

Houston Ship Channel Tidal

Segment: 1006 San Jacinto River Basin

Basin number: 10
Basin group: C
Water body description: From the confluence with the San Jacinto River in Harris County to a point immediately upstream of Greens Bayou in Harris County, including tidal portions of tributaries
Water body classification: Classified
Water body type: Tidal Stream
Water body length / area: 25.6 Miles
Water body uses: Aquatic Life Use, General Use, Fish Consumption Use

Standards Not Met in 2004	Use	Support Status	Parameter	Category
Assessment Area				
Goodyear Creek Tidal	Fish Consumption Use	Not Supporting	PCBs in fish tissue	5a
Goodyear Creek Tidal	Fish Consumption Use	Not Supporting	chlordan in fish tissue	5a
Goodyear Creek Tidal	Fish Consumption Use	Not Supporting	dieldrin in fish tissue	5a
Goodyear Creek Tidal	Fish Consumption Use	Not Supporting	dioxin in catfish and crab tissue	5a
Goodyear Creek Tidal	Fish Consumption Use	Not Supporting	heptachlor epoxide in fish tissue	5a
Greens Bayou Tidal	Fish Consumption Use	Not Supporting	PCBs in fish tissue	5a
Greens Bayou Tidal	Fish Consumption Use	Not Supporting	chlordan in fish tissue	5a
Greens Bayou Tidal	Fish Consumption Use	Not Supporting	dieldrin in fish tissue	5a
Greens Bayou Tidal	Fish Consumption Use	Not Supporting	dioxin in catfish and crab tissue	5a
Greens Bayou Tidal	Fish Consumption Use	Not Supporting	heptachlor epoxide in fish tissue	5a
Houston Ship Channel Tidal	Fish Consumption Use	Not Supporting	PCBs in fish tissue	5a
Houston Ship Channel Tidal	Fish Consumption Use	Not Supporting	chlordan in fish tissue	5a
Houston Ship Channel Tidal	Fish Consumption Use	Not Supporting	dieldrin in fish tissue	5a
Houston Ship Channel Tidal	Fish Consumption Use	Not Supporting	dioxin in catfish and crab tissue	5a
Houston Ship Channel Tidal	Fish Consumption Use	Not Supporting	heptachlor epoxide in fish tissue	5a
Patrick Bayou Tidal	Aquatic Life Use	Not Supporting	acute toxicity in sediment to aquatic organisms	5c
Patrick Bayou Tidal	Fish Consumption Use	Not Supporting	PCBs in fish tissue	5a
Patrick Bayou Tidal	Fish Consumption Use	Not Supporting	chlordan in fish tissue	5a
Patrick Bayou Tidal	Fish Consumption Use	Not Supporting	dieldrin in fish tissue	5a
Patrick Bayou Tidal	Fish Consumption Use	Not Supporting	dioxin in catfish and crab tissue	5a
Patrick Bayou Tidal	Fish Consumption Use	Not Supporting	heptachlor epoxide in fish tissue	5a
Patrick Bayou Tidal	Fish Consumption Use	Not Supporting	mercury in water	5c

Standards Not Met and Concerns in Previous Years				
Assessment Area	Use	Support Status or Concern	Parameter	Category
Patrick Bayou Tidal	General Use	Partially Supporting	temperature	5c

Parameters Removed from the 2002 303(d) List: pesticides in fish tissue

Additional Information: The industrial water supply and navigation uses were not assessed.

The available temperature data near the bayou's confluence with the Houston Ship Channel indicate that over the past eight years the temperature criterion is regularly exceeded in the summer. Also, studies conducted in the bayou further upstream of its confluence with the Houston Ship Channel by the Patrick Bayou Lead Organization indicate that summer temperatures often exceed the criterion.

2004 Concerns:			
Assessment Area	Use or Concern	Concern Status	Description of Concern
Goodyear Creek Tidal	Nutrient Enrichment Concern	Concern	ammonia
Goodyear Creek Tidal	Narrative Criteria Concern	Concern	bacteria
Houston Ship Channel Tidal	Nutrient Enrichment Concern	Concern	nitrate+nitrite nitrogen
Patrick Bayou Tidal	Sediment Contaminants Concern	Concern	1,3-dichlorobenzene in sediment
Patrick Bayou Tidal	Sediment Contaminants Concern	Concern	acenaphtene in sediment
Patrick Bayou Tidal	Sediment Contaminants Concern	Concern	acenaphtylene in sediment
Patrick Bayou Tidal	Sediment Contaminants Concern	Concern	anthracene in sediment
Patrick Bayou Tidal	Sediment Contaminants Concern	Concern	barium in sediment
Patrick Bayou Tidal	Sediment Contaminants Concern	Concern	benzo(a)anthracene in sediment
Patrick Bayou Tidal	Sediment Contaminants Concern	Concern	benzo(a)pyrene in sediment
Patrick Bayou Tidal	Sediment Contaminants Concern	Concern	benzo(b)fluoranthene in sediment
Patrick Bayou Tidal	Sediment Contaminants Concern	Concern	benzo(k)fluoranthene in sediment
Patrick Bayou Tidal	Sediment Contaminants Concern	Concern	bis(2-ethyhexyl) phthalate in sediment
Patrick Bayou Tidal	Sediment Contaminants Concern	Concern	chromium in sediment
Patrick Bayou Tidal	Sediment Contaminants Concern	Concern	chrysene in sediment
Patrick Bayou Tidal	Sediment Contaminants Concern	Concern	copper in sediment
Patrick Bayou Tidal	Sediment Contaminants Concern	Concern	fluoranthene in sediment
Patrick Bayou Tidal	Sediment Contaminants Concern	Concern	fluorene in sediment
Patrick Bayou Tidal	Sediment Contaminants Concern	Concern	hexachlorobenzene in sediment
Patrick Bayou Tidal	Sediment Contaminants Concern	Concern	hexachlorobutadiene in sediment
Patrick Bayou Tidal	Sediment Contaminants Concern	Concern	mercury in sediment
Patrick Bayou Tidal	Sediment Contaminants Concern	Concern	napthalene in sediment
Patrick Bayou Tidal	Sediment Contaminants Concern	Concern	nickel in sediment
Patrick Bayou Tidal	Sediment Contaminants Concern	Concern	phenanthrene in sediment

2004 Concerns:			
Assessment Area	Use or Concern	Concern Status	Description of Concern
Patrick Bayou Tidal	Sediment Contaminants Concern	Concern	pyrene in sediment
Patrick Bayou Tidal	Sediment Contaminants Concern	Concern	zinc in sediment

Monitoring sites used:		
Assessment Area	Station ID	Station Description
Goodyear Creek Tidal	16664	GOODYEAR CREEK AT IH 10 IN EAST HOUSTON
Greens Bayou Tidal	11275	GREENS BAYOU TIDAL AT IH 10 BRIDGE EAST OF HOUSTON
Greens Bayou Tidal	11277	GREENS BAYOU TIDAL AT SOUTH LAKE HOUSTON PARKWAY (FM 526)
Greens Bayou Tidal	11279	GREENS BAYOU TIDAL AT GREEN RIVER ROAD (LEY ROAD) IN HOUSTON
Houston Ship Channel Tidal	11264	HOUSTON SHIP CHANNEL AT SAN JACINTO PARK WEST OF THE BATTLESHIP TEXAS
Houston Ship Channel Tidal	11266	HOUSTON SHIP CHANNEL DIAMOND SHAMROCK (DEER PARK PLANT) INTAKE SCREENS ON THE HOUSTON SHIP CHANNEL MILE 11.5
Houston Ship Channel Tidal	11271	HOUSTON SHIP CHANNEL AT CONFLUENCE WITH GREENS BAYOU (CM 152)
Houston Ship Channel Tidal	16617	HOUSTON SHIP CHANNEL AT CARGILL TERMINAL NORTH OF TIDAL ROAD
Houston Ship Channel Tidal	16961	OLD RIVER AT GLENDALE BOAT WORKS, 500FT SW OF MARKET ST AND MARKET STREET ROAD INTERSECTION, NE OF CHANNELVIEW
Houston Ship Channel Tidal	16962	OLD RIVER AT MCDONOUGH MARINE, 800FT SSW OF INTERSECTION OF MONMOUTH RD AND IH10, NE OF CHANNELVIEW
Houston Ship Channel Tidal	16963	OLD RIVER AT LOST LAKE PLACEMENT AREA OUTFALL, 0.5KM EAST OF RIVER TERRACE PARK, NE OF CHANNELVIEW
Houston Ship Channel Tidal	16965	OLD RIVER AT HOLLYWOOD MARINE, 2.0KM SOUTH OF RIVER TERRACE PARK AND 1.9KM WEST OF THE NORTH LYNCHBURG FERRY LANDING, SE OF CHANNELVIEW
Patrick Bayou Tidal	11273	PATRICK BAYOU TIDAL IMMEDIATELY UPSTREAM OF BRIDGE LEADING TO OCCIDENTAL CHEMICAL INTAKE STATION ON HOUSTON SHIP CHANNEL
Patrick Bayou Tidal	15936	HOUSTON SHIP CHANNEL AT MOUTH OF OXYCHEM DITCH THAT CARRIES WASTEWATER FROM OUTFALLS 005 AND 004, 800 FT. DOWNSTREAM OF PATRICK BAYOU
Patrick Bayou Tidal	16871	EAST FORK PATRICK BAYOU AT OXYCHEM GOLF COURSE BRIDGE, ABOUT 0.2KM UPSTREAM OF TIDAL ROAD
Patrick Bayou Tidal	16872	PATRICK BAYOU AT SH225 AT ENTRANCE TO BOX CULVERTS ON SOUTH SIDE OF ROADWAY
Patrick Bayou Tidal	16873	PATRICK BAYOU UPSTREAM OF DITCH CARRYING EFFLUENT FROM CITY OF DEER PARK WWTP, ABOUT 0.1KM UPSTREAM OF SH225
Patrick Bayou Tidal	16874	PATRICK BAYOU JUST NORTH OF BOX CULVERTS BETWEEN LUBRIZOL AND SHELL CHEMICAL, 0.6KM DOWNSTREAM OF SH225
Patrick Bayou Tidal	16876	PATRICK BAYOU TIDAL 200FT DOWNSTREAM OF OXYCHEM OUTFALL 003, ABOUT 0.8KM UPSTREAM OF THE OXYCHEM BRIDGE
Patrick Bayou Tidal	17145	PATRICK BAYOU TIDAL APPROX. 75 M UPSTREAM OF THE HOUSTON SHIP CHANNEL
Patrick Bayou Tidal	17146	PATRICK BAYOU TIDAL APPROX. 0.5 KM UPSTREAM OF THE HOUSTON SHIP CHANNEL
Patrick Bayou Tidal	17147	PATRICK BAYOU TIDAL APPROX. 0.6 KM UPSTREAM OF THE HOUSTON SHIP CHANNEL, 465 M DOWNSTREAM OF OXY OUTFALL 003

Monitoring sites used:		
Assessment Area	Station ID	Station Description
Patrick Bayou Tidal	17149	PATRICK BAYOU TIDAL APPROX. 0.8 KM UPSTREAM OF THE HOUSTON SHIP CHANNEL, 190 M DOWNSTREAM OF OXY OUTFALL 003
Patrick Bayou Tidal	17150	PATRICK BAYOU TIDAL APPROX. 1.2 KM UPSTREAM OF THE HOUSTON SHIP CHANNEL AND APPROX. 100 M DOWNSTREAM OF OXY OUTFALL 002
Patrick Bayou Tidal	17151	PATRICK BAYOU TIDAL AT LOW WATER CROSSING IMMEDIATELY UPSTREAM OF OXY OUTFALL 002 APPROX. 2.4 KM DOWNSTREAM OF SH 225
Patrick Bayou Tidal	17152	PATRICK BAYOU TIDAL APPROX. 1.3 KM DSTR OF THE HOUSTON SHIP CHANNEL BETWEEN OXY OUTFALL 001 AND 002, 2.3 KM DOWNSTREAM OF SH 225
Patrick Bayou Tidal	17153	PATRICK BAYOU TIDAL APPROX. 1.5 KM DSTR OF HOUSTON SHIP CHANNEL, 200 M UPSTREAM OF OXY OUTFALL 001 AND 2.1 KM DOWNSTREAM OF SH225
Patrick Bayou Tidal	17154	PATRICK BAYOU TIDAL APPROX. 1.6 KM DSTR OF THE HOUSTON SHIP CHANNEL AND APPROX. 310 M UPSTREAM OF OXY OUTFALL 001, 1.9 KM DSTR SH 225
Patrick Bayou Tidal	17155	PATRICK BAYOU AT END OF LINED CHANNEL AT THE CONFLUENCE OF EAST FORK, 1.6 KM DOWNSTREAM OF SH 225
Patrick Bayou Tidal	17156	PATRICK BAYOU TIDAL IMMEDIATELY DOWNSTREAM OF SHELL BRIDGE AND APPROX. 1.2 KM DOWNSTREAM OF SH 225

Published studies:		
Publication	Date	Author
AS 122/SR Patrick Bayou	Dec. 1996	Broach, L (Region 12)
IS 30 Greens Bayou	Sept. 1980	Ottmers, D.
IS 31 Halls Bayou	Oct. 1979	Ottmers, D.
IS 87-09 Houston Ship Channel	Feb. 1985	Kirkpatrick, J.

Historical fish kills:			
Date	Location	Fish Killed	Suspected Cause
8/12/1996	Houston Ship Channel - 9640 Clinton Drive, Houston, TX	45	Unknown
8/19/1997	tidal inlet to the battleship mooring basin off S.H. 134 in the state park	200	Low Dissolved Oxygen
12/20/1999	Houston Ship Channel and Jefferson Rd. at Phillips 66 plant in Pasadena	200	Low Dissolved Oxygen