01371500 WALLKILL RIVER AT GARDINER, NY

Upper Hudson Basin
Rondout Subbasin

LOCATION.--Lat 41°41′10″, long 74°09′56″ referenced to North American Datum of 1927, Ulster County, NY, Hydrologic Unit 02020007, on left bank 400 ft upstream from bridge on U.S. Highway 44, 500 ft downstream from Shawangunk Kill, and 0.7 mi northwest of Gardiner.

DRAINAGE AREA.--695 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--September 1924 to current year.

REVISED RECORDS.--WSP 756: Drainage area. WDR NY-90-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 185.70 ft above NGVD of 1929.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Regulation at low flows by dams upstream and some diversions for municipalities and irrigational purposes. Satellite and telephone gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,800 ft^3/s, Oct. 16, 1955, gage height, 19.81 ft; minimum discharge, 9.5 ft^3/s, Sept. 28, 1964; minimum gage height, 1.49 ft, Aug. 7, 1999.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,400 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec 24	0830	6,920	7.53
Feb 7	0745	7,440	7.82
Feb 14	0215	11,800	10.14
Feb 18	2315	10,700	9.60
Mar 5	1800	16,400	12.34
Mar 9	0315	*20,800	*13.87

Minimum discharge, 46 ft^3/s, Oct. 6, 7, 8, 9; minimum gage height, 1.85 ft, Sept. 5.

01371500 WALLKILL RIVER AT GARDINER, NY—Continued

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	49	792	1,160	3,360	749	1,720	1,440	1,510	508	215	96	79
2	47	610	933	2,950	2,120	1,580	1,760	1,120	499	192	118	78
3	48	500	1,160	e2,070	2,240	1,500	1,510	1,120	445	191	136	75
4	49	450	1,430	e1,620	1,950	2,070	2,040	1,270	393	197	214	72
5	48	408	1,200	e1,470	2,120	12,400	2,590	1,260	427	197	193	68
6	46	367	939	1,540	4,280	11,000	1,940	1,020	505	196	180	104
7	46	403	773	1,780	6,610	8,020	1,570	831	476	192	248	635
8	46	402	722	2,580	4,280	13,000	1,330	713	404	179	395	842
9	48	355	706	3,520	2,980	16,700	1,140	739	382	171	286	702
10	74	364	836	3,180	2,380	9,740	1,110	1,240	391	182	224	1,030
11	195	431	1,110	2,650	e1,680	7,980	1,020	1,240	348	169	173	776
12	244	477	1,280	2,610	e1,260	7,190	1,310	965	336	141	233	485
13	570	441	1,280	2,070	e3,840	6,090	1,430	766	337	132	348	426
14	620	461	1,160	1,850	9,270	4,630	1,210	666	310	148	390	480
15	450	862	1,100	1,900	7,210	4,060	1,030	608	270	172	322	397
16	303	1,550	944	1,660	6,010	3,710	886	653	269	163	266	266
17	219	1,290	863	1,360	5,030	3,120	839	1,850	285	145	239	208
18	160	967	e881	1,320	7,660	2,480	777	1,800	280	135	229	184
19	175	755	e890	e1,360	9,190	3,130	734	1,540	336	109	182	150
20	244	698	876	e1,250	6,750	5,850	690	1,250	322	105	168	108
21	550	849	825	e905	e4,830	4,510	649	1,080	305	e100	151	113
22	534	859	783	e741	e3,760	3,440	630	1,030	277	e90	108	107
23	395	747	1,080	e700	e3,070	2,810	566	935	365	e95	78	116
24	322	615	6,030	e664	e2,360	2,300	552	812	323	286	84	71
25	275	544	4,800	e610	e2,040	1,940	541	672	267	535	87	100
26	286	978	3,950	e598	1,960	1,690	509	594	256	418	89	136
27	1,360	3,100	3,280	e590	2,590	1,500	489	533	194	310	84	358
28	3,050	2,430	2,900	e575	2,490	1,470	852	577	184	200	79	460
29	2,160	1,740	3,490	574	e1,840	1,440	3,300	724	198	213	76	497
30	1,590	1,410	3,800	630	---	1,270	2,260	635	221	177	79	543
31	1,170	---	3,370	705	---	1,210	---	494	---	162	77	---
Total	15,373	25,855	54,551	49,392	112,549	149,550	36,704	30,247	10,113	5,917	5,632	9,666
Mean	496	862	1,760	1,593	3,881	4,824	1,223	976	337	191	182	322
Max	3,050	3,100	6,030	3,520	9,270	16,700	3,300	1,850	508	535	395	1,030
Min	46	355	706	574	749	1,210	489	494	184	90	76	68
Cfsm	0.71	1.24	2.53	2.29	5.58	6.94	1.76	1.40	0.49	0.27	0.26	0.46
In.	0.82	1.38	2.92	2.64	6.02	8.00	1.96	1.62	0.54	0.32	0.30	0.52

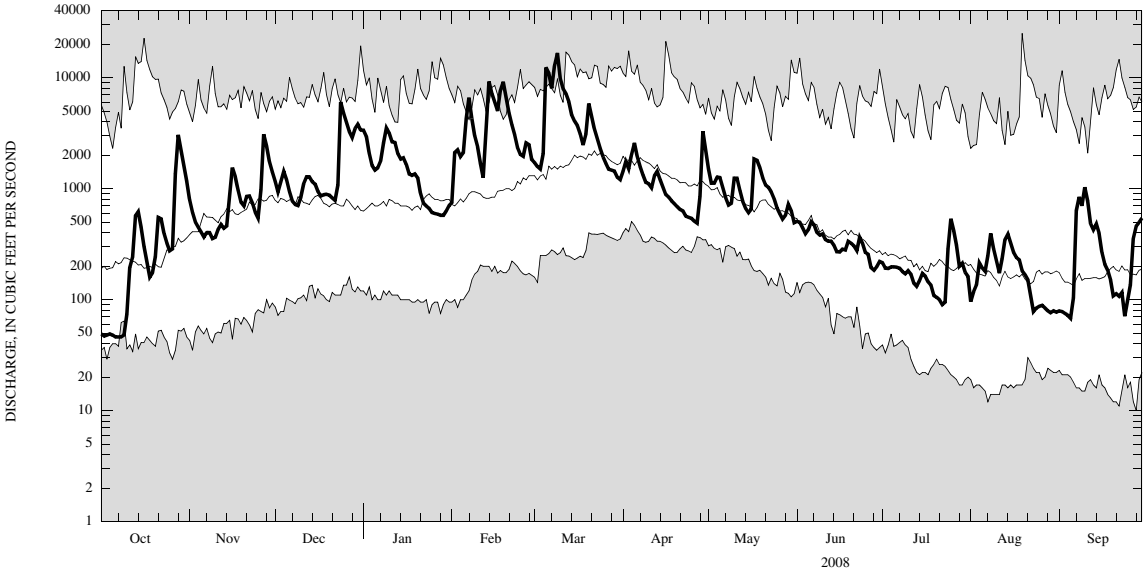
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	615	1,011	1,243	1,262	1,421	2,305	1,926	1,141	757	467	442	506
Max	4,875	3,407	3,773	4,054	3,881	5,947	5,466	4,087	3,688	2,735	3,333	2,664
(WY)	(2006)	(1928)	(1997)	(1996)	(2008)	(1936)	(1983)	(1989)	(1972)	(1928)	(1955)	(1938)
Min	58.2	76.1	149	102	226	444	463	239	98.2	33.6	21.6	18.9
(WY)	(1965)	(1965)	(1999)	(1925)	(2002)	(2002)	(1946)	(1941)	(1965)	(1966)	(1966)	(1964)

01371500 WALLKILL RIVER AT GARDINER, NY—Continued

SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1925 - 2008	
Annual total	398,655		505,549			
Annual mean	1,092		1,381		1,089	
Highest annual mean					1,900	1928
Lowest annual mean					390	1965
Highest daily mean	21,300	Apr 16	16,700	Mar 9	25,200	Aug 19, 1955
Lowest daily mean	46	Oct 6	46	Oct 6	10	Sep 28, 1964
Annual seven-day minimum	47	Oct 2	47	Oct 2	13	Sep 17, 1964
Annual runoff (cfsm)	1.57		1.99		1.57	
Annual runoff (inches)	21.34		27.06		21.29	
10 percent exceeds	2,400		3,320		2,700	
50 percent exceeds	480		694		580	
90 percent exceeds	118		112		108	



CURRENT WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.