

**APALACHICOLA RIVER BASIN  
2004 Water Year**

**02334885 SUWANEE CREEK AT SUWANEE, GA**

**LOCATION.**—Lat 34°01'56", long 84°05'22", referenced to North American Datum (NAD) of 1927, Gwinnett County, Hydrologic Unit 03130001, 20.0 feet upstream of US 23 bridge, 1.7 miles southwest of Suwanee, 3.1 miles upstream of the Chattahoochee River, 0.2 miles upstream of Bennett Creek, and 0.65 miles downstream of Mill Creek.

**DRAINAGE AREA.**—47.0 square miles.

**COOPERATION.**—Atlanta Regional Commission, Gwinnett County Department of Public Utilities.

**PERIODIC WATER-QUALITY RECORDS**

**PERIOD OF RECORD.**—August 16, 1976 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 ana-lyzing sample, code (00028)	Instan-taneous dis-charge, cfs (00061)	Gage height, feet (00065)	Turbdty white light, det ang 90 NTU (63675)	Turbdty white light, det ang 90 corrctd NTRU (63676)	BOD, water, unfltrd 5 day, mg/L (00310)	COD, high level, water, unfltrd mg/L (00340)	Calcium water, fltrd, mg/L (00915)	Hard-ness, water, mg/L as CaCO3 (00900)	Magnes-ium, water, fltrd, mg/L (00925)
OCT													
02...	0935	--	9	81213	33	1.52	--	14	--	7	8.40	28	1.80
DEC													
16...	1120	--	9	81213	58	1.84	--	15	1.7	22	7.50	26	1.70
JAN													
05-06	1611	0551	J	81213	--	--	--	81	1.9	6	7.50	26	1.80
FEB													
12-12	0357	1902	J	81213	--	--	--	200	--	11	5.10	18	1.30
MAR													
09...	0845	--	9	81213	57	1.74	--	14	1.2	7	7.80	27	1.90
24...	1410	--	9	81213	49	1.63	--	6.8	<.1	<5	8.90	31	2.10
APR													
13...	0930	--	J	81213	330	3.58	--	--	3.5	--	--	--	--
MAY													
24...	1235	--	9	81213	31	1.40	--	14	1.2	12	8.50	29	1.90
MAY 31-													
JUN 01	1357	0215	J	81213	--	--	--	78	2.8	13	8.80	30	1.90
JUL													
08...	0900	--	9	81213	36	1.47	--	23	.8	<5	8.40	29	1.90
AUG													
05-05	1628	1933	J	80855	--	--	210	250	6.9	20	4.10	21	1.20
AUG													
12-12	0733	1127	J	80855	--	--	290	260	8.6	E14	3.30	14	.80
SEP													
07-08	1706	0006	J	80855	--	--	200	230	3.3	E16	2.30	11	.54

**APALACHICOLA RIVER BASIN  
2004 Water Year**

**02334885 SUWANEE CREEK AT SUWANEE, GA—continued.**

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

Date	Magnesium, water, unfltrd recover-able, mg/L (00927)	Loss on ignition, from ROE, wat unfltrd mg/L (00505)	Residue on evap. at 180degC wat flt 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)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd, mg/L (00665)	Cadmium water, unfltrd, ug/L (01027)	Chrom-ium, water, unfltrd recover-able, ug/L (01034)
OCT 02...	--	--	62	8	4	1.00	1.10	A.072	<.20	<.02	.03	<.5	<1
DEC 16...	--	--	55	6	1	.62	.640	A.121	.40	<.02	.03	<.5	<1
JAN 05-06	--	--	61	66	9	.56	.560	A.121	.70	<.02	.11	<.5	3
FEB 12-12	--	--	38	157	21	.52	.520	A.107	.90	<.02	.21	<.5	6
MAR 09...	--	--	79	7	3	.78	.780	A.084	.20	<.02	<.02	<.5	<1
MAR 24...	--	--	78	2	<1	1.20	1.20	A.120	<.20	<.02	<.02	<.5	<1
MAY 24...	--	--	71	9	3	.85	.850	A.090	.50	<.02	.06	<.5	<1
MAY 31-	--	--	66	79	18	.84	.840	A.075	.70	<.02	.22	<.5	3
JUN 01	--	--	66	79	18	.84	.840	A.075	.70	<.02	.22	<.5	3
JUL 08...	--	--	65	12	2	.34	.890	A.056	.30	<.02	.05	<.5	<1
AUG 05-05	2.3	53	74	260	38	.660	.590	.240	1.0	E.029	.140	<5	15
AUG 12-12	1.0	--	62	350	50	.360	.350	.130	1.0	E.020	<.050	<5	E3
SEP 07-08	.9	--	98	110	19	.200	.210	E.043	.57	<.050	.077	<5	E6

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

Date	Copper, water, unfltrd recover-able, ug/L (01042)	Lead, water, unfltrd recover-able, ug/L (01051)	Mangan-ese, 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 concen-tration mg/L (80154)
OCT 02...	<2	<2	386	3	--	12
DEC 16...	<2	<2	478	6	--	10
JAN 05-06	2	3	583	21	22	79
FEB 12-12	6	6	440	27	67	237
MAR 09...	<2	<2	477	4	--	9
MAR 24...	<2	<2	440	3	--	4
MAY 24...	<2	<2	361	4	--	11
MAY 31-	5	5	601	19	70	82
JUN 01	5	5	601	19	70	82
JUL 08...	<2	<2	429	5	--	13
AUG 05-05	20	M	730	70	87	291
AUG 12-12	M	M	560	30	76	360
SEP 07-08	M	M	230	30	92	140

**APALACHICOLA RIVER BASIN  
2004 Water Year**

**02334885 SUWANEE CREEK AT SUWANEE, GA—continued.**

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

Date	Time	Hydro- logic event	Loca- tion in X-sect. downstrm 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)	Suspnd. sedi- ment, sieve diametr <.063mm (70331)	Sus- pended sedi- ment concentra- tion mg/L (80154)
OCT													
02...	0939		20.0	33	1.52	90	8.8	7.2	106	15.0	16	--	--
02...	0940		13.0	33	1.52	90	8.8	7.2	106	15.0	16	--	--
02...	0941		6.00	33	1.52	90	8.8	7.2	106	15.0	16	--	--
NOV													
19...	1315	J	245	1370	8.69	77	7.2	6.5	46	17.3	340	86	150
19...	1321	J	225	1380	8.71	78	7.3	6.5	46	17.3	340	77	153
19...	1326	J	200	1390	8.73	87	8.0	6.5	47	17.4	360	86	105
19...	1330	J	110	1400	8.74	85	7.9	6.5	47	17.4	350	92	119
19...	1334	J	40.0	1400	8.74	83	7.7	6.5	47	17.4	280	93	110
DEC													
16...	1125		24.0	58	1.84	87	10.5	6.6	92	6.3	18	--	--
16...	1126		19.0	58	1.84	87	10.5	6.6	92	6.3	18	--	--
16...	1127		14.0	58	1.84	87	10.5	6.6	92	6.3	17	--	--
16...	1128		9.00	58	1.84	87	10.5	6.6	92	6.3	18	--	--
16...	1129		4.00	58	1.84	87	10.5	6.6	92	6.3	17	--	--
JAN													
06...	0949	J	30.0	64	1.91	85	9.4	6.1	82	10.2	55	--	--
06...	0950	J	20.0	64	1.91	85	9.3	6.2	82	10.2	56	--	--
06...	0951	J	10.0	64	1.91	84	9.3	6.2	82	10.1	54	--	--
FEB													
12...	0958	J	40.0	384	4.04	95	11.2	6.6	70	6.9	200	--	--
12...	0959	J	35.0	384	4.04	94	11.1	6.6	70	6.9	200	--	--
12...	1000	J	30.0	384	4.04	94	11.1	6.6	70	6.9	190	--	--
12...	1001	J	25.0	384	4.04	93	11.1	6.5	70	6.9	190	--	--
12...	1002	J	20.0	384	4.04	93	11.1	6.5	70	6.9	190	--	--
12...	1003	J	15.0	384	4.04	93	11.0	6.5	69	6.9	190	--	--
12...	1004	J	10.0	384	4.04	93	11.0	6.5	69	6.9	180	--	--
12...	1005	J	5.00	384	4.04	93	11.1	6.5	67	6.8	180	--	--
MAR													
09...	0855		21.0	57	1.74	86	9.2	6.9	100	10.6	15	--	--
09...	0856		14.0	57	1.74	86	9.2	6.9	100	10.6	14	--	--
09...	0857		7.00	57	1.74	86	9.2	7.0	100	10.6	15	--	--
24...	1417		21.0	49	1.63	96	10.3	7.2	109	11.6	7.7	--	--
24...	1418		14.0	49	1.63	95	10.2	7.2	109	11.6	7.6	--	--
24...	1419		7.00	49	1.63	94	10.1	7.2	109	11.6	7.6	--	--
MAY													
24...	1244		15.5	31	1.40	89	7.9	6.8	99	21.5	13	--	--
24...	1245		10.5	31	1.40	86	7.6	6.7	99	21.5	17	--	--
24...	1246		5.50	31	1.40	85	7.5	6.7	99	21.5	18	--	--
JUN													
01...	1008	J	15.0	36	1.47	90	7.8	7.2	82	21.1	46	--	--
01...	1010	J	30.0	36	1.47	91	7.9	7.2	87	21.2	45	--	--
01...	1011	J	45.0	36	1.47	91	7.9	7.2	86	21.2	49	--	--
JUL													
08...	0905		22.0	36	1.47	84	7.0	7.0	95	23.2	22	--	--
08...	0906		15.0	36	1.47	82	6.8	7.0	95	23.2	21	--	--
08...	0907		9.00	36	1.47	81	6.7	7.0	95	23.2	21	--	--
AUG													
05...	1724	J	40.0	283	3.24	92	7.4	7.0	54	24.5	270	--	--
05...	1725	J	32.0	283	3.24	92	7.4	6.9	54	24.6	270	--	--
05...	1726	J	24.0	283	3.24	89	7.2	6.8	54	24.6	280	--	--
05...	1727	J	16.0	283	3.24	89	7.2	6.8	54	24.6	280	--	--
05...	1728	J	8.00	283	3.24	88	7.1	6.8	54	24.6	280	--	--
12...	1451	J	60.0	613	5.98	79	6.7	6.2	45	22.0	380	--	--
12...	1452	J	40.0	613	5.98	79	6.7	6.3	45	22.0	380	--	--
12...	1453	J	20.0	613	5.98	82	7.0	6.3	45	22.0	370	--	--
SEP													
07...	0838	J	6.00	651	6.21	70	6.1	6.4	40	21.8	200	--	--
07...	0839	J	18.0	651	6.21	68	6.0	6.4	40	21.8	210	--	--
07...	0840	J	30.0	651	6.21	70	6.1	6.4	40	21.8	200	--	--
07...	0841	J	42.0	651	6.21	70	6.2	6.4	40	21.8	210	--	--
07...	0842	J	54.0	651	6.21	70	6.1	6.4	40	21.8	210	--	--

Remark codes used in this table:

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