LAKE POINTE ESTATES HYDRO ACOUSTIC SURVEY RESULTS May 8, 2009



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Survey Background

Hydro acoustics utilizes sound energy to detect objects and contours underwater. By integrating digital echo sounders with computer processors, GPS (Global Positioning System) data and GIS (geographical information system) software, graphic representation can be generated of bathymetry (depth contours and shape), fisheries, bottom sediment type, and submersed aquatic plant coverage and height within the water column.

On May 8, 2009, a hydro acoustic survey was conducted on the lake at Lake Pointe Estates. Bathymetry data was generated, processed, and then graphically represented.

Utilizing GPS-interfaced imagery, navigation transects of the lake were made with an average of 30 to 40 feet between transects with several crossover transects to ensure data cohesion. This pattern allowed for complete mapping of the lake within 20 to 30 feet of the shoreline areas.

Over 17,500 individual soundings were taken. These were analyzed and processed into over 1,200 individual data points, which were extrapolated into graphic representation of the bathymetry. Contours were marked at 3, 5, 7, 9, 10, 11-foot intervals. The following pages contain:

- Transect Track Data
- Color Contour Bathymetry Map of the lake at Lake Pointe Estates with Scale
- Black and White Contour Bathymetry Map of the lake at Lake Pointe Estates

Survey Discussion

The result of the hydro acoustic survey shows a fairly regular bottom contour with sloping banks. Maximum depth was 10.85 feet, and average depth was calculated at 6.12 feet. The surface acreage was calculated at 5.74 acres with a calculated volume on day of survey of 35.11 acre-feet. The level of the lake was at the lower part of the Northwest culvert.

Electronic copies of the maps are available upon request. Please contact Marine Biochemists should questions arise or further analysis be requested.

Survey Transect Data



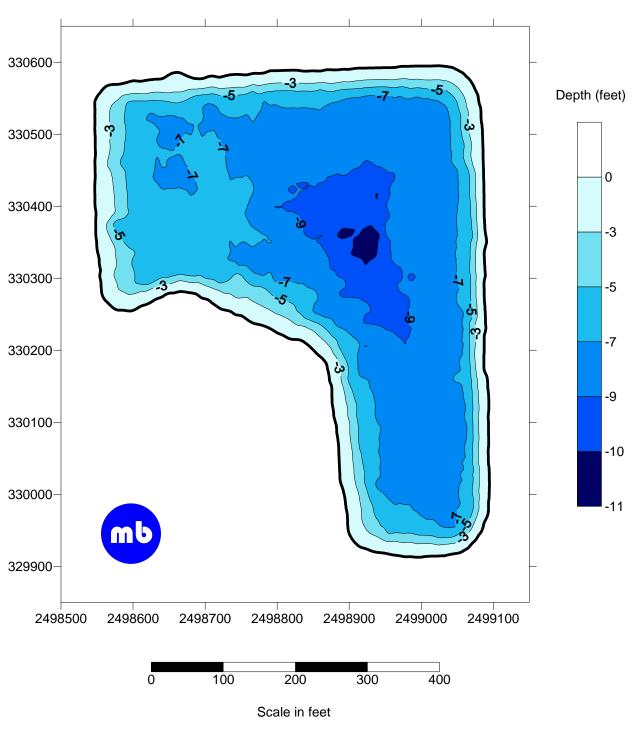
Approximate Survey Track Data overlaid on satellite imagery



Photo showing Hydro Acoustic data collection and lake level (left) and photo of digital Hydro Acoustic mapping equipment

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Lake Pointe Estates, Milwaukee County, WI Bathymetric Survey Results (Feet) Wisconsin State Plane South-NAD83 May 8, 2009



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