

Project Report, April 1, 2020 – June 30, 2020

Project Name: Grand Lake Bathymetry

Begin Date: April 1st, 2019

End Date: June 30th, 2020

Project Number: SH00MEZ

Project Chief: Jason Lewis, Shelby Hunter, Kevin Smith

Cooperator: Grand River Dam Authority

Principal Cooperator Contact: Darrell Townsend, Grand River Dam Authority, Vinita, OK

Objectives:

Bathymetric survey and area capacity table of Grand Lake O' the Cherokees:

- 1) Conduct a bathymetric survey,
- 2) Construct a detailed bathymetry map of the lake,
- 3) Using the gathered data, develop Elevation-Area-Volume tables for Grand Lake, and
- 4) Compare differences between this study and any previous studies done on the lake,
- 5) Publish a USGS scientific investigations Map report.

Scope: The proposed project area includes all of Grand Lake O' the Cherokees (Grand Lake). Grand Lake covers approximately 41,779 acres and has beneficial uses of public and private water supply, hydropower, and recreation. Multibeam bathymetric data will be collected throughout the lake area and include an overlap at both the Twin Bridges area as well as the Elk River area bathymetric studies completed by the USGS in 2017.

Progress:

- Since April 1, 2020 we have completed the contour map of the lake.
- We have completed all pertinent figures and tables pertaining to the report.
- The comparison between this study and previous studies is complete.
- The report text has been completed.
- The report has started the USGS Report Publication Process with the report currently sitting with the Subject Matter Experts for Peer Review.

Plans for Next Quarter:

- Make any changes that are requested from the Peer Review.
- Present the completed report and data to GRDA for review.
- Complete the USGS Report Publication Process.