

**APALACHICOLA RIVER BASIN
2004 Water Year**

02334480 RICHLAND CREEK AT SUWANEE DAM ROAD, NEAR BUFORD, GA

LOCATION.—Lat 34°07'57", long 84°04'12", referenced to North American Datum (NAD) 1927, Gwinnett County, Hydrologic Unit 03130001, at 3 - 10' X 10' concrete box culverts on Suwanee Dam Road near Buford, GA, 5.0 miles North of Level Creek, and 7.0 miles South of Buford Dam.

DRAINAGE AREA.—9.34 square miles.

COOPERATION.—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 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)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)	Calcium water, fltrd, mg/L (00915)
OCT 03...	1100	--	9	81213	9.9	.50	--	--	13	--	--	100	--
NOV 17-17	0820	0830	J	81213	88	1.50	--	--	940	--	--	6200	--
DEC 09...	1050	--	9	81213	9.9	.50	--	--	14	--	--	--	--
FEB 12-12	0920	0925	J	81213	88	1.51	--	--	610	--	--	--	--
MAR 09...	1055	--	9	81213	12	.54	--	--	12	--	--	67	--
MAR 23...	1315	--	9	81213	10	.51	--	--	8.7	--	--	59	--
APR 26-26	1040	1050	J	81213	21	.68	--	--	98	--	--	3100	--
MAY 25...	0945	--	9	81213	13	.55	--	--	38	--	--	370	--
JUL 07...	1150	--	9	81213	11	.51	--	--	87	.8	9	180	5.30
AUG 12-12	0805	0820	J	80855	230	2.75	--	2300	3400	13.0	E17	56000	2.00
SEP 02-02	0257	0432	J	80855	--	--	--	670	980	9.0	E19	21000	4.70
SEP 07-07	0654	1444	J	80855	--	--	2700	1600	--	5.6	E13	44000	1.80

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**02334480 RICHLAND CREEK AT SUWANEЕ DAM ROAD, NEAR BUFORD, GA
—continued.**

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

Date	Hard-ness, water, mg/L as CaCO3 (00900)	Magnesium, water, unfltrd, mg/L (00925)	Magnesium, water, unfltrd, recover-able, mg/L (00927)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Residue vola-tile, sus-pended, mg/L (00535)	Nitrite nitrate water fltrd, mg/L as N (00631)	Nitrite water unfltrd, mg/L as N (00630)	Ammonia				Cadmium water, unfltrd, ug/L (01027)
									Ammonia water, fltrd, mg/L as N (00608)	org-N, water, unfltrd, mg/L as N (00625)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd, mg/L (00665)	
OCT 03...	--	--	--	53	4	2	.54	.570	A.033	<.20	<.02	.03	--
NOV 17-17	--	--	--	44	816	121	.51	.510	A.037	2.8	<.02	1.10	--
DEC 09...	--	--	--	53	10	4	.75	.750	A.084	<.20	<.02	<.02	--
FEB 12-12	--	--	--	34	400	56	.48	.480	A.106	1.0	<.02	.38	--
MAR 09...	--	--	--	54	5	2	.52	.520	A.050	<.20	<.02	<.02	--
MAR 23...	--	--	--	95	<1	1	.29	.300	A.011	<.20	<.02	<.02	--
APR 26-26	--	--	--	54	128	20	.43	.430	A.062	.80	<.02	.22	--
MAY 25...	--	--	--	57	46	8	.33	.410	A.041	.40	<.02	.10	--
JUL 07...	19	1.30	--	56	21	3	.56	.560	A.043	.20	.02	.07	<.5
AUG 12-12	29	.53	2.9	230	5200	670	.460	.280	.140	3.1	<.050	.730	<5
SEP 02-02	53	1.10	8.5	100	1200	140	.360	.360	E.056	1.2	<.050	E.019	<5
SEP 07-07	93	.60	19.0	300	3600	420	.460	.410	.100	<.50	<.050	<.050	<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)	Organic carbon, water, unfltrd, mg/L (00680)	Suspnd. sedi-ment, sieve diametr <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)
NOV 17-17	--	--	--	--	--	3.5	13	1170
DEC 09...	--	--	--	--	--	1.2	--	9
FEB 12-12	--	--	--	--	--	4.0	67	750
MAR 09...	--	--	--	--	--	.9	--	15
MAR 23...	--	--	--	--	--	.8	--	11
APR 26-26	--	--	--	--	--	2.7	44	200
MAY 25...	--	--	--	--	--	1.6	--	52
JUL 07...	2	<2	<2	165	5	2.4	--	54
AUG 12-12	E10	30	M	2300	110	--	42	6730
SEP 02-02	44	30	M	1700	260	--	64	1460
SEP 07-07	130	50	M	2300	330	--	56	4740

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—continued.**

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

Date	Time	Hydro-logic event	Location in X-sect. looking downstrm ft from l bank (00009)	Instantaneous discharge, cfs (00061)	Gage height, feet (00065)	Dissolved oxygen, percent of saturation (00301)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd std field, units (00400)	Specific conductance, wat unfiltered, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Turbidity, IR LED light, 90 deg, FNU (63680)	Suspended sediment, sieve diameter percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)
OCT													
03...	1104		23.0	9.9	.50	99	10.0	7.0	83	13.9	19	--	--
03...	1105		16.0	9.9	.50	99	10.0	7.0	83	13.6	17	--	--
03...	1106		9.00	9.9	.50	99	10.1	7.0	83	13.4	17	--	--
NOV													
17...	0829	J	5.00	87	1.49	92	9.2	6.7	63	14.6	920	44	982
17...	0830	J	11.0	87	1.49	92	9.1	6.7	62	14.7	950	20	2060
17...	0831	J	17.0	87	1.49	91	9.1	6.6	61	14.7	990	30	1550
DEC													
09...	1058		6.00	9.9	.50	118	14.2	7.1	83	7.5	25	--	9
09...	1059		12.0	9.9	.50	118	14.2	7.1	83	7.5	53	--	7
09...	1100		18.0	9.9	.50	118	14.2	7.1	83	7.5	18	--	9
FEB													
12...	0928	J	6.00	87	1.49	97	11.6	6.4	51	6.8	690	47	934
12...	0929	J	11.0	87	1.49	97	11.6	6.4	49	6.8	760	45	1030
12...	0930	J	16.0	87	1.49	97	11.6	6.4	49	6.8	700	49	1000
MAR													
09...	1059		4.00	12	.54	102	11.3	7.1	77	9.4	13	--	--
09...	1100		9.00	12	.54	99	11.1	7.1	75	9.2	15	--	--
09...	1101		14.0	12	.54	98	11.0	7.1	75	9.1	19	--	--
23...	1324		6.00	10	.51	129	13.9	7.2	80	11.6	13	--	--
23...	1325		11.0	10	.51	128	13.8	7.2	79	11.5	17	--	--
23...	1326		16.0	10	.51	127	13.7	7.2	79	11.4	12	--	--
APR													
26...	1052	J	2.00	21	.68	89	8.5	6.8	82	17.7	140	53	135
26...	1054	J	8.00	21	.69	90	8.6	6.9	82	17.2	130	25	407
26...	1056	J	14.0	21	.69	88	8.6	6.8	82	16.9	160	38	250
MAY													
25...	0949		4.00	13	.55	94	8.7	6.5	74	19.2	36	--	--
25...	0950		9.00	13	.55	94	8.7	6.5	74	19.0	51	--	--
25...	0951		14.0	13	.55	94	8.8	6.5	73	18.8	62	--	--
JUL													
07...	1202		14.0	10	.50	95	8.1	7.1	76	21.9	91	--	--
07...	1203		9.00	10	.50	93	8.0	7.1	76	21.9	89	--	--
07...	1204		4.00	10	.50	93	7.9	7.1	76	21.9	86	--	--
AUG													
12...	0821	J	10.0	230	2.75	94	8.2	6.5	34	20.8	--	50	5750
12...	0825	J	20.0	215	2.64	93	8.1	6.5	32	20.8	--	51	5720
12...	0828	J	30.0	215	2.64	93	8.1	6.5	33	20.8	--	53	5560
SEP													
02...	0823	J	3.50	15	.59	109	9.5	6.8	60	21.2	580	90	328
02...	0824	J	10.5	15	.59	109	9.5	6.8	58	21.2	570	91	344
02...	0825	J	17.0	15	.59	109	9.5	6.8	57	21.1	670	94	341
07...	0805	J	15.0	900	6.00	90	8.0	6.0	26	21.5	3800	52	6600
07...	0806	J	10.0	900	6.00	90	8.0	6.0	25	21.5	3900	49	7120
07...	0807	J	5.00	900	6.00	90	8.0	6.0	25	21.6	3800	49	7040

Remark codes used in this table:

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