

Water-Data Report 2008

02077200 HYCO CREEK NEAR LEASBURG, NC

Roanoke Basin
Lower Dan Subbasin

LOCATION.--Lat 36°23'52", long 79°11'48" referenced to North American Datum of 1983, Caswell County, NC, Hydrologic Unit 03010104, on right bank 10 ft upstream from bridge on U.S. Highway 158, 1.5 mi upstream from Kilgore Creek, and 2.5 mi west of Leasburg.

DRAINAGE AREA.--45.9 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--July 1964 to current year. Prior to October 1968 published as "North Hyco Creek near Leasburg".

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 400.08 ft above National Geodetic Vertical Datum of 1929. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. Maximum gage height for period of record from floodmark. Periods of no flow occur at times most years.

02077200 HYCO CREEK NEAR LEASBURG, NC—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.00	2.0	0.77	85	43	15	327	70	4.6	0.28	0.15	4.1
2	0.00	1.1	0.80	43	104	14	181	47	3.7	0.01	0.36	5.1
3	0.00	0.75	0.76	28	51	13	80	36	3.4	0.00	0.20	2.8
4	0.00	0.55	0.83	24	37	14	216	29	3.0	0.00	0.15	1.3
5	0.00	0.52	0.95	19	39	400	855	24	2.6	0.02	0.26	0.68
6	0.00	0.49	1.1	18	34	137	495	21	2.2	12	0.12	549
7	0.00	0.32	0.85	16	28	89	246	17	1.9	8.3	0.03	377
8	0.00	0.23	0.81	14	23	218	113	15	1.6	4.4	0.00	40
9	0.00	0.23	0.70	13	20	101	76	50	1.4	3.2	0.00	18
10	0.00	0.22	1.0	11	18	62	58	24	1.1	3.1	0.00	11
11	0.00	0.20	1.3	13	17	48	46	17	0.86	2.8	0.00	9.7
12	0.00	0.27	1.3	12	16	39	41	19	2.6	1.9	0.00	8.7
13	0.00	0.30	0.99	11	25	32	36	16	1.9	1.3	0.00	7.0
14	0.00	0.35	0.96	9.4	42	28	29	13	0.75	0.90	0.00	4.9
15	0.00	0.57	1.2	9.3	60	26	25	11	0.48	0.55	0.00	3.5
16	0.00	0.74	7.5	8.7	52	58	22	12	0.32	0.38	0.00	4.1
17	0.00	0.99	13	11	40	45	20	11	0.19	0.20	0.00	11
18	0.00	0.93	8.6	29	35	34	18	9.3	0.10	1.3	0.00	8.4
19	0.00	0.92	6.3	26	29	31	17	12	0.06	2.1	0.00	4.8
20	0.00	0.86	4.8	22	23	35	24	10	0.01	2.8	0.00	3.2
21	0.00	0.85	4.2	18	19	29	28	8.6	0.01	1.3	0.00	2.6
22	0.00	0.90	3.3	17	19	26	24	7.5	0.62	0.40	0.00	2.6
23	0.00	0.76	3.9	16	19	23	21	6.3	0.88	0.82	0.00	2.7
24	0.17	0.58	4.2	15	16	21	19	6.5	0.47	2.8	0.00	5.4
25	0.04	0.51	3.9	13	16	20	16	5.7	0.22	2.0	0.00	5.7
26	9.4	0.69	4.4	12	17	18	15	4.8	0.05	0.96	0.00	12
27	52	0.98	7.6	12	21	17	18	4.4	0.00	0.47	5.2	99
28	34	0.87	8.1	11	18	16	351	5.2	0.00	0.17	31	45
29	12	0.84	15	11	15	16	627	5.5	0.00	0.08	16	26
30	6.4	0.79	84	11	---	18	133	5.2	0.17	0.03	6.1	17
31	3.7	---	295	10	---	64	---	4.6	---	0.06	2.6	---
Total	117.71	20.31	488.12	568.4	896	1,707	4,177	527.6	35.19	54.63	62.17	1,292.28
Mean	3.80	0.68	15.7	18.3	30.9	55.1	139	17.0	1.17	1.76	2.01	43.1
Max	52	2.0	295	85	104	400	855	70	4.6	12	31	549
Min	0.00	0.20	0.70	8.7	15	13	15	4.4	0.00	0.00	0.00	0.68
Cfs/m	0.08	0.01	0.34	0.40	0.67	1.20	3.03	0.37	0.03	0.04	0.04	0.94
In.	0.10	0.02	0.40	0.46	0.73	1.38	3.39	0.43	0.03	0.04	0.05	1.05

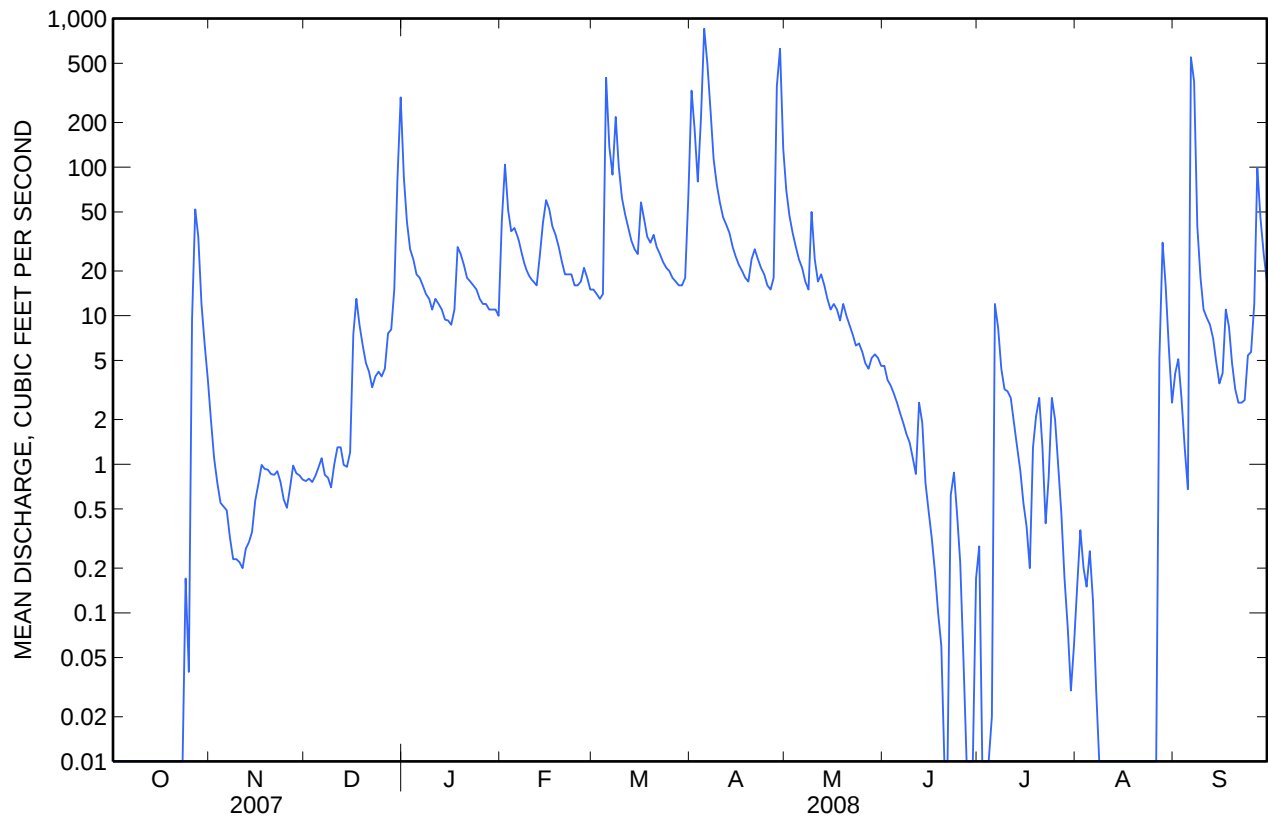
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	24.5	31.5	47.6	76.1	82.7	92.1	64.6	32.1	25.1	23.0	20.1	25.0
Max	131	168	144	278	244	266	194	184	233	274	264	193
(WY)	(1996)	(2007)	(1973)	(1978)	(1979)	(1975)	(2003)	(1978)	(1995)	(1975)	(1995)	(1996)
Min	0.00	0.10	2.33	6.15	13.2	9.49	8.45	2.55	0.14	0.00	0.00	0.00
(WY)	(1969)	(2002)	(2002)	(1981)	(2002)	(2006)	(2002)	(2002)	(2002)	(2002)	(2002)	(1968)

02077200 HYCO CREEK NEAR LEASBURG, NC—Continued

SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1964 - 2008	
Annual total	11,197.33		9,946.41			
Annual mean	30.7		27.2		45.2	
Highest annual mean					113	2003
Lowest annual mean					8.68	2002
Highest daily mean	1,160	Apr 15	855	Apr 5	7,400	Aug 28, 1995
Lowest daily mean	0.00	Aug 10	0.00	Oct 1	0.00	Jul 9, 1966
Annual seven-day minimum	0.00	Aug 20	0.00	Oct 1	0.00	Jul 9, 1966
Maximum peak flow			1,190	Sep 7	NOT DETERMINED	
Maximum peak stage			32.78	Sep 7	^a 48.53	Aug 27, 1995
Instantaneous low flow			^a 0.00	Oct 1	^a 0.00	Jul 8, 1966
Annual runoff (cfs)	0.668		0.592		0.985	
Annual runoff (inches)	9.07		8.06		13.38	
10 percent exceeds	54		46		86	
50 percent exceeds	4.2		5.3		15	
90 percent exceeds	0.00		0.00		0.66	

^aSee Remarks.

02077200 HYCO CREEK NEAR LEASBURG, NC—Continued**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 1964 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: May 1964 to current year.

INSTRUMENTATION.--Water-temperature recorder since May 1964.

REMARKS.--Miscellaneous water-quality data published for water years, 1959, 1965-67; 1959 data published as "North Hyco Creek near Leasburg" (station 02077202). Prior to October 1967, daily water-temperature data published as "North Hyco Creek near Leasburg". Interruptions in the record due to malfunctions of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum recorded, 31.3°C, July 17, 1996; minimum recorded, 0.0°C, many days during winter months in most years.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum recorded, 29.9°C, July 30; minimum recorded, 0.3°C, January 4, 21, 22.

**TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
October			November			December			January			
1	---	---	---	14.4	10.6	12.4	6.4	3.8	5.3	8.6	6.0	7.3
2	---	---	---	13.8	11.7	12.7	7.6	4.9	6.1	6.3	3.0	4.7
3	---	---	---	12.5	10.4	11.4	8.4	6.7	7.7	3.2	1.1	1.9
4	---	---	---	11.3	8.7	10.2	6.8	4.7	5.6	2.1	0.3	1.1
5	---	---	---	10.9	8.3	9.7	6.1	3.9	4.9	3.2	0.6	2.0
6	---	---	---	11.5	10.1	10.8	5.8	3.4	4.5	6.2	2.8	4.5
7	---	---	---	10.2	7.7	8.6	5.0	2.3	3.7	7.5	4.7	6.2
8	---	---	---	8.0	6.3	7.1	7.8	4.2	5.8	9.3	6.4	7.9
9	---	---	---	9.0	6.1	7.5	10.6	7.6	8.9	11.7	8.8	10.2
10	---	---	---	9.2	7.5	8.4	12.7	9.2	10.9	10.1	8.4	9.0
11	---	---	---	8.1	6.1	7.2	12.9	10.8	11.8	11.7	8.3	10.0
12	---	---	---	10.0	6.5	8.2	14.1	10.8	12.4	10.7	8.1	9.3
13	---	---	---	12.0	9.2	10.6	14.1	12.4	13.2	8.7	6.4	7.6
14	---	---	---	14.0	10.5	12.2	13.4	10.5	11.8	6.7	4.7	5.8
15	---	---	---	13.8	10.5	12.7	10.7	7.1	9.0	5.1	2.8	3.9
16	---	---	---	10.7	8.3	9.1	7.8	5.9	7.0	3.7	1.3	2.7
17	---	---	---	9.2	6.1	7.8	6.0	4.0	5.2	4.1	2.6	3.2
18	---	---	---	9.9	6.4	8.1	4.4	1.8	3.2	5.1	2.4	3.7
19	---	---	---	10.6	8.3	9.4	4.5	2.0	3.2	5.3	3.9	4.5
20	---	---	---	11.8	8.9	10.2	4.6	1.9	3.4	4.5	1.4	3.2
21	---	---	---	12.8	9.0	10.9	5.8	4.0	5.0	1.7	0.3	0.8
22	---	---	---	14.8	11.7	13.1	7.1	5.3	6.1	3.1	0.3	1.5
23	---	---	---	12.7	8.5	10.5	9.5	6.5	7.9	5.0	2.3	3.6
24	---	---	---	8.9	5.4	6.7	8.4	5.8	7.1	4.2	2.5	3.4
25	---	---	---	8.2	6.1	7.0	6.7	4.8	5.8	2.9	0.7	1.9
26	---	---	---	10.6	7.5	8.8	5.9	4.2	5.3	3.9	1.0	2.5
27	18.4	16.3	17.2	11.7	9.6	11.1	6.9	4.0	5.4	4.5	1.6	3.2
28	17.3	14.5	16.0	9.6	7.1	8.3	7.9	5.1	6.4	4.4	1.3	3.0
29	14.6	11.4	12.7	7.9	5.6	7.0	9.3	7.4	8.3	6.5	3.4	5.0
30	12.0	9.0	10.8	7.1	5.0	6.2	9.8	8.7	9.2	8.2	5.9	7.0
31	12.2	8.6	10.5	---	---	---	9.5	8.2	8.9	5.9	2.8	4.4
Month	---	---	---	14.8	5.0	9.5	14.1	1.8	7.1	11.7	0.3	4.7

02077200 HYCO CREEK NEAR LEASBURG, NC—Continued

 TEMPERATURE, WATER, DEGREES CELSIUS
 WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	6.2	3.9	5.0	10.5	6.7	8.5	14.2	9.6	11.5	17.4	14.0	15.8
2	6.3	3.9	5.3	10.6	6.3	8.7	15.1	12.5	13.8	20.1	16.9	18.3
3	7.3	4.7	6.1	12.1	7.2	9.8	14.8	10.7	12.6	21.1	18.2	19.6
4	9.6	6.2	7.8	15.1	11.7	13.3	12.9	9.9	11.1	22.0	18.4	20.1
5	11.8	7.9	9.9	14.3	11.8	12.7	13.8	12.1	12.9	20.0	17.3	18.5
6	14.0	10.8	12.4	12.5	9.5	11.1	13.8	11.9	12.9	20.2	16.3	18.3
7	13.8	11.0	12.4	11.8	9.3	10.4	12.6	11.1	11.9	20.7	16.3	18.6
8	11.0	8.1	9.7	12.2	9.3	10.7	13.2	11.4	12.2	20.9	18.8	19.8
9	10.6	7.3	9.1	10.4	6.9	8.6	15.1	12.8	13.8	21.8	18.3	20.1
10	10.0	7.4	8.8	10.2	6.9	8.6	17.5	13.1	15.3	21.9	18.9	20.4
11	7.9	5.1	6.4	11.6	8.5	10.1	20.0	15.8	17.8	20.2	16.7	17.6
12	6.0	4.2	5.1	12.8	8.7	10.7	19.7	18.2	19.1	16.9	15.5	16.1
13	6.2	4.4	5.4	13.7	8.4	11.1	18.2	14.5	16.3	18.0	14.1	16.0
14	6.4	2.8	4.7	15.0	10.8	12.9	14.5	11.5	12.6	17.5	14.4	16.1
15	7.3	3.8	5.6	14.4	11.7	13.3	14.8	9.6	12.2	19.4	16.6	18.0
16	9.1	6.6	7.8	14.4	11.9	13.0	15.8	9.5	12.8	21.4	18.4	19.7
17	9.5	7.2	8.4	13.0	9.9	11.7	17.5	10.7	14.2	20.3	17.0	18.8
18	13.6	9.5	11.5	11.5	9.0	10.3	19.2	13.1	16.2	19.0	17.0	18.1
19	11.6	8.2	9.4	15.1	10.3	12.6	19.1	15.4	17.5	19.0	16.1	17.6
20	9.5	5.4	7.7	15.7	12.8	14.3	18.6	16.3	17.6	19.2	17.4	18.3
21	8.8	6.6	7.5	14.3	9.6	12.2	17.4	15.1	16.1	19.6	16.6	18.0
22	7.2	5.5	6.2	15.9	10.8	13.2	17.2	15.1	16.1	19.6	15.5	17.6
23	9.4	5.9	7.5	14.5	10.4	12.8	17.9	15.9	16.8	18.8	16.2	17.6
24	8.7	6.9	7.9	12.9	9.8	11.1	19.9	14.8	17.4	20.5	16.9	18.5
25	10.6	6.7	8.7	12.2	7.3	9.9	21.5	16.4	19.0	20.4	16.6	18.5
26	9.9	8.3	9.1	14.2	8.9	11.5	22.7	18.4	20.5	21.8	17.4	19.4
27	9.4	6.1	7.9	15.9	11.2	13.6	22.0	19.9	20.9	23.4	19.7	21.4
28	6.8	3.4	5.3	17.4	13.1	15.3	20.5	17.0	18.3	22.7	19.1	21.0
29	7.5	3.1	5.5	16.8	12.1	14.2	17.2	15.4	16.3	21.0	17.4	19.1
30	---	---	---	12.3	9.6	10.9	16.3	13.3	14.8	22.2	18.1	20.0
31	---	---	---	10.2	9.1	9.6	---	---	---	23.6	20.4	21.9
Month	14.0	2.8	7.7	17.4	6.3	11.5	22.7	9.5	15.3	23.6	14.0	18.7

02077200 HYCO CREEK NEAR LEASBURG, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	23.6	20.9	22.3	24.1	21.7	22.8	27.9	23.1	24.9	25.5	23.2	24.2
2	23.7	20.4	22.0	---	---	---	26.2	23.5	24.8	24.3	21.5	22.9
3	22.8	20.5	21.7	---	---	---	28.0	22.8	24.7	24.1	20.8	22.4
4	25.6	21.4	23.3	---	---	---	28.2	22.0	24.3	24.6	21.0	22.7
5	27.1	23.4	25.1	---	---	---	27.0	22.7	24.6	23.2	21.1	22.4
6	28.3	24.1	26.0	24.6	22.1	23.3	28.6	23.5	25.4	22.9	21.5	22.3
7	28.8	24.6	26.5	26.2	23.1	24.5	---	---	---	23.7	22.1	22.8
8	29.0	24.9	26.8	26.3	24.2	25.0	---	---	---	24.3	22.2	23.2
9	29.4	25.1	26.9	26.8	23.5	24.9	---	---	---	24.5	22.7	23.5
10	29.0	25.4	27.1	26.2	24.0	25.1	---	---	---	24.1	21.9	23.1
11	27.9	25.0	26.3	26.8	23.9	25.1	---	---	---	22.1	21.2	21.6
12	26.6	24.1	25.3	27.3	23.6	25.2	---	---	---	23.2	21.4	22.2
13	27.2	23.8	25.2	27.8	23.9	25.6	---	---	---	24.8	21.9	23.2
14	27.2	23.5	24.9	26.8	24.2	25.1	---	---	---	25.6	23.1	24.2
15	27.1	23.5	24.9	26.1	21.7	23.7	---	---	---	25.0	23.7	24.4
16	27.5	22.5	24.6	26.1	21.4	23.4	---	---	---	23.8	21.0	22.2
17	26.9	22.7	24.3	27.6	21.1	23.4	---	---	---	21.8	20.3	21.0
18	24.9	19.9	21.9	26.3	20.9	23.3	---	---	---	21.3	19.2	20.3
19	23.6	18.6	20.8	26.1	23.2	24.5	---	---	---	20.5	18.6	19.6
20	23.8	19.0	21.1	27.9	24.1	25.6	---	---	---	19.1	17.0	18.1
21	24.4	20.1	21.8	28.9	24.6	26.3	---	---	---	18.7	16.6	17.7
22	23.4	20.5	21.8	28.7	24.6	26.2	---	---	---	20.0	17.7	18.7
23	25.3	21.6	23.1	26.4	23.8	24.8	---	---	---	19.6	17.5	18.5
24	25.8	21.4	23.2	26.0	22.4	23.9	---	---	---	18.5	16.4	17.4
25	26.0	20.8	23.1	23.9	21.8	22.8	---	---	---	17.4	16.3	16.6
26	---	---	---	25.9	21.6	23.3	---	---	---	18.5	16.2	17.2
27	---	---	---	27.4	23.1	24.7	---	---	---	19.7	18.4	18.9
28	---	---	---	28.5	23.0	25.0	23.5	21.3	22.2	20.8	19.2	20.0
29	---	---	---	29.5	23.4	25.8	24.9	22.5	23.6	21.1	19.5	20.3
30	27.0	22.9	24.4	29.9	24.1	26.4	25.7	22.8	24.1	20.6	18.9	19.8
31	---	---	---	26.8	24.1	25.2	25.7	23.1	24.3	---	---	---
Month	---	---	---	---	---	---	---	---	---	25.6	16.2	21.0