



**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 (891.5 feet, see table). Datum is North American Vertical Datum of 1988 using the geoid model GEOID18
- Spillway elevation**—Shows approximate emergency spillway elevation (893.1 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 is the chiseled arrow on top of northern wing wall of spillway structure. Elevation 893.62 feet. RM2 is the chiseled X on the concrete block on the east side of the dam road. Elevation 894.42 feet. Datum is North American Vertical Datum of 1988 using the geoid model GEOID18

**Table 1.** Surface area and capacity at specified water-surface elevations for Garden City Lake near Garden City, Missouri, July 13, 2020.

[Primary spillway elevation is about 892.0 feet and the emergency spillway elevation is about 893.1 feet; the mean water-surface elevation during the survey was about 891.5 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
880.0	1.02	0.54
882.0	4.00	5.01
884.0	10.6	20.3
886.0	14.4	45.2
888.0	20.5	80.3
890.0	24.4	126
891.5	26.4	164
892.0	27.7	177
893.1	30.4	209

<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 0.09-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.

## Bathymetric Contour Map and Surface Area and Capacity Table for Garden City Lake (Lake 20) near Garden City, Missouri, 2020

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