

Project Report, January 1, 2020 – March 31, 2020

Project Name: Grand Lake Bathymetry

Begin Date: February 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 January 1, 2020 we have completed the data editing of the point cloud data of the lake.
- We have almost completed the contour map of Grand Lake O' the Cherokees.
- We have almost completed the text of the report.

Plans for Next Quarter:

- Complete the Contour Map of Grand Lake O' the Cherokees
- Complete the text of the report and move it through the USGS review process.

Current Status Relating to COVID-19:

Our goal was to get the report to GRDA for review by Wednesday April 1, 2020 but we have hit a couple of snags. With the COVID-19 Pandemic we are running into some issues. The Department Policy has us all teleworking right now and the data set is so large making changes through remote access is very slow. We are very close to getting the report to you for review, but the changes that are being made are to the contours right now and these changes are very time consuming. For the time being we are looking at getting the report out for review by Mid-April. We apologize for the tardiness and are doing our very best to get this product to you ASAP.