Water-Data Report 2013

01531000 CHEMUNG RIVER AT CHEMUNG, NY

Upper Susquehanna Basin
Chemung Subbasin

LOCATION.--Lat 42°00′08″, long 76°38′05″ referenced to North American Datum of 1983, Chemung County, NY, Hydrologic Unit 02050105, on right bank 100 ft upstream from bridge on State Highway 427, 0.7 mi southwest of Chemung, and 10.0 mi upstream from mouth.

DRAINAGE AREA.--2,506 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--September 1903 to current year (gage heights only for some winter periods).

REVISED RECORDS.--WSP 891: 1935-39. WSP 1432: 1904, 1907, 1915. WSP 2103: Drainage area. WDR NY-74-1: 1973.

GAGE.--Water-stage recorder. Datum of gage is 778.63 ft above NGVD of 1929 (levels by Corps of Engineers). Prior to Jan. 10, 1930, nonrecording gage on highway bridge 60 ft upstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. High flows significantly regulated by upstream reservoirs. During each year a large part of flow from 45.5 mi^2 of drainage area is diverted upstream from Lake Lamoka on Mud Creek, an upstream tributary, into Keuka Lake (Oswego River basin) for power development. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, since construction of Tioga, Hammond and Cowanesque Lakes in 1979, 77,800 ft^3/s, Jan. 20, 1996, gage height 19.71 ft; minimum discharge, 104 ft^3/s, Sept. 3, 1991, gage height, 2.82 ft.

EXTREMES FOR PERIOD PRIOR TO REGULATION.--Maximum discharge, prior to construction of Tioga, Hammond and Cowanesque Lakes in 1979, 189,000 ft^3/s, June 23, 1972, gage height, 31.62 ft, from floodmark, from rating curve extended above 65,000 ft^3/s on basis of slope-area and velocity-area studies at gage height 19.57 ft, and slope-area and contracted-opening measurements at gage heights 23.97 ft and 31.62 ft, respectively; minimum discharge, 49 ft^3/s, Aug. 14, 1911, gage height, 1.47 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 31,300 ft^3/s, Jan. 31, gage height, 12.95 ft; minimum discharge, 222 ft^3/s, Oct. 17, 18, gage height, 2.77 ft.

Suggested citation: U.S. Geological Survey, 2014, Water-resources data for the United States, Water Year 2013: U.S. Geological Survey Water-Data Report WDR-US-2013, site 01531000, accessed at http://wdr.water.usgs.gov/wy2013/pdfs/01531000.2013.pdf

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	310	7,430	595	2,370	17,400	2,750	3,250	2,030	1,300	5,410	568	394
2	290	4,280	583	2,270	12,100	2,390	4,130	1,890	1,050	9,740	498	1,210
3	282	2,980	583	2,210	8,560	2,130	3,350	1,650	986	4,700	461	649
4	280	2,340	602	2,150	5,970	1,910	2,760	1,500	909	2,800	425	498
5	272	1,920	711	2,080	4,890	1,790	2,410	1,320	793	1,880	396	394
6	269	1,570	1,400	2,080	4,260	1,690	2,250	1,190	717	1,370	360	349
7	262	1,350	1,310	2,080	3,390	1,650	2,130	1,080	946	1,070	347	323
8	252	1,250	1,260	2,030	2,980	1,650	2,120	1,010	1,490	963	e425	312
9	253	1,150	1,650	1,970	e2,380	1,670	2,290	1,300	1,190	1,010	e4,500	305
10	256	1,030	1,820	2,110	e2,000	2,140	3,440	1,580	1,000	994	6,060	286
11	257	954	3,180	2,340	e1,980	3,860	13,400	2,160	1,030	946	2,190	279
12	255	904	3,490	3,470	2,410	9,760	12,400	2,400	1,670	840	1,130	335
13	245	954	2,470	12,000	2,440	14,700	13,300	2,140	1,730	725	849	365
14	242	1,130	2,000	19,400	2,390	8,170	9,000	1,730	2,650	631	974	523
15	239	1,120	1,740	13,000	2,430	5,700	6,890	1,470	3,070	562	906	492
16	240	1,060	1,640	8,080	2,400	4,640	5,610	1,340	2,030	519	771	419
17	226	884	1,730	6,410	2,190	3,880	5,700	1,210	1,510	480	649	378
18	223	853	10,100	5,020	1,710	3,150	5,020	1,030	1,240	455	527	351
19	283	824	12,800	4,160	1,650	3,010	4,360	928	1,010	460	458	321
20	314	787	7,940	3,870	1,640	3,120	5,930	895	851	430	413	304
21	311	768	10,300	3,400	1,450	2,730	4,840	853	757	411	381	307
22	305	749	12,500	2,520	1,320	2,470	4,020	794	669	398	364	586
23	310	739	7,420	e1,580	1,280	2,230	3,520	821	611	1,710	355	823
24	644	746	5,410	e1,160	1,250	2,020	3,000	941	712	2,320	332	565
25	1,050	722	4,360	e950	1,230	2,000	3,190	978	793	1,520	314	458
26	852	691	3,740	e900	1,160	2,010	3,000	889	762	960	314	414
27	703	677	3,240	e850	1,400	1,990	2,530	764	733	702	354	369
28	622	656	2,920	e800	2,330	2,150	2,230	710	1,080	667	343	346
29	735	643	2,790	e750	---	2,270	2,130	1,740	1,350	862	345	344
30	13,400	621	2,740	6,030	---	2,270	2,050	3,950	1,170	789	326	339
31	11,900	---	2,430	24,100	---	2,340	---	2,030	---	631	319	---
Total	36,082	41,782	115,454	142,140	96,590	104,240	140,250	44,323	35,809	46,955	26,654	13,038
Mean	1,164	1,393	3,724	4,585	3,450	3,363	4,675	1,430	1,194	1,515	860	435
Max	13,400	7,430	12,800	24,100	17,400	14,700	13,400	3,950	3,070	9,740	6,060	1,210
Min	223	621	583	750	1,160	1,650	2,050	710	611	398	314	279

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,509	2,236	3,109	2,946	3,087	5,674	6,207	3,207	2,095	1,084	944	1,163
Max	6,774	8,107	6,688	8,569	7,695	14,800	21,600	9,014	7,418	3,601	5,001	10,270
(WY)	(1991)	(1997)	(1997)	(1996)	(1981)	(2011)	(1993)	(2011)	(1989)	(2003)	(1994)	(2004)
Min	199	266	282	459	631	1,750	2,204	696	280	196	161	169
(WY)	(1992)	(1999)	(1999)	(1981)	(1980)	(1981)	(2012)	(1985)	(1999)	(1991)	(1999)	(1991)

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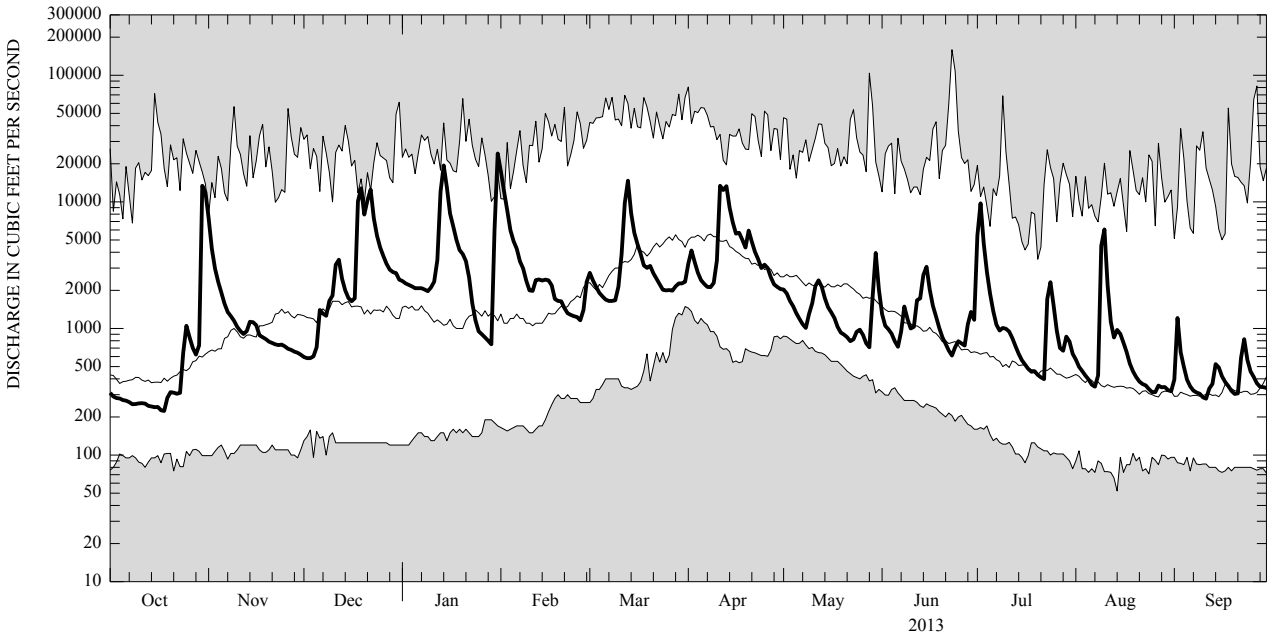
SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1980 - 2013	
Annual total	687,841		843,317			
Annual mean	1,879		2,310		2,768	
Highest annual mean					4,830	2011
Lowest annual mean					1,513	1999
Highest daily mean	13,400	Oct 30	24,100	Jan 31	65,400	Jan 20, 1996
Lowest daily mean	207	Aug 26	223	Oct 18	113	Sep 3, 1991
Annual seven-day minimum	231	Aug 21	239	Oct 12	125	Sep 1, 1991
10 percent exceeds	4,360		5,180		6,350	
50 percent exceeds	1,090		1,260		1,300	
90 percent exceeds	271		334		295	



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.