

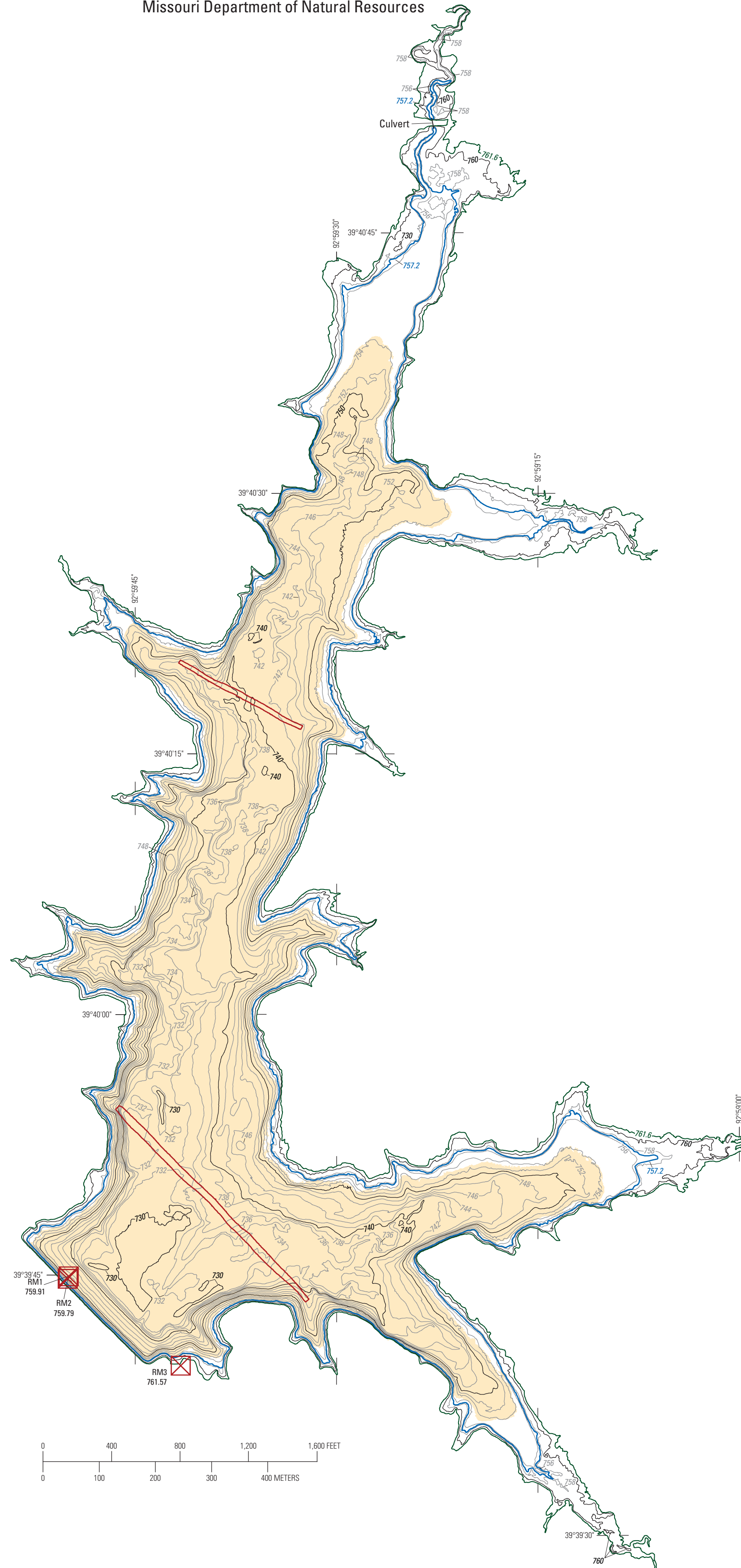
Table 1. Surface area and capacity at specified water-surface elevations for New Marceline City Lake near Marceline, Missouri, March 31, 2021.

[Primary intake elevation is about 757.2 feet, and emergency spillway elevation is about 761.6 feet; the mean water-surface elevation during the survey was about 757.2 feet (row shaded in the table)]

Water-surface elevation, ¹ in feet	Surface area, in acres	Capacity, ² in acre-feet
730.0	3.02	1.34
732.0	11.8	15.9
734.0	19.9	48.1
736.0	28.7	96.3
738.0	39.1	164
740.0	50.9	254
742.0	62.8	367
744.0	74.4	504
746.0	85.6	664
748.0	96.8	846
750.0	109	1,050
752.0	121	1,280
754.0	133	1,540
756.0	155	1,820
757.2	164	2,020
758.0	170	2,150
760.0	191	2,510
761.6	209	2,830

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

²Capacities were calculated from surface testing at 0.19-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 (757.2 feet, refer to table 1). Datum is North American Vertical Datum of 1988 using the geoid model GEOID18
- Spillway elevation**—Shows approximate emergency spillway elevation (761.6 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
- Reference mark and identifier**—Shows location of survey control used in the survey. RM1 is the chiseled arrow on the north side of short intake structure, near west edge. Elevation 759.91 feet. RM2 is a chiseled X on west side of manhole rim on short intake structure. Elevation 759.79 feet. RM3 is the east end of the concrete emergency spillway lip. Elevation 761.57 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 New Marceline City Lake (lake 24) near Marceline, Missouri, 2021

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