Choctawhatchee Bay 03140102

Watershed Summary Information

Accounting Unit Name: Florida Panhandle Coastal

State(s): FL

Political Boundaries: Walton, Okaloosa

Major Waterways:
Alaqua Cr
Turkey Cr
Lafayette Cr
Rocky Cr
Little Alaqua Cr

Number of Stations in Watershed:
Tier1 - 19
Tier2 - 23
Tier3 - 9

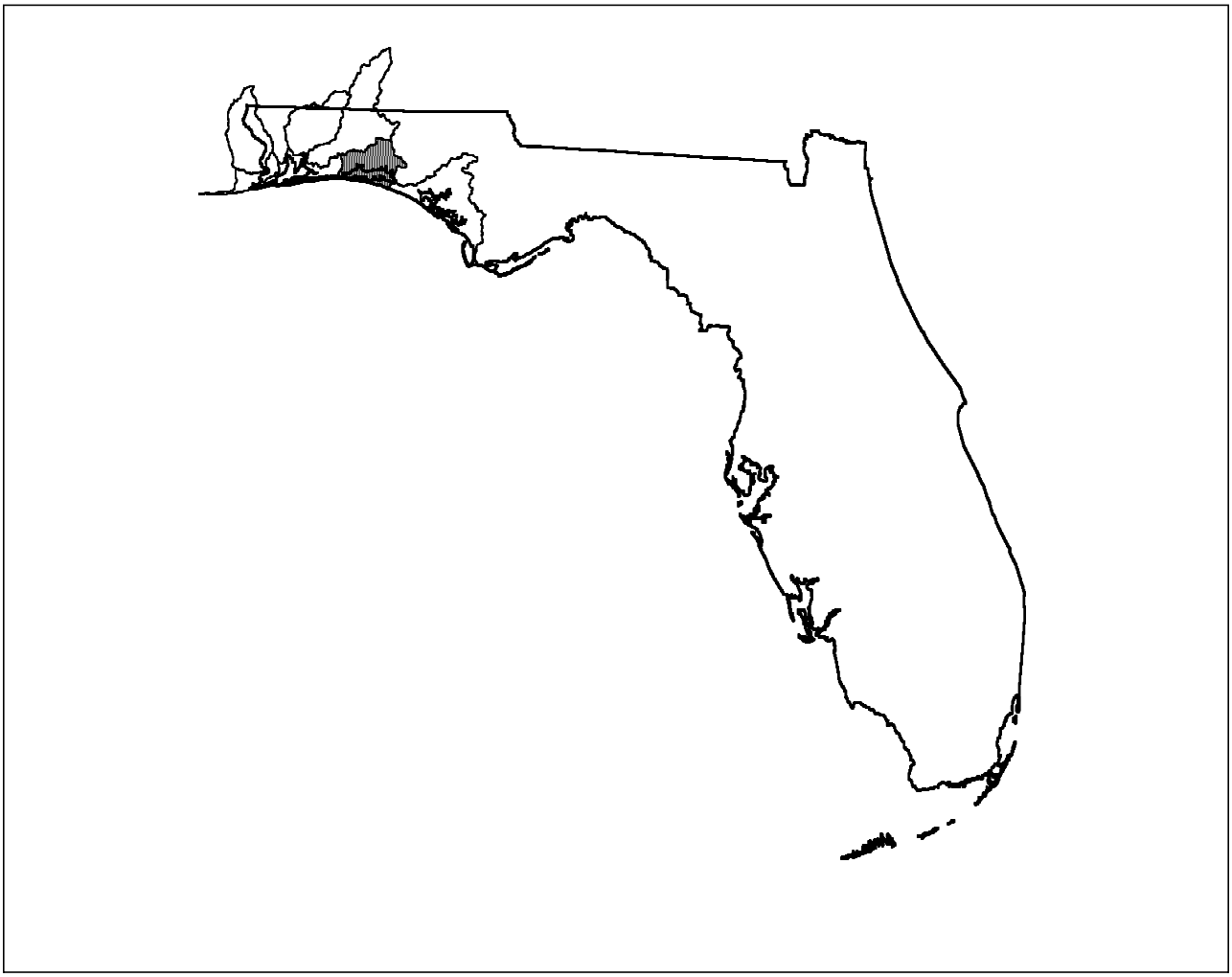

Figure 37. Watershed Location Map

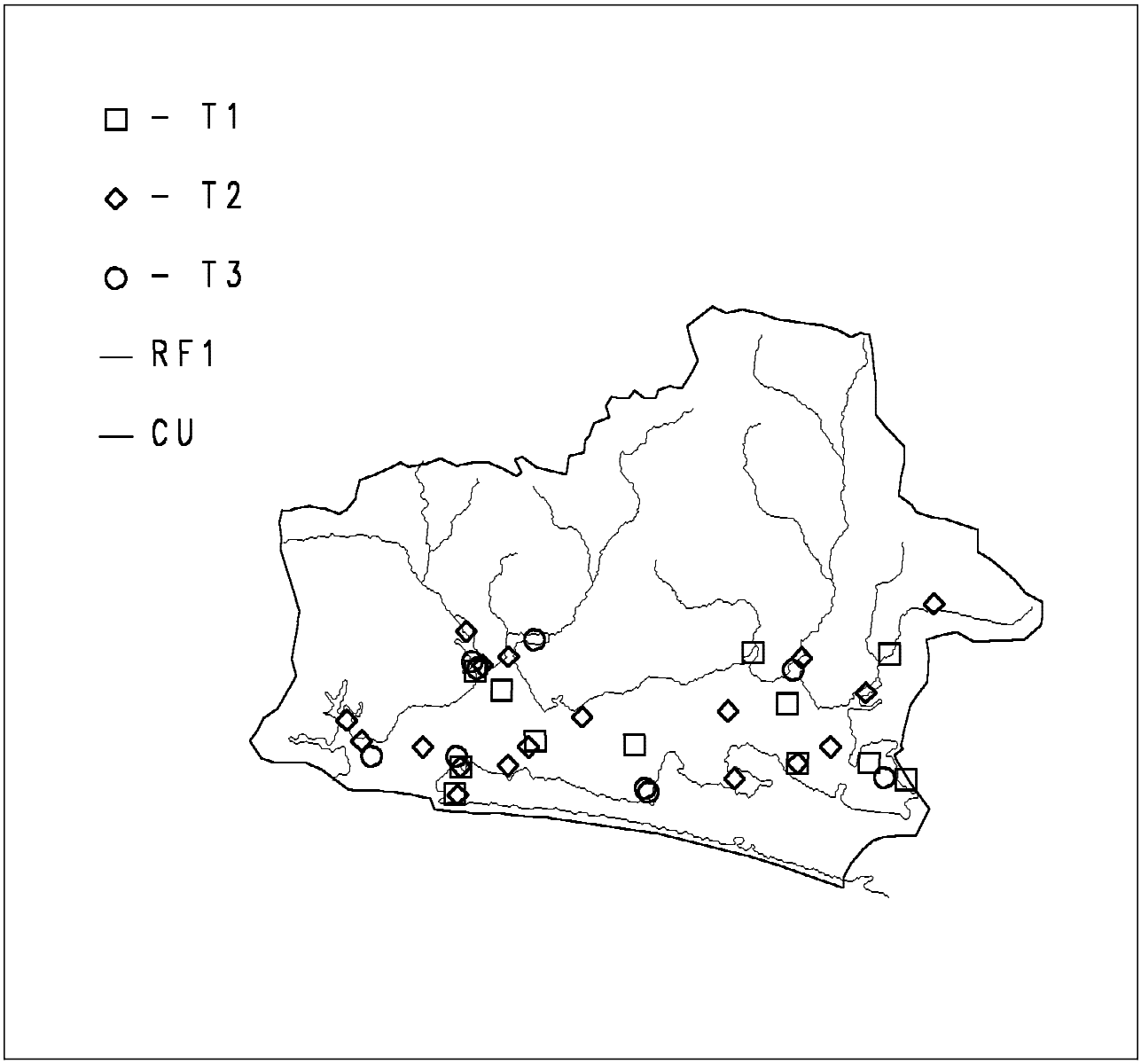

Figure 38. Major Waterways and Location of Sampling Stations

Data Source(s) Used in Evaluation

Source: **COSED** Agency: **NS&T**
Monitoring Program: **NOAA/National Status and Trends**
Num. of Stations: 15 Date Range: 1986-90

Source: **EMAP-LA** Agency: **EMAPLA**
Monitoring Program: **EMAP-LA Province**
Num. of Stations: 1 Date Range: 1992

Source: **ODES** Agency: **FL**
Monitoring Program: **Florida**
Num. of Stations: 2 Date Range: 1986-88

Source: **REGION 4** Agency: **FL DER**
Monitoring Program: **FL DER**
Num. of Stations: 5 Date Range: 1986-90

Source: **REGION 4** Agency: **UNKNOWN**
Monitoring Program:
Num. of Stations: 24 Date Range: 1987

Source: **STORET** Agency: **112WRD**
Monitoring Program: **US Geological Survey Data**
Num. of Stations: 2 Date Range: 1980-93

Source: **STORET** Agency: **21FLA**
Monitoring Program: **Fla Dept Environmental Regulation (Protection) Water, Sediment & Tissue Data**
Num. of Stations: 2 Date Range: 1981-89

Chemicals Responsible for Sampling Station Classification as Tier 1 or Tier 2

Classifying Parameter	Number of Stations							
	All Parameters				Aquatic Life		Human Health	
	Total	T.1&2	Tier1	Tier2	Tier1	Tier2	Tier1	Tier2
Arsenic	43	34	7	27	7	25	.	2
Lead	49	28	.	28	.	27	.	1
Copper	49	25	.	25	.	25	.	.
Nickel	48	22	.	22	.	22	.	.
Chromium	49	20	.	20	.	20	.	.
DDT	34	17	8	9	8	8	.	7
Mercury	49	14	.	14	.	14	.	.
Dibenzo(a,h)anthracene	17	13	.	13	.	11	.	9
Polychlorinated biphenyls	34	11	2	9	.	8	2	9
BHC	28	11	1	10	1	10	.	.
Benzo(a)pyrene	21	10	1	9	1	7	.	10
Chlordane	34	10	.	10	.	9	.	8
Pyrene	21	9	1	8	1	8	.	.
Dieldrin	32	9	.	9	.	7	.	9
Benzo(a)anthracene	21	8	.	8	.	7	.	8
Fluorene	16	8	.	8	.	8	.	.
Acenaphthene	17	7	.	7	.	7	.	.
Acenaphthylene	16	7	.	7	.	7	.	.
Cadmium	49	7	.	7	.	5	.	2
Chrysene	21	7	.	7	.	7	.	.
Fluoranthene	21	7	.	7	.	7	.	.
Phenanthrene	19	7	.	7	.	7	.	.
Indeno(1,2,3-cd)pyrene	17	6	.	6	.	1	.	6
Silver	21	5	.	5	.	5	.	.
Zinc	48	5	.	5	.	3	.	2
Benzo(b)fluoranthene	13	4	.	4	.	.	.	4
Anthracene	21	3	.	3	.	3	.	.

Classifying Parameter	Number of Stations							
	All Parameters				Aquatic Life		Human Health	
	Total	T.1&2	Tier1	Tier2	Tier1	Tier2	Tier1	Tier2
Aldrin	24	1	.	1	.	.	.	1
Benzo(ghi)perylene	19	1	.	1	.	1	.	.
HMW_PAHs	1	1	.	1	.	1	.	.
LMW_PAHs	1	1	.	1	.	1	.	.
Methylnaphthalene, 2-	3	1	.	1	.	1	.	.
Naphthalene	17	1	.	1	.	1	.	.

Sediment Chemistry Data: Chemical Summary

Sediment Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Acenaphthene	18	18.05	9.14	15	85.00	0.66
Acenaphthylene	16	7.18	3.51	12	32.01	0.65
Aldrin	50	0.06	0.00	7	1.75	0.04
Anthracene	22	27.69	19.00	19	95.00	1.58
Antimony	22	730.91	692.50	22	1300.00	220.00
Arsenic	49	31831.16	20006.00	48	191500.0	600.00
Benzo(a)anthracene	25	153.44	23.00	22	1045.00	4.57
Benzo(a)pyrene	25	226.20	38.00	22	1764.60	4.17
Benzo(b)fluoranthene	13	163.47	14.43	10	575.07	6.24
Benzo(ghi)perylene	19	170.73	23.50	16	955.60	0.14
Benzo(k)fluoranthene	13	90.45	16.58	10	392.24	2.66
Biphenyl	14	16.05	10.08	14	82.44	2.79
BHC	97	0.24	0.00	15	5.48	0.04
Cadmium	57	341.56	180.00	56	2500.00	0.22
Chlordane	78	3.27	0.00	28	47.00	0.04
Chromium	49	52163.12	35000.00	49	190000.0	10.70
Chrysene	25	157.11	24.60	22	623.01	6.23
Copper	57	24876.49	15515.00	57	135000.0	2.35
Dibenzo(a,h)anthracene	21	55.06	12.62	20	254.05	1.90
Dieldrin	61	0.69	0.00	22	9.47	0.10
DDT	258	30.64	0.12	134	2244.37	0.03
Endosulfan mixed isomers	27	0.00	0.00	0	.	.
Endosulfan, alpha-	17	0.00	0.00	0	.	.
Endosulfan, beta-	17	0.00	0.00	0	.	.
Endrin	41	0.00	0.00	0	.	.
Fluoranthene	25	263.95	48.94	22	1650.00	13.37
Fluorene	18	22.34	13.50	15	125.52	2.19
Heptachlor	56	0.11	0.00	13	2.80	0.02
Heptachlor epoxide	48	0.03	0.00	5	0.58	0.14
Hexachlorobenzene	23	0.19	0.08	19	0.98	0.03
HMW_PAHs	1	1532.11	1532.11	1	1532.11	1532.11
Indeno(1,2,3-cd)pyrene	15	222.80	94.76	15	956.60	6.22

Sediment Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Lead	57	39816.77	33260.00	57	159413.0	16.00
LMW_PAHs	1	2499.31	2499.31	1	2499.31	2499.31
Malathion	3	0.00	0.00	0	.	.
Mercury	54	88.70	92.00	53	395.70	0.01
Methoxychlor	40	0.00	0.00	0	.	.
Methylnaphthalene, 2-	3	46.97	0.00	1	140.92	140.92
Mirex/Dechlorane	51	0.10	0.00	11	1.80	0.06
Naphthalene	17	14.85	11.49	14	58.41	5.80
Nickel	52	18283.05	14650.00	52	83000.00	1.64
Phenanthrene	25	104.75	45.00	22	597.00	8.00
Polychlorinated biphenyls	152	3.45	0.00	21	111.80	1.40
Pyrene	25	1031.16	114.65	23	19500.00	21.79
Silver	25	447.49	85.00	25	2200.00	0.33
SEM_est	1	2.67	2.67	1	2.67	2.67
Toxaphene	44	0.00	0.00	0	.	.
Zinc	56	67202.19	77705.00	56	213992.0	6.60

Tissue Residue Data: Chemical Summary

Tissue Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Acenaphthene	6	82.30	82.00	6	110.00	53.40
Aldrin	2	1.12	1.12	2	1.83	0.40
Anthracene	8	41.96	41.00	8	63.30	21.20
Antimony	2	120.00	120.00	2	130.00	110.00
Arsenic	18	7130.56	7375.00	18	11700.00	3900.00
Benzo(a)anthracene	15	102.70	53.80	15	347.50	23.00
Benzo(a)pyrene	8	55.98	42.70	8	164.60	28.00
Biphenyl	2	34.00	34.00	2	35.00	33.00
BHC	13	1.52	1.00	13	4.54	0.29
Cadmium	18	3741.11	3600.00	18	7700.00	1150.00
Chlordane	18	34.82	9.32	18	291.84	2.40
Chromium	18	419.44	395.00	18	1070.00	160.00
Chrysene	14	187.44	96.00	14	608.20	50.70
Copper	18	77666.67	75000.00	18	124000.0	36000.00
Dibenzo(a,h)anthracene	4	36.63	37.00	4	42.20	30.30
Dieldrin	18	6.72	5.63	18	28.04	0.68
DDT	86	89.20	12.16	86	1314.86	0.24
Fluoranthene	18	235.16	123.05	18	735.50	23.00
Heptachlor	3	1.17	1.24	3	1.66	0.60
Heptachlor epoxide	17	2.72	1.88	17	9.20	0.95
Hexachlorobenzene	4	0.95	0.99	4	1.62	0.22
Indeno(1,2,3-cd)pyrene	6	44.30	42.75	6	67.30	31.00

Tissue Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Lead	18	2864.28	1280.00	18	12510.00	80.00
Manganese	18	11316.67	11000.00	18	18600.00	4800.00
Mercury	18	268.67	240.00	18	452.00	70.00
Mirex/Dechlorane	4	2.06	0.67	4	6.34	0.53
Nickel	18	1200.56	1185.00	18	1770.00	700.00
Polychlorinated biphenyls	12	52.81	38.75	12	155.50	5.60
Pyrene	18	168.96	92.50	18	587.70	20.00
Selenium	18	4263.89	3840.00	18	8660.00	2700.00
Silver	18	3395.00	3405.00	18	7380.00	1150.00
Tin	2	240.00	240.00	2	240.00	240.00
Zinc	18	2540889	2300000	18	4172000	1200000

Biotoxicity Data

Lat. Long.	Date	Species Name	Phase	% Mortality		Sign.
				Test	Control	
Monitoring Program: EMAP-LA Province						
30.4472 86.3872	92-07-09	Ampelisca Abdita	S	3.97	3.00	no