

04283500 EAST BARRE DETENTION RESERVOIR AT EAST BARRE, VT

Richelieu Basin
Winooski Subbasin

LOCATION.--Lat 44°09'18", long 72°26'42" referenced to North American Datum of 1927, Washington County, Hydrologic Unit 02010003, at dam on Jail Branch at East Barre, 4.5 mi upstream from mouth.

DRAINAGE AREA.--38.8 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Gage heights and contents: Monthend readings only, February 1936 (in WSP 1307), March and April 1936 (in WSP 798), May 1936 to August 1938 (in WSP 1307), September 1938 (in WSP 867), October 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage at National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to August 30, 1960, nonrecording gage, and August 30 to September 30, 1960, water-stage recorder, at present site at datum 1,127.9 ft above National Geodetic Vertical Datum of 1929.

COOPERATION.--Vermont Department of Environmental Conservation.

REMARKS.--Reservoir is formed by earthfill dam completed by U.S. Army Corps of Engineers in 1935 for flood control. Usable capacity, 529 million ft³ between elevation 1,124.9 ft (bottom of outlet opening) and 1,165.0 ft (crest of spillway). Dam has no gates; below elevation 1,165.0 ft, outflow from reservoir is dependent on capacity of outlet opening near base of dam. Outlet-opening enlargement and reservoir-construction modifications completed in November 1959. Size of opening since enlargement, height, 7 ft and average width, 3.7 ft. Figures given herein represent usable contents, determined from capacity tables furnished by U.S. Army Corps of Engineers.

Usable Capacity table

Elevation, in feet	Contents, in millions of cubic feet
1,125.0	0.1
1,130.0	5.6
1,135.0	13.2
1,140.0	34.9
1,145.0	86.1
1,150.0	165.5
1,155.0	268.0
1,160.0	390.0
1,165.0	529.0

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,163.9 ft, present datum, March 22, 1936; minimum not determined.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,148.54 ft, Apr. 13; minimum elevation, 1,126.12 ft, Aug. 3.

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GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	---	---	---	1,127.43	1,127.42	1,129.11	1,131.86	1,132.36	1,127.61	1,126.26	1,129.62
2	---	---	---	---	1,127.40	1,127.39	1,129.04	1,131.13	1,130.18	1,127.52	1,126.20	1,128.64
3	---	---	---	---	1,127.49	1,127.31	1,129.34	1,130.88	1,129.77	1,127.49	1,126.18	1,128.32
4	---	---	---	---	1,127.45	1,127.31	1,129.41	1,133.36	1,129.36	1,127.48	1,126.23	1,128.19
5	---	---	---	---	1,127.41	1,127.38	1,130.91	1,135.88	1,129.11	1,127.24	1,126.20	1,128.44
6	---	---	---	---	1,127.45	1,131.33	1,130.70	1,131.81	1,128.97	1,127.19	1,126.21	1,131.51
7	---	---	---	---	1,127.42	1,132.78	1,130.01	1,130.59	1,128.70	1,127.98	1,126.28	1,129.73
8	---	---	---	---	1,127.50	1,130.77	1,130.39	1,130.12	1,128.49	1,127.39	1,126.32	1,129.70
9	---	---	---	---	1,127.41	1,129.55	1,131.45	1,129.80	1,129.17	1,127.27	1,126.30	1,128.97
10	---	---	---	---	1,127.42	1,129.15	1,133.80	1,129.43	1,129.23	1,127.04	1,127.21	1,128.48
11	---	---	---	---	1,127.39	1,130.07	1,143.37	1,129.24	1,129.09	1,126.70	1,126.64	1,128.09
12	---	---	---	---	1,127.34	1,132.77	1,147.90	1,129.03	1,130.07	1,126.66	1,126.43	1,127.97
13	---	---	---	---	1,127.30	1,131.46	1,148.35	1,128.86	1,130.15	1,126.59	1,126.37	1,127.83
14	---	---	---	---	1,127.32	1,130.51	1,147.75	1,128.90	1,129.93	1,127.59	1,126.33	1,127.73
15	---	---	---	---	1,127.43	1,129.76	1,146.60	1,134.24	1,129.05	1,126.65	1,127.84	1,127.97
16	---	---	---	---	1,127.31	1,129.59	1,144.72	1,139.53	1,128.55	1,126.50	1,130.70	1,128.27
17	---	---	---	---	1,127.33	1,129.71	1,142.67	1,133.36	1,128.27	1,126.41	1,127.84	1,127.69
18	---	---	---	---	1,128.55	1,132.81	1,141.11	1,131.20	1,128.46	1,126.44	1,126.97	1,127.52
19	---	---	---	---	1,129.99	1,135.55	1,136.84	1,131.91	1,128.23	1,126.55	1,126.73	1,127.39
20	---	---	---	---	1,128.48	1,131.96	1,137.06	1,131.26	1,127.90	1,126.42	1,126.63	1,127.34
21	---	---	---	---	1,127.92	1,130.70	1,139.21	1,131.97	1,127.70	1,126.30	1,126.63	1,127.36
22	---	---	---	1,127.80	1,127.71	1,130.11	1,134.07	1,130.79	1,127.55	1,126.22	1,128.14	1,127.38
23	---	---	---	1,127.69	1,127.59	1,129.77	1,133.51	1,129.97	1,129.24	1,126.15	1,126.83	1,127.80
24	---	---	---	1,127.56	1,127.54	1,129.62	1,134.08	1,129.68	1,130.03	1,126.15	1,126.61	1,128.02
25	---	---	---	1,127.56	1,127.51	1,129.35	1,134.99	1,129.24	1,129.48	1,126.16	1,126.51	1,127.72
26	---	---	---	1,127.52	1,127.57	1,129.30	1,139.44	1,129.56	1,128.87	1,126.77	1,126.71	1,127.36
27	---	---	---	1,127.57	1,127.42	1,129.21	1,141.01	1,146.46	1,128.41	1,126.87	1,126.92	1,127.19
28	---	---	---	1,127.53	1,127.42	1,129.13	1,141.56	1,147.29	1,127.99	1,126.53	1,135.30	1,127.08
29	---	---	---	1,127.51	---	1,128.93	1,141.47	1,145.75	1,127.87	1,126.42	1,147.26	1,129.00
30	---	---	---	1,127.51	---	1,128.93	1,137.09	1,143.85	1,127.71	1,126.52	1,144.63	1,134.50
31	---	---	---	1,127.47	---	1,129.04	---	1,140.95	---	1,126.36	1,140.25	---
Mean	---	---	---	---	1,127.62	1,129.96	1,137.23	1,133.48	1,129.00	1,126.81	1,128.76	1,128.43
Max	---	---	---	---	1,129.99	1,135.55	1,148.35	1,147.29	1,132.36	1,127.98	1,147.26	1,134.50
Min	---	---	---	---	1,127.30	1,127.31	1,129.04	1,128.86	1,127.55	1,126.15	1,126.18	1,127.08
Contents, in millions of cubic feet, at the end of the month	---	---	---	2.5	2.6	4.6	8.8	23.2	2.8	1.4	14.2	5.3
Change in contents, equivalent in cubic feet per second	---	---	---	---	0.03	0.74	1.64	5.38	-7.87	-0.52	4.78	-3.43

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