07288700 BIG SUNFLOWER RIVER NR ANGUILLA, MS

Yazoo Basin
Big Sunflower Subbasin

LOCATION.--Lat 32°58′18″, long 90°46′40″ referenced to North American Datum of 1927, Sharkey County, MS, Hydrologic Unit 08030207.

WATER-QUALITY RECORDS

DELTA NUTRIENT FIXED-MONITORING NETWORK
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

[FNU, Formazin nephelometric units; LED, light-emitting diode; ft, feet; ft^3/s, cubic feet per second; mg/L, milligrams per liter; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; --, no data]

Date	Sample start time	Discharge, instantaneous, ft^3/s (00061)	Dissolved oxygen, water, unfiltered, mg/L (00300)	pH, water, unfiltered, field, standard units (00400)	Specific conductance, water, unfiltered, µS/cm at 25 °C (00095)	Temperature, water, °C (00010)	Turbidity, water, unfiltered, monochrome near infrared LED light, 780-900 nm, detection angle 90 +/- 2.5 degrees, FNU (63680)	Gage height, ft (00065)
10-14-2010	1140	103	--	--	--	--	--	21.08
10-27-2010	1415	--	13.5	8.4	460	24.5	21	21.14
11-15-2010	1200	240	6.3	7.2	224	15.0	75	21.89
12-02-2010	1325	--	9.1	8.0	290	12.7	47	24.69
12-16-2010	1245	--	9.4	7.5	259	9.7	150	22.13
01-12-2011	1515	--	8.4	7.7	260	7.0	210	21.71
01-13-2011	1540	--	8.2	7.5	273	7.4	170	21.69
01-28-2011	1300	--	11.1	7.9	268	7.7	240	25.74
02-02-2011	1545	--	10.0	7.7	280	9.2	240	26.72
02-15-2011	1030	578	10.8	7.5	239	7.3	270	22.68

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

[ANC, acid neutralizing capacity; $CaCO_3$, calcium carbonate; mg/L, milligrams per liter; °C, degrees Celsius; --, no data; <, less than]

Date	Sample start time	Biochemical oxygen demand, water, unfiltered, 5 days at 20 °C, mg/L (00310)	Chemical oxygen demand, high level, water, unfiltered, milligrams per liter (00340)	Suspended solids, water, unfiltered, mg/L (00530)	ANC, water, unfiltered, fixed endpoint (pH 4.5) titration, field, mg/L as $CaCO_3$ (00410)	Chloride, water, filtered, mg/L (00940)
10-27-2010	1415	< 2.0	14	54	202	14.7
11-15-2010	1200	3.0	17	99	66	13.4
12-02-2010	1325	2.0	13	67	88	17.1
01-12-2011	1515	< 2.0	< 10	194	71	14.8
02-02-2011	1545	< 2.0	22	334	79	14.8

Suggested citation: U.S. Geological Survey, 2012, Water-resources data for the United States, Water Year 2011: U.S. Geological Survey Water-Data Report WDR-US-2011, site 07288700, accessed at http://wdr.water.usgs.gov/wy2011/pdfs/07288700.2011.pdf

07288700 BIG SUNFLOWER RIVER NR ANGUILLA, MS—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
[N, nitrogen; P, phosphorus; mg/L, milligrams per liter; --, no data]

Date	Sample start time	Ammonia plus organic nitrogen, water, unfiltered, mg/L as N (00625)	Ammonia, water, unfiltered, mg/L as N (00610)	Nitrate plus nitrite, water, unfiltered, mg/L as N (00630)	Orthophos-phate, water, unfiltered, mg/L as P (70507)	Phosphorus, water, unfiltered, mg/L as P (00665)	Organic carbon, water, unfiltered, mg/L (00680)	Suspended sediment concen-tration, mg/L (80154)
10-14-2010	**1140**	--	--	--	--	--	--	100
10-27-2010	**1415**	.96	.080	.310	.12	.280	26.0	--
11-15-2010	**1200**	1.4	.170	1.65	.21	.280	14.0	--
12-02-2010	**1325**	1.2	.100	1.72	.30	.270	12.0	--
01-12-2011	**1515**	.80	.330	3.00	.08	.300	8.0	--
02-02-2011	**1545**	.73	.160	2.88	.09	.340	13.0	--

DENITRIFICATION STUDY
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
[NTRU, nephelometric turbidity ratio unit; ft, feet; mg/L, milligrams per liter; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; --, no data]

Date	Sample start time	Dissolved oxygen, water, unfiltered, mg/L (00300)	pH, water, unfiltered, field, standard units (00400)	Specific conduc-tance, water, unfiltered, µS/cm at 25 °C (00095)	Tempera-ture, water, °C (00010)	Turbidity, water, unfiltered, broad band light source (400-680 nm), detectors at multiple angles including 90 +/- 30 degrees, ratiometric correction, NTRU (63676)	Gage height, ft (00065)	Sampling depth, ft (00003)	Location in cross section, distance from left bank looking down-stream, ft (00009)
11-18-2010	**1000**	6.2	6.7	259	13.6	150	21.90	--	--
03-02-2011	**1030**	7.0	7.6	347	16.0	140	22.84	--	--
06-02-2011	**1200**	--	--	--	--	55	38.86	--	--
06-02-2011	**1230**	8.2	8.4	221	31.6	--	--	1.00	465
06-02-2011	**1231**	1.4	7.0	238	26.8	--	--	4.50	465
06-02-2011	**1232**	.4	7.0	218	25.9	--	--	9.18	465
06-02-2011	**1235**	12.7	8.5	226	31.5	--	--	1.00	350
06-02-2011	**1236**	1.7	7.0	253	26.8	--	--	4.71	350
06-02-2011	**1237**	.3	7.0	219	25.4	--	--	9.38	350
06-02-2011	**1240**	12.8	8.5	226	31.3	--	--	1.00	255
06-02-2011	**1241**	2.3	7.1	253	27.1	--	--	4.31	255
06-02-2011	**1242**	.5	7.2	225	25.9	--	--	8.92	255

07288700 BIG SUNFLOWER RIVER NR ANGUILLA, MS—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
[$CaCO_3$, calcium carbonate; N, nitrogen; mg/L, milligrams per liter]

Date	Sample start time	Alkalinity, water, filtered, inflection-point, incremental titration method, field, mg/L as $CaCO_3$ (39086)	Bicarbonate, water, filtered, inflection-point, incremental titration method, field, mg/L (00453)	Sulfate, water, filtered, mg/L (00945)	Ammonia, water, filtered, mg/L as N (00608)	Nitrate plus nitrite, water, filtered, mg/L as N (00631)	Nitrite, water, filtered, mg/L as N (00613)
11-18-2010	**1000**	84	103	20.1	.239	1.61	.057
03-02-2011	**1030**	96	117	28.5	.285	1.07	.033
06-02-2011	**1200**	89	55	11.2	.037	.99	.003

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
[P, phosphorus; mg/L, milligrams per liter; per mil, parts per thousand; --, no data]

Date	Sample start time	Orthophosphate, water, filtered, mg/L as P (00671)	Phosphorus, water, unfiltered, mg/L as P (00665)	Total nitrogen, water, unfiltered, analytically determined, mg/L (62855)	Nitrogen-15/-Nitrogen-14 ratio in nitrate fraction, water, filtered, per mil (82690)	Oxygen-18/Oxygen-16 ratio in nitrate fraction, water, filtered, per mil (63041)
11-18-2010	**1000**	.053	.20	2.61	8.32	8.24
03-02-2011	**1030**	.066	.24	2.62	9.71	7.28
06-02-2011	**1200**	--	--	1.90	6.25	4.22