

Figure 31. Location of Lake Viking near Gallatin, Missouri.

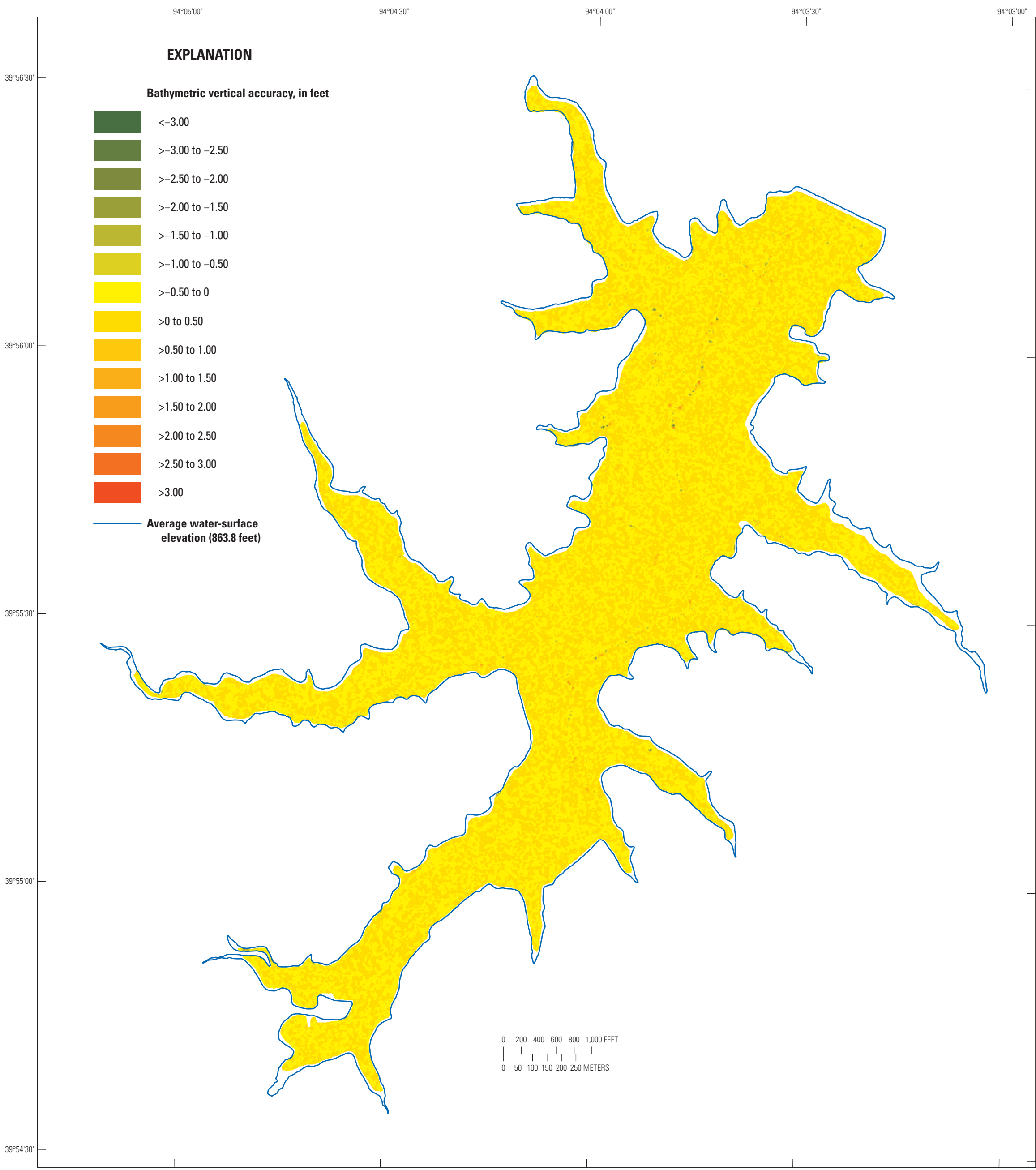


Figure 33. Vertical accuracy of the bathymetric surface of Lake Viking near Gallatin, Missouri, 2019.

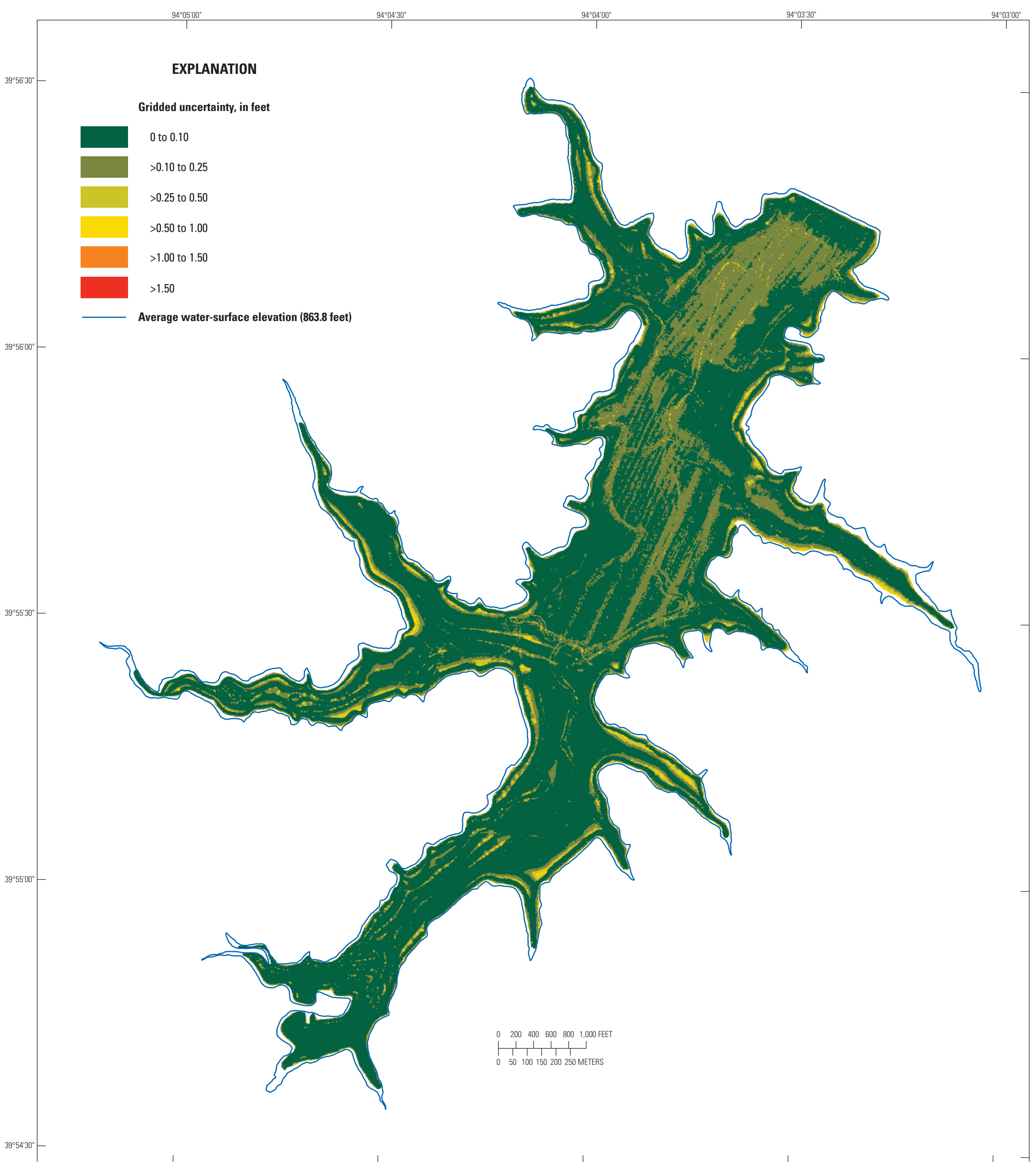


Figure 34. Gridded uncertainty of the bathymetric surface of Lake Viking near Gallatin, Missouri, 2019.

Table 9. Surface area and capacity at specified water-surface elevations for Lake Viking near Gallatin, Missouri, August 20–22, 2019.

[Primary spillway elevation is about 864.4 feet and the emergency spillway elevation is about 870.3 feet; the average water-surface elevation during the survey was about 863.8 feet (row shaded in the table)]

Water-surface elevation, <sup>a</sup> in feet	Surface area, in acres	Capacity, <sup>b</sup> in acre-feet
804.0	0.30	0.10
806.0	1.40	1.90
808.0	2.80	6.10
810.0	5.70	14.1
812.0	12.7	32.2
814.0	21.5	66.3
816.0	33.5	121
818.0	44.9	200
820.0	57.4	301
822.0	76.6	436
824.0	91.1	605
826.0	105	800
828.0	119	1,030
830.0	131	1,280
832.0	146	1,550
834.0	160	1,860
836.0	174	2,190
838.0	189	2,560
840.0	208	2,950
842.0	227	3,390
844.0	250	3,860
846.0	274	4,390
848.0	299	4,960
850.0	326	5,590
852.0	352	6,270
854.0	378	7,000
856.0	407	7,780
858.0	444	8,630
860.0	500	9,580
862.0	522	10,600
863.8	541	10,600
864.0	543	11,700
864.4	548	11,900
866.0	570	12,800
868.0	609	14,000
870.0	648	15,200
870.3	649	15,400

<sup>a</sup>Elevations are referenced to the North American Vertical Datum of 1988 using the geoid model GEOID12b.

<sup>b</sup>Capacities were calculated from surface testing at 0.25-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 sheet is a part.

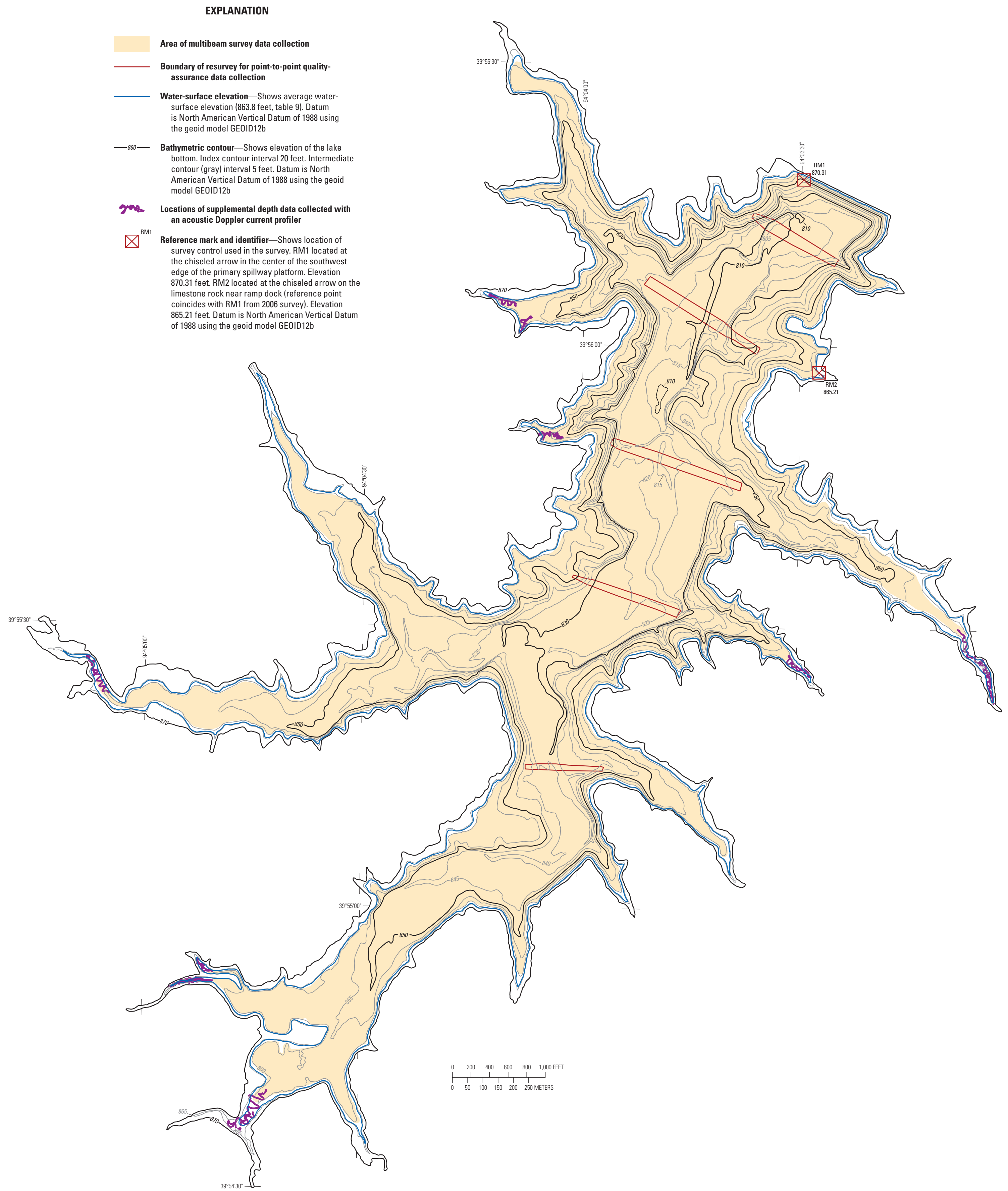


Figure 32. Bathymetric contours for Lake Viking (lake 7; fig. 1; table 1) near Gallatin, Missouri, resulting from a survey on August 20–22, 2019.

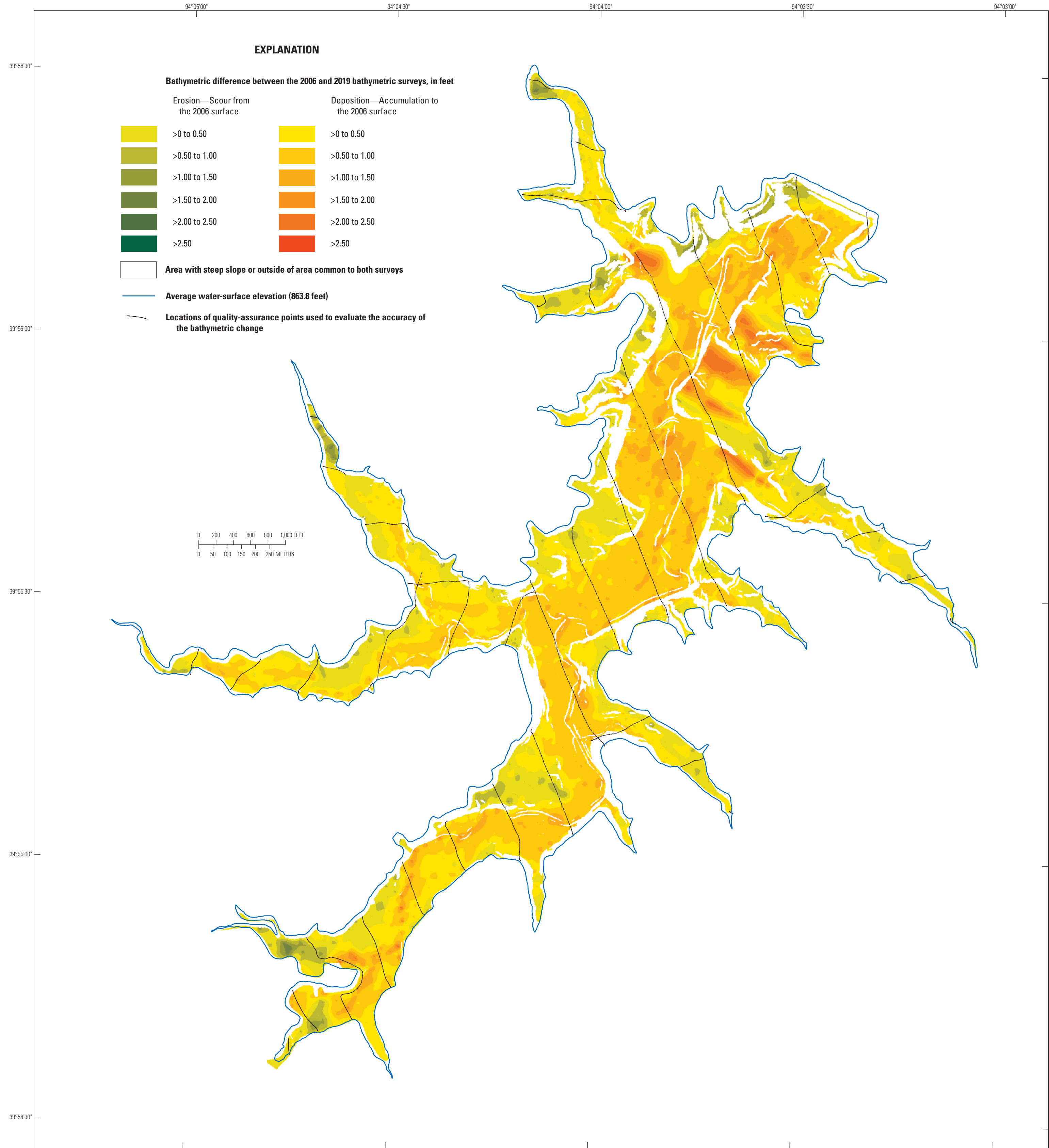


Figure 35. Bathymetric change between the 2006 survey and the 2019 survey of Lake Viking near Gallatin, Missouri.

## Bathymetric Contour Map, Surface Area and Capacity Table, and Bathymetric Change Map for Lake Viking near Gallatin, Missouri, 2019

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