

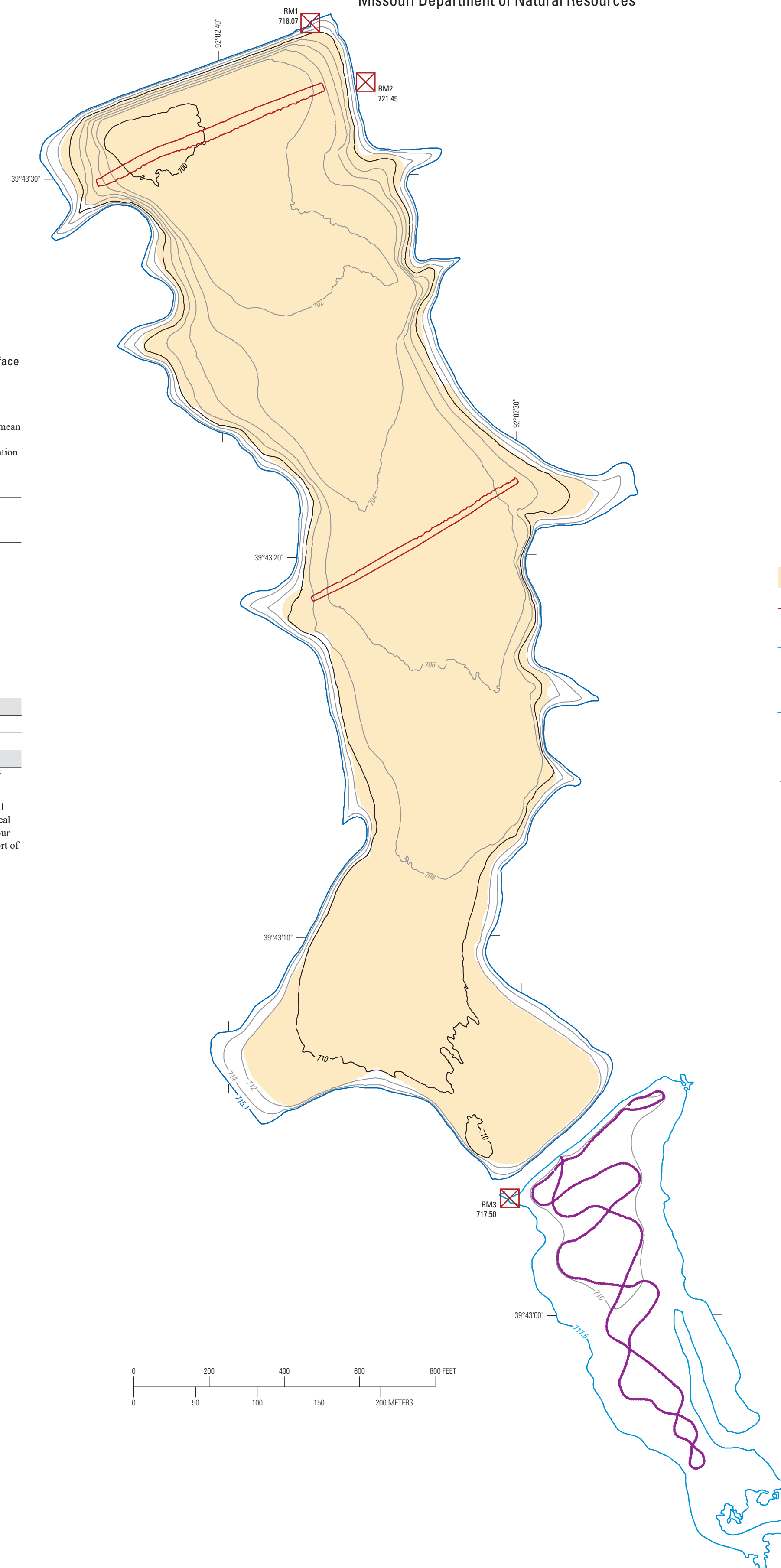
Table 1. Surface area and capacity at specified water-surface elevations for main body of Shelbina Lake near Shelbina, Missouri, April 1, 2021.

[Primary spillway elevation for the main lake is about 715.1 feet, and primary spillway elevation for the upper lake is about 717.5 feet; the mean water-surface elevation of the main lake during the survey was about 715.1 feet (row shaded in the table), and the mean water-surface elevation of the upper lake during the survey was 717.5 feet (row shaded in the table)]

Water-surface elevation, ¹ in feet	Surface area, in acres	Capacity, ² in acre-feet
Main lake		
700.0	0.82	0.21
702.0	6.23	7.07
704.0	12.2	25.4
706.0	20.1	56.9
708.0	27.3	105
710.0	35.2	166
712.0	41.7	244
714.0	44.4	330
715.1	46.6	380
Upper lake		
716.0	2.30	0.80
717.5	8.53	8.16

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

²Capacities were calculated from surface testing at 0.06-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, main—Shows mean water-surface elevation of main lake (715.1 feet, refer to table 1). Datum is North American Vertical Datum of 1988 using the geoid model GEOID18
- Water-surface elevation, upper—Shows mean water-surface elevation of upper lake (717.5 feet, refer to table 1). 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 is the chiseled X on the southern top of the wing wall at the western end of the spillway. Elevation 718.07 feet. RM2 is a crack in the concrete cap near the middle of the stone wall near the boat ramp. Elevation 721.45 feet. RM3 is the lowest point of the crest of the upper lake channel allowing flow into the lower lake. Elevation 717.50 feet. Datum is North American Vertical Datum of 1988 using the geoid model GEOID18

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Bathymetric Contour Map and Surface Area and Capacity Table for Shelbina Lake (lake 26) near Shelbina, Missouri, 2021

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