

## **CR ENVIRONMENTAL, INC.**

**Ecological & Oceanographic Consultants, East Falmouth, Massachusetts**

### **Bathymetric Surveys, Vibrocore Sampling, and Sediment Mapping** **Happy Hollow Pond & Robin Hollow Pond** **Cumberland, Rhode Island**

CR Environmental performed detailed bathymetric surveys, sediment surveys and sediment vibrocore sampling in two drinking water supply reservoirs to assess storage capacity, sedimentation, and sediment quality. Survey operations were conducted from a shallow draft jon boat due to inadequate launching facilities. Bathymetric data was acquired using a Trimble ProXRS DGPS and a high-frequency echosounder specifically designed for surveys in very shallow water. Sediment thickness was measured manually throughout each reservoir.

The data was used to develop detailed CADD / GIS compatible bathymetric and sediment contour maps. These data will help GZA engineers to assess the environmental condition of the reservoirs and the potential for improvement of storage capacity.

Reference:

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*Sediment mapping at Happy Hollow Pond guided by DGPS and Hypack acquisition software*



*Sediment vibrocore sampling at Happy Hollow Pond*