLA 33020134	846B	JACKSON CR BEHIN WELLING ARM APT	JA-2	1973	1975
21FLPNS 33020222	846B	TMDL Wbid # 846B-5 Jackson Cr New Warrington Rd	JA-3	2004	2009
21FLA 33020135	846B	JACKSON CR NEW WARRINGTON RD	JA-4	1971	1975
21FLA 33020136	846B	JACKSON CREEK AT OLD CORRY ROAD	JA-5A	1983	1992
21FLPNS 33020221	846B	Jackson Cr @ Old Corry Rd-also 33020136	JA-5B	2004	2004
21FLBFA 33020136	846B	JACKSON CREEK AT OLD CORRY ROAD	JA-6	1989	2010
21FLPNS 33020223	846B	TMDL Wbid # 846B-6 Jackson Cr @ Larkfield Rd	JA-7	2004	2004
21FLPNS 33020138	846B	JACKSON CREEK AT BAYOU CHICO	JA-8	2004	2004
21FLPNS 33020220	846B	TMDL Wbid # 846B-3 Jackson Cr @head water of Bayou Chico	JA-9	2004	2004
21FLA 33020JD5	846C	BAYOU CHICO CENTER OF WEST ARM	BC-1	1976	1989
21FLA 3302JE16	846C	BAYOU CHICO TIP UPPER W ARM	BC-2	1970	1977
21FLA 33020JF1	846C	BAYOU CHICO W ST BRIDGE	BC-3A	1982	1992
21FLBFA 33020JF1	846C	Bayou Chico at "W" Street	BC-3B	1999	2010
21FLPNS 33020218	846C	TMDL Wbid # 846B-1 Jackson Cr @ W st. West side	BC-4	2004	2004
21FLA 33020JE2	846C	BAYOU CHICO TIP UP E ARM	BC-5	1970	1989

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Station	WBID	Location	Alias	Start	End
21FLPNS 33020219	846C	TMDL Wbid # 846B-2 Jackson Cr behind Frank Pattis house	BC-6	2004	2004
21FLA 3302JE18	846C	BAYOU CHICO APEX OF NORTH FORK	BC-7A	1971	1989
21FLPNS 3302JE18	846C	BAYOU CHICO APEX OF NORTH FORK	BC-7B	2004	2004
21FLA 3302JE19	846C	BAYOU CHICO S APEX UP E UP W ARM	BC-8	1970	1971
21FLA 3302JE20	846	BAYOU CHICO AT NAVY BVLD BRIDGE	BC-9A	1976	1992
21FLBFA 3302JE20	846	BAYOU CHICO AT NAVY BLVD BRIDGE	BC-9B	1989	2010
21FLA 3302JE23	846	BAYOU CHICO FRISCO TRES CEN CHAN	BC-10A	1971	1989
21FLPNS 3302JE23	846	BAYOU CHICO FRISCO TRES CEN CHAN	BC-10B	2004	2004
21FLA 33020JC6	846	BAYOU CHICO SE FRISCO R R TRES	BC-11	1971	1990
21FLA 3302JD13	846	BAYOU CHICO W TIP W ARM BAYOU	BC-12	1970	1989
21FLA 33020JD6	846	BAYOU CHICO SEC D BACKGR STA	BC-13	1971	1972
21FLA 33020JD4	846	S W ARM BAYOU CHICO NEAR PARK N OF MANDALAY DR	BC-14A	1997	1998
21FLPNS 33020JD4	846	S W ARM BAYOU CHICO NEAR PARK N OF MANDALAY DR	BC-14B	1997	2004
21FLPNS 3302JBC4	846	Bayou Chico TMDL WBID site 846-4	BC-15	2004	2004
21FLA 3302JC10	846	BAYOU CHICO CHAN MKR 17	BC-16	1970	1989
21FLA 3302JC15	846	BAYOU CHICO E MO W ARM BAYOU	BC-17	1971	1990
21FLA 3302JC17	846	BAYOU CHICO SEC C CHAN MKR 13	BC-18	1971	1988
21FLA 33020JB2	846	BAYOU CHICO 800 FT W ARMSTRONG O	BC-19	1971	1987
21FLPNS 3302JBC3	846	Bayou Chico TMDL WBID site 846-3	BC-20	2004	2009
21FLA 33020JB9	846	SEGMENT 33.2AA BODY OF WATE	BC-21	1971	1989
21FLA 3302JB14	846	BAYOU CHICO NW BARRANCAS AVE BR	BC-22	1970	1989
21FLA 33020JA1	846	BAYOU CHICO BARRANCAS AVE BRIDGE	BC-23A	1971	1990
21FLPNS 33020JA1	846	BAYOU CHICO BARRANCAS AVE BRIDGE	BC-23B	2004	2004
21FLA 3302JB17	846	BAYOU CHICO DOCK NAUTICAL SPECIA	BC-24A	1991	1991
21FLPNS 3302JB17	846	Bayou Chico, dock at Nautical Specialist Shop	BC-24B	2009	2009
21FLA 33020JA4	846	BAY CHICO MO BAY PENS YACHT CLB	BC-25	1971	1989
21FLPNS 3302JBC6	846	Bayou Chico TMDL wbid site 846-6 PNS Yacht Club @ mouth Byu	BC-26	2004	2004
21FLA 33020JB8	846	BAYOU CHICO 800 FT WEST OF TENNE	BC-27	1976	1989
21FLDOH ESCAMBIA96	846	FL869739	BC-DOH-1	2000	2010

The locations of the stations listed in **Table B.1** are depicted in **Figure B.1** with the station alias.



Figure B.1. Bayou Chico (WBIDs 846, 846C, 846A, and 846B) Monitoring Stations)

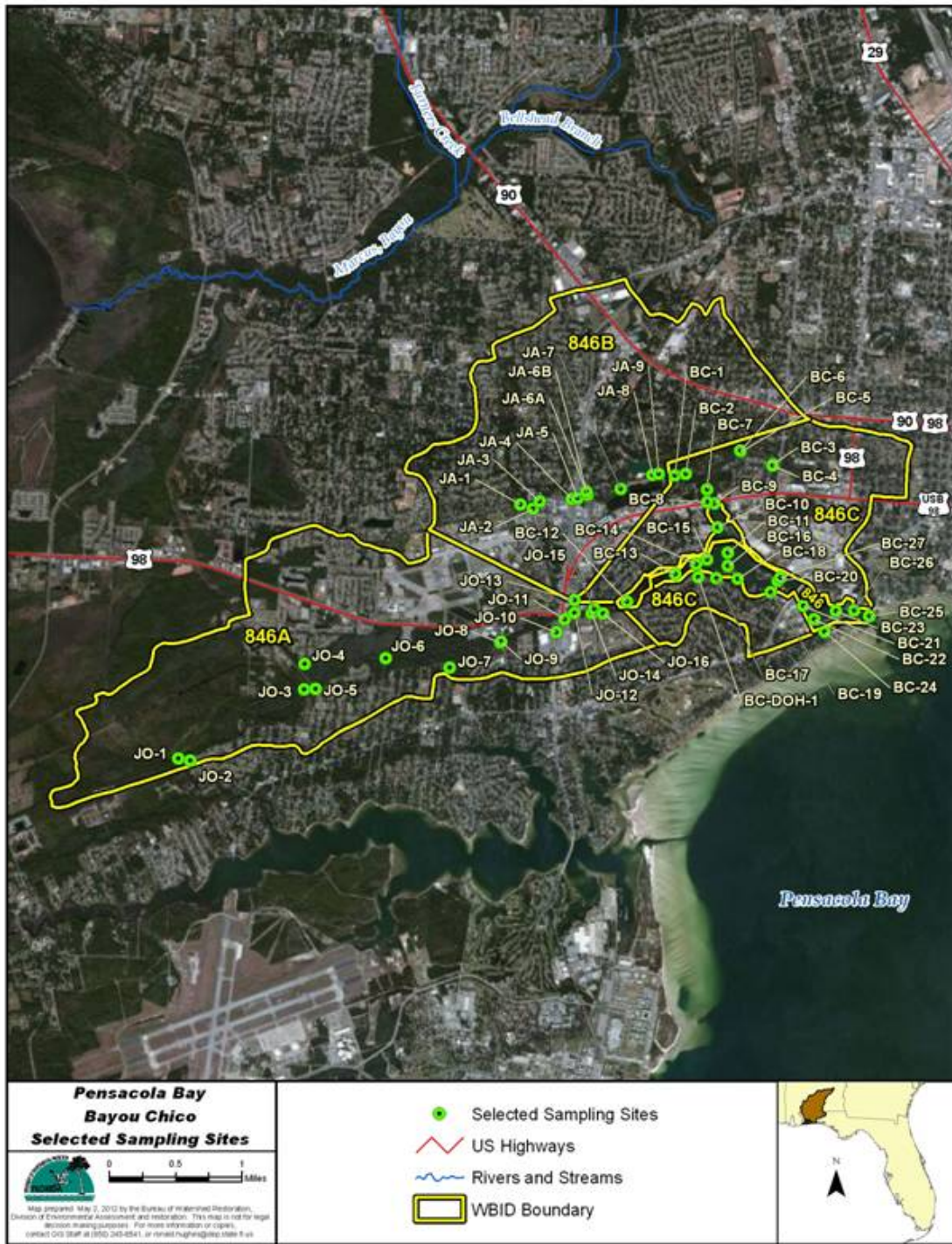


Figure B.2. Jones Creek Specific Conductivity Daily Average

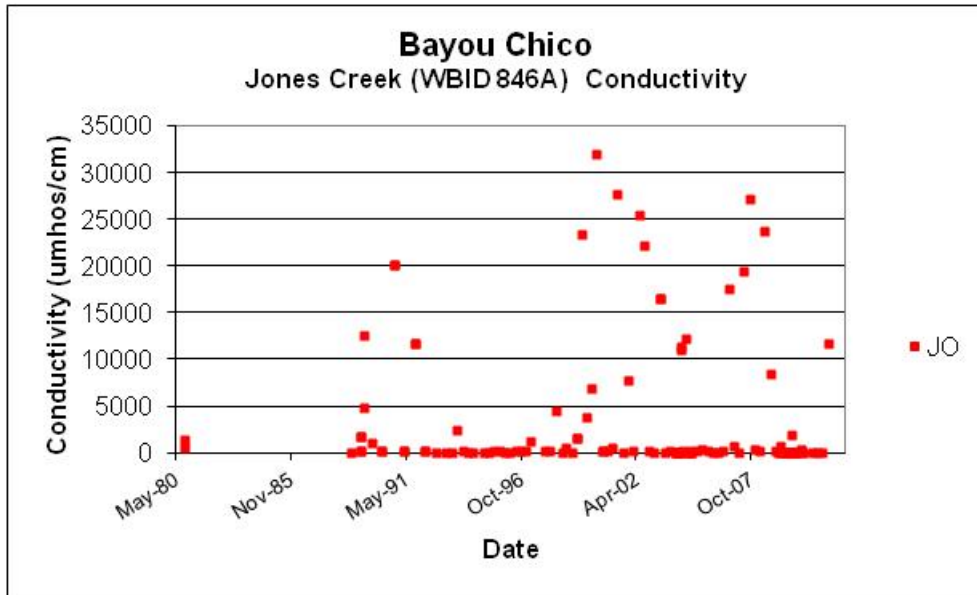


Figure B.3. Jackson Creek Specific Conductivity Daily Average

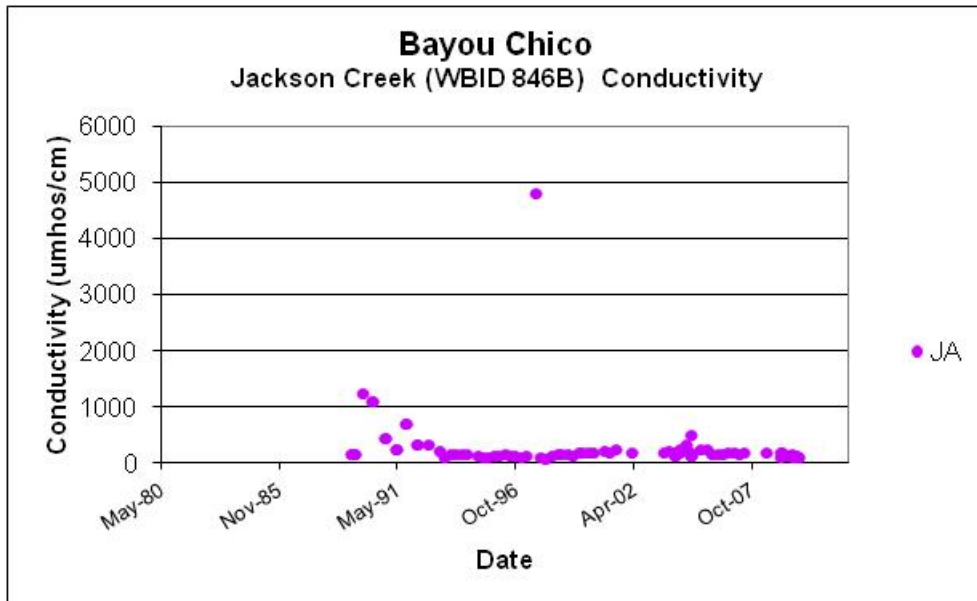


Figure B.4. Upper Bayou Chico Salinity Daily Average

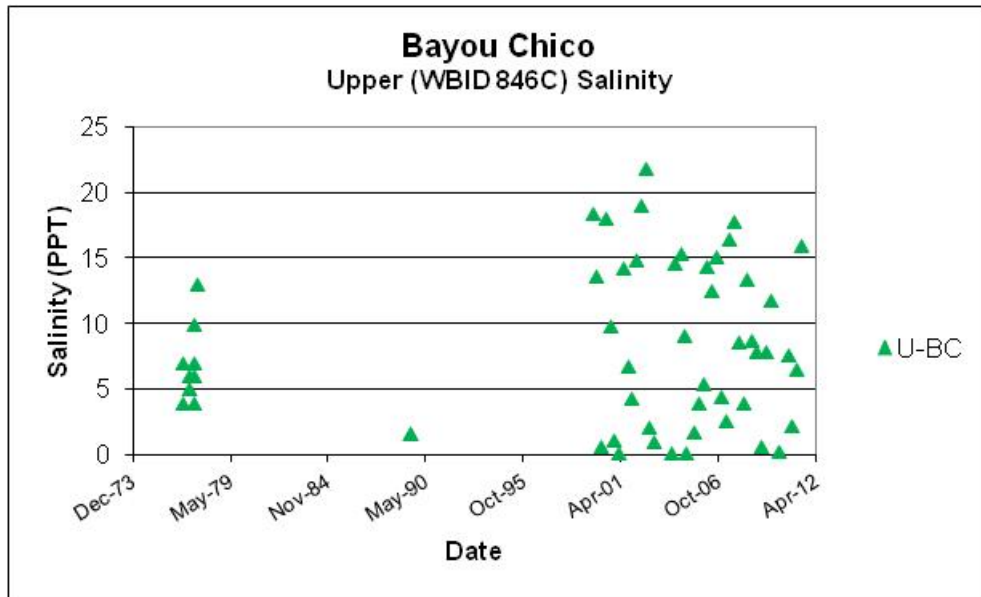


Figure B.5. Lower Bayou Chico Salinity Daily Average

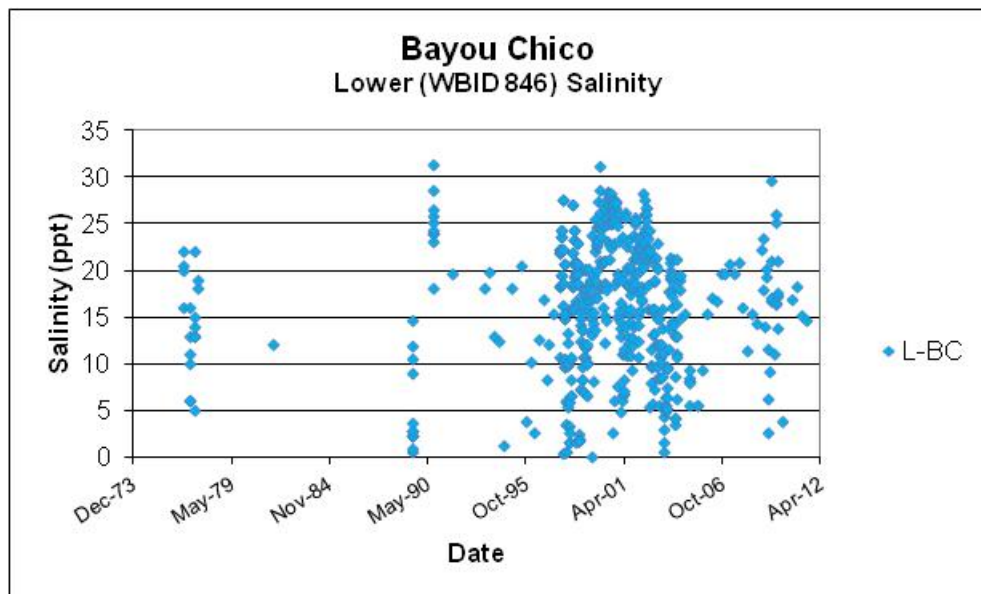


Table B.2. Bayou Chico Watershed: Summary of Conductivity/Salinity Data

- = Empty cell/no data  
VP = Verified period

Location	Constituent	Date Range	Count	Min ( $\mu$ mhos/cm)	Max ( $\mu$ mhos/cm)	Median ( $\mu$ mhos/cm)	Average ( $\mu$ mhos/cm)
<b>Freshwater (<math>\mu</math>mhos/cm)</b>	-	-	-	-	-	-	-
Jackson Creek (846B)	Conductivity	3/89 - 3/02	48	90.0	4810.0	187.0	379.4
Jackson Creek (846B)-VP	Conductivity	9/03 - 12/09	42	108.0	532.0	186.5	193.7
Jones Creek (846A)	Conductivity	10/80 - 12/02	60	47.0	31930.0	189.0	4223.6
Jones Creek (846A)-VP	Conductivity	3/03 - 6/11	63	54.0	27188.0	90.0	2933.3
Freshwater (VP)	Conductivity	3/03 - 6/11	105	54.0	27188.0	151.0	1837.4
<b>Marine (ppt)</b>	<b>Constituent</b>	<b>Date Range</b>	-	<b>ppt</b>	<b>ppt</b>	<b>ppt</b>	<b>ppt</b>
Upper (846C)	Salinity	9/76 - 12/02	25	0.2	21.9	6.8	8.4
Upper (846C)-VP	Salinity	3/03 - 6/11	29	0.1	17.8	7.8	7.9
Lower (846)	Salinity	9/76 - 12/02	409	0.1	31.3	18.2	16.9
Lower (846)-VP	Salinity	1/03 - 6/11	125	0.6	29.6	13.9	13.5
Marine (VP)	Salinity	1/03 - 6/11	154	0.1	29.6	12.7	12.4

Figure B.6. Jackson Creek Nitrate-N Daily Average

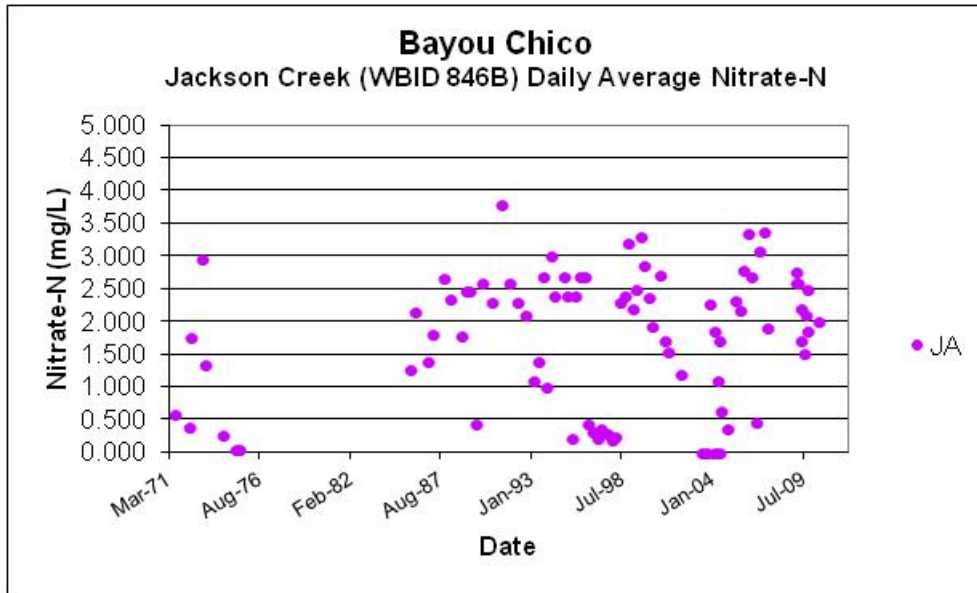


Figure B.7. Jackson Creek Nitrate-N Daily Average

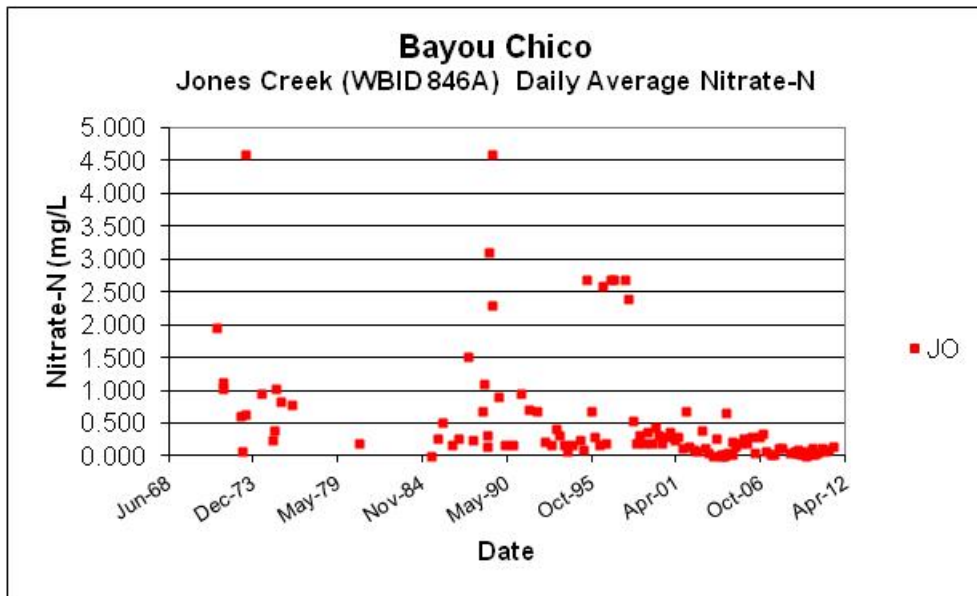


Figure B.8. Upper Bayou Chico Nitrate-N Daily Average

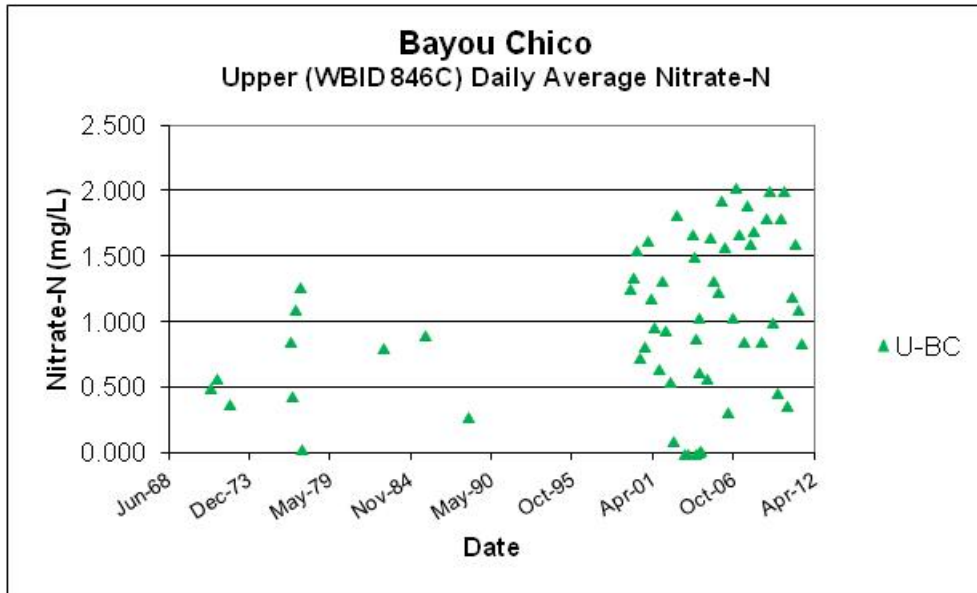


Figure B.9. Lower Bayou Chico Nitrate-N Daily Average

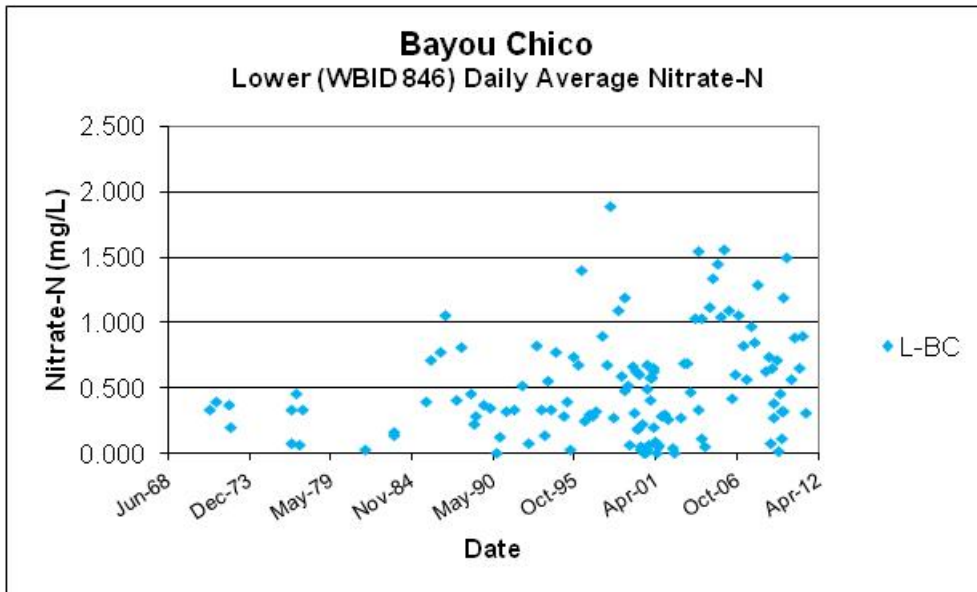


Table B.3. Bayou Chico Watershed: Summary of Nitrate-N Data

- = Empty cell/no data  
VP = Verified period

Location	Constituent	Date Range	Count	Min (mg/L)	Max (mg/L)	Median (mg/L)	Average (mg/L)
<b>Freshwater</b>	-	-	-	-	-	-	-
Jackson Creek (846B)	Nitrate-N	7/71 - 3/02	66	0.040	6.71	2.30	1.88
Jackson Creek (846B)-VP	Nitrate-N	3/03 - 6/10	42	0.002	3.90	1.80	1.59
Jones Creek (846A)	Nitrate-N	7/71 - 12/02	108	0.010	21.50	0.36	1.16
Jones Creek (846A)-VP	Nitrate-N	3/03 - 6/11	62	0.002	0.65	0.06	0.09
Freshwater (VP)	Nitrate-N	3/03 - 6/11	104	0.002	3.90	0.11	0.69
<b>Marine</b>	-	-	-	-	-	-	-
Upper (846C)	Nitrate-N	3/71 - 12/02	41	0.030	10.80	0.78	1.11
Upper (846C)-VP	Nitrate-N	6/03 - 6/11	18	0.002	1.93	1.04	0.89
Lower (846)	Nitrate-N	3/71 - 12/02	139	0.010	1.90	0.30	0.36
Lower (846)-VP	Nitrate-N	3/03 - 6/11	59	0.002	1.57	0.57	0.63
Marine (VP)	Nitrate-N	3/03 - 6/11	77	0.002	1.93	0.61	0.69

Figure B.10. Jackson Creek Ammonia-N Daily Average

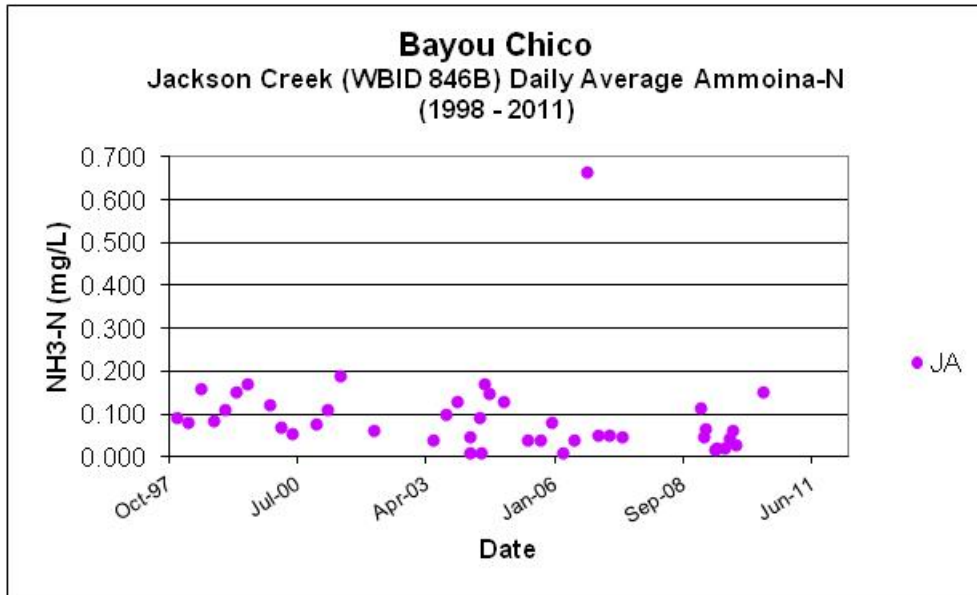


Figure B.11. Jones Creek Ammonia-N Daily Average

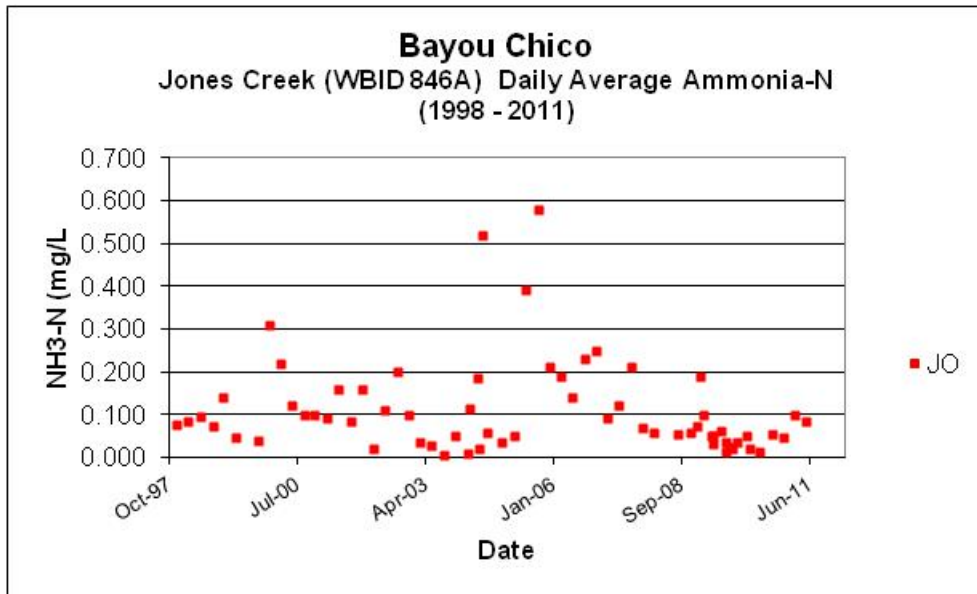




Figure B.12. Upper Bayou Chico Ammonia-N Daily Average

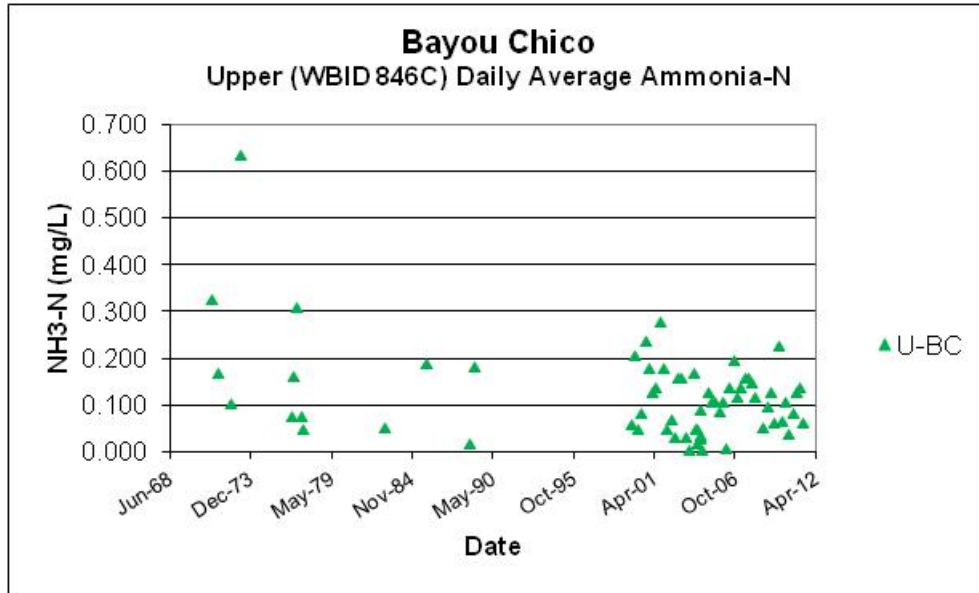


Figure B.13. Lower Bayou Chico Ammonia-N Daily Average

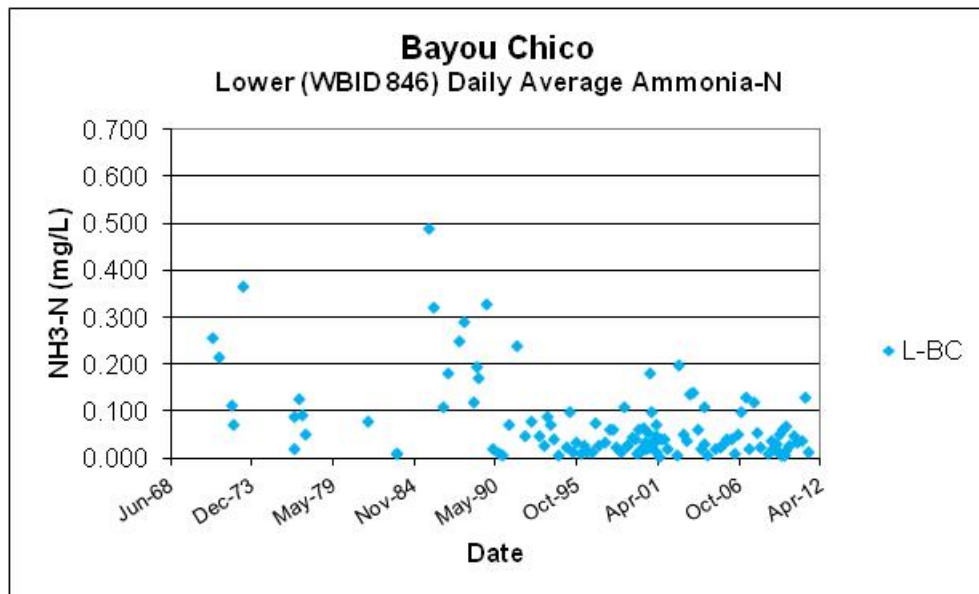


Table B.4. Bayou Chico Watershed: Summary of Ammonia-N Data

- = Empty cell/no data  
VP = Verified period

Location	Constituent	Date Range	Count	Min (mg/L)	Max (mg/L)	Median (mg/L)	Average (mg/L)
<b>Freshwater</b>	-	-	-	-	-	-	-
Jackson Creek (846B)	NH3-N	7/71 - 3/02	65	0.042	18.30	0.11	1.98
Jackson Creek (846B)-VP	NH3-N	6/03 - 6/10	42	0.010	0.73	0.05	0.10
Jones Creek (846A)	NH3-N	7/71 - 12/02	105	0.005	3.56	0.10	0.36
Jones Creek (846A)-VP	NH3-N	3/03 - 6/11	61	0.005	0.58	0.05	0.10
Freshwater (VP)	NH3-N	3/03 - 6/11	103	0.005	0.73	0.05	0.10
<b>Marine</b>	-	-	-	-	-	-	-
Upper (846C)	NH3-N	3/71 - 12/02	43	0.010	0.82	0.13	0.17
Upper (846C)-VP	NH3-N	3/03 - 6/11	39	0.005	0.23	0.11	0.10
Lower (846)	NH3-N	3/71 - 12/02	135	0.004	0.59	0.06	0.11
Lower (846)-VP	NH3-N	3/03 - 6/11	57	0.005	0.23	0.03	0.04
Marine (VP)	NH3-N	3/03 - 6/11	96	0.005	0.23	0.04	0.06

Figure B.14. Jackson Creek Organic-N Daily Average

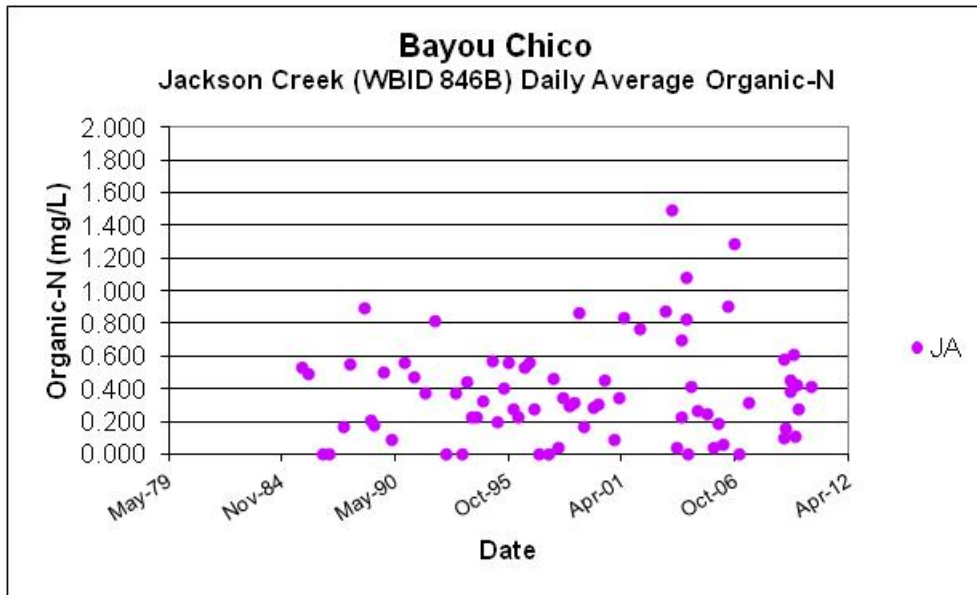


Figure B.15. Jones Creek Organic-N Daily Average

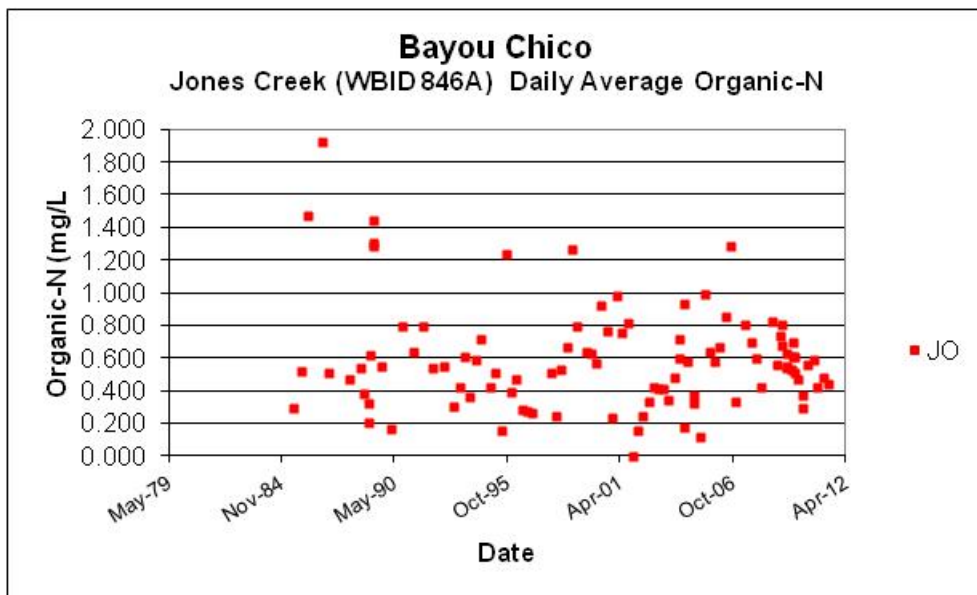


Figure B.16. Upper Bayou Chico Organic-N Daily Average

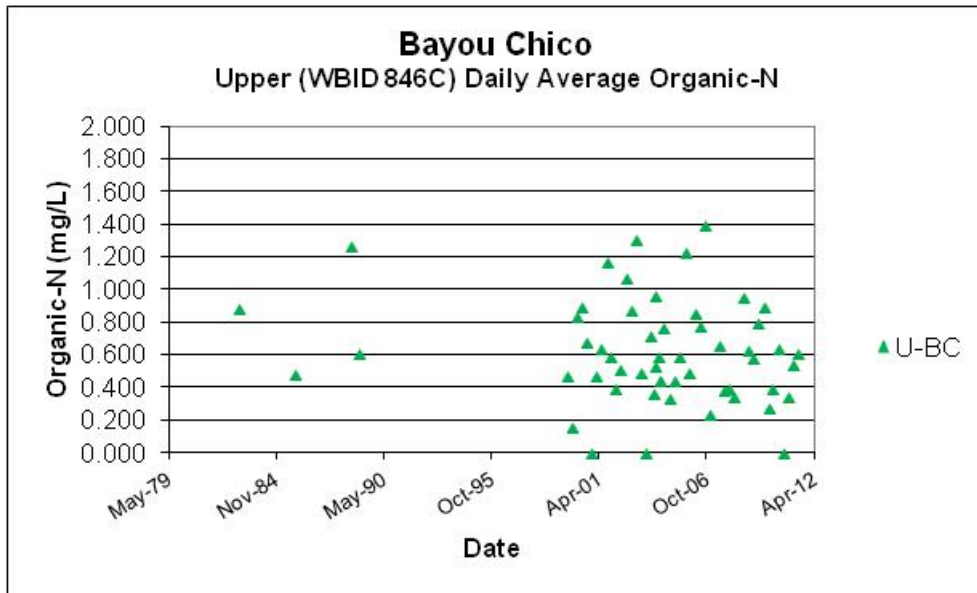


Figure B.17. Lower Bayou Chico Organic-N Daily Average

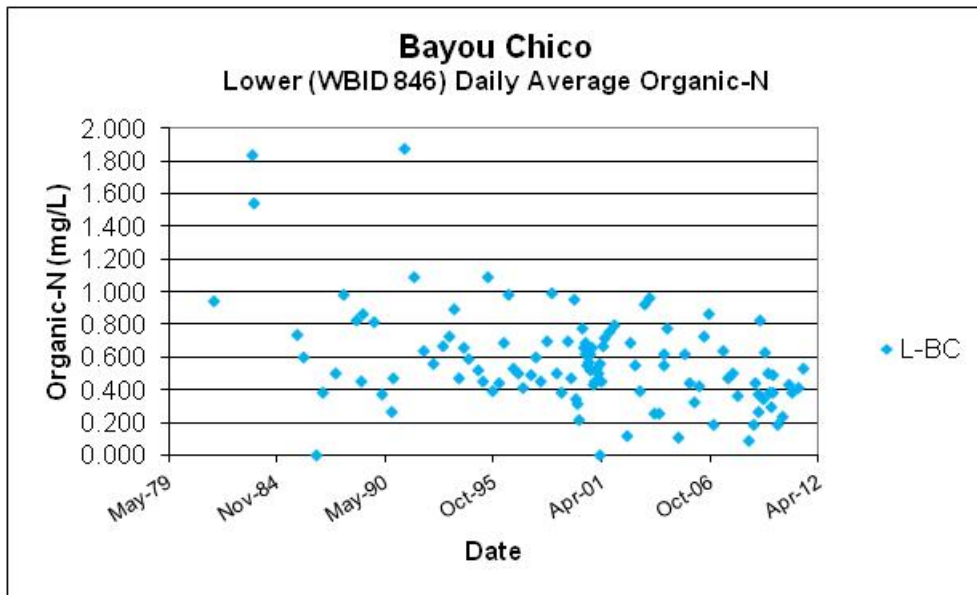


Table B.5. Bayou Chico Watershed: Summary of Organic-N Data

- = Empty cell/no data  
VP = Verified period

Location	Constituent	Date Range	Count	Min (mg/L)	Max (mg/L)	Median (mg/L)	Average (mg/L)
<b>Freshwater</b>	-	-	-	-	-	-	-
Jackson Creek (846B)	Organic-N	1/83 - 3/02	55	0.00	5.82	0.35	0.46
Jackson Creek (846B)-VP	Organic-N	6/03 - 6/10	41	0.00	1.72	0.33	0.51
Jones Creek (846A)	Organic-N	10/80 - 12/02	81	0.00	14.76	0.55	0.91
Jones Creek (846A)-VP	Organic-N	3/03 - 6/11	61	0.00	3.66	0.56	0.63
Freshwater (VP)	Organic-N	3/03 - 6/11	102	0.00	3.66	0.53	0.58
<b>Marine</b>	-	-	-	-	-	-	-
Upper (846C)	Organic-N	12/82 - 12/02	23	0.00	1.30	0.68	0.70
Upper (846C)-VP	Organic-N	3/03 - 6/11	38	0.00	1.40	0.56	0.60
Lower (846)	Organic-N	9/81 - 12/02	83	0.00	1.90	0.57	0.65
Lower (846)-VP	Organic-N	3/03 - 6/11	56	0.09	1.19	0.44	0.48
Marine (VP)	Organic-N	3/03 - 6/11	94	0.00	1.40	0.49	0.53

Figure B.18. Jackson Creek TN Daily Average for the Period of Record

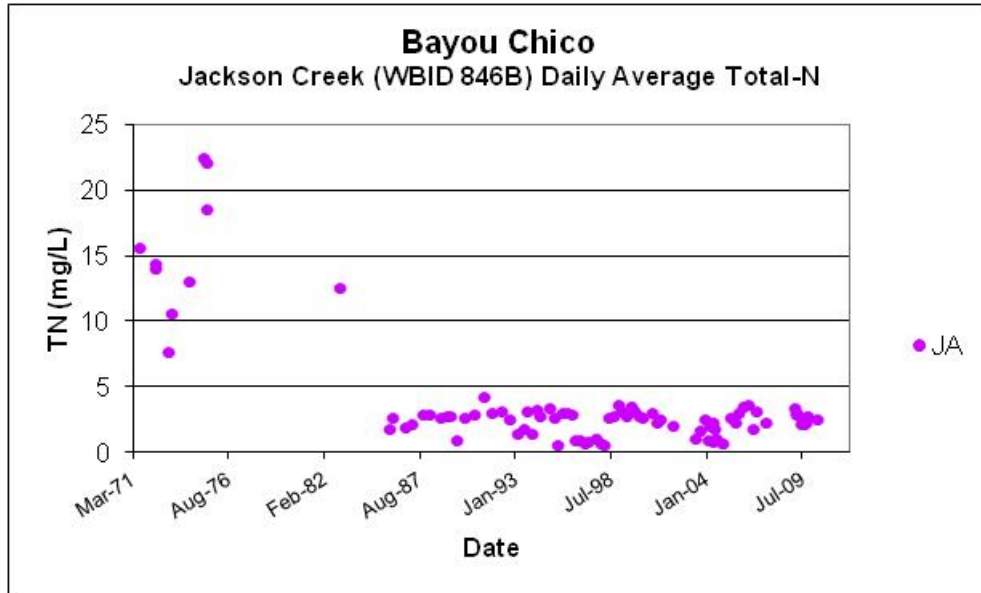


Figure B.19. Jackson Creek TN Daily Average, 1998–2011

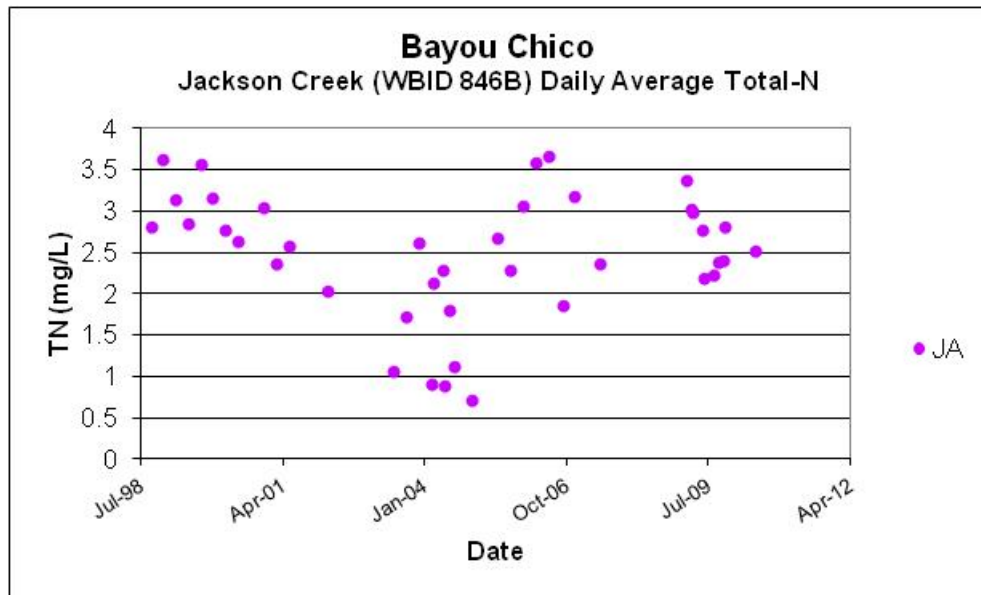


Figure B.20. Jones Creek TN Daily Average for the Period of Record

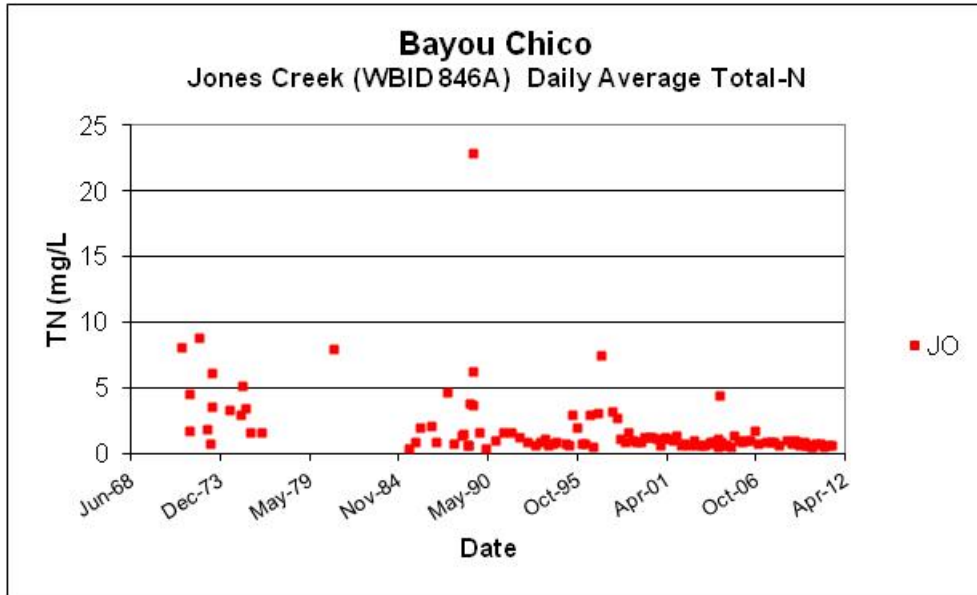
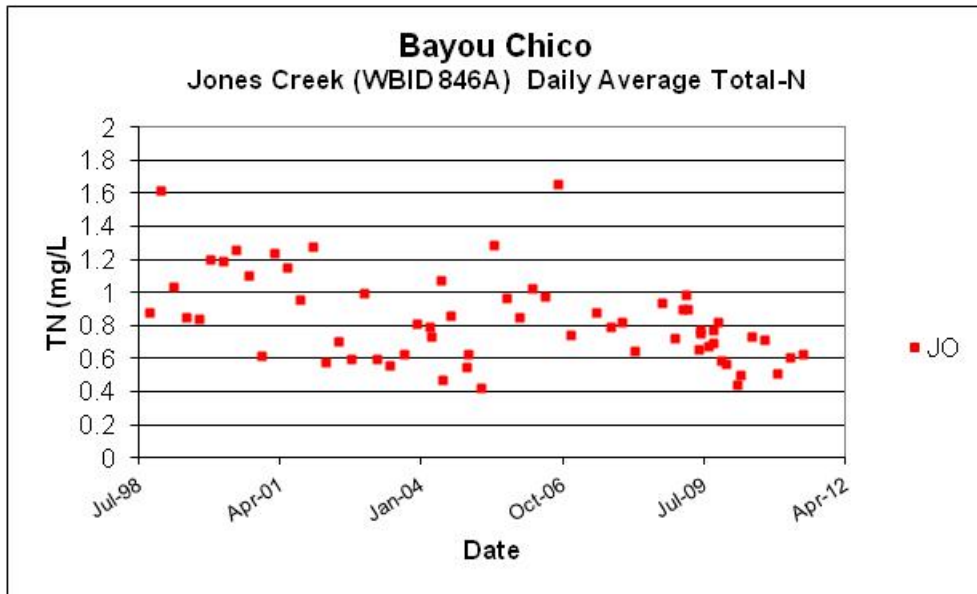


Figure B.21. Jones Creek TN Daily Average, 1998–2011



- Rescaled data for 6/30/04 = 4.35 mg/L

Figure B.22. Upper Bayou Chico TN Daily Average for the Period of Record

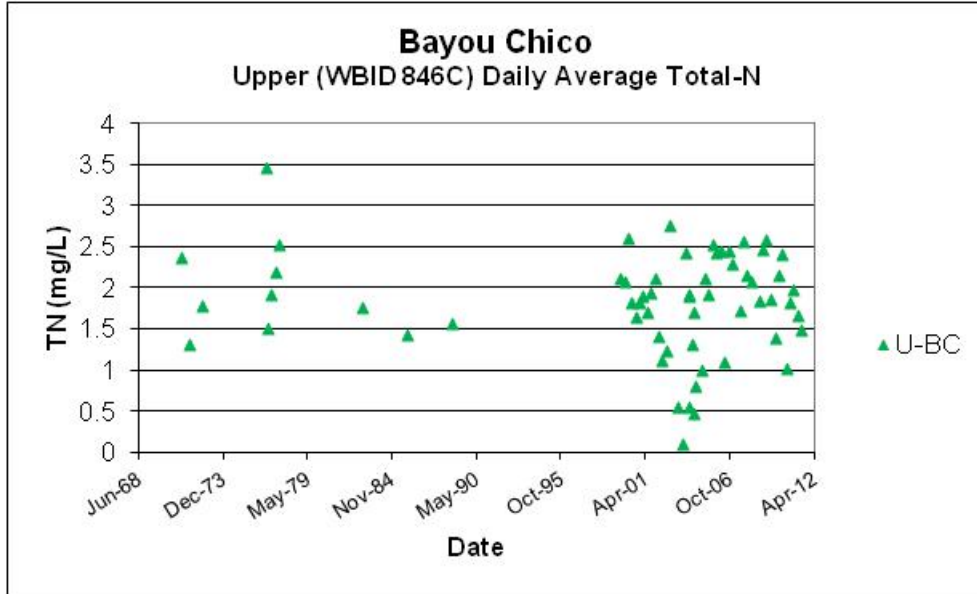


Figure B.23. Lower Bayou Chico TN Daily Average for the Period of Record

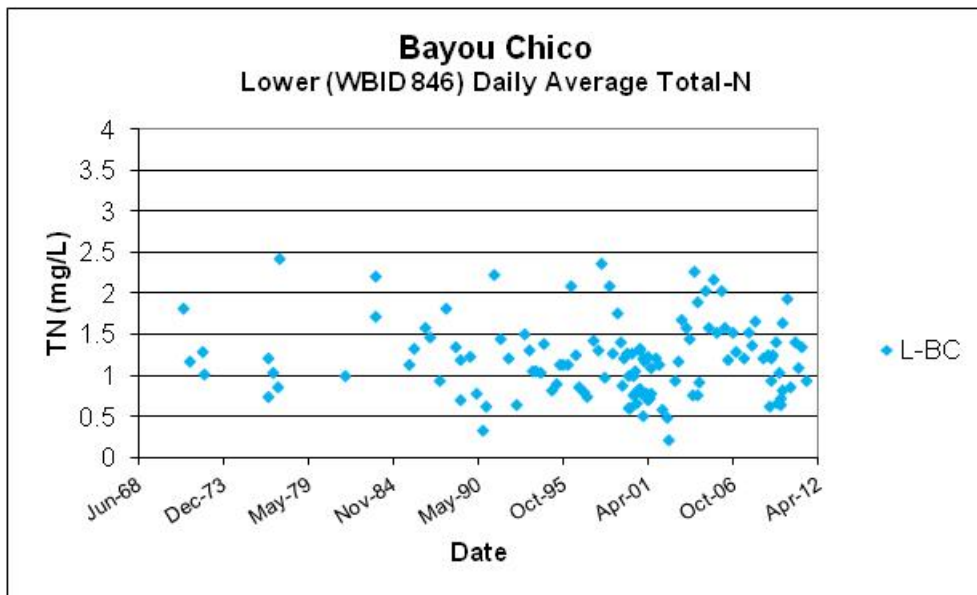




Figure B.24. Jackson Creek TN Annual Average

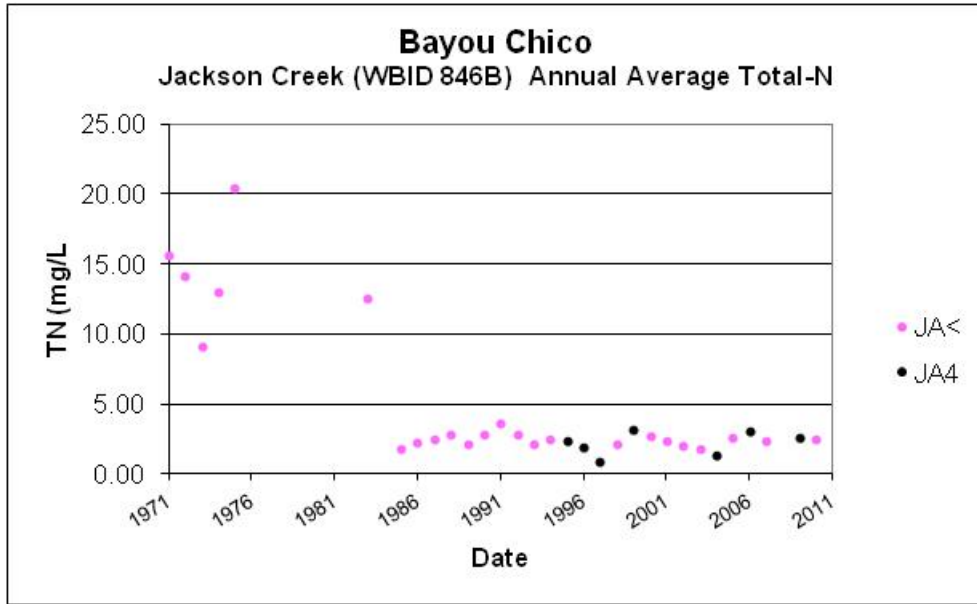


Figure B.25. Jones Creek TN Annual Average

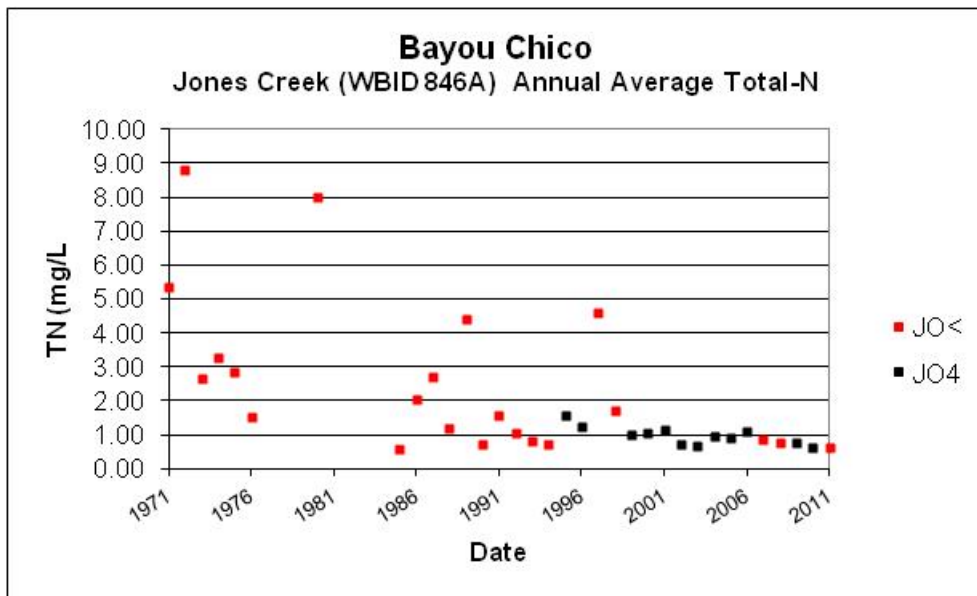


Figure B.26. Upper Bayou Chico TN Annual Average

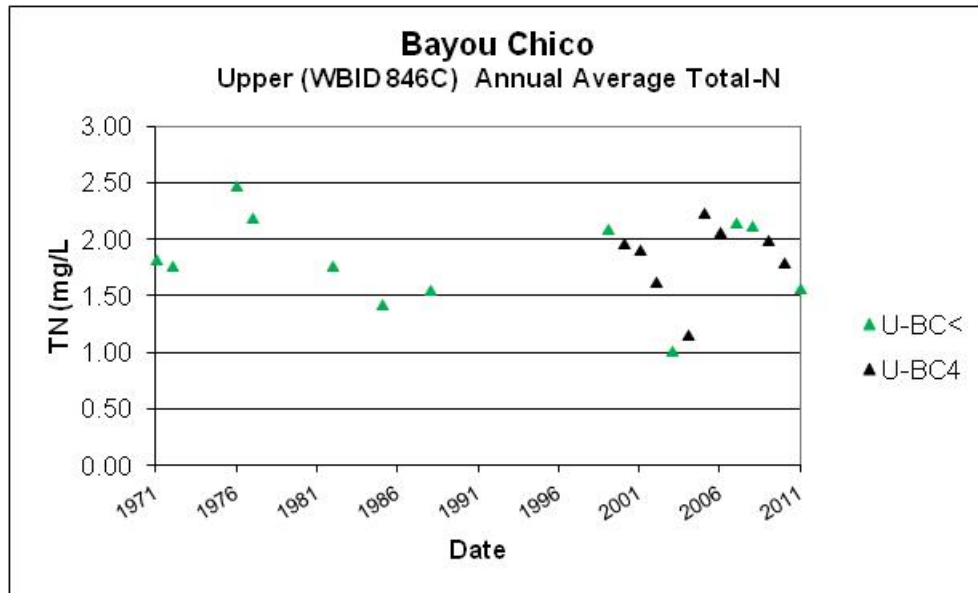


Figure B.27. Lower Bayou Chico TN Annual Average

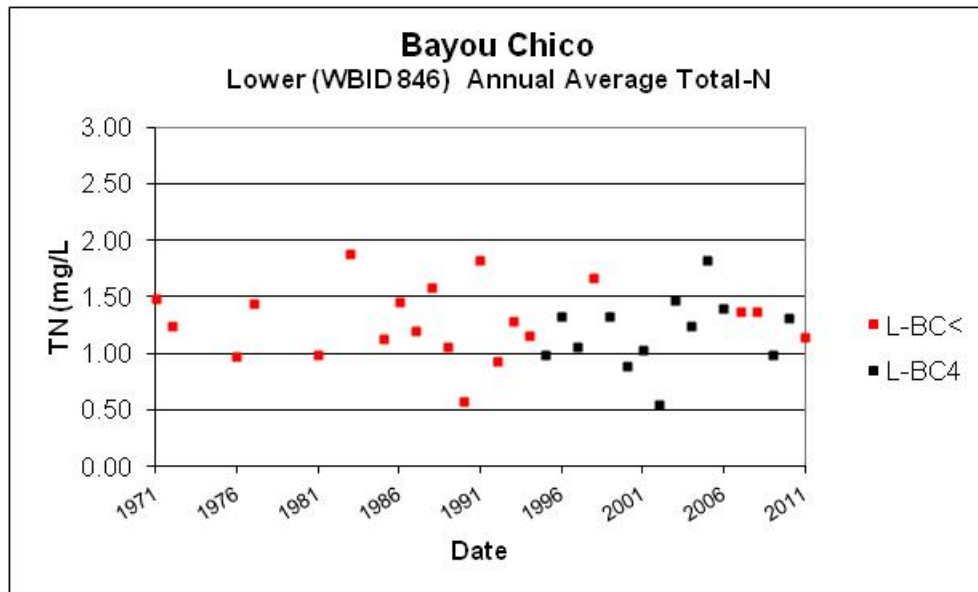


Table B.6. Bayou Chico Watershed: Summary of TN Data

- = Empty cell/no data  
VP = Verified period

Location	Constituent	Date Range	Count	Min (mg/L)	Max (mg/L)	Median (mg/L)	Average (mg/L)
<b>Freshwater</b>	-	-	-	-	-	-	-
Jackson Creek (846B)	TN	7/71 - 3/02	66	0.64	22.47	2.83	4.65
Jackson Creek (846B)-VP	TN	6/03 - 6/10	41	0.64	4.50	2.24	2.16
Jones Creek (846A)	TN	7/71 - 12/02	108	0.31	22.84	1.17	2.46
Jones Creek (846A)-VP	TN	3/03 - 6/11	61	0.42	4.35	0.76	0.83
Freshwater (VP)	TN	3/03 - 6/11	102	0.42	4.50	0.91	1.37
<b>Marine</b>	-	-	-	-	-	-	-
Upper (846C)	TN	3/71 - 12/02	41	0.85	11.64	1.90	2.21
Upper (846C)-VP	TN	6/03 - 6/11	37	0.09	2.59	1.86	1.75
Lower (846)	TN	3/71 - 12/02	138	0.16	3.53	1.14	1.16
Lower (846)-VP	TN	3/03 - 6/11	58	0.44	2.29	1.19	1.23
Marine (VP)	TN	3/03 - 6/11	95	0.09	2.59	1.40	1.43

Figure B.28. Jones Creek Orthophosphate-P Daily Average

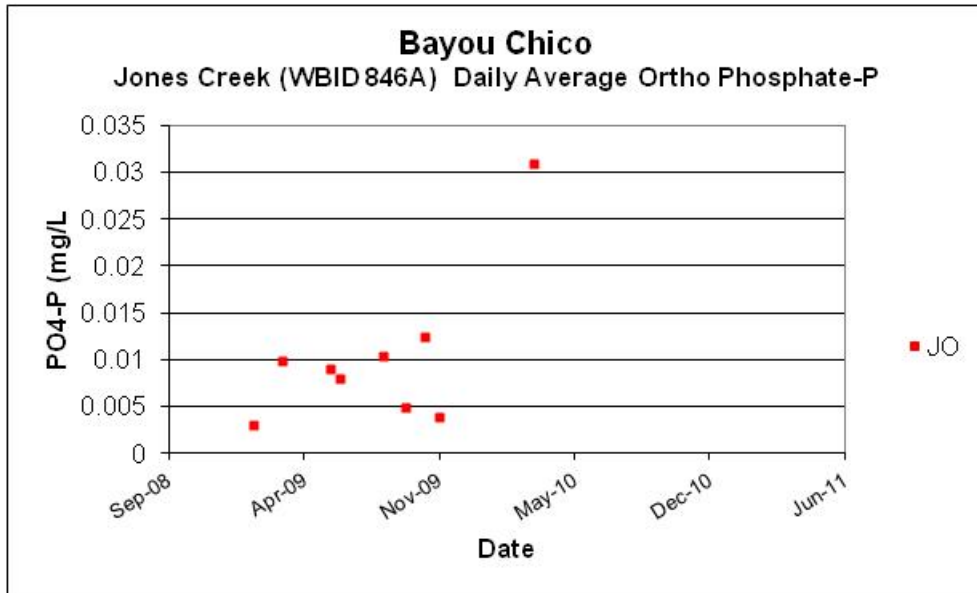


Figure B.29. Jackson Creek Orthophosphate-P Daily Average

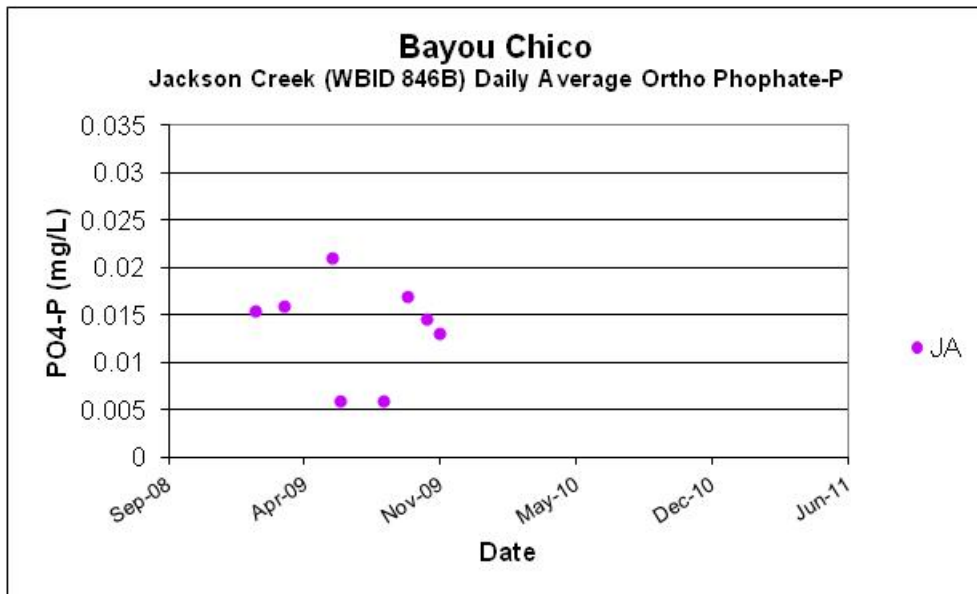


Figure B.30. Lower Bayou Chico Orthophosphate-P Daily Average

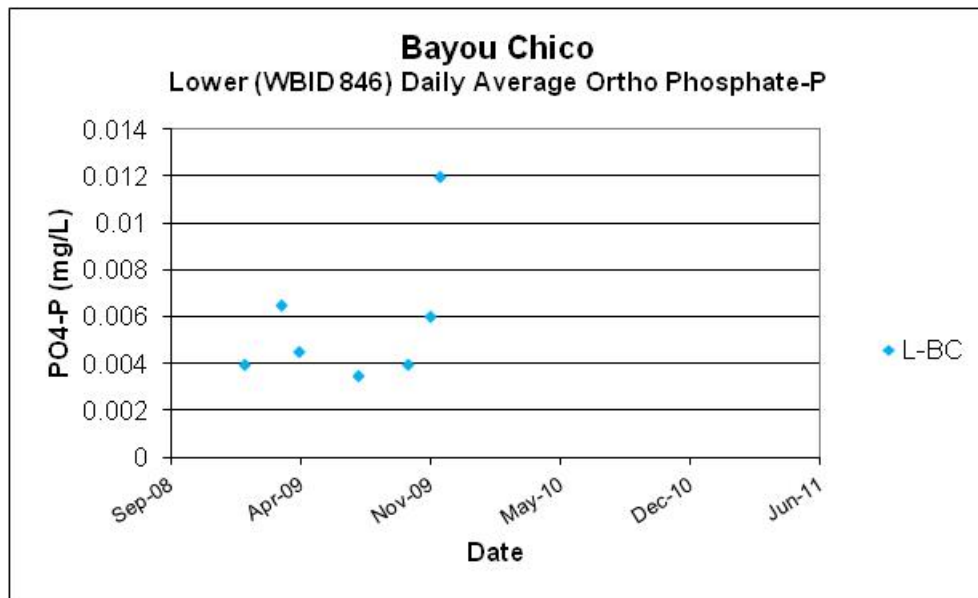


Table B.7. Bayou Chico Watershed: Summary of Orthophosphate Data

- = Empty cell/no data  
 VP = Verified period  
 N/A = Not available

Location	Constituent	Date Range	Count	Min (mg/L)	Max (mg/L)	Median (mg/L)	Average (mg/L)
<b>Freshwater</b>	-	-	-	-	-	-	-
Jackson Creek (846B)	Ortho-P	N/A	N/A	-	-	-	-
Jackson Creek (846B)-VP	Ortho-P	2/09 - 11/09	12	0.004	0.025	0.014	0.013
Jones Creek (846A)	Ortho-P	N/A	N/A	-	-	-	-
Jones Creek (846A)-VP	Ortho-P	2/09 - 3/10	13	0.002	0.031	0.008	0.010
Freshwater (VP)	Ortho-P	2/09 - 3/10	25	0.002	0.031	0.009	0.011
<b>Marine</b>	-	-	-	-	-	-	-
Upper (846C)	Ortho-P	N/A	N/A	-	-	-	-
Upper (846C)-VP	Ortho-P	N/A	N/A	-	-	-	-
Lower (846)	Ortho-P	N/A	N/A	-	-	-	-
Lower (846)-VP	Ortho-P	1/09 - 11/09	12	0.002	0.012	0.005	0.005
Marine (VP)	Ortho-P	1/09 - 11/09	12	0.002	0.012	0.005	0.005

Figure B.31. Jackson Creek TP Daily Average for the Period of Record

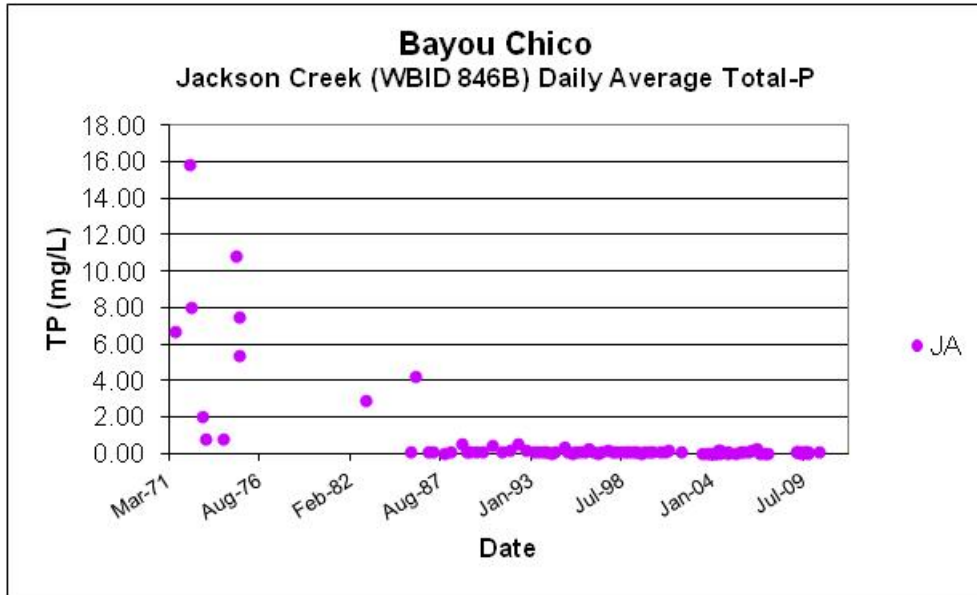


Figure B.32. Jackson Creek TP Daily Average, 1998-2011

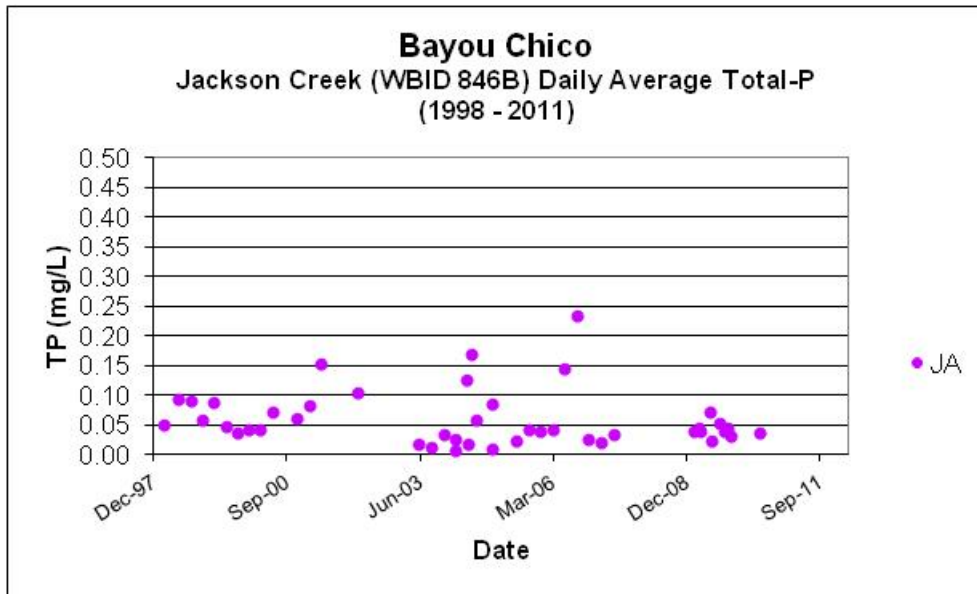


Figure B.33. Jones Creek TP Daily Average for the Period of Record

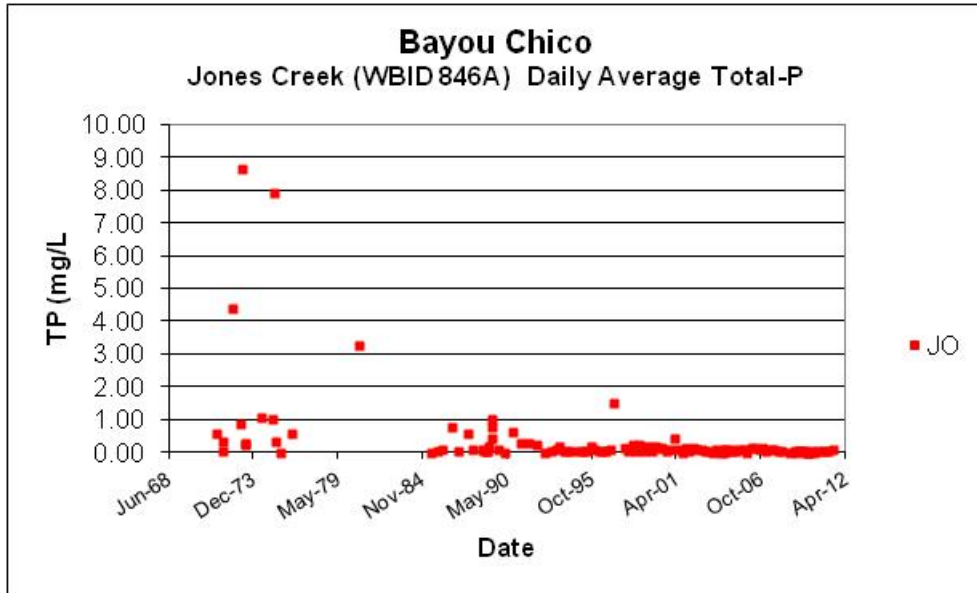


Figure B.34. Jones Creek TP Daily Average, 1998–2011

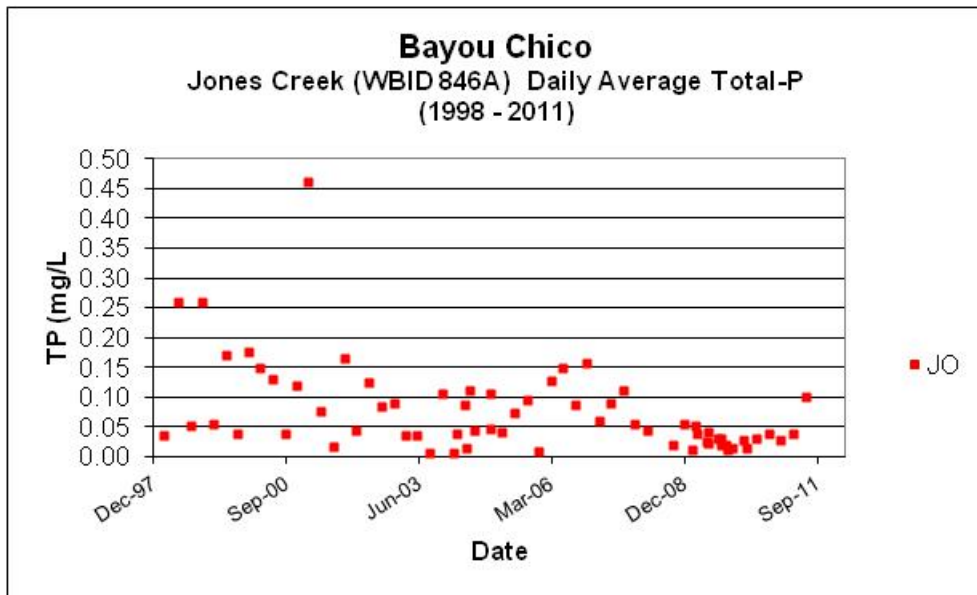


Figure B.35. Upper Bayou Chico TP Daily Average for the Period of Record

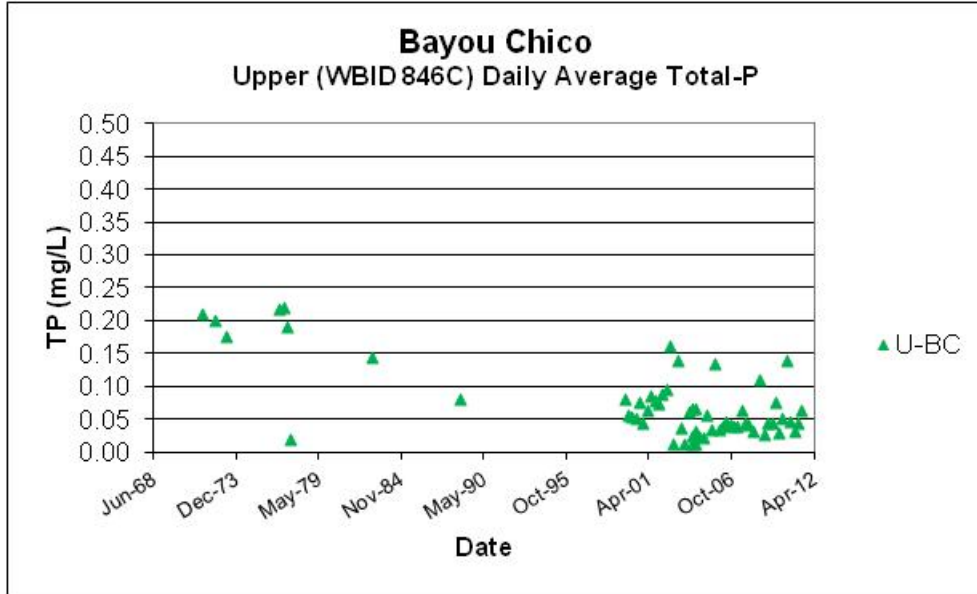


Figure B.36. Upper Bayou Chico TP Daily Average, 1998–2011

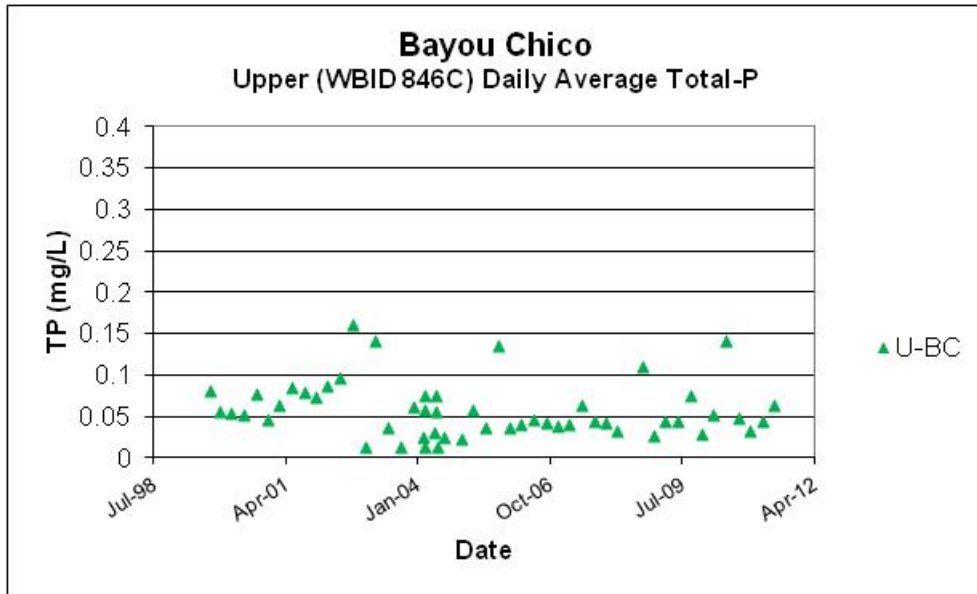




Figure B.37. Lower Bayou Chico TP Daily Average for the Period of Record

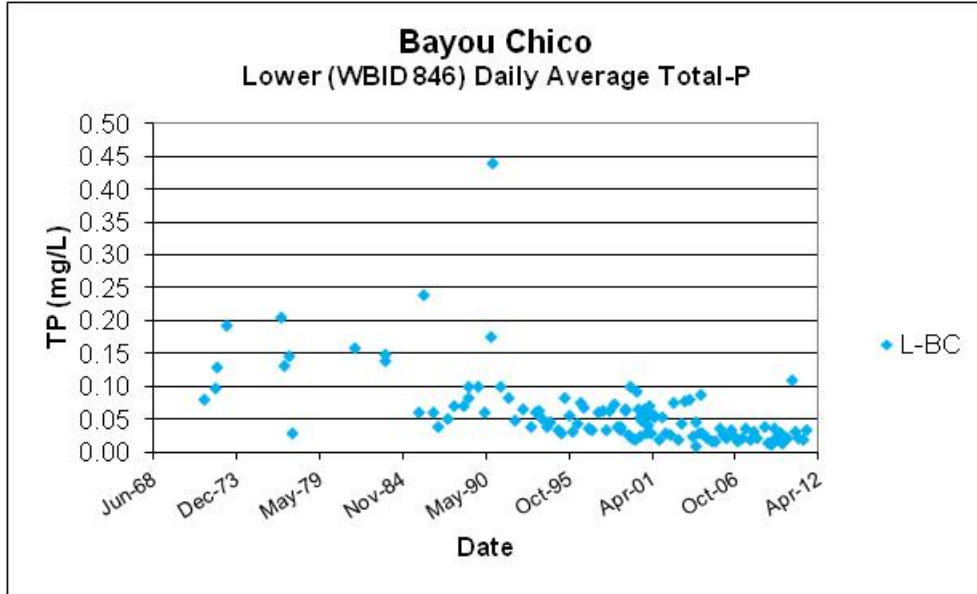


Figure B.38. Lower Bayou Chico TP Daily Average, 1998–2010

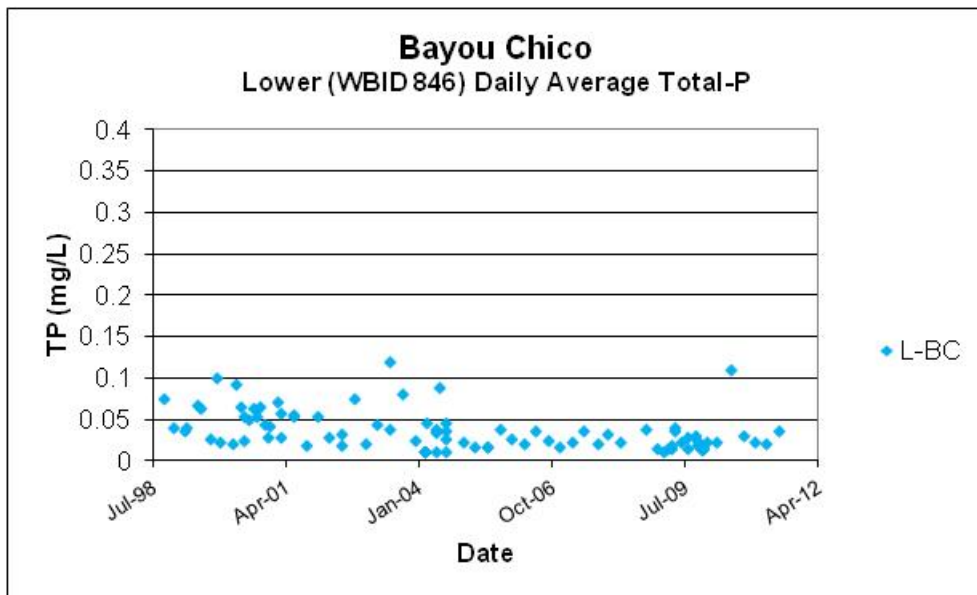


Figure B.39. Jackson Creek TP Annual Average for the Period of Record

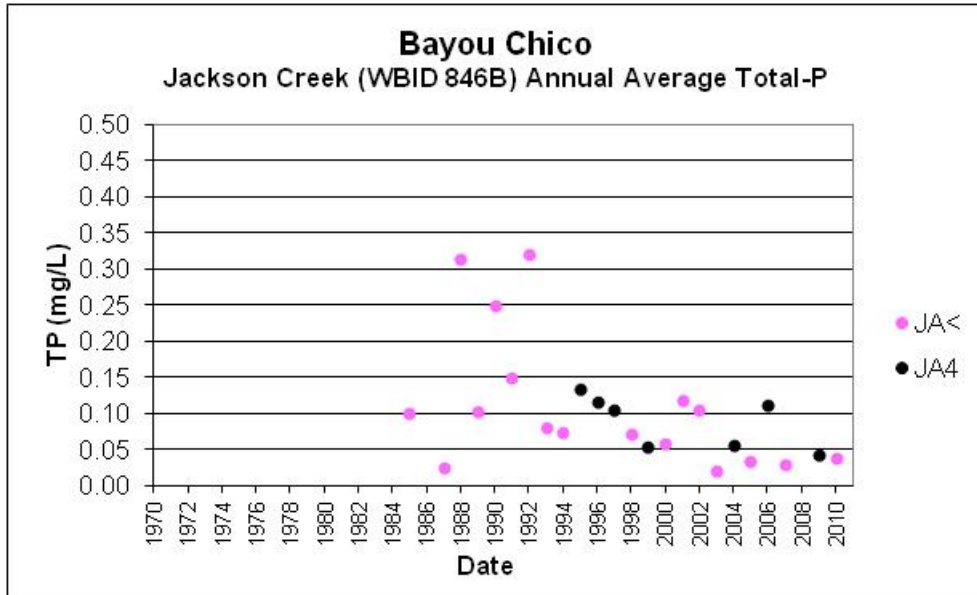


Figure B.40. Jones Creek TP Annual Average for the Period of Record

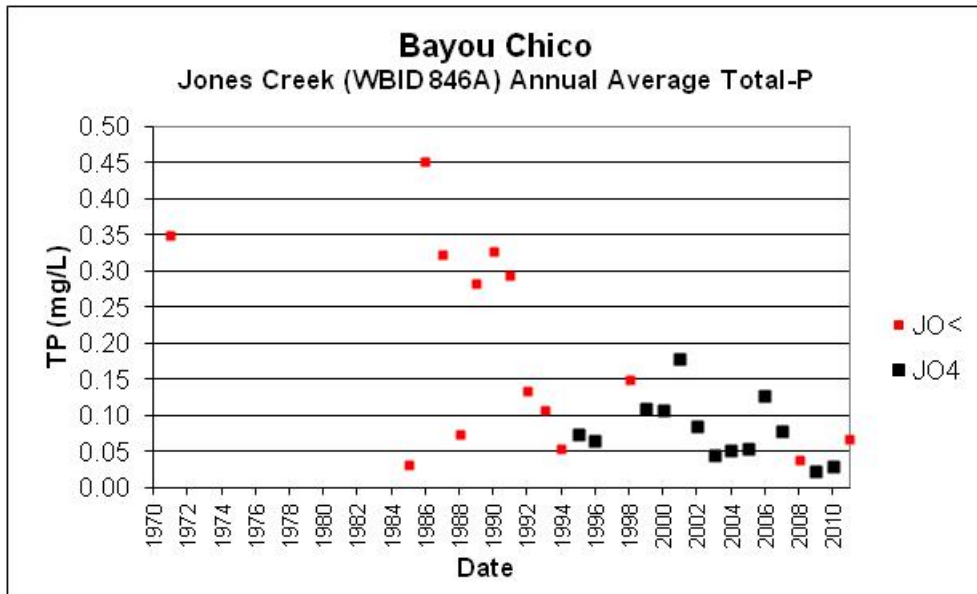


Figure B.41. Upper Bayou Chico TP Annual Average for the Period of Record

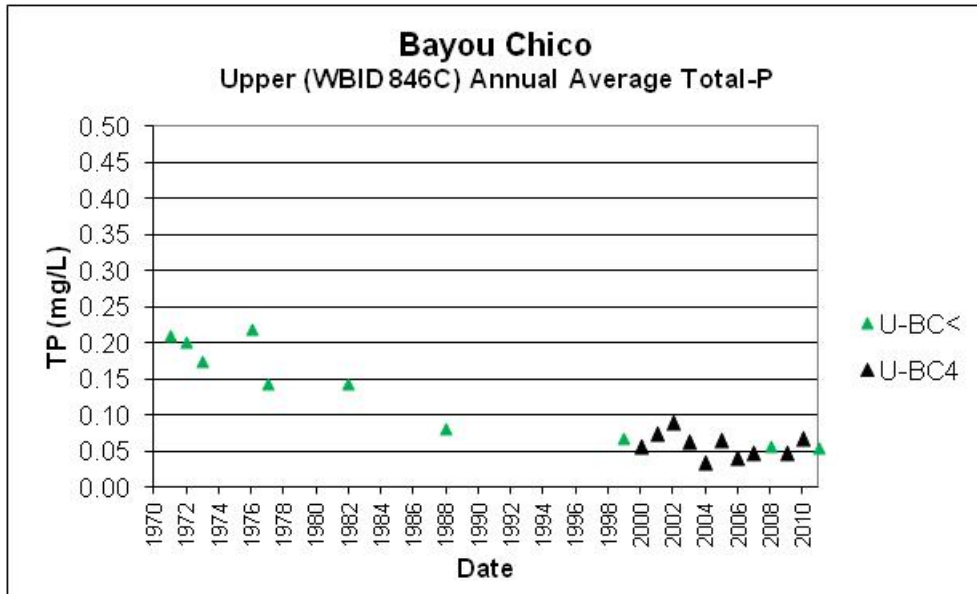


Figure B.42. Lower Bayou Chico TP Annual Average for the Period of Record

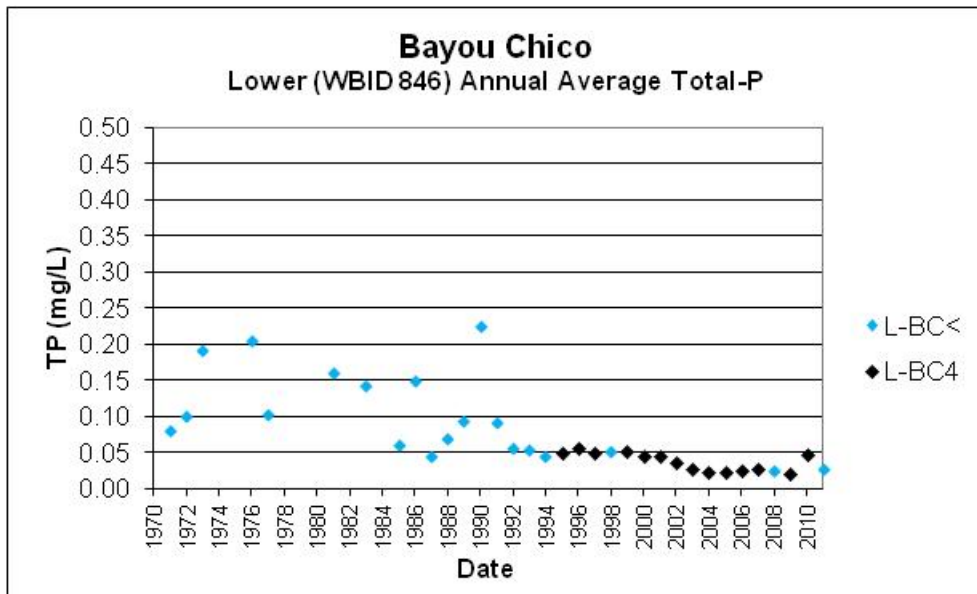


Table B.8. Bayou Chico Watershed: Summary of TP Data

- = Empty cell/no data  
VP = Verified period

Location	Constituent	Date Range	Count	Min (mg/L)	Max (mg/L)	Median (mg/L)	Average (mg/L)
<b>Freshwater</b>	-	-	-	-	-	-	-
Jackson Creek (846B)	TP	7/71 - 3/02	66	0.010	15.80	0.11	1.17
Jackson Creek (846B)-VP	TP	6/03 - 6/10	44	0.007	0.25	0.04	0.06
Jones Creek (846A)	TP	7/71 - 12/02	107	0.005	8.64	0.11	0.59
Jones Creek (846A)-VP	TP	3/03 - 6/11	62	0.005	0.16	0.04	0.05
Freshwater (VP)	TP	3/03 - 6/11	106	0.005	0.25	0.04	0.05
<b>Marine</b>	-	-	-	-	-	-	-
Upper (846C)	TP	9/71 - 12/02	37	0.012	1.57	0.13	0.17
Upper (846C)-VP	TP	3/03 - 6/11	39	0.012	0.14	0.04	0.05
Lower (846)	TP	9/71 - 12/02	122	0.019	0.81	0.06	0.09
Lower (846)-VP	TP	3/03 - 6/11	58	0.010	0.12	0.02	0.03
Marine (VP)	TP	3/03 - 6/11	97	0.010	0.14	0.03	0.04

Figure B.43. Jackson Creek Chla Daily Average for the Period of Record

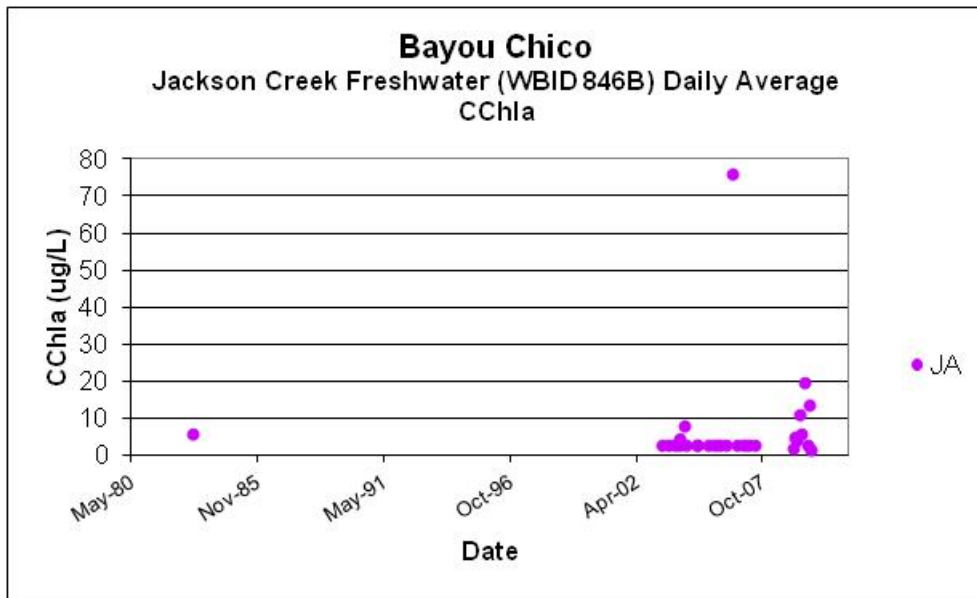


Figure B.44. Jones Creek Chla Daily Average for the Period of Record

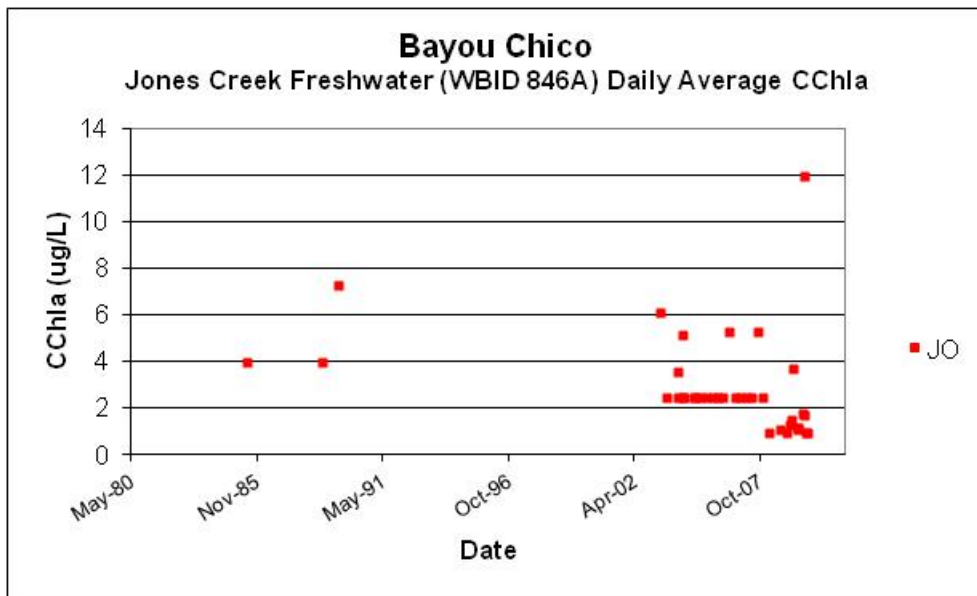


Figure B.45. Upper Bayou Chico Chla Daily Average for the Period of Record

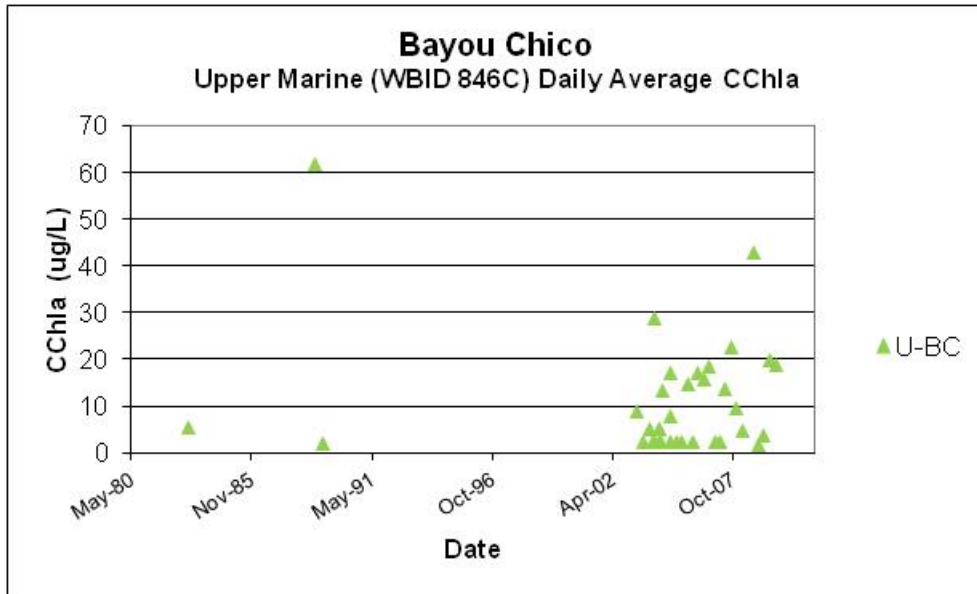


Figure B.46. Lower Bayou Chico Chla Daily Average for the Period of Record

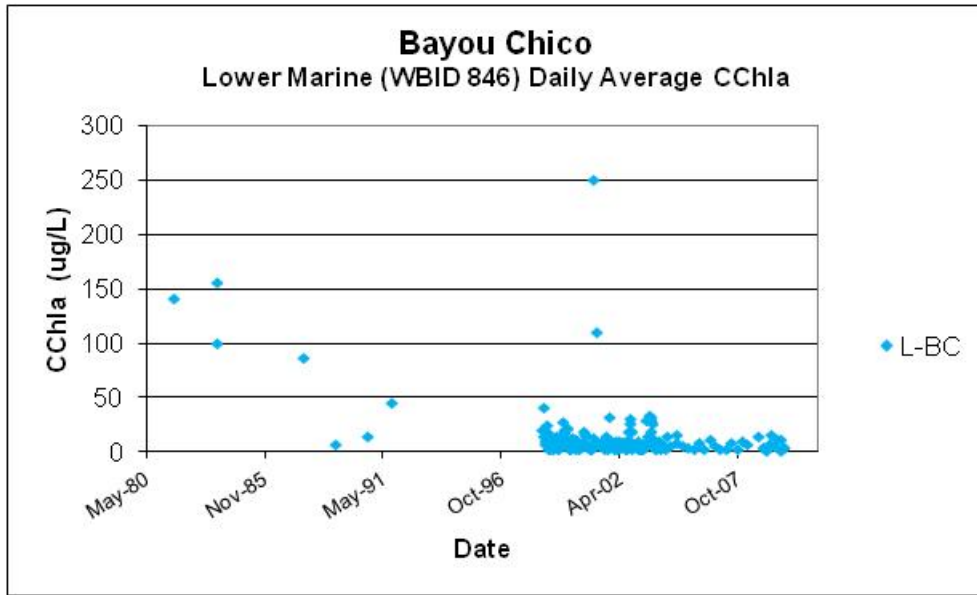


Figure B.47. Lower Bayou Chico Chla Daily Average, 1998–2010

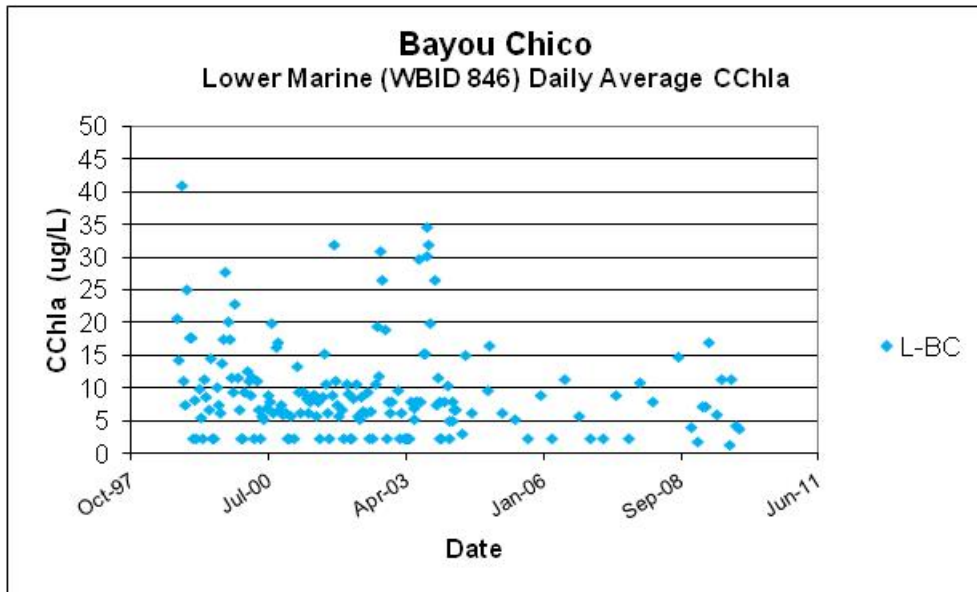


Figure B.48. Jackson Creek Chla Annual Average for the Period of Record

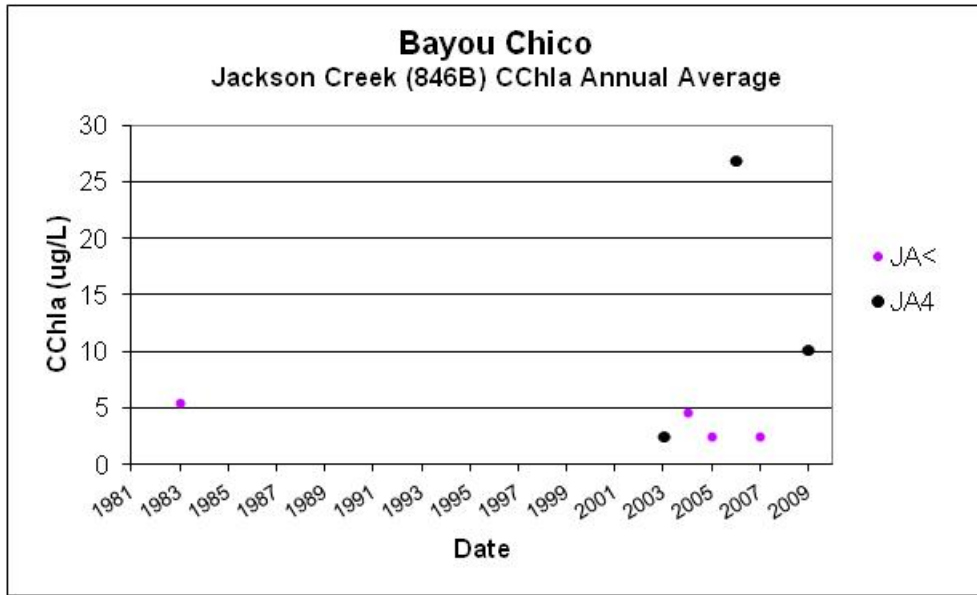


Figure B.49. Jones Creek Chla Annual Average for the Period of Record

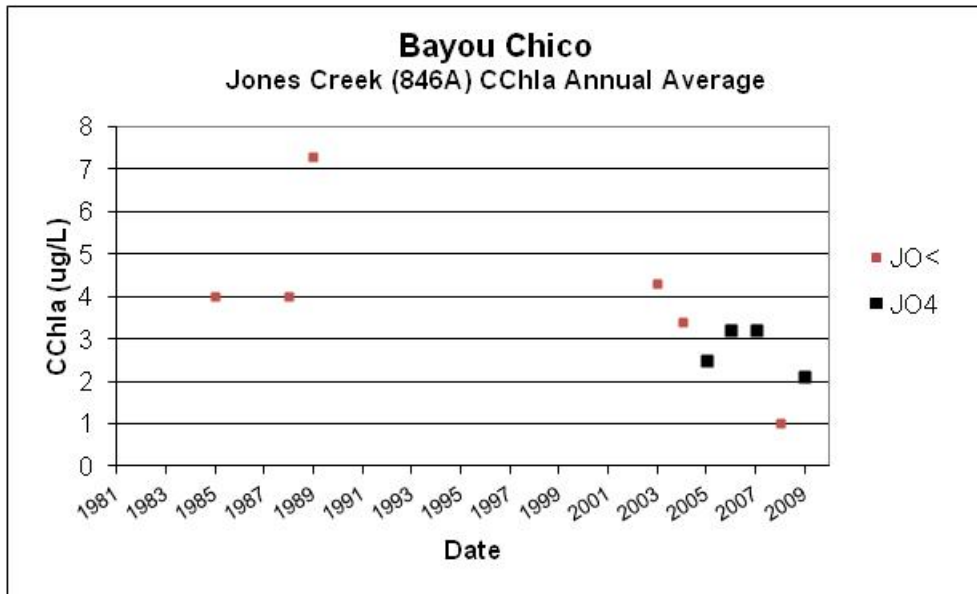




Figure B.50. Upper Bayou Chico Chla Annual Average for the Period of Record

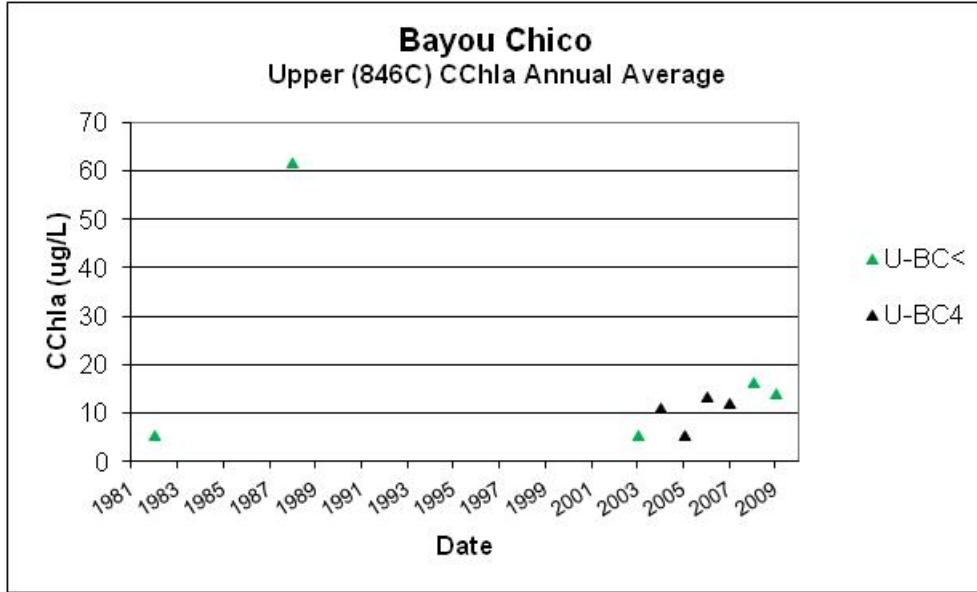


Figure B.51. Lower Bayou Chico Chla Annual Average for the Period of Record

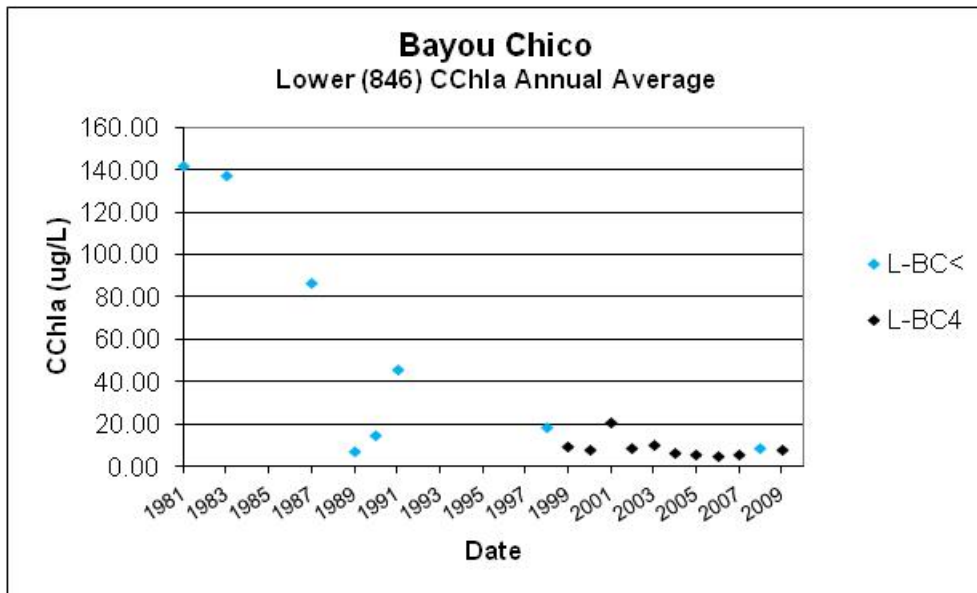


Table B.9 Bayou Chico Watershed: Summary of CChla Data

- = Empty cell/no data  
VP = Verified period

Location	Constituent	Date Range	Count	Min (µg/L)	Max (µg/L)	Median (µg/L)	Average (µg/L)
<b>Freshwater</b>	-	-	-	-	-	-	-
Jackson Creek (846B)	CChla	Jan-83	1	5.60	5.60	5.60	5.60
Jackson Creek (846B)-VP	CChla	6/03 - 11/09	42	1.20	76.00	2.50	6.62
Jones Creek (846A)	CChla	6/85 - 5/89	4	2.00	12.60	4.00	5.65
Jones Creek (846A)-VP	CChla	6/03 - 11/09	50	1.00	12.30	2.50	2.93
Freshwater (VP)	CChla	6/03 - 11/09	92	1.00	76.00	2.50	4.61
<b>Marine</b>	-	-	-	-	-	-	-
Upper (846C)	CChla	12/82 - 2/89	8	2.00	61.80	5.00	11.70
Upper (846C)-VP	CChla	6/03 - 9/09	36	1.80	43.00	7.95	10.74
Lower (846)	CChla	9/81 - 12/02	132	2.50	250.30	9.10	17.84
Lower (846)-VP	CChla	2/03 - 11/09	89	1.50	34.70	6.90	8.68
Marine (VP)	CChla	2/03 - 11/09	125	1.50	43.00	6.90	9.27

## B.2 Middle Pensacola Bay (WBID 548D)

Bayou Chico drains to that area of Pensacola Bay known as Middle Pensacola Bay and identified as WBID 548D. This information is provided to characterize the water quality of the tidal waters moving into and out of Bayou Chico.

Figure B.52. Middle Pensacola Bay (WBID 548D)

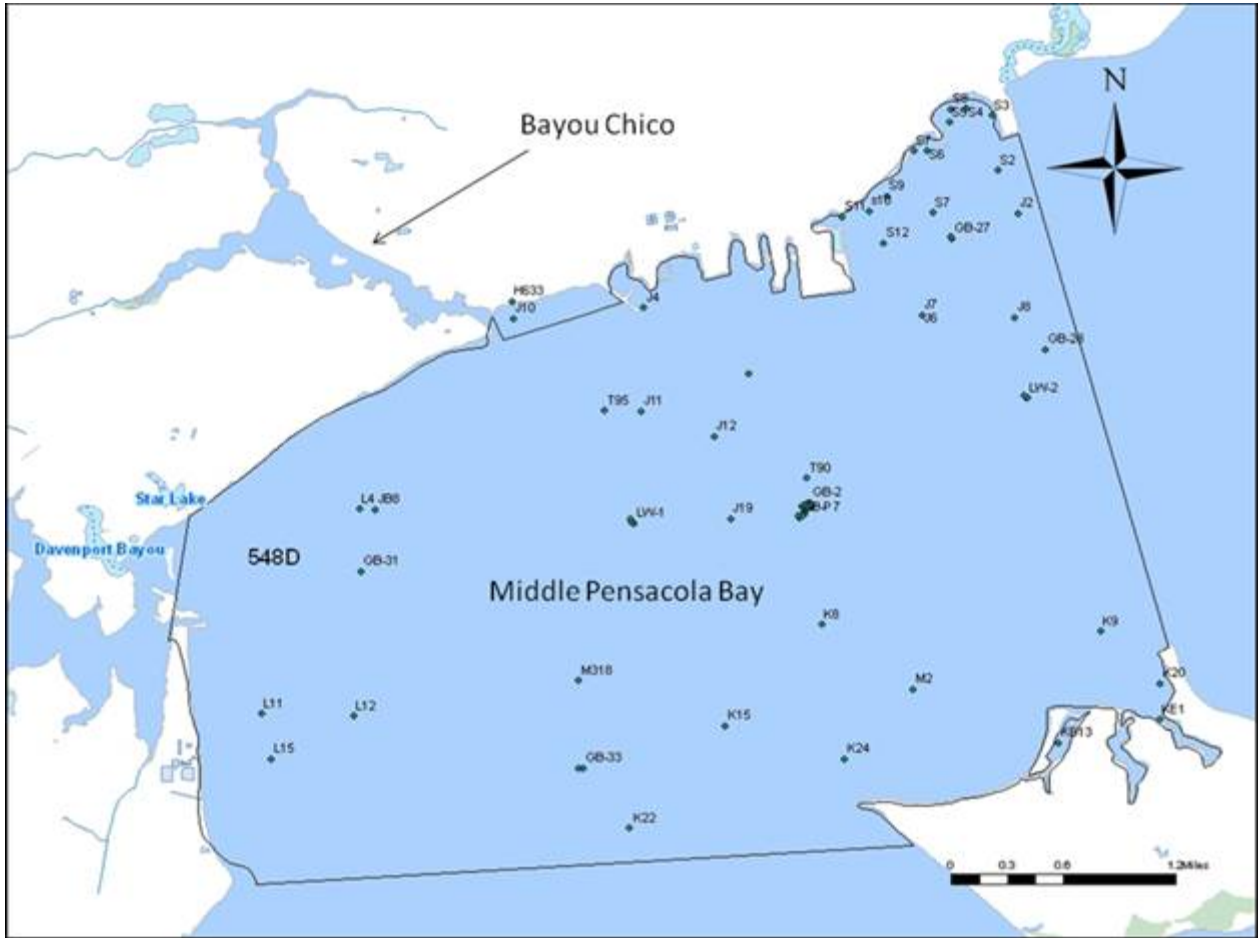


Table B.10. Water Quality Stations in Middle Pensacola Bay (WBID 548D)

Station_ID	Alias	Location	WBID	Begin	End
21FLGBO1CTD27PB0209	GB-27	Pensacola Bay CTD27PB0209	548D	2002	2002
21FLGBO1CTD27PB0307	GB-27	Pensacola Bay CTD27PB0307	548D	2003	2003
21FLGBO1CTD28PB0209	GB-28	Pensacola Bay CTD28PB0209	548D	2002	2002
21FLGBO1CTD28PB0307	GB-28	Pensacola Bay CTD28PB0307	548D	2003	2003
21FLGBO1CTD31PB0209	GB-31	Pensacola Bay CTD31PB0209	548D	2002	2002
21FLGBO1CTD33PB0209	GB-33	Pensacola Bay CTD33PB0209	548D	2002	2002
21FLGBO1CTD33PB0307	GB-33	Pensacola Bay CTD33PB0307	548D	2003	2003
21FLDOH ESCAMBIA91	H633	Sanders Beach	548D	2000	2010
21FLBFA 33020J10	J10	PENSACOLA BAY SANDERS BEACH 100YDS OFF PIER	548D	1997	1999
21FLA 33020J11	J11	PENSACOLA BAY 100 YDS OFF JETTY	548D	1987	1988
21FLBFA 33020J12	J12	PENSACOLA BAY MAIN ST WWTP OUTFALL	548D	1997	1999
21FLA 33020J12	J12	PENSACOLA BAY MAIN STP OUTFALL	548D	1970	1990
21FLA 33020J19	J19	PENSACOLA BAY SEC J BACKGR STA	548D	1970	1988
21FLA 330200J2	J2	PENSACO BA END L&N RAILROAD PIER	548D	1970	1989
21FLA 330200J4	J4	PENSACOLA BAY BEHIND JOE PATTIES	548D	1970	1991
21FLA 330200J6	J6	PENSACOLA BAY END MUNICIPAL PIER	548D	1970	1989
21FLA 330200J7	J7	PENSACOLA BAY 9TH AVE STP OUTFA	548D	1970	1970
21FLA 330200J8	J8	PENSACO BAY N END BAY BR FLAMBER	548D	1971	1971
21FLA 33020JB8	JB8	BAYOU CHICO 800 FT WEST OF TENNE	846	1976	1989
21FLA 33020K15	K15	PENSA BAY NORTH BUOY N22	548D	1973	1990
21FLPNS 33020K20	K20	PENSACOLA BAY, S END OF BAY BRID	548D	1996	2010
21FLA 33020K20	K20	PENSACOLA BAY, S END OF BAY BRID	548D	1971	1998
21FLA 33020K22	K22	PENSACOLA BAY BOUY N22	548D	1970	1972
21FLBFA 33020K24	K24	PENSACOLA BAY MARKER 4 R OFF FAIR POINT	548D	1997	1999
21FLA 33020K24	K24	PENSACOL BA FLASH RED LIGH R 4	834	1990	1996
21FLA 330200K8	K8	PENSACOLA BAY SECT K BUOY R24	548D	1972	1972
21FLA 330200K9	K9	PENSACOLA BAY SEC K BACKGR STA	548D	1970	1974
21FLA 3302KB13	KB13	GILMORE BAYOU CEN N ARM BAYOU	548D	1970	1976

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Station_ID	Alias	Location	WBID	Begin	End
21FLA 33020KE1	KE1	HOFFMAN BAY MOUTH	548D	1972	1972
21FLA 33020L11	L11	PENSACO BA 1000 YDS N NAS OUTFA	548D	1987	1996
21FLA 33020L12	L12	PENSACOLA BAY SEC L BACKGR STA	548D	1970	1994
21FLBFA 33020L15	L15	PENSACOLA BAY AT NAS WWTP OUTFALL	548D	1997	1999
21FLA 33020L15	L15	PENSACOLA BAY NAS STP OUTFALL	548D	1970	1990
21FLA 330200L4	L4	PENSACOLA BAY 300 YDS S CNTRY CL	548D	1970	1989
21FLKWATSAN-STR2-613	LW-2	Santa Rosa-STR2-613	548D	2000	2000
21FLKWATSAN-STR2-614	LW-2	Santa Rosa-STR2-614	548D	2001	2001
21FLKWATSAN-STR2-624	LW-2	Santa Rosa-STR2-624	548D	2001	2001
21FLKWATSAN-STR1-963	LW-1	Santa Rosa-STR1-963	548D	2001	2001
21FLKWATSAN-STR1-970	LW-1	Santa Rosa-STR1-970	548D	2001	2001
21FLKWATSAN-STR1-981	LW-1	Santa Rosa-STR1-981	548D	2000	2000
21FLFMRISTR200002	M2	StateNonTrend - Pensacola Bay	548D	2000	2000
21FLFMRIPEN200318	M318	Pensacola - Magazine Point	548D	2003	2003
21FLGBO1EX2PB0203	GB-2	Pensacola Bay EX2PB0203	548D	2002	2002
21FLGBO1P07PB0205	GB-P7	Pensacola Bay P07PB0205	548D	2002	2002
21FLGBO1P07PB0206	GB-P7	Pensacola Bay P07PB0206	548D	2002	2002
21FLGBO1P07PB0207	GB-P7	Pensacola Bay P07PB0207	548D	2002	2002
21FLGBO1P07PB0208	GB-P7	Pensacola Bay P07PB0208	548D	2002	2002
21FLGBO1P07PB0209	GB-P7	Pensacola Bay P07PB0209	548D	2002	2002
21FLGBO1P07PB0210	GB-P7	Pensacola Bay P07PB0210	548D	2002	2002
21FLGBO1P07PB0211	GB-P7	Pensacola Bay P07PB0211	548D	2002	2002
21FLGBO1P07PB0212	GB-P7	Pensacola Bay P07PB0212	548D	2002	2002
21FLGBO1P07PB0301	GB-P7	Pensacola Bay P07PB0301	548D	2003	2003
21FLGBO1P07PB0302	GB-P7	Pensacola Bay P07PB0302	548D	2003	2003
21FLGBO1P07PB0303	GB-P7	Pensacola Bay P07PB0303	548D	2003	2003
21FLGBO1P07PB0304	GB-P7	Pensacola Bay P07PB0304	548D	2003	2003
21FLGBO1P07PB0305	GB-P7	Pensacola Bay P07PB0305	548D	2003	2003
21FLGBO1P07PB0306	GB-P7	Pensacola Bay P07PB0306	548D	2003	2003
21FLGBO1P07PB0307	GB-P7	Pensacola Bay P07PB0307	548D	2003	2003

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Station_ID	Alias	Location	WBID	Begin	End
21FLGBO1P07PB0308	GB-P7	Pensacola Bay P07PB0308	548D	2003	2003
21FLGBO1P07PB0309	GB-P7	Pensacola Bay P07PB0309	548D	2003	2003
21FLGBO1P07PB0310	GB-P7	Pensacola Bay P07PB0310	548D	2003	2003
21FLGBO1P07PB0311	GB-P7	Pensacola Bay P07PB0311	548D	2003	2003
21FLGBO1P07PB0312	GB-P7	Pensacola Bay P07PB0312	548D	2003	2003
21FLGBO1P07PB0405	GB-P7	Pensacola Bay P07PB0405	548D	2004	2004
21FLPNS 3302J7GS10	s10	Pensacola Bay, So. of Bayfront stormdrain	548D	2004	2010
21FLPNS 3302J7GS11	S11	Pensacola Bay @ Seville Marina Inlet	548D	2004	2010
21FLPNS 3302J7GS12	S12	Pensacola Bay, East of port spoil pond	548D	2004	2010
21FLPNS 3302J8GS2	S2	Pensacola Bay, midpoint between Bay Bridge & Muscogee Wharf	548D	2004	2010
21FLPNS 3302J2GS3	S3	Pensacola Bay, East end of primary Stormdrain	548D	2004	2010
21FLPNS 3302J2GS4	S4	Pensacola Bay, 100 Ft So. of Primary Stormdrain	548D	2004	2010
21FLPNS 3302J2GS5	S5	Pensacola Bay, End of Chase Street	548D	2004	2010
21FLPNS 3302J1GS6	S6	Pensacola Bay, Midpoint btw Muscogee & Hawkshaw	548D	2004	2010
21FLPNS 3302J8GS7	S7	Pensacola Bay, Midpoint between bridge & port spoil pond	548D	2004	2010
21FLPNS 3302J1GS7	S7	Pensacola Bay, 150 FT So of Hawkshaw Lagoon East Stormdrain	548D	2008	2010
21FLPNS 3302J2GS8	S8	Pensacola Bay, West of primary stormdrain	548D	2004	2010
21FLPNS 3302J1GS9	S9	Pensacola Bay, West of Hawkshaw Lagoon	548D	2004	2010
1113T070120090	T90	PENSACOLA BAY	548D	1973	1973
1113T070120095	T95	PENSACOLA BAY	548D	1973	1973

Figure B.53. TP: Daily Average for Middle Pensacola Bay (WBID 548D), 1970-2011

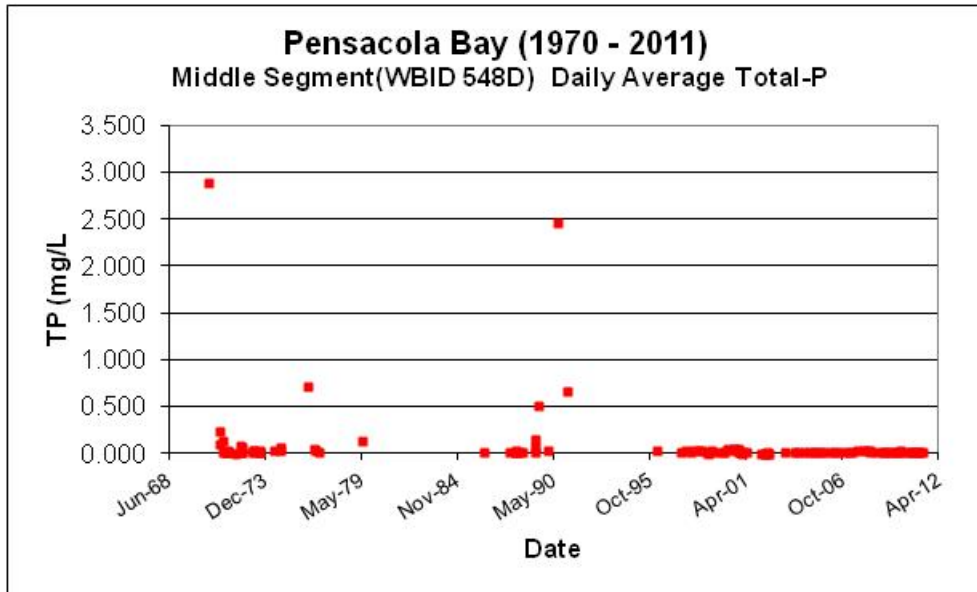


Figure B.54. TP: Daily Average for Middle Pensacola Bay (WBID 548D), 1998-2011

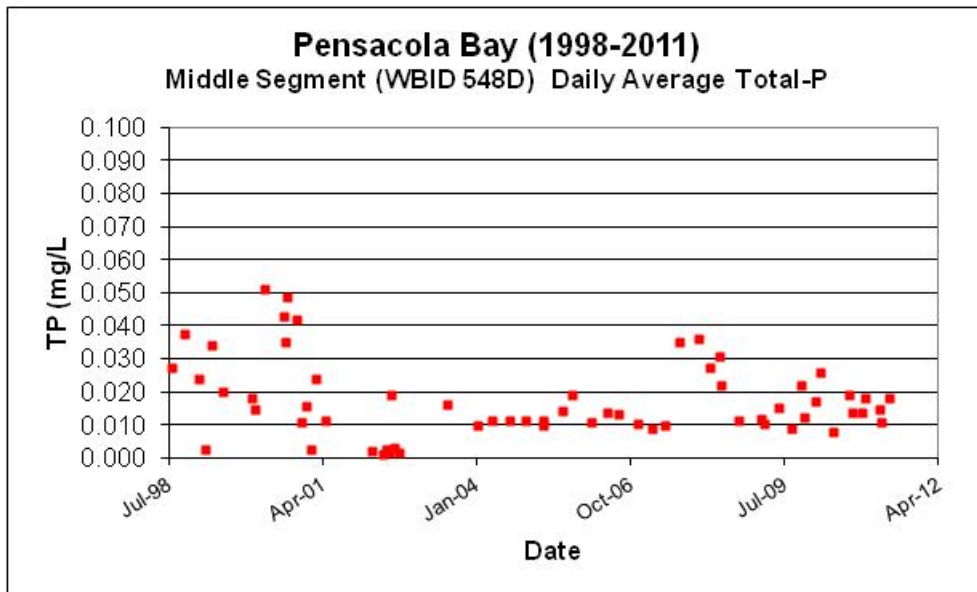


Figure B.55. TP: Annual Average for Middle Pensacola Bay (WBID 548D)

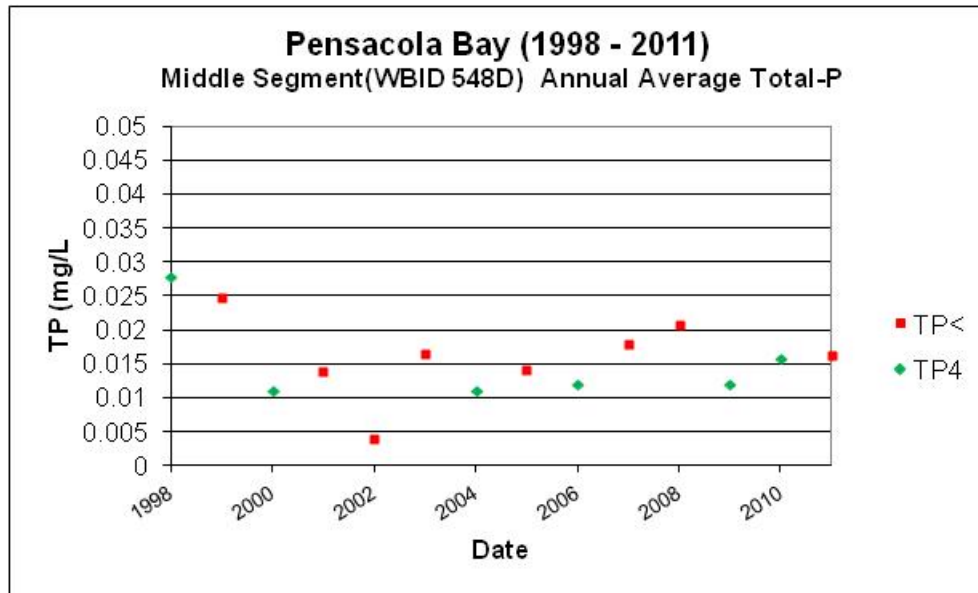


Figure B.56. TN: Daily Average for Middle Pensacola Bay (WBID 548D), 1970-2011

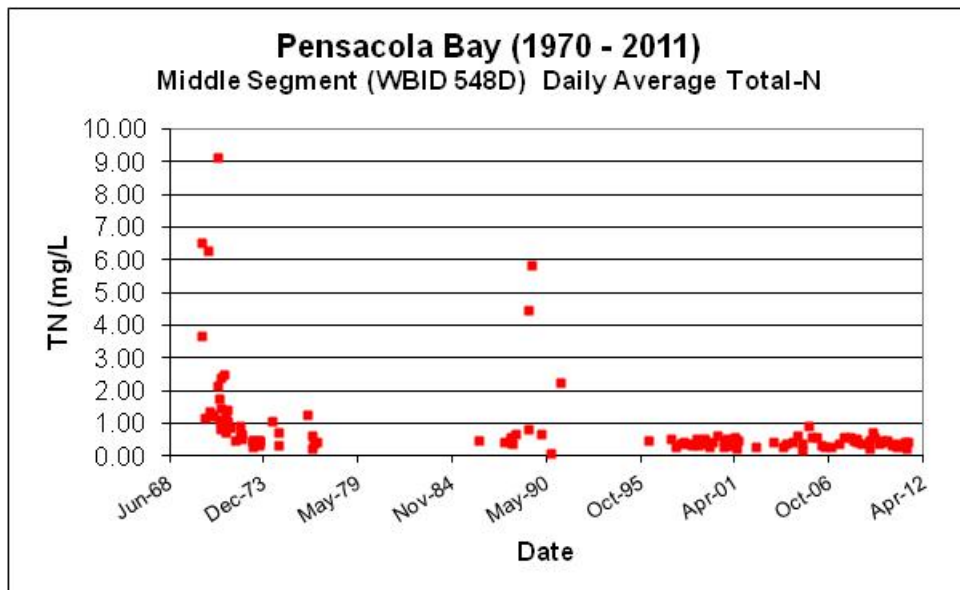




Figure B.57. TN: Daily Average for Middle Pensacola Bay (WBID 548D), 1998–2011

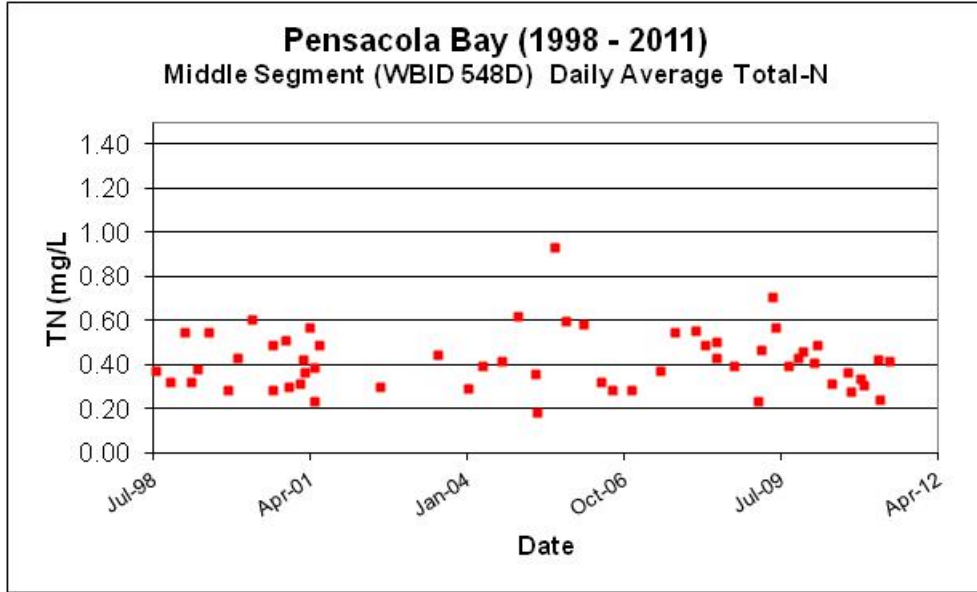


Figure B.58. TN: Annual Average for Middle Pensacola Bay (WBID 548D), 1998–2011

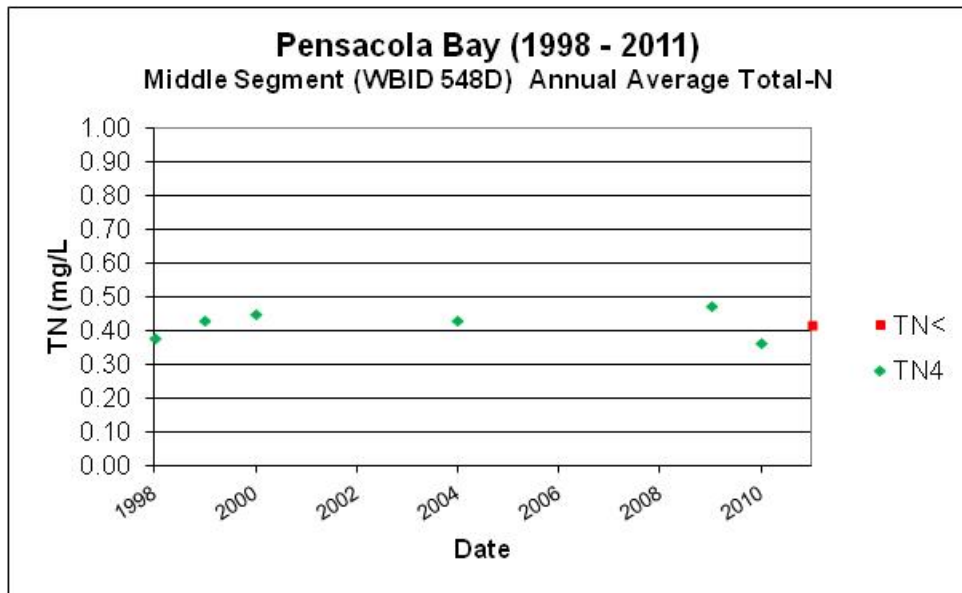


Figure B.59. CChla: Daily Average for Middle Pensacola Bay (WBID 548D), 1986–2011

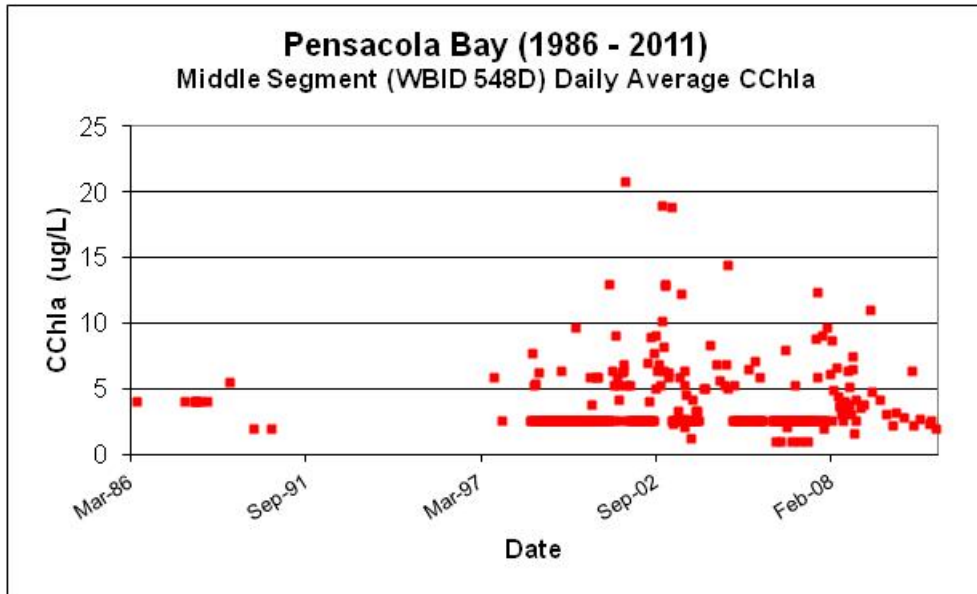


Figure B.60. CChla: Annual Average for Middle Pensacola Bay (WBID 548D), 1986–2011

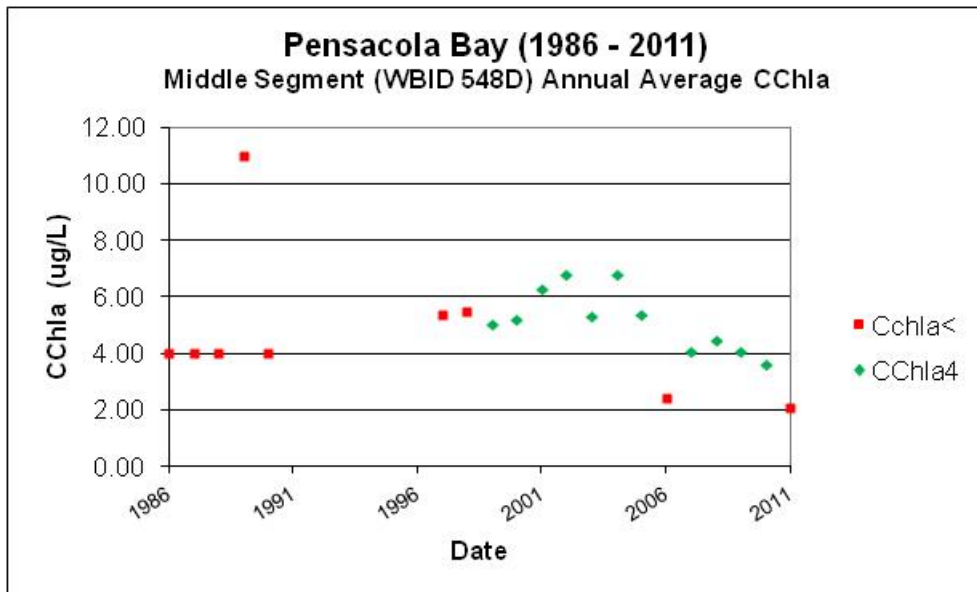


Table B.11. Summary of Data for Middle Pensacola Bay (WBID 548D)

- = Empty cell/no data

Year	TN< (mg/L)	TN4 (mg/L)	TP< (mg/L)	TP4 (mg/L)	CChla< (µg/L)	CChla4 (µg/L)
1970	3.25	-	2.900	-	-	-
1971	1.33	-	0.071	-	-	-
1972	0.57	-	0.019	-	-	-
1973	0.42	-	0.023	-	-	-
1974	0.72	-	0.033	-	-	-
1975	-	-	-	-	-	-
1976	0.69	-	0.266	-	-	-
1977	0.44	-	0.015	-	-	-
1978	-	-	-	-	-	-
1979	-	-	0.135	-	-	-
1980	-	-	-	-	-	-
1981	-	-	-	-	-	-
1982	-	-	-	-	-	-
1983	-	-	-	-	-	-
1984	-	-	-	-	-	-
1985	-	-	-	-	-	-
1986	0.48	-	0.018	-	4.00	-
1987	0.43	-	0.017	-	4.00	-
1988	0.52	-	0.015	-	4.00	-
1989	3.71	-	0.185	-	11.00	-
1990	0.38	-	1.244	-	4.00	-
1991	2.24	-	0.665	-	-	-
1992	-	-	-	-	-	-
1993	-	-	-	-	-	-
1994	-	-	-	-	-	-
1995	-	-	-	-	-	-
1996	-	-	0.033	-	-	-
1997	0.39	-	0.027	-	5.40	-
1998	-	0.38	-	0.028	5.52	-
1999	-	0.43	0.025	-	-	5.05
2000	-	0.45	-	0.011	-	5.23
2001	-	-	0.014	-	-	6.31
2002	-	-	0.004	-	-	6.81
2003	-	-	0.016	-	-	5.33
2004	-	0.43	-	0.011	-	6.81
2005	-	-	0.014	-	-	5.39
2006	-	-	-	0.012	2.43	-
2007	-	-	0.018	-	-	4.08
2008	-	-	0.021	-	-	4.46
2009	-	0.47	-	0.012	-	4.07
2010	-	0.36	-	0.016	-	3.64
2011	0.42	-	0.016	-	2.10	-

Table B.12. Summary of Annual Data for Middle Pensacola Bay (WBID 548D)

**Note:** Only years with all four quarters are represented.

- = Empty cell/no data

Time	-	TN (mg/L)	TP (mg/L)	CChla (µg/L)
Through 2002	Average	0.42	0.02	5.85
Through 2002	Median	0.43	0.02	5.77
After 2002	Average	0.42	0.01	4.83
After 2002	Median	0.43	0.01	4.46



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