04282000 OTTER CREEK AT CENTER RUTLAND, VT

St Lawrence Basin
Otter Subbasin

LOCATION.--Lat 43°36′13″, long 73°00′49″ referenced to North American Datum of 1927, Rutland County, Hydrologic Unit 02010002, on right bank, 200 ft downstream from dam, 500 ft upstream from bridge on US Highway 4 (Business) in Center Rutland, 0.3 mi upstream of Clarendon River, 1.2 mi downstream from East Creek, and 2.1 mi west of US 7N and 4E intersection in Rutland.

DRAINAGE AREA.--307 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Discharge records: May 1928 to current year.

REVISED RECORDS.--WSP 1084: 1929.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 474.80 ft above National Geodetic Vertical Datum of 1929; prior to October 1, 1964, datum was 1.00 ft higher. Prior to July 22, 1929, nonrecording gage at same site.

COOPERATION.--Vermont Department of Environmental Conservation.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow regulated by power plants and Chittenden Reservoir 14 mi upstream on East Creek. These reservoirs have a combined usable capacity of about 819.8 million ft^3. Prior to June 3, 1947, regulation by East Pittsford Reservoir, usable capacity, 150 million ft^3.

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

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct 1	1400	5,060	9.56
Oct 16	1745	3,870	8.11
Apr 13	0200	4,880	9.35
Apr 28	1715	4,340	8.70
Aug 29	0230	*15,700	*17.43

Minimum daily discharge, 124 ft^3/s, Aug. 14.

Suggested citation: U.S. Geological Survey, 2012, Water-resources data for the United States, Water Year 2011: U.S. Geological Survey Water-Data Report WDR-US-2011, site 04282000, accessed at http://wdr.water.usgs.gov/wy2011/pdfs/04282000.2011.pdf

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	3,400	981	978	578	e290	e420	806	1,500	468	440	198	1,860
2	3,960	883	2,270	930	e280	e390	821	1,200	438	329	201	1,420
3	2,110	814	1,990	1,030	e280	e340	836	1,090	415	304	185	1,080
4	899	862	1,210	829	e280	e335	877	1,480	342	474	184	953
5	660	1,550	916	760	e290	e350	1,240	1,990	308	384	175	1,140
6	635	1,440	808	604	e310	1,220	1,500	1,940	317	344	128	1,670
7	1,290	1,010	789	590	e330	2,120	1,210	1,480	281	471	164	1,780
8	1,090	898	725	634	e310	e1,880	1,160	1,200	254	332	315	2,580
9	798	908	611	603	e290	e1,620	1,200	1,050	527	526	283	2,890
10	654	1,030	e390	535	e295	1,370	1,460	940	902	499	411	1,750
11	572	924	551	e510	e285	1,520	2,270	877	553	352	258	1,040
12	481	796	625	e475	e285	1,970	3,920	809	629	270	199	835
13	363	735	2,250	e505	e290	2,010	4,570	745	678	277	155	726
14	468	685	2,460	e495	e310	1,730	3,590	701	553	369	124	680
15	1,680	640	1,480	e445	e320	1,390	2,810	1,000	512	316	533	625
16	3,500	614	1,040	e465	e300	1,240	2,070	1,760	399	224	1,520	680
17	3,320	1,010	870	e440	e310	1,300	2,040	1,590	380	176	1,100	565
18	2,110	1,390	858	e440	e445	2,090	2,420	1,270	543	455	613	455
19	1,360	1,000	759	e450	e700	3,100	2,020	1,440	488	575	408	408
20	1,090	838	693	e440	e620	2,500	1,780	1,600	358	356	389	418
21	976	743	668	e420	e550	1,750	1,760	1,410	294	275	382	447
22	1,020	678	706	e390	e450	1,420	1,460	1,320	309	244	1,830	660
23	901	705	725	e370	e410	1,230	1,300	1,150	891	188	1,710	1,120
24	821	704	690	e340	e410	1,120	1,440	1,010	865	154	887	922
25	848	590	e600	e340	e420	1,040	1,610	906	711	151	670	781
26	1,420	623	e560	e345	e410	926	3,080	795	682	184	849	608
27	2,340	651	e450	e335	e405	877	3,330	812	624	304	776	518
28	2,250	532	e520	e320	e390	829	3,680	718	460	196	5,440	459
29	1,660	542	e520	e310	---	793	3,410	647	637	217	13,500	870
30	1,360	576	e510	e310	---	762	2,300	578	584	422	6,700	2,000
31	1,130	---	e500	e295	---	780	---	513	---	224	3,430	---
Total	45,166	25,352	28,722	15,533	10,265	40,422	61,970	35,521	15,402	10,032	43,717	31,940
Mean	1,457	845	927	501	367	1,304	2,066	1,146	513	324	1,410	1,065
Max	3,960	1,550	2,460	1,030	700	3,100	4,570	1,990	902	575	13,500	2,890
Min	363	532	390	295	280	335	806	513	254	151	124	408
Cfsm	4.75	2.75	3.02	1.63	1.19	4.25	6.73	3.73	1.67	1.05	4.59	3.47
In.	5.47	3.07	3.48	1.88	1.24	4.90	7.51	4.30	1.87	1.22	5.30	3.87

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	386	527	544	498	465	842	1,468	821	451	303	269	260
Max	1,457	1,184	1,299	1,163	1,564	2,376	3,078	2,120	1,565	1,047	1,591	1,385
(WY)	(2011)	(2006)	(2009)	(2006)	(1981)	(1936)	(1969)	(1940)	(1947)	(1976)	(1976)	(1938)
Min	86.5	141	126	100	110	231	445	271	130	78.2	65.5	78.4
(WY)	(1965)	(1965)	(1948)	(1948)	(1980)	(1965)	(1995)	(1941)	(1965)	(1965)	(1999)	(1964)

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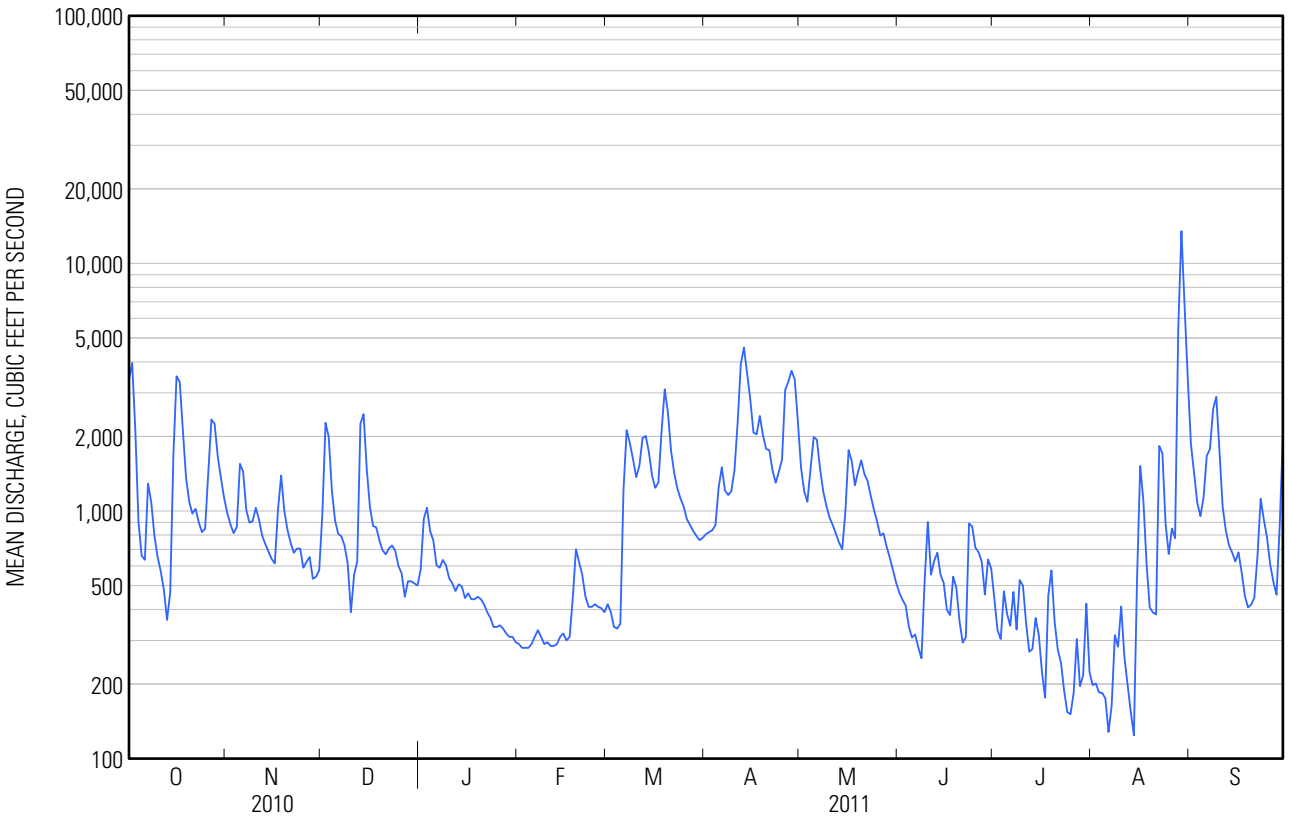
SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1928 - 2011	
Annual total	280,554		364,042			
Annual mean	769		997		569	
Highest annual mean					1,049	1976
Lowest annual mean					239	1965
Highest daily mean	4,050	Mar 24	13,500	Aug 29	13,500	Aug 29, 2011
Lowest daily mean	76	Sep 26	124	Aug 14	38	Aug 3, 1999
Annual seven-day minimum	83	Sep 3	176	Aug 1	48	Aug 1, 1999
Maximum peak flow			[a]15,700	Aug 29	[a]15,700	Aug 29, 2011
Maximum peak stage			17.43	Aug 29	17.43	Aug 29, 2011
Annual runoff (cfsm)	2.50		3.25		1.85	
Annual runoff (inches)	34.00		44.11		25.17	
10 percent exceeds	1,680		2,000		1,240	
50 percent exceeds	575		700		355	
90 percent exceeds	135		292		135	

[a] From rating curve extended above 7,300 ft³/s on basis of measurements of peak flow over dam at gage heights 13.25 ft and 17.43 ft.