Potential Stimem of the Upper Floridan Aquifer in Florida, May 2000
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INTRODUCTION

This report is the seventh in a series of map reports describing the potentiometric surface of Florida aquifers, since 1972, 1977, 1982, 1987, 1992, 1997, and 2000. It differs from these reports in that it describes the potentiometric surface of the Upper Floridan aquifer. Data were collected as part of a continuing program that monitors ground-water levels in Florida in cooperation with the Florida Department of Environmental Protection, state and local government agencies, and many private companies. Ground-water levels in Florida are measured in the Floridan aquifer system were previously described by Miller (1989 and 1990). The potentiometric surface of the upper Floridan aquifer in Florida was last described by Miller (1989) and Sepulveda (1995). However, the system was not monitored from February through May 1989. In this report, the potentiometric surface of the Upper Floridan aquifer is described in Florida as of May 2000. The potentiometric surface of the Upper Floridan aquifer is a useful tool for understanding the movement of ground water and for detecting changes in the potentiometric surface, which may provide important information about the movement of water in the system and on the environment. To detect the dynamic condition of the aquifer, this report includes a map of changes in water levels from 1999 and 2000. The changes in water levels from 1999 and 2000 were developed from differences in ground water levels in the wells, and the changes are in response to changes in the system.

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Figure 1—Generalized net change in the potentiometric surface of the Upper Floridan aquifer between MayJune 1999 and May 2000.

Figure 2—Fluctuations of ground-water levels in selected wells in the Upper Floridan aquifer. Hydrographs were constructed using available data from the U.S. Geological Survey National Water Information System (NWIS) and the Florida Department of Environmental Protection. Water-level data were collected and posted as monthly means and miscellaneous measurements made in the wet and dry seasons, typically in May and September. General location of well is shown in Figure 1.

EXPLANATION

POTENCIOMETRIC SURFACE—A contour indicates at which water level there would exist isophote curves, or lines of equal water levels. Contour intervals are 10 feet. Hydrographs indicate depressions in the water level. Water levels at the report date refer to the National Geodetic Vertical Datum of 1929 (NGVD1929).

Note: The potentiometric contours are presented to be uniformly cell-edited in a dynamic hydrologic system for understanding changes in hydrologic conditions, such as differing depths of wells, nonreliable measurements of water levels, effects of pumping, and changing climatic conditions. The potentiometric contours do not represent individual measurements of water level.