

Figure 40. Location of King City Reservoir system near King City, Missouri.

Table 11. Surface area and capacity at specified water-surface elevations for King City Reservoir, Upper near King City, Missouri, September 6, 2019.

[Emergency spillway elevation is about 1,052.0 feet; the average water-surface elevation during the survey was about 1,051.2 feet (row shaded in the table)]

Water-surface elevation, ^a in feet	Surface area, in acres	Capacity, ^b in acre-feet
1,040.0	0.30	0.10
1,042.0	1.00	1.30
1,044.0	1.90	4.10
1,046.0	3.10	9.30
1,048.0	3.60	16.1
1,050.0	3.90	23.5
1,051.2	4.10	28.3
1,052.0	4.70	31.8

^aElevations are referenced to the North American Vertical Datum of 1988 using the geoid model GEOID12b.

^bCapacities were calculated from surface testing at 0.15-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.

Table 12. Surface area and capacity at specified water-surface elevations for King City Reservoir, Middle near King City, Missouri, September 6, 2019.

[Primary spillway elevation is about 1,035.3 feet; the emergency spillway elevation for the middle and lower lakes is about 1,037.9; the average water-surface elevation during the survey was about 1,035.3 feet (row shaded in the table)]

Water-surface elevation, ^a in feet	Surface area, in acres	Capacity, ^b in acre-feet
1,028.0	4.90	3.40
1,030.0	7.30	16.4
1,032.0	8.80	32.7
1,034.0	9.50	51.0
1,035.3 ^c	11.4 ^c	64.2 ^c
1,036.0	12.2	72.5
1,036.4 ^d	12.3 ^d	77.4 ^d

^aElevations are referenced to the North American Vertical Datum of 1988 using the geoid model GEOID12b.

^bCapacities were calculated from surface testing at 0.20-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.

^cThe middle and lower lakes are connected across a low spillway with an approximate elevation of 1,035.3 feet. For elevations above the low spillway between these two lakes, the individual area or capacity of the two lakes should be added together for the total area and capacity.

^dThe storage capacity of the middle and lower lakes is questionable above 1,036.4 feet because of the transient nature of the capacity.

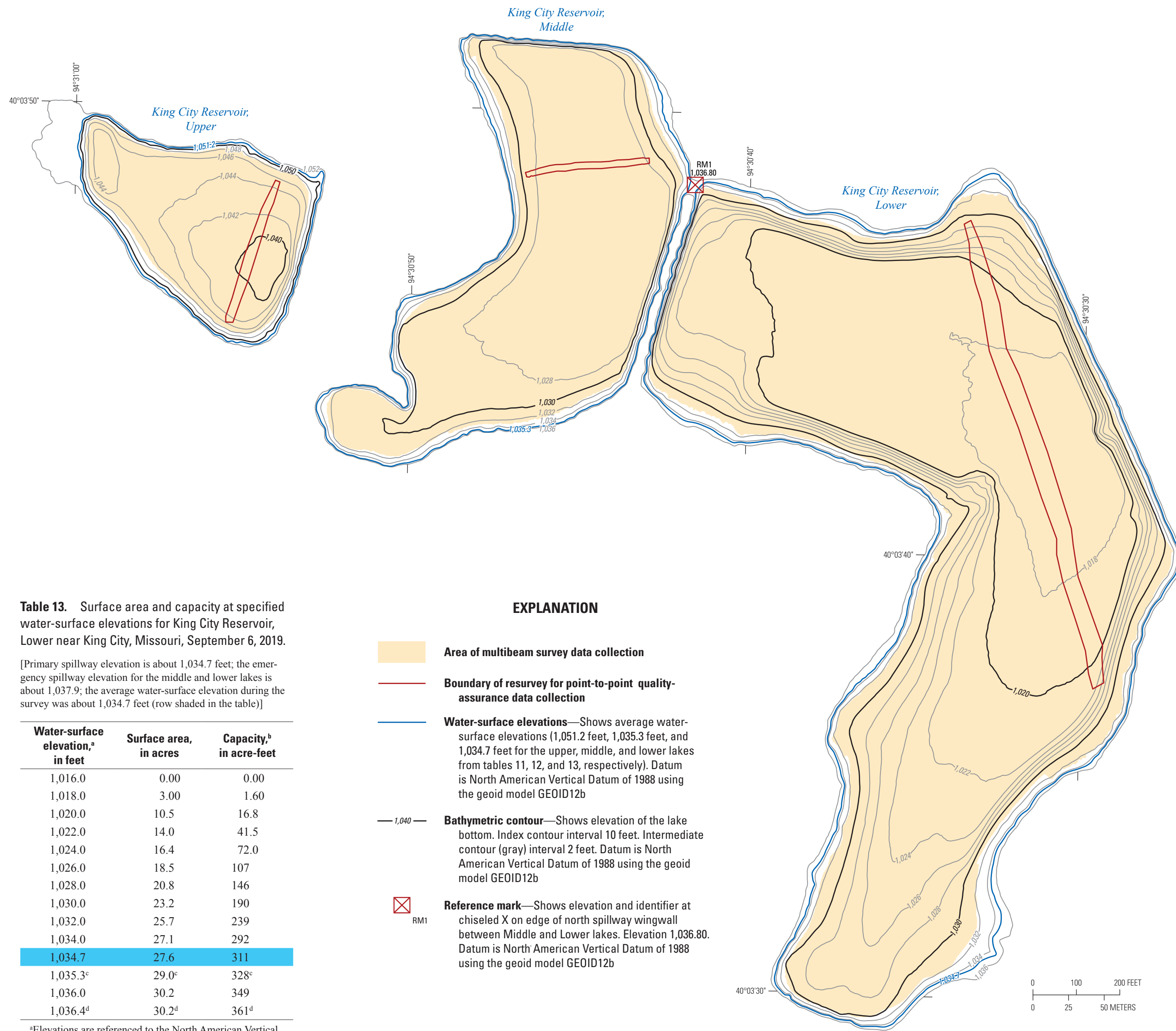


Figure 41. Bathymetric contours for King City Reservoir system (lake 9; fig. 1; table 1) near King City, Missouri, resulting from a survey on September 6, 2019.

Table 13. Surface area and capacity at specified water-surface elevations for King City Reservoir, Lower near King City, Missouri, September 6, 2019.

[Primary spillway elevation is about 1,034.7 feet; the emergency spillway elevation for the middle and lower lakes is about 1,037.9; the average water-surface elevation during the survey was about 1,034.7 feet (row shaded in the table)]

Water-surface elevation, ^a in feet	Surface area, in acres	Capacity, ^b in acre-feet
1,016.0	0.00	0.00
1,018.0	3.00	1.60
1,020.0	10.5	16.8
1,022.0	14.0	41.5
1,024.0	16.4	72.0
1,026.0	18.5	107
1,028.0	20.8	146
1,030.0	23.2	190
1,032.0	25.7	239
1,034.0	27.1	292
1,034.7	27.6	311
1,035.3 ^c	29.0 ^c	328 ^c
1,036.0	30.2	349
1,036.4 ^d	30.2 ^d	361 ^d

^aElevations are referenced to the North American Vertical Datum of 1988 using the geoid model GEOID12b.

^bCapacities were calculated from surface testing at 0.15-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.

^cThe middle and lower lakes are connected across a low spillway with an approximate elevation of 1,035.3 feet. For elevations above the low spillway between these two lakes, the individual area or capacity of the two lakes should be added together for the total area and capacity.

^dThe storage capacity of the middle and lower lakes is questionable above 1,036.4 feet because of the transient nature of the capacity.

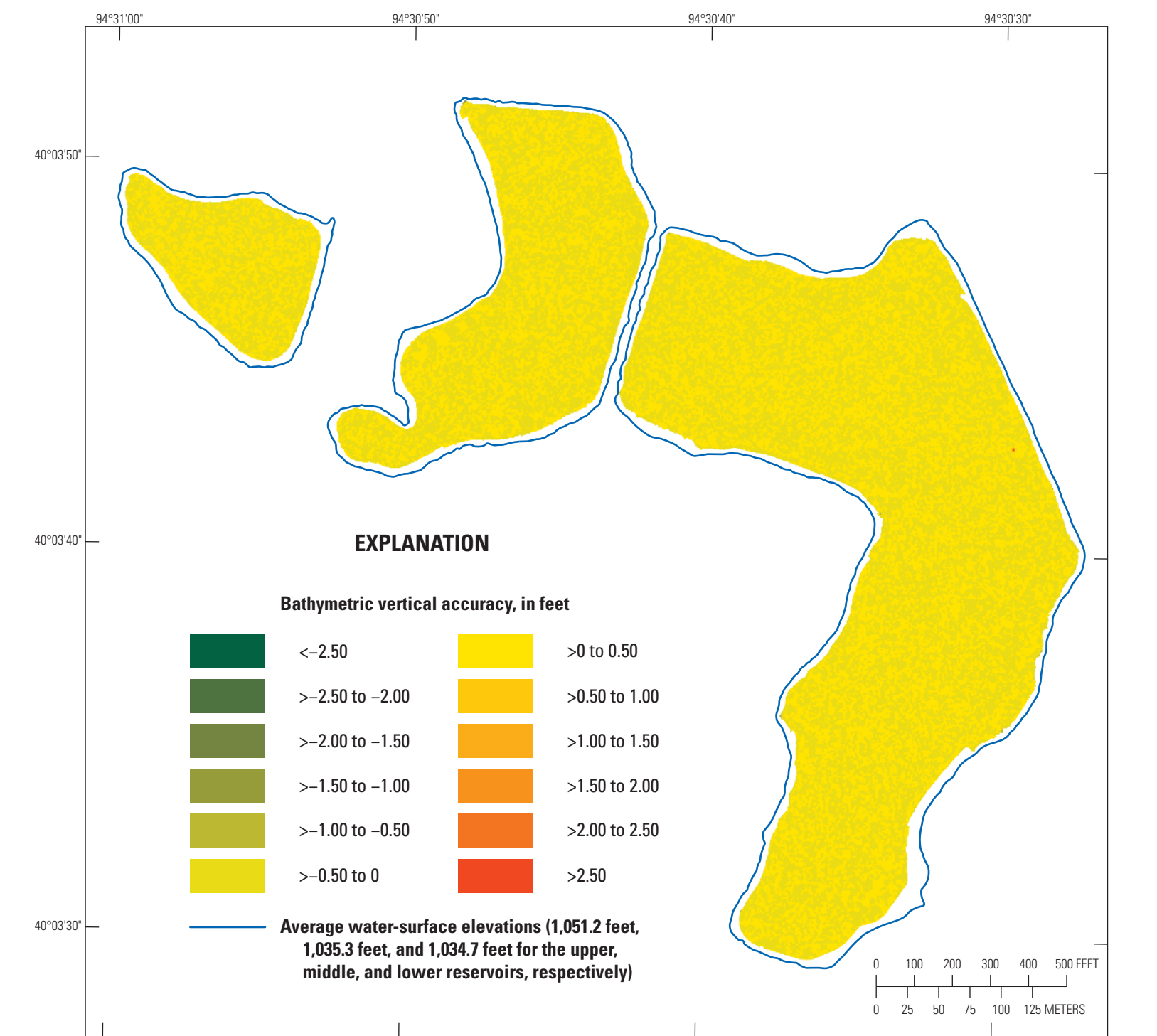


Figure 42. Vertical accuracy of the bathymetric surface of King City Reservoir system near King City, Missouri, 2019.

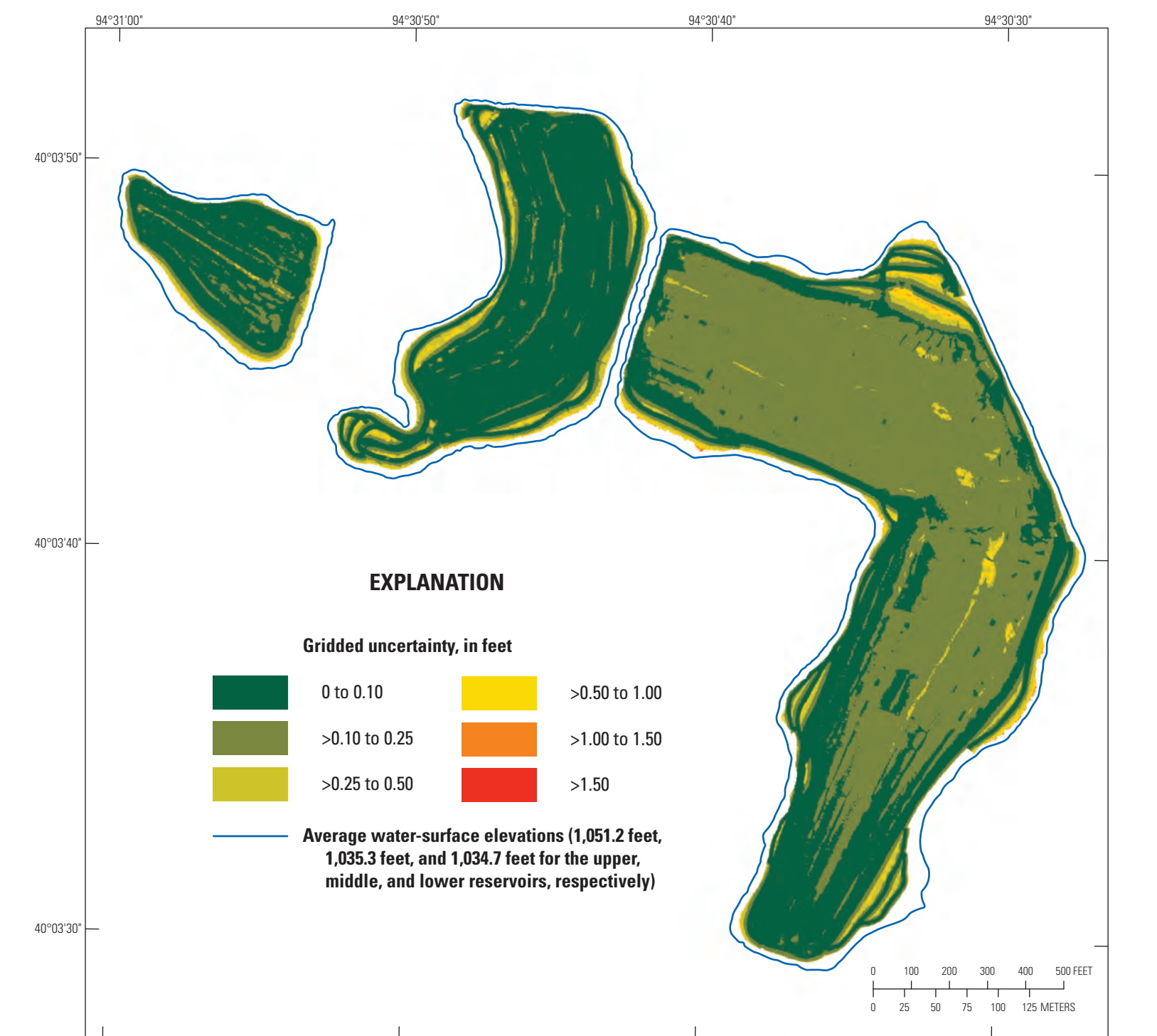


Figure 43. Gridded uncertainty of the bathymetric surface of King City Reservoir system near King City, Missouri, 2019.

Bathymetric Contour Map, and Surface Area and Capacity Table for King City Reservoir system near King City, Missouri, 2019

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