

Water-Data Report 2013

05057500 LAKE ASHTABULA AT BALDHILL DAM, ND

Devils Lake-Sheyenne Basin
Middle Sheyenne Subbasin

LOCATION.--Lat 47°02'00", long 98°05'00" referenced to North American Datum of 1927, in NW ¼ sec.18, T.141 N., R.58 W., Barnes County, ND, Hydrologic Unit 09020203, at Baldhill Dam on Sheyenne River and 8 mi northwest of Valley City.

DRAINAGE AREA.--7,470 mi² of which 5,560 mi² probably is noncontributing, including 3,800 mi² in closed basins.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--MONTH-END ELEVATION AND CONTENTS--July 1949 to current year.

PERIOD OF RECORD.--DAILY ELEVATION--October 2000 to current year.

REVISED RECORDS.--WSP 1238: 1950(M). WSP 1728: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is at National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by an earth-filled dam, 1,650 ft long; storage began on July 30, 1949; dam completed September 1949. Usable capacity, 69,100 acre-ft between invert of outlet conduit, elevation, 1,238.0 ft, and normal pool level, elevation 1,266.0 ft. Dead storage below elevation 1,238.0 ft, 1,500 acre-ft. Maximum pool elevation, 1,278.5 ft, capacity, 157,500 acre-ft. Maximum elevation and capacity increased by construction, which was completed in the fall of 2003. Low flows are controlled by 2 sluice gates 3 ft in diameter. The spillway crest is 120 ft long at elevation 1,252.0 ft, surmounted by 3 taintor gates, each 15 ft high and 40 ft long. The reservoir is operated for flood control and to increase low-water flow. Figures given for storage capacity (in acre-ft) based on capacity table dated 1978 (provided by U.S. Army Corps of Engineers).

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 98,210 acre-ft, April 7, 2004, elevation, 1,270.51 ft; minimum since reservoir first reached spillway level, 6,660 acre-ft, August 11-14, 1950, elevation 1,245.13 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 74,590 acre-ft, May 14, elevation, 1,266.70 ft; minimum, 30,820 acre-ft, April 3, elevation, 1,256.94 ft.

MONTH-END ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Date	Elevation,in ft	Contents,in acre-ft	Change in contents
Sep. 30	1,265.72	69,030	
Oct. 31	1,265.88	69,930	+900
Nov. 30	1,265.49	67,740	-2,190
Dec. 31	1,264.64	63,020	-4,720
CAL YR 2012	-----	-----	+9,820
Jan. 31	1,263.70	58,000	-5,020
Feb. 28	1,262.55	52,480	-5,520
Mar. 31	1,256.96	30,880	-21,600
Apr. 30	1,261.26	46,670	+15,790
May 31	1,266.50	73,450	+26,780
June 30	1,265.94	70,260	-3,190
July 31	1,265.86	69,820	-440
Aug. 31	1,266.03	70,770	+950
Sep. 30	1,266.06	70,940	+170
WTR YR 2013	-----	-----	+1,910

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ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1,265.75	1,265.86	1,265.48	1,264.63	1,263.69	1,262.53	1,256.96	1,261.43	1,266.39	1,265.93	1,265.86	1,266.05
2	1,265.66	1,265.82	1,265.47	1,264.59	1,263.64	1,262.49	1,256.95	1,261.71	1,266.14	1,265.90	1,265.87	1,266.00
3	1,265.92	1,265.84	1,265.45	1,264.56	1,263.61	1,262.45	1,256.96	1,261.99	1,266.05	1,265.86	1,265.88	1,265.98
4	1,265.98	1,265.85	1,265.44	1,264.54	1,263.56	1,262.44	1,256.96	1,262.45	1,265.99	1,265.83	1,265.85	1,266.02
5	1,265.93	1,265.83	1,265.43	1,264.52	1,263.52	1,262.32	1,256.97	1,262.67	1,265.95	1,265.86	1,265.91	1,265.96
6	1,265.88	1,265.95	1,265.40	1,264.49	1,263.48	1,262.15	1,257.00	1,262.99	1,265.81	1,265.89	1,265.95	1,265.95
7	1,265.82	1,265.87	1,265.39	1,264.46	1,263.43	1,261.98	1,257.03	1,263.57	1,265.73	1,265.93	1,265.94	1,266.01
8	1,265.83	1,265.96	1,265.37	1,264.45	1,263.39	1,261.76	1,257.07	1,264.37	1,265.73	1,265.91	1,265.88	1,265.95
9	1,265.83	1,266.02	1,265.35	1,264.42	1,263.34	1,261.52	1,257.09	1,265.09	1,265.83	1,265.99	1,265.78	1,266.04
10	1,265.74	1,265.98	1,265.32	1,264.40	1,263.32	1,261.28	1,257.11	1,265.55	1,265.85	1,265.95	1,265.65	1,265.95
11	1,265.72	1,265.90	1,265.29	1,264.39	1,263.29	1,261.03	1,257.14	1,266.00	1,265.90	1,265.84	1,265.57	1,265.88
12	1,265.60	1,265.89	1,265.26	1,264.36	1,263.25	1,260.78	1,257.15	1,266.20	1,265.91	1,265.77	1,265.49	1,265.86
13	1,265.67	1,265.83	1,265.23	1,264.34	1,263.22	1,260.53	1,257.16	1,266.36	1,265.88	1,265.72	1,265.46	1,265.81
14	1,265.67	1,265.75	1,265.20	1,264.31	1,263.19	1,260.28	1,257.20	1,266.54	1,265.86	1,265.66	1,265.43	1,265.85
15	1,265.60	1,265.67	1,265.17	1,264.28	1,263.14	1,260.05	1,257.23	1,266.54	1,265.88	1,265.54	1,265.41	1,265.97
16	1,265.62	1,265.62	1,265.13	1,264.27	1,263.10	1,259.80	1,257.23	1,266.50	1,265.87	1,265.53	1,265.36	1,265.89
17	1,265.66	1,265.61	1,265.11	1,264.23	1,263.06	1,259.54	1,257.22	1,266.34	---	1,265.81	1,265.36	1,265.88
18	1,265.92	1,265.61	1,265.08	1,264.21	1,263.01	1,259.29	1,257.22	1,266.24	1,265.87	1,266.01	1,265.46	1,265.92
19	1,265.83	1,265.59	1,265.04	1,264.18	1,262.97	1,259.03	1,257.21	1,266.28	1,265.88	1,266.15	1,265.73	1,265.94
20	1,265.69	1,265.58	1,265.02	1,264.15	1,262.92	1,258.76	1,257.18	1,266.22	1,265.94	1,266.18	1,265.92	1,265.96
21	1,265.77	1,265.58	1,264.98	1,264.12	1,262.88	1,258.49	1,257.15	1,266.13	1,266.29	1,266.08	1,266.06	1,265.94
22	1,265.79	1,265.60	1,264.95	1,264.09	1,262.83	1,258.21	1,257.14	1,265.85	1,266.39	1,266.07	1,265.99	1,265.90
23	1,265.73	1,265.58	1,264.93	1,264.07	1,262.79	1,257.92	1,257.07	1,265.68	1,266.37	1,265.98	1,265.91	1,265.87
24	1,265.74	1,265.55	1,264.89	1,264.03	1,262.75	1,257.64	1,257.03	1,265.68	1,266.32	1,265.95	1,265.90	1,265.95
25	1,265.73	1,265.53	1,264.85	1,264.00	1,262.70	1,257.37	1,257.05	1,265.84	1,266.26	1,265.94	1,265.99	1,265.93
26	1,265.67	1,265.53	1,264.83	1,263.95	1,262.66	1,257.18	1,257.22	1,265.98	1,266.24	1,265.98	1,266.01	1,265.94
27	1,265.66	1,265.52	1,264.80	1,263.91	1,262.62	1,257.05	1,257.74	1,266.14	1,266.29	1,265.92	1,265.98	1,265.99
28	1,265.72	1,265.52	1,264.76	1,263.87	1,262.58	1,256.99	1,258.87	1,266.18	1,266.28	1,265.88	1,265.97	1,266.01
29	1,265.76	1,265.52	1,264.73	1,263.82	---	1,256.98	1,260.12	1,266.27	1,266.12	1,265.83	1,266.02	1,265.99
30	1,265.78	1,265.49	1,264.70	1,263.78	---	1,256.97	1,260.99	1,266.30	1,265.99	1,265.90	1,266.02	1,266.04
31	1,265.82	---	1,264.66	1,263.73	---	1,256.96	---	1,266.33	---	1,265.89	1,266.02	---
Mean	1,265.76	1,265.71	1,265.12	1,264.23	1,263.14	1,259.73	1,257.41	1,265.21	---	1,265.89	1,265.79	1,265.95
Max	1,265.98	1,266.02	1,265.48	1,264.63	1,263.69	1,262.53	1,260.99	1,266.54	---	1,266.18	1,266.06	1,266.05
Min	1,265.60	1,265.49	1,264.66	1,263.73	1,262.58	1,256.96	1,256.95	1,261.43	---	1,265.53	1,265.36	1,265.81

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