

0344789265 BOYD BRANCH AT BENT CREEK GAP ROAD NEAR LAKE POWHATAN, NC

LOCATION.--Lat 35°28'54", long 82°38'05", Buncombe County, Hydrologic Unit 06010105, on right bank 70 ft below trail footbridge, 300 ft downstream from culvert under Bent Creek Gap Road, 0.4 mi west of Lake Powhatan, and at Bent Creek Research Station well cluster number 2.

DRAINAGE AREA.--1.03 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 2004 to November 2005 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 2,177.77 ft above NGVD of 1929 (levels by North Carolina Department of Environment and Natural Resources). Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Minimum discharge for 2005 water year also occurred Sept. 24, 25. Minimum discharge for 2006 water year also occurred Oct. 18.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	e1.5	1.8	1.7	1.3	0.58	e1.0	1.7
2	---	---	---	---	---	e1.6	1.4	1.8	0.95	0.62	e1.1	3.9
3	---	---	---	---	---	e1.6	1.3	1.6	0.90	0.71	e1.1	2.0
4	---	---	---	---	---	e1.5	1.2	1.5	1.5	0.68	0.87	1.5
5	---	---	---	---	---	e1.5	1.2	1.5	0.82	0.65	0.92	1.3
6	---	---	---	---	---	e1.6	1.1	1.4	0.72	0.80	0.83	1.7
7	---	---	---	---	---	e1.5	1.1	1.3	0.68	0.75	0.78	17
8	---	---	---	---	---	e1.5	1.1	1.3	0.71	0.71	0.79	24
9	---	---	---	---	---	e1.5	0.98	1.7	0.61	0.76	0.74	7.4
10	---	---	---	---	---	e1.4	0.92	1.3	0.54	0.79	0.70	5.3
11	---	---	---	---	---	e1.4	1.2	1.1	0.45	0.84	2.0	5.2
12	---	---	---	---	---	e1.3	2.5	0.97	0.55	0.88	2.2	4.5
13	---	---	---	---	---	e1.3	7.5	1.3	0.81	0.93	1.4	4.6
14	---	---	---	---	---	e1.4	4.2	1.2	0.72	0.81	1.1	4.1
15	---	---	---	---	---	e1.5	2.5	0.95	2.0	0.68	1.0	4.0
16	---	---	---	---	---	e1.6	2.0	0.82	1.5	0.63	0.89	9.2
17	---	---	---	---	---	e1.4	1.8	0.82	1.5	0.81	0.85	e56
18	---	---	---	---	---	1.6	1.6	0.77	1.5	0.85	0.81	4.7
19	---	---	---	---	---	1.4	1.5	0.86	0.99	0.71	0.79	3.3
20	---	---	---	---	---	1.4	1.3	0.93	0.76	0.68	0.77	2.5
21	---	---	---	---	---	e1.4	1.2	0.71	0.81	0.63	1.00	2.2
22	---	---	---	---	---	e1.2	1.1	0.87	0.85	0.62	0.99	2.1
23	---	---	---	---	---	1.1	1.2	1.1	0.72	0.59	0.91	2.2
24	---	---	---	---	---	1.1	1.3	0.88	0.67	0.64	0.83	2.1
25	---	---	---	---	---	0.99	1.2	0.67	0.89	0.63	0.80	2.1
26	---	---	---	---	---	0.96	2.8	0.69	0.90	0.62	0.78	2.1
27	---	---	---	---	---	0.91	2.2	0.79	0.75	2.5	0.74	3.7
28	---	---	---	---	---	0.87	1.9	0.69	0.69	1.6	0.74	7.9
29	---	---	---	---	---	0.80	1.8	0.62	0.61	e1.0	1.5	4.5
30	---	---	---	---	---	0.88	1.7	0.91	0.60	e1.2	2.3	3.9
31	---	---	---	---	---	2.1	---	2.0	---	e1.0	1.9	---
TOTAL	---	---	---	---	---	41.81	54.60	34.75	27.00	25.90	33.13	196.7
MEAN	---	---	---	---	---	1.35	1.82	1.12	0.90	0.84	1.07	6.56
MAX	---	---	---	---	---	2.1	7.5	2.0	2.0	2.5	2.3	56
MIN	---	---	---	---	---	0.80	0.92	0.62	0.45	0.58	0.70	1.3
CFSM	---	---	---	---	---	1.31	1.77	1.09	0.87	0.81	1.04	6.37
IN.	---	---	---	---	---	1.51	1.97	1.26	0.98	0.94	1.20	7.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2004, BY WATER YEAR (WY)

MEAN	---	---	---	---	---	1.35	1.82	1.12	0.90	0.84	1.07	6.56
MAX	---	---	---	---	---	1.35	1.82	1.12	0.90	0.84	1.07	6.56
(WY)	---	---	---	---	---	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)
MIN	---	---	---	---	---	1.35	1.82	1.12	0.90	0.84	1.07	6.56
(WY)	---	---	---	---	---	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)

SUMMARY STATISTICS

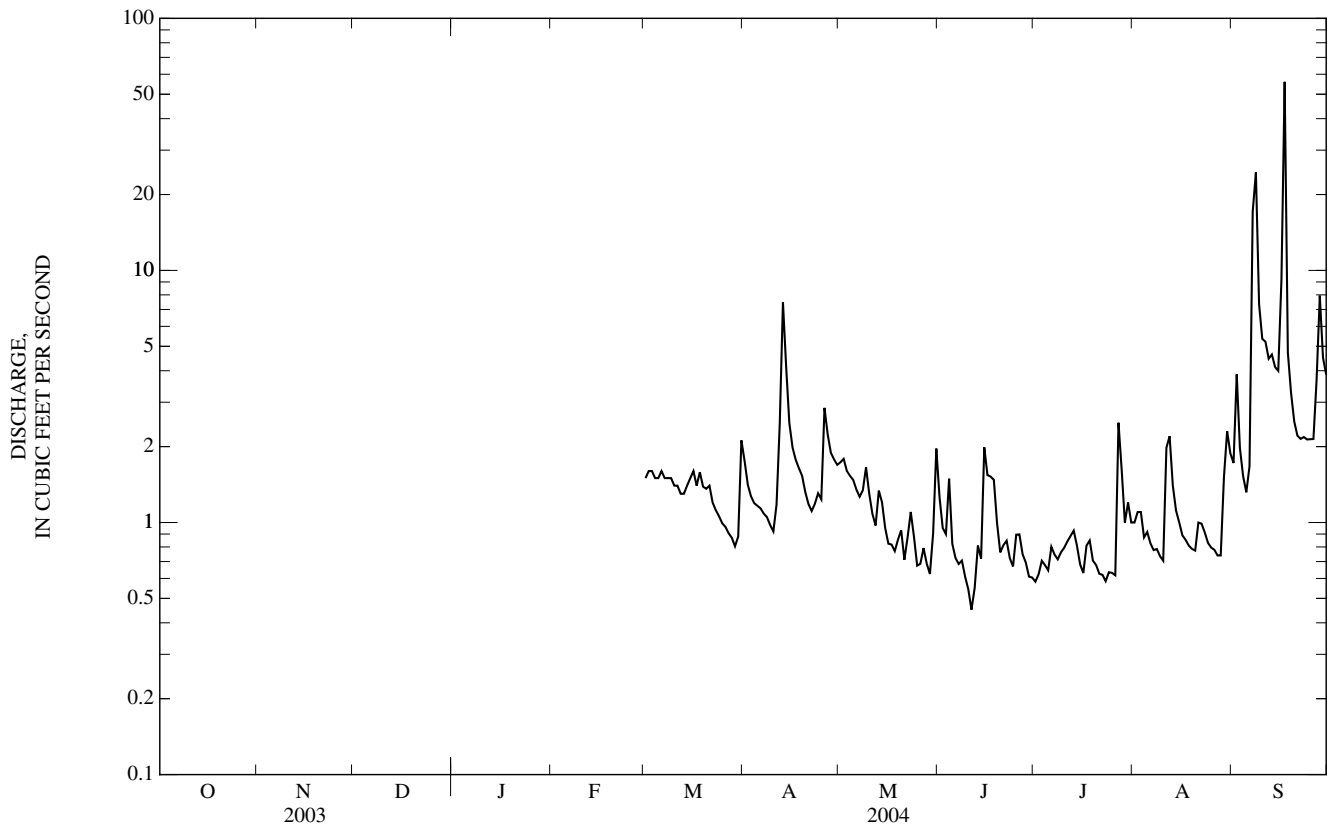
FOR 2004 WATER YEAR

INSTANTANEOUS PEAK FLOW
INSTANTANEOUS PEAK STAGE
INSTANTANEOUS LOW FLOW

NOT DETERMINED
4.91 Sep 17
0.34 Jun 12

e Estimated.

0344789265 BOYD BRANCH AT BENT CREEK GAP ROAD NEAR LAKE POWHATAN, NC—Continued



0344789265 BOYD BRANCH AT BENT CREEK GAP ROAD NEAR LAKE POWHATAN, NC—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	1.9	3.1	1.8	1.6	1.8	2.3	1.6	1.8	2.6	2.2	1.7
2	3.0	2.0	2.6	1.8	1.5	1.7	2.6	1.5	2.4	2.2	2.0	1.5
3	2.8	2.2	2.5	1.7	1.7	1.6	2.2	1.5	1.8	2.0	1.8	1.4
4	2.7	7.1	2.4	1.7	1.5	1.5	2.1	1.4	1.6	1.9	1.7	1.3
5	2.5	3.6	2.3	1.7	1.5	1.5	2.0	1.4	1.4	1.7	1.7	1.3
6	2.5	2.8	2.3	1.8	1.4	1.5	1.9	1.4	1.4	1.6	1.7	1.2
7	2.4	2.5	2.3	1.7	1.4	1.5	2.0	1.4	1.3	8.4	2.2	1.2
8	2.3	2.3	2.2	1.7	1.4	1.7	2.1	1.4	1.6	4.2	2.6	1.2
9	2.3	2.2	3.2	1.6	1.5	1.5	1.9	1.4	1.4	2.8	2.1	1.1
10	2.3	2.1	2.9	1.6	1.4	1.5	1.8	1.7	1.4	2.3	1.9	1.1
11	2.2	2.1	2.6	1.6	1.4	1.4	1.7	1.6	1.4	3.1	1.7	1.1
12	2.3	3.4	2.5	1.6	1.4	1.4	1.9	1.4	4.0	2.8	1.6	1.1
13	2.4	2.6	2.4	2.8	1.5	1.4	2.2	1.4	4.4	2.6	1.6	1.2
14	2.2	2.4	2.2	3.9	1.5	1.4	2.6	1.5	2.6	2.3	1.5	1.2
15	2.2	2.3	2.2	2.5	1.4	1.4	2.2	1.5	2.0	2.2	1.4	1.2
16	2.1	2.3	2.2	2.2	1.4	1.5	2.0	1.4	1.7	2.1	1.5	1.3
17	2.0	2.2	2.1	2.0	1.3	1.6	1.9	1.4	1.6	1.9	1.5	1.2
18	2.1	2.1	2.1	1.9	1.3	1.4	1.8	1.3	1.7	1.9	1.7	1.2
19	2.4	2.1	2.1	1.9	1.3	1.4	1.8	1.4	2.4	3.1	1.5	1.1
20	2.1	2.1	2.0	1.9	1.4	1.3	1.6	2.7	2.2	4.2	1.5	1.1
21	2.1	2.0	2.0	1.8	2.2	1.3	1.5	1.7	1.9	3.7	1.4	1.1
22	2.0	2.1	2.2	1.8	1.8	1.6	1.6	1.6	1.7	2.8	1.5	1.1
23	2.1	2.3	5.6	1.6	1.7	2.5	1.8	1.5	1.5	2.3	1.5	1.1
24	2.2	5.9	3.0	1.7	1.8	1.9	1.7	1.5	1.4	2.1	1.4	1.1
25	2.0	4.3	2.5	1.7	1.6	1.8	1.6	1.4	1.2	2.0	1.3	1.1
26	1.9	3.2	2.3	1.7	1.5	1.6	1.6	1.4	1.4	1.9	1.3	1.3
27	2.0	3.0	2.1	1.6	1.5	2.4	1.6	1.3	2.9	3.2	1.3	1.2
28	2.2	2.8	2.0	1.5	2.1	8.0	1.5	1.4	10	2.6	1.2	1.1
29	2.4	2.5	2.0	1.7	---	3.6	1.5	1.3	6.7	3.3	1.3	1.2
30	2.1	2.5	1.9	1.8	---	2.7	1.7	1.3	3.3	2.7	4.4	1.1
31	2.0	---	1.8	1.7	---	2.4	---	1.2	---	2.5	2.2	---
TOTAL	71.0	82.9	75.6	58.0	43.0	59.8	56.7	45.9	72.1	85.0	54.2	36.1
MEAN	2.29	2.76	2.44	1.87	1.54	1.93	1.89	1.48	2.40	2.74	1.75	1.20
MAX	3.2	7.1	5.6	3.9	2.2	8.0	2.6	2.7	10	8.4	4.4	1.7
MIN	1.9	1.9	1.8	1.5	1.3	1.3	1.5	1.2	1.2	1.6	1.2	1.1
CFSM	2.22	2.68	2.37	1.82	1.49	1.87	1.83	1.44	2.33	2.66	1.70	1.17
IN.	2.56	2.99	2.73	2.09	1.55	2.16	2.05	1.66	2.60	3.07	1.96	1.30

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2005, BY WATER YEAR (WY)

MEAN	2.29	2.76	2.44	1.87	1.54	1.64	1.85	1.30	1.65	1.79	1.41	3.88
MAX	2.29	2.76	2.44	1.87	1.54	1.93	1.89	1.48	2.40	2.74	1.75	6.56
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2004)
MIN	2.29	2.76	2.44	1.87	1.54	1.35	1.82	1.12	0.90	0.84	1.07	1.20
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2005)

SUMMARY STATISTICS

FOR 2004 CALENDAR YEAR

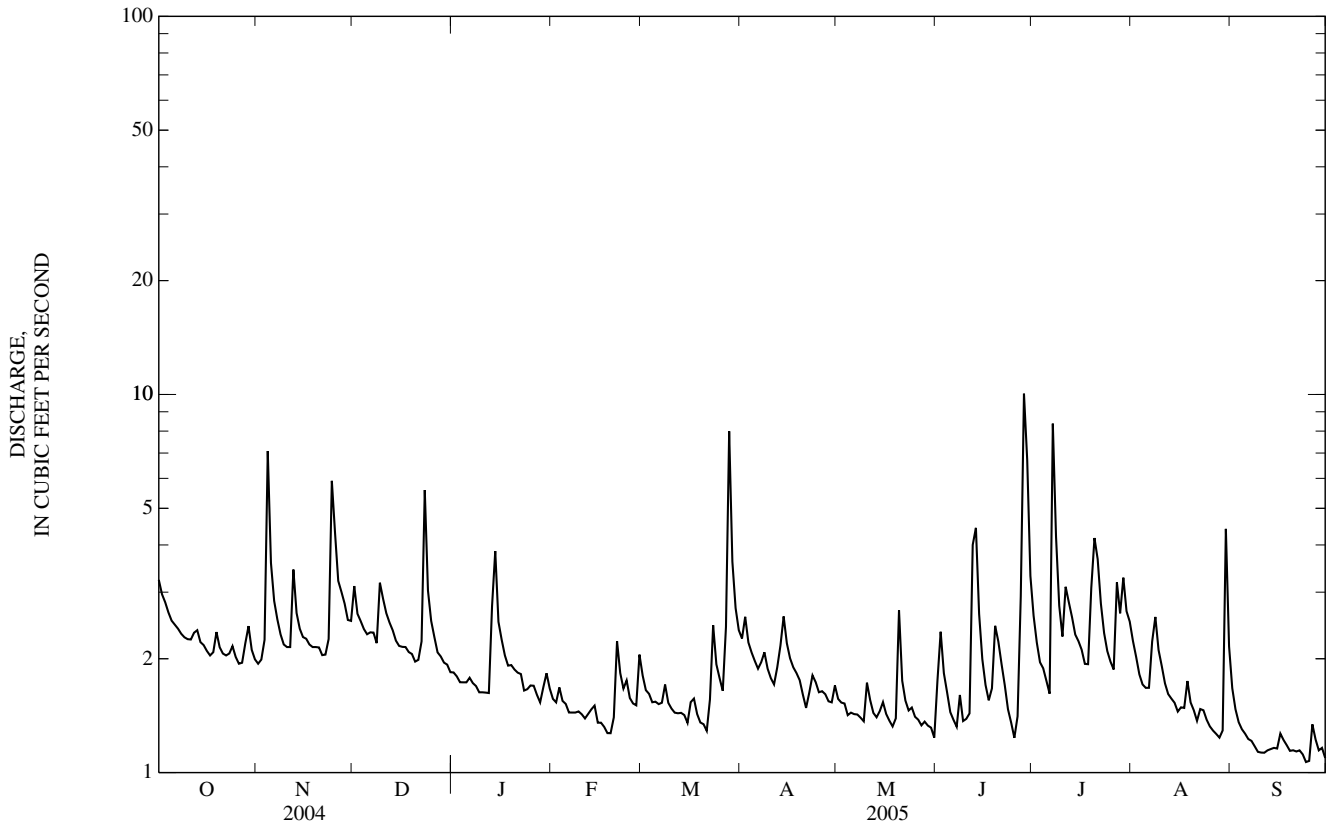
FOR 2005 WATER YEAR

WATER YEARS 2004 - 2005

ANNUAL TOTAL							740.3					
ANNUAL MEAN							2.03				2.03	
HIGHEST ANNUAL MEAN											2.03	2005
LOWEST ANNUAL MEAN											2.03	2005
HIGHEST DAILY MEAN				56	Sep 17		10	Jun 28		56	Sep 17, 2004	
LOWEST DAILY MEAN				0.45	Jun 11		1.1	Sep 9		0.45	Jun 11, 2004	
ANNUAL SEVEN-DAY MINIMUM				0.61	Jun 6		1.1	Sep 19		0.61	Jun 6, 2004	
MAXIMUM PEAK FLOW							63	Jun 28			NOT DETERMINED	
MAXIMUM PEAK STAGE							3.19	Jun 28		4.91	Sep 17, 2004	
INSTANTANEOUS LOW FLOW							0.98*	Sep 23		0.34	Jun 12, 2004	
ANNUAL RUNOFF (CFSM)							1.97			1.97		
ANNUAL RUNOFF (INCHES)							26.74			26.75		
10 PERCENT EXCEEDS							2.8			2.8		
50 PERCENT EXCEEDS							1.8			1.8		
90 PERCENT EXCEEDS							1.3			1.3		

* See REMARKS.

0344789265 BOYD BRANCH AT BENT CREEK GAP ROAD NEAR LAKE POWHATAN, NC—Continued



0344789265 BOYD BRANCH AT BENT CREEK GAP ROAD NEAR LAKE POWHATAN, NC—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	0.92	---	---	---	---	---	---	---	---	---	---
2	1.1	0.90	---	---	---	---	---	---	---	---	---	---
3	1.1	0.90	---	---	---	---	---	---	---	---	---	---
4	1.1	0.92	---	---	---	---	---	---	---	---	---	---
5	1.1	0.92	---	---	---	---	---	---	---	---	---	---
6	2.7	0.92	---	---	---	---	---	---	---	---	---	---
7	1.9	0.92	---	---	---	---	---	---	---	---	---	---
8	1.6	0.92	---	---	---	---	---	---	---	---	---	---
9	1.3	0.92	---	---	---	---	---	---	---	---	---	---
10	1.3	1.0	---	---	---	---	---	---	---	---	---	---
11	1.2	0.98	---	---	---	---	---	---	---	---	---	---
12	1.2	0.98	---	---	---	---	---	---	---	---	---	---
13	1.2	1.00	---	---	---	---	---	---	---	---	---	---
14	1.2	1.0	---	---	---	---	---	---	---	---	---	---
15	1.1	1.1	---	---	---	---	---	---	---	---	---	---
16	1.1	2.1	---	---	---	---	---	---	---	---	---	---
17	0.91	1.1	---	---	---	---	---	---	---	---	---	---
18	0.85	1.0	---	---	---	---	---	---	---	---	---	---
19	0.86	0.98	---	---	---	---	---	---	---	---	---	---
20	0.88	0.98	---	---	---	---	---	---	---	---	---	---
21	0.91	2.7	---	---	---	---	---	---	---	---	---	---
22	0.91	2.3	---	---	---	---	---	---	---	---	---	---
23	0.92	1.3	---	---	---	---	---	---	---	---	---	---
24	0.91	1.1	---	---	---	---	---	---	---	---	---	---
25	0.91	1.0	---	---	---	---	---	---	---	---	---	---
26	0.92	0.99	---	---	---	---	---	---	---	---	---	---
27	0.92	1.00	---	---	---	---	---	---	---	---	---	---
28	0.92	2.7	---	---	---	---	---	---	---	---	---	---
29	0.92	11	---	---	---	---	---	---	---	---	---	---
30	0.92	3.1	---	---	---	---	---	---	---	---	---	---
31	0.92	---	---	---	---	---	---	---	---	---	---	---
TOTAL	34.88	47.65	---	---	---	---	---	---	---	---	---	---
MEAN	1.13	1.59	---	---	---	---	---	---	---	---	---	---
MAX	2.7	11	---	---	---	---	---	---	---	---	---	---
MIN	0.85	0.90	---	---	---	---	---	---	---	---	---	---
CFSM	1.09	1.54	---	---	---	---	---	---	---	---	---	---
IN.	1.26	1.72	---	---	---	---	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2006, BY WATER YEAR (WY)

	2004	2005	2006	2004	2005	2006	2004	2005	2006	2004	2005	2006
MEAN	1.71	2.18	2.44	1.87	1.54	1.64	1.85	1.30	1.65	1.79	1.41	3.88
MAX	2.29	2.76	2.44	1.87	1.54	1.93	1.89	1.48	2.40	2.74	1.75	6.56
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2004)
MIN	1.13	1.59	2.44	1.87	1.54	1.35	1.82	1.12	0.90	0.84	1.07	1.20
(WY)	(2006)	(2006)	(2005)	(2005)	(2005)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2005)

SUMMARY STATISTICS

FOR 2005 CALENDAR YEAR

FOR 2006 WATER YEAR

WATER YEARS 2004 - 2006

ANNUAL MEAN										2.03		
HIGHEST ANNUAL MEAN										2.03		2005
LOWEST ANNUAL MEAN										2.03		2005
HIGHEST DAILY MEAN				11	Nov 29		11	Nov 29		56	Sep 17, 2004	
LOWEST DAILY MEAN				0.85	Oct 18		0.85	Oct 18		0.45	Jun 11, 2004	
ANNUAL SEVEN-DAY MINIMUM				0.89	Oct 17		0.89	Oct 17		0.61	Jun 6, 2004	
MAXIMUM PEAK FLOW							43	Nov 29		NOT DETERMINED		
MAXIMUM PEAK STAGE							2.98	Nov 29		4.91	Sep 17, 2004	
INSTANTANEOUS LOW FLOW							0.80*	Oct 17		0.34	Jun 12, 2004	
ANNUAL RUNOFF (CFSM)										1.97		
ANNUAL RUNOFF (INCHES)										26.75		
10 PERCENT EXCEEDS										2.8		
50 PERCENT EXCEEDS										1.8		
90 PERCENT EXCEEDS										1.3		

* See REMARKS.

0344789265 BOYD BRANCH AT BENT CREEK GAP ROAD NEAR LAKE POWHATAN, NC—Continued

