



Bathymetric Contour Map and Surface Area and Capacity Table for Unity Lake Number 1 (lake 46) near Unity Village, Missouri, 2023

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Table 1. Surface area and capacity at specified water-surface elevations for Unity Lake Number 1 near Unity Village, Missouri, May 17, 2023.

[Primary spillway elevation is about 913.9 feet; the mean water-surface elevation during the survey was about 913.9 feet (row shaded in the table)]

Water-surface elevation, ¹ in feet	Surface-area, in acres	Capacity, ² in acre-feet
878.0	0.03	0.02
880.0	0.19	0.20
882.0	0.45	0.85
884.0	0.63	1.93
886.0	0.89	3.43
888.0	1.13	5.43
890.0	1.44	7.98
892.0	2.10	11.4
894.0	3.19	16.7
896.0	4.18	24.0
898.0	5.35	33.5
900.0	6.41	45.2
902.0	7.66	59.3
904.0	9.04	75.9
906.0	10.6	95.5
908.0	12.5	119
910.0	14.9	146
912.0	16.7	178
913.9	17.9	211

¹Elevations are referenced to the North American Vertical Datum of 1988 using the geoid model GEOID18.

²Capacities were calculated from surface testing at 0.24-foot vertical accuracy at a 95-percent confidence level. An explanation of the vertical accuracy calculation can be found in the "Quality Assurance for Bathymetric Surface, Contour Map, and Bathymetric Change" section of the report of which this plate is a part.