Buffalo-San Jacinto 12040104

Watershed Summary Information

Accounting Unit Name: San Jacinto

State(s): TX

Political Boundaries: Harris, Fort Bend, Chambers, Walker

Major Waterways: San Jacinto R
Buffalo Bayou
Greens Bayou
Brays Bayou
White Oak Bayou

Number of Stations in Watershed: Tier1 - 10
Tier2 - 23
Tier3 - 3

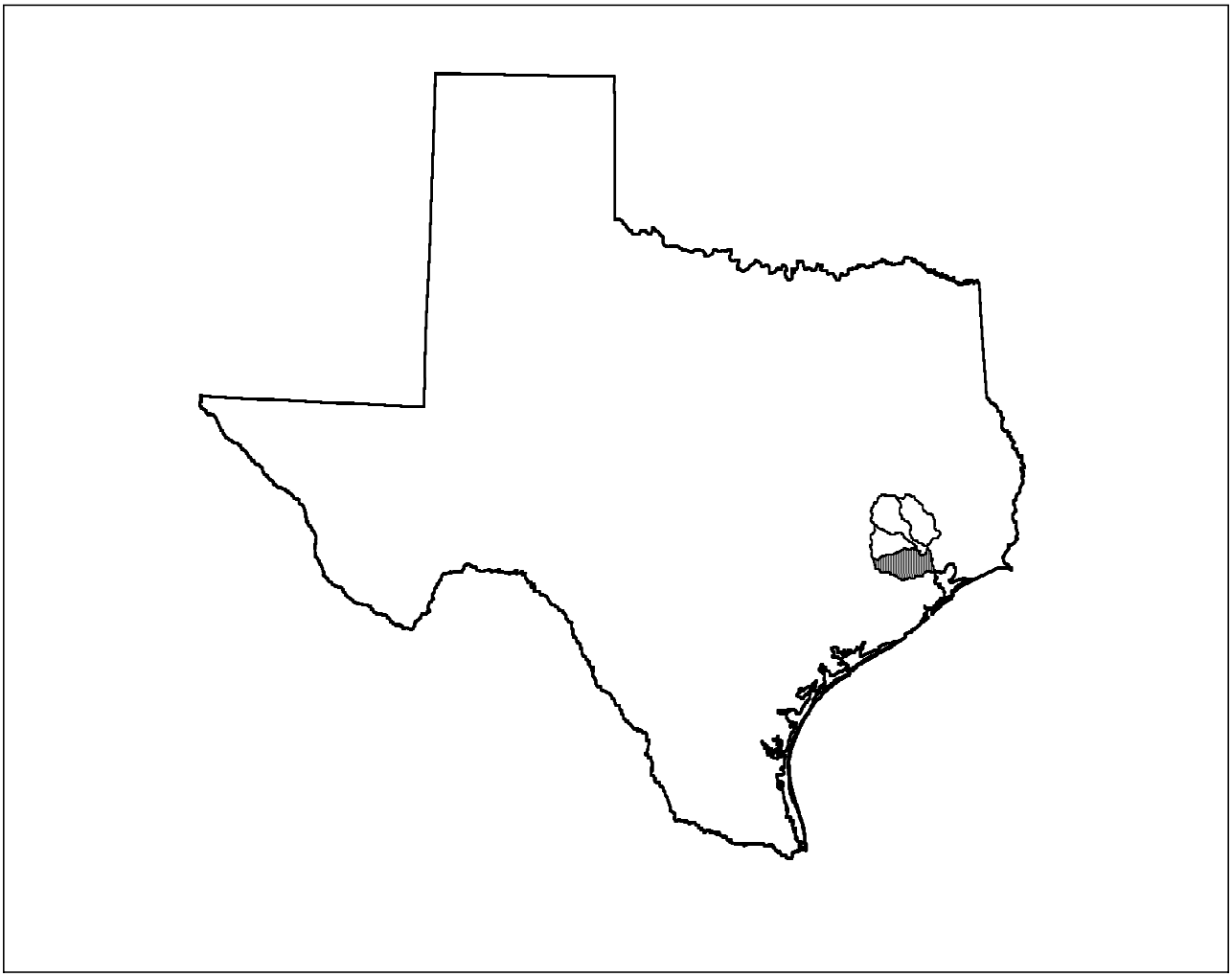

Figure 157. Watershed Location Map

Figure 158. 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: 9 Date Range: 1987-90

Source: **EMAP-LA** Agency: **EMAPLA**
Monitoring Program: **EMAP-LA Province**
Num. of Stations: 3 Date Range: 1991-92

Source: **GOM** Agency: **USEPA REGION 6**
Monitoring Program: **USEPA Region 6**
Num. of Stations: 10 Date Range: 1988-90

Source: **STORET** Agency: **112WRD**
Monitoring Program: **US Geological Survey Data**
Num. of Stations: 1 Date Range: 1980

Source: **STORET** Agency: **21TXWQB**
Monitoring Program: **Texas Dept. of Water Resources Surface Water Data**
Num. of Stations: 13 Date Range: 1980-92

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
Polychlorinated biphenyls	25	24	9	15	7	14	2	22
Chromium	30	21	.	21	.	21	.	.
Nickel	29	21	.	21	.	21	.	.
Copper	30	19	.	19	.	19	.	.
Zinc	29	18	.	18	.	18	.	.
Lead	30	17	.	17	.	17	.	.
DDT	18	15	2	13	2	13	.	4
Mercury	30	14	.	14	.	14	.	.
Dibenzo(a,h)anthracene	12	12	1	11	1	11	.	6
Benzo(a)pyrene	12	12	.	12	.	4	.	12
BHC	16	11	1	10	1	10	.	.
Acenaphthylene	12	11	.	11	.	11	.	.
Chlordane	17	9	.	9	.	8	.	6
Arsenic	30	8	.	8	.	8	.	.
Cadmium	30	8	.	8	.	8	.	.
Dieldrin	17	7	.	7	.	6	.	6
Silver	29	6	1	5	1	5	.	.
Bis(2-ethylhexyl)phthalate	5	5	3	2	3	2	.	3
Chrysene	12	5	.	5	.	5	.	.
Pyrene	12	5	.	5	.	5	.	.
Benzo(a)anthracene	12	4	.	4	.	4	.	1
Hexachlorobenzene	18	4	.	4	.	4	.	.
Heptachlor epoxide	16	3	.	3	.	.	.	3
Aldrin	12	2	.	2	.	.	.	2
Fluoranthene	12	2	.	2	.	2	.	.
Fluorene	12	2	.	2	.	2	.	.
HMW_PAHs	3	2	.	2	.	2	.	.
LMW_PAHs	3	2	.	2	.	2	.	.
Acenaphthene	12	1	.	1	.	1	.	.
Anthracene	11	1	.	1	.	1	.	.
Di-n-butyl phthalate	5	1	.	1	.	1	.	.
Indeno(1,2,3-cd)pyrene	12	1	.	1	.	.	.	1
Methylnaphthalene, 2-	3	1	.	1	.	1	.	.
Mirex/Dechlorane	6	1	.	1	.	.	.	1

Classifying Parameter	Number of Stations							
	All Parameters				Aquatic Life		Human Health	
	Total	T.1&2	Tier1	Tier2	Tier1	Tier2	Tier1	Tier2
Naphthalene	12	1	.	1	.	1	.	.
Phenanthrene	12	1	.	1	.	1	.	.
SEM_est	3	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	15	7.33	4.93	13	22.00	2.00
Acenaphthylene	19	15.10	10.74	19	45.00	1.00
Aldrin	37	0.11	0.00	3	2.00	0.31
Anthracene	16	16.62	13.18	16	64.00	3.00
Antimony	29	911.21	0.00	12	15800.00	496.00
Arsenic	79	3925.78	4000.00	63	9600.00	1100.00
Benzo(a)anthracene	19	90.87	44.00	19	480.00	20.00
Benzo(a)pyrene	17	71.78	53.87	17	220.00	12.00
Benzo(b)fluoranthene	10	82.25	57.17	10	166.20	35.17
Benzo(ghi)perylene	17	104.47	72.31	17	310.00	19.00
Benzo(k)fluoranthene	9	39.54	25.75	9	91.56	13.77
Biphenyl	15	38.13	14.53	15	360.00	2.50
Bis(2-ethylhexyl)phthalate	23	3208.52	2370.00	14	16200.00	430.00
BHC	61	0.35	0.00	14	12.30	0.21
Cadmium	77	1079.34	180.00	44	11000.00	84.00
Chlordane	76	71.85	1.65	48	587.00	0.40
Chromium	79	49166.44	43000.00	78	185000.0	2200.00
Chrysene	18	89.86	84.07	18	280.00	13.00
Copper	79	24616.85	20069.00	77	115000.0	1200.00
Di-n-butyl phthalate	23	114.26	0.00	5	2010.00	59.00
Diazinon/Spectracide	32	0.00	0.00	0	.	.
Dibenzo(a,h)anthracene	19	54.03	14.17	19	567.00	3.00
Dieldrin	46	4.47	0.51	27	32.00	0.38
DCPA/Dacthal	1	51.00	51.00	1	51.00	51.00
DDT	223	2.56	0.00	88	107.00	0.07
Endosulfan, alpha-	3	0.00	0.00	0	.	.
Endosulfan, beta-	3	0.00	0.00	0	.	.
Endrin	35	0.00	0.00	0	.	.
Fluoranthene	18	176.35	96.75	18	960.00	12.00
Fluorene	18	12.10	11.80	18	39.00	1.00
Heptachlor	34	0.00	0.00	0	.	.
Heptachlor epoxide	46	2.95	0.00	15	37.00	0.01
Hexachlorobenzene	43	18.66	2.50	33	150.00	0.09
HMW_PAHs	3	1637.50	2052.43	3	2301.03	559.04
Indeno(1,2,3-cd)pyrene	17	65.81	35.10	17	180.00	11.00

Sediment Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Lead	77	46018.05	31000.00	70	226000.0	2300.00
LMW_PAHs	3	566.31	740.54	3	816.26	142.13
Malathion	28	0.00	0.00	0	.	.
Mercury	69	198.95	216.20	51	590.00	20.00
Methoxychlor	32	0.00	0.00	0	.	.
Methylnaphthalene, 2-	3	18.66	19.88	3	23.21	12.90
Mirex/Dechlorane	6	0.05	0.03	3	0.15	0.06
Naphthalene	16	19.51	13.19	16	53.00	5.00
Nickel	62	17428.73	18000.00	58	45000.00	2000.00
Pentachlorophenol	13	2.37	0.00	1	30.87	30.87
Phenanthrene	17	55.21	36.35	17	230.00	12.00
Polychlorinated biphenyls	59	287.05	26.96	41	6430.00	3.80
Pyrene	21	234.58	132.50	21	1200.00	28.00
Silver	60	430.87	0.00	29	7000.00	115.00
SEM_est	3	3.10	2.75	3	4.11	2.45
Toxaphene	34	0.00	0.00	0	.	.
Zinc	79	159725.1	125700.0	79	836000.0	6800.00

Tissue Residue Data: Chemical Summary

Tissue Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Aldrin	6	0.00	0.00	0	.	.
Arsenic	6	0.00	0.00	0	.	.
BHC	6	0.50	0.00	1	3.00	3.00
Cadmium	6	0.05	0.00	1	0.30	0.30
Chlordane	6	217.88	0.00	2	1300.00	7.30
Chromium	6	0.12	0.00	2	0.40	0.30
Copper	6	125.83	1.05	3	750.00	2.10
Dieldrin	6	14.57	3.20	3	70.00	6.40
DCPA/Dacthal	2	22.50	22.50	2	30.00	15.00
DDT	32	14.63	0.00	15	87.00	2.50
Endosulfan, alpha-	4	0.00	0.00	0	.	.
Endrin	6	3.33	0.00	1	20.00	20.00
Heptachlor	2	0.00	0.00	0	.	.
Heptachlor epoxide	6	2.52	0.00	2	8.35	6.75
Hexachlorobenzene	6	3.18	1.50	3	9.80	3.00
Lead	6	0.10	0.00	2	0.40	0.20
Mercury	5	14.06	0.04	3	70.00	0.04
Methoxychlor	2	0.00	0.00	0	.	.
Mirex/Dechlorane	4	47.43	5.85	4	174.10	3.90
Nickel	4	0.50	0.45	2	1.10	0.90
Polychlorinated biphenyls	6	63.88	26.20	5	270.00	2.10

Tissue Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Selenium	6	253.33	0.00	2	850.00	670.00
Silver	4	0.32	0.19	2	0.89	0.37
Tin	4	0.40	0.35	2	0.89	0.70
Toxaphene	6	0.00	0.00	0	.	.
Zinc	4	3.90	0.00	1	15.60	15.60

Biotoxicity Data

Lat.	Long.	Date	Species Name	Phase	% Mortality		Sign.
					Test	Control	
Monitoring Program: EMAP-LA Province							
29.7058	95.0408	91-07-09	Ampelisca Abdita	S	0.01	1.00	no
29.7472	95.0385	92-07-22	Ampelisca Abdita	S	6.05	1.00	no
29.7568	95.0932	92-07-22	Ampelisca Abdita	S	10.04	2.00	no