

Water-Data Report 2011

**08068090 West Fork San Jacinto River above Lake Houston near Porter, TX**

San Jacinto Basin  
West Fork San Jacinto Subbasin

LOCATION.--Lat 30°05'09", long 95°17'59" referenced to North American Datum of 1927, Montgomery County, TX, Hydrologic Unit 12040101, on left bank, 4.4 mi southwest of Porter, 5.0 mi upstream from Spring Creek and 6.2 mi northwest of Humble.

DRAINAGE AREA.--962 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--Feb. to Mar. 1984 (discharge measurements only), May 1984 to current year. During water years 1968-72 and 1974-75 occasional low flow measurements were made at site 1.7 mi downstream.

GAGE.--Water-stage recorder. Datum of gage is 33 ft above NGVD of 1929, from topographic map and levels. Satellite telemeter at station.

REMARKS.--Records good. Since installation of gage in 1984, at least 10% of contributing drainage area has been regulated. There are no large diversions upstream from station. There is minor wastewater effluent being discharged by the city of Conroe and by other smaller communities into the river upstream from station. Some records listed in the "Period of Record" for surface water and water quality may not be available electronically.

## 08068090 West Fork San Jacinto River above Lake Houston near Porter, TX—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**  
**DAILY MEAN VALUES**

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	33	30	43	50	147	43	35	27	14	14	13	222
2	32	158	39	41	157	42	35	27	14	14	13	218
3	32	472	38	38	115	42	35	26	14	21	13	223
4	31	165	38	37	86	42	35	27	13	21	13	225
5	31	89	36	86	76	49	32	28	12	17	12	221
6	31	67	34	75	72	58	32	28	13	21	12	214
7	31	53	34	55	68	47	34	27	14	25	11	211
8	31	46	35	46	64	48	34	26	13	22	11	217
9	31	43	38	79	64	49	33	24	12	15	12	216
10	31	41	37	254	67	44	32	23	12	13	11	212
11	31	39	37	150	69	41	33	22	12	13	11	211
12	31	39	36	102	65	41	33	24	12	13	12	213
13	31	40	34	76	61	40	32	37	11	12	12	212
14	30	39	34	64	58	41	32	50	11	12	12	219
15	29	87	35	61	55	53	31	28	11	12	13	217
16	30	157	35	67	56	58	30	22	11	13	15	212
17	30	84	34	193	57	50	29	20	11	14	13	212
18	30	57	33	187	58	45	29	20	11	15	14	214
19	31	48	32	115	55	43	30	20	11	16	53	223
20	30	44	32	85	54	40	30	20	11	20	158	247
21	30	42	34	73	54	39	30	20	11	27	211	225
22	30	40	36	69	52	38	31	21	14	21	218	216
23	30	39	35	65	51	37	30	20	60	16	220	210
24	30	40	34	97	50	37	29	18	51	14	230	208
25	30	42	70	234	50	36	29	18	25	14	236	211
26	30	38	74	167	48	36	28	17	19	17	259	211
27	30	35	54	109	49	36	28	16	17	31	236	210
28	29	35	48	84	46	35	26	15	15	22	228	209
29	28	37	47	74	---	35	26	15	15	17	223	210
30	28	53	76	69	---	37	26	15	14	15	224	217
31	28	---	66	83	---	36	---	14	---	14	225	---
<b>Total</b>	940	2,199	1,288	2,985	1,904	1,318	929	715	484	531	2,944	6,486
<b>Mean</b>	30.3	73.3	41.5	96.3	68.0	42.5	31.0	23.1	16.1	17.1	95.0	216
<b>Max</b>	33	472	76	254	157	58	35	50	60	31	259	247
<b>Min</b>	28	30	32	37	46	35	26	14	11	12	11	208
<b>Ac-ft</b>	1,860	4,360	2,550	5,920	3,780	2,610	1,840	1,420	960	1,050	5,840	12,860

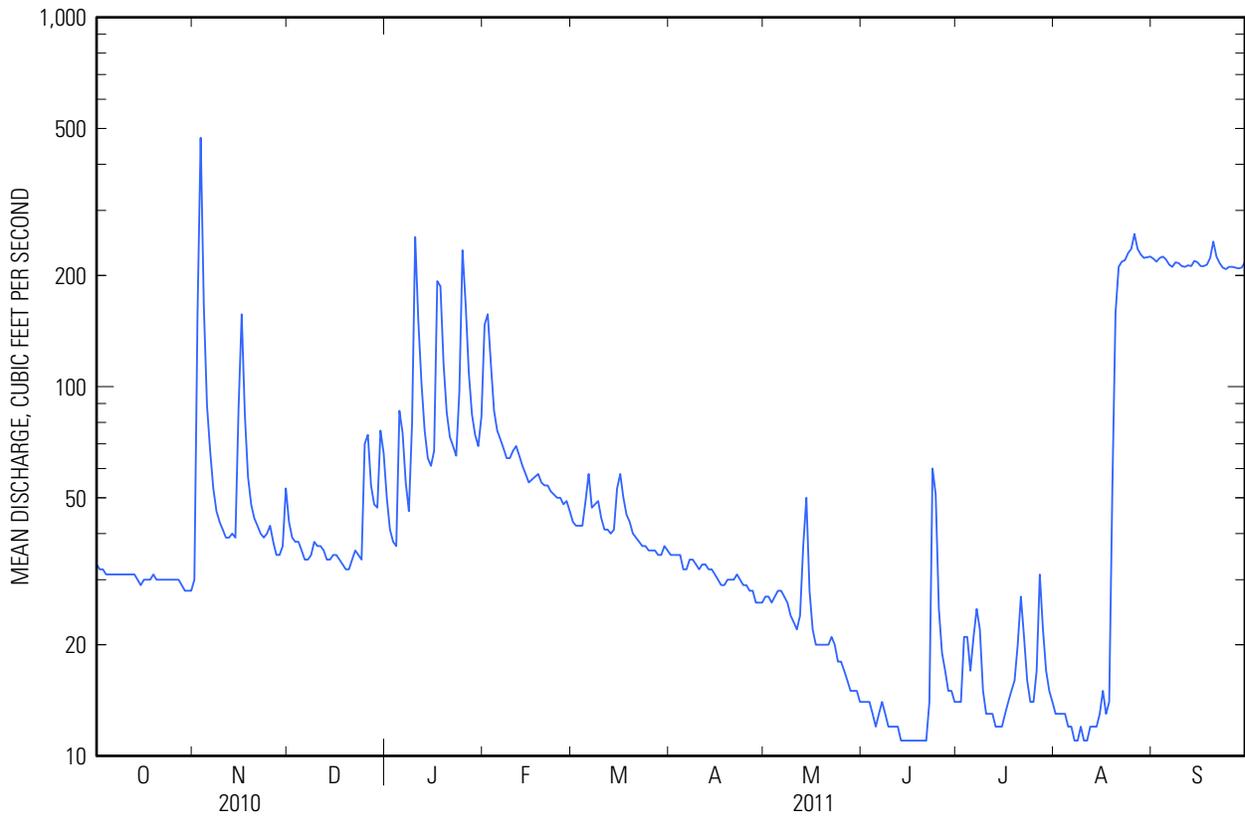
**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2011, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	841	884	737	1,059	1,063	825	579	539	700	207	82.9	180
<b>Max</b>	10,910	8,244	1,881	3,890	3,763	2,688	2,229	2,369	4,261	1,349	223	1,651
<b>(WY)</b>	(1995)	(1999)	(1992)	(2007)	(1992)	(2001)	(1991)	(2004)	(2001)	(2007)	(1995)	(2008)
<b>Min</b>	22.2	29.8	41.5	41.5	37.8	34.3	31.0	23.1	16.1	17.1	16.1	23.3
<b>(WY)</b>	(1991)	(1991)	(2011)	(2000)	(2000)	(2000)	(2011)	(2011)	(2011)	(2011)	(2000)	(2000)

08068090 West Fork San Jacinto River above Lake Houston near Porter, TX—Continued

SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1984 - 2011	
<b>Annual total</b>	81,313		22,723			
<b>Annual mean</b>	223		62.3		642	
<b>Highest annual mean</b>					1,694	1995
<b>Lowest annual mean</b>					51.6	2000
<b>Highest daily mean</b>	3,520	Feb 12	472	Nov 3	113,000	Oct 19, 1994
<b>Lowest daily mean</b>	28	Oct 29	11	Jun 13	11	Jun 13, 2011
<b>Annual seven-day minimum</b>	29	Oct 25	11	Jun 13	11	Jun 13, 2011
<b>Maximum peak flow</b>			617	Nov 3	130,000	Oct 18, 1994
<b>Maximum peak stage</b>			13.64	Nov 3	40.10	Oct 18, 1994
<b>Annual runoff (ac-ft)</b>	161,300		45,070		464,900	
<b>10 percent exceeds</b>	467		211		1,640	
<b>50 percent exceeds</b>	72		35		108	
<b>90 percent exceeds</b>	32		13		32	



## 08068090 West Fork San Jacinto River above Lake Houston near Porter, TX—Continued

## WATER-QUALITY RECORDS

## PERIOD OF RECORD.--

CHEMICAL DATA: Feb. 1984 to Sept. 1999, Aug. 2011.

BIOCHEMICAL DATA: Feb. 1984 to Sept. 1999, Aug. 2011.

PESTICIDE DATA: Feb. 1984 to Sept. 1990.

SEDIMENT DATA: Aug. 2011.

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 1 of 4

[%, percent; ANC, acid neutralizing capacity; CaCO<sub>3</sub>, calcium carbonate; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; ft, feet; ft<sup>3</sup>/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; nm, nanometers; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Medium name	Sample type	Barometric pressure, mm Hg (00025)	Discharge, instantaneous, ft <sup>3</sup> /s (00061)	Dissolved oxygen, water, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)	pH, water, field, standard units (00400)	Specific conductance, water, unfiltered, μS/cm at 25 °C (00095)
08-22-2011	1516	Surface water	Regular	759	220	11.5	160	8.9	403

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 2 of 4

[%, percent; ANC, acid neutralizing capacity; CaCO<sub>3</sub>, calcium carbonate; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; ft, feet; ft<sup>3</sup>/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; nm, nanometers; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Temperature, water, °C (00010)	Turbidity, water, unfiltered, monochrome near infra-red LED light, 780-900 nm, detection angle 90 +/- 2.5 degrees, FNU (63680)	Gage height, ft (00065)	ANC, water, unfiltered, inflection-point, incremental titration method, field, mg/L as CaCO <sub>3</sub> (00419)	Carbon dioxide, water, unfiltered, mg/L (00405)	Ammonia, water, unfiltered, milligrams per liter as NH <sub>4</sub> (71845)	Ammonia, water, unfiltered, mg/L as N (00610)	Nitrate, water, unfiltered, mg/L as N (00620)
08-22-2011	1516	32.8	11	11.74	96	.2	.283	.220	.127

## 08068090 West Fork San Jacinto River above Lake Houston near Porter, TX—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 3 of 4

[%, percent; ANC, acid neutralizing capacity; CaCO<sub>3</sub>, calcium carbonate; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; ft, feet; ft<sup>3</sup>/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Nitrite, water, unfiltered, mg/L as N (00615)	Orthophosphate, water, unfiltered, mg/L as P (70507)	Phosphate, water, unfiltered, milligrams per liter (00650)	Phosphorus, water, unfiltered, mg/L as P (00665)	Actinomycetes, standard plate count, double agar layer, water, colonies per milliliter (63688)	Manganese, water, unfiltered, recoverable, µg/L (01055)	2-	Suspended sediment, sieve diameter, percent smaller than 0.0625 mm (70331)	
								Methylisoborneol, water, filtered (0.7 micron glass fiber filter), recoverable, microgram s per liter (62749)		Geosmin, water, filtered (0.7 micron glass fiber filter), recoverable, microgram s per liter (62719)
08-22-2011	1516	< .050	.2340	.717	.34680	E 380	84.0	.005	.006	73

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 4 of 4

[%, percent; ANC, acid neutralizing capacity; CaCO<sub>3</sub>, calcium carbonate; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; ft, feet; ft<sup>3</sup>/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Suspended sediment concentration, mg/L (80154)	Suspended sediment discharge, tons per day (80155)
08-22-2011	1516	18	11