INTRODUCTION

AREA DESCRIPTION

LAKE CHARACTERISTICS

WATER BUDGET

WATER QUALITY

REFERENCES CITED

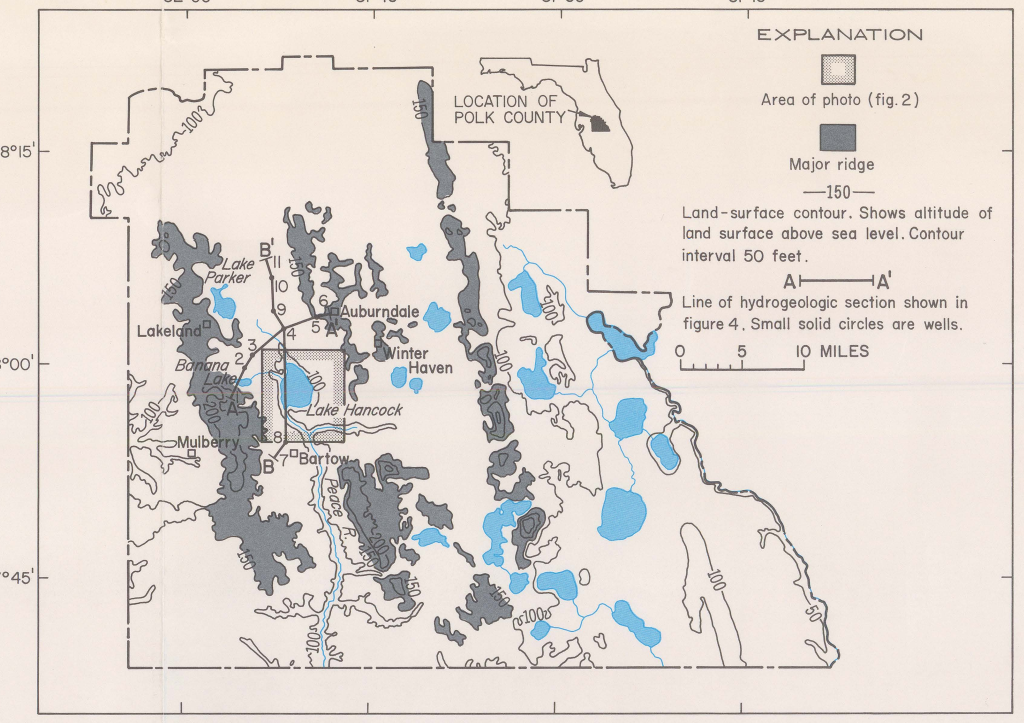

Figure 1.—Location of Lake Hancock and the three major ridges in Polk County.

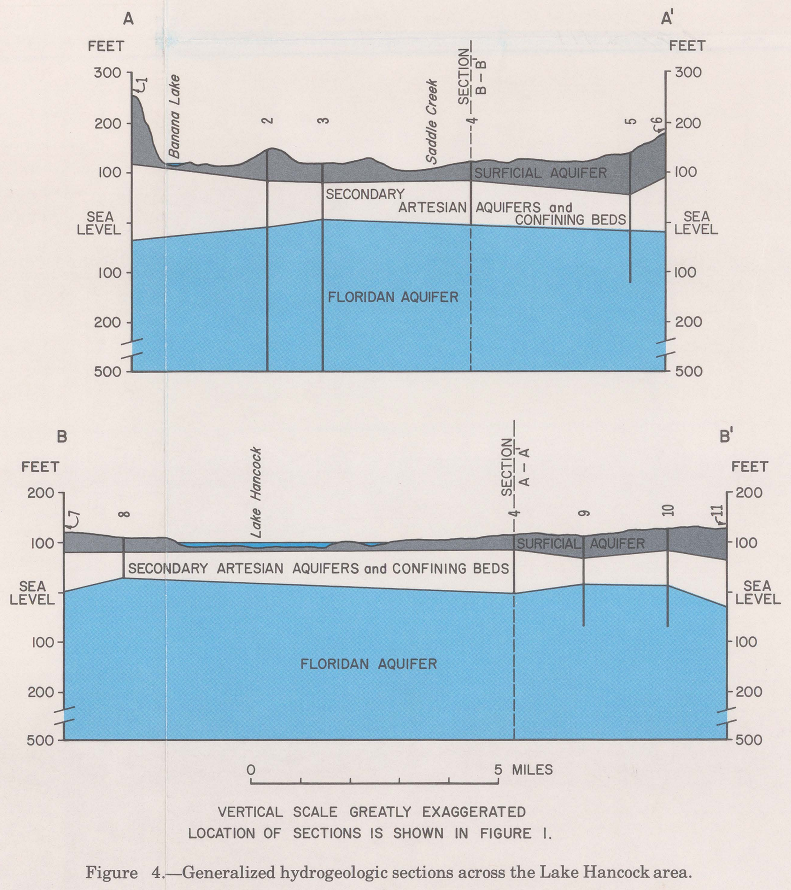

Figure 4.—Generalized hydrogeologic sections across the Lake Hancock area.

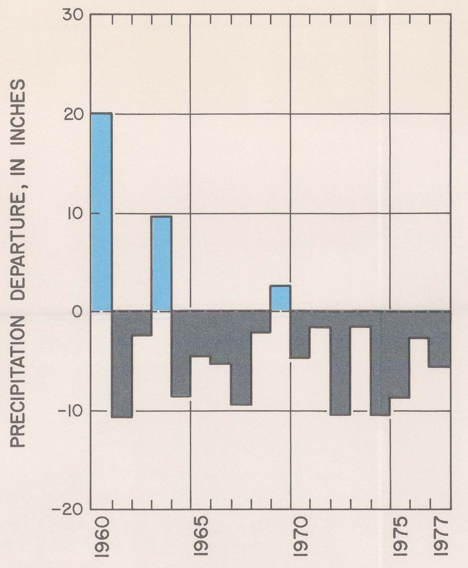

Figure 3.—Annual departures from long-term average precipitation (53.95 inches) at Bartow, 1960–77.

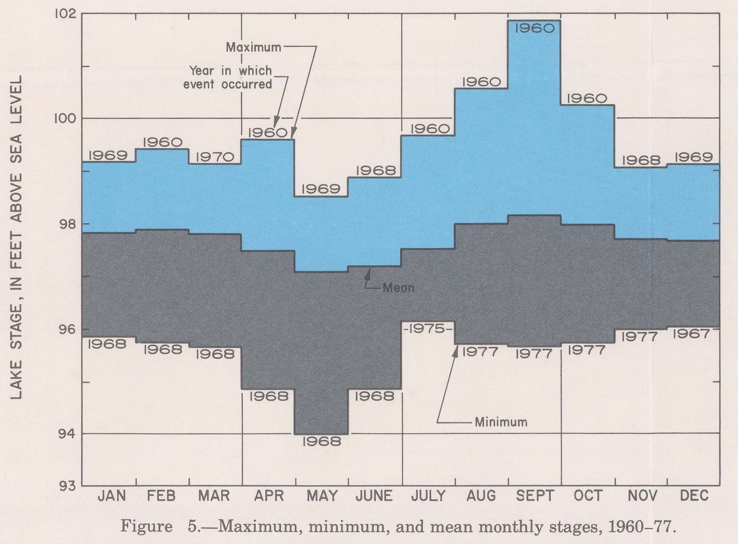

Figure 5.—Maximum, minimum, and mean monthly stages, 1960–77.

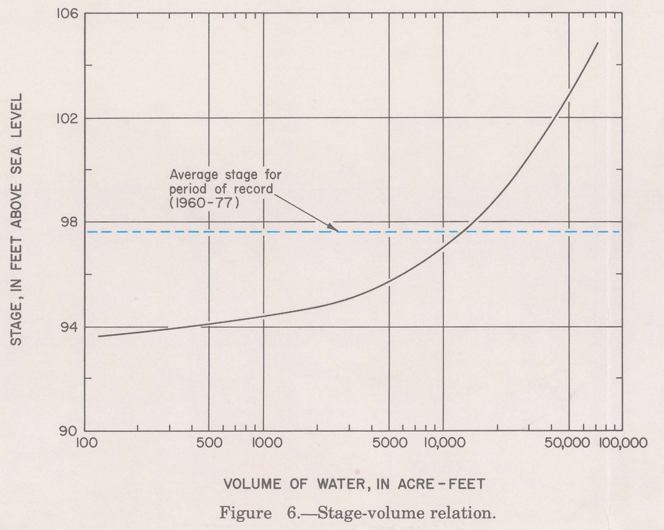

Figure 6.—Stage-volume relation.

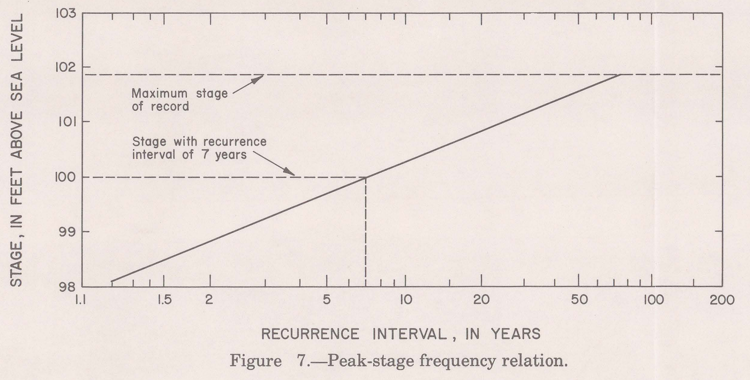

Figure 7.—Peak-stage frequency relation.

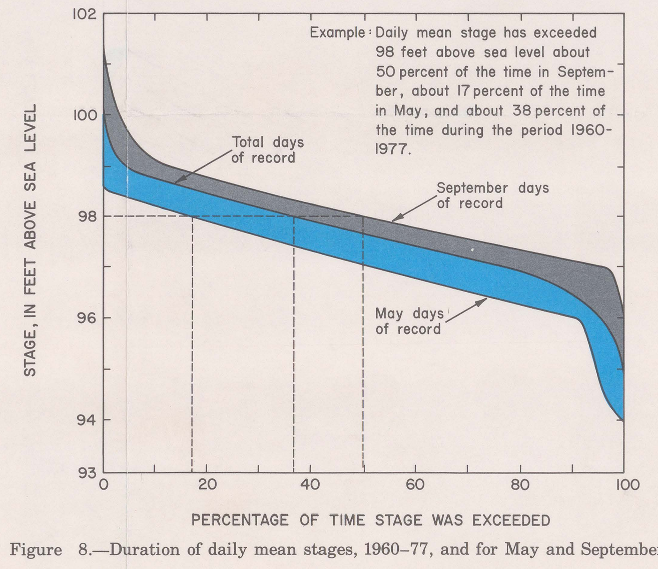

Figure 8.—Duration of daily mean stages, 1960–77, and for May and September.

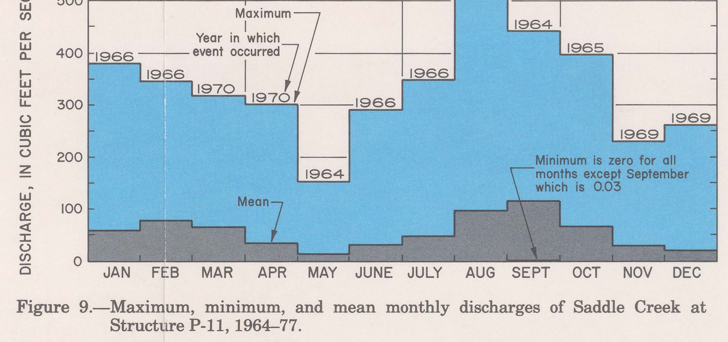

Figure 9.—Maximum, minimum, and mean monthly discharges of Saddle Creek at Structure P-11, 1964–77.

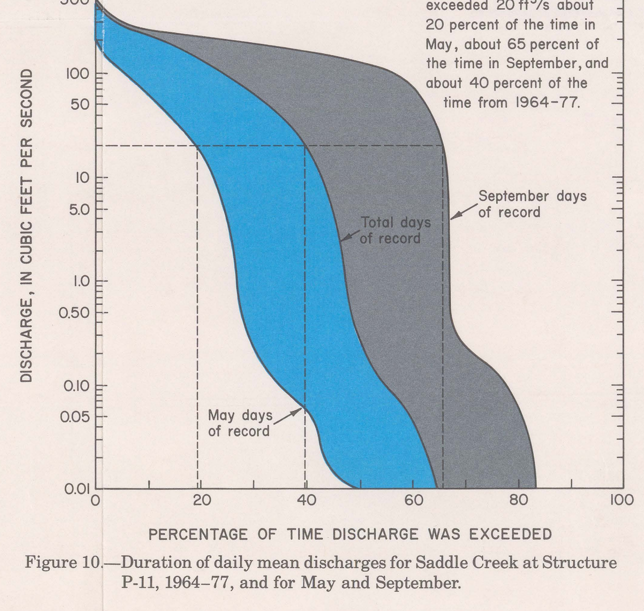

Figure 10.—Duration of daily mean discharges for Saddle Creek at Structure P-11, 1964–77, and for May and September.

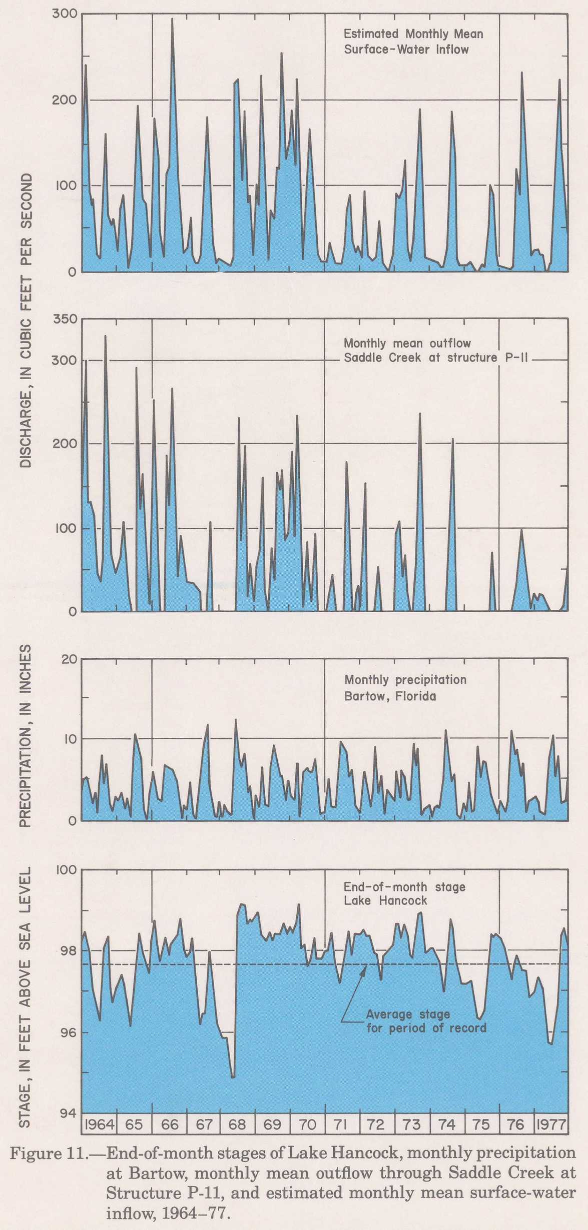

Figure 11.—End-of-month stages of Lake Hancock, monthly precipitation at Bartow, monthly mean outflow through Saddle Creek at Structure P-11, and estimated monthly mean surface-water inflow, 1964–77.

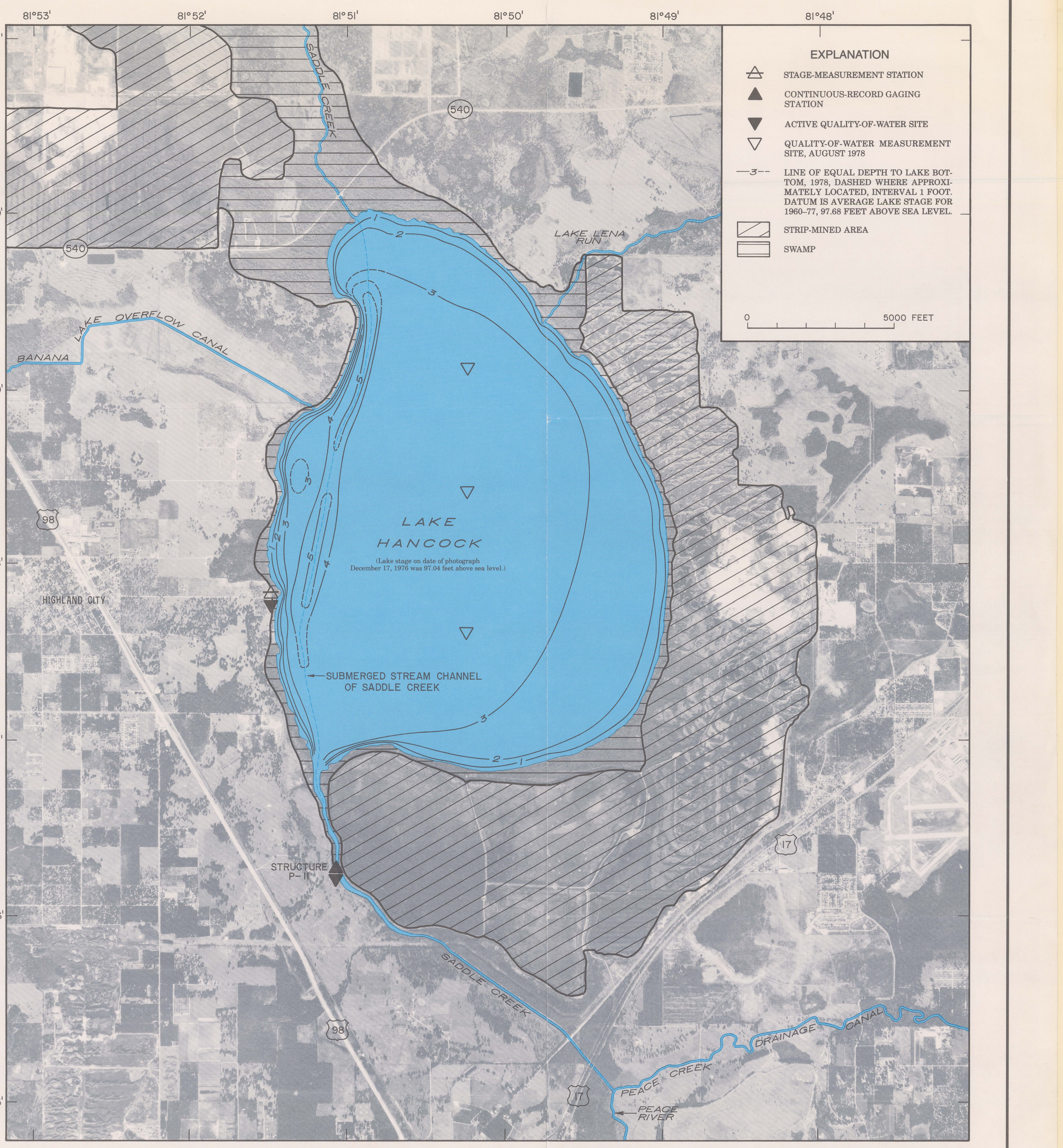

Figure 2.—Lake Hancock bottom contours, data collection sites, and adjacent land use.

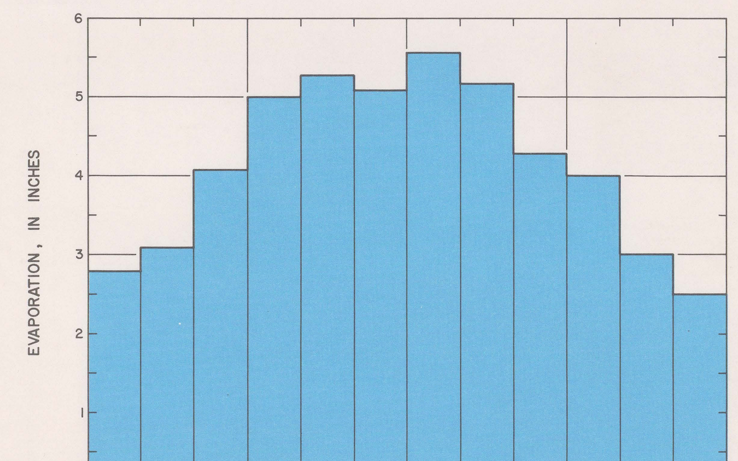

Figure 12.—Estimated average monthly lake evaporation.

Table 1.—Chemical analyses of water from Lake Hancock and Saddle Creek, 1965–71

Table 2.—Analyses of water from Lake Hancock, August 1978

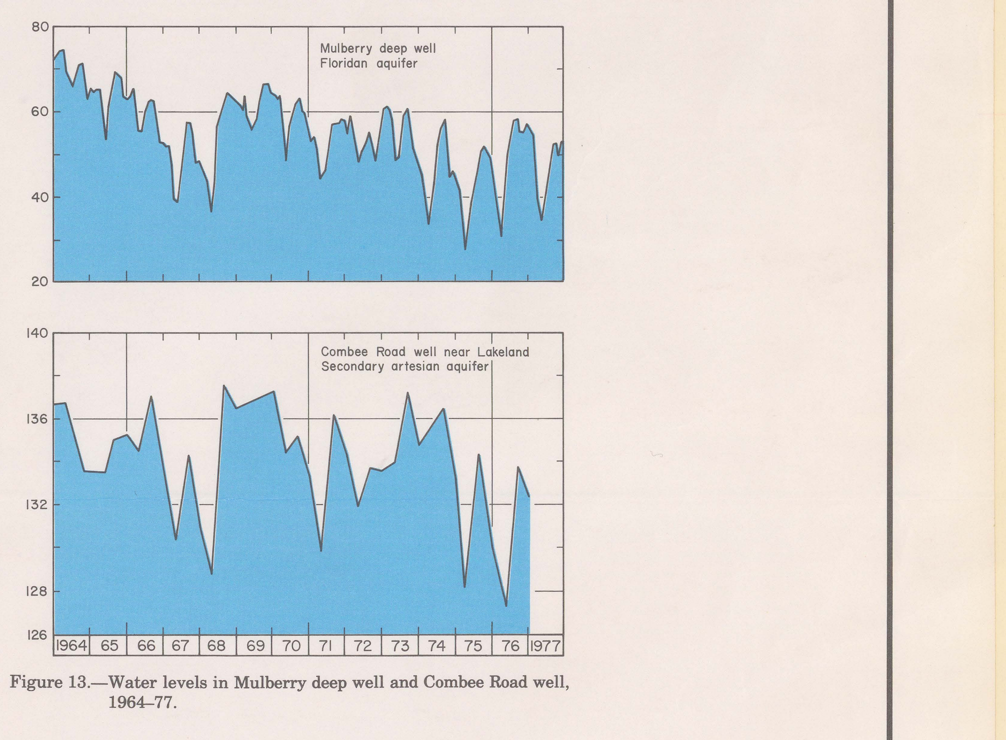

Figure 13.—Water levels in Mulberry deep well and Combee Road well, 1964–77.

HYDROLOGIC DESCRIPTION OF LAKE HANCOCK, POLK COUNTY, FLORIDA

BY

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