

Determining Which Boat Slips are in Trouble

The depths of the waters of Deep Creek Lake near the shoreline dictate the usability of the near-shore-line for boat slips. Most boats on the waters of Deep Creek Lake have a draft in the range of 1.5 ft to 4 ft. This means that, in order to accommodate essentially all types of boats, we should have a minimum water depth at any time during the boating season of at least 4 ft.

There is a lot of talk about boats being in trouble when the lake level goes below a certain value. It is not known what that value is nor how many boats actually do get in trouble.

It is suggested that we can fairly easily determine what slips become unusable, when and where, and perhaps suggest some relocation of slips or assess the possibility of extending the boat slip ramps further into the lake.

The key to make this happen requires three items:

1. The detailed bathymetry of the lake - This is in progress by the DNR under the Phase II sedimentation study. We should get some good near-shore water depths.
2. Aerial geospatial indexed photographs showing the locations of all of the current boat slips - If no appropriate one exists, one can be generated fairly quickly for moderate costs
3. A GIS capability - This is available via Debbie Carpenter of GC Planning and Zoning. Chris Nichols of the POA has that capability now also. I have that capability via R.

The process would be as follows:

1. Overlay the bathymetry on the lake outline
2. Color code all areas less than 4ft deep(or whatever criteria is decided upon, perhaps)below the lowest lake level to be expected during the summer (probably 2457 ft)
3. Overlay the aerial imagery in partial transparent mode
4. Identify boat slips that are in trouble (probably to be done manually)
5. Alternatively, DNR may already have the geospatial locations of boat slips. In that case it's fairly easy to overlay those with the color coded area.
6. Alternatively, use the aerial photography to define the geospatial coordinates of each boat slip (a manual process) and use them to overlay the color coded areas. [This is the preferred way of doing it because one can then simply redo maps if different boat drafts are to be considered or if different lake levels need to be looked at.]

The product would be maps showing at different lake levels the boat drafts required to be able to navigate. These maps can be posted on various websites that people commonly go to for boating information.

PLV: 7/30/2012

Rev.: 8/12/2012

Rev.: 8/18/2012

Rev.: 8/27/2012