Update - Remapping Conway Lake Bathymetry

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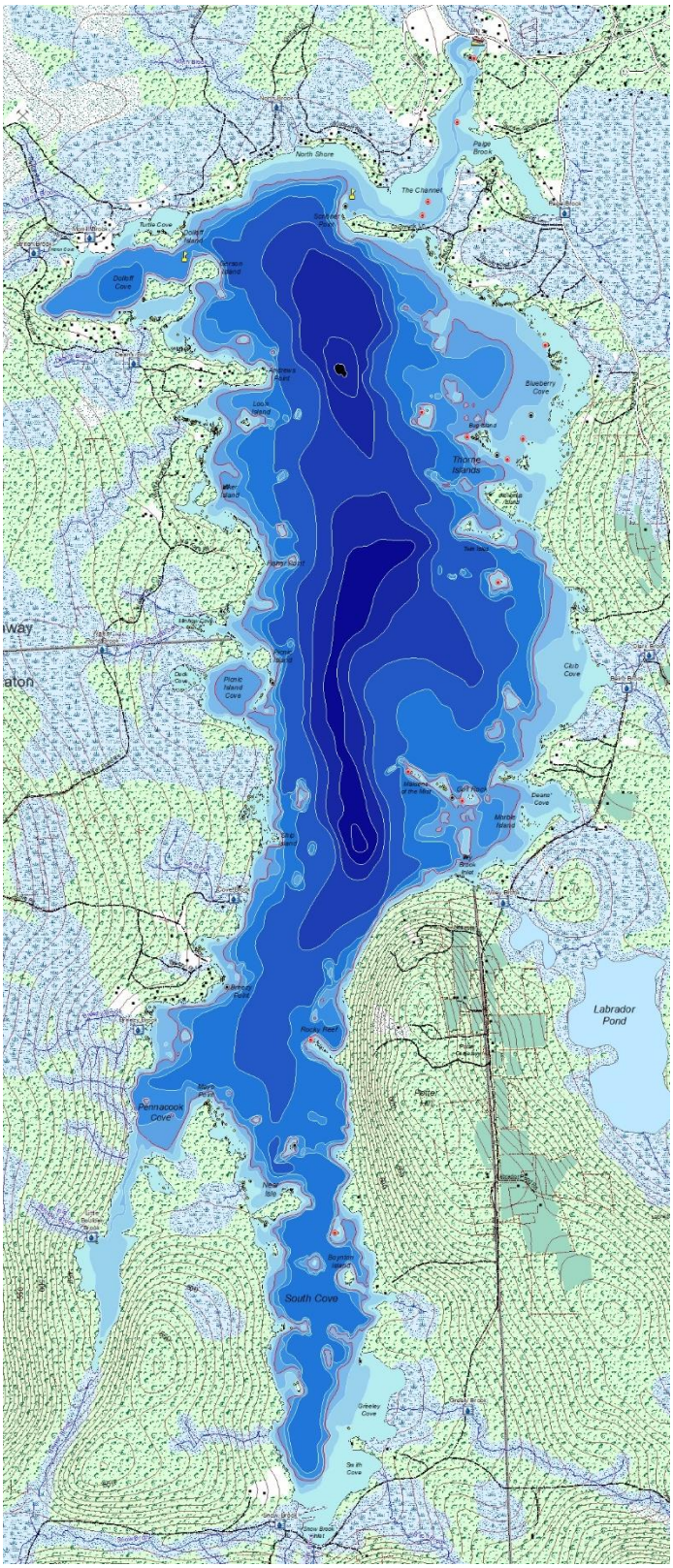
The project to remap water depth across Conway Lake was completed in late 2022. The project kicked off in July 2021 with an aim to replace the water depth map for Conway Lake that is available from the NH DES with one that is more accurate and detailed. A portable sonar device that records water depth and latitude/longitude and a sounding line were used in 2021 to collect raw data. Over the course of the summer and fall over 70 transects were made across the lake collecting over 100K sonar data points. The data were then downloaded into GIS mapping software to create a new depth map. Large rocks and boulders were also mapped based on Google satellite images of the lake. An additional 58 transects were run in 2022 using a Garmin Echomap depth finder. It provided more accurate and reliable data that was used to refine the map created in 2021. Water depth was datumed on a lake level measured on June 25, 2022. The updated map is available in several formats on the 'Resource' page of this website.

So, what does the new map show? For one it depicts a much more accurate limit to the shallow water littoral zone (depths less than 15') where aquatic plants can grow and where the AIS patrol needs to check for possible invasive plants.

Sonar profiles and depth data show that the axis of the lake is characterized by a gently sloping and smooth bottom – probably the



Snapshot of 2022 Updated Depth Map.

result of glacial scouring and slow deposition of post-glacial lake sediment

The margins of the lake are marked by numerous submerged knolls, some of which break the surface, or are shallow enough to be boating hazards. Most of these were not shown on the DES map. These knolls are probably erosional bedrock highs capped with glacial boulders and till left by retreating glaciers. Lake margins vary from gentle slopes (e.g., the north end of the lake), to steep cliff-like escarpments, to terraced step-down margins. The deepest measured point in the lake is just over 50' and sits directly east of Andrews Point. There is a spot nearly as deep (49') ENE of Ship Island.