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LAKE DATA

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12080600. Long Lake near Lacey

Location

Thurston County, 2.0 miles east of Lacey (fig. 1).

Origin

Kettle lake.

Basin geology

Glacial drift consisting of recessional outwash of poorly sorted gravel and sand with some alluvium on south shore of lake (Noble and Wallace, 1966).

Soils

Intricate patterns of gravelly sandy loam, loamy fine sand, and loamy sand. The main surface-water inflow drains through peat deposits (Ness, 1958).

Land use and cover

Scattered forest, with residential and agricultural clearings. The nearshore cover is mixture of Douglas fir, cedar, alder, Oregon ash, black cottonwood, madrona, and willow.

Population

Lakeshore development moderately dense with 205 homes surrounding lake, compared to about 117 homes in 1959 (estimated from U.S. Geological Survey topographic map). Approximately 11 percent of shoreline adjoins marsh or wetland, making it less desirable for homesites.

Physical characteristics of lake

A bathymetric map of the lake is shown in figure 16. The map was surveyed during spring of 1971 using an arbitrary datum.

Some morphometric parameters of the lake, based on the bathymetric map, are listed below.

Drainage area8.25 sq mi
Altitude (from topographic map)	158 ft
Surface area	328 acres
Lake volume	3,910 acre-ft
Mean depth	12 ft
Maximum depth	21 ft
Length of shoreline	37,400 ft
Length of lake	10,000 ft
Mean breadth of lake	1,430 ft
Shoreline configuration2.79
Development of volume0.57
Mean slope	3.8 percent