



**Table 1.** Surface area and capacity at specified water-surface elevations for Edwin A Pape Lake near Concordia, Missouri, June 8–9, 2020.

[Primary spillway elevation is about 709.5 feet; the mean water-surface elevation during the survey was about 709.5 feet (row shaded in the table)]

Water-surface elevation, <sup>1</sup> in feet	Surface area, in acres	Capacity, <sup>2</sup> in acre-feet
686.0	1.40	0.86
688.0	12.5	13.0
690.0	28.3	56.3
692.0	45.8	129
694.0	64.5	240
696.0	86.0	391
698.0	112	589
700.0	137	836
702.0	159	1,130
704.0	190	1,480
706.0	225	1,890
708.0	247	2,370
709.5	271	2,750

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

<sup>2</sup>Capacities were calculated from surface testing at 0.13-foot vertical accuracy at a 95-percent confidence level. An explanation of the vertical accuracy calculation can be found in the "Bathymetric Surface, Contour Map, and Bathymetric Change Quality Assurance" section of the report of which this plate is a part.

**EXPLANATION**

- Area of multibeam survey data collection
- Boundary of resurvey for point-to-point quality-assurance data collection (cross-check line)
- Water-surface elevation—Shows mean water-surface elevation (709.5 feet, see table). Datum is North American Vertical Datum of 1988 using the geoid model GEOID18
- Bathymetric contour—Shows elevation of the lake bottom. Index contour interval 10 feet. Intermediate contour (gray) interval 2 feet. Datum is North American Vertical Datum of 1988 using the geoid model GEOID18
- Locations of supplemental depth data collected with an acoustic Doppler current profiler (ADCP)
- Reference mark and identifier—Shows location of survey control used in the survey. RM1 located at the chiseled X on the eastern corner of the picnic table pad southwest from the boat ramp. Elevation 712.62 feet. RM2 location at the chiseled arrow on west side of pump tower bridge on second pier from shore. Elevation 715.23 feet. Datum is North American Vertical Datum of 1988 using the geoid model GEOID18



## Bathymetric Contour Map and Surface Area and Capacity Table for Edwin A Pape Lake (lake 13) near Concordia, Missouri, 2020

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