2011 Putnam Lake Bathymetric Study

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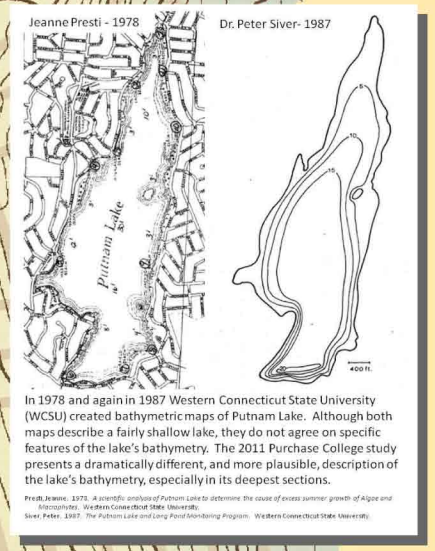
GIS
Purchase College
STATE UNIVERSITY OF NEW YORK

Surface Elevation(MSL)	493 Feet
Ave. Depth	11 Feet
Max. Depth	17 Feet
Surface Area	226 Acres
Est. Volume	2,486 Acre-Ft.
Drainage/Surface Area Ratio	7.6
Relative Depth	0.48%

Bathymetry Interval = 2 Feet
Watershed Contour = 10 Feet

Patterson, NY

New Fairfield, CT



In 1978 and again in 1987 Western Connecticut State University (WCSU) created bathymetric maps of Putnam Lake. Although both maps describe a fairly shallow lake, they do not agree on specific features of the lake's bathymetry. The 2011 Purchase College study presents a dramatically different, and more plausible, description of the lake's bathymetry, especially in its deepest sections.

Presti,Jeanne. 1978. *A scientific analysis of Putnam Lake to determine the cause of excess summer growth of Algae and Macrophytes.* Western Connecticut State University.
Siver, Peter. 1987. *The Putnam Lake and Long Pond Monitoring Program.* Western Connecticut State University.

Sounding positions differentially corrected from CORS Brookfield, CT base station with GPS Pathfinder Office.

Sonar readings verfied with simultaneous traditional sounding weight measurements.

Bathymetric elevations calculated for each depth sounding using 2000 USGS Putnam Lake surface elevation reported on the Brewster 7.5 Minute DRG.

Depth soundings interpolated into 10' rasters for a Putnam Lake mask using the Spatial Analyst Inverse Distance Weighted (IDW) tool.

Two-foot contours of bathymetric surface estimated using the Spatial Analyst Contour tool.

0 0.25 0.5 Miles

1:3,000

NAD83 New York State Plane East