

**ALTAMAHA RIVER BASIN
2004 Water Year**

02207120 YELLOW RIVER AT GA 124, NEAR LITHONIA, GA

LOCATION.—Lat 33°46'22", long 84°03'30" referenced to North American Datum (NAD) of 1927, Gwinnett County, Hydrologic Unit 03070103, on GA 124 bridge, 5.0 miles south of the intersection of GA 124 and US 78.

DRAINAGE AREA.—162.0 square miles.

COOPERATION.—Gwinnett County Department of Public Utilities.

PERIODIC WATER-QUALITY RECORDS

PERIOD OF RECORD.— March 14, 1996 to current year.

REMARKS.— Hydrologic event 9 indicates a routine sample while J designates a storm event sample. Laboratory chemical analyses with analyzing agency code 81213 are by the U.S. Geological Survey, Ocala Water Quality Laboratory. Laboratory chemical analyses with analyzing agency code 80855 are by the Severn-Trent Laboratory, Denver, CO. Laboratory sediment analyses are by the U.S. Geological Survey, Sediment Partitioning Research Laboratory. Field determinations of discharge, specific conductance, pH, water temperature, turbidity, and dissolved oxygen are by the U.S. Geological Survey.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	End time	Hydro-logic event	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Gage height, feet (00065)	Turbidity, IR LED light, det ang 90 deg, FNU (63680)	Turbidity white light, det ang 90 degrees NTU (63675)	Turbidity white light, det ang 90 corrctd NTRU (63676)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	COD, high level, water, unfltrd mg/L (00340)	Calcium water, fltrd, mg/L (00915)	Hardness, water, mg/L as CaCO3 (00900)
OCT 20...	1055	--	9	81213	102	3.14	--	--	5.2	.6	8	13.0	44
NOV 19-20	0535	0547	J	81213	--	--	--	--	220	3.0	13	4.20	15
DEC 08...	1420	--	9	81213	151	3.43	--	--	8.3	.4	9	13.0	44
FEB 12-13	1231	0455	J	81213	--	--	--	--	100	--	7	6.00	22
MAR 10...	1025	--	9	81213	194	3.58	--	--	6.9	.8	<5	11.0	39
MAR 25...	1355	--	9	81213	142	3.32	--	--	4.6	.3	<5	11.0	39
APR 13...	1115	--	J	81213	984	5.88	190	--	--	1.5	--	--	--
APR 26-27	2200	0830	J	81213	--	--	--	--	21	1.8	12	13.0	44
MAY 26...	0845	--	9	81213	110	3.14	--	--	11	.5	<5	12.0	40
MAY 31- JUN 01	1148	0545	J	81213	--	--	--	--	55	2.4	8	13.0	43
JUL 08...	1000	--	9	81213	135	3.28	--	--	14	.7	13	11.0	38
AUG 05-06	1837	0949	J	80855	--	--	--	48	62	4.3	E16	13.0	46
AUG 12-12	0816	2254	J	80855	--	--	--	320	350	5.7	E19	4.70	22
SEP 07-08	0645	1135	J	80855	--	--	--	180	200	3.8	E17	4.00	20

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02207120 YELLOW RIVER AT GA 124, NEAR LITHONIA, GA—continued.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Magnesium, water, fltrd, mg/L (00925)	Magnesium, water, unfltrd recover-able, mg/L (00927)	Loss on ignition, from ROE, wat unfltrd mg/L (00505)	Residue on evap. at 180degC, wat fltrd mg/L (70300)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Residue volatile, sus-pended, mg/L (00535)	Nitrite nitrate water fltrd, mg/L as N (00631)	Nitrite nitrate water unfltrd mg/L as N (00630)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia org-N, water, unfltrd mg/L as N (00625)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Cadmium water, unfltrd ug/L (01027)
OCT 20...	2.80	--	--	135	4	2	1.90	1.90	A.019	.20	<.02	.03	<.5
NOV 19-20	1.20	--	--	45	252	45	.45	.450	A.005	1.2	.02	.17	<.5
DEC 08...	2.90	--	--	114	5	3	2.20	2.10	A.073	.20	<.02	<.02	<.5
FEB 12-13	1.60	--	--	52	91	15	.99	.990	A.067	.60	<.02	.09	<.5
MAR 10...	2.90	--	--	95	2	1	1.70	1.70	A.009	<.20	<.02	<.02	<.5
MAR 25...	2.70	--	--	122	3	2	1.80	1.80	A.035	.30	<.02	<.02	<.5
APR 26-27	2.70	--	--	114	17	5	2.10	2.20	A.038	.40	<.02	.03	<.5
MAY 26...	2.50	--	--	106	10	3	1.90	1.90	A.057	.60	<.02	<.02	<.5
MAY 31-JUN 01	2.50	--	--	105	56	14	1.90	1.90	A.022	.60	<.02	.06	<.5
JUL 08...	2.50	--	--	90	10	2	1.80	1.80	A.052	.30	<.02	.02	<.5
AUG 05-06	2.40	2.7	48	120	80	16	2.00	1.90	<.100	.50	<.050	E.035	<5
AUG 12-12	1.00	1.7	--	79	740	120	.600	.600	E.055	1.9	<.050	<.050	<5
SEP 07-08	.94	1.8	--	66	270	36	.550	.350	E.054	.89	<.050	.087	<5

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Chromium, water, unfltrd recover-able, ug/L (01034)	Copper, water, unfltrd recover-able, ug/L (01042)	Lead, water, unfltrd recover-able, ug/L (01051)	Manganese, water, unfltrd recover-able, ug/L (01055)	Zinc, water, unfltrd recover-able, ug/L (01092)	Suspnd. sedi-ment, sieve diametr percent <.063mm (70331)	Sus-pended sedi-ment concentration mg/L (80154)
OCT 20...	<1	<2	<2	73	13	--	2
NOV 19-20	7	7	8	995	41	30	373
DEC 08...	<1	<2	<2	111	9	--	4
FEB 12-13	4	6	4	334	24	63	135
MAR 10...	<1	<2	<2	69	6	--	3
MAR 25...	<1	<2	<2	71	8	--	4
APR 26-27	1	2	<2	278	19	49	37
MAY 26...	<1	<2	<2	98	8	--	11
MAY 31-JUN 01	2	2	2	350	21	82	56
JUL 08...	<1	<2	<2	86	8	--	11
AUG 05-06	E4	M	M	340	30	86	81
AUG 12-12	E5	M	M	1600	70	72	729
SEP 07-08	12	M	M	890	130	55	379

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02207120 YELLOW RIVER AT GA 124, NEAR LITHONIA, GA—continued.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Hydro-logic event	Location in X-sect. looking dwnstrm ft from l bank (00009)	Instan-taneous discharge, cfs (00061)	Gage height, feet (00065)	Dis-solved oxygen, percent of saturation (00301)	Dis-solved oxygen, mg/L (00300)	pH, water, unfltrd std units (00400)	Specif. conduc-tance, wat unf 25 degC (00095)	Temper-ature, water, deg C (00010)	Turb-idity, IR LED light, det ang 90 deg, FNU (63680)	Suspnd. sedi-ment, sieve diametr percent <.063mm (70331)	Sus-pended sedi-ment concentration mg/L (80154)
OCT													
20...	1114	9	66.0	102	3.14	102	10.2	7.4	198	15.2	4.5	--	--
20...	1115	9	36.0	102	3.14	102	10.2	7.4	198	15.3	5.7	--	--
20...	1116	9	6.00	102	3.14	102	10.2	7.4	198	15.3	4.8	--	--
NOV													
19...	1019	J	5.00	1970	8.13	95	9.1	6.9	64	17.5	290	--	--
19...	1023	J	20.0	1960	8.13	95	9.1	6.9	64	17.5	280	--	--
19...	1024	J	35.0	1960	8.13	74	9.0	6.9	64	17.5	290	--	--
19...	1026	J	50.0	1960	8.13	94	9.0	6.8	64	17.5	290	--	--
19...	1027	J	65.0	1960	8.12	94	9.0	6.8	64	17.5	290	--	--
19...	1029	J	80.0	1960	8.12	94	8.9	6.8	64	17.5	280	--	--
20...	1150	J	10.0	1530	7.28	98	9.6	7.0	61	15.5	120	27	226
20...	1155	J	25.0	1520	7.25	97	9.5	6.9	61	15.5	130	40	146
20...	1200	J	40.0	1500	7.21	97	9.5	6.9	61	15.5	120	39	136
20...	1205	J	55.0	1490	7.19	97	9.5	6.9	61	15.5	120	16	414
20...	1210	J	70.0	1480	7.16	97	9.5	6.9	61	15.5	130	18	287
DEC													
08...	1425	9	74.0	151	3.43	97	11.3	7.1	180	7.8	8.5	--	--
08...	1426	9	59.0	151	3.43	97	11.3	7.1	180	7.8	8.3	--	--
08...	1427	9	49.0	151	3.43	97	11.3	7.1	179	7.9	8.4	--	--
08...	1428	9	39.0	151	3.43	97	11.3	7.1	179	7.9	9.8	--	--
08...	1429	9	29.0	151	3.43	97	11.3	7.1	179	7.9	8.6	--	--
08...	1430	9	19.0	151	3.43	96	11.2	7.1	180	7.9	9.2	--	--
08...	1431	9	9.00	151	3.43	96	11.2	7.1	180	7.9	8.7	--	--
FEB													
12...	0924	J	80.0	838	5.54	109	12.7	7.2	92	7.8	140	--	--
12...	0925	J	60.0	838	5.54	110	12.8	7.2	92	7.8	130	--	--
12...	0926	J	40.0	838	5.54	112	13.0	7.2	92	7.8	120	--	--
12...	0927	J	20.0	838	5.54	113	13.1	7.2	92	7.8	130	--	--
MAR													
10...	1029	9	72.0	194	3.58	103	11.4	7.4	147	10.4	7.6	--	--
10...	1030	9	56.0	194	3.58	101	11.2	7.4	147	10.4	6.9	--	--
10...	1031	9	40.0	194	3.58	100	11.1	7.4	147	10.4	7.7	--	--
10...	1032	9	28.0	194	3.58	99	10.9	7.4	147	10.4	6.9	--	--
10...	1033	9	12.0	194	3.58	99	10.9	7.4	147	10.4	6.8	--	--
25...	1358	9	69.0	142	3.32	103	10.4	7.7	165	14.7	4.6	--	--
25...	1359	9	55.0	142	3.32	103	10.3	7.7	165	14.8	6.7	--	--
25...	1400	9	41.0	142	3.32	103	10.3	7.7	165	14.8	4.6	--	--
25...	1401	9	27.0	142	3.32	103	10.3	7.7	165	14.8	6.6	--	--
25...	1402	9	13.0	142	3.32	103	10.3	7.7	165	14.8	4.4	--	--
APR													
27...	1105	J	75.0	222	3.70	96	9.2	7.2	162	17.6	21	--	--
27...	1106	J	60.0	222	3.70	96	9.2	7.2	161	17.6	22	--	--
27...	1107	J	45.0	222	3.70	96	9.2	7.2	160	17.6	24	--	--
27...	1108	J	30.0	222	3.70	96	9.2	7.2	159	17.6	23	--	--
27...	1109	J	15.0	222	3.70	96	9.2	7.2	159	17.6	29	--	--
MAY													
26...	0900	9	72.0	110	3.14	99	8.5	7.2	156	23.0	10	--	--
26...	0901	9	60.0	110	3.14	97	8.3	7.2	157	23.0	22	--	--
26...	0902	9	48.0	110	3.14	96	8.2	7.2	157	23.0	13	--	--
26...	0903	9	36.0	110	3.14	94	8.1	7.3	157	23.0	13	--	--
26...	0904	9	24.0	110	3.14	93	8.0	7.3	157	23.0	10	--	--
26...	0905	9	12.0	110	3.14	93	8.0	7.3	156	23.0	11	--	--
JUN													
01...	0908	J	100	222	3.70	95	8.4	7.4	114	21.5	73	--	--
01...	0909	J	80.0	222	3.70	96	8.5	7.3	113	21.5	70	--	--
01...	0910	J	60.0	222	3.70	96	8.5	7.3	113	21.5	71	--	--
01...	0911	J	40.0	222	3.70	96	8.5	7.3	113	21.5	71	--	--
01...	0912	J	20.0	222	3.70	96	8.5	7.3	113	21.5	67	--	--
JUL													
08...	1006	9	66.0	135	3.28	91	7.5	7.2	147	24.5	14	--	--
08...	1007	9	46.0	135	3.28	91	7.5	7.2	147	24.5	15	--	--
08...	1008	9	26.0	135	3.28	91	7.5	7.2	147	24.5	15	--	--

**ALTAMAHA RIVER BASIN
2004 Water Year**

02207120 YELLOW RIVER AT GA 124, NEAR LITHONIA, GA—continued.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Hydro-logic event	Loca- tion in X-sect. dwnstrm ft from l bank (00009)	Instan- taneous dis- charge, cfs (00061)	Gage height, feet (00065)	Dis- solved oxygen, percent of sat- uration (00301)	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)	Turb- idity, IR LED light, det ang 90 deg, FNU (63680)
AUG											
05...	1938	J	90.0	182	3.52	96	7.6	7.4	174	25.7	74
05...	1939	J	70.0	182	3.52	94	7.5	7.5	174	25.7	73
05...	1940	J	50.0	182	3.52	93	7.4	7.5	173	25.7	76
05...	1941	J	30.0	182	3.52	93	7.4	7.5	172	25.7	82
05...	1942	J	10.0	182	3.52	92	7.3	7.5	172	25.6	83
12...	0805	J	10.0	520	4.70	95	8.1	7.0	187	22.3	190
12...	0806	J	25.0	540	4.74	94	8.0	7.1	187	22.3	200
12...	0807	J	40.0	550	4.78	94	8.0	7.1	187	22.3	190
12...	0808	J	55.0	560	4.82	94	8.0	7.1	187	22.3	210
12...	0809	J	70.0	580	4.86	94	8.0	7.1	187	22.3	180
SEP											
07...	1317	J	17.0	1890	7.98	88	7.6	6.8	83	22.4	310
07...	1318	J	29.0	1890	7.98	88	7.6	6.8	84	22.4	340
07...	1319	J	41.0	1890	7.98	88	7.6	6.8	84	22.4	360
07...	1320	J	53.0	1890	7.98	88	7.6	6.8	84	22.4	340
07...	1321	J	65.0	1890	7.98	88	7.6	6.8	84	22.4	330

Remark codes used in this table:

- < -- Less than
- A -- Average value
- E -- Estimated value
- M -- Presence verified, not quantified