

Water-Data Report 2007

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 NGVD 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 most years.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	6.9	9.2	42	50	23	44	45	19	2.8	2.4	2.3	0.00
2	5.3	8.5	42	76	26	244	39	17	2.6	1.5	0.89	0.00
3	4.5	7.6	35	51	25	153	33	16	12	1.3	0.56	0.00
4	4.4	6.8	32	42	22	76	29	15	19	1.2	1.5	0.00
5	8.2	6.3	29	47	21	55	25	16	11	1.0	0.58	0.00
6	335	6.0	27	196	20	46	21	16	13	3.0	0.31	0.00
7	58	9.5	26	120	21	40	22	14	12	3.1	0.17	0.00
8	38	172	25	880	19	35	20	13	7.3	2.1	0.09	0.00
9	21	89	23	276	18	31	18	13	4.9	1.3	0.02	0.00
10	12	40	23	109	17	29	17	15	5.1	1.7	0.00	0.00
11	8.5	25	23	73	16	27	20	14	5.9	1.4	0.00	0.00
12	7.2	187	22	58	17	25	287	12	5.0	4.2	0.00	0.00
13	5.8	121	22	49	18	23	133	12	4.2	3.9	0.00	0.00
14	4.5	55	21	43	491	22	64	10	4.5	2.6	0.03	0.00
15	3.9	36	21	39	178	21	1,160	9.7	4.7	1.7	0.11	0.00
16	3.6	484	20	36	83	216	677	9.3	4.0	1.5	0.50	0.00
17	5.6	378	19	30	58	433	162	13	3.9	1.4	0.31	0.00
18	14	97	18	28	48	111	89	12	3.4	1.8	0.12	0.00
19	12	59	18	32	39	68	64	9.6	2.7	1.8	0.02	0.00
20	9.6	42	17	28	35	52	52	8.3	27	0.84	0.00	0.00
21	8.6	42	16	26	33	43	44	7.5	10	0.58	0.00	0.00
22	7.5	1,530	24	50	38	38	38	7.0	5.0	0.46	0.00	0.00
23	7.9	1,030	94	60	31	35	33	6.6	8.5	0.38	0.00	0.00
24	8.2	220	55	45	27	31	30	5.9	4.2	0.31	0.00	0.00
25	7.5	107	102	38	48	28	28	5.5	2.9	0.28	0.00	0.00
26	6.5	73	271	36	140	25	25	5.2	2.8	0.30	0.00	0.00
27	6.6	58	100	31	76	24	29	4.6	2.6	0.24	0.00	0.00
28	34	49	62	29	53	36	32	4.3	2.2	0.30	0.00	0.00
29	35	42	47	27	---	250	23	3.8	2.1	0.94	0.00	0.00
30	17	38	40	25	---	105	21	2.9	2.3	0.85	0.00	0.00
31	11	---	36	23	---	60	---	2.7	---	1.8	0.00	---
Total	717.8	5,027.9	1,352	2,653	1,641	2,426	3,280	319.9	197.6	46.18	7.51	0.00
Mean	23.2	168	43.6	85.6	58.6	78.3	109	10.3	6.59	1.49	0.24	0.00
Max	335	1,530	271	880	491	433	1,160	19	27	4.2	2.3	0.00
Min	3.6	6.0	16	23	16	21	17	2.7	2.1	0.24	0.00	0.00
Cfsm	0.50	3.65	0.95	1.86	1.28	1.70	2.38	0.22	0.14	0.03	0.01	0.00
In.	0.58	4.07	1.10	2.15	1.33	1.97	2.66	0.26	0.16	0.04	0.01	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2007, BY WATER YEAR (WY)

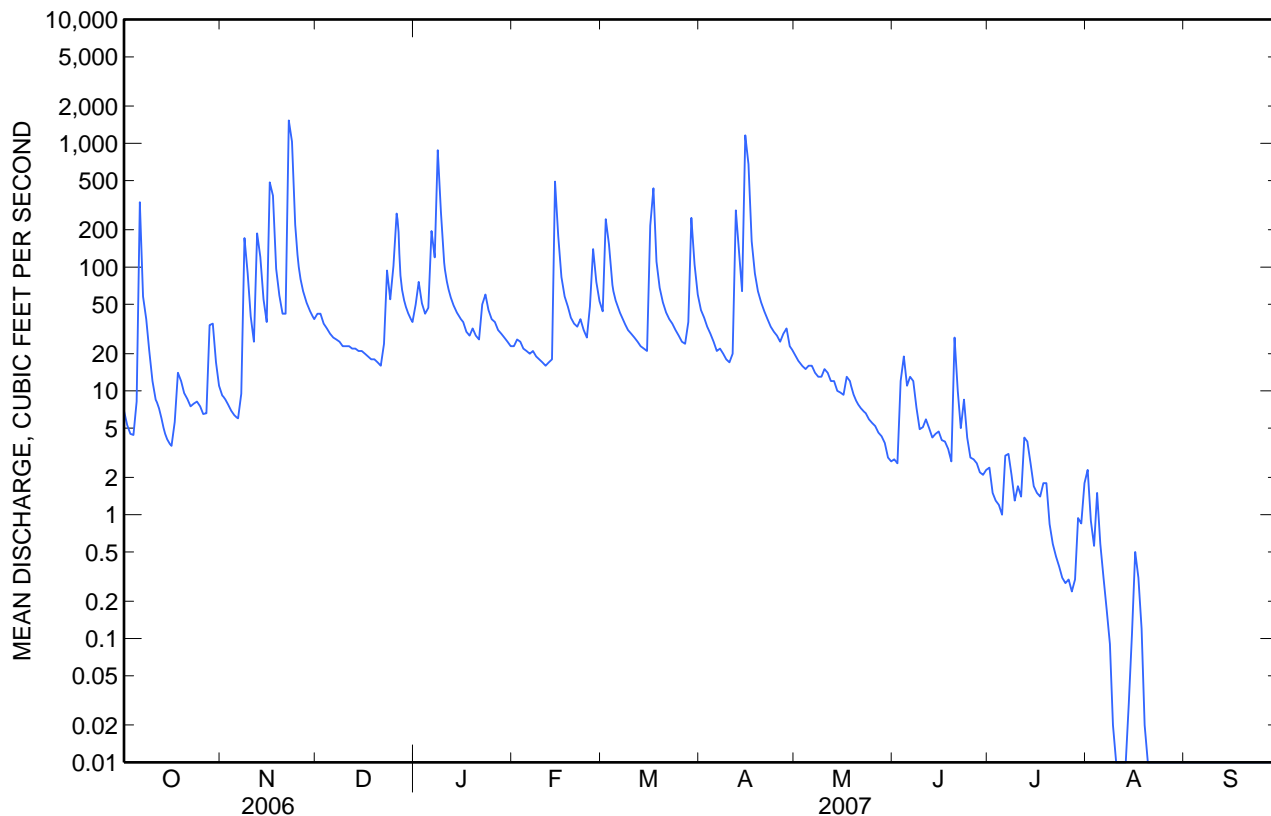
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	24.9	32.2	48.4	77.5	84.0	93.0	62.8	32.5	25.7	23.5	20.5	24.6
Max	131	168	144	278	244	266	194	184	233	274	264	193
(WY)	(1996)	(2007)	(1973)	(1978)	(1979)	(1975)	(2003)	(1978)	(1995)	(1975)	(1995)	(1996)
Min	0.00	0.10	2.33	6.15	13.2	9.49	8.45	2.55	0.14	0.00	0.00	0.00
(WY)	(1969)	(2002)	(2002)	(1981)	(2002)	(2006)	(2002)	(2002)	(2002)	(2002)	(2002)	(1968)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1964 - 2007	
Annual total	13,988.45		17,668.89			
Annual mean	38.3		48.4		45.6	
Highest annual mean					113	2003
Lowest annual mean					8.68	2002
Highest daily mean	1,530	Nov 22	1,530	Nov 22	7,400	Aug 28, 1995
Lowest daily mean	0.55	Aug 29	0.00	Aug 10	0.00	Jul 9, 1966
Annual seven-day minimum	0.86	Aug 23	0.00	Aug 20	0.00	Jul 9, 1966
Maximum peak flow			2,650 Nov 22		NOT DETERMINED	
Maximum peak stage			35.39 Nov 22		^a 48.53	Aug 27, 1995
Instantaneous low flow			^a 0.00 Aug 9		^a 0.00	Jul 8, 1966
Annual runoff (cfsm)	0.835		1.05		0.994	
Annual runoff (inches)	11.34		14.32		13.51	
10 percent exceeds	58		89		86	
50 percent exceeds	12		17		15	
90 percent exceeds	4.4		0.00		0.71	

^a See Remarks.



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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, not determined; minimum recorded, 0.4°C, February 6, 11.

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TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	18.3	15.5	16.7	15.8	12.9	14.3	16.3	13.4	14.9	12.6	9.3	11.2
2	17.9	15.3	16.7	15.4	12.6	14.6	14.8	10.8	12.4	11.6	7.9	9.6
3	18.2	15.0	16.6	12.6	8.5	10.3	11.0	9.2	9.9	8.0	6.0	7.3
4	19.1	15.9	17.4	8.6	6.1	7.4	9.8	6.8	8.6	10.0	6.9	8.5
5	20.0	17.1	18.5	7.8	4.6	6.4	7.1	4.7	6.0	12.2	9.4	10.7
6	19.3	16.4	18.1	8.5	5.1	6.9	6.3	3.8	5.1	13.3	11.8	12.6
7	16.5	15.1	15.6	10.4	6.9	8.1	7.5	5.6	6.6	12.8	10.0	11.0
8	16.0	15.1	15.5	12.3	10.2	11.4	5.7	2.9	3.9	11.9	10.8	11.4
9	17.2	14.7	15.9	13.5	11.3	12.5	3.1	0.7	2.1	10.9	7.5	8.4
10	17.5	14.9	16.3	14.1	11.0	12.7	4.0	1.3	2.7	7.8	5.7	6.5
11	17.3	15.8	16.6	15.2	12.1	13.8	5.1	2.8	4.0	5.9	3.9	5.0
12	18.4	16.5	17.3	15.0	12.2	13.3	5.4	2.9	4.3	7.7	4.8	6.1
13	17.1	13.5	15.0	13.2	11.3	12.2	7.0	5.0	5.9	9.8	7.2	8.4
14	13.5	10.7	12.2	13.5	11.5	12.5	7.4	4.9	6.3	11.5	8.8	10.1
15	12.3	9.6	11.1	12.4	10.6	11.6	7.8	5.4	6.7	13.1	10.5	11.8
16	12.6	10.3	11.5	15.5	12.4	14.4	7.5	5.5	6.7	13.0	10.4	12.4
17	14.3	12.3	13.1	14.7	12.1	13.0	7.8	5.3	6.7	10.5	6.4	8.0
18	17.6	14.2	15.8	12.2	9.9	10.8	8.6	6.2	7.5	6.5	4.6	5.2
19	16.9	15.2	16.2	10.4	8.2	9.6	8.8	7.3	8.0	6.9	4.1	5.6
20	18.6	16.7	17.5	9.9	8.4	9.2	7.7	5.4	6.3	6.3	4.3	5.3
21	16.7	13.1	14.5	8.8	7.1	7.9	7.3	5.3	6.2	5.1	3.6	4.2
22	13.8	11.5	12.4	8.6	7.0	7.8	10.2	6.9	8.2	5.6	3.5	4.6
23	12.9	10.6	11.9	10.1	8.0	8.9	11.5	9.9	10.6	6.7	4.7	5.8
24	10.8	8.7	9.6	9.7	7.9	9.0	10.5	7.8	9.0	6.3	4.3	5.2
25	10.2	7.3	8.8	9.5	7.5	8.5	8.9	7.3	8.0	5.5	3.7	4.6
26	10.3	7.2	8.9	8.9	7.0	8.2	10.1	8.3	9.1	4.4	2.0	3.3
27	11.5	9.7	10.4	9.2	7.1	8.2	9.6	6.9	8.2	6.0	2.5	4.3
28	14.8	11.3	13.2	9.9	7.4	8.8	7.3	5.3	6.4	8.0	5.6	6.6
29	13.4	10.3	12.1	11.7	9.1	10.4	7.0	4.9	6.0	6.0	2.6	3.7
30	13.8	10.5	12.3	13.7	10.7	12.1	7.5	4.9	6.3	4.3	1.0	2.8
31	14.3	11.5	13.1	---	---	---	9.5	7.1	8.2	3.9	1.3	2.8
Month	20.0	7.2	14.2	15.8	4.6	10.5	16.3	0.7	7.1	13.3	1.0	7.2

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TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	3.5	1.7	2.5	10.1	8.0	9.0	18.2	16.2	17.1	23.4	18.6	21.1
2	4.8	2.3	3.6	13.1	9.7	11.6	20.8	16.8	18.7	24.2	20.5	22.4
3	4.9	2.3	3.7	12.0	9.0	10.5	20.7	16.8	18.8	23.2	18.7	20.9
4	4.3	1.1	2.9	10.9	8.0	9.2	22.3	18.5	20.0	18.7	16.2	17.2
5	3.5	1.0	2.3	9.2	6.0	7.8	19.3	14.9	16.8	17.1	15.6	16.4
6	2.0	0.4	1.2	10.2	7.7	8.8	15.5	11.3	13.6	19.1	15.9	17.3
7	5.2	1.9	3.6	11.6	7.7	9.6	13.8	10.2	12.1	17.8	13.9	15.9
8	5.0	2.5	3.8	11.6	8.4	10.0	12.9	7.6	10.4	16.9	14.6	15.8
9	3.6	1.4	2.6	11.0	7.1	9.2	13.0	8.3	10.8	19.4	16.6	17.8
10	3.8	1.0	2.5	12.4	7.3	10	14.1	8.8	11.6	20.9	17.5	19.1
11	3.1	0.4	2.0	14.6	10.2	12.3	13.5	10.8	11.8	22.5	18.7	20.5
12	5.0	1.2	3.0	13.6	9.2	11.6	16.2	10.8	13.1	23.4	20.7	21.9
13	5.4	4.0	4.9	14.4	10.1	12.2	15.9	12.6	14.4	22.3	19.7	21.3
14	6.0	3.4	4.7	16.5	11.8	14.2	15.4	13.5	14.6	20.5	16.3	18.4
15	5.5	2.7	3.8	17.8	13.7	15.8	15.1	13.4	14.3	21.4	17.0	19.0
16	4.0	2.2	3.3	17.4	9.6	12.6	14.1	11.0	12.6	22.5	19.2	20.7
17	3.4	1.6	2.6	10.0	8.3	9.3	15.8	11.6	13.5	21.2	18.7	19.8
18	4.7	2.3	3.3	9.6	6.7	8.3	15.9	13.7	15.0	18.8	17.0	18.0
19	4.5	1.2	3.1	10.1	6.7	8.6	15.6	14.0	14.8	19.3	15.3	17.2
20	7.1	3.5	5.2	13.9	10.0	11.8	16.2	12.3	14.3	20.4	15.8	18.0
21	10.5	6.3	8.4	13.8	12.2	13.4	18.2	13.2	15.6	21.7	17.2	19.4
22	12.4	8.9	10.5	15.7	11.1	13.1	19.9	14.5	17.1	21.7	19.8	20.7
23	10.2	7.4	8.8	18.3	13.5	15.8	21.1	16.0	18.4	21.8	18.8	20.2
24	8.6	4.7	7.1	19.5	15.9	17.6	21.5	17.5	19.5	22.3	18.3	20.2
25	8.2	6.2	7.2	20.4	15.8	18.2	22.8	18.3	20.6	22.7	18.7	20.6
26	8.9	6.2	7.4	19.3	15.8	17.7	22.5	19.5	21.1	23.6	19.8	21.7
27	9.7	6.7	8.4	20.7	16.5	18.5	22.9	19.5	21.3	24.1	21.0	22.5
28	10.0	7.3	8.8	21.1	17.4	19.3	22.2	19.6	21.0	24.3	20.9	22.6
29	---	---	---	19.6	14.2	15.9	21.8	18.1	19.9	24.6	21.1	22.9
30	---	---	---	15.2	11.1	13.4	22.1	16.7	19.6	25.2	21.9	23.4
31	---	---	---	16.6	13.5	15.1	---	---	---	24.9	21.5	23.2
Month	12.4	0.4	4.7	21.1	6.0	12.6	22.9	7.6	16.1	25.2	13.9	19.9

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TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	25.3	21.9	23.4	25.8	22.6	23.9	27.0	23.0	24.7	---	---	---
2	23.7	21.5	22.7	23.5	20.6	22.1	25.5	22.9	24.3	---	---	---
3	22.5	20.2	20.8	23.5	20.3	21.7	26.0	22.6	24.1	---	---	---
4	22.9	19.5	21.1	25.0	21.4	22.8	26.8	22.6	24.5	---	---	---
5	23.9	20.6	22.2	26.2	22.0	23.5	27.3	23.7	25.3	---	---	---
6	23.5	20.7	22.1	25.9	22.5	24.0	27.8	24.1	25.7	---	---	---
7	24.0	20.1	22.1	25.9	22.5	24.2	28.5	24.3	26.2	---	---	---
8	26.2	22.7	24.3	26.8	23.1	24.8	30.1	25.0	27.1	---	---	---
9	26.7	23.9	25.2	28.2	23.8	25.7	---	---	---	---	---	---
10	26.0	23.3	24.6	27.1	24.8	25.6	---	---	---	---	---	---
11	24.3	22.1	23.1	26.7	23.8	25.0	---	---	---	---	---	---
12	24.3	21.1	22.6	26.7	23.3	24.7	---	---	---	---	---	---
13	23.3	21.3	22.3	24.7	22.5	23.5	---	---	---	---	---	---
14	22.3	19.8	20.8	23.5	20.7	22.2	---	---	---	---	---	---
15	19.8	18.8	19.2	24.9	21.3	23.0	26.6	21.5	23.6	---	---	---
16	21.2	18.2	19.6	26.4	22.9	24.4	27.7	23.1	25.1	---	---	---
17	23.4	19.4	21.3	26.6	23.3	24.6	28.8	24.8	26.4	---	---	---
18	24.6	20.6	22.6	26.8	23.7	25.0	26.4	23.1	24.6	---	---	---
19	25.3	22.2	23.7	27.9	24.1	25.7	---	---	---	---	---	---
20	24.3	22.7	23.4	26.8	24.4	25.4	---	---	---	---	---	---
21	24.0	20.4	22.2	25.2	21.7	23.2	---	---	---	---	---	---
22	23.1	20.2	21.9	23.4	19.8	21.4	---	---	---	---	---	---
23	23.8	21.0	22.2	23.1	19.5	21.1	---	---	---	---	---	---
24	23.2	21.1	22.2	22.5	20.1	21.1	---	---	---	---	---	---
25	24.9	21.6	23.2	24.7	20.5	22.2	---	---	---	---	---	---
26	26.6	22.9	24.6	25.0	20.7	22.6	---	---	---	---	---	---
27	26.8	23.5	25.1	25.7	21.3	23.2	---	---	---	---	---	---
28	27.2	23.8	25.3	24.6	21.8	23.1	---	---	---	---	---	---
29	27.1	24.2	25.5	25.2	22.1	23.5	---	---	---	---	---	---
30	26.1	24.3	25.1	25.5	23.4	24.2	---	---	---	---	---	---
31	---	---	---	25.8	22.5	24.0	---	---	---	---	---	---
Month	27.2	18.2	22.8	28.2	19.5	23.6	---	---	---	---	---	---