01531000 CHEMUNG RIVER AT CHEMUNG, NY

Chemung Watershed

LOCATION.--Lat 42°00′08″, long 76°38′06″ referenced to North American Datum of 1927, Chemung County, 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.

WATER-DISCHARGE 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 1974: 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, prior to construction of Tioga Reservoir 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 and 31.62 ft; minimum discharge, 49 ft^3/s, Aug. 14, 1911, gage height, 1.47 ft. Maximum discharge, since construction of Tioga Reservoir 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 CURRENT YEAR.--Maximum discharge, 58,600 ft^3/s, Apr 3, gage height, 17.40 ft; minimum discharge, 161 ft^3/s, Aug 26, 27, 28, gage height, 2.70 ft.

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1,690	1,350	7,610	2,820	e1,900	2,180	17,600	2,600	752	1,090	260	5,140
2	1,490	1,220	12,100	2,940	e1,750	2,190	20,900	2,640	711	773	247	2,340
3	1,350	1,420	6,960	2,960	e1,650	2,020	52,000	2,330	664	549	236	1,110
4	1,320	2,090	5,390	6,840	1,680	1,820	26,300	2,080	636	486	227	673
5	1,210	2,660	4,320	7,070	1,600	e1,700	24,700	1,900	619	468	219	531
6	1,100	2,640	3,810	5,390	e1,550	e1,680	21,800	1,740	633	588	205	460
7	1,050	2,360	3,880	5,920	e1,650	1,860	18,800	1,620	838	544	194	398
8	1,010	2,030	5,400	6,160	2,400	5,810	14,500	1,540	782	594	190	371
9	976	1,730	4,460	6,350	e6,200	6,570	11,400	1,410	714	1,200	188	350
10	942	1,550	6,600	5,370	e12,000	4,360	9,730	1,350	654	1,240	261	331
11	897	1,460	18,100	4,950	8,190	3,360	6,720	1,320	3,660	797	270	315
12	842	1,400	14,000	5,120	5,190	3,120	4,610	1,230	1,570	626	226	305
13	822	1,320	8,470	17,800	4,390	2,930	3,750	1,150	2,550	541	248	299
14	817	1,270	6,760	42,000	3,810	2,660	3,410	1,100	1,750	474	284	292
15	840	1,150	5,170	21,400	4,550	e2,300	3,000	1,120	1,410	409	305	282
16	985	1,120	4,210	17,500	7,940	e2,200	2,760	1,110	1,190	382	272	280
17	1,120	1,090	3,710	13,200	7,650	2,120	2,570	1,070	1,120	367	265	278
18	1,000	1,090	3,280	8,800	5,250	2,340	2,400	1,010	1,100	372	244	279
19	1,440	1,090	2,990	4,770	e3,800	2,590	2,160	963	1,070	392	222	272
20	3,070	1,090	2,570	4,810	e3,500	2,990	1,980	928	911	371	216	276
21	2,470	1,120	e1,800	e4,200	3,450	4,870	2,040	905	806	340	211	262
22	2,200	1,130	e2,000	e2,900	3,350	4,720	2,040	877	770	328	203	237
23	1,950	1,100	2,950	e2,400	3,150	5,380	2,220	866	821	331	196	235
24	e1,600	1,100	10,700	e2,600	2,640	4,800	4,110	874	574	317	192	228
25	e1,500	2,180	5,090	e2,600	2,490	5,030	4,820	893	529	304	177	220
26	1,460	3,090	e3,200	e2,500	2,330	5,920	3,770	913	475	294	169	239
27	1,360	2,450	3,040	e2,300	2,110	6,630	3,150	990	448	293	166	284
28	1,240	6,810	2,280	e2,000	2,130	17,200	2,560	1,070	436	296	165	399
29	1,170	13,100	e2,550	e1,900	---	28,500	2,260	911	457	286	168	475
30	1,170	6,640	2,630	e2,000	---	19,900	2,160	840	920	277	335	435
31	1,500	---	2,620	e1,950	---	17,100	---	787	---	271	1,470	---
Total	41,591	69,850	168,650	219,520	108,300	176,850	280,220	40,137	29,570	15,600	8,231	17,596
Mean	1,342	2,328	5,440	7,081	3,868	5,705	9,341	1,295	986	503	266	587
Max	3,070	13,100	18,100	42,000	12,000	28,500	52,000	2,640	3,660	1,240	1,470	5,140
Min	817	1,090	1,800	1,900	1,550	1,680	1,980	787	436	271	165	220

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2005, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,260	2,205	2,926	2,658	3,100	5,267	6,622	3,357	2,194	1,129	1,008	1,088
Max	6,774	8,107	6,688	8,569	7,695	10,420	21,600	8,901	7,418	3,601	5,001	10,270
(WY)	(1991)	(1997)	(1997)	(1996)	(1981)	(2003)	(1993)	(1996)	(1989)	(2003)	(1994)	(2004)
Min	199	266	282	459	631	1,750	2,214	696	280	196	161	169
(WY)	(1992)	(1999)	(1999)	(1981)	(1980)	(1981)	(1981)	(1985)	(1999)	(1991)	(1999)	(1991)

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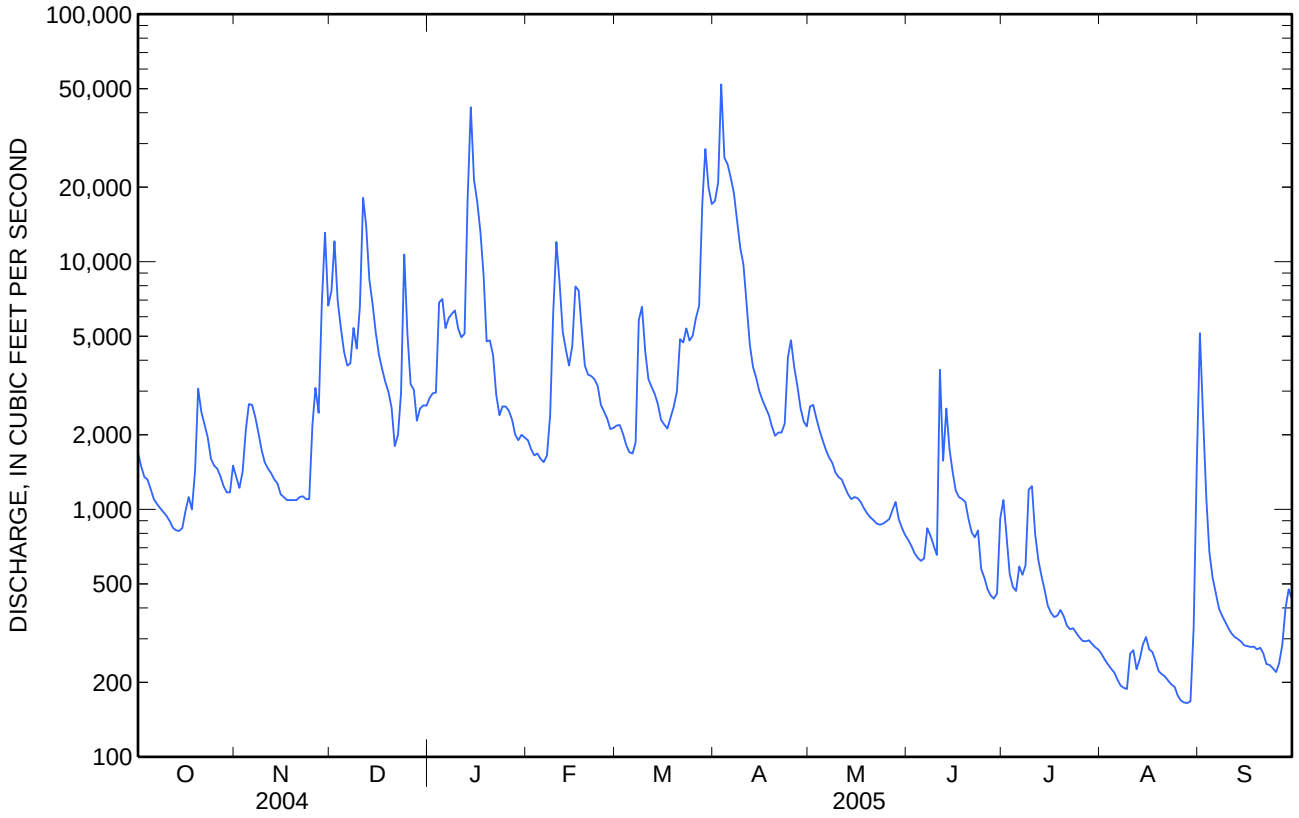
SUMMARY STATISTICS

	Calendar Year 2004		Water Year 2005		Water Years 1980 - 2005	
Annual total	1,606,270		1,176,115			
Annual mean	4,389		3,222		2,729	
Highest annual mean					4,763	2004
Lowest annual mean					1,513	1999
Highest daily mean	55,100	Sep 18	52,000	Apr 3	65,400	Jan 20, 1996
Lowest daily mean	544	Jul 7	165	Aug 28	113	Sep 3, 1991
Annual seven-day minimum	606	Jul 1	176	Aug 23	125	Sep 1, 1991
10 percent exceeds	9,360		6,740		6,240	
50 percent exceeds	2,620		1,550		1,260	
90 percent exceeds	1,060		277		277