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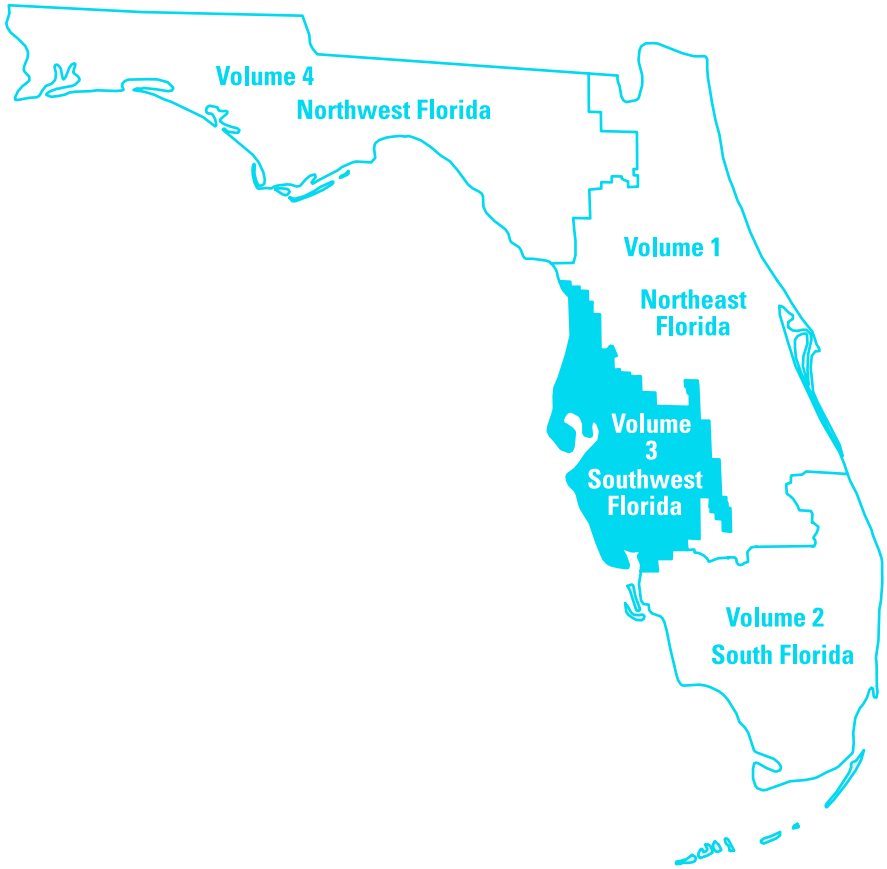
Water Resources Data Florida Water Year 2003

Volume 3B. Southwest Florida Ground Water



Water-Data Report FL-03-3B

U.S. Department of the Interior
U.S. Geological Survey

CALENDAR FOR WATER YEAR 2003

2002

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2003

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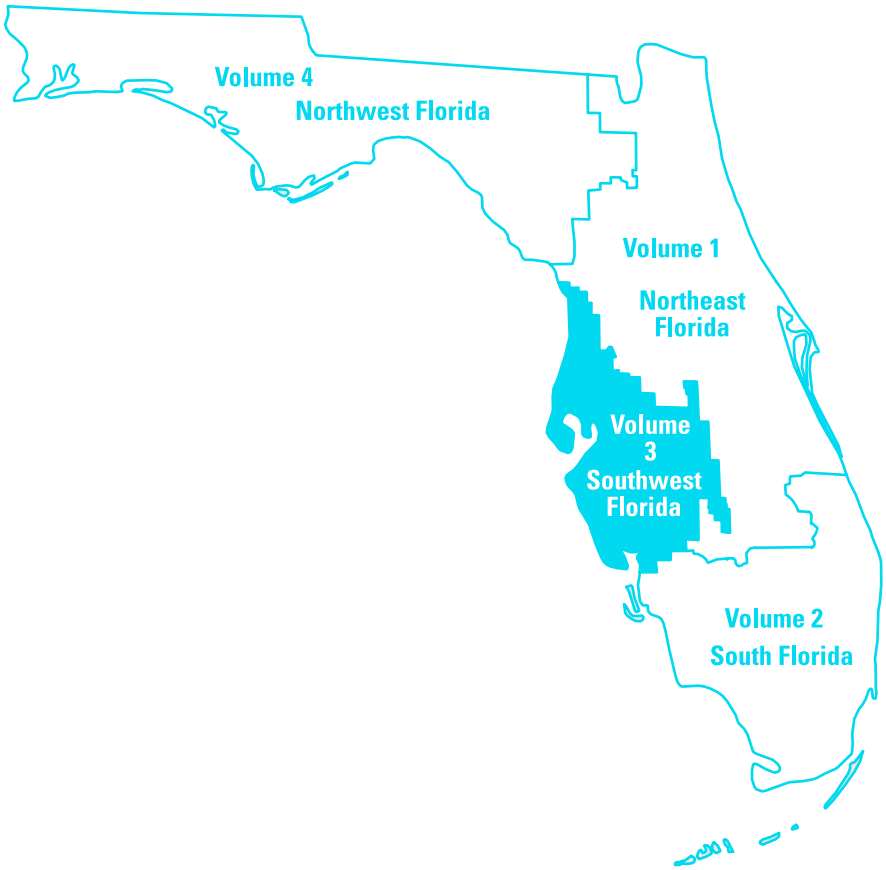
Water Resources Data
Florida
Water Year 2003

Volume 3B. Southwest Florida Ground Water

By Richard L. Kane, William L. Fletcher, and Susan L. Lane

Water-Data Report FL-03-3B



Prepared in cooperation with the State of Florida and with other agencies

U.S. Department of the Interior
U.S. Geological Survey

U.S. Department of the Interior
Gale A. Norton, Secretary

U.S. Geological Survey
Charles G. Groat, Director

2004

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Information about all USGS reports and products is available by calling 1-888-ASK-USGS or on the Internet via the World Wide Web at http://www.usgs.gov/

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PREFACE

This volume of the annual hydrologic data report of Florida is one of a series of annual reports that document hydrologic data gathered for the U.S. Geological Survey's surface- and ground-water data collection networks in each state, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for Florida are contained in four volumes.

Volume 1. Northeast Florida
Volume 2. South Florida
Volume 3. Southwest Florida
Volume 4. Northwest Florida

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data. This report was prepared for publication by J. M. Todd, and the Summary of Hydrologic Conditions was prepared by S. L. Lane under the supervision of R. L. Kane, and W. L. Fletcher. The following individuals contributed significantly to the collection, processing, and tabulation of the data:

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13. ABSTRACT ***(Maximum 200 words)***

Water resources data for the 2003 water year in Florida consist of continuous or daily discharges for 385 streams, periodic discharge for 13 streams, continuous daily stage for 255 streams, periodic stage for 13 streams, peak stage for 36 streams and peak discharge for 36 streams, continuous or daily elevations for 13 lakes, periodic elevations for 46 lakes; continuous ground-water levels for 441 wells, periodic ground-water levels for 1,227 wells, and quality-of-water data for 133 surface-water sites and 308 wells.

The data for Southwest Florida include records of stage, discharge, and water quality of streams; stage, contents, water quality of lakes and reservoirs, and water levels and water quality of ground-water wells. Volume 3B contains records for continuous ground-water elevations for 128 wells; periodic ground-water elevations at 31 wells; miscellaneous ground-water elevations at 405 wells; and water quality at 32 ground-water sites.

These data represent the national Water Data System records collected by the U.S. Geological Survey and cooperating local, state, and federal agencies in Florida.

14. SUBJECT TERMS
*Florida, *Hydrologic data, *Surface Water, *Ground Water, *Water Quality, Flow-rate, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediments, Water Temperatures, Sampling sites, Water Levels, Water analyses, Elevations, Water wells.

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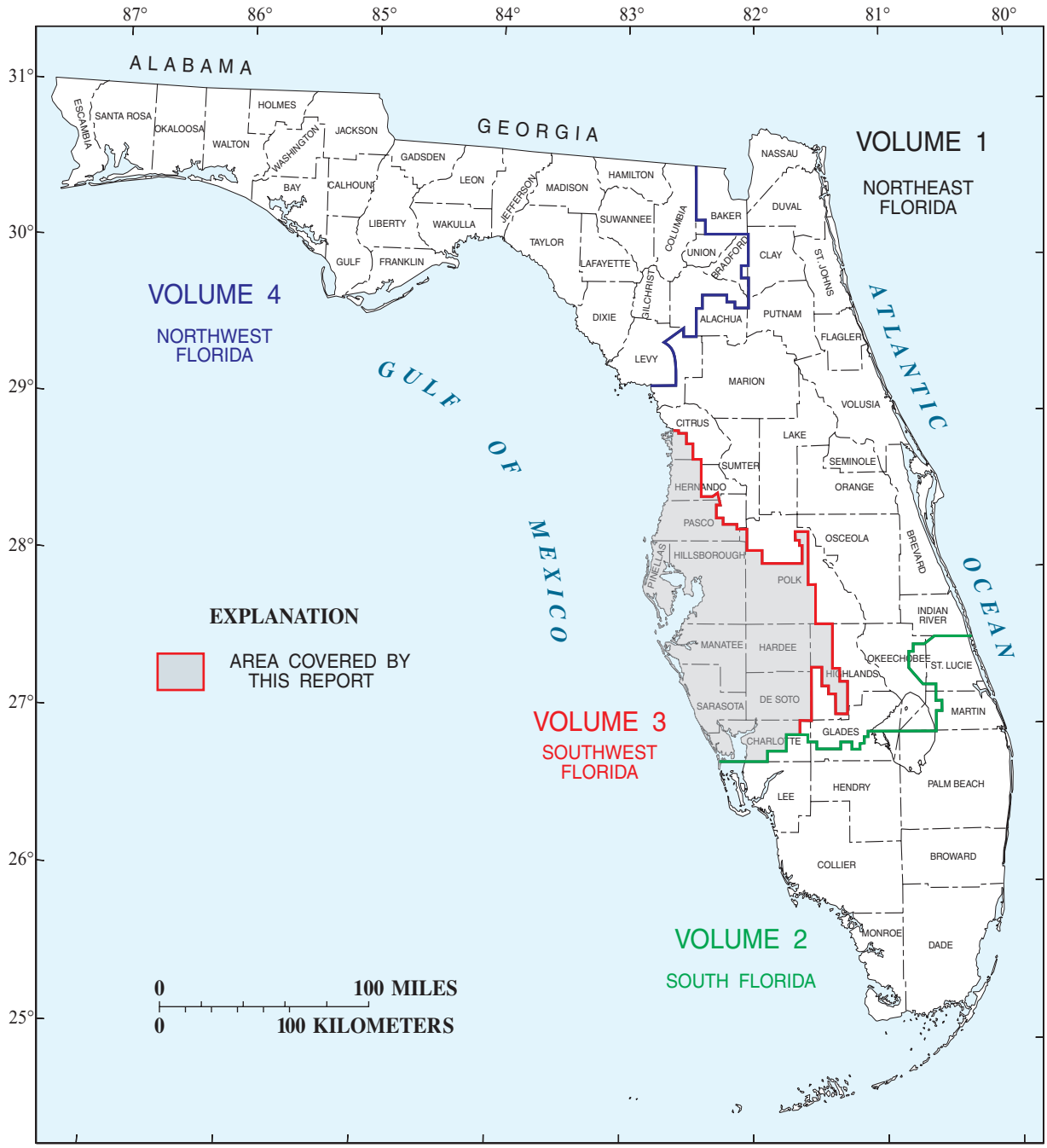


Figure 1.--Geographic area covered by this report.

WATER RESOURCES DATA FOR FLORIDA, 2003
Volume 3B: Southwest Florida Ground Water

INTRODUCTION

The U.S. Geological Survey, in cooperation with local, State, and Federal agencies, obtains a large amount of data pertaining to the water resources of Florida each water year. These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the Geological Survey, the data are published annually in this report series entitled "Water Resources Data - Florida."

This report series includes records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of ground-water wells. Volume 3B contains records for continuous ground-water elevations at 128 wells; periodic ground-water elevations at 31 wells; miscellaneous ground-water elevations at 405 wells; and water-quality at 32 ground-water sites. Locations of these sites are shown on figure 1. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating local, State, and Federal agencies in Florida.

This series of annual reports for Florida began with the 1961 water year with a report that contained only data relating to the quantities of surface water. For the 1964 water year, a similar report was introduced that contained only data relating to water quality. Beginning with the l975 water year, the report format was changed to present, in one volume, data on quantities of surface water, quality of surface and ground water, and ground-water levels.

Prior to introduction of this series and for several water years concurrent with it, water-resources data for Florida were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage, and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface-Water Supply of the United States." For the 1961 through 1970 water years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States," and water levels for the 1935 through 1974 water years were published under the title "Ground-Water Levels in the United States." The above mentioned Water-Supply Papers may be consulted in the libraries of the principal cities of the United States and may be purchased from U.S. Geological Survey, Branch of Information Services, Box 25286, Federal Center, Denver, CO 80225.

Publications similar to this report are published annually by the Geological Survey for all States. These official Survey reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report FL-03-3B." For archiving and general distribution, the reports for l971-74 water years also are identified as water-data reports. These water-data reports are for sale in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the Office at the address given on the back of the title page or by telephone (813) 975-8620.

COOPERATION

The U.S. Geological Survey and agencies of the State of Florida have had cooperative agreements for the collection of water-resource records since 1930. Organizations that assisted in collecting the data in this report through cooperative agreement with the Survey are:

City of Bradenton
City of Sarasota
City of Tampa
County of Hillsborough
County of Manatee
County of Pinellas
Peace/Manasota Regional Water Supply Authority
Florida Department of Environmental Protection
City of North Port
Tampa Bay Water
Southwest Florida Water Management District
Federal Program

SUMMARY OF HYDROLOGIC CONDITIONS

During the 2003 water year, rainfall at 10 National Oceanic and Atmospheric Administration (NOAA) sites in southwest Florida (fig. 2) ranged from 61.49 inches at Arcadia in De Soto County (site 13) to 96.51 inches at Parrish in Manatee County (site 12). The 2003 water year total rainfall was higher at all 10 long-term sites than the respective 30-year (1961-90) averages (normal rainfall). Total rainfall at the 10 sites ranged from 11.74 inches above normal at Archbold Biological Station in Highlands County (site 14) to 44.89 inches above normal at Parrish (site 12).

The ground-water system in southwest Florida is a multiaquifer system consisting of a thick sequence of carbonate rock overlain by clastic deposits. The aquifer systems lie atop each other. For example, the surficial aquifer system overlies the intermediate aquifer system, which overlies the Floridan aquifer system.

The surficial aquifer system is present over much of southwest Florida and consists of a thin, widespread layer of unconsolidated sand, shelly sand, and shell, with some minor limestone beds. In places, clay beds are sufficiently thick and continuous to divide the system into two or three aquifers; mostly, however, the system is undivided. The thickness of the aquifer system is generally less than 50 feet, but its thickness in ridge areas can be much greater. Thicknesses of 200 feet or more are common in Highlands, Polk, and Pasco Counties. This aquifer system generally yields small volumes of water, and is primarily used for domestic supplies.

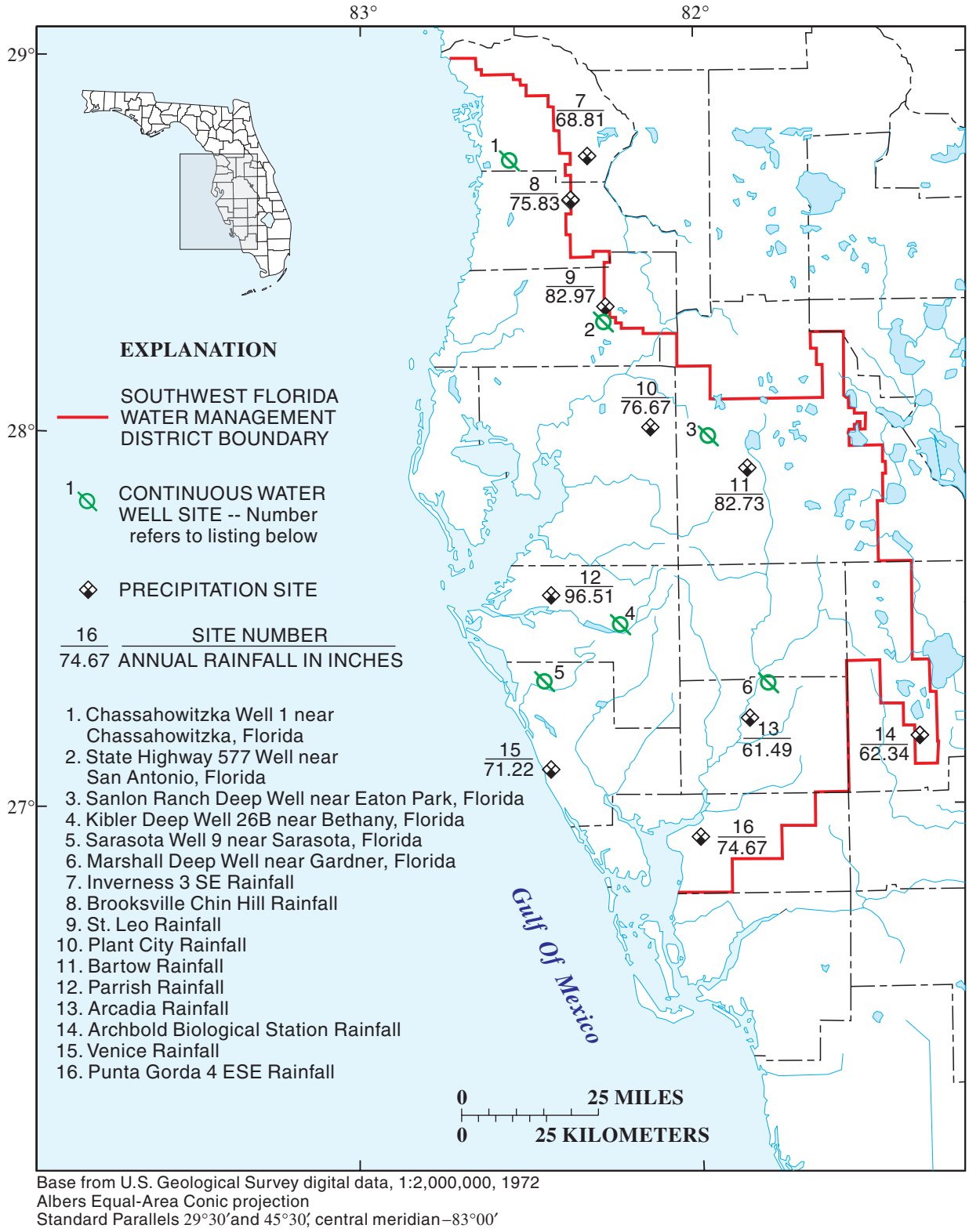
The intermediate aquifer system underlies the surficial aquifer system and overlies the Floridan aquifer system. The intermediate aquifer system consists of as many as three water-bearing units that are composed of clastic sediments interbedded with carbonate rocks. In areas where the aquifer system is thin or absent, including a large area of Citrus, Hernando, Sumter, and Pasco Counties, the Floridan aquifer system is unconfined. Clay confining units isolate the aquifers in the system from the Floridan and surficial aquifer systems. This aquifer system contains water under confined, or artesian, conditions, but does not yield as much water as the underlying Floridan aquifer system. The intermediate aquifer system is an important source of municipal supply in Sarasota and Charlotte Counties, where the underlying Floridan aquifer system is deeply buried and contains brackish or saltwater. Elsewhere, it primarily is used for domestic supplies.

The Floridan aquifer system consists of a thick sequence of carbonate rocks and is the most productive aquifer in southwest Florida. The Floridan underlies the intermediate aquifer system where the latter is present; it also underlies the surficial aquifer system, but is separated from them practically everywhere by a thick, clayey confining unit. Where the surficial aquifer system overlies the Floridan, the clayey confining unit between the systems is thick in some places and thin or absent in other places. The Floridan aquifer system consists of the Upper and Lower Floridan aquifers that are separated by a middle confining unit. The middle confining unit and the Lower Floridan aquifer is brackish to saline and is not used as a water supply in southwest Florida. Thickness of the Floridan aquifer system ranges from less than 600 feet in Citrus County to more than1,800 feet in Charlotte County. The Floridan aquifer system provides water for several large cities and for hundreds of thousands of people in smaller communities and rural areas. Locally, the Floridan is intensively pumped for industrial and irrigation supplies.

Generally, water levels are lowest in May at the height of the spring dry season. Ground-water levels generally are highest in September at the end of the wet season when ground-water withdrawals for agricultural use are low.

Figures 3 through 8 show representative hydrographs for wells in the Upper Floridan aquifer and the relation between the monthly mean water levels in the 2003 water year and maximum, median, and minimum monthly water levels for 10 years of record. Wells at sites 1 and 2 (fig. 2) are representative of wells in the northern part of the area (figs. 3 and 4). Wells at sites 3, 4, 5, and 6 (fig. 2) are representative of wells in the southern part of the area (figs. 5-8).

Ground-water levels in some coastal areas in southwest Florida are affected by tidal fluctuations in the Gulf of Mexico. Water levels fluctuate several feet in some wells in response to tidal fluctuations.



Base from U.S. Geological Survey digital data, 1:2,000,000, 1972
Albers Equal-Area Conic projection
Standard Parallels 29°30′and 45°30′, central meridian–83°00′

Figure 2.--Hydrologic conditions index map.

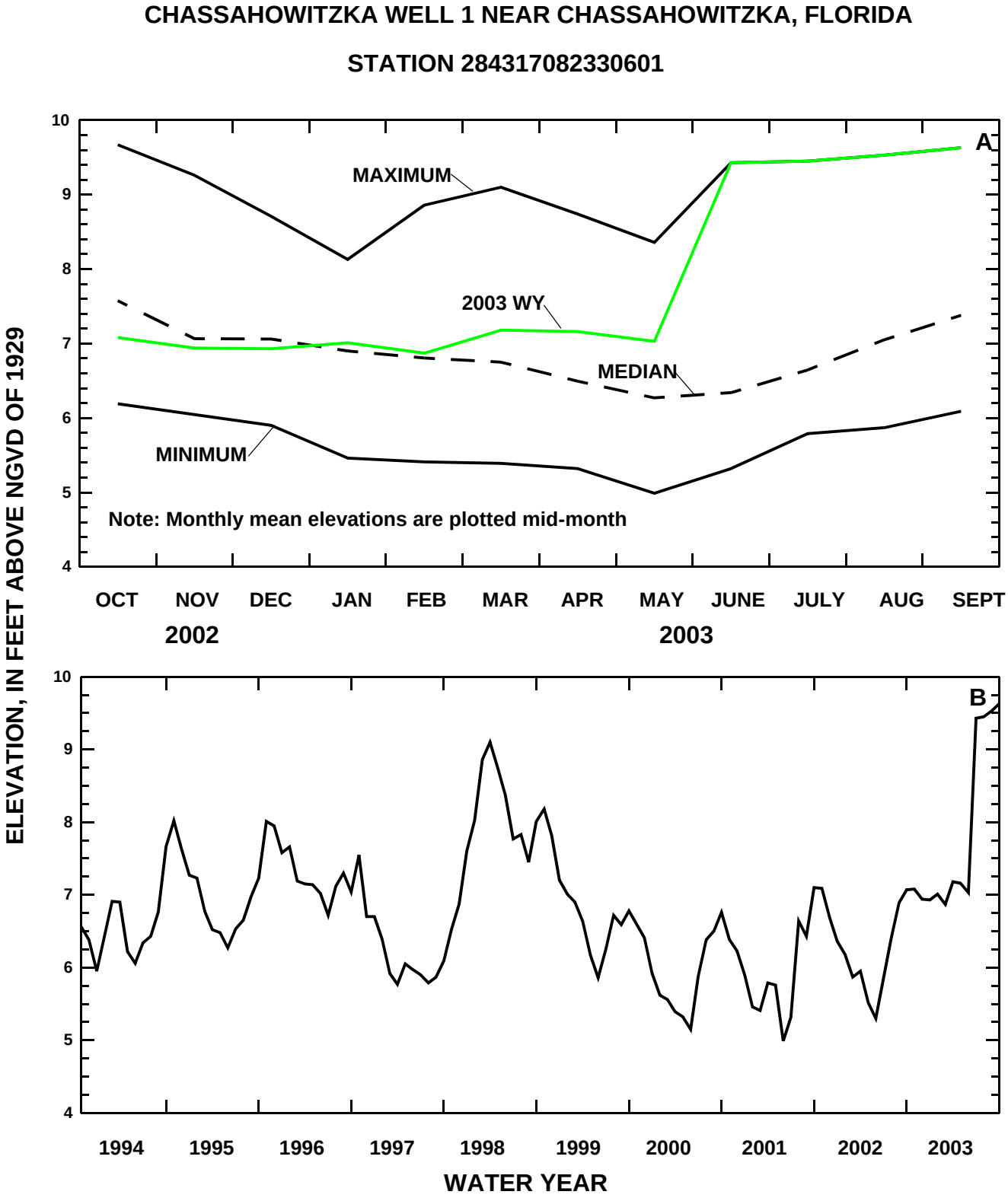


Figure 3.--Chassahowitzka well 1 near Chassahowitzka, Upper Floridan aquifer, (A) 2003 monthly mean elevation compared to the maximum, median, and minimum monthly mean elevation for the period of record, and (B) the monthly mean elevation for the period 1994-2003.

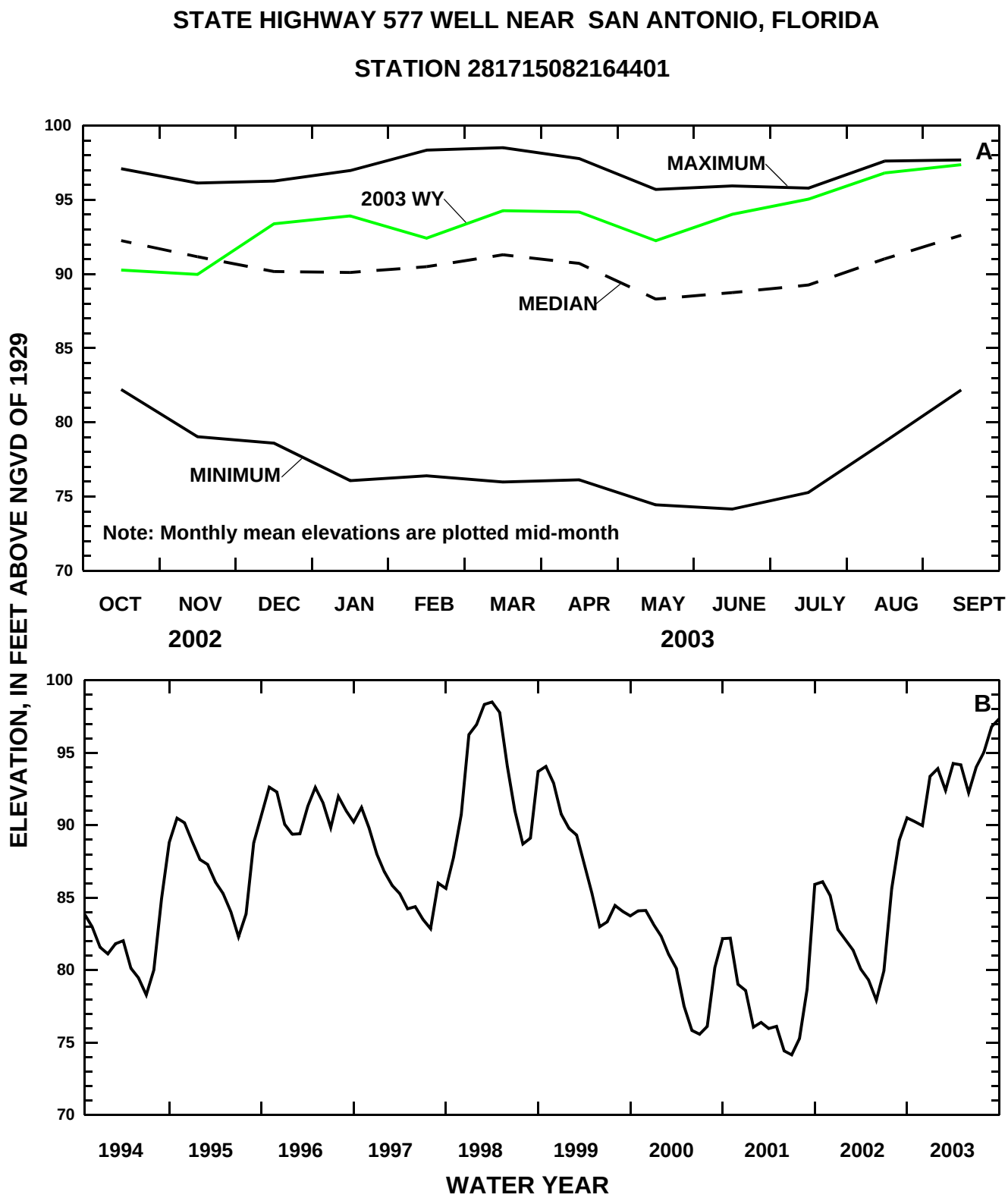


Figure 4.--State Highway 577 well near San Antonio, Upper Floridan aquifer, (A) 2003 monthly mean elevation compared to the maximum, median, and minimum monthly mean elevation for the period of record, and (B) the monthly mean elevation for the period 1994-2003.

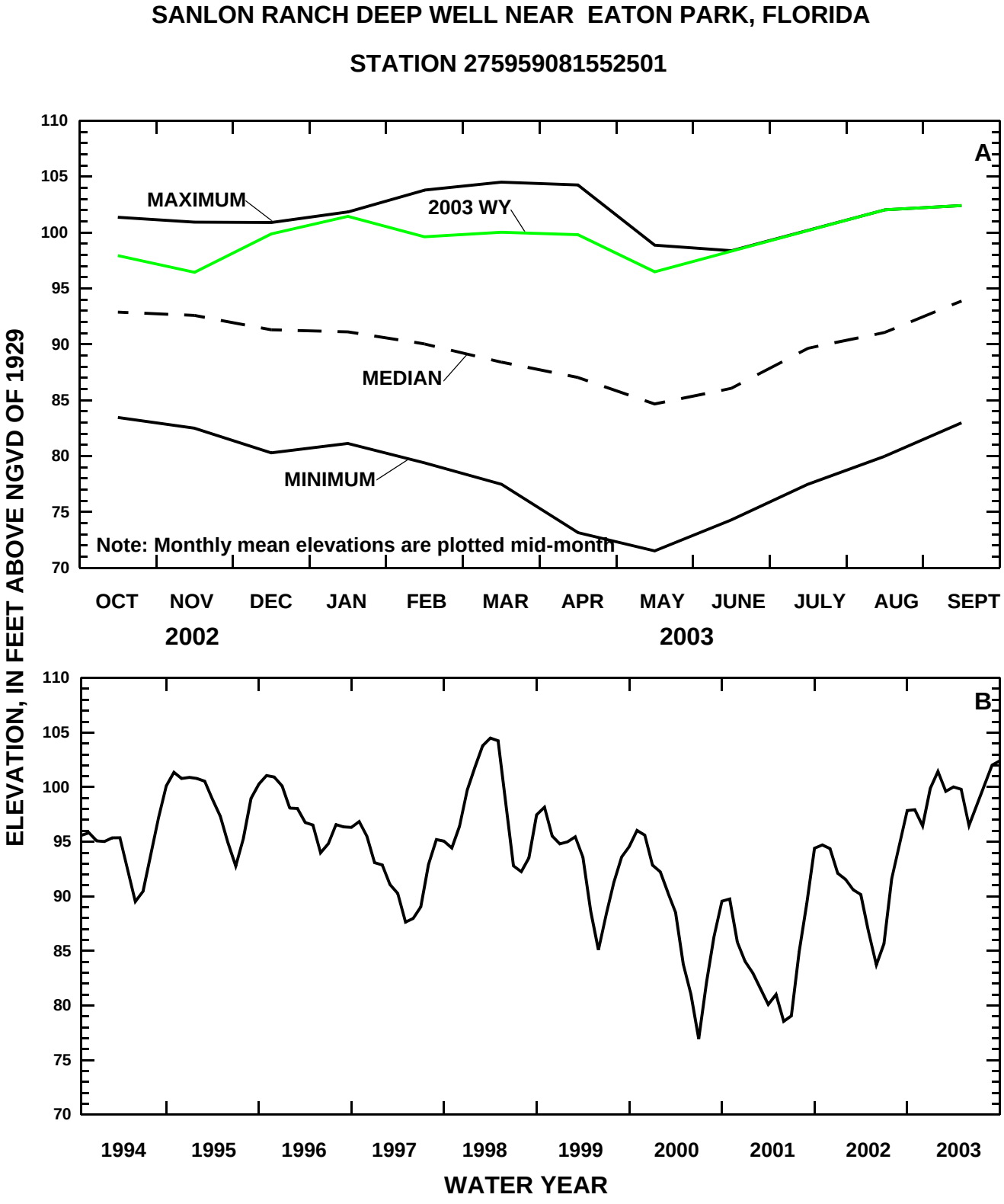


Figure 5.--Sanlon Ranch deep well near Eaton Park, Upper Floridan aquifer, (A) 2003 monthly mean elevation compared to the maximum, median, and minimum monthly mean elevation for the period of record, and (B) the monthly mean elevation for the period 1994-2003.

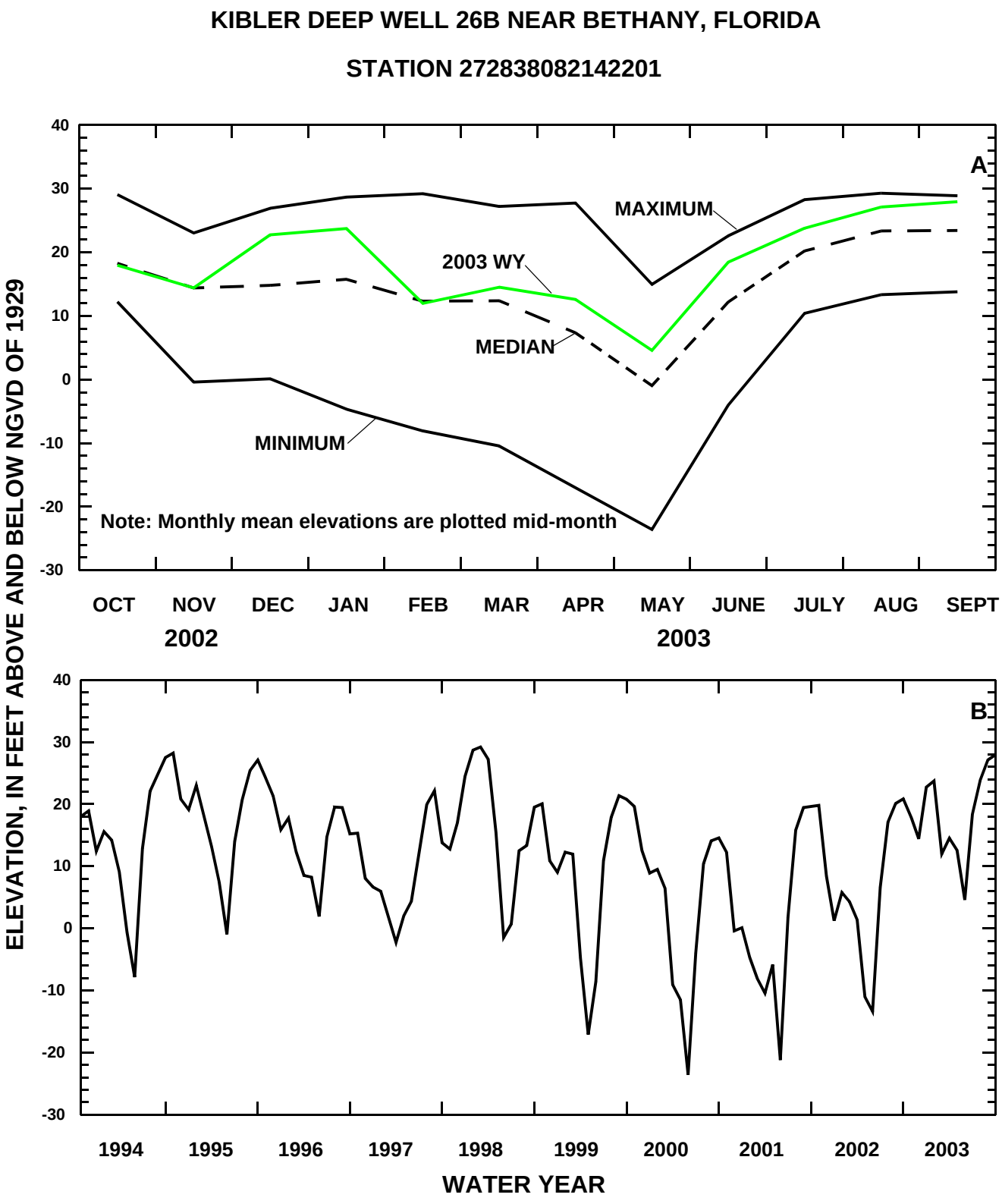


Figure 6.--Kibler deep well 26B near Bethany, Upper Floridan aquifer, (A) 2003 monthly mean elevation compared to the maximum, median, and minimum monthly mean elevation for the period of record, and (B) the monthly mean elevation for the period 1994-2003.

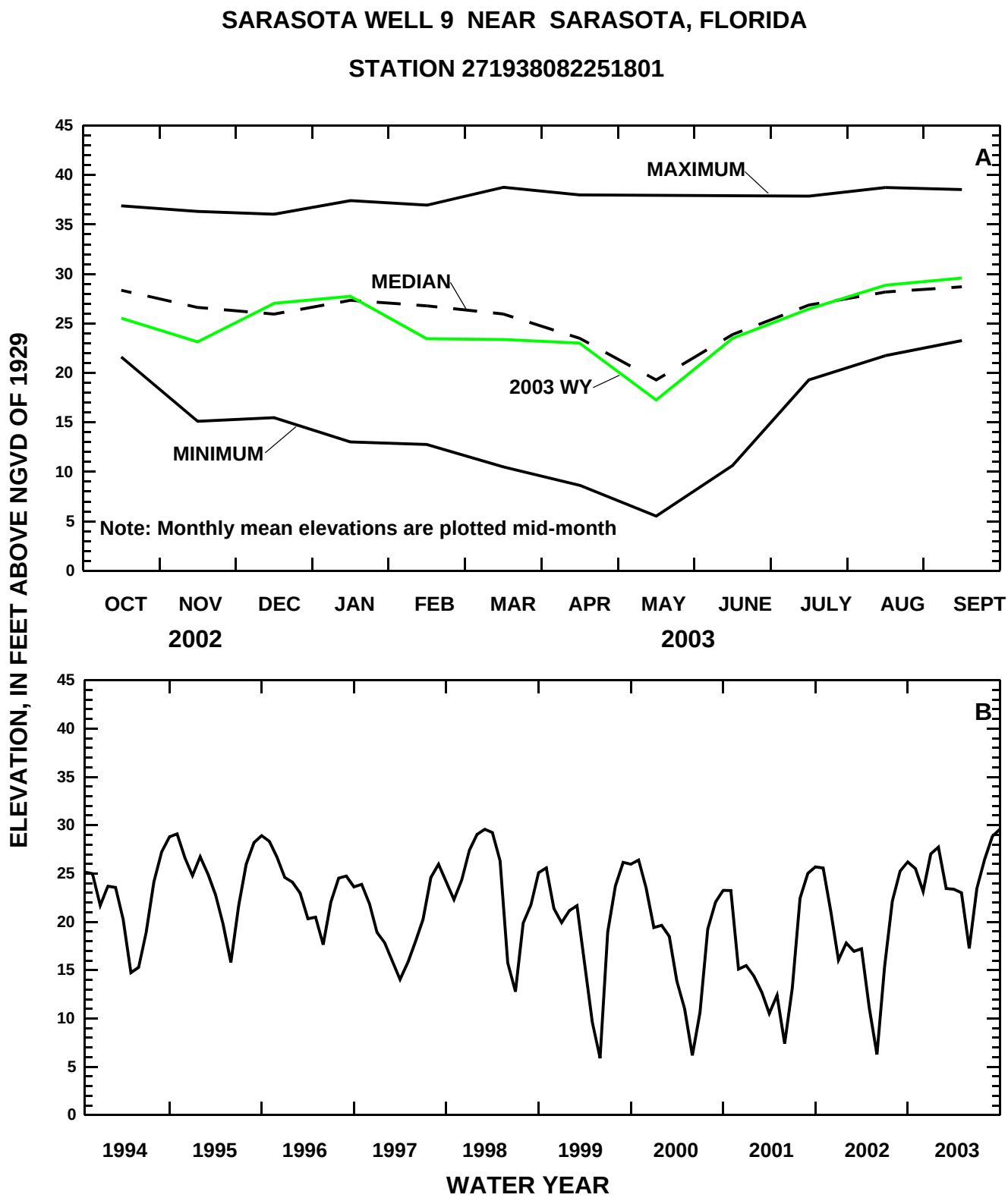


Figure 7.--Sarasota well 9 near Sarasota, Upper Floridan aquifer, (A) 2003 monthly mean elevation compared to the maximum, median, and minimum monthly mean elevation for the period of record, and (B) the monthly mean elevation for the period 1994-2003.

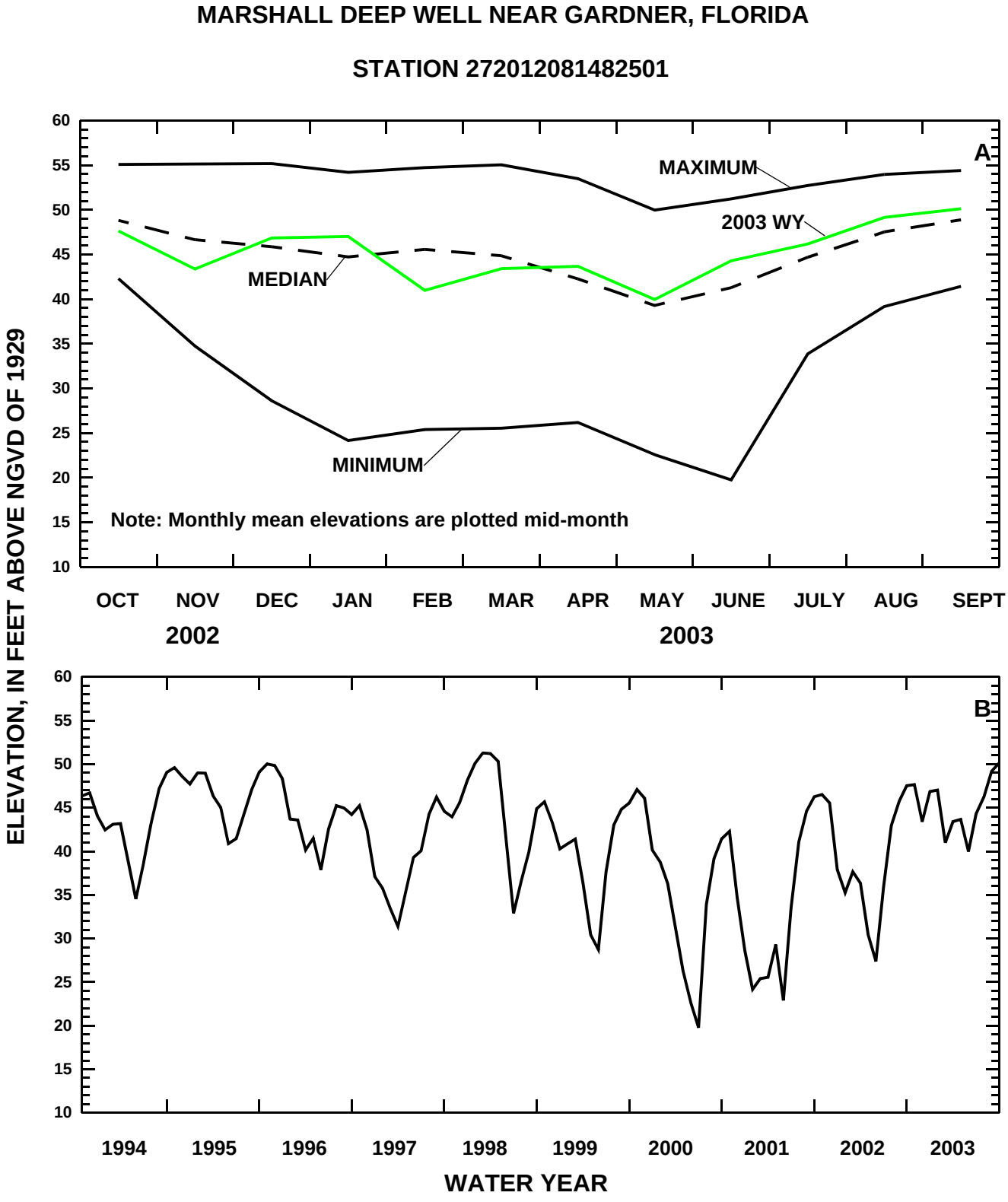


Figure 8.--Marshall deep well near Gardner, Upper Floridan aquifer, (A) 2003 monthly mean elevation compared to the maximum, median, and minimum monthly mean elevation for the period of record, and (B) the monthly mean elevation for the period 1994-2003.

EXPLANATION OF THE RECORDS

The ground-water records published in this report are for the 2003 water year that began October 1, 2002 and ended September 30, 2003. A calendar of the water year is provided on the inside of the front cover. The records contain ground water-quality and water-level data. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

Each data station in this report is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. The number usually is assigned when a station is first established and is retained for that station indefinitely. The system used by the U.S. Geological Survey to assign identification numbers is based on geographic location. The "latitude-longitude" system is used for wells.

Latitude-Longitude System

The identification numbers for wells are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells or other sites within a 1-second grid. This site-identification number, once assigned, is a pure number and has no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description. (See figure 9.)

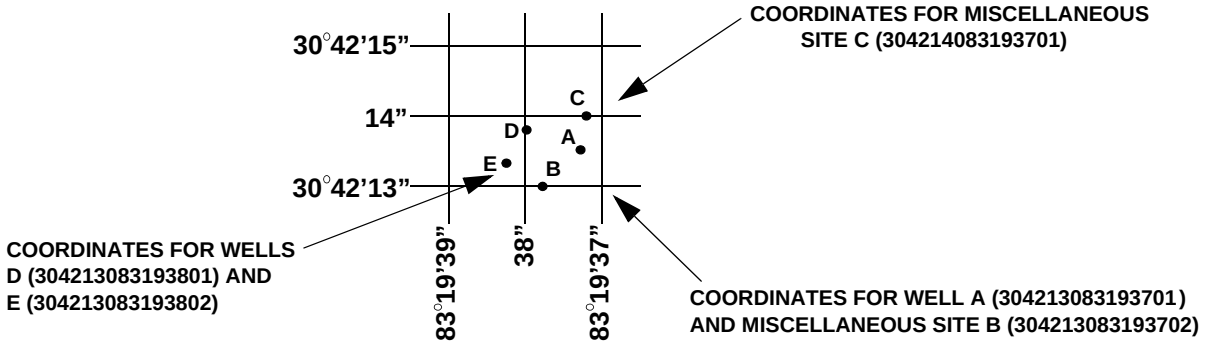


Figure 9.--System for numbering wells and miscellaneous sites.
(latitude and longitude)

A second well-numbering system used in Florida utilizes 7 l/2-minute quadrangles within the State. The quadrangles are numbered from west to east, and lettered from south to north, omitting the letters "I" and "O." The designation for each quadrangle is determined by the method "Read Right, Up." Wells are numbered serially within each quadrangle. This local well number is shown immediately after the primary well number.

Well records furnished by the State of Florida also include the well number that is based on an indexing system used by the State Water Control Board.

Records of Ground-Water Levels

Data Collection and Computation

Measurements are made in many types of wells, under varying conditions of access and at different temperatures; hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Most methods for collecting and analyzing water samples are described in the TWRIs referred to in the On-site Measurements and Sample Collection and the Laboratory Measurements sections in this report. In addition, TWRI Book 1, Chapter D2, describes guidelines for the collection and field analysis of ground-water samples for selected unstable constituents. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in TWRIs Book 1, Chapter D2; Book 3, Chapters A1, A3, and A4; and Book 9, Chapters A1 through A9. The values in this report represent water-quality conditions at the time of sampling, as much as possible, and that are consistent with available sampling techniques and methods of analysis. These methods are consistent with ASTM standards and generally follow ISO standards. Trained personnel collected all samples. The wells sampled were pumped long enough to ensure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material, possibly metal, comprising the casings.

Water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well. If known, the elevation of the land-surface datum above sea level is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (EOM).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth of water of several hundred feet, the error in determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

Data Presentation

Water-level data are presented in alphabetical order by county. The primary identification number for a given well is the 15-digit site identification number that appears in the upper left corner of the table. The secondary identification number is the local or county well number. Well locations are shown in figures 10-21*;* each well is identified on the map by its local well or county well number.

Each well record consists of three parts: the well description, the data table of water levels observed during the water year, and, for most wells, a hydrograph following the data table. Well descriptions are presented in the headings preceding the tabular data.

The following comments clarify information presented in these various headings.

LOCATION.—This paragraph follows the well-identification number and reports the hydrologic-unit number and a geographic point of reference. Latitudes and longitudes used in this report are reported as North American Datum of 1927 unless otherwise specified.

AQUIFER.—This entry designates by name and geologic age the aquifer that the well taps.

WELL CHARACTERISTICS.—This entry describes the well in terms of depth, casing diameter and depth or screened interval, method of construction, use, and changes since construction.

INSTRUMENTATION.—This paragraph provides information on both the frequency of measurement and the collection method used, allowing the user to better evaluate the reported water-level extremes by knowing whether they are based on continuous, monthly, or some other frequency of measurement.

DATUM.—This entry describes both the measuring point and the land-surface elevation at the well. The altitude of the land-surface datum is described in feet above the altitude datum; it is reported with a precision depending on the method of determination. The measuring point is described physically (such as top of casing, top of instrument shelf, and so forth), and in relation to land surface (such as 1.3 ft above land-surface datum). The elevation of the land-surface datum is described in feet above National Geodetic Vertical Datum of 1929 (NGVD 29); it is reported with a precision depending on the method of determination.

REMARKS.—This entry describes factors that may influence the water level in a well or the measurement of the water level, when various methods of measurement were begun, and the network (climatic, terrane, local, or areal effects) or the special project to which the well belongs.

PERIOD OF RECORD.—This entry indicates the time period for which records are published for the well, the month and year at the start of publication of water-level records by the USGS, and the words “to current year” if the records are to be continued into the following year. Time periods for which water-level records are available, but are not published by the USGS, may be noted.

EXTREMES FOR PERIOD OF RECORD.—This entry contains the highest and lowest instantaneously recorded or measured water levels of the period of published record, with respect to land-surface datum or sea level, and the dates of occurrence.

Water-Level Tables

A table of water levels follows the well description for each well. Water-level measurements in this report are given in feet with reference to either sea level or land-surface datum (lsd). Missing records are indicated by dashes in place of the water-level value.

For wells not equipped with recorders, water-level measurements were obtained periodically by steel or electric tape. Tables of periodic water-level measurements in these wells show the date of measurement and the measured water-level value.

Hydrographs

Hydrographs are a graphic display of water-level fluctuations over a period of time. In this report, current water year and, when appropriate, period-of-record hydrographs are shown. Hydrographs that display periodic water-level measurements show points that may be connected with a dashed line from one measurement to the next. Hydrographs that display recorder data show a solid line representing the mean water level recorded for each day. Missing data are indicated by a blank space or break in a hydrograph. Missing data may occur as a result of recorder malfunctions, battery failures, or mechanical problems related to the response of the recorder's float mechanism to water-level fluctuations in a well.

Records of Ground-Water Quality

Data Collection and Computation

The ground-water-quality data in this report were obtained as a part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some wells within a county but not for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality Statewide.

Most methods for collecting and analyzing water samples are described in Techniques of Water_Resources Investigations of the United States Geological Survey (TWRI). Procedures for on-site measurements and for collecting, treating, and shipping samples are given in TWRI, Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4. Also, detailed information on collecting, treating, and shipping samples may be obtained from the USGS District office (see address shown on back of title page in this report).

Laboratory Measurements

Analysis for sulfide and measurement of alkalinity, pH, water temperature, specific conductance, and dissolved oxygen are performed on site. All other sample analyses are performed at the USGS laboratory in Lakewood, Colorado, unless otherwise noted. Methods used by the USGS laboratory are given in TWRI, Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4.

Remark Codes

The following remark codes may appear with the water-quality data in this section:

Printed Output	Remark
E or e	Estimated value.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
K	Results based on colony count outside the acceptance range (non-ideal colony count).
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted).
D	Biological organism count equal to or greater than 15 percent (dominant).
V	Analyte was detected in both the environmental sample and the associated blanks.
&	Biological organism estimated as dominant.

Water-Quality Control Data

The USGS National Water Quality Laboratory collects quality-control data on a continuing basis to evaluate selected analytical methods to determine long-term method detection levels (LT-MDLs) and laboratory reporting levels (LRLs). These values are re-evaluated each year on the basis of the most recent quality-control data and, consequently, may change from year to year.

This reporting procedure limits the occurrence of false positive error. Falsely reporting a concentration greater than the LT-MDL for a sample in which the analyte is not present is 1 percent or less. Application of the LRL limits the occurrence of false negative error. The chance of falsely reporting a non-detection for a sample in which the analyte is present at a concentration equal to or greater than the LRL is 1 percent or less.

Accordingly, concentrations are reported as less than LRL for samples in which the analyte was either not detected or did not pass identification. Analytes detected at concentrations between the LT-MDL and the LRL and that pass identification criteria are estimated. Estimated concentrations will be noted with a remark code of "E." These data should be used with the understanding that their uncertainty is greater than that of data reported without the E remark code.

Data generated from quality-control (QC) samples are a requisite for evaluating the quality of the sampling and processing techniques as well as data from the actual samples themselves. Without QC data, environmental sample data cannot be adequately interpreted because the errors associated with the sample data are unknown. The various types of QC samples collected by this District office are described in the following section. Procedures have been established for the storage of water-quality-control data within the USGS. These procedures allow for storage of all derived QC data and are identified so that they can be related to corresponding environmental samples. These data are not presented in this report but are available from the District office.

Blank Samples

Blank samples are collected and analyzed to ensure that environmental samples have not been contaminated in the overall data-collection process. The blank solution used to develop specific types of blank samples is a solution that is free of the analytes of interest. Any measured value signal in a blank sample for an analyte (a specific component measured in a chemical analysis) that was absent in the blank solution is believed to be due to contamination. Many types of blank samples are possible; each is designed to segregate a different part of the overall data-collection process. The types of blank samples collected in this district are:

Field blank—A blank solution that is subjected to all aspects of sample collection, field processing preservation, transportation, and laboratory handling as an environmental sample.

Trip blank—A blank solution that is put in the same type of bottle used for an environmental sample and kept with the set of sample bottles before and after sample collection.

Equipment blank—A blank solution that is processed through all equipment used for collecting and processing an environmental sample (similar to a field blank but normally done in the more controlled conditions of the office).

Sampler blank—A blank solution that is poured or pumped through the same field sampler used for collecting an environmental sample.

Filter blank—A blank solution that is filtered in the same manner and through the same filter apparatus used for an environmental sample.

Splitter blank—A blank solution that is mixed and separated using a field splitter in the same manner and through the same apparatus used for an environmental sample.

Preservation blank—A blank solution that is treated with the sampler preservatives used for an environmental sample.

Reference Samples

Reference material is a solution or material prepared by a laboratory. The reference material composition is certified for one or more properties so that it can be used to assess a measurement method. Samples of reference material are submitted for analysis to ensure that an analytical method is accurate for the known properties of the reference material. Generally, the selected reference material properties are similar to the environmental sample properties.

Replicate Samples

Replicate samples are a set of environmental samples collected in a manner such that the samples are thought to be essentially identical in composition. Replicate is the general case for which a duplicate is the special case consisting of two samples. Replicate samples are collected and analyzed to establish the amount of variability in the data contributed by some part of the collection and analytical process. Many types of replicate samples are possible, each of which may yield slightly different results in a dynamic hydrologic setting, such as a flowing stream. The types of replicate samples collected in this district are:

Concurrent samples—A type of replicate sample in which the samples are collected simultaneously with two or more samplers or by using one sampler and alternating the collection of samples into two or more compositing containers.

Sequential samples—A type of replicate sample in which the samples are collected one after the other, typically over a short time.

Split sample—A type of replicate sample in which a sample is split into subsamples, each subsample contemporaneous in time and space.

Spike Samples

Spike samples are samples to which known quantities of a solution with one or more well-established analyte concentrations have been added. These samples are analyzed to determine the extent of matrix interference or degradation on the analyte concentration during sample processing and analysis.

ACCESS TO USGS WATER DATA

The USGS provides near real-time stage and discharge data for many of the gaging stations equipped with the necessary telemetry and historic daily-mean and peak-flow discharge data for most current or discontinued gaging stations through the World Wide Web (WWW). These data may be accessed from *http://water.usgs.gov*.

Water-quality data and ground-water data also are available through the WWW. In addition, data can be provided in various machine-readable formats on various media. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each Water Discipline District Office (See address that is shown on the back of the title page of this report.)

DEFINITION OF TERMS

Specialized technical terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. Terms such as algae, water level, and precipitation are used in their common everyday meanings, definitions of which are given in standard dictionaries. Not all terms defined in this alphabetical list apply to every State. See also table for converting English units to International System (SI) Units. Other glossaries that also define water-related terms are accessible from *http://water.usgs.gov/glossaries.html*.

Acid neutralizing capacity (ANC) is the equivalent sum of all bases or base-producing materials, solutes plus particulates, in an aqueous system that can be titrated with acid to an equivalence point. This term designates titration of an "unfiltered" sample (formerly reported as alkalinity).

Acre-foot (AC-FT, acre-ft) is a unit of volume, commonly used to measure quantities of water used or stored, equivalent to the volume of water required to cover 1 acre to a depth of 1 foot and equivalent to 43,560 cubic feet, 325,851 gallons, or 1,233 cubic meters. (See also "Annual runoff")

Adenosine triphosphate (ATP) is an organic, phosphate-rich compound important in the transfer of energy in organisms. Its central role in living cells makes ATP an excellent indicator of the presence of living material in water. A measurement of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter.

Adjusted discharge is discharge data that have been mathematically adjusted (for example, to remove the effects of a daily tide cycle or reservoir storage).

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample. (See also "Biomass" and "Dry weight")

Alkalinity is the capacity of solutes in an aqueous system to neutralize acid. This term designates titration of a "filtered" sample.

Annual runoff is the total quantity of water that is discharged ("runs off") from a drainage basin in a year. Data reports may present annual runoff data as volumes in acre-feet, as discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches.

Annual 7-day minimum is the lowest mean value for any 7-consecutive-day period in a year. Annual 7-day minimum values are reported herein for the calendar year and the water year (October 1 through September 30). Most low-flow frequency analyses use a climatic year (April 1-March 31), which tends to prevent the low-flow period from being artificially split between adjacent years. The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day, 10-year low-flow statistic.)

Aroclor is the registered trademark for a group of poly-chlorinated biphenyls that were manufactured by the Monsanto Company prior to 1976. Aroclors are assigned specific 4-digit reference numbers dependent upon molecular type and degree of substitution of the biphenyl ring hydrogen atoms by chlorine atoms. The first two digits of a numbered aroclor represent the molecular type, and the last two digits represent the percentage weight of the hydrogen-substituted chlorine.

Artificial substrate is a device that purposely is placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is collected. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multiplate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection. (See also "Substrate")

Ash mass is the mass or amount of residue present after the residue from a dry-mass determination has been ashed in a muffle furnace at a temperature of 500 °C for 1 hour. Ash mass of zooplankton and phytoplankton is expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2). (See also "Biomass" and "Dry mass")

Aspect is the direction toward which a slope faces with respect to the compass.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, whereas others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Bankfull stage, as used in this report, is the stage at which a stream first overflows its natural banks formed by floods with 1- to 3-year recurrence intervals.

Base discharge (for peak discharge) is a discharge value, determined for selected stations, above which peak discharge data are published. The base discharge at each station is selected so that an average of about three peak flows per year will be published. (See also "Peak flow")

Base flow is sustained flow of a stream in the absence of direct runoff. It includes natural and human-induced streamflows. Natural base flow is sustained largely by ground-water discharge.

Bed material is the sediment mixture of which a stream-bed, lake, pond, reservoir, or estuary bottom is composed. (See also "Bedload" and "Sediment")

Bedload is material in transport that primarily is supported by the streambed. In this report, bedload is considered to consist of particles in transit from the bed to the top of the bedload sampler nozzle (an elevation ranging from 0.25 to 0.5 foot). These particles are retained in the bedload sampler. A sample collected with a pressure-differential bedload sampler also may contain a component of the suspended load.

Bedload discharge (tons per day) is the rate of sediment moving as bedload, reported as dry weight, that passes through a cross section in a given time. NOTE: Bedload discharge values in this report may include a component of the suspended-sediment discharge. A correction may be necessary when computing the total sediment discharge by summing the bedload discharge and the suspended-sediment discharge. (See also "Bedload," "Dry weight," "Sediment," and "Suspended-sediment discharge")

Benthic organisms are the group of organisms inhabiting the bottom of an aquatic environment. They include a number of types of organisms, such as bacteria, fungi, insect larvae and nymphs, snails, clams, and crayfish. They are useful as indicators of water quality.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as mass per unit area or volume of habitat.

Biomass pigment ratio is an indicator of the total proportion of periphyton that are autotrophic (plants). This also is called the Autotrophic Index.

Blue-green algae (*Cyanophyta*) are a group of phytoplankton and periphyton organisms with a blue pigment in addition to a green pigment called chlorophyll. Blue-green algae can cause nuisance water-quality conditions in lakes and slow-flowing rivers; however, they are found commonly in streams throughout the year. The abundance of blue-green algae in phytoplankton samples is expressed as the number of cells per milliliter (cells/mL) or biovolume in cubic micrometers per milliliter (μm^3/mL). The abundance of blue-green algae in periphyton samples is given in cells per square centimeter ($cells/cm^2$) or biovolume per square centimeter ($\mu m^3/cm^2$). (See also "Phytoplankton"and "Periphyton")

Bottom material (See "Bed material")

Bulk electrical conductivity is the combined electrical conductivity of all material within a doughnut-shaped volume surrounding an induction probe. Bulk conductivity is affected by different physical and chemical properties of the material including the dissolved-solids content of the pore water, and the lithology and porosity of the rock.

Canadian Geodetic Vertical Datum 1928 is a geodetic datum derived from a general adjustment of Canada's first order level network in 1928.

Cell volume (biovolume) determination is one of several common methods used to estimate biomass of algae in aquatic systems. Cell members of algae are used frequently in aquatic surveys as an indicator of algal production. However, cell numbers alone cannot represent true biomass because of considerable cell-size variation among the algal species. Cell volume (μm^3) is determined by obtaining critical cell measurements or cell dimensions (for example, length, width, height, or radius) for 20 to 50 cells of each important species to obtain an average biovolume per cell. Cells are categorized according to the correspondence of their cellular shape to the nearest geometric solid or combinations of simple solids (for example, spheres, cones, or cylinders). Representative formulae used to compute biovolume are as follows:

$$\text{sphere } 4/3\ \pi r^3 \quad \text{cone } 1/3\ \pi r^2 h \quad \text{cylinder } \pi r^2 h.$$

pi (π) is the ratio of the circumference to the diameter of a circle; pi = 3.14159….

From cell volume, total algal biomass expressed as biovolume (μm^3/mL) is thus determined by multiplying the number of cells of a given species by its average cell volume and then summing these volumes for all species.

Cells/volume refers to the number of cells of any organism that is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample volume, and generally are reported as cells or units per milliliter (mL) or liter (L).

Cfs-day (See "Cubic foot per second-day")

Channel bars, as used in this report, are the lowest prominent geomorphic features higher than the channel bed.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with BOD or with carbonaceous organic pollution from sewage or industrial wastes. [See also "Biochemical oxygen demand (BOD)"]

Clostridium perfringens *(C. perfringens)* is a spore-forming bacterium that is common in the feces of human and other warm-blooded animals. Clostridial spores are being used experimentally as an indicator of past fecal contamination and the presence of microorganisms that are resistant to disinfection and environmental stresses. (See also "Bacteria")

Coliphages are viruses that infect and replicate in coliform bacteria. They are indicative of sewage contamination of water and of the survival and transport of viruses in the environment.

Color unit is produced by 1 milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Confined aquifer is a term used to describe an aquifer containing water between two relatively impermeable bound-aries. The water level in a well tapping a confined aquifer stands above the top of the confined aquifer and can be higher or lower than the water table that may be present in the material above it. In some cases, the water level can rise above the ground surface, yielding a flowing well.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Continuous-record station is a site where data are collected with sufficient frequency to define daily mean values and variations within a day.

Control designates a feature in the channel that physically affects the water-surface elevation and thereby determines the stage-discharge relation at the gage. This feature may be a constriction of the channel, a bedrock outcrop, a gravel bar, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure, as used in this report, is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of saltwater.

Cubic foot per second (CFS, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point in 1 second. It is equivalent to approximately 7.48 gallons per second or approximately 449 gallons per minute, or 0.02832 cubic meters per second. The term "second-foot" sometimes is used synonymously with "cubic foot per second" but is now obsolete.

Cubic foot per second-day (CFS-DAY, Cfs-day, [$(ft^3/s)/d$]) is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.98347 acre-feet, 646,317 gallons, or 2,446.6 cubic meters. The daily mean discharges reported in the daily value data tables numerically are equal to the daily volumes in cfs-days, and the totals also represent volumes in cfs-days.

Cubic foot per second per square mile [CFSM, $(ft^3/s)/mi^2$] is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming the runoff is distributed uniformly in time and area. (See also "Annual runoff")

Daily mean suspended-sediment concentration is the time-weighted mean concentration of suspended sediment passing a stream cross section during a 24-hour day. (See also "Sediment" and "Suspended-sediment concentration")

Daily record station is a site where data are collected with sufficient frequency to develop a record of one or more data values per day. The frequency of data collection can range from continuous recording to data collection on a daily or near-daily basis.

Data collection platform (DCP) is an electronic instrument that collects, processes, and stores data from various sensors, and transmits the data by satellite data relay, line-of-sight radio, and/or landline telemetry.

Data logger is a microprocessor-based data acquisition system designed specifically to acquire, process, and store data. Data usually are downloaded from onsite data loggers for entry into office data systems.

Datum is a surface or point relative to which measurements of height and/or horizontal position are reported. A vertical datum is a horizontal surface used as the zero point for measurements of gage height, stage, or elevation; a horizontal datum is a reference for positions given in terms of latitude-longitude, State Plane coordinates, or Universal Transverse Mercator (UTM) coordinates. (See also "Gage datum," "Land-surface datum," "National Geodetic Vertical Datum of 1929," and "North American Vertical Datum of 1988")

Diatoms *(Bacillariophyta)* are unicellular or colonial algae with a siliceous cell wall. The abundance of diatoms in phytoplankton samples is expressed as the number of cells per milliliter (cells/mL) or biovolume in cubic micrometers per milliliter (μm^3/mL). The abundance of diatoms in periphyton samples is given in cells per square centimeter (cells/cm^2) or biovolume per square centimeter ($\mu m^3/cm^2$). (See also "Phytoplankton" and "Periphyton")

Diel is of or pertaining to a 24-hour period of time; a regular daily cycle.

Discharge, or **flow**, is the rate that matter passes through a cross section of a stream channel or other water body per unit of time. The term commonly refers to the volume of water (including, unless otherwise stated, any sediment or other constituents suspended or dissolved in the water) that passes a cross section in a stream channel, canal, pipeline, and so forth, within a given period of time (cubic feet per second). Discharge also can apply to the rate at which constituents, such as suspended sediment, bedload, and dissolved or suspended chemicals, pass through a cross section, in which cases the quantity is expressed as the mass of constituent that passes the cross section in a given period of time (tons per day).

Dissolved refers to that material in a representative water sample that passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal and State agencies that collect water-quality data. Determinations of "dissolved" constituent concentrations are made on sample water that has been filtered.

Dissolved oxygen (DO) is the molecular oxygen (oxygen gas) dissolved in water. The concentration in water is a function of atmospheric pressure, temperature, and dissolved-solids concentration of the water. The ability of water to retain oxygen decreases with increasing temperature or dissolved-solids concentration. Photosynthesis and respiration by plants commonly cause diurnal variations in dissolved-oxygen concentration in water from some streams.

Dissolved solids concentration in water is the quantity of dissolved material in a sample of water. It is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. In the mathematical calculation, the bicarbonate value, in milligrams per liter, is multiplied by 0.4926 to convert it to carbonate. Alternatively, alkalinity concentration (as mg/L $CaCO_3$) can be converted to carbonate concentration by multiplying by 0.60.

Diversity index (H) (Shannon index) is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

$$\bar{d} = -\sum_{i \approx 1}^{s} \frac{n_i}{n} \log_2 \frac{n_i}{n},$$

where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

Drainage area of a stream at a specific location is that area upstream from the location, measured in a horizontal plane, that has a common outlet at the site for its surface runoff from precipitation that normally drains by gravity into a stream. Drainage areas given herein include all closed basins, or noncontributing areas, within the area unless otherwise specified.

Drainage basin is a part of the Earth's surface that contains a drainage system with a common outlet for its surface runoff. (See "Drainage area")

Dry mass refers to the mass of residue present after drying in an oven at 105 °C, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry-mass values are expressed in the same units as ash mass. (See also "Ash mass," "Biomass," and "Wet mass")

Dry weight refers to the weight of animal tissue after it has been dried in an oven at 65 °C until a constant weight is achieved. Dry weight represents total organic and inorganic matter in the tissue. (See also "Wet weight")

Embeddedness is the degree to which gravel-sized and larger particles are surrounded or enclosed by finer-sized particles. (See also "Substrate embeddedness class")

Enterococcus bacteria commonly are found in the feces of humans and other warmblooded animals. Although some strains are ubiquitous and not related to fecal pollution, the presence of enterococci in water is an indication of fecal pollution and the possible presence of enteric pathogens. Enterococcus bacteria are those bacteria that produce pink to red colonies with black or reddish-brown precipitate after incubation at 41 °C on mE agar (nutrient medium for bacterial growth) and subsequent transfer to EIA medium. Enterococci include *Streptococcus feacalis, Streptococcus feacium, Streptococcus avium,* and their variants. (See also "Bacteria")

EPT Index is the total number of distinct taxa within the insect orders Ephemeroptera, Plecoptera, and Trichoptera. This index summarizes the taxa richness within the aquatic insects that generally are considered pollution sensitive; the index usually decreases with pollution.

Escherichia coli *(E. coli)* are bacteria present in the intestine and feces of warmblooded animals. *E. coli* are a member species of the fecal coliform group of indicator bacteria. In the laboratory, they are defined as those bacteria that produce yellow or yellow-brown colonies on a filter pad saturated with urea substrate broth after primary culturing for 22 to 24 hours at 44.5 °C on mTEC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

Estimated (E) value of a concentration is reported when an analyte is detected and all criteria for a positive result are met. If the concentration is less than the method detection limit (MDL), an E code will be reported with the value. If the analyte is identified qualitatively as present, but the quantitative determination is substantially more uncertain, the National Water Quality Laboratory will identify the result with an E code even though the measured value is greater than the MDL. A value reported with an E code should be used with caution. When no analyte is detected in a sample, the default reporting value is the MDL preceded by a less than sign (<). For bacteriological data, concentrations are reported as estimated when results are based on non-ideal colony counts.

Euglenoids (*Euglenophyta*) are a group of algae that usually are free-swimming and rarely creeping. They have the ability to grow either photosynthetically in the light or heterotrophically in the dark. (See also "Phytoplankton")

Extractable organic halides (EOX) are organic compounds that contain halogen atoms such as chlorine. These organic compounds are semivolatile and extractable by ethyl acetate from air-dried streambed sediment. The ethyl acetate extract is combusted, and the concentration is determined by microcoulometric determination of the halides formed. The concentration is reported as micrograms of chlorine per gram of the dry weight of the streambed sediment.

Fecal coliform bacteria are present in the intestines or feces of warmblooded animals. They often are used as indicators of the sanitary quality of the water. In the laboratory, they are defined as all organisms that produce blue colonies within 24 hours when incubated at 44.5 °C plus or minus 0.2 °C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

Fecal streptococcal bacteria are present in the intestines of warmblooded animals and are ubiquitous in the environment. They are characterized as gram-positive, cocci bacteria that are capable of growth in brain-heart infusion broth. In the laboratory, they are defined as all the organisms that produce red or pink colonies within 48 hours at 35 °C plus or minus 1.0 °C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

Fire algae (*Pyrrhophyta*) are free-swimming unicells characterized by a red pigment spot. (See also "Phytoplankton")

Flow-duration percentiles are values on a scale of 100 that indicate the percentage of time for which a flow is not exceeded. For example, the 90th percentile of river flow is greater than or equal to 90 percent of all recorded flow rates.

Gage datum is a horizontal surface used as a zero point for measurement of stage or gage height. This surface usually is located slightly below the lowest point of the stream bottom such that the gage height is usually slightly greater than the maximum depth of water. Because the gage datum is not an actual physical object, the datum is usually defined by specifying the elevations of permanent reference marks such as bridge abutments and survey monuments, and the gage is set to agree with the reference marks. Gage datum is a local datum that is maintained independently of any national geodetic datum. However, if the elevation of the gage datum relative to the national datum (North American Vertical Datum of 1988 or National Geodetic Vertical Datum of 1929) has been determined, then the gage readings can be converted to elevations above the national datum by adding the elevation of the gage datum to the gage reading.

Gage height (G.H.) is the water-surface elevation, in feet above the gage datum. If the water surface is below the gage datum, the gage height is negative. Gage height often is used interchangeably with the more general term "stage," although gage height is more appropriate when used in reference to a reading on a gage.

Gage values are values that are recorded, transmitted, and/or computed from a gaging station. Gage values typically are collected at 5-, 15-, or 30-minute intervals.

Gaging station is a site on a stream, canal, lake, or reservoir where systematic observations of stage, discharge, or other hydrologic data are obtained.

Gas chromatography/flame ionization detector (GC/FID) is a laboratory analytical method used as a screening technique for semivolatile organic compounds that are extractable from water in methylene chloride.

Geomorphic channel units, as used in this report, are fluvial geomorphic descriptors of channel shape and stream velocity. Pools, riffles, and runs are types of geomorphic channel units considered for National Water-Quality Assessment (NAWQA) Program habitat sampling.

Green algae *(Chlorophyta)* are unicellular or colonial algae with chlorophyll pigments similar to those in terrestrial green plants. Some forms of green algae produce mats or floating "moss" in lakes. The abundance of green algae in phytoplankton samples is expressed as the number of cells per milliliter (cells/mL) or biovolume in cubic micrometers per milliliter (μm^3/mL). The abundance of green algae in periphyton samples is given in cells per square centimeter (cells/cm^2) or biovolume per square centimeter ($\mu m^3/cm^2$). (See also "Phytoplankton" and "Periphyton")

Habitat, as used in this report, includes all nonliving (physical) aspects of the aquatic ecosystem, although living components like aquatic macrophytes and riparian vegetation also are usually included. Measurements of habitat typically are made over a wider geographic scale than are measurements of species distribution.

Habitat quality index is the qualitative description (level 1) of instream habitat and riparian conditions surrounding the reach sampled. Scores range from 0 to 100 percent with higher scores indicative of desirable habitat conditions for aquatic life. Index only applicable to wadable streams.

Hardness of water is a physical-chemical characteristic that commonly is recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations (primarily calcium and magnesium) and is expressed as the equivalent concentration of calcium carbonate ($CaCO_3$).

High tide is the maximum height reached by each rising tide. The high-high and low-high tides are the higher and lower of the two high tides, respectively, of each tidal day. *See NOAA Web site: http://www.co-ops.nos.noaa.gov/tideglos.html*

Hilsenhoff's Biotic Index (HBI) is an indicator of organic pollution that uses tolerance values to weight taxa abundances; usually increases with pollution. It is calculated as follows:

$$HBI = sum\frac{(n)(a)}{N},$$

where n is the number of individuals of each taxon, a is the tolerance value of each taxon, and N is the total number of organisms in the sample.

Horizontal datum (See "Datum")

Hydrologic index stations referred to in this report are continuous-record gaging stations that have been selected as representative of streamflow patterns for their respective regions. Station locations are shown on index maps.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as defined by the former Office of Water Data Coordination and delineated on the State Hydrologic Unit Maps by the USGS. Each hydrologic unit is identified by an 8-digit number.

Inch (IN., in.), in reference to streamflow, as used in this report, refers to the depth to which the drainage area would be covered with water if all of the runoff for a given time period were distributed uniformly on it. (See also "Annual runoff")

Instantaneous discharge is the discharge at a particular instant of time. (See also "Discharge")

International Boundary Commission Survey Datum refers to a geodetic datum established at numerous monuments along the United States-Canada boundary by the International Boundary Commission.

Island, as used in this report, is a mid-channel bar that has permanent woody vegetation, is flooded once a year, on average, and remains stable except during large flood events.

Laboratory reporting level (LRL) generally is equal to twice the yearly determined long-term method detection level (LT-MDL). The LRL controls false negative error. The probability of falsely reporting a nondetection for a sample that contained

an analyte at a concentration equal to or greater than the LRL is predicted to be less than or equal to 1 percent. The value of the LRL will be reported with a "less than" (<) remark code for samples in which the analyte was not detected. The National Water Quality Laboratory (NWQL) collects quality-control data from selected analytical methods on a continuing basis to determine LT-MDLs and to establish LRLs. These values are reevaluated annually on the basis of the most current quality-control data and, therefore, may change. The LRL replaces the term 'non-detection value' (NDV).

Land-surface datum (lsd) is a datum plane that is approximately at land surface at each ground-water observation well.

Latent heat flux (often used interchangeably with latent heat-flux density) is the amount of heat energy that converts water from liquid to vapor (evaporation) or from vapor to liquid (condensation) across a specified cross-sectional area per unit time. Usually expressed in watts per square meter.

Light-attenuation coefficient, also known as the extinction coefficient, is a measure of water clarity. Light is attenuated according to the Lambert-Beer equation:

$$I = I_o e^{-\lambda L},$$

where I_o is the source light intensity, I is the light intensity at length L (in meters) from the source, λ is the light-attenuation coefficient, and e is the base of the natural logarithm. The light-attenuation coefficient is defined as

$$\lambda = -\frac{1}{L}\log_e \frac{I}{I_o}.$$

Lipid is any one of a family of compounds that are insoluble in water and that make up one of the principal components of living cells. Lipids include fats, oils, waxes, and steroids. Many environmental contaminants such as organochlorine pesticides are lipophilic.

Long-term method detection level (LT-MDL) is a detection level derived by determining the standard deviation of a minimum of 24 method detection limit (MDL) spike-sample measurements over an extended period of time. LT-MDL data are collected on a continuous basis to assess year-to-year variations in the LT-MDL. The LT-MDL controls false positive error. The chance of falsely reporting a concentration at or greater than the LT-MDL for a sample that did not contain the analyte is predicted to be less than or equal to 1 percent.

Low tide is the minimum height reached by each falling tide. The high-low and low-low tides are the higher and lower of the two low tides, respectively, of each tidal day. *See NOAA Web site: http://www.co-ops.nos.noaa.gov/tideglos.html*

Macrophytes are the macroscopic plants in the aquatic environment. The most common macrophytes are the rooted vascular plants that usually are arranged in zones in aquatic ecosystems and restricted in the area by the extent of illumination through the water and sediment deposition along the shoreline.

Mean concentration of suspended sediment (Daily mean suspended-sediment concentration) is the time-weighted concentration of suspended sediment passing a stream cross section during a given time period. (See also "Daily mean suspended-sediment concentration" and "Suspended-sediment concentration")

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period. (See also "Discharge")

Mean high or **low tide** is the average of all high or low tides, respectively, over a specific period.

Mean sea level is a local tidal datum. It is the arithmetic mean of hourly heights observed over the National Tidal Datum Epoch. Shorter series are specified in the name; for example, monthly mean sea level and yearly mean sea level. In order that they may be recovered when needed, such datums are referenced to fixed points known as benchmarks. (See also "Datum")

Measuring point (MP) is an arbitrary permanent reference point from which the distance to water surface in a well is measured to obtain water level.

Megahertz is a unit of frequency. One megahertz equals one million cycles per second.

Membrane filter is a thin microporous material of specific pore size used to filter bacteria, algae, and other very small particles from water.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

Method detection limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99-percent confidence that the analyte concentration is greater than zero. It is determined from the analysis of a sample in a given matrix containing the analyte. At the MDL concentration, the risk of a false positive is predicted to be less than or equal to 1 percent.

Method of Cubatures is a method of computing discharge in tidal estuaries based on the conservation of mass equation.

Methylene blue active substances (MBAS) indicate the presence of detergents (anionic surfactants). The determination depends on the formation of a blue color when methylene blue dye reacts with synthetic anionic detergent compounds.

Micrograms per gram (UG/G, µg/g) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

Micrograms per kilogram (UG/KG, µg/kg) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the constituent per unit mass (kilogram) of the material analyzed. One microgram per kilogram is equivalent to 1 part per billion.

Micrograms per liter (UG/L, µg/L) is a unit expressing the concentration of chemical constituents in water as mass (micrograms) of constituent per unit volume (liter) of water. One thousand micrograms per liter is equivalent to 1 milligram per liter. One microgram per liter is equivalent to 1 part per billion.

Microsiemens per centimeter (US/CM, µS/cm) is a unit expressing the amount of electrical conductivity of a solution as measured between opposite faces of a centimeter cube of solution at a specified temperature. Siemens is the International System of Units nomenclature. It is synonymous with mhos and is the reciprocal of resistance in ohms.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in water as the mass (milligrams) of constituent per unit volume (liter) of water. Concentration of suspended sediment also is expressed in milligrams per liter and is based on the mass of dry sediment per liter of water-sediment mixture.

Minimum reporting level (MRL) is the smallest measured concentration of a constituent that may be reliably reported by using a given analytical method.

Miscellaneous site, miscellaneous station, or miscellaneous sampling site is a site where streamflow, sediment, and/or water-quality data or water-quality or sediment samples are collected once, or more often on a random or discontinuous basis to provide better areal coverage for defining hydrologic and water-quality conditions over a broad area in a river basin.

Most probable number (MPN) is an index of the number of coliform bacteria that, more probably than any other number, would give the results shown by the laboratory examination; it is not an actual enumeration. MPN is determined from the distribution of gas-positive cultures among multiple inoculated tubes.

Multiple-plate samplers are artificial substrates of known surface area used for obtaining benthic invertebrate samples. They consist of a series of spaced, hardboard plates on an eyebolt.

Nanograms per liter (NG/L, ng/L) is a unit expressing the concentration of chemical constituents in solution as mass (nanograms) of solute per unit volume (liter) of water. One million nanograms per liter is equivalent to 1 milligram per liter.

National Geodetic Vertical Datum of 1929 (NGVD 29) is a fixed reference adopted as a standard geodetic datum for elevations determined by leveling. It formerly was called "Sea Level Datum of 1929" or "mean sea level." Although the datum was derived from the mean sea level at 26 tide stations**,** it does not necessarily represent local mean sea level at any particular place. *See NOAA Web site: http://www.ngs.noaa.gov/faq.shtml#WhatVD29VD88* (See "North American Vertical Datum of 1988")

Natural substrate refers to any naturally occurring immersed or submersed solid surface, such as a rock or tree, upon which an organism lives. (See also "Substrate")

Nekton are the consumers in the aquatic environment and consist of large, free-swimming organisms that are capable of sustained, directed mobility.

Nephelometric turbidity unit (NTU) is the measurement for reporting turbidity that is based on use of a standard suspension of formazin. Turbidity measured in NTU uses nephelometric methods that depend on passing specific light of a specific wavelength through the sample.

North American Datum of 1927 (NAD 27) is the horizontal control datum for the United States that was defined by a location and azimuth on the Clarke spheroid of 1866.

North American Datum of 1983 (NAD 83) is the horizontal control datum for the United States, Canada, Mexico, and Central America that is based on the adjustment of 250,000 points including 600 satellite Doppler stations that constrain the system to a geocentric origin. NAD 83 has been officially adopted as the legal horizontal datum for the United States by the Federal government.

North American Vertical Datum of 1988 (NAVD 88) is a fixed reference adopted as the official civilian vertical datum for elevations determined by Federal surveying and mapping activities in the United States. This datum was established in 1991 by minimum-constraint adjustment of the Canadian**,** Mexican, and United States first-order terrestrial leveling networks.

Open or **screened interval** is the length of unscreened opening or of well screen through which water enters a well, in feet below land surface.

Organic carbon (OC) is a measure of organic matter present in aqueous solution, suspension, or bottom sediment. May be reported as dissolved organic carbon (DOC), particulate organic carbon (POC), or total organic carbon (TOC).

Organic mass or **volatile mass** of a living substance is the difference between the dry mass and ash mass and represents the actual mass of the living matter. Organic mass is expressed in the same units as for ash mass and dry mass. (See also "Ash mass," "Biomass," and "Dry mass")

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meter (m^2), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliter (mL) or liter (L). Numbers of planktonic organisms can be expressed in these terms.

Organochlorine compounds are any chemicals that contain carbon and chlorine. Organochlorine compounds that are important in investigations of water, sediment, and biological quality include certain pesticides and industrial compounds.

Parameter code is a 5-digit number used in the USGS computerized data system, National Water Information System (NWIS), to uniquely identify a specific constituent or property.

Partial-record station is a site where discrete measurements of one or more hydrologic parameters are obtained over a period of time without continuous data being recorded or computed. A common example is a crest-stage gage partial-record station at which only peak stages and flows are recorded.

Particle size is the diameter, in millimeters (mm), of a particle determined by sieve or sedimentation methods. The sedimentation method uses the principle of Stokes Law to calculate sediment particle sizes. Sedimentation methods (pipet, bottom-with-

drawal tube, visual-accumulation tube, sedigraph) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification, as used in this report, agrees with the recommendation made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay	>0.00024 - 0.004	Sedimentation
Silt	>0.004 - 0.062	Sedimentation
Sand	>0.062 - 2.0	Sedimentation/sieve
Gravel	>2.0 - 64.0	Sieve
Cobble	>64 - 256	Manual measurement
Boulder	>256	Manual measurement

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. For the sedimentation method, most of the organic matter is removed, and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native water analysis.

Peak flow (peak stage) is an instantaneous local maximum value in the continuous time series of streamflows or stages, preceded by a period of increasing values and followed by a period of decreasing values. Several peak values ordinarily occur in a year. The maximum peak value in a year is called the annual peak; peaks lower than the annual peak are called secondary peaks. Occasionally, the annual peak may not be the maximum value for the year; in such cases, the maximum value occurs at midnight at the beginning or end of the year, on the recession from or rise toward a higher peak in the adjoining year. If values are recorded at a discrete series of times, the peak recorded value may be taken as an approximation of the true peak, which may occur between the recording instants. If the values are recorded with finite precision, a sequence of equal recorded values may occur at the peak; in this case, the first value is taken as the peak.

Percent composition or **percent of total** is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, weight, mass, or volume.

Percent shading is a measure of the amount of sunlight potentially reaching the stream. A clinometer is used to measure left and right bank canopy angles. These values are added together, divided by 180, and multiplied by 100 to compute percentage of shade.

Periodic-record station is a site where stage, discharge, sediment, chemical, physical, or other hydrologic measurements are made one or more times during a year but at a frequency insufficient to develop a daily record.

Periphyton is the assemblage of microorganisms attached to and living upon submerged solid surfaces. Although primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton are useful indicators of water quality.

Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

pH of water is the negative logarithm of the hydrogen-ion activity. Solutions with pH less than 7.0 standard units are termed "acidic," and solutions with a pH greater than 7.0 are termed "basic." Solutions with a pH of 7.0 are neutral. The presence and concentration of many dissolved chemical constituents found in water are affected, in part, by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms also are affected, in part, by the hydrogen-ion activity of water.

Phytoplankton is the plant part of the plankton. They usually are microscopic, and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment and commonly are known as algae. (See also "Plankton")

Picocurie (PC, pCi) is one-trillionth (1×10^{-12}) of the amount of radioactive nuclide represented by a curie (Ci). A curie is the quantity of radioactive nuclide that yields 3.7×10^{10} radioactive disintegrations per second (dps). A picocurie yields 0.037 dps, or 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers. Concentrations are expressed as a number of cells per milliliter (cells/mL) of sample.

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Polychlorinated naphthalenes (PCNs) are industrial chemicals that are mixtures of chlorinated naphthalene compounds. They have properties and applications similar to polychlorinated biphenyls (PCBs) and have been identified in commercial PCB preparations.

Pool, as used in this report, is a small part of a stream reach with little velocity, commonly with water deeper than surrounding areas.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photo-synthetic and chemosynthetic activity of producer organisms (chiefly, green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated (carbon method) by the plants.

Primary productivity (carbon method) is expressed as milligrams of carbon per area per unit time [mg C/(m^2/time)] for periphyton and macrophytes or per volume [mg C/(m^3/time)] for phytoplankton. The carbon method defines the amount of carbon dioxide consumed as measured by radioactive carbon (carbon-14). The carbon-14 method is of greater sensitivity than the oxygen light- and dark-bottle method and is preferred for use with unenriched water samples. Unit time may be either the hour or day, depending on the incubation period. (See also "Primary productivity")

Primary productivity (oxygen method) is expressed as milligrams of oxygen per area per unit time [mg O/(m^2/time)] for periphyton and macrophytes or per volume [mg O/(m^3/time)] for phytoplankton. The oxygen method defines production and respiration rates as estimated from changes in the measured dissolved-oxygen concentration. The oxygen light- and dark-bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period. (See also "Primary productivity")

Radioisotopes are isotopic forms of elements that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus; for example, ordinary chlorine is a mixture of isotopes having atomic weights of 35 and 37, and the natural mixture has an atomic weight of about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron. There are 275 isotopes of the 81 stable elements, in addition to more than 800 radioactive isotopes.

Reach, as used in this report, is a length of stream that is chosen to represent a uniform set of physical, chemical, and biological conditions within a segment. It is the principal sampling unit for collecting physical, chemical, and biological data.

Recoverable from bed (bottom) material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results. (See also "Bed material")

Recurrence interval, also referred to as return period, is the average time, usually expressed in years, between occurrences of hydrologic events of a specified type (such as exceedances of a specified high flow or nonexceedance of a specified low flow). The terms "return period" and "recurrence interval" do not imply regular cyclic occurrence. The actual times between occurrences vary randomly, with most of the times being less than the average and a few being substantially greater than the average. For example, the 100-year flood is the flow rate that is exceeded by the annual maximum peak flow at intervals whose average length is 100 years (that is, once in 100 years, on average); almost two-thirds of all exceedances of the 100-year flood occur

less than 100 years after the previous exceedance, half occur less than 70 years after the previous exceedance, and about one-eighth occur more than 200 years after the previous exceedance. Similarly, the 7-day, 10-year low flow ($7Q_{10}$) is the flow rate below which the annual minimum 7-day-mean flow dips at intervals whose average length is 10 years (that is, once in 10 years, on average); almost two-thirds of the nonexceedances of the $7Q_{10}$ occur less than 10 years after the previous nonexceedance, half occur less than 7 years after, and about one-eighth occur more than 20 years after the previous nonexceedance. The recurrence interval for annual events is the reciprocal of the annual probability of occurrence. Thus, the 100-year flood has a 1-percent chance of being exceeded by the maximum peak flow in any year, and there is a 10-percent chance in any year that the annual minimum 7-day-mean flow will be less than the $7Q_{10}$.

Replicate samples are a group of samples collected in a manner such that the samples are thought to be essentially identical in composition.

Return period (See "Recurrence interval")

Riffle, as used in this report, is a shallow part of the stream where water flows swiftly over completely or partially submerged obstructions to produce surface agitation.

River mileage is the curvilinear distance, in miles, measured upstream from the mouth along the meandering path of a stream channel in accordance with Bulletin No. 14 (October 1968) of the Water Resources Council and typically is used to denote location along a river.

Run, as used in this report, is a relatively shallow part of a stream with moderate velocity and little or no surface turbulence.

Runoff is the quantity of water that is discharged ("runs off") from a drainage basin during a given time period. Runoff data may be presented as volumes in acre-feet, as mean discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches. (See also "Annual runoff")

Sea level, as used in this report, refers to one of the two commonly used national vertical datums (NGVD 1929 or NAVD 1988). See separate entries for definitions of these datums.

Sediment is solid material that originates mostly from disintegrated rocks; when transported by, suspended in, or deposited from water, it is referred to as "fluvial sediment." Sediment includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are affected by environmental and land-use factors. Some major factors are topography, soil characteristics, land cover, and depth and intensity of precipitation.

Sensible heat flux (often used interchangeably with latent sensible heat-flux density) is the amount of heat energy that moves by turbulent transport through the air across a specified cross-sectional area per unit time and goes to heating (cooling) the air. Usually expressed in watts per square meter.

Seven-day, 10-year low flow ($7Q_{10}$) is the discharge below which the annual 7-day minimum flow falls in 1 year out of 10 on the long-term average. The recurrence interval of the $7Q_{10}$ is 10 years; the chance that the annual 7-day minimum flow will be less than the $7Q_{10}$ is 10 percent in any given year. (See also "Annual 7-day minimum" and "Recurrence interval")

Shelves, as used in this report, are streambank features extending nearly horizontally from the flood plain to the lower limit of persistent woody vegetation.

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Sodium hazard in water is an index that can be used to evaluate the suitability of water for irrigating crops.

Soil heat flux (often used interchangeably with soil heat-flux density) is the amount of heat energy that moves by conduction across a specified cross-sectional area of soil per unit time and goes to heating (or cooling) the soil. Usually expressed in watts per square meter.

Soil-water content is the water lost from the soil upon drying to constant mass at 105 °C; expressed either as mass of water per unit mass of dry soil or as the volume of water per unit bulk volume of soil.

Specific electrical conductance (conductivity) is a measure of the capacity of water (or other media) to conduct an electrical current. It is expressed in microsiemens per centimeter at 25 °C. Specific electrical conductance is a function of the types and quantity of dissolved substances in water and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is from 55 to 75 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stable isotope ratio (per MIL) is a unit expressing the ratio of the abundance of two radioactive isotopes. Isotope ratios are used in hydrologic studies to determine the age or source of specific water, to evaluate mixing of different water, as an aid in determining reaction rates, and other chemical or hydrologic processes.

Stage (See "Gage height")

Stage-discharge relation is the relation between the water-surface elevation, termed stage (gage height), and the volume of water flowing in a channel per unit time.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lives.

Substrate embeddedness class is a visual estimate of riffle streambed substrate larger than gravel that is surrounded or covered by fine sediment (<2 mm, sand or finer). Below are the class categories expressed as the percentage covered by fine sediment:

0	no gravel or larger substrate	3	26-50 percent
1	> 75 percent	4	5-25 percent
2	51-75 percent	5	< 5 percent

Surface area of a lake is that area (acres) encompassed by the boundary of the lake as shown on USGS topographic maps, or other available maps or photographs. Because surface area changes with lake stage, surface areas listed in this report represent those determined for the stage at the time the maps or photographs were obtained.

Surficial bed material is the upper surface (0.1 to 0.2 foot) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Surrogate is an analyte that behaves similarly to a target analyte, but that is highly unlikely to occur in a sample. A surrogate is added to a sample in known amounts before extraction and is measured with the same laboratory procedures used to measure the target analyte. Its purpose is to monitor method performance for an individual sample.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is defined operationally as the material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative suspended water-sediment sample that is retained on a 0.45-micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment, and, thus, the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results. Determinations of "suspended, recoverable" constituents are made either by directly analyzing the suspended mate-rial collected on the filter or, more commonly, by difference, on the basis of determinations of (1) dissolved and (2) total recoverable concentrations of the constituent. (See also "Suspended")

Suspended sediment is the sediment maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid. (See also "Sediment")

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 foot above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L). The analytical technique uses the mass of all of the sediment and the net weight of the water-sediment mixture in a sample to compute the suspended-sediment concentration. (See also "Sediment" and "Suspended sediment")

Suspended-sediment discharge (tons/d) is the rate of sediment transport, as measured by dry mass or volume, that passes a cross section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft^3/s) x 0.0027. (See also "Sediment," "Suspended sediment," and "Suspended-sediment concentration")

Suspended-sediment load is a general term that refers to a given characteristic of the material in suspension that passes a point during a specified period of time. The term needs to be qualified, such as "annual suspended-sediment load" or "sand-size suspended-sediment load," and so on. It is not synonymous with either suspended-sediment discharge or concentration. (See also "Sediment")

Suspended solids, total residue at 105 °C concentration is the concentration of inorganic and organic material retained on a filter, expressed as milligrams of dry material per liter of water (mg/L). An aliquot of the sample is used for this analysis.

Suspended, total is the total amount of a given constituent in the part of a water-sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. Knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total." Determinations of "suspended, total" constituents are made either by directly analyzing portions of the suspended material collected on the filter or, more commonly, by difference, on the basis of determinations of (1) dissolved and (2) total concentrations of the constituent. (See also "Suspended")

Synoptic studies are short-term investigations of specific water-quality conditions during selected seasonal or hydro-logic periods to provide improved spatial resolution for critical water-quality conditions. For the period and conditions sampled, they assess the spatial distribution of selected water-quality conditions in relation to causative factors, such as land use and contaminant sources.

Taxa (Species) richness is the number of species (taxa) present in a defined area or sampling unit.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchial scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, *Hexagenia limbata,* is the following:

Kingdom:	Animal
Phylum:	Arthropeda
Class:	Insecta
Order:	Ephemeroptera
Family:	Ephemeridae
Genus:	*Hexagenia*
Species:	*Hexagenia limbata*

Thalweg is the line formed by connecting points of minimum streambed elevation (deepest part of the channel).

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term "temperature recorder" is used in the table descriptions and refers to any instrument that records temperature whether on a chart, a tape, or any other medium.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water resulting from the mixing of flow proportionally to the duration of the concentration.

Tons per acre-foot (T/acre-ft) is the dry mass (tons) of a constituent per unit volume (acre-foot) of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

Tons per day (T/DAY, tons/d) is a common chemical or sediment discharge unit. It is the quantity of a substance in solution, in suspension, or as bedload that passes a stream section during a 24-hour period. It is equivalent to 2,000 pounds per day, or 0.9072 metric ton per day.

Total is the amount of a given constituent in a representative whole-water (unfiltered) sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determined at least 95 percent of the constituent in the sample.)

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. This group includes coliforms that inhabit the intestine of warmblooded animals and those that inhabit soils. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria that ferment lactose with gas formation within 48 hours at 35 °C. In the laboratory, these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35 °C plus or minus 1.0 °C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 milliliters of sample. (See also "Bacteria")

Total discharge is the quantity of a given constituent, measured as dry mass or volume, that passes a stream cross section per unit of time. When referring to constituents other than water, this term needs to be qualified, such as "total sediment discharge," "total chloride discharge," and so on.

Total in bottom material is the amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."

Total length (fish) is the straight-line distance from the anterior point of a fish specimen's snout, with the mouth closed, to the posterior end of the caudal (tail) fin, with the lobes of the caudal fin squeezed together.

Total load refers to all of a constituent in transport. When referring to sediment, it includes suspended load plus bed load.

Total organism count is the number of organisms collected and enumerated in any particular sample. (See also "Organism count/volume")

Total recoverable is the amount of a given constituent in a whole-water sample after a sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data for whole-water samples, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures may produce different analytical results.

Total sediment discharge is the mass of suspended-sediment plus bed-load transport, measured as dry weight, that passes a cross section in a given time. It is a rate and is reported as tons per day. (See also "Bedload," "Bedload discharge," "Sediment," "Suspended sediment," and "Suspended-sediment concentration")

Total sediment load or **total load** is the sediment in transport as bedload and suspended-sediment load. The term may be qualified, such as "annual suspended-sediment load" or "sand-size suspended-sediment load," and so on. It differs from total sediment discharge in that load refers to the material, whereas discharge refers to the quantity of material, expressed in units of mass per unit time. (See also "Sediment," "Suspended-sediment load," and "Total load")

Transect, as used in this report, is a line across a stream perpendicular to the flow and along which measurements are taken, so that morphological and flow characteristics along the line are described from bank to bank. Unlike a cross section, no attempt is made to determine known elevation points along the line.

Turbidity is the reduction in the transparency of a solution because of the presence of suspended and some dissolved substances. The measurement technique records the collective optical properties of the solution that cause light to be scattered and attenuated rather than transmitted in straight lines; the higher the intensity of scattered or attenuated light, the higher the value of the turbidity. Turbidity is expressed in nephelometric turbidity units (NTU). Depending on the method used, the turbidity units as NTU can be defined as the intensity of light of a specified wavelength scattered or attenuated by suspended particles or absorbed at a method specified angle, usually 90 degrees, from the path of the incident light. Currently approved methods for the measurement of turbidity in the USGS include those that conform to USEPA Method 180.1, ASTM D1889-00, and ISO 7027. Measurements of turbidity by these different methods and different instruments are unlikely to yield equivalent values.

Ultraviolet (UV) absorbance (absorption) at 254 or 280 nanometers is a measure of the aggregate concentration of the mixture of UV absorbing organic materials dissolved in the analyzed water, such as lignin, tannin, humic substances, and various aromatic compounds. UV absorbance (absorption) at 254 or 280 nanometers is measured in UV absorption units per centimeter of path length of UV light through a sample.

Unconfined aquifer is an aquifer whose upper surface is a water table free to fluctuate under atmospheric pressure. (See "Water-table aquifer")

Vertical datum (See "Datum")

Volatile organic compounds (VOCs) are organic compounds that can be isolated from the water phase of a sample by purging the water sample with inert gas, such as helium, and, subsequently, analyzed by gas chromatography. Many VOCs are human-made chemicals that are used and produced in the manufacture of paints, adhesives, petroleum products, pharmaceuticals, and refrigerants. They often are components of fuels, solvents, hydraulic fluids, paint thinners, and dry-cleaning agents commonly used in urban settings. VOC contamination of drinking-water supplies is a human-health concern because many are toxic and are known or suspected human carcinogens.

Water table is that surface in a ground-water body at which the water pressure is equal to the atmospheric pressure.

Water-table aquifer is an unconfined aquifer within which the water table is found.

Water year in USGS reports dealing with surface-water supply is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 2003, is called the "2003 water year."

Watershed (See "Drainage basin")

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports. (WRD was used as an abbreviation for "Water-Resources Data" in reports published prior to 1976.)

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

Wet mass is the mass of living matter plus contained water. (See also "Biomass" and "Dry mass")

Wet weight refers to the weight of animal tissue or other substance including its contained water. (See also "Dry weight")

WSP is used as an acronym for "Water-Supply Paper" in reference to previously published reports.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column and often are large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers. (See also "Plankton")

Techniques of Water-Resources Investigations of the U.S. Geological Survey

The USGS publishes a series of manuals, the Techniques of Water-Resources Investigations, describing procedures for planning and conducting specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, section A of book 3 (Applications of Hydraulics) pertains to surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

Reports in the Techniques of Water-Resources Investigations series, which are listed below, are online at http://water.usgs.gov/pubs/twri/. Printed copies are for sale by the USGS, Information Services, Box 25286, Federal Center, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office), telephone 1-888-ASK-USGS. Please telephone 1-888-ASK-USGS for current prices, and refer to the title, book number, chapter number, and mention the "U.S. Geological Survey Techniques of Water-Resources Investigations." Products can then be ordered by telephone, or online at http://www.usgs.gov/sales.html, or by FAX to (303)236-469 of an order form available online at http://mac.usgs.gov/isb/pubs/forms/. Prepayment by major credit card or by a check or money order payable to the "U.S. Geological Survey" is required.

Book 1. Collection of Water Data by Direct Measurement

Section D. Water Quality

1–D1.Water temperature—Influential factors, field measurement, and data presentation, by H.H. Stevens, Jr., J.F. Ficke, and G.F. Smoot: USGS–TWRI book 1, chap. D1. 1975. 65 p.
1–D2.Guidelines for collection and field analysis of ground-water samples for selected unstable constituents, by W.W. Wood: USGS–TWRI book 1, chap. D2. 1976. 24 p.

Book 2. Collection of Environmental Data

Section D. Surface Geophysical Methods

2–D1.Application of surface geophysics to ground-water investigations, by A.A.R. Zohdy, G.P. Eaton, and D.R. Mabey: USGS–TWRI book 2, chap. D1. 1974. 116 p.
2–D2.Application of seismic-refraction techniques to hydrologic studies, by F.P. Haeni: USGS–TWRI book 2, chap. D2. 1988. 86 p.

Section E. Subsurface Geophysical Methods

2–E1.Application of borehole geophysics to water-resources investigations, by W.S. Keys and L.M. MacCary: USGS–TWRI book 2, chap. E1. 1971. 126 p.
2–E2.Borehole geophysics applied to ground-water investigations, by W.S. Keys: USGS–TWRI book 2, chap. E2. 1990. 150 p.

Section F. Drilling and Sampling Methods

2–F1.Application of drilling, coring, and sampling techniques to test holes and wells, by Eugene Shuter and W.E. Teasdale: USGS–TWRI book 2, chap. F1. 1989. 97 p.

Book 3. Applications of Hydraulics

Section A. Surface-Water Techniques

3–A1.General field and office procedures for indirect discharge measurements, by M.A. Benson and Tate Dalrymple: USGS–TWRI book 3, chap. A1. 1967. 30 p.
3–A2.Measurement of peak discharge by the slope-area method, by Tate Dalrymple and M.A. Benson: USGS–TWRI book 3, chap. A2. 1967. 12 p.
3–A3.Measurement of peak discharge at culverts by indirect methods, by G.L. Bodhaine: USGS–TWRI book 3, chap. A3. 1968. 60 p.
3–A4.Measurement of peak discharge at width contractions by indirect methods, by H.F. Matthai: USGS-TWRI book 3, chap. A4. 1967. 44 p.
3–A5.Measurement of peak discharge at dams by indirect methods, by Harry Hulsing: USGS–TWRI book 3, chap. A5. 1967. 29 p.
3–A6.General procedure for gaging streams, by R.W. Carter and Jacob Davidian: USGS–TWRI book 3, chap. A6. 1968. 13 p.
3–A7.Stage measurement at gaging stations, by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A7. 1968. 28 p.
3–A8.Discharge measurements at gaging stations, by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A8. 1969. 65 p.
3–A9.Measurement of time of travel in streams by dye tracing, by F.A. Kilpatrick and J.F. Wilson, Jr.: USGS–TWRI book 3, chap. A9. 1989. 27 p.
3–Al0.Discharge ratings at gaging stations, by E.J. Kennedy: USGS–TWRI book 3, chap. A10. 1984. 59 p.
3–A11.Measurement of discharge by the moving-boat method, by G.F. Smoot and C.E. Novak: USGS–TWRI book 3, chap. A11. 1969. 22 p.
3–A12.Fluorometric procedures for dye tracing, Revised, by J.F. Wilson, Jr., E.D. Cobb, and F.A. Kilpatrick: USGS–TWRI book 3, chap. A12. 1986. 34 p.
3–A13.Computation of continuous records of streamflow, by E.J. Kennedy: USGS–TWRI book 3, chap. A13. 1983. 53 p.
3–A14.Use of flumes in measuring discharge, by F.A. Kilpatrick and V.R. Schneider: USGS–TWRI book 3, chap. A14. 1983. 46 p.
3–A15.Computation of water-surface profiles in open channels, by Jacob Davidian: USGS–TWRI book 3, chap. A15. 1984. 48 p.

3–A16.*Measurement of discharge using tracers*, by F.A. Kilpatrick and E.D. Cobb: USGS–TWRI book 3, chap. A16. 1985. 52 p.
3–A17.*Acoustic velocity meter systems,* by Antonius Laenen: USGS–TWRI book 3, chap. A17. 1985. 38 p.
3–A18.*Determination of stream reaeration coefficients by use of tracers,* by F.A. Kilpatrick, R.E. Rathbun, Nobuhiro Yotsukura, G.W. Parker, and L.L. DeLong: USGS–TWRI book 3, chap. A18. 1989. 52 p.
3–A19.*Levels at streamflow gaging stations*, by E.J. Kennedy: USGS–TWRI book 3, chap. A19. 1990. 31 p.
3–A20.*Simulation of soluble waste transport and buildup in surface waters using tracers*, by F.A. Kilpatrick: USGS–TWRI book 3, chap. A20. 1993. 38 p.
3–A21*Stream-gaging cableways,* by C. Russell Wagner: USGS–TWRI book 3, chap. A21. 1995. 56 p.

Section B. Ground-Water Techniques

3–B1. *Aquifer-test design, observation, and data analysis,* by R.W. Stallman: USGS–TWRI book 3, chap. B1. 1971. 26 p.
3–B2.*Introduction to ground-water hydraulics, a programed text for self-instruction*, by G.D. Bennett: USGS–TWRI book 3, chap. B2. 1976. 172 p.
3–B3.*Type curves for selected problems of flow to wells in confined aquifers*, by J.E. Reed: USGS–TWRI book 3, chap. B3. 1980. 106 p.
3–B4.*Regression modeling of ground-water flow,* by R.L. Cooley and R.L. Naff: USGS–TWRI book 3, chap. B4. 1990. 232 p.
3–B4.*Supplement 1. Regression modeling of ground-water flow—Modifications to the computer code for nonlinear regression solution of steady-state ground-water flow problems,* by R.L. Cooley: USGS–TWRI book 3, chap. B4. 1993. 8 p.
3–B5.*Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems—An introduction*, by O.L. Franke, T.E. Reilly, and G.D. Bennett: USGS–TWRI book 3, chap. B5. 1987. 15 p.
3–B6.*The principle of superposition and its application in ground-water hydraulics,* by T.E. Reilly, O.L. Franke, and G.D. Bennett: USGS–TWRI book 3, chap. B6. 1987. 28 p.
3–B7.*Analytical solutions for one-, two-, and three-dimensional solute transport in ground-water systems with uniform flow,* by E.J. Wexler: USGS–TWRI book 3, chap. B7. 1992. 190 p.
3–B8.*System and boundary conceptualization in ground-water flow simulation,* by T.E. Reilly: USGS–TWRI book 3, chap. B8. 2001. 29 p.

Section C. Sedimentation and Erosion Techniques

3–C1.*Fluvial sediment concepts,* by H.P. Guy: USGS–TWRI book 3, chap. C1. 1970. 55 p.
3–C2.*Field methods for measurement of fluvial sediment*, by T.K. Edwards and G.D. Glysson: USGS–TWRI book 3, chap. C2. 1999. 89 p.
3–C3.*Computation of fluvial-sediment discharge,* by George Porterfield: USGS–TWRI book 3, chap. C3. 1972. 66 p.

Book 4. Hydrologic Analysis and Interpretation

Section A. Statistical Analysis

4–A1.*Some statistical tools in hydrology*, by H.C. Riggs: USGS–TWRI book 4, chap. A1. 1968. 39 p.
4–A2.*Frequency curves,* by H.C. Riggs: USGS–TWRI book 4, chap. A2. 1968. 15 p.
4–A3.*Statistical methods in water resources*, by D.R. Helsel and R.M. Hirsch: USGS–TWRI book 4, chap. A3. 1991. Available only online at http://water.usgs.gov/pubs/twri/twri4a3/. (Accessed August 30, 2002.)

Section B. Surface Water

4–B1.*Low-flow investigations,* by H.C. Riggs: USGS–TWRI book 4, chap. B1. 1972. 18 p.
4–B2.*Storage analyses for water supply*, by H.C. Riggs and C.H. Hardison: USGS–TWRI book 4, chap. B2. 1973. 20 p.
4–B3.*Regional analyses of streamflow characteristics,* by H.C. Riggs: USGS–TWRI book 4, chap. B3. 1973.
15 p.

Section D. Interrelated Phases of the Hydrologic Cycle

4–D1.*Computation of rate and volume of stream depletion by wells*, by C.T. Jenkins: USGS–TWRI book 4, chap. D1. 1970. 17 p.

Book 5. Laboratory Analysis

Section A. Water Analysis

5–A1.*Methods for determination of inorganic substances in water and fluvial sediments,* by M.J. Fishman and L.C. Friedman, editors: USGS–TWRI book 5, chap. A1. 1989. 545 p.
5–A2.*Determination of minor elements in water by emission spectroscopy,* by P.R. Barnett and E.C. Mallory, Jr.: USGS–TWRI book 5, chap. A2. 1971. 31 p.
5–A3.*Methods for the determination of organic substances in water and fluvial sediments*, edited by R.L. Wershaw, M.J. Fishman, R.R. Grabbe, and L.E. Lowe: USGS–TWRI book 5, chap. A3. 1987. 80 p.
5–A4.*Methods for collection and analysis of aquatic biological and microbiological samples,* by L.J. Britton and P.E. Greeson, editors: USGS–TWRI book 5, chap. A4. 1989. 363 p.

5–A5.*Methods for determination of radioactive substances in water and fluvial sediments,* by L.L. Thatcher, V.J. Janzer, and K.W. Edwards: USGS–TWRI book 5, chap. A5. 1977. 95 p.
5–A6.*Quality assurance practices for the chemical and biological analyses of water and fluvial sediments,* by L.C. Friedman and D.E. Erdmann: USGS–TWRI book 5, chap. A6. 1982. 181 p.

Section C. Sediment Analysis

5–C1.*Laboratory theory and methods for sediment analysis*, by H.P. Guy: USGS–TWRI book 5, chap. C1. 1969. 58 p.

Book 6. Modeling Techniques

Section A. Ground Water

6–A1.*A modular three-dimensional finite-difference ground-water flow model*, by M.G. McDonald and A.W. Harbaugh: USGS–TWRI book 6, chap. A1. 1988. 586 p.
6–A2.*Documentation of a computer program to simulate aquifer-system compaction using the modular finite-difference ground-water flow model,* by S.A. Leake and D.E. Prudic: USGS–TWRI book 6, chap. A2. 1991. 68 p.
6–A3.*A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 1: Model Description and User's Manual,* by L.J. Torak: USGS–TWRI book 6, chap. A3. 1993. 136 p.
6–A4.*A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 2: Derivation of finite-element equations and comparisons with analytical solutions,* by R.L. Cooley: USGS–TWRI book 6, chap. A4. 1992. 108 p.
6–A5.*A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 3: Design philosophy and programming details,* by L.J. Torak: USGS–TWRI book 6, chap. A5. 1993. 243 p.
6–A6.*A coupled surface-water and ground-water flow model (MODBRANCH) for simulation of stream-aquifer interaction*, by Eric D. Swain and Eliezer J. Wexler: USGS–TWRI book 6, chap. A6. 1996. 125 p.
6–A7.*User's guide to SEAWAT: A computer program for simulation of three-dimensional variable-density ground-water flow*, by Weixing Guo and Christian D. Langevin: USGS–TWRI book 6, chap. A7. 2002.
77 p.

Book 7. Automated Data Processing and Computations

Section C. Computer Programs

7–C1.*Finite difference model for aquifer simulation in two dimensions with results of numerical experiments,* by P.C. Trescott, G.F. Pinder, and S.P. Larson: USGS–TWRI book 7, chap. C1. 1976. 116 p.
7–C2.*Computer model of two-dimensional solute transport and dispersion in ground water*, by L.F. Konikow and J.D. Bredehoeft: USGS–TWRI book 7, chap. C2. 1978. 90 p.
7–C3.*A model for simulation of flow in singular and interconnected channels,* by R.W. Schaffranek, R.A. Baltzer, and D.E. Goldberg: USGS–TWRI book 7, chap. C3. 1981. 110 p.

Book 8. Instrumentation

Section A. Instruments for Measurement of Water Level

8–A1.*Methods of measuring water levels in deep wells,* by M.S. Garber and F.C. Koopman: USGS–TWRI book 8, chap. A1. 1968. 23 p.
8–A2.*Installation and service manual for U.S. Geological Survey manometers*, by J.D. Craig: USGS–TWRI book 8, chap. A2. 1983. 57 p.

Section B. Instruments for Measurement of Discharge

8–B2.*Calibration and maintenance of vertical-axis type current meters,* by G.F. Smoot and C.E. Novak: USGS–TWRI book 8, chap. B2. 1968. 15 p.

Book 9. Handbooks for Water-Resources Investigations

Section A. National Field Manual for the Collection of Water-Quality Data

9–A1.*National field manual for the collection of water-quality data: Preparations for water sampling*, by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A1. 1998. 47 p.
9–A2.*National field manual for the collection of water-quality data: Selection of equipment for water sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A2. 1998. 94 p.
9–A3.*National field manual for the collection of water-quality data: Cleaning of equipment for water sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A3. 1998. 75 p.
9–A4.*National field manual for the collection of water-quality data: Collection of water samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A4. 1999. 156 p.

9–A5.*National field manual for the collection of water-quality data: Processing of water samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A5. 1999, 149 p.
9–A6.*National field manual for the collection of water-quality data: Field measurements*, edited by F.D. Wilde and D.B. Radtke: USGS–TWRI book 9, chap. A6. 1998. Variously paginated.
9–A7.*National field manual for the collection of water-quality data: Biological indicators*, edited by D.N. Myers and F.D. Wilde: USGS–TWRI book 9, chap. A7. 1997 and 1999. Variously paginated.
9–A8.*National field manual for the collection of water-quality data: Bottom-material samples*, by D.B. Radtke: USGS–TWRI book 9, chap. A8. 1998. 48 p.
9–A9.*National field manual for the collection of water-quality data: Safety in field activities*, by S.L. Lane and R.G. Fay: USGS–TWRI book 9, chap. A9. 1998. 60 p.

SELECTED REFERENCES

American Public Health Association, 1998, Standard methods for the examination of water and waste-water, 20th ed.: United Book Press Inc., Baltimore, MD.

California State Water Quality Control Board, 1963, Water quality criteria; Pub. 3-A, p. 226.

Conover, C. S., and Leach, S. D., 1975, River basin and hydrologic unit map of Florida: Florida Bur. Geology Map Ser. 72.

Ellis, M. M., Westfall, B. A., and Ellis, M. D., 1946, Determination of water quality, U.S. Fish and Wildlife Reserve Report 9.

Heath, R. C., and Smith, P. C., 1954, Ground-water resources of Pinellas County, Florida: Florida Geological Survey Report of Investigations 12, 139 p.

Kirkor, Teodor, 1951, Protecting Public Waters from Pollution in the U.S.S.R., Sewage Works Journal, v. 23, 938 p.

Langbein, W. B., and Iseri, K. T., 1960, General introduction and hydrologic definitions: U. S. Geological Survey Water-Supply Paper 1541-A, 29 p.

Maxcy, K. F., 1950, Report on the relation of nitrate concentrations in well waters to the occurrence of methemoglobinemia: National Research Council, Bull. Sanitary Eng. and Environment, App. D., 271 p.

Paynter, O. E., 1960, The chronic toxicity of dodecylbenzene sodium sulfonate: U. S. Public Health Conference on Physiological Aspects of Water Quality Proc., Washington, D. C., Sept. 8-9, 1960, 175-177 p.

Rose, Arthur and Elizabeth, 1966, The condensed chemical dictionary: Reinhold Pub. Corp., New York, 7th ed., 286 p.

Slack, K. V., Averett, R. C., Grieson, P. E., and Lipscomb, R. G., 1973, Methods for Collection and Analysis of Aquatic Biological and Microbiological Samples: U.S. Geological Survey Techniques of Water Resources Inv., Book 5, Chapter A4, 165 p.

Sutcliffe, H., Jr., 1975, Appraisal of the water resources of Charlotte County, Florida: Florida Bureau of Geology Report of Investigations 78, 53 p.

Swenson, H. A. and Baldwin, H. L., 1965, A Primer on water quality: Washington, U.S. Government Printing Office, 27 p.

U.S. Environmental Protection Agency, 1975, National Interim primary drinking water regulations: Federal Register, v. 40, no. 51, March 14, p. 11990-11998.

U.S. Environmental Protection Agency, 1976, "Quality criteria for water," 256 p.

U.S. Environmental Protection Agency, 1977, National secondary drinking water regulations: Federal Register, v. 42, no. 62, March 31, p. 17143-17146.

U.S. Environmental Protection Agency, 1979, "National secondary drinking water regulations," Federal Register, v. 44, No. 140, July 19, p. 42201.

U.S. Public Health Service, 1962, Drinking water standards: U.S. Dept. Health, Education and Welfare, Public Health Service: Pub. no. 956.

Wayman, C. H., Robertson, J. B., and Page, H. G., Foaming characteristics of synthetic-detergent solutions: U.S. Geological Survey, Prof. Paper 450D, art. 178, D198 p.

Wetterhall, W. S., 1964, Geohydrologic reconnaissance of Pasco and southern Hernando Counties, Florida: Florida Bureau of Geology Report of Investigations 34, 28 p.

WELL DESCRIPTIONS AND GROUND-WATER DATA

KEY TO SITE LOCATIONS ON FIGURE 10

CHARLOTTE COUNTY

INDEX NUMBER	SITE NUMBER
1	265138082002201

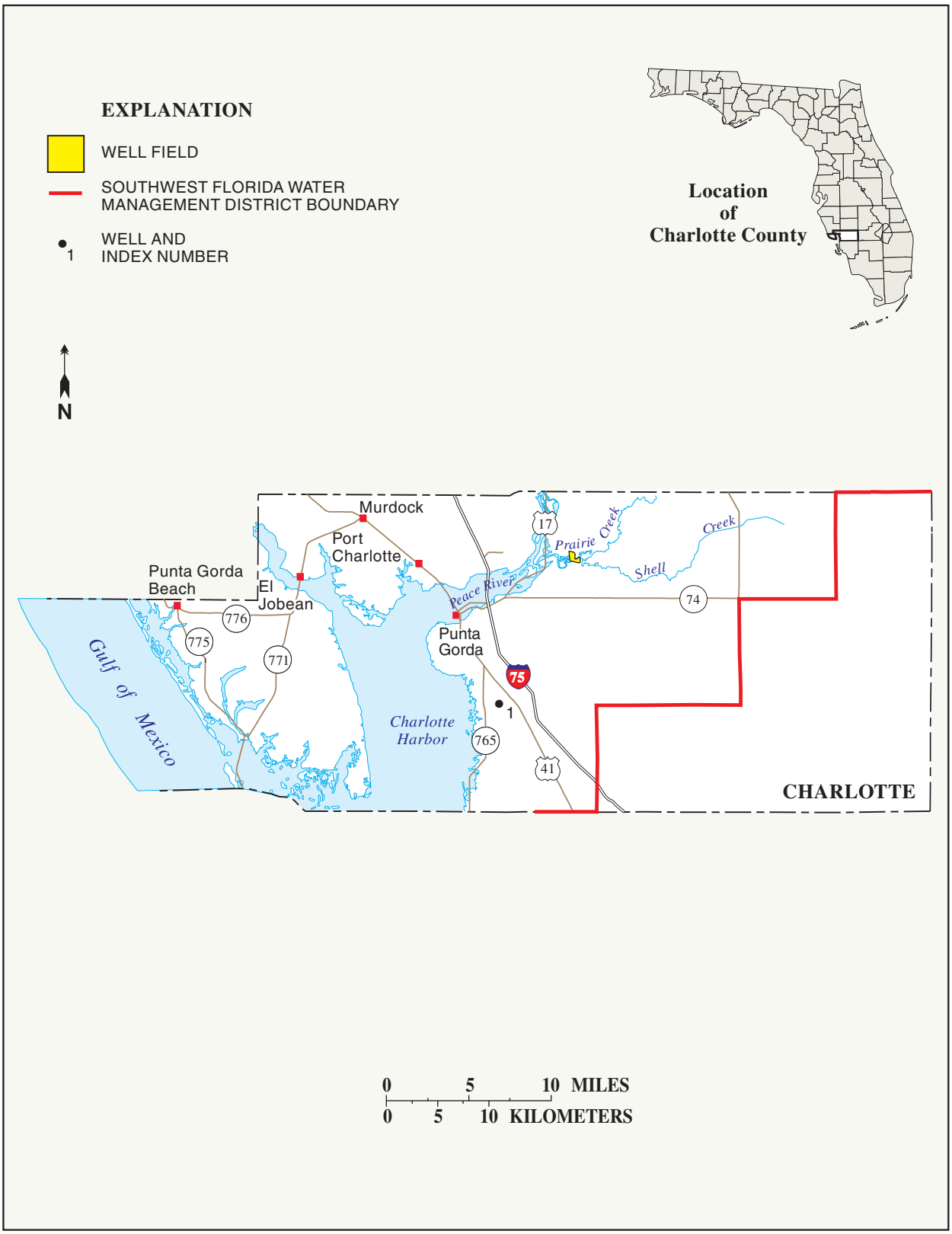


Figure 10.-- Location of wells in Charlotte County.

CHARLOTTE COUNTY

WELL NUMBER.--265138082002201. Punta Gorda Heights Well near Punta Gorda, FL.

LOCATION.--Lat 26°51'38", long 82°00'22" (1927 North American datum), in SW¼ SW¼ sec.34, T.41 S., R.23 E., Hydrologic Unit 03100103, 1.5 mi west of U. S. Highway 41, and 4.0 mi southeast of Punta Gorda.

AQUIFER.--Hawthorn formation of Miocene Age, Geologic Unit 122HTRN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 125 ft, cased to 84 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 21.41 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 1.63 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby wells.

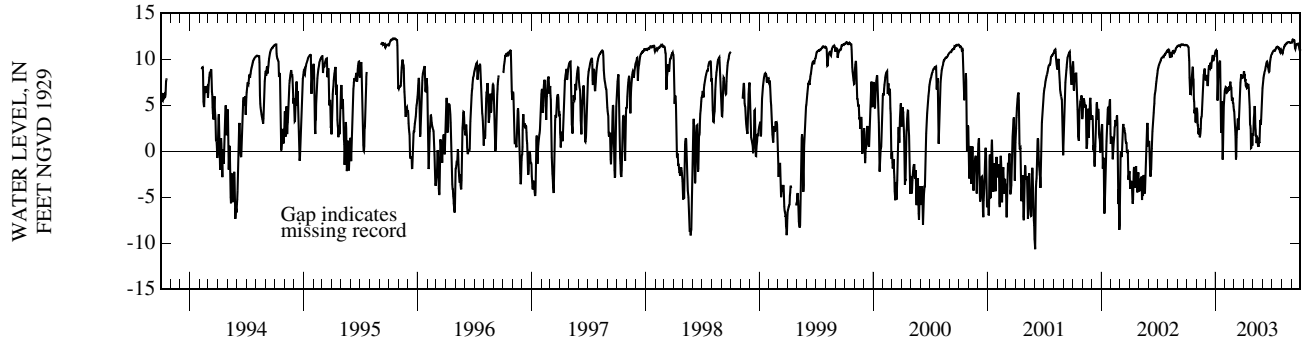
PERIOD OF RECORD.--April 1967 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 14.28 ft NGVD, Oct. 31, 1967; lowest, 10.89 ft below NGVD, Dec. 7, 1990.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.52	4.60	7.68	10.81	6.72	4.47	7.95	1.93	6.85	10.58	10.94	11.78
2	11.49	4.71	8.18	10.93	6.76	4.38	8.57	1.68	7.23	10.66	10.81	11.78
3	11.46	4.53	8.28	10.97	6.96	3.78	8.67	2.46	7.58	10.70	10.67	11.78
4	11.44	4.07	7.75	10.69	6.93	3.07	8.23	3.63	7.92	10.80	10.63	11.81
5	11.39	2.81	7.91	10.82	6.43	2.41	8.39	3.98	8.15	10.86	10.77	12.10
6	11.33	2.81	7.36	10.95	6.35	1.77	7.60	4.47	8.35	10.91	10.89	12.14
7	11.28	1.93	7.08	9.66	6.39	0.33	7.84	4.90	8.52	10.93	11.02	12.10
8	10.39	2.17	7.25	5.49	6.61	-0.89	7.13	4.45	8.65	10.93	11.13	12.09
9	9.88	1.81	8.23	7.04	6.42	-0.55	7.07	2.77	8.74	10.92	11.31	12.06
10	7.98	2.28	8.85	7.97	6.70	1.47	7.30	2.31	8.96	10.91	11.37	12.01
11	7.15	2.45	9.22	8.57	6.92	2.26	7.41	1.56	9.18	10.91	11.49	12.01
12	6.12	1.50	9.31	8.98	6.66	2.60	6.89	1.72	9.32	10.98	11.51	11.72
13	6.43	1.70	8.83	9.35	6.66	2.98	6.92	0.88	9.53	11.05	11.51	11.21
14	6.36	1.95	9.15	9.59	6.80	3.54	6.96	1.32	9.62	11.15	11.62	11.13
15	6.77	2.45	9.07	9.72	7.06	2.45	7.18	1.50	9.72	11.25	11.66	11.31
16	7.13	3.51	9.50	9.83	6.64	2.30	7.21	1.45	9.76	11.27	11.70	11.47
17	8.00	3.69	9.62	8.31	7.36	3.36	7.21	0.71	9.65	11.30	11.73	11.55
18	8.21	3.77	8.94	4.24	7.54	4.64	6.89	0.63	9.30	11.31	11.71	11.59
19	8.66	4.53	9.13	2.02	7.14	5.55	6.17	0.48	9.13	11.33	11.77	11.60
20	9.04	5.82	9.66	4.33	6.87	6.25	5.48	0.77	8.93	11.30	11.79	11.62
21	9.16	6.72	9.85	5.43	6.87	6.86	4.78	1.00	8.72	11.26	11.82	11.63
22	7.92	7.36	10.13	5.07	5.99	7.42	2.92	0.87	8.63	11.20	11.85	11.65
23	7.76	7.85	10.34	1.42	5.46	7.81	2.83	1.86	8.67	11.21	11.86	11.68
24	5.69	8.26	10.41	-0.92	5.73	8.12	2.42	3.03	9.27	11.15	11.85	11.66
25	5.36	8.37	9.77	0.27	5.83	8.34	0.33	3.40	9.67	11.15	11.83	11.48
26	4.11	8.69	9.87	2.61	5.21	8.03	0.37	3.08	9.93	10.99	11.81	11.36
27	4.53	8.88	10.02	4.07	5.29	8.00	1.53	2.85	10.15	10.82	11.78	11.14
28	4.36	8.89	10.29	4.92	4.84	7.99	1.63	3.85	10.31	10.75	11.79	11.01
29	3.19	8.07	10.31	5.50	---	8.19	0.60	4.99	10.42	10.88	11.80	10.87
30	3.17	8.18	10.50	6.07	---	7.94	1.69	5.79	10.52	10.96	11.80	11.06
31	4.07	---	10.70	6.54	---	8.12	---	6.37	---	11.03	11.81	---
MAX	11.52	8.89	10.70	10.97	7.54	8.34	8.67	6.37	10.52	11.33	11.86	12.14

CAL YR 2002 MAX 11.60
WTR YR 2003 MAX 12.14



MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2002 TO SEPTEMBER 2003

CHARLOTTE COUNTY

SITE-ID	STATION NAME	WATER-LEVEL DATE	WATER-LEVEL MSL FEET	WATER-LEVEL DATUM CODE
265004081581901	42S23E12 HERRIN NVR 1 FL	05-20-2003	25.40	NGVD29
		09-16-2003	27.65	NGVD29
265017082153701	42S20E12 65021501241 FL	05-19-2003	15.10	NGVD29
		09-16-2003	17.90	NGVD29
265026081585401	ROMP TR1-2 SUWANNEE WELL NEAR PUNTA GORDA FL	05-19-2003	44.07	NGVD29
		09-16-2003	45.89	NGVD29
265026081585403	ROMP TR1-2 ARCADIA WELL NEAR PUNTA GORDA FL	05-19-2003	20.98	NGVD29
		09-16-2003	24.83	NGVD29
265257081444101	BABCOCK 5 NEAR PUNTA GORDA FL	05-20-2003	35.27	NGVD29
265504082000601	41S23E10 USGS C3 343 FL	05-20-2003	10.39	NGVD29
		09-16-2003	13.03	NGVD29
265531082194803	ROMP TR3-3 SUWANNEE WELL NEAR ENGLEWOOD FL	05-19-2003	18.39	NGVD29
		09-16-2003	19.16	NGVD29
265531082194805	ROMP TR3-3 ARCADIA 175-FT WELL NR ENGLEWOOD FL	05-19-2003	13.25	NGVD29
		09-15-2003	14.38	NGVD29
265633082015201	BROWNS DEEP WELL AT PUNTA GORDA FL	05-20-2003	41.00	NGVD29
		09-16-2003	43.00	NGVD29
265638082130702	ROMP TR3-1 TAMIAMI WELL NEAR PORT CHARLOTTE FL	05-19-2003	4.07	NGVD29
		09-16-2003	6.30	NGVD29
265638082130703	ROMP TR3-1 PEACE RIV 160FT W NR PORT CHARLOTTE FL	05-19-2003	13.40	NGVD29
		09-16-2003	14.78	NGVD29
265638082130705	ROMP TR 3-1 PEACE RIVER 400FT WELL NR EL JOBEAN FL	05-19-2003	29.18	NGVD29
		09-16-2003	32.18	NGVD29
265638082130706	ROMP TR3-1 SUWANNEE WELL NR EL JOBEAN FL	05-19-2003	32.68	NGVD29
		09-16-2003	34.68	NGVD29
265644081483301	ROMP 5 CECIL WEBB AVON PARK WELL NR PUNTA GORDA FL	05-22-2003	50.03	NGVD29
		09-17-2003	51.46	NGVD29
265644081483303	ROMP 5 CECIL WEBB ARCADIA WELL NR PUNTA GORDA FL	05-22-2003	50.01	NGVD29
		09-17-2003	51.49	NGVD29
265644081483304	ROMP 5-MW2 WELL NEAR BERMONT FL	05-22-2003	32.05	NGVD29
		09-17-2003	36.97	NGVD29
265644081483305	ROMP 5 CECIL WEBB NRSD 4IN WELL NR PUNTA GORDA FL	05-22-2003	38.34	NGVD29
		09-17-2003	38.52	NGVD29
265646081554501	ST HWY 74 DEEP NEAR PUNTA GORDA FL	05-20-2003	24.14	NGVD29
		09-17-2003	24.50	NGVD29
265837081561101	ROMP 11 HAWTHORN WELL NEAR PUNTA GORDA FL	05-20-2003	22.42	NGVD29
		09-17-2003	24.22	NGVD29

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2002 TO SEPTEMBER 2003

CHARLOTTE COUNTY

SITE-ID	STATION NAME	WATER-LEVEL DATE	WATER-LEVEL MSL FEET	WATER-LEVEL DATUM CODE
270152082002806	ROMP 10 TAMPA WELL NEAR PORT CHARLOTTE FL	05-19-2003	45.76	NGVD29
		09-16-2003	48.47	NGVD29
270152082002807	ROMP 10 ARCADIA WELL NEAR PORT CHARLOTTE FL	05-19-2003	19.04	NGVD29
		09-16-2003	21.99	NGVD29

KEY TO SITE LOCATIONS ON FIGURE 11

CITRUS COUNTY

INDEX NUMBER	SITE NUMBER
1	284317082330601
2	284752082362501
3	284759082344101

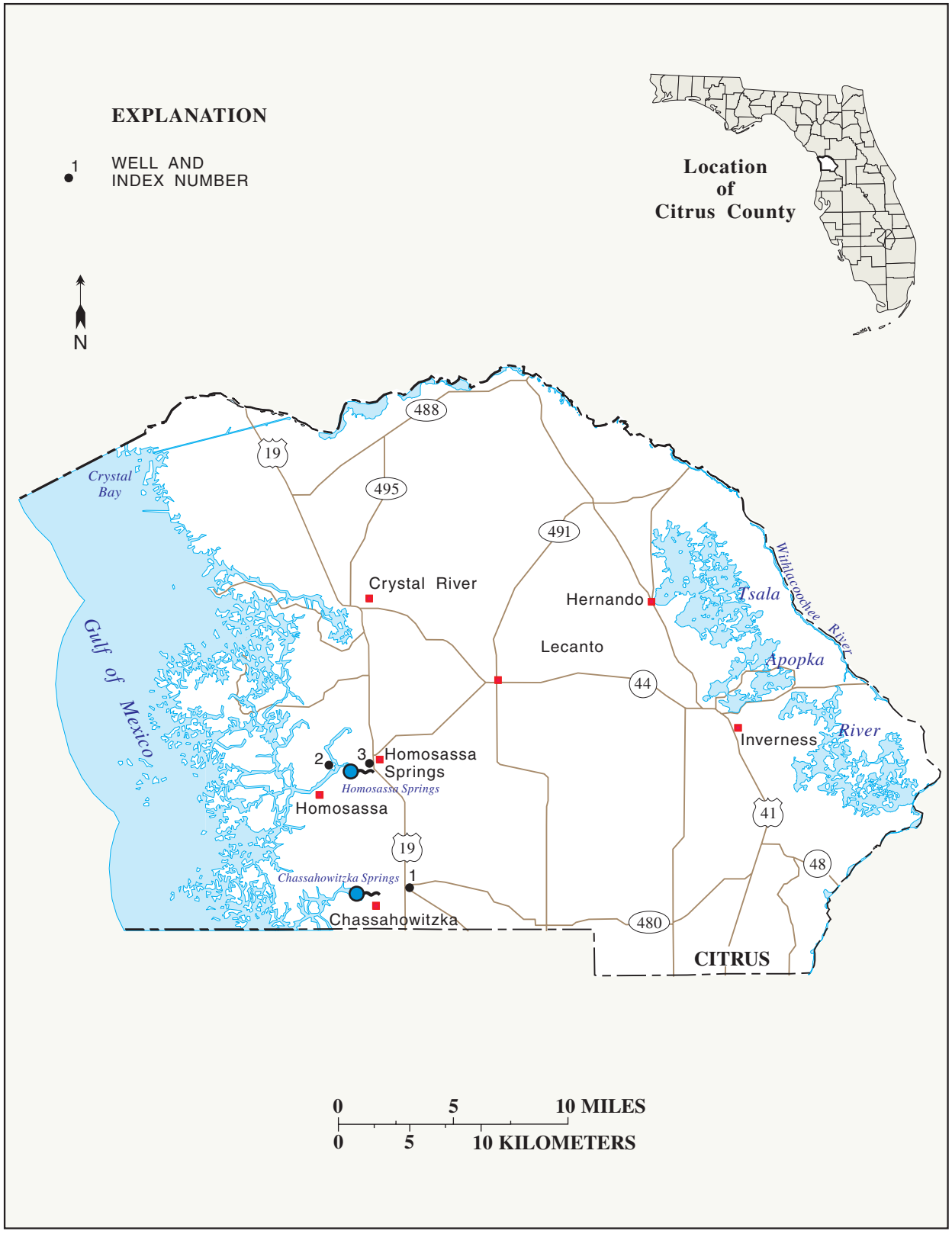


Figure 11.-- Location of wells in Citrus County.

CITRUS COUNTY

WELL NUMBER.--284317082330601. Chassahowitzka Well 1 near Chassahowitzka, FL.

LOCATION.--Lat 28°43'17", long 82°33'06" (1927 North American datum), in NE $^1/_4$ NE $^1/_4$ sec.25, T.20 S., R.17 E., Hydrologic Unit 03100207, 0.1 mi southeast of intersection U. S. Highway 19 and U. S. Highway 98, and 1.2 mi east of Chassahowitzka.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 176 ft, cased to 166 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 9.82 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 2.72 ft above land-surface datum.

REMARKS.--Water level affected by tidal fluctuations. Some records were provided by Southwest Florida Water Management District and reviewed by Geological Survey.

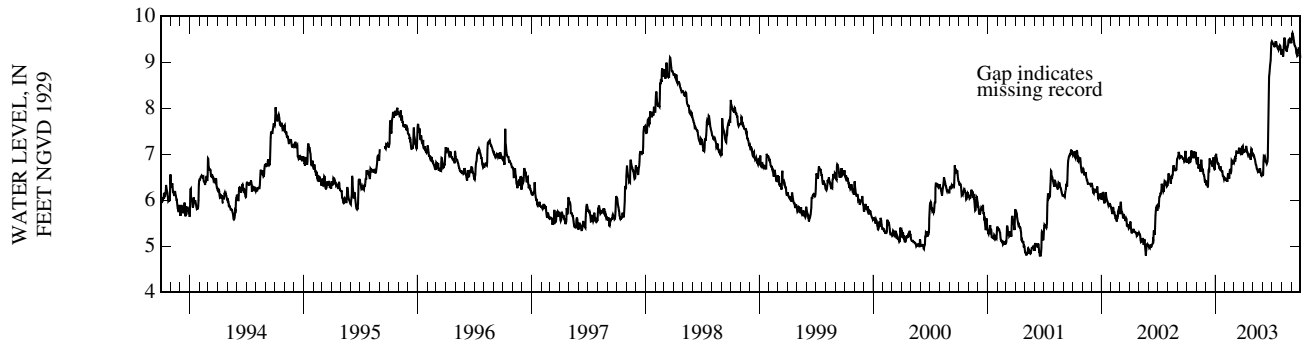
PERIOD OF RECORD.--October 1965 to March 1971; January 1973 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 9.67 ft NGVD, Oct. 14, 1982; lowest, 4.80 ft NGVD, June 17-20, 2001, May 23, 2002.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.82	6.84	6.42	6.96	6.47	6.81	7.05	7.03	6.57	9.45	9.16	9.41
2	6.86	6.80	6.36	6.96	6.46	6.85	7.06	6.98	6.53	9.44	9.27	9.50
3	6.85	6.80	6.34	7.01	6.44	6.83	7.06	6.98	6.55	9.42	9.25	9.55
4	6.86	6.81	6.32	6.93	6.48	6.89	7.07	6.95	6.85	9.41	9.20	9.61
5	6.85	6.84	6.37	6.91	6.46	6.91	7.06	6.95	6.95	9.40	9.16	9.63
6	6.84	6.94	6.40	6.89	6.41	6.90	7.06	6.93	6.94	9.39	9.12	9.60
7	6.91	6.77	6.31	6.83	6.45	6.97	7.07	6.91	6.95	9.39	9.21	9.58
8	6.92	6.69	6.28	6.80	6.40	6.95	7.10	6.88	6.96	9.35	9.35	9.54
9	6.89	6.72	6.51	6.80	6.49	7.06	7.16	6.84	6.93	9.34	9.45	9.49
10	6.83	6.78	6.66	6.79	6.57	7.06	7.16	6.79	6.87	9.34	9.53	9.44
11	6.84	6.74	6.67	6.79	6.57	7.05	7.12	6.77	6.84	9.35	9.48	9.39
12	6.83	6.71	6.66	6.75	6.55	7.04	7.05	6.76	6.84	9.41	9.45	9.36
13	6.84	6.74	6.89	6.70	6.51	7.03	7.05	6.71	6.83	9.45	9.36	9.35
14	6.91	6.62	6.89	6.69	6.47	7.03	7.02	6.68	6.80	9.43	9.30	9.34
15	7.02	6.65	6.82	6.68	6.53	7.03	6.99	6.67	6.79	9.43	9.28	9.32
16	7.08	6.86	6.82	6.67	6.62	7.03	7.00	6.64	6.81	9.38	9.27	9.29
17	7.01	6.88	6.81	6.74	6.68	7.11	7.01	6.62	6.83	9.36	9.27	9.20
18	6.94	6.77	6.81	6.64	6.65	7.14	7.00	6.63	6.94	9.33	9.23	9.18
19	6.95	6.69	6.80	6.66	6.62	7.10	6.97	6.63	7.21	9.31	9.29	9.17
20	6.95	6.66	6.86	6.65	6.61	7.10	6.98	6.63	7.98	9.31	9.33	9.13
21	6.95	6.67	6.78	6.63	6.64	7.07	6.98	6.60	8.42	9.29	9.34	9.14
22	6.95	6.66	6.76	6.63	6.87	7.04	6.98	6.68	8.68	9.27	9.36	9.27
23	6.91	6.58	6.73	6.63	6.86	7.06	6.94	6.68	8.74	9.30	9.47	9.25
24	6.97	6.56	6.84	6.55	6.81	7.04	6.88	6.68	8.83	9.34	9.47	9.19
25	7.06	6.55	6.93	6.51	6.80	7.00	7.05	6.63	8.92	9.34	9.46	9.30
26	7.04	6.52	6.79	6.52	6.80	7.00	7.12	6.60	8.98	9.33	9.50	9.30
27	6.98	6.49	6.72	6.52	6.81	7.14	7.11	6.58	9.04	9.36	9.51	9.29
28	6.94	6.43	6.69	6.48	6.82	7.16	7.04	6.54	9.24	9.35	9.50	9.28
29	6.93	6.38	6.67	6.45	---	7.17	7.03	6.53	9.42	9.30	9.49	9.20
30	7.05	6.43	6.68	6.47	---	7.18	7.01	6.54	9.43	9.27	9.45	9.09
31	6.92	---	6.93	6.48	---	7.10	---	6.56	---	9.20	9.44	---
MAX	7.08	6.94	6.93	7.01	6.87	7.18	7.16	7.03	9.43	9.45	9.53	9.63

CAL YR 2002 MAX 7.08
WTR YR 2003 MAX 9.63



CITRUS COUNTY—Continued

WELL NUMBER.--284752082362501. Naturés Resort Well at Homosassa, FL.

LOCATION.--Lat 28°47'52", long 82°36'25" (1927 North American datum), in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.29, T.19 S., R.17 E., Hydrologic Unit 03100207, 0.5 mi north of Homosassa, and 1.9 mi west of intersection U.S. Highway 19 and County Road 490A (Halls River Road).

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 43 ft, cased to 18 ft.

INSTRUMENTATION.--Water-stage recorder--15-minute interval.

DATUM.--Land-surface datum is 3.44 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 3.52 ft above land-surface datum.

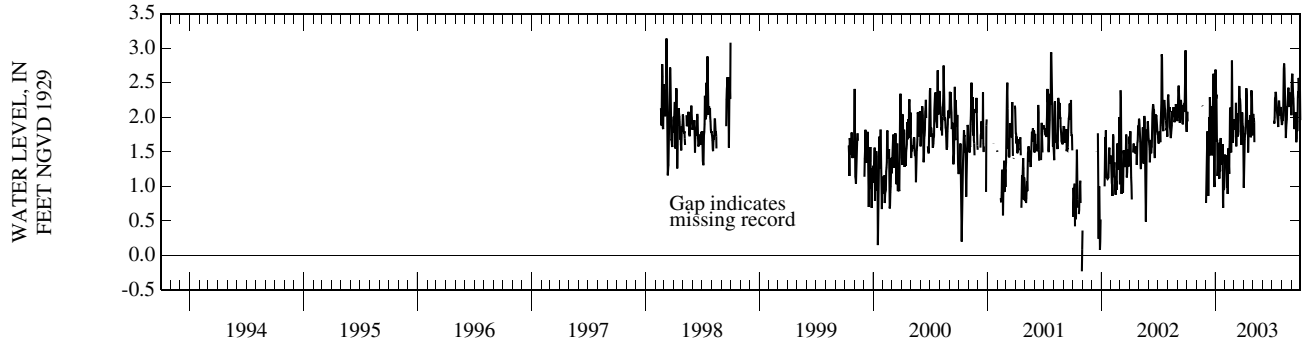
REMARKS.--Water level affected by tidal fluctuations.

PERIOD OF RECORD.--February to September 1998; October 1998 to May 1999 (periodic); October 1999 to September 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.28 ft NGVD, Oct. 1, 1998; lowest daily maximum, 0.23 ft below NGVD, Oct. 30, 2001.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.79	---	---	2.69	1.45	1.92	1.33	1.83	---	---	1.95	2.03
2	2.01	---	0.76	2.65	1.39	1.93	0.98	2.05	---	---	1.89	2.45
3	2.08	---	0.98	2.27	1.30	1.95	1.28	1.95	---	---	1.91	2.55
4	1.94	---	1.21	2.33	1.27	1.88	1.45	1.98	---	---	1.97	2.62
5	---	---	1.51	1.86	1.45	1.82	1.68	1.93	---	---	1.95	2.63
6	---	---	1.76	1.66	1.30	1.93	1.75	1.64	---	---	2.03	2.45
7	---	---	1.80	1.66	0.98	1.89	1.76	---	---	---	2.23	2.33
8	---	---	1.07	1.15	1.32	2.21	1.94	---	---	1.95	2.70	2.27
9	---	---	0.86	1.24	0.89	1.58	2.07	---	---	1.91	2.78	2.17
10	---	---	1.29	1.42	1.05	2.06	2.42	---	---	2.00	2.71	2.02
11	---	---	1.81	1.63	1.55	1.84	2.31	---	---	2.27	2.47	1.83
12	---	---	2.00	1.35	1.41	1.85	2.07	---	---	2.29	2.32	1.90
13	---	---	1.49	1.12	1.29	1.72	1.89	---	---	2.37	2.12	1.99
14	---	---	2.29	1.11	1.18	1.75	1.88	---	---	2.35	1.82	2.04
15	---	---	2.14	1.27	1.52	1.74	1.75	---	---	2.23	1.70	2.07
16	---	---	1.50	1.22	1.65	1.80	1.49	---	---	2.14	1.84	2.01
17	---	---	1.45	1.67	2.12	2.06	1.67	---	---	2.09	1.92	1.64
18	---	---	1.63	1.70	2.14	2.44	1.89	---	---	2.03	1.97	1.70
19	---	---	1.63	1.38	1.89	2.45	1.96	---	---	1.98	2.16	2.04
20	---	2.17	2.07	1.42	1.50	2.27	1.81	---	---	1.95	2.15	1.80
21	---	2.16	2.16	1.35	1.49	2.26	1.87	---	---	1.86	2.24	1.94
22	---	---	1.74	1.32	1.78	2.17	2.02	---	---	2.04	2.37	2.29
23	---	---	1.54	1.46	2.82	1.96	2.02	---	---	2.23	2.43	2.38
24	---	---	1.45	1.61	2.43	1.90	1.71	---	---	2.23	2.15	2.30
25	---	---	2.13	0.77	1.75	1.60	1.73	---	---	2.15	2.27	2.57
26	---	---	2.63	0.69	1.63	1.66	2.39	---	---	2.07	2.25	2.48
27	---	---	1.53	1.10	1.73	1.79	2.37	---	---	2.03	2.36	2.48
28	---	---	1.10	0.95	1.97	2.07	2.29	---	---	2.10	2.29	2.57
29	---	---	0.99	0.96	---	1.91	1.90	---	---	2.15	2.33	2.41
30	---	---	1.23	1.29	---	1.87	1.74	---	---	2.12	2.19	1.96
31	---	---	1.62	1.45	---	1.86	---	---	---	1.99	2.13	---
MAX	---	---	---	2.69	2.82	2.45	2.42	---	---	---	2.78	2.63



CITRUS COUNTY—Continued

WELL NUMBER.--284759082344101. Homosassa Springs Visitor Center Well at Homosassa Springs, FL.

LOCATION.--Lat 28°47'59", long 82°34'41" (1927 North American datum), in NE $^1/_4$ NW $^1/_4$ sec.27, T.19 S., R.17 E., Hydrologic Unit 03100207, 1,000 ft southwest of intersection U. S. Highway 19 and County Road 490A (Halls River Road) in Homosassa Springs.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 8 in., depth 61 ft, cased to 52 ft.

INSTRUMENTATION.--Water-stage recorder--15-minute interval.

DATUM.--Land-surface datum is 6.38 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 3.06 ft above land-surface datum.

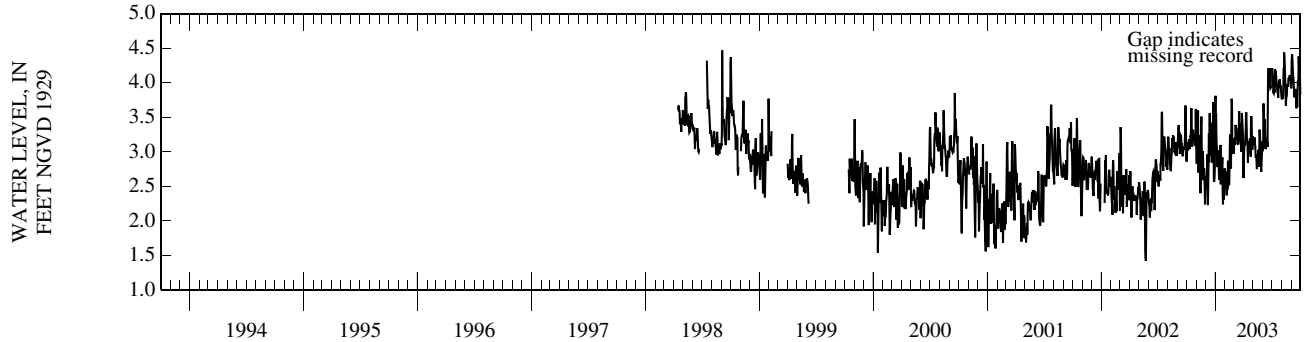
REMARKS.--Water level affected by tidal fluctuations.

PERIOD OF RECORD.--January 1998 (periodic); April to September 1998; October 1998 to May 1999 (periodic); October 1999 to September 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.04 ft NGVD, Jan. 20, 1998; lowest daily minimum, 1.42 ft NGVD, May 23, 2002.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.86	2.88	2.65	3.81	2.67	2.97	2.62	3.23	3.15	4.24	3.79	3.92
2	3.03	2.83	2.45	3.50	2.59	3.19	2.88	3.14	3.01	4.20	3.76	4.31
3	3.07	2.91	2.53	3.55	2.57	3.10	2.99	3.15	3.08	4.13	3.78	4.39
4	3.14	3.03	2.55	3.20	2.72	3.16	3.11	3.11	3.70	4.07	3.80	4.41
5	3.11	3.27	2.82	3.07	2.55	3.21	3.11	3.18	3.61	3.97	3.77	4.34
6	3.04	3.60	2.96	3.05	2.37	3.17	3.11	3.21	3.38	3.86	3.80	4.20
7	3.05	3.07	2.38	2.82	2.65	3.39	3.23	3.18	3.42	3.85	3.97	4.12
8	3.17	2.70	2.23	2.78	2.45	3.26	3.31	3.12	3.47	3.91	4.38	4.07
9	3.18	2.92	2.82	2.89	2.50	3.35	3.54	3.07	3.32	3.86	4.44	3.99
10	3.04	3.24	3.12	3.01	2.86	3.24	3.57	2.93	3.08	3.88	4.39	3.89
11	3.17	3.18	3.27	3.01	2.86	3.21	3.40	2.93	3.04	4.20	4.21	3.79
12	3.14	3.06	2.85	2.73	2.74	3.19	3.14	2.96	3.15	4.15	4.09	3.81
13	3.24	3.01	3.55	2.60	2.53	3.11	3.15	2.83	3.19	4.17	3.98	3.89
14	3.22	2.40	3.55	2.67	2.53	3.13	3.04	2.75	3.14	4.13	3.79	3.90
15	3.61	2.78	3.05	2.78	2.82	3.11	2.84	2.91	3.09	4.06	3.67	3.90
16	3.63	3.36	3.00	2.63	3.09	3.13	2.99	2.89	3.15	3.99	3.78	3.85
17	3.30	3.51	2.95	3.10	3.25	3.35	3.13	2.90	3.07	3.94	3.80	3.63
18	3.09	3.16	3.09	2.53	3.05	3.59	3.15	2.99	3.40	3.89	3.81	3.65
19	3.09	2.61	3.05	2.80	2.77	3.40	3.07	3.03	3.97	3.86	3.98	3.82
20	3.17	2.61	3.42	2.74	2.77	3.40	3.08	3.01	4.75	3.85	3.97	3.65
21	3.25	2.90	3.05	2.72	2.99	3.33	3.19	2.78	4.55	3.78	3.95	3.81
22	3.32	3.01	2.93	2.81	3.77	3.21	3.18	3.32	4.60	3.88	3.94	4.02
23	3.21	2.63	2.84	2.92	3.71	3.15	3.17	3.31	4.41	4.02	4.07	4.04
24	3.24	2.59	3.32	2.40	3.19	3.11	2.93	3.19	4.05	4.01	---	3.96
25	3.27	2.76	3.72	2.24	3.03	3.00	3.46	2.89	3.96	3.95	4.08	4.38
26	3.22	2.75	3.13	2.61	2.97	3.11	3.52	2.86	3.92	4.05	4.07	4.27
27	3.09	2.55	2.59	2.61	3.05	3.56	3.44	2.80	3.93	3.94	4.11	4.20
28	3.11	2.39	2.57	2.31	3.20	3.48	3.16	2.71	4.35	3.94	4.06	4.25
29	3.18	2.24	2.63	2.45	---	3.36	3.03	2.81	4.50	3.95	4.07	4.10
30	3.62	2.56	2.78	2.67	---	3.30	3.07	2.93	4.21	3.93	3.99	3.83
31	3.28	---	3.67	2.76	---	3.07	---	3.08	---	3.84	3.94	---
MAX	3.63	3.60	3.72	3.81	3.77	3.59	3.57	3.32	4.75	4.24	---	4.41



MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2002 TO SEPTEMBER 2003

CITRUS COUNTY

SITE-ID	STATION NAME	WATER-LEVEL DATE	WATER-LEVEL MSL FEET	WATER-LEVEL DATUM CODE
284339082270401	LECANTO WELL 1 NEAR LECANTO FL	05-21-2003	8.93	NGVD29
		09-15-2003	13.45	NGVD29
284532082371001	HOMOSASSA WELL 1 AT HOMOSASSA FL	05-22-2003	1.43	NGVD29
		09-15-2003	2.07	NGVD29
284803082351701	NORRIS CATTLE CO WELL AT HOMOSASSA SPRINGS FL	05-22-2003	1.69	NGVD29
		09-15-2003	2.41	NGVD29
285020082365301	OZELLO WELL 3 NEAR CRYSTAL RIVER FL	05-22-2003	1.07	NGVD29
		09-15-2003	2.00	NGVD29
285102082361001	OZELLO WELL 4 NEAR CRYSTAL RIVER FL	05-22-2003	2.02	NGVD29
		09-15-2003	3.16	NGVD29
285112082354401	ROMP TR 21-2 DEEP WELL NR HOMOSASSA SPRINGS FL	05-22-2003	1.43	NGVD29
		09-15-2003	2.64	NGVD29
285234082341901	ROMP TR 21-3 DEEP WELL NR HOMOSASSA SPRINGS FL	05-22-2003	2.75	NGVD29
		09-15-2003	4.34	NGVD29
285254082323001	LECANTO WELL 7 NEAR LECANTO FL	05-22-2003	3.90	NGVD29
		09-15-2003	6.21	NGVD29
285421082361602	CRYSTAL RIVER DEEP WELL AT CRYSTAL RIVER FL	05-22-2003	1.21	NGVD29
		09-15-2003	1.44	NGVD29
285737082400601	FPC (FLORIDA POWER CORP) CR3 NEAR CRYSTAL RIVER FL	05-22-2003	2.29	NGVD29
		09-15-2003	4.97	NGVD29

KEY TO SITE LOCATIONS ON FIGURE 12

DE SOTO COUNTY

INDEX NUMBER	SITE NUMBER
1	270410081565201
2	270414081584701
3	271308081522601
4	271538082002301
5	271757081493001
5	271757081493002
5	271757081493003
5	271757081493004
6	272012081482501

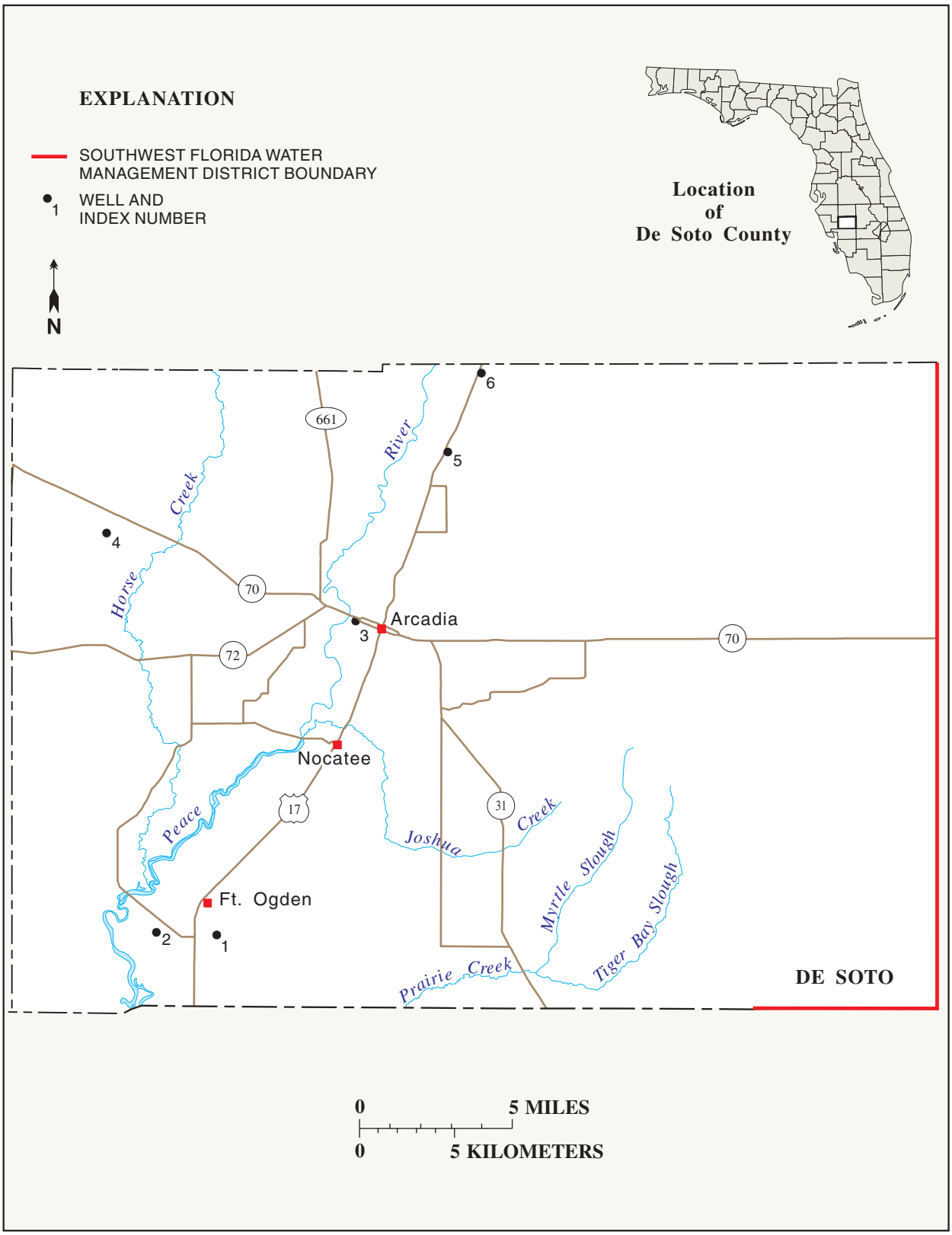


Figure 12.-- Location of wells in De Soto County.

DE SOTO COUNTY

WELL NUMBER.--270410081565201. Morgan Deep Well near Fort Ogden, FL.

LOCATION.--Lat 27°04'10", long 81°56'52" (1927 North American datum), in NW $^1/_4$ SE $^1/_4$ sec.19, T.39 S., R.24 E., Hydrologic Unit 03100101, 0.6 mi east of U. S. Highway 17, and 1.8 mi southeast of Fort Ogden.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, unused irrigation, artesian well, diameter 6 in., depth 1,010 ft, cased to 208 ft.

INSTRUMENTATION.--Periodic measurement with pressure gage or chalked tape by USGS personnel.

DATUM.--Land-surface datum is 38.53 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of welded cover plate, 2.25 ft above land-surface datum.

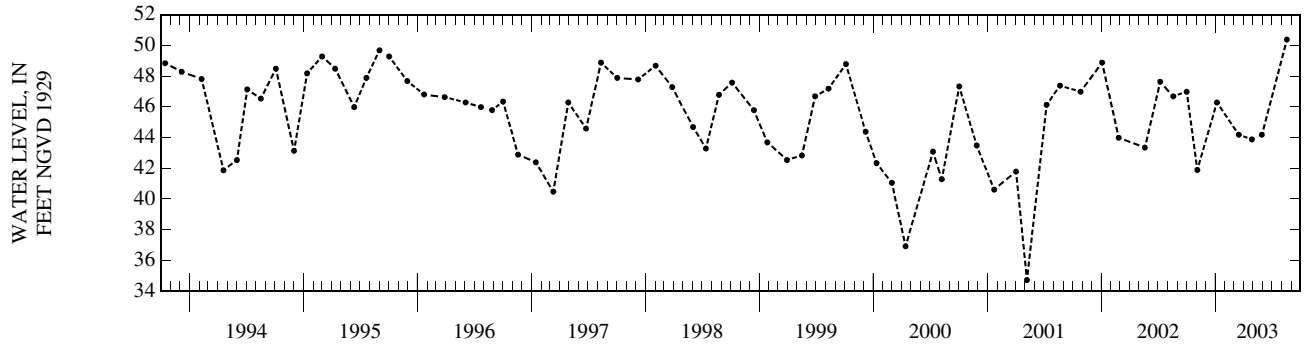
PERIOD OF RECORD.--March 1970 to current year (periodic). Records of water levels prior to January 1974 are available in files of the Geological Survey. The figures of water level as elevation, in feet NGVD, prior to Oct. 1, 1982, are in error. Correct elevations for data published prior to this date may be obtained by using datum correction of +5.53 ft.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 51.12 ft NGVD, Sept. 27, 1978; lowest measured, 29.66 ft NGVD, Jan. 28, 1988.

WATER SURFACE ELEVATION IN FEET (NGVD1929), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	46.98	JAN 06	46.28	APR 28	43.88	AUG 18	50.38
NOV 04	41.88	MAR 17	44.18	MAY 30	44.18		

WATER YEAR 2003 LOWEST 41.88 NOV 04, 2002 HIGHEST 50.38 AUG 18, 2003



DE SOTO COUNTY—Continued

WELL NUMBER.--270414081584701. Lettuce Lake Well near Fort Ogden, FL.

LOCATION.--Lat 27°04'14", long 81°58'47" (1927 North American datum), in NW $^1/_4$ SE $^1/_4$ sec.23, T.39 S., R.23 E., Hydrologic Unit 03100101, 300 ft west of Lettuce Lake Road, 0.4 mi south of State Highway 761, and 2.0 mi southwest of Fort Ogden.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, unused irrigation, artesian well, diameter 16 in., depth 1,190 ft, cased to 105 ft.

INSTRUMENTATION.--Periodic measurement with pressure gage by USGS personnel.

DATUM.--Elevation of land-surface datum is 21 ft, from topographic map. Measuring point: Top of flange, 3.0 ft above land-surface datum.

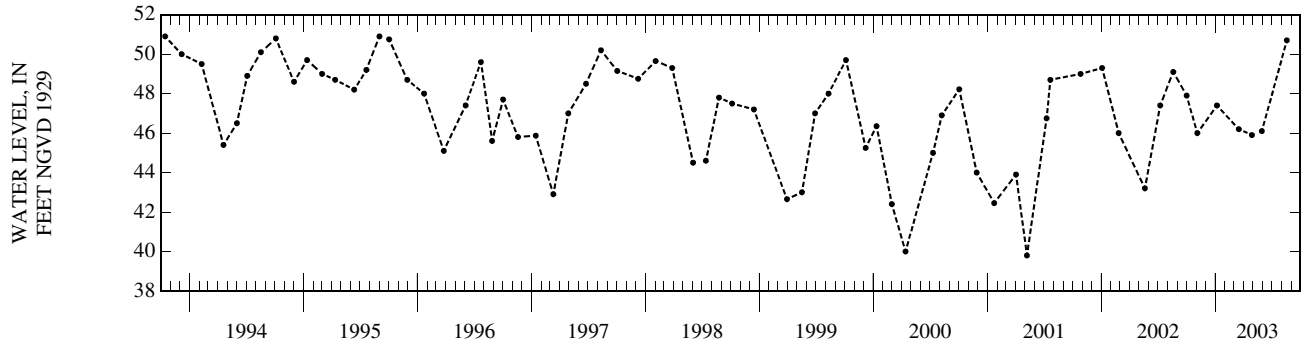
PERIOD OF RECORD.--January 1975 to current year (periodic).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 53.11 ft NGVD, Sept. 27, 1978; lowest measured, 39.80 ft NGVD, May 7, 2001.

WATER SURFACE ELEVATION IN FEET (NGVD1929), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	47.90	JAN 06	47.40	APR 28	45.90	AUG 18	50.70
NOV 04	46.00	MAR 17	46.20	MAY 30	46.10		

WATER YEAR 2003 LOWEST 45.90 APR 28, 2003 HIGHEST 50.70 AUG 18, 2003



DE SOTO COUNTY—Continued

WELL NUMBER.--271308081522601. Arcadia Well 2 at Arcadia, FL.

LOCATION.--Lat 27°13'08", long 81°52'26" (1927 North American datum), in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.36, T.37 S., R.24 E., Hydrologic Unit 03100101, 900 ft south of intersection State Highway 70 and Baldwin Avenue, and 0.9 mi west of U. S. Highway 17 in Arcadia.

AQUIFER.--Hawthorn formation of Miocene Age, Geologic Unit 122HTRN.

WELL CHARACTERISTICS.--Drilled, unused municipal, artesian well, diameter 8 in., depth 372 ft, cased to 263 ft.

INSTRUMENTATION.--Periodic measurement with pressure gage by USGS personnel.

DATUM.--Land-surface datum is 29.33 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 6 in. valve, 3.10 ft above land-surface datum.

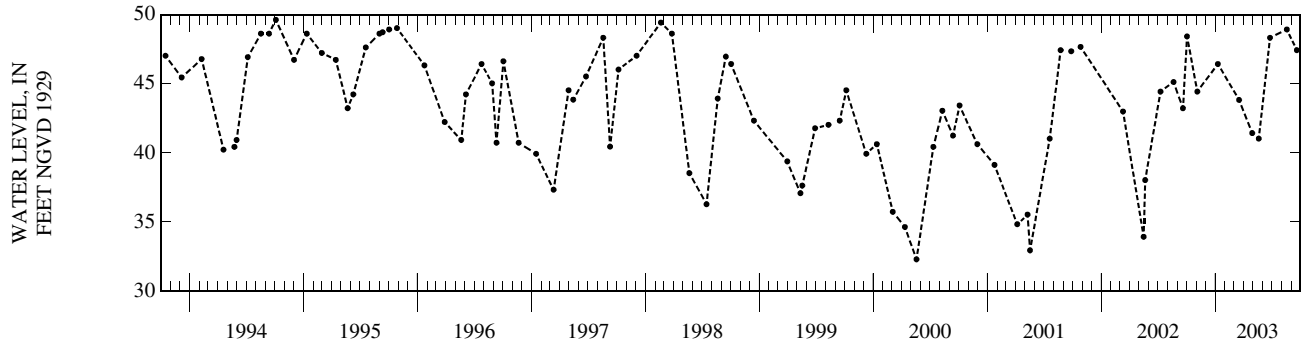
PERIOD OF RECORD.--November 1970 to current year (periodic). Records of water levels prior to January 1974 are available in files of the Geological Survey. The figures of water level as elevation, in feet NGVD, prior to Oct. 1, 1977, are in error. Correct elevations for data published prior to this date may be obtained by using datum correction of +1.33 ft.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 50.45 ft NGVD, Sept. 27, 1978; lowest measured, 32.29 ft NGVD, May 18, 2000.

WATER SURFACE ELEVATION IN FEET (NGVD1929), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02	48.43	JAN 09	46.43	APR 29	41.43	JUN 25	48.33	SEP 19	47.43
NOV 04	44.43	MAR 18	43.83	MAY 20	41.03	AUG 18	48.93		

WATER YEAR 2003 LOWEST 41.03 MAY 20, 2003 HIGHEST 48.93 AUG 18, 2003



DE SOTO COUNTY—Continued

WELL NUMBER.--271538082002301. AMAX No. 3 Well near Pine Level, FL.

LOCATION.--Lat 27°15'38", long 82°00'23" (1927 North American datum), in SW $^1/_4$ NW $^1/_4$ sec.15, T.37 S., R.23 E., Hydrologic Unit 03100101, 0.7 mi south of State Highway 70, and 1.7 mi north of Pine Level.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, unused irrigation, artesian well, diameter 8 in., depth 1,547 ft, cased to 340 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 58 ft, from topographic map. Measuring point: Top of recorder shelter floor, 2.00 ft above land-surface datum.

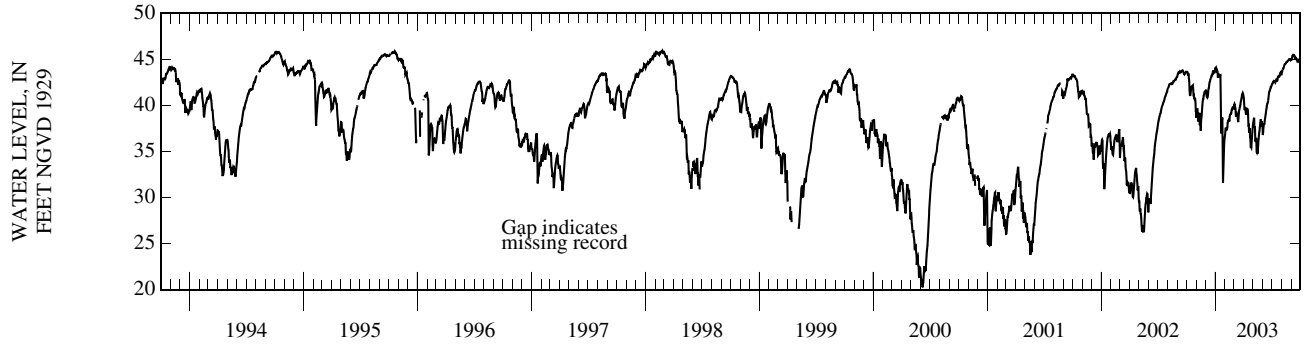
PERIOD OF RECORD.--March 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 45.92 ft NGVD, Feb. 23, 1998; lowest, 20.24 ft NGVD, June 6, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43.63	38.67	41.63	44.08	36.79	39.82	41.01	37.86	37.72	42.31	43.43	45.01
2	43.64	39.02	41.64	44.08	37.24	40.07	40.84	38.11	36.79	42.34	43.61	44.99
3	43.64	39.40	41.29	44.13	37.61	40.16	40.34	38.30	37.13	42.38	43.77	45.06
4	43.58	39.68	41.00	44.01	37.47	40.03	39.71	38.56	37.64	42.45	43.83	45.22
5	43.34	38.62	40.91	43.94	37.27	39.88	39.50	38.66	37.90	42.55	43.89	45.40
6	43.34	38.93	40.86	43.76	37.46	39.58	39.74	37.60	38.00	42.61	43.99	45.46
7	43.36	38.94	40.93	43.79	37.50	39.31	39.71	37.74	38.00	42.65	44.01	45.51
8	42.92	38.25	41.14	43.68	37.56	38.77	39.23	37.49	38.34	42.63	44.13	45.51
9	42.62	38.73	41.56	43.03	38.08	38.96	38.98	36.14	38.60	42.63	44.26	45.49
10	41.69	39.12	41.85	43.09	38.27	39.07	39.38	36.14	38.84	42.61	44.40	45.46
11	41.17	39.20	41.93	43.12	38.30	39.13	39.52	36.41	39.04	42.57	44.47	45.44
12	41.04	37.87	42.26	43.14	38.44	39.03	39.66	36.48	39.34	42.51	44.49	45.30
13	41.24	38.22	42.50	43.36	38.47	38.82	39.64	34.98	39.60	42.60	44.50	45.15
14	41.56	38.20	42.59	43.34	38.30	38.44	39.58	34.91	39.78	42.72	44.57	45.15
15	41.86	37.23	42.72	43.24	38.25	38.19	39.37	35.11	39.98	42.79	44.59	45.20
16	41.98	38.29	42.83	43.25	38.79	38.65	38.92	34.77	40.11	42.77	44.69	45.15
17	41.96	38.66	42.90	43.26	38.97	39.12	37.85	35.12	40.17	42.71	44.73	45.04
18	42.00	39.00	42.97	41.07	39.01	39.48	37.87	35.80	40.36	42.70	44.72	45.04
19	42.11	39.53	43.14	38.08	39.08	39.64	37.06	36.30	40.51	42.85	44.74	44.96
20	42.17	40.01	43.25	36.96	39.10	39.78	37.43	36.66	40.78	43.06	44.79	44.85
21	42.20	40.39	43.25	37.94	39.16	39.94	37.53	36.99	41.12	43.14	44.85	44.91
22	41.64	40.67	43.36	38.53	39.53	40.11	36.58	37.20	41.40	43.16	44.89	44.99
23	41.12	40.69	43.37	38.69	39.56	40.40	36.47	37.61	41.49	43.15	44.93	44.98
24	41.13	41.04	43.71	36.26	39.67	40.55	35.52	37.93	41.57	43.12	44.97	44.85
25	40.78	41.15	43.71	31.62	39.77	40.71	35.52	38.20	41.70	43.17	44.98	44.67
26	40.72	41.31	43.61	32.67	39.76	40.88	35.45	38.40	41.85	43.29	45.03	44.78
27	40.74	41.45	43.65	33.83	39.68	41.07	36.02	38.48	41.98	43.43	45.03	44.86
28	40.74	41.46	43.65	34.78	39.67	41.15	36.54	38.02	41.98	43.52	44.98	44.92
29	40.34	41.50	43.62	35.70	---	41.24	37.03	38.28	42.05	43.58	44.98	44.97
30	39.31	41.57	43.75	36.26	---	41.34	37.42	38.17	42.16	43.48	44.91	44.95
31	39.47	---	44.00	36.58	---	41.23	---	37.79	---	43.28	44.96	---
MAX	43.64	41.57	44.00	44.13	39.77	41.34	41.01	38.66	42.16	43.58	45.03	45.51

CAL YR 2002 MAX 44.00
WTR YR 2003 MAX 45.51



DE SOTO COUNTY—Continued

WELL NUMBER.--271757081493001. ROMP 26 Shallow Well near Gardner, FL.

LOCATION.--Lat 27°17'57", long 81°49'30" (1927 North American datum), in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.33, T.36 S., R.25 E., Hydrologic Unit 03100101, 235 ft east of U. S. Highway 17, and 3.8 mi south of Gardner.

AQUIFER.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit 112NRSD.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 6 in., depth 15 ft, cased to 10 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

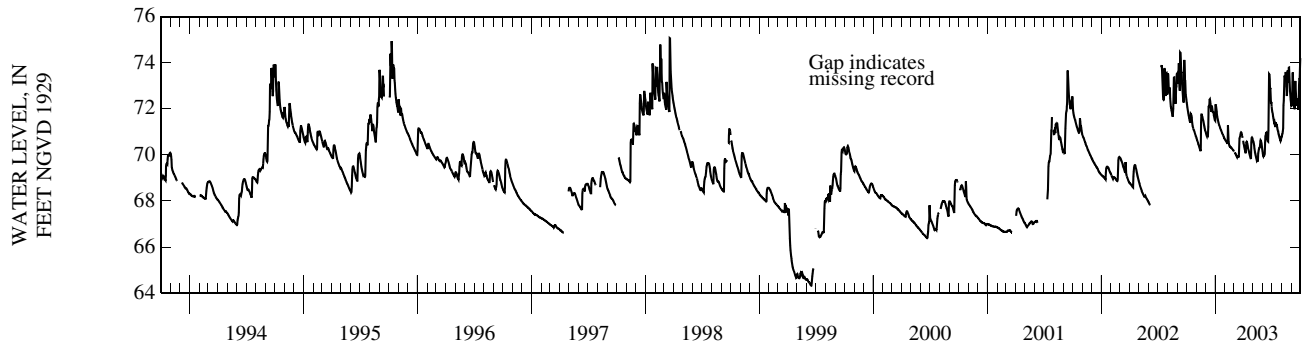
DATUM.--Land-surface datum is 75.37 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 1.70 ft above land-surface datum.

PERIOD OF RECORD.--August 1976 to February 1978 (periodic); March 1978 to current year. The figures of water level as elevation, in feet NGVD, prior to Oct. 1, 1983, are in error. Correct elevations for data published prior to this date may be obtained by using datum corrections of -2.08 ft August 1976 to Sept. 30, 1980, and +1.00 ft Oct. 1, 1980, to Sept. 30, 1983. Revised records are in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 75.11 ft NGVD, June 20, 1982; lowest, 64.32 ft NGVD, June 16, 1999.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72.28	70.74	71.00	72.16	70.67	70.16	70.52	70.63	70.16	71.96	70.79	72.13
2	72.19	70.70	70.93	72.16	70.65	70.15	70.46	70.60	70.05	71.88	70.80	72.14
3	72.07	70.65	70.89	72.09	70.62	---	70.38	70.54	69.96	71.83	70.89	72.27
4	71.99	70.61	70.84	71.98	70.59	70.11	70.32	70.47	69.93	71.73	70.92	72.21
5	71.90	70.57	70.81	71.87	70.57	70.08	70.25	70.39	69.98	71.67	71.03	73.16
6	71.81	70.53	70.86	71.76	70.55	70.06	70.19	70.29	69.99	71.60	71.16	73.58
7	71.73	70.49	70.89	71.66	70.53	70.03	70.13	70.20	69.99	71.51	72.16	73.26
8	71.66	70.45	70.87	71.58	70.51	70.01	70.07	70.12	70.03	71.43	72.35	72.77
9	71.59	70.41	71.22	71.52	70.48	69.98	70.35	70.05	70.52	71.45	73.01	72.46
10	71.51	70.36	72.11	71.46	71.28	69.95	70.55	69.99	70.81	71.35	73.39	72.26
11	71.46	70.32	72.12	71.40	71.00	69.92	70.57	69.92	70.84	71.27	73.44	72.11
12	71.40	70.27	72.06	71.35	70.59	69.89	70.54	69.86	70.95	71.21	73.33	71.98
13	71.53	70.24	72.40	71.31	70.47	69.93	70.48	69.80	70.97	71.38	73.33	72.92
14	71.78	70.19	72.42	71.27	70.43	69.94	70.41	69.74	70.90	71.38	73.60	73.21
15	71.76	70.16	72.33	71.23	70.40	69.92	70.32	69.76	70.81	71.27	73.47	72.92
16	71.72	71.42	72.21	71.18	70.37	69.91	70.28	69.74	70.70	71.31	72.98	72.60
17	71.61	71.75	72.08	71.15	70.35	69.92	70.24	69.71	70.65	71.28	72.85	72.37
18	71.48	71.75	71.97	71.10	70.35	70.31	70.19	70.06	70.59	71.18	72.56	72.30
19	71.36	71.70	71.87	71.07	70.33	70.71	70.12	70.15	70.58	71.10	72.77	72.13
20	71.26	71.64	72.11	71.04	70.32	70.75	70.06	70.23	71.05	71.06	73.63	72.37
21	71.22	71.59	72.11	71.00	70.30	70.79	70.00	70.29	72.33	71.00	73.63	72.45
22	71.15	71.54	72.01	70.96	70.29	70.87	69.95	70.31	73.51	70.92	73.44	72.26
23	71.10	71.48	71.91	70.93	70.27	70.96	69.90	70.33	73.49	70.86	73.12	72.06
24	71.08	71.40	71.82	70.89	70.25	70.98	69.85	70.46	73.28	70.83	73.78	71.96
25	71.05	71.32	71.88	70.87	70.24	70.97	69.82	70.59	72.86	70.77	73.79	72.13
26	71.01	71.26	71.83	70.85	70.22	70.91	70.56	70.63	72.91	70.73	73.36	73.01
27	70.96	71.21	71.72	70.82	70.21	70.86	70.74	70.61	72.63	70.70	73.03	73.28
28	70.91	71.14	71.65	70.79	70.19	70.82	70.76	70.54	72.21	70.65	72.77	73.28
29	70.87	71.08	71.58	70.73	---	70.74	70.74	70.49	72.30	70.60	72.60	73.75
30	70.83	71.04	71.51	70.72	---	---	70.68	70.37	72.11	70.64	72.39	74.20
31	70.79	---	71.49	70.69	---	70.61	---	70.25	---	70.72	72.25	---
MAX	72.28	71.75	72.42	72.16	71.28	---	70.76	70.63	73.51	71.96	73.79	74.20



DE SOTO COUNTY—Continued

WELL NUMBER.--271757081493002. ROMP 26 Avon Park Well near Gardner, FL.

LOCATION.--Lat 27°17'57", long 81°49'30" (1927 North American datum), in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.33, T.36 S., R.25 E., Hydrologic Unit 03100101, 235 ft east of U. S. Highway 17, and 3.8 mi south of Gardner.

AQUIFER.--Avon Park formation of Eocene Age, Geologic Unit 124AVPK.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 12 in., depth 1,320 ft, cased to 580 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

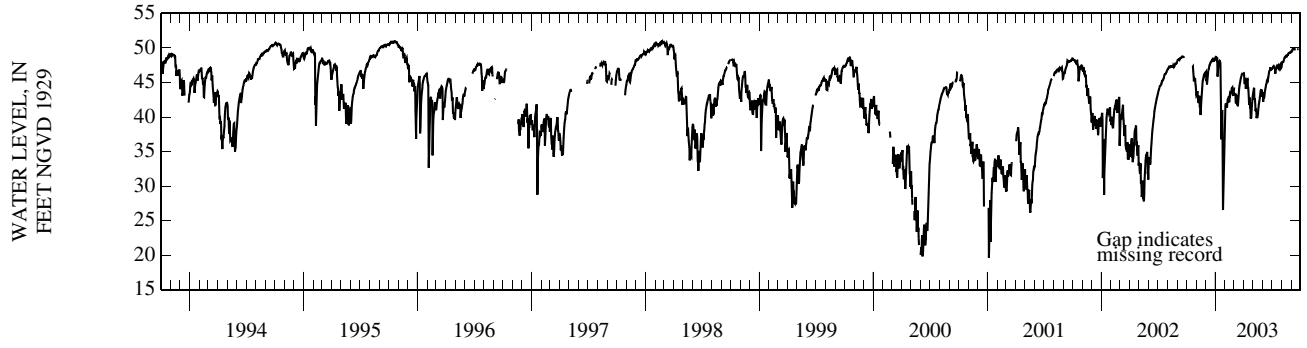
DATUM.--Land-surface datum is 75.28 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 2.59 ft above land-surface datum.

PERIOD OF RECORD.--March 1978 to current year. The figures of water level as elevation, in feet NGVD, prior to Oct. 1, 1980, are in error. Correct elevations for data published prior to this date may be obtained by using datum correction of -2.03 ft. Revised records are in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 51.28 ft NGVD, Oct. 5, 1979; lowest, 19.62 ft NGVD, Jan. 5, 2001.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	43.09	46.49	48.65	40.86	43.75	46.39	43.21	43.49	46.94	47.20	49.52
2	---	43.18	46.55	48.72	41.66	44.28	46.36	43.54	43.43	46.98	47.59	49.53
3	---	43.48	45.18	48.68	41.88	---	45.98	43.82	42.19	47.07	47.83	49.49
4	---	43.75	45.46	48.64	41.88	43.25	45.10	44.12	42.71	47.14	47.94	49.51
5	---	43.15	44.73	48.58	41.79	43.45	44.76	44.21	42.79	47.23	47.97	49.79
6	---	42.68	45.27	48.28	41.82	43.27	45.30	42.50	42.80	47.34	47.98	49.87
7	---	42.23	45.75	48.32	41.40	42.27	45.37	42.70	43.01	47.39	47.98	49.91
8	---	42.14	46.18	45.85	41.90	41.96	44.10	42.51	43.52	47.27	48.15	49.92
9	---	42.03	46.66	46.44	42.47	43.04	44.31	41.78	43.87	47.15	48.38	49.85
10	---	42.84	46.94	47.03	42.66	43.22	44.74	40.84	44.10	47.04	48.55	49.86
11	---	43.08	47.02	47.49	42.42	42.69	45.08	41.18	44.33	46.96	48.63	49.83
12	---	41.42	47.32	47.84	42.85	41.85	45.22	40.98	44.60	46.28	48.70	49.83
13	---	41.77	47.55	47.97	42.97	41.81	45.46	39.83	44.74	46.89	48.64	49.80
14	---	40.29	47.60	48.07	42.14	41.56	45.49	40.08	44.95	46.97	48.67	49.79
15	---	40.43	47.71	47.93	42.42	42.32	44.15	39.85	45.19	47.18	48.74	49.82
16	---	41.73	47.80	47.97	43.15	42.96	44.34	40.14	45.30	47.28	48.83	---
17	---	42.57	47.88	47.73	43.41	43.60	43.83	40.34	45.00	47.06	48.92	---
18	---	43.37	47.96	45.38	43.29	44.13	43.02	40.96	45.26	47.10	48.91	---
19	---	44.12	48.09	39.07	43.54	44.49	41.78	41.37	45.53	47.17	48.85	---
20	47.26	44.70	48.15	36.75	43.55	44.75	42.59	41.81	45.87	47.46	48.94	---
21	47.32	45.20	48.11	39.70	43.55	45.01	42.82	42.12	46.17	47.51	49.00	49.72
22	46.60	45.43	48.18	40.84	44.04	45.29	41.28	42.38	46.49	47.08	49.02	49.79
23	46.05	45.50	48.29	41.00	44.19	45.56	41.47	42.80	46.62	47.00	49.15	49.78
24	45.17	45.86	48.45	32.67	44.26	45.69	39.76	43.16	46.72	46.91	49.25	---
25	45.44	46.10	48.45	26.54	43.49	45.87	39.85	43.48	46.84	47.02	49.27	---
26	45.30	46.16	48.35	31.58	43.39	46.09	39.92	43.76	47.17	47.20	49.32	---
27	45.57	46.06	48.02	34.50	43.52	46.18	41.03	43.89	46.85	47.52	49.35	---
28	45.51	46.19	48.24	36.73	43.07	46.24	41.74	43.86	46.83	47.62	49.35	---
29	44.71	46.27	48.31	38.38	---	46.42	42.28	43.84	46.87	47.70	49.35	---
30	44.48	46.21	48.32	39.39	---	---	42.88	43.85	46.92	47.05	49.33	49.71
31	43.56	---	48.50	40.19	---	46.42	---	42.96	---	47.11	49.37	---
MAX	---	46.27	48.50	48.72	44.26	---	46.39	44.21	47.17	47.70	49.37	---



DE SOTO COUNTY—Continued

WELL NUMBER.--271757081493003. ROMP 26 Hawthorn Well near Gardner, FL.

LOCATION.--Lat 27°17'57", long 81°49'30" (1927 North American datum), in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.33, T.36 S., R.25 E., Hydrologic Unit 03100101, 200 ft east of U. S. Highway 17, and 3.8 mi south of Gardner.

AQUIFER.--Hawthorn formation of Miocene Age, Geologic Unit 122HTRN.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 12 in., depth 180 ft, cased to 140 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 75.84 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 2.58 ft above land-surface datum.

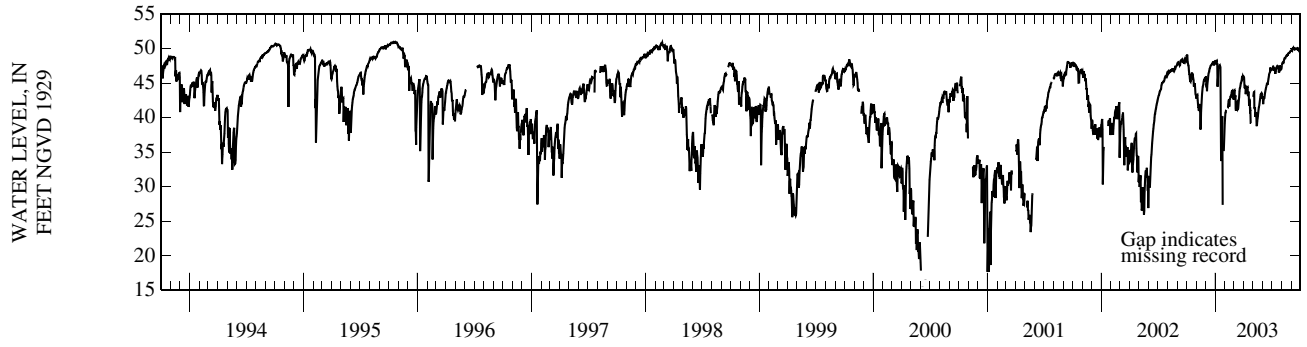
REMARKS.--Water level affected by pumping of nearby well.

PERIOD OF RECORD.--March 1978 to current year. The figures of water level as elevation, in feet NGVD, prior to Oct. 1, 1980, are in error. Correct elevations for data published prior to this date may be obtained by using datum correction of -1.98 ft. Revised records are in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 51.17 ft NGVD, Oct. 1, 1979; lowest measured, 15.49 ft NGVD, June 6, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49.08	42.75	45.86	48.10	39.86	43.38	45.88	---	42.96	46.98	47.23	49.74
2	48.96	43.07	46.00	48.32	40.71	43.92	45.89	43.01	42.95	47.03	47.53	49.77
3	49.13	43.25	44.79	48.08	40.79	43.97	45.75	43.34	41.95	47.09	47.77	49.73
4	48.09	43.30	44.85	48.20	41.05	42.83	44.71	43.68	42.55	47.16	47.90	49.69
5	47.87	42.50	43.83	48.24	41.10	43.00	44.25	43.72	42.68	47.53	47.98	49.95
6	47.58	41.92	44.68	47.71	---	43.23	44.63	41.38	42.76	47.36	47.98	50.05
7	47.53	41.56	45.21	47.89	---	41.31	44.71	41.38	42.83	46.92	47.97	50.10
8	46.83	41.55	45.53	44.48	---	40.98	43.39	41.49	43.29	46.81	48.16	50.16
9	46.31	41.01	46.09	45.49	41.55	41.94	43.94	40.11	43.61	47.23	48.40	50.00
10	46.23	41.98	46.39	46.18	41.53	42.02	44.22	40.32	43.85	47.10	48.55	50.01
11	45.60	41.77	46.54	46.77	41.97	42.12	43.98	40.79	44.12	46.98	48.64	49.98
12	45.30	41.12	46.79	47.15	42.32	41.57	44.25	40.67	44.27	46.35	48.64	49.87
13	45.23	41.17	47.03	47.23	42.61	41.54	44.41	38.91	44.48	46.76	48.61	49.89
14	45.57	38.28	47.18	47.48	41.60	41.25	44.43	38.78	44.65	46.90	48.74	50.00
15	46.03	38.55	47.25	47.42	41.89	41.33	43.13	39.46	44.87	47.12	48.80	50.05
16	46.30	40.85	47.41	47.52	42.67	41.93	43.51	39.85	44.96	47.27	48.94	50.04
17	46.41	41.86	47.50	47.35	42.72	42.51	43.78	40.16	44.77	47.15	49.01	50.03
18	46.52	42.68	47.59	40.69	42.95	42.97	43.29	40.72	45.00	47.17	49.01	50.00
19	46.20	43.39	47.63	33.71	42.99	43.82	41.73	41.08	45.27	47.24	48.97	49.98
20	45.90	43.92	47.65	34.87	43.27	44.24	42.41	41.47	45.60	47.44	49.08	49.91
21	45.98	44.43	47.70	38.22	43.11	44.34	42.45	41.63	45.88	47.41	49.16	49.98
22	45.72	44.63	47.83	39.77	43.65	44.60	41.01	41.99	46.20	47.24	49.14	50.04
23	45.41	44.80	47.83	40.19	43.85	44.97	41.08	42.38	46.37	46.54	49.28	50.01
24	44.52	45.20	48.03	27.36	43.90	45.00	39.24	42.72	46.51	46.77	49.37	49.94
25	44.87	45.42	48.04	---	43.33	45.24	39.26	43.02	46.65	47.03	49.37	49.82
26	44.87	45.47	47.99	---	43.17	45.44	---	43.31	47.27	47.24	49.38	49.92
27	44.98	45.46	47.56	---	43.47	45.68	---	43.43	46.82	47.46	49.42	49.95
28	44.19	45.64	47.83	35.16	42.64	45.61	---	43.50	46.88	47.46	49.56	50.02
29	43.45	45.82	48.01	37.06	---	45.83	---	43.56	46.92	47.19	49.63	50.05
30	43.30	45.63	47.95	38.26	---	46.04	---	43.41	47.00	46.96	49.62	50.01
31	43.03	---	48.11	39.18	---	45.91	---	42.76	---	47.01	49.64	---
MAX	49.13	45.82	48.11	---	---	46.04	---	---	47.27	47.53	49.64	50.16



DE SOTO COUNTY—Continued

WELL NUMBER.--271757081493004. ROMP 26 Tampa Well near Gardner, FL.

LOCATION.--Lat 27°17'57", long 81°49'30" (1983 North American datum), in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.33, T.36 S., R.25 E., Hydrologic Unit 03100101, 200 ft east of U. S. Highway 17, and 3.8 mi south of Gardner.

AQUIFER.--Tampa member Arcadia formation of Miocene Age, Geologic Unit 122HTRN.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 6 in., depth 430 ft, cased to 255 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 75 ft, from topographic map. Measuring point: Top of recorder shelter floor, 3.46 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby well.

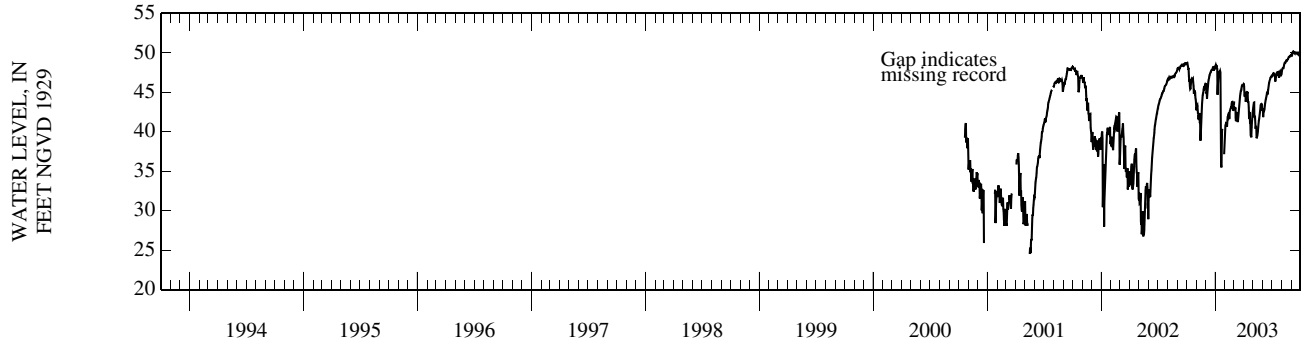
PERIOD OF RECORD.--October 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 50.18 ft NGVD, Sept. 8, 2003; lowest, 24.53 ft NGVD, May 16, 2001.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48.71	42.73	46.04	48.32	39.89	43.35	46.08	42.72	42.87	47.03	47.29	49.76
2	48.70	42.98	46.13	48.44	40.76	43.86	46.03	43.06	43.01	47.08	47.65	49.78
3	48.73	43.23	44.85	48.28	40.90	---	45.75	43.36	41.86	47.15	47.89	49.75
4	48.51	43.31	45.03	48.36	41.08	42.78	44.73	43.67	42.43	47.24	48.01	49.73
5	48.28	42.70	44.20	48.35	41.05	43.02	44.44	43.70	42.55	47.36	48.05	50.00
6	47.97	42.22	44.82	47.97	41.21	43.00	44.89	41.82	42.61	47.42	48.06	50.10
7	47.97	41.78	45.35	48.06	40.63	41.79	44.92	41.95	42.75	47.40	48.07	50.16
8	47.05	41.76	45.74	44.70	41.22	41.34	43.79	41.89	43.23	47.25	48.25	50.18
9	46.51	41.49	46.26	45.80	41.86	42.37	44.07	41.02	43.55	47.29	48.48	50.08
10	46.54	42.19	46.56	46.55	41.93	42.51	44.37	40.37	43.79	47.11	48.64	50.08
11	45.76	42.38	46.67	47.08	41.85	42.12	44.62	40.72	44.06	47.04	48.75	50.02
12	45.42	41.09	46.96	47.47	42.25	41.58	44.81	40.61	44.26	46.38	48.77	49.92
13	45.48	41.21	47.18	47.53	42.42	41.45	45.00	39.18	44.44	46.87	48.76	49.88
14	46.01	38.88	47.27	47.72	41.62	41.22	44.98	39.28	44.64	46.96	48.82	50.01
15	46.40	39.57	47.39	47.57	41.78	41.82	43.72	39.40	44.85	47.24	48.86	50.05
16	46.55	41.02	47.49	47.70	42.54	42.46	43.86	39.72	44.94	47.35	49.03	50.03
17	46.62	41.94	47.59	47.50	42.69	43.02	43.77	40.03	44.71	47.22	49.10	50.02
18	46.70	42.76	47.66	42.39	42.80	43.51	43.11	40.57	44.96	47.23	49.09	49.97
19	46.64	43.53	47.77	35.86	42.94	43.93	41.62	40.99	45.25	47.27	49.04	49.96
20	46.68	44.10	47.79	35.49	43.07	44.27	42.41	41.39	45.58	47.54	49.15	49.91
21	46.74	44.61	47.81	38.67	43.06	44.56	42.50	41.63	45.88	47.57	49.20	49.98
22	46.21	44.81	47.92	40.11	43.57	44.83	41.03	41.94	46.20	47.25	49.22	50.04
23	45.80	45.00	47.97	40.38	43.74	45.16	41.11	42.27	46.36	46.97	49.35	50.05
24	44.83	45.36	48.16	---	43.76	45.24	39.52	42.62	46.47	46.96	49.46	49.92
25	45.09	45.60	48.17	---	43.14	45.45	39.50	43.01	46.60	47.12	49.47	49.82
26	45.00	45.62	48.08	---	43.03	45.67	39.30	43.33	46.84	47.32	49.53	49.90
27	45.22	45.59	47.76	---	43.22	45.81	40.52	43.46	46.90	47.59	49.60	49.95
28	44.91	45.78	47.97	---	42.68	45.82	41.26	43.48	46.95	47.68	49.61	50.00
29	44.23	45.90	48.07	37.16	---	46.04	41.78	43.52	46.99	47.54	49.64	50.02
30	44.04	45.77	48.06	38.31	---	---	42.37	43.46	47.06	47.04	49.60	50.14
31	43.29	---	48.25	39.16	---	46.05	---	42.69	---	47.18	49.66	---
MAX	48.73	45.90	48.25	---	43.76	---	46.08	43.70	47.06	47.68	49.66	50.18

CAL YR 2002 MAX 48.73



DE SOTO COUNTY—Continued

WELL NUMBER.--272012081482501. Marshall Deep Well near Gardner, FL.

LOCATION.--Lat 27°20'12", long 81°48'25" (1927 North American datum), in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.22, T.36 S., R.25 E., Hydrologic Unit 03100101, 200 ft east of U. S. Highway 17, and 1.0 mi south of Gardner.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, unused irrigation, artesian well, diameter 5 in., depth 478 ft, cased to 137 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval and tipping bucket raingage.

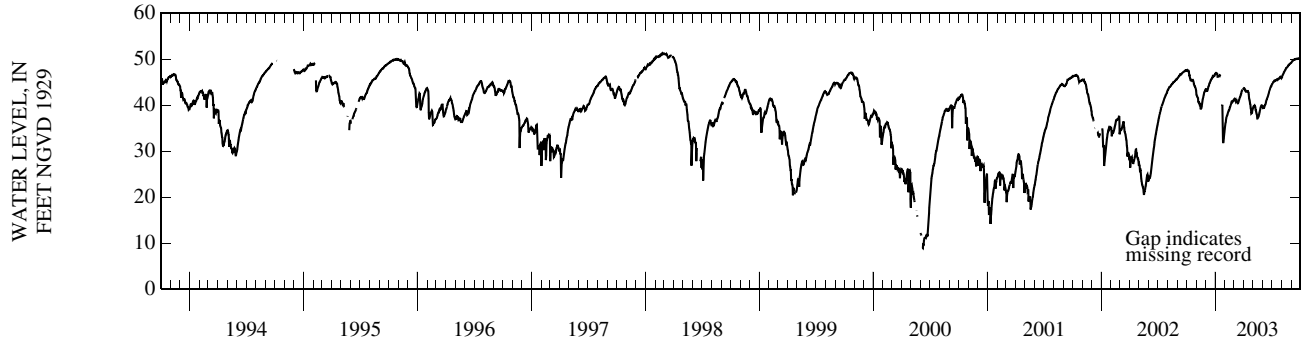
DATUM.--Land-surface datum is 62.58 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.12 ft above land-surface datum.

PERIOD OF RECORD.--November 1962 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 55.24 ft NGVD, Mar. 5, 1964; lowest, 8.96 ft NGVD, June 7, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47.57	42.32	43.48	46.92	35.41	41.10	43.61	39.27	39.80	44.49	45.89	49.27
2	47.60	42.14	43.43	46.96	35.97	41.31	43.67	39.52	39.57	44.65	46.03	49.35
3	47.64	41.94	43.18	47.02	36.15	41.37	43.60	39.74	39.43	44.71	46.21	49.39
4	47.52	41.80	43.24	47.01	36.87	41.28	43.61	39.84	39.49	44.78	46.41	49.47
5	47.39	41.63	43.10	46.93	37.25	41.27	43.40	39.86	39.24	44.90	46.55	49.63
6	47.39	41.50	43.12	46.82	37.45	41.32	43.27	39.79	39.46	45.03	46.68	49.67
7	47.44	40.80	43.28	46.75	37.67	41.05	43.29	39.87	39.63	45.06	46.83	49.73
8	47.28	40.63	43.51	46.20	37.80	40.80	43.10	39.69	39.85	45.15	46.99	49.78
9	46.50	40.52	43.93	46.25	38.10	40.94	42.95	39.59	39.99	45.32	47.16	49.81
10	46.50	40.59	44.13	46.27	38.32	41.00	42.96	38.88	40.14	45.35	47.30	49.84
11	46.04	40.44	44.23	46.25	38.47	40.70	43.02	38.83	40.42	45.32	47.45	49.91
12	45.85	40.07	44.58	46.29	38.71	40.67	43.05	38.38	40.68	45.27	47.55	49.89
13	45.41	40.09	44.77	46.43	38.92	40.48	43.07	38.12	40.94	45.32	47.63	49.89
14	45.36	39.68	44.87	46.48	38.90	40.40	43.08	37.93	41.12	45.42	47.77	49.94
15	45.52	39.07	45.03	46.37	39.02	40.47	42.75	37.31	41.31	45.47	47.86	49.99
16	45.52	39.35	45.19	46.54	39.41	40.64	42.87	37.38	41.40	45.54	48.04	50.04
17	45.34	39.41	45.35	46.65	39.59	40.89	42.81	37.23	41.64	45.57	48.10	50.05
18	45.30	39.74	45.47	---	39.69	41.10	42.34	37.39	41.83	45.55	48.15	50.05
19	45.36	40.25	45.66	---	39.92	41.37	41.52	37.49	42.00	45.49	48.22	50.03
20	45.42	40.76	45.76	---	40.15	41.57	41.19	37.77	42.25	45.62	48.31	50.05
21	45.44	41.20	45.79	---	40.44	41.74	40.94	38.04	42.52	45.72	48.44	50.06
22	45.33	41.45	45.91	39.93	40.68	41.94	40.39	38.39	42.83	45.75	48.53	50.11
23	45.09	41.72	46.12	40.06	40.63	42.23	40.24	38.67	43.05	45.74	48.61	50.11
24	44.60	42.13	46.37	36.65	40.78	42.39	39.40	38.90	43.25	45.75	48.74	50.10
25	44.45	42.44	46.37	32.16	40.85	42.65	39.07	39.17	43.45	45.77	48.78	50.10
26	44.16	42.70	46.26	31.76	40.94	42.92	38.18	39.43	43.71	45.86	48.88	50.13
27	44.08	42.86	46.31	32.14	40.99	43.14	38.26	39.66	43.94	46.00	48.95	50.09
28	43.98	43.00	46.37	32.76	40.94	43.24	38.43	39.77	44.05	46.15	49.01	50.05
29	43.80	43.11	46.37	33.53	---	43.38	38.70	39.94	44.13	46.19	49.07	50.03
30	43.58	43.38	46.57	34.10	---	---	38.93	39.97	44.30	46.12	49.08	49.97
31	43.10	---	46.85	34.83	---	43.41	---	39.81	---	46.03	49.16	---
MAX	47.64	43.38	46.85	---	40.99	---	43.67	39.97	44.30	46.19	49.16	50.13
*PREC	0.61	4.05	5.43	---	1.17	4.53	2.30	2.98	11.42	2.57	8.87	10.44



MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2002 TO SEPTEMBER 2003

DE SOTO COUNTY

SITE-ID	STATION NAME	WATER-LEVEL DATE	WATER-LEVEL MSL FEET	WATER-LEVEL DATUM CODE
270225081443303	ROMP 12 PRAIRIE CREEK NOCATEE WELL NR ARCADIA FL	05-22-2003	47.17	NGVD29
		09-18-2003	49.37	NGVD29
270225081443304	ROMP 12 PRAIRIE CREEK ARCADIA WELL NR ARCADIA FL	05-22-2003	47.20	NGVD29
270225081443305	ROMP 12 PRAIRIE CREEK TAMIAMI WELL NR ARCADIA FL	05-22-2003	41.28	NGVD29
		09-18-2003	43.28	NGVD29
270325081484701	NAT WOLF CORP IRRIGATION WELL NEAR ARCADIA FL	05-20-2003	45.67	NGVD29
		09-18-2003	47.92	NGVD29
270417081575601	ROB LANE DESOTO 36 WELL (RUSSELL) NEAR ARCADIA FL	05-21-2003	41.85	NGVD29
		09-17-2003	44.85	NGVD29
270418081365802	ROMP 13 TIPPEN BAY SUWANNEE WELL NEAR ARCADIA FL	05-22-2003	46.94	NGVD29
		09-18-2003	50.62	NGVD29
270418081365803	ROMP 13 TIPPEN BAY LOWER ARCADIA NR ARCADIA FL	05-22-2003	47.02	NGVD29
		09-18-2003	50.72	NGVD29
270418081365804	ROMP 13 TIPPEN BAY UPPER ARCADIAN NR ARCADIA FL	05-22-2003	46.83	NGVD29
		09-18-2003	50.77	NGVD29
270418081365805	ROMP 13 TIPPEN BAY NRSD WELL NR ARCADIA FL	05-22-2003	57.64	NGVD29
		09-18-2003	59.34	NGVD29
270540082001101	GDU WELL M-2 NEAR FORT OGDEN FL	05-21-2003	43.60	NGVD29
		09-17-2003	50.50	NGVD29
270540082001102	GDU WELL T-2 NEAR FORT OGDEN FL	05-21-2003	39.17	NGVD29
		09-17-2003	48.37	NGVD29
270737082025101	ROMP 9.5 SUWANNEE WELL (MW1) NEAR FT OGDEN FL	05-19-2003	42.74	NGVD29
		09-17-2003	47.52	NGVD29
270737082025102	ROMP 9.5 LOWER ARCADIA WELL (MW2) NEAR FT OGDEN FL	05-19-2003	40.43	NGVD29
		09-17-2003	45.49	NGVD29
270737082025104	ROMP 9.5 NRSD WELL (MW3) NEAR FT OGDEN FL	05-19-2003	32.59	NGVD29
		09-17-2003	32.60	NGVD29
270858081582201	NUNEZ RED HAWK RANCH WELL NEAR NOCATEE FL	05-20-2003	40.80	NGVD29
		09-17-2003	45.30	NGVD29
271026081583601	ROMP 17 AVON PARK WELL NEAR NOCATEE FL	05-22-2003	43.78	NGVD29
		09-17-2003	49.96	NGVD29
271026081583603	ROMP 17 TAMPA-SUWANNEE WELL NEAR NOCATEE FL	05-22-2003	19.46	NGVD29
		09-17-2003	19.32	NGVD29
271026081583604	ROMP 17 TAMPA WELL NEAR NOCATEE FL	05-22-2003	39.32	NGVD29
		09-17-2003	43.71	NGVD29
271026081583605	ROMP 17-NRSD WELL NEAR NOCATEE FL	05-22-2003	43.53	NGVD29
		09-17-2003	49.98	NGVD29
271115081462701	ROMP 16 OCALA WELL NEAR ARCADIA FL	05-20-2003	45.19	NGVD29
		09-18-2003	50.11	NGVD29

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2002 TO SEPTEMBER 2003

DE SOTO COUNTY

SITE-ID	STATION NAME	WATER-LEVEL DATE	WATER-LEVEL MSL FEET	WATER-LEVEL DATUM CODE
271115081462702	ROMP 16 JOSHUA CREEK TAMPA WELL NEAR ARCADIA FL	05-20-2003	44.13	NGVD29
		09-18-2003	50.29	NGVD29
271228081482801	TOWNSEN RIVER HAWTHORN WELL NEAR ARCADIA FL	05-20-2003	44.52	NGVD29
		09-18-2003	51.40	NGVD29
271232081392201	ROMP 15 AVON PARK WELL NEAR ARCADIA FL	05-21-2003	45.40	NGVD29
		09-18-2003	50.47	NGVD29
271405081453201	BEVIS DEEP IRRIGATION WELL NEAR ARCADIA FL	05-21-2003	45.51	NGVD29
		09-18-2003	50.47	NGVD29
271610081565401	CUNNINGHAM WELL NEAR ARCADIA FL	05-22-2003	40.18	NGVD29
		09-19-2003	48.12	NGVD29
271623081520101	CAMP CHANYATAH WELL 49 NEAR ARCADIA FL	05-22-2003	37.10	NGVD29
		09-19-2003	43.90	NGVD29
271720081521501	SORRELLS BROS WELL 8 NEAR ARCADIA FL	05-22-2003	39.40	NGVD29
		09-19-2003	19.23	NGVD29
271746081404301	SOUTH TOMATO GROWERS WELL NEAR ARCADIA FL	05-21-2003	44.09	NGVD29
		09-18-2003	50.35	NGVD29
271746081453501	FLA POWER & LIGHT WELL NEAR ARCADIA FL	05-22-2003	42.64	NGVD29
		09-19-2003	48.95	NGVD29
271748081345101	TRG WELL J36 NEAR ARCADIA FL	05-21-2003	43.93	NGVD29
		09-18-2003	49.42	NGVD29
272014081595701	HOLLINGSWORTH WELL 751 NEAR ARCADIA FL	05-22-2003	25.23	NGVD29
		09-19-2003	43.97	NGVD29
272015081392701	AMOCO 2 OIL TEST WELL NEAR ARCADIA FL	05-20-2003	50.92	NGVD29
		09-15-2003	59.82	NGVD29

KEY TO SITE LOCATIONS ON FIGURE 13

HARDEE COUNTY

INDEX NUMBER	SITE NUMBER
1	272714081545901
1	272714081545902
1	272714081545903
2	272728081474701
2	272728081474702
2	272728081474703
2	272728081474704
3	273156081451401

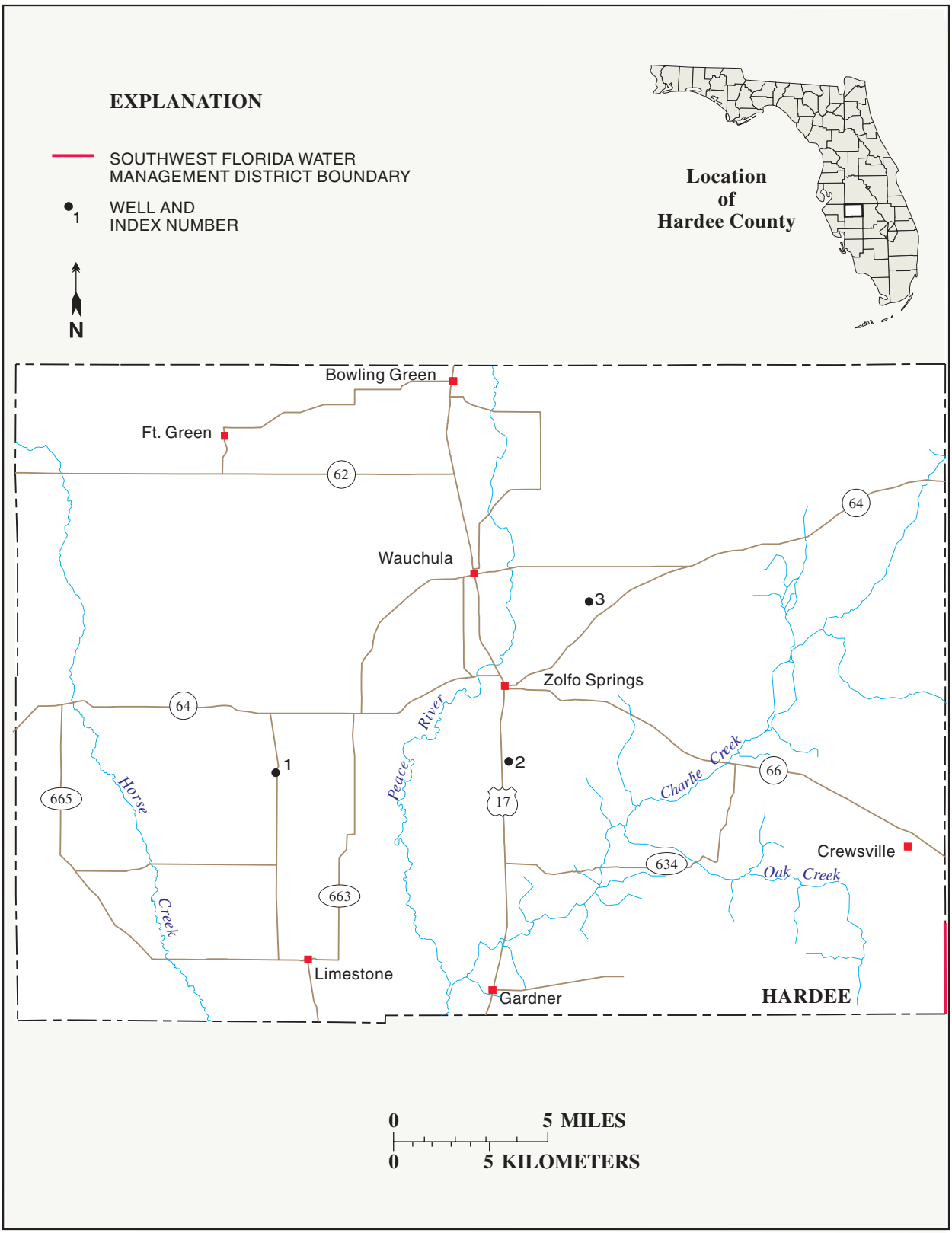


Figure 13.-- Location of wells in Hardee County.

HARDEE COUNTY

WELL NUMBER.--272714081545901. ROMP 31 Avon Park Well near Ona, FL.

LOCATION.--Lat 27°27'14", long 81°54'59" (1927 North American datum), in NE ¼ NW ¼ sec.9, T.35 S., R.24 E., Hydrologic Unit 03100101, 80 ft west of State Highway 663, and 1.4 mi south of Ona.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 8 in., depth 1,152 ft, cased to 460 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 78.09 ft above National Geodetic Vertical Datum of 1929 (levels by Southwest Florida Water Management District). Measuring point: Top of recorder shelter floor, 3.00 ft above land-surface datum.

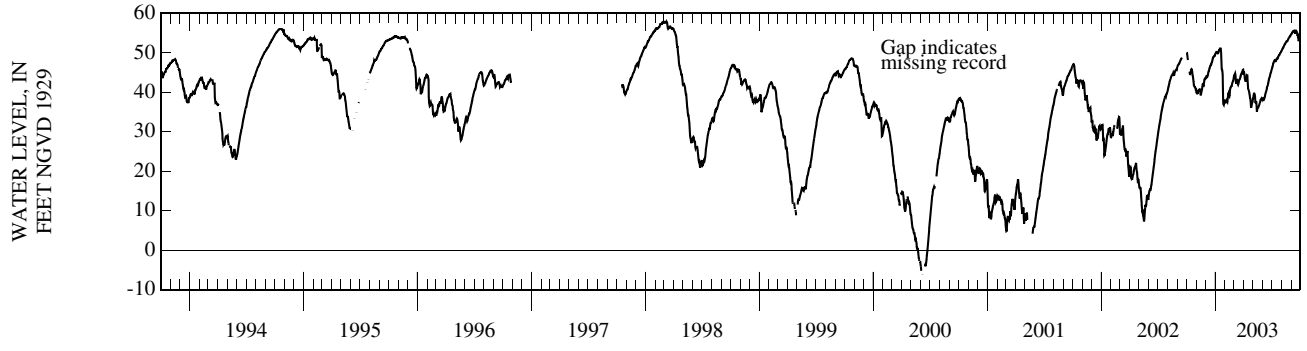
REMARKS.--Water level affected by pumping of nearby irrigation wells.

PERIOD OF RECORD.--November 1977 to October 1996 (corrected); October 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 57.92 ft NGVD, Mar. 9, 1998; lowest, 6.25 ft below NGVD, June 6, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50.03	40.11	43.51	49.83	37.69	43.93	44.49	38.29	38.40	46.00	50.44	54.76
2	50.02	40.17	43.69	49.92	37.61	44.12	44.84	38.57	38.46	46.34	50.62	54.87
3	49.33	39.53	44.04	50.01	37.82	44.02	44.94	39.08	38.18	46.54	50.84	54.97
4	48.69	39.82	44.09	50.23	37.93	44.53	44.48	39.54	38.05	46.82	50.98	55.08
5	48.19	39.60	43.92	50.25	37.60	44.73	43.70	39.69	38.07	47.15	51.20	55.29
6	---	40.18	43.90	50.12	37.68	44.25	43.15	39.70	38.18	47.43	51.24	55.36
7	---	40.39	44.13	50.14	37.64	43.57	42.98	39.51	38.42	47.57	51.42	55.47
8	---	40.49	44.50	49.98	37.52	42.62	42.72	38.96	38.84	47.74	51.60	55.53
9	---	40.52	44.98	49.90	38.24	42.12	43.30	37.76	39.23	48.00	51.78	55.53
10	45.22	40.62	45.35	49.96	38.97	42.67	44.00	37.25	39.58	48.12	52.00	55.55
11	44.66	40.78	45.48	50.14	39.62	42.97	44.21	37.60	39.88	48.11	52.16	55.61
12	44.61	40.75	45.84	50.45	39.81	43.04	44.05	37.75	40.08	47.92	52.26	55.40
13	44.85	40.36	46.20	50.77	39.51	42.56	44.12	36.39	40.33	47.91	52.34	54.88
14	45.17	39.92	46.30	50.86	39.12	42.04	43.09	35.07	40.65	48.02	52.51	55.37
15	45.74	39.22	46.59	50.81	39.05	41.90	41.83	35.64	41.03	48.21	52.62	55.57
16	45.85	39.66	46.74	51.03	39.57	42.18	41.01	35.88	41.31	48.46	52.79	55.62
17	45.73	40.06	46.94	51.29	40.70	42.67	40.79	36.06	41.48	48.51	52.91	55.55
18	45.65	40.46	47.05	50.89	41.06	42.95	40.53	36.19	41.75	48.47	52.92	55.46
19	45.05	40.84	47.13	50.23	41.22	43.25	40.24	36.35	42.27	48.52	52.93	55.24
20	44.33	41.36	47.52	47.62	41.43	43.36	39.69	36.47	42.58	48.83	53.02	54.86
21	44.00	41.97	47.66	45.88	41.52	43.53	39.29	36.72	43.09	48.97	53.14	54.28
22	43.32	42.23	47.99	45.74	41.59	43.90	38.54	36.94	43.45	49.12	53.35	54.45
23	42.69	41.68	48.32	45.43	41.97	44.29	38.43	37.22	43.65	49.30	53.53	54.19
24	41.83	41.66	48.73	44.49	42.26	44.49	37.64	37.53	43.86	49.45	53.73	54.31
25	41.67	42.38	48.78	41.14	42.49	44.66	36.32	37.82	44.26	49.46	53.85	52.97
26	41.41	42.90	48.92	37.61	42.78	44.81	36.31	38.13	44.58	49.52	54.02	53.37
27	41.33	43.22	49.13	37.03	42.88	44.96	36.69	38.25	44.85	49.80	54.15	53.65
28	41.30	43.44	49.22	36.88	43.41	45.13	37.12	38.35	45.04	49.99	54.19	53.82
29	41.03	43.52	49.21	37.27	---	45.26	37.36	38.51	45.44	50.09	54.34	53.86
30	40.70	43.44	49.24	37.62	---	45.68	37.71	38.30	45.66	50.17	54.47	53.81
31	40.73	---	49.62	37.79	---	45.69	---	38.13	---	50.36	54.61	---
MAX	---	43.52	49.62	51.29	43.41	45.69	44.94	39.70	45.66	50.36	54.61	55.62



HARDEE COUNTY—Continued

WELL NUMBER.--272714081545902. ROMP 31 Hawthorn Well near Ona, FL.

LOCATION.--Lat 27°27'14", long 81°54'59" (1927 North American datum), in NE $^1/_4$ NW $^1/_4$ sec.9, T.35 S., R.24 E., Hydrologic Unit 03100101, 80 ft west of State Highway 663, and 1.4 mi south of Ona.

AQUIFER.--Hawthorn formation of Miocene Age, Geologic Unit 122HTRN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 8 in., depth 350 ft, cased to 130 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 78.41 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 3.04 ft above land-surface datum.

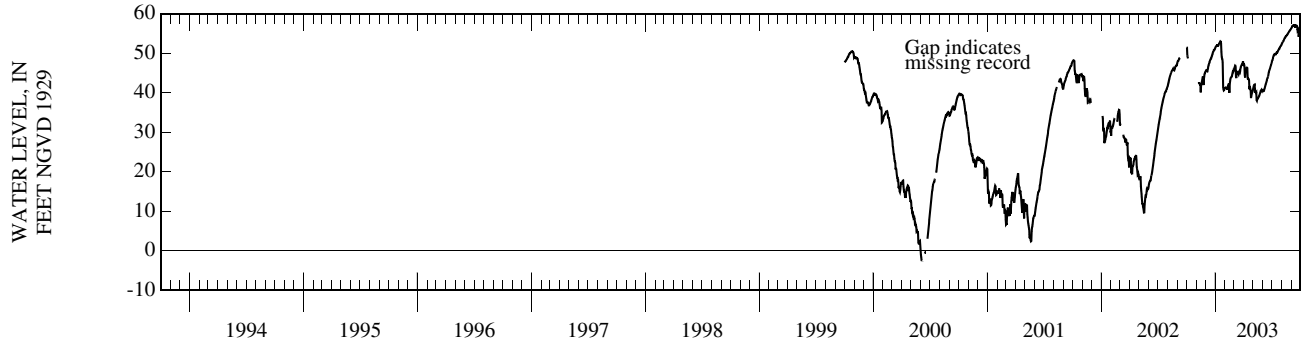
REMARKS.--Water level affected by pumping of nearby irrigation wells.

PERIOD OF RECORD.--November 1977 to September 1991; October 1991 to September 1992 (periodic); October 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 58.37 ft NGVD, Oct. 15, 16, 1982; lowest, 2.70 ft below NGVD, June 6, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51.38	---	45.44	51.44	41.18	45.77	46.90	40.75	40.60	47.82	52.17	56.35
2	51.40	---	45.53	51.60	41.24	46.03	47.18	41.04	40.64	48.13	52.34	56.47
3	49.51	---	45.71	51.76	41.29	46.23	47.12	41.44	40.40	48.33	52.52	56.58
4	49.07	---	45.71	51.90	41.26	46.52	46.75	41.83	40.35	48.57	52.69	56.71
5	48.68	---	45.43	51.97	41.13	46.85	44.46	41.95	40.41	48.87	52.86	56.90
6	---	---	45.39	51.97	41.07	46.76	43.84	41.98	40.52	49.14	52.98	56.96
7	---	---	45.78	52.03	41.03	46.44	45.09	42.03	40.82	49.31	53.06	57.05
8	---	42.32	46.14	52.03	40.79	44.09	45.35	40.06	41.16	49.50	53.25	57.12
9	---	42.45	46.65	51.91	41.34	43.68	45.38	40.32	41.51	49.73	53.46	57.12
10	---	42.43	46.99	51.89	41.64	45.12	46.01	40.04	41.82	49.82	53.68	57.13
11	---	42.40	47.17	51.96	41.88	45.30	46.28	39.97	42.15	49.81	53.86	57.13
12	---	42.18	47.44	52.19	42.13	45.22	46.32	40.08	42.37	49.73	53.97	57.07
13	---	42.03	47.78	52.45	42.10	45.09	46.24	38.13	42.55	49.71	54.05	56.51
14	---	41.94	47.97	52.59	40.23	44.96	43.82	37.99	42.83	49.80	54.18	56.82
15	---	40.09	48.18	52.62	39.96	44.81	43.31	38.38	43.13	49.97	54.27	56.98
16	---	41.73	48.38	52.81	42.01	44.68	43.63	38.43	43.43	50.14	54.33	57.04
17	---	42.16	48.57	52.97	42.76	45.08	43.52	38.60	43.64	50.20	54.47	57.01
18	---	42.56	48.67	52.88	43.31	45.37	43.37	38.70	43.85	50.15	54.57	56.97
19	---	42.95	48.82	52.41	43.63	45.53	43.06	38.84	44.10	50.22	54.68	56.91
20	---	43.36	49.11	50.35	43.87	45.63	40.84	38.96	44.62	50.51	54.77	56.66
21	---	43.88	49.28	49.09	43.93	45.45	41.67	39.11	45.11	50.69	54.88	55.82
22	---	44.07	49.53	48.66	44.02	45.95	41.38	39.31	45.43	50.84	55.05	55.98
23	---	42.30	49.85	48.52	44.17	46.39	40.84	39.59	45.65	51.01	55.19	55.60
24	---	41.94	50.23	47.69	44.65	46.64	40.52	39.83	45.83	51.13	55.32	55.62
25	---	43.58	50.32	44.87	45.08	46.85	38.64	40.06	46.10	51.14	55.47	54.14
26	---	44.16	50.47	41.35	45.36	47.07	39.14	40.32	46.40	51.24	55.60	54.63
27	---	44.60	50.66	40.84	45.29	47.09	39.55	40.53	46.65	51.48	55.74	55.05
28	---	44.92	50.81	40.56	45.44	47.18	39.81	40.65	46.89	51.70	55.82	55.29
29	---	45.02	50.88	40.65	---	47.39	40.12	40.77	47.19	51.82	55.93	55.43
30	---	45.28	50.93	40.85	---	47.73	40.33	40.58	47.52	51.88	56.06	55.40
31	---	---	51.25	41.08	---	47.76	---	40.41	---	52.05	56.19	---
MAX	---	---	51.25	52.97	45.44	47.76	47.18	42.03	47.52	52.05	56.19	57.13



HARDEE COUNTY—Continued

WELL NUMBER.--272714081545903. ROMP 31 Shallow Well near Ona, FL.

LOCATION.--Lat 27°27'14", long 81°54'59" (1927 North American datum), in NE $^1/_4$ NW $^1/_4$ sec.9, T.35 S., R.24 E., Hydrologic Unit 03100101, 80 ft west of State Highway 663, and 1.4 mi south of Ona.

AQUIFER.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit 112NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 15 ft, cased to 5 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

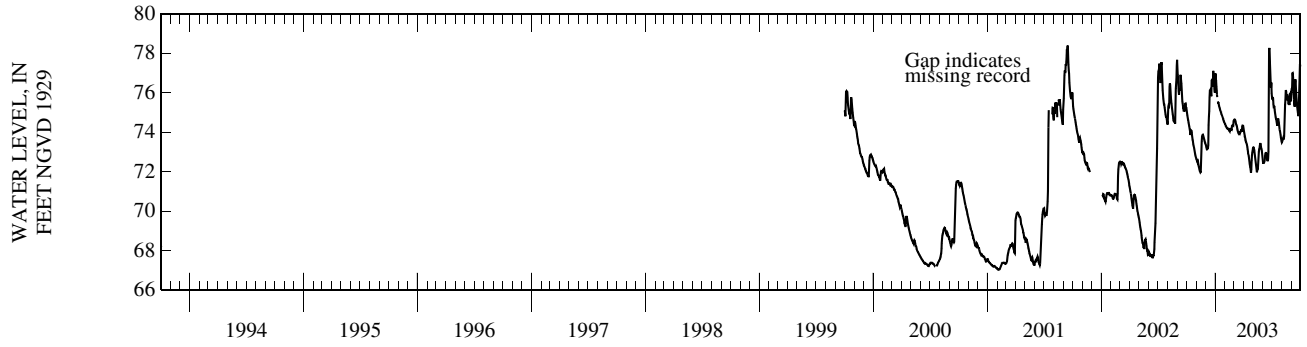
DATUM.--Land-surface datum is 78.76 ft above National Geodetic Vertical Datum of 1929 (levels by Southwest Florida Water Management District). Measuring point: Top of recorder shelter floor, 1.10 ft above land-surface datum.

PERIOD OF RECORD.--November 1977 to September 1992; October 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 78.46 ft NGVD, Sept. 7, 1988; lowest, 67.05 ft NGVD, Feb. 6, 7, 2001.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75.12	72.64	73.40	76.99	74.43	74.62	74.21	73.17	72.73	75.80	73.55	75.97
2	74.99	72.63	73.33	76.73	74.40	74.64	74.11	73.23	72.57	75.67	73.49	76.21
3	74.87	72.54	73.26	76.62	74.35	74.65	74.02	73.24	72.42	75.79	73.52	76.23
4	74.77	72.51	73.17	76.33	74.32	74.64	73.92	73.21	72.47	75.74	73.57	76.30
5	74.67	72.47	73.14	76.12	74.29	74.64	73.83	73.15	72.46	75.75	73.64	77.00
6	74.60	72.50	73.15	75.94	74.25	74.59	73.75	73.06	72.48	75.44	73.69	77.01
7	74.49	72.44	73.19	75.79	74.22	74.53	73.66	72.94	72.52	75.29	73.64	76.80
8	74.40	72.34	73.21	---	74.20	74.44	73.58	72.81	72.62	75.30	73.70	76.41
9	74.31	72.26	73.36	75.57	74.18	74.41	73.51	72.68	72.82	75.35	73.76	75.95
10	74.20	72.20	74.37	75.51	74.17	74.37	73.49	72.56	72.92	75.14	74.22	75.66
11	74.11	72.13	74.80	75.50	74.19	74.30	73.43	72.43	72.96	75.01	74.84	75.46
12	74.01	72.05	75.09	75.40	74.18	74.20	73.37	72.28	72.96	74.89	75.41	75.31
13	73.87	72.02	75.79	75.33	74.14	74.12	73.26	72.13	72.94	74.79	75.64	76.49
14	74.06	71.98	76.13	75.29	74.10	74.05	73.14	71.98	72.85	74.71	76.06	76.69
15	74.11	72.01	76.16	75.22	74.08	74.00	73.04	72.07	72.74	74.65	76.15	76.58
16	74.09	72.40	76.09	75.15	74.06	73.95	72.95	72.15	72.63	74.55	76.05	76.19
17	74.02	73.08	76.00	75.11	74.16	73.93	72.89	72.17	72.59	74.45	75.88	75.89
18	73.88	73.55	75.99	75.06	74.18	73.95	72.80	72.42	72.54	74.33	75.64	75.67
19	73.76	73.79	75.83	75.00	74.17	74.01	72.67	72.71	72.66	74.57	75.84	75.44
20	73.64	73.84	76.62	74.95	74.15	74.02	72.53	73.00	73.02	74.64	75.86	75.27
21	73.56	73.88	76.65	74.91	74.15	73.97	72.40	73.13	76.82	74.71	75.69	75.15
22	73.42	73.89	76.64	74.87	74.14	74.01	72.30	73.19	78.19	74.61	75.65	75.01
23	73.34	73.83	76.45	74.82	74.32	74.04	72.22	73.31	78.28	74.50	75.49	74.91
24	73.28	73.76	76.31	74.77	74.36	74.12	72.08	73.42	77.90	74.36	75.42	74.83
25	73.19	73.71	77.12	74.72	74.37	74.14	71.96	73.46	77.33	74.21	75.57	75.09
26	73.10	73.64	76.89	74.68	74.37	74.09	72.14	73.40	76.88	74.14	75.39	75.55
27	73.00	73.61	76.72	74.64	74.36	74.04	72.56	73.30	76.52	74.07	75.82	75.97
28	72.90	73.54	76.47	74.58	74.56	74.29	72.83	73.19	76.27	73.98	75.96	76.58
29	72.82	73.47	76.21	74.54	---	74.35	72.98	73.16	76.53	73.87	75.99	77.46
30	72.77	73.44	76.02	74.51	---	74.35	73.06	73.05	75.99	73.73	75.81	77.34
31	72.70	---	76.77	74.47	---	74.33	---	72.89	---	73.64	75.58	---
MAX	75.12	73.89	77.12	---	74.56	74.65	74.21	73.46	78.28	75.80	76.15	77.46



HARDEE COUNTY—Continued

WELL NUMBER.--272728081474701. ROMP 30 Avon Park Well near Zolfo Springs, FL.

LOCATION.--Lat 27°27'28", long 81°47'47" (1927 North American datum), in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.3, T.35 S., R.25 E., Hydrologic Unit 03100101, 200 ft east of State Highway l7, 0.25 mi north of State Highway 684, and 2.4 mi south of Zolfo Springs.

AQUIFER.--Avon Park formation of Eocene Age, Geologic Unit 124AVPK.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 8 in., depth 1,266 ft, cased to 380 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 66.73 ft above National Geodetic Vertical Datum of 1929 (levels by Southwest Florida Water Management District). Measuring point: Top of recorder shelter floor, 4.50 ft above land-surface datum.

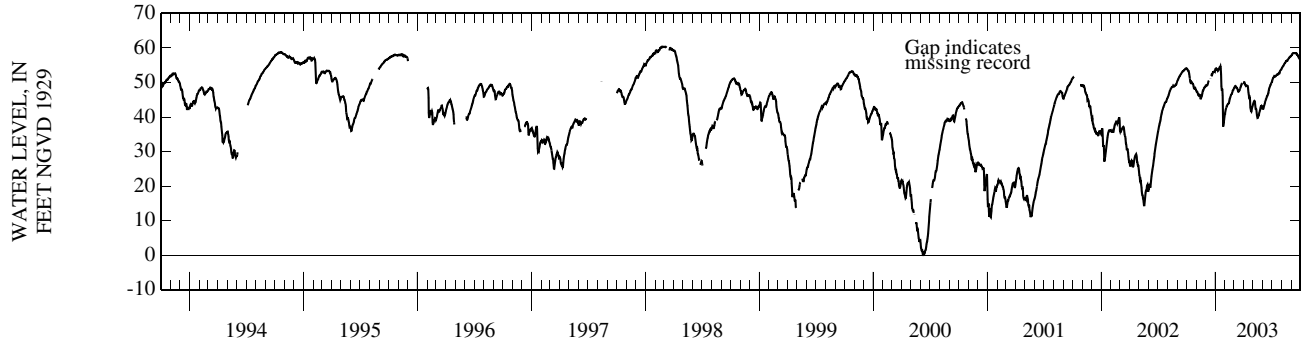
REMARKS.--Water level affected by pumping of nearby irrigation wells.

PERIOD OF RECORD.--August 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 60.52 ft NGVD, Mar. 9, 1998; lowest, 0.20 ft below NGVD, June 10, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54.05	47.50	49.06	53.79	41.13	48.18	50.04	43.47	42.77	50.16	53.89	57.78
2	53.97	47.30	49.05	53.99	41.61	48.44	50.05	43.79	42.82	50.61	54.09	57.91
3	53.86	47.32	48.98	54.09	42.11	48.53	50.02	44.06	42.19	50.83	54.27	57.98
4	53.67	47.26	49.06	54.03	42.41	48.71	50.01	44.42	42.49	51.05	54.49	58.14
5	53.49	46.94	49.19	53.93	42.69	48.89	49.53	44.61	42.78	51.31	54.65	58.36
6	53.41	46.56	49.20	53.67	43.13	48.94	49.46	44.69	43.09	51.46	54.78	58.45
7	53.36	46.37	49.33	53.62	43.26	48.83	49.34	44.59	43.44	51.53	54.85	58.48
8	52.94	46.23	49.63	53.58	43.32	48.58	49.08	44.03	43.83	51.66	55.02	58.54
9	52.45	46.18	50.10	53.37	43.66	48.53	48.93	43.19	44.20	51.84	55.19	58.52
10	51.72	46.27	50.42	53.52	43.74	48.53	48.97	42.36	44.55	51.81	55.40	58.52
11	51.14	46.43	50.54	53.62	43.85	48.46	49.06	42.36	44.85	51.78	55.58	58.55
12	50.36	46.41	---	53.74	43.97	48.32	49.04	42.28	45.10	51.72	55.68	58.52
13	49.97	46.31	---	53.95	44.04	48.12	49.05	41.43	45.26	51.79	55.78	58.47
14	49.85	45.59	---	54.26	44.30	47.68	49.00	40.60	45.60	51.95	55.92	58.42
15	49.98	45.13	---	54.23	44.81	47.35	48.56	40.12	45.85	52.05	56.02	58.47
16	50.14	45.51	51.20	54.42	45.22	47.32	48.01	39.72	46.07	52.20	56.22	58.52
17	49.99	45.75	---	54.63	45.42	47.60	47.10	39.76	46.16	52.27	56.23	58.51
18	49.79	45.91	---	54.04	45.64	47.67	46.54	40.20	46.41	52.20	56.33	58.43
19	49.66	46.38	51.88	52.38	45.96	47.69	45.68	40.40	46.68	52.18	56.38	58.13
20	49.70	46.87	52.18	48.93	46.35	47.93	45.47	40.46	47.12	52.39	56.40	58.07
21	49.64	47.38	52.08	47.95	46.51	48.18	45.60	40.96	47.62	52.50	56.42	57.89
22	49.42	47.70	52.22	48.02	46.67	48.44	44.95	41.29	48.09	52.50	56.67	57.81
23	48.88	47.70	52.55	47.96	46.72	48.79	42.77	41.70	48.45	52.63	56.86	57.73
24	48.48	47.89	52.95	46.10	46.98	49.02	42.36	42.10	48.56	52.69	56.98	57.67
25	48.25	48.21	53.02	39.16	47.37	49.20	41.78	42.47	48.90	52.70	57.12	57.39
26	48.20	48.39	53.00	37.21	47.70	49.43	41.64	42.73	49.13	52.95	57.24	57.15
27	48.23	48.42	53.11	37.76	47.79	49.56	42.07	43.06	49.31	53.20	57.30	57.21
28	48.37	48.65	53.21	38.36	47.90	49.71	42.45	43.10	49.53	53.43	57.43	57.30
29	48.19	48.70	53.18	39.22	---	49.87	42.74	43.22	49.80	53.56	57.48	57.43
30	47.96	48.81	53.09	39.91	---	---	43.05	43.09	50.07	53.66	57.61	57.48
31	47.81	---	53.56	40.64	---	50.04	---	42.68	---	53.78	57.66	---
MAX	54.05	48.81	---	54.63	47.90	---	50.05	44.69	50.07	53.78	57.66	58.55



HARDEE COUNTY—Continued

WELL NUMBER.--272728081474702. ROMP 30 Tampa Well near Zolfo Springs, FL.

LOCATION.--Lat 27°27'28", long 81°47'47" (1927 North American datum), in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.3, T.35 S., R.25 E., Hydrologic Unit 03100101, 200 ft east of State Highway l7, 0.25 mi north of State Highway 684, and 2.4 mi south of Zolfo Springs.

AQUIFER.--Tampa limestone formation of Miocene Age, Geologic Unit 122TAMP.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 8 in., depth 316 ft, cased to 280 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 66.73 ft above National Geodetic Vertical Datum of 1929 (levels by Southwest Florida Water Management District). Measuring point: Top of recorder shelter floor, 4.11 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby irrigation wells.

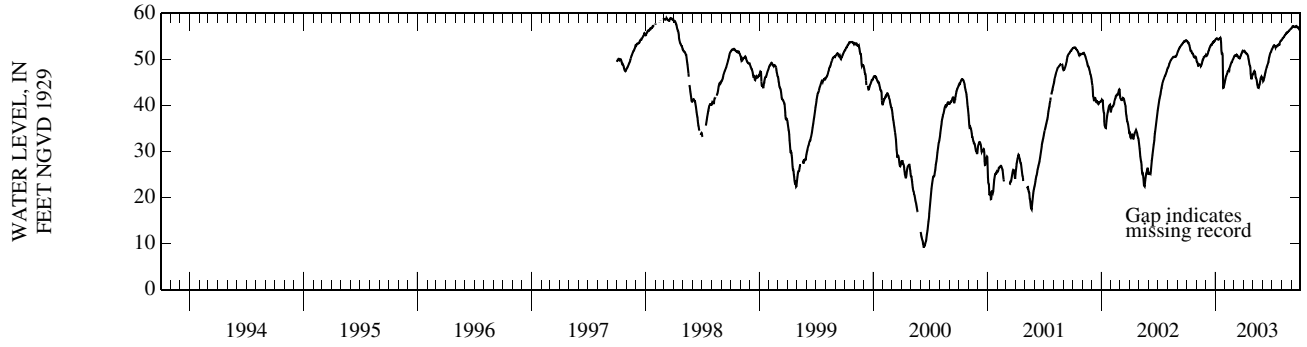
PERIOD OF RECORD.--October 1981 to September 1989; October 1989 to September 1990, October 1991 to September 1997 (periodic); October 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 58.98 ft NGVD, Mar. 9, 1998; lowest, 9.27 ft NGVD, June 10, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54.08	49.90	50.85	54.33	45.37	50.45	51.86	46.81	45.75	52.18	54.17	56.71
2	54.02	49.57	51.01	54.41	45.71	50.62	51.86	46.92	45.79	52.35	54.28	56.77
3	53.97	49.50	50.90	54.49	46.00	50.79	51.83	47.00	45.29	52.44	54.37	56.85
4	53.77	49.38	50.80	54.50	46.27	50.86	51.85	47.33	45.39	52.57	54.49	56.97
5	53.64	49.08	50.92	54.54	46.41	50.89	51.73	47.44	45.57	52.73	54.62	57.12
6	53.56	48.75	50.97	54.56	46.60	50.89	51.66	47.34	45.82	52.88	54.71	57.15
7	53.57	48.78	51.07	54.43	46.80	50.88	51.62	47.35	46.14	53.01	54.76	57.18
8	53.47	48.71	51.28	54.39	46.99	50.81	51.38	47.18	46.56	52.97	54.86	57.19
9	53.20	48.81	51.68	54.37	47.32	50.97	51.32	46.73	46.90	53.02	54.94	57.18
10	52.94	48.87	51.88	54.37	47.50	51.05	51.25	46.14	47.21	53.00	55.06	57.10
11	52.70	48.90	51.98	54.31	47.60	50.96	51.27	45.97	47.52	52.91	55.21	57.10
12	52.23	48.85	52.31	54.34	47.69	50.91	51.22	45.89	47.73	52.78	55.31	57.06
13	51.87	48.86	52.52	54.48	47.75	50.84	51.13	45.65	47.95	52.53	55.38	57.03
14	51.82	48.71	52.60	54.50	47.66	50.74	51.03	45.16	48.19	52.76	55.49	57.04
15	51.84	48.52	52.78	54.52	47.97	50.55	50.79	44.65	48.41	52.88	55.53	57.04
16	51.81	48.65	53.00	54.61	48.21	50.43	50.65	44.34	48.59	52.93	55.69	57.19
17	51.62	48.74	53.02	54.71	48.41	50.45	50.19	43.92	48.77	52.95	55.71	57.20
18	51.41	48.94	53.08	54.46	48.60	50.32	49.90	43.92	48.95	53.01	55.77	57.23
19	51.28	49.28	53.13	53.74	48.81	50.32	49.42	44.09	49.19	52.92	55.81	57.05
20	51.25	49.59	53.27	51.88	49.05	50.25	48.98	44.01	49.53	53.08	55.94	57.00
21	51.25	49.88	53.24	51.38	49.23	50.35	48.76	44.27	49.94	53.16	55.94	56.98
22	51.04	50.00	53.37	51.39	49.43	50.56	48.61	44.46	50.37	53.14	56.04	57.00
23	50.78	50.05	53.51	51.34	49.43	50.88	48.15	44.81	50.65	53.17	56.13	56.98
24	50.58	50.29	53.77	50.76	49.59	51.02	46.93	45.17	50.90	53.24	56.18	56.89
25	50.49	50.47	53.82	46.97	49.84	51.13	46.25	45.53	51.12	53.23	56.22	56.77
26	50.44	50.59	53.77	43.78	50.00	51.33	45.71	45.84	51.36	53.41	56.30	56.64
27	50.48	50.63	53.85	43.81	50.12	51.46	45.86	46.05	51.53	53.65	56.41	56.71
28	50.58	50.69	53.90	44.00	50.23	51.53	46.14	46.12	51.65	53.85	56.51	56.79
29	50.60	50.68	54.01	44.38	---	51.70	46.37	46.25	51.83	54.00	56.58	56.88
30	50.50	50.71	54.04	44.74	---	51.84	46.57	46.08	52.04	54.07	56.65	56.83
31	50.36	---	54.21	45.02	---	51.79	---	45.82	---	54.13	56.69	---
MAX	54.08	50.71	54.21	54.71	50.23	51.84	51.86	47.44	52.04	54.13	56.69	57.23

CAL YR 2002 MAX 54.21
WTR YR 2003 MAX 57.23



HARDEE COUNTY—Continued

WELL NUMBER.--272728081474703. ROMP 30 Shallow Well near Zolfo Springs, FL.

LOCATION.--Lat 27°27'28", long 81°47'47" (1927 North American datum), in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.3, T.35 S., R.25 E., Hydrologic Unit 03100101, 200 ft east of State Highway 17, 0.25 mi north of State Highway 684, and 2.4 mi south of Zolfo Springs.

AQUIFER.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit 111NRSD.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 8 in., depth 15 ft, cased to 5 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 66.73 ft above National Geodetic Vertical Datum of 1929 (levels by Southwest Florida Water Management District). Measuring point: Top of recorder shelter floor, 4.12 ft above land-surface datum.

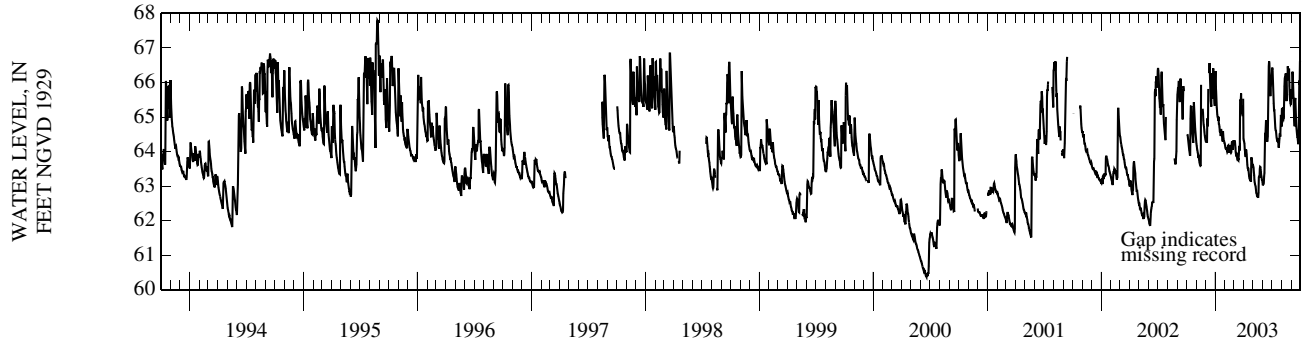
REMARKS.--Water level affected by pumping of nearby irrigation wells.

PERIOD OF RECORD.--August 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 67.80 ft NGVD, Aug. 25, 1995; lowest, 60.37 ft NGVD, June 19, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	64.22	64.31	66.33	64.17	64.25	64.37	63.60	63.11	66.27	64.72	65.77
2	---	64.16	64.27	65.90	64.11	64.17	64.33	63.58	63.02	66.43	65.23	65.79
3	64.50	64.08	64.32	65.75	64.09	---	64.28	63.52	63.06	66.35	65.24	65.68
4	64.48	64.03	64.30	65.48	64.06	64.33	64.23	63.40	63.06	66.13	65.21	65.54
5	64.39	63.97	64.26	65.28	64.11	64.22	64.07	63.31	63.08	66.02	65.22	66.31
6	64.28	63.92	64.96	65.23	64.07	64.10	63.98	63.19	63.28	65.72	64.97	66.25
7	64.19	63.87	64.89	65.08	64.02	64.00	63.90	63.11	63.38	65.40	64.95	66.04
8	64.11	63.88	64.73	65.01	63.98	63.93	63.84	63.06	64.14	65.20	65.01	65.70
9	64.04	63.83	65.81	64.98	64.00	63.95	64.06	63.03	64.48	65.20	65.43	65.37
10	63.99	63.75	---	64.90	64.17	63.95	64.02	62.98	64.47	64.97	65.89	65.09
11	63.90	63.69	---	65.01	64.18	63.87	63.92	62.90	64.73	64.81	66.13	64.92
12	63.90	63.64	66.27	64.80	64.06	63.79	63.75	62.81	64.91	64.68	66.14	64.73
13	64.95	63.61	66.56	64.78	64.02	63.77	63.62	62.79	64.71	64.61	66.14	65.48
14	65.30	63.59	66.24	64.71	64.01	63.72	63.53	62.73	64.54	64.60	66.26	65.55
15	65.30	63.60	65.90	64.59	63.96	63.79	63.51	62.74	64.36	64.51	66.03	65.25
16	65.32	65.93	65.66	64.59	64.04	63.77	63.53	62.72	64.28	64.40	65.72	64.94
17	64.97	---	65.47	64.57	64.19	63.91	63.49	62.69	64.33	64.35	65.46	64.74
18	64.72	---	65.37	64.45	64.07	64.12	63.39	62.66	64.44	64.30	66.27	64.62
19	64.58	---	65.30	64.65	63.98	64.14	63.29	62.81	64.96	64.29	66.21	64.52
20	64.47	---	66.26	64.58	63.96	64.03	63.23	63.26	66.04	64.31	66.05	64.43
21	64.38	65.24	66.00	64.53	63.98	65.48	63.21	63.27	66.47	64.37	66.47	64.42
22	64.25	65.13	65.73	64.48	64.20	65.49	63.18	63.24	66.61	64.15	66.33	64.32
23	64.82	64.90	65.56	64.42	64.29	65.48	63.17	63.49	66.55	64.11	66.14	64.24
24	65.43	64.78	65.56	64.29	64.17	65.68	63.15	63.56	66.30	64.27	66.35	64.21
25	65.25	64.72	66.41	64.59	64.11	65.34	63.13	63.55	65.93	64.38	66.40	64.38
26	65.04	64.63	66.01	64.53	64.05	65.08	63.83	63.49	65.60	64.49	65.90	65.38
27	64.85	64.57	65.74	64.39	64.15	65.26	63.81	63.41	65.90	64.53	65.65	66.05
28	64.67	64.47	65.60	64.31	64.33	65.33	63.74	63.31	65.93	64.43	65.48	65.94
29	64.54	64.40	65.40	64.30	---	65.02	63.62	63.26	66.18	64.75	65.43	66.61
30	64.42	64.35	65.32	64.25	---	---	63.54	63.18	66.11	65.06	65.37	66.59
31	64.32	---	66.07	64.23	---	65.53	---	63.17	---	64.94	65.39	---
MAX	---	---	---	66.33	64.33	---	64.37	63.60	66.61	66.43	66.47	66.61



HARDEE COUNTY—Continued

WELL NUMBER.--272728081474704. ROMP 30 Arcadia Well near Zolfo Springs, FL.

LOCATION.--Lat 27°27'28", long 81°47'47" (1983 North American datum), in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.3, T.35 S., R.25 E., Hydrologic Unit 03100101, 200 ft east of State Highway 17, 0.25 mi north of State Highway 684, and 2.4 mi south of Zolfo Springs.

AQUIFER.--Arcadia formation of Miocene Age, Geologic Unit 122HTRN.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 8 in., depth 180 ft, cased to 55 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 66.37 ft above National Geodetic Vertical Datum of 1929 (levels by Southwest Florida Water Management District). Measuring point: Top of recorder shelter floor, 3.49 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby irrigation wells.

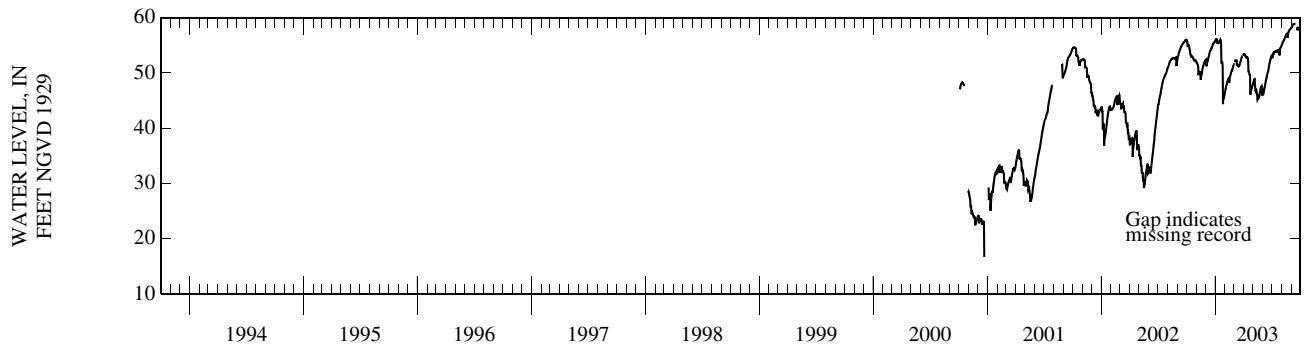
PERIOD OF RECORD.--October 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 58.87 ft NGVD, Sept. 11, 2003; lowest, 16.71 ft NGVD, Dec. 21, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55.98	51.99	52.39	55.89	46.62	51.51	53.35	47.95	46.57	53.23	54.92	58.16
2	55.66	51.84	52.44	56.00	46.90	51.73	53.35	48.14	46.68	52.66	55.07	58.27
3	55.62	51.79	51.22	56.10	47.22	---	53.39	48.34	45.98	53.02	55.22	58.35
4	54.69	51.65	51.35	56.11	47.48	52.01	53.41	48.59	46.39	53.25	55.39	58.47
5	54.88	51.50	51.74	56.11	47.68	52.15	53.27	48.77	46.69	53.47	55.54	58.64
6	55.05	51.33	51.87	56.06	48.03	52.25	53.19	48.85	46.94	53.64	55.66	58.73
7	55.06	51.14	52.05	55.46	48.18	52.25	53.13	48.87	47.19	53.68	55.75	58.80
8	54.96	49.59	52.29	55.46	48.32	52.21	53.00	47.89	47.53	53.60	55.87	58.85
9	54.72	49.91	52.66	55.39	48.60	52.23	52.92	46.90	47.82	53.81	55.98	58.86
10	54.39	50.03	52.90	55.41	48.74	52.24	52.84	46.75	48.11	53.88	56.13	58.86
11	54.09	50.14	53.07	55.43	48.87	51.51	52.86	46.94	48.47	53.89	56.30	58.87
12	53.63	50.18	53.39	55.47	49.01	51.55	52.82	46.96	48.73	53.88	56.44	58.83
13	53.29	50.15	53.63	55.61	49.09	51.51	52.80	46.65	48.98	53.89	56.55	58.78
14	53.17	49.89	53.78	55.73	48.21	51.40	52.76	46.28	49.22	53.94	56.69	---
15	53.04	48.79	53.96	55.77	48.70	51.26	52.64	46.02	49.46	53.93	56.78	58.77
16	53.11	49.33	54.03	55.87	49.07	51.19	52.45	45.17	49.68	54.00	56.96	58.80
17	53.06	49.51	54.11	55.99	49.28	51.33	50.28	45.27	49.85	54.05	57.03	---
18	52.97	49.78	54.24	55.80	49.47	51.40	50.26	45.47	50.04	54.05	57.09	---
19	52.88	50.16	54.43	55.28	49.75	51.42	50.03	45.56	50.26	53.64	57.14	57.72
20	52.88	50.56	54.57	51.90	49.99	51.52	49.74	45.40	50.60	53.90	57.17	58.09
21	52.85	50.91	54.61	51.93	50.21	51.72	49.69	45.77	50.96	54.04	56.34	58.19
22	52.76	51.13	54.75	51.93	50.37	51.91	49.58	46.06	51.32	54.07	57.05	58.19
23	52.55	51.22	54.94	51.88	50.37	52.17	46.09	46.38	51.64	54.16	57.33	58.16
24	52.40	51.41	55.22	51.26	50.54	52.37	46.84	46.66	51.89	54.19	57.49	58.11
25	52.26	51.62	55.27	44.37	50.81	52.57	46.94	46.93	52.15	53.20	57.63	57.90
26	52.23	51.81	55.31	45.10	51.05	52.77	46.90	47.17	52.41	53.83	57.76	57.82
27	52.23	51.91	55.42	45.23	51.20	52.91	47.07	47.38	52.63	54.19	57.84	57.80
28	52.30	52.05	55.52	45.37	51.30	53.03	47.29	47.51	52.75	54.42	57.90	57.86
29	52.32	52.15	55.57	45.68	---	53.15	47.48	47.59	52.92	54.61	57.96	57.99
30	52.23	52.28	55.58	45.97	---	---	47.68	46.59	53.16	54.70	58.03	58.02
31	52.14	---	55.79	46.33	---	53.23	---	45.96	---	54.81	58.08	---
MAX	55.98	52.28	55.79	56.11	51.30	---	53.41	48.87	53.16	54.81	58.08	---

CAL YR 2002 MAX 56.04



HARDEE COUNTY—Continued

WELL NUMBER.--273156081451401. Rowell Deep Well near Wauchula, FL.

LOCATION.--Lat 27°31'56", long 81°45'14" (1927 North American datum), in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.7, T.34 S., R.26 S., Hydrologic Unit 03100101, 0.5 mi south of State Highway 652, and 4.0 mi east of Wauchula.

AQUIFER.--Hawthorn formation of Miocene Age, Geologic Unit 122HTRN.

WELL CHARACTERISTICS.--Drilled, unused irrigation, artesian well, diameter 6 in., depth 267 ft, cased to 39 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 98.14 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 3.87 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby industrial and irrigation wells.

PERIOD OF RECORD.--September 1962 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey.

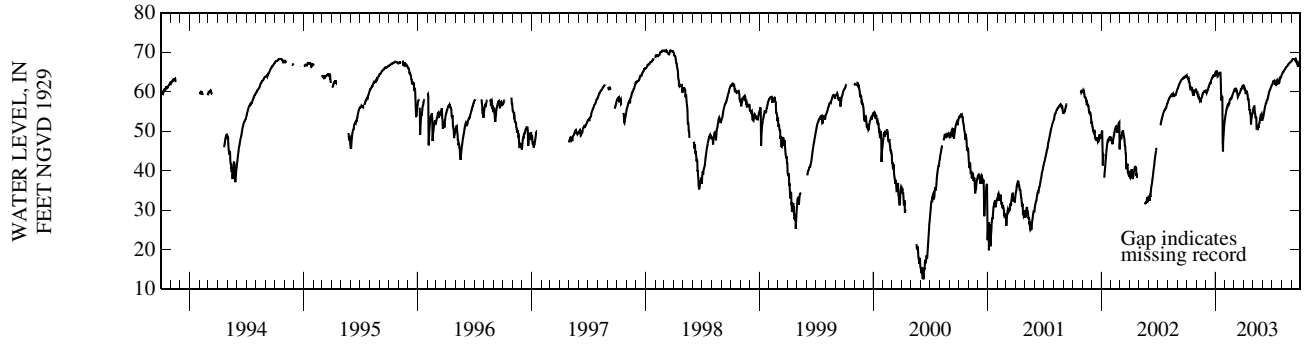
REVISED RECORDS.--WDR FL-76-3: 1975.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 73.44 ft NGVD, Oct. 18, 1962; lowest, 12.54 ft NGVD, June 9, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64.15	59.94	60.16	64.98	53.30	60.14	61.56	55.37	53.30	61.75	64.07	67.73
2	63.52	59.81	60.25	65.12	53.96	60.42	61.58	55.61	53.37	61.94	64.37	67.79
3	63.77	59.87	60.06	65.26	54.28	60.60	61.55	56.01	53.54	62.04	64.58	67.94
4	63.70	59.89	59.73	65.22	54.88	60.63	60.80	56.23	53.92	62.30	64.76	68.06
5	63.59	59.36	59.99	65.01	55.39	60.78	60.81	56.21	54.46	62.59	64.91	68.24
6	63.43	58.72	60.10	64.73	55.72	60.81	60.58	56.26	54.83	62.72	64.98	68.34
7	63.50	58.84	60.36	64.84	55.99	60.59	60.29	55.26	55.39	62.79	65.05	68.37
8	62.33	58.95	60.66	63.90	56.06	60.01	59.44	54.62	55.92	62.72	65.29	68.39
9	62.52	58.25	61.01	63.99	56.76	60.25	59.72	54.24	56.29	62.81	65.45	68.35
10	62.41	58.54	61.32	64.05	56.89	60.39	60.03	53.32	56.54	62.14	65.61	68.35
11	61.52	58.48	61.39	64.20	56.99	60.06	60.13	53.52	56.87	62.17	65.72	68.31
12	61.22	57.80	61.69	64.49	57.01	59.73	59.96	53.49	57.14	62.06	65.82	68.26
13	60.43	57.93	62.04	64.69	56.84	59.42	59.70	50.96	57.34	62.47	65.91	68.16
14	60.91	57.73	62.18	64.84	57.13	58.74	59.17	51.04	57.57	62.62	66.07	68.27
15	61.04	57.68	62.22	64.89	57.18	58.90	57.94	51.40	57.85	62.74	66.12	67.88
16	61.12	58.28	62.26	64.90	57.86	59.11	58.25	50.58	57.98	62.86	66.30	67.76
17	60.99	58.40	62.26	64.88	58.10	59.30	58.44	50.57	58.09	62.09	66.40	68.00
18	60.84	58.51	62.82	63.11	58.18	59.51	57.47	51.25	58.39	62.19	66.47	67.77
19	60.30	58.72	63.07	59.69	58.34	59.66	56.63	50.94	58.75	62.49	66.54	67.33
20	60.49	59.17	63.32	57.81	58.45	59.79	55.40	51.67	59.21	62.74	66.61	67.09
21	60.28	59.58	63.41	58.42	58.37	59.90	55.58	51.92	59.60	62.40	66.71	67.21
22	59.99	59.75	63.51	58.85	58.68	60.14	54.63	52.08	59.97	61.97	66.92	67.31
23	59.01	59.75	63.66	58.73	58.79	60.53	54.59	52.67	60.22	62.49	67.01	66.49
24	59.66	59.90	64.11	47.33	58.97	60.69	53.97	53.28	60.34	62.44	67.17	66.77
25	59.90	60.06	64.19	44.93	59.28	60.70	51.77	53.81	60.50	62.50	67.25	66.41
26	60.08	60.06	64.16	47.42	59.55	60.93	52.97	54.09	60.77	63.01	67.37	66.72
27	60.34	60.19	64.06	48.72	59.76	61.11	53.64	54.24	60.91	63.49	67.44	66.91
28	60.46	60.22	64.21	49.93	59.90	61.13	54.04	54.17	61.18	63.65	67.48	67.10
29	60.57	60.27	64.18	51.13	---	61.44	54.32	54.34	61.41	63.59	67.56	67.33
30	60.61	59.78	64.15	51.94	---	61.65	54.63	53.44	61.55	63.77	67.62	67.44
31	60.63	---	64.74	52.79	---	61.66	---	52.68	---	63.92	67.67	---
MAX	64.15	60.27	64.74	65.26	59.90	61.66	61.58	56.26	61.55	63.92	67.67	68.39

WTR YR 2003 MAX 68.39



MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2002 TO SEPTEMBER 2003

HARDEE COUNTY

SITE-ID	STATION NAME	WATER-LEVEL DATE	WATER-LEVEL MSL FEET	WATER-LEVEL DATUM CODE
272038081530701	LIMESTONE LAND 622 WELL NEAR LIMESTONE FL	05-20-2003	36.37	NGVD29
		09-15-2003	50.41	NGVD29
272108081582601	HOLLINGSWORTH WELL 620 NEAR LIMESTONE FL	05-20-2003	23.83	NGVD29
		09-15-2003	45.04	NGVD29
272442082015201	STEPHENS DEEP WELL NO 724201132344 NEAR ONA FL	05-20-2003	21.38	NGVD29
		09-15-2003	43.60	NGVD29
272509081410401	MARRLS DEEP WELL NO 411 NEAR GARDNER FL	05-20-2003	43.61	NGVD29
		09-15-2003	61.09	NGVD29
272715081401601	WILBUR ROBERTSON WELL NO 124 NR ZOLFO SPRINGS FL	05-20-2003	52.91	NGVD29
		09-15-2003	67.00	NGVD29
272855081400701	PEACE RIVER RANCH NO 231 NR CREWSVILLE FL	05-20-2003	57.73	NGVD29
		09-15-2003	72.92	NGVD29
272917081453901	ANDERSON WELL (HARDEE 601) NO 442 ZOLFO SPRINGS FL	05-20-2003	53.29	NGVD29
		09-15-2003	69.21	NGVD29
272944081474001	CITY ZOLFO SPGS DEEP WELL NO 242 ZOLFO SPRINGS FL	05-20-2003	48.60	NGVD29
		09-15-2003	66.09	NGVD29
273108081461301	W.D. BOND WELL HA-89 NO. 323 NEAR WAUCHULA FL	05-20-2003	51.23	NGVD29
		09-15-2003	67.66	NGVD29
273423081582901	CF INDUSTRIES UF-3 WELL NEAR WAUCHULA FL	05-22-2003	94.91	NGVD29
		09-17-2003	99.23	NGVD29
273424081582501	CF INDUSTRIES DEEP WELL LF1 NEAR FORT GREEN FL	05-22-2003	49.00	NGVD29
		09-17-2003	65.41	NGVD29
273426081513401	CF INDUSTRIES DEEP WELL LF6 NEAR FORT GREEN FL	05-22-2003	61.39	NGVD29
		09-17-2003	76.28	NGVD29
273427081513401	CF INDUSTRIES WELL UF-6 NEAR WAUCHULA FL	05-22-2003	76.05	NGVD29
		09-17-2003	87.59	NGVD29
273435081444001	W.B. GEIGER WELL NEAR WAUCHULA FL	05-20-2003	59.45	NGVD29
		09-15-2003	75.93	NGVD29
273555081403001	JOHN WHITE WELL 627 NEAR WAUCHULA FL	05-20-2003	87.75	NGVD29
		09-15-2003	98.79	NGVD29
273714081483101	ST OF FLORIDA PAYNES CREEK HISTORIC SITE FL	05-20-2003	59.13	NGVD29
		09-15-2003	68.99	NGVD29

KEY TO SITE LOCATIONS ON FIGURE 14

HERNANDO COUNTY

INDEX NUMBER	SITE NUMBER
1	282605082345801
2	282613082381701
2	282613082381702
2	282613082381703
3	282636082221401
4	282659082391101
5	282742082375901
6	283201082315601
7	283650082313301

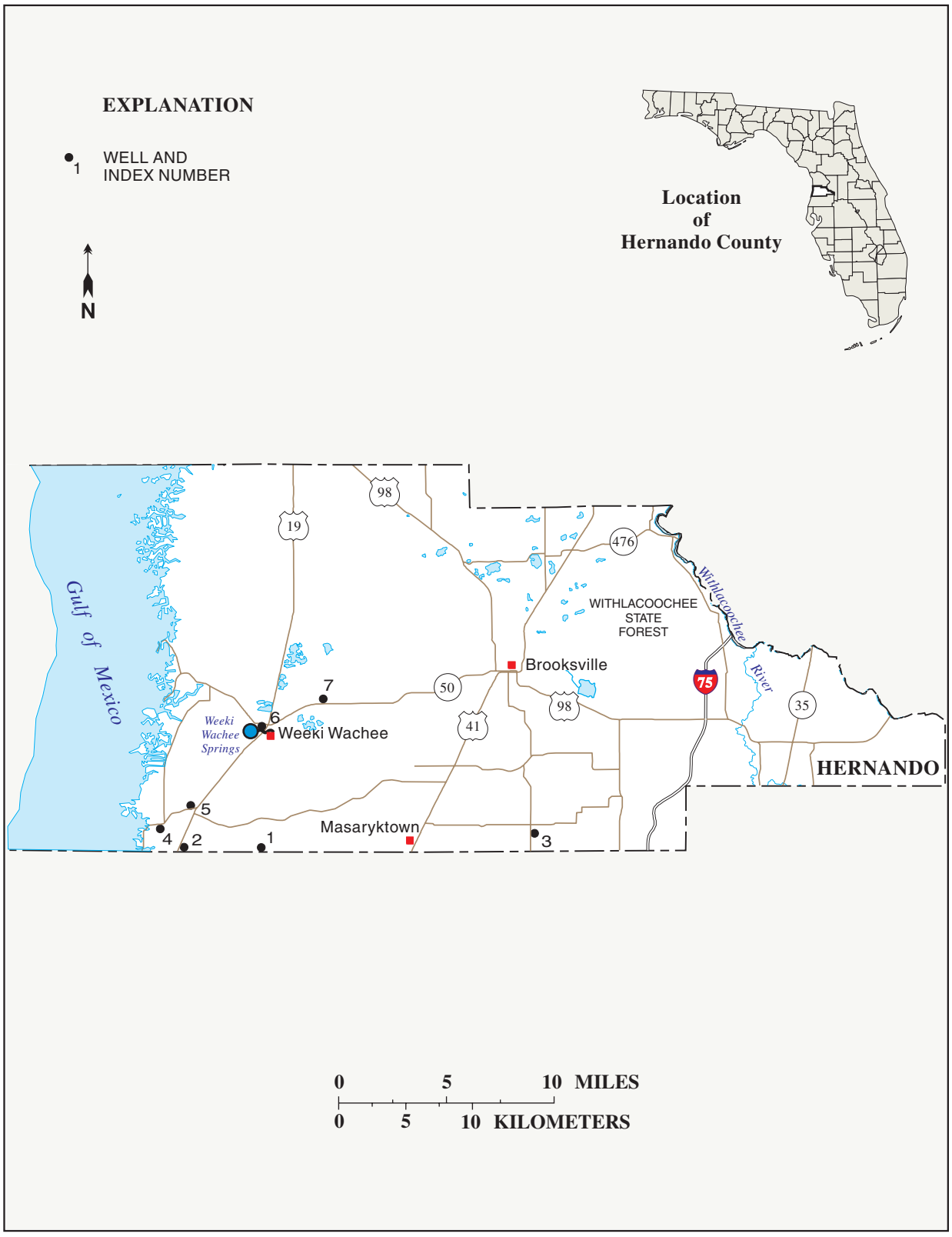


Figure 14.-- Location of wells in Hernando County.

HERNANDO COUNTY

WELL NUMBER.--282605082345801. ROMP 97 Deep Well near Aripeka, FL.

LOCATION.--Lat 28°26'05", long 82°34'58" (1927 North American datum), in SW $^1/_4$ SW $^1/_4$ sec.35, T.23 S., R.17 E., Hydrologic Unit 03100207, 300 ft north of State Highway 578, 3.5 mi east of U. S. Highway 19, and 5.0 mi east of Aripeka.

AQUIFER.--Avon Park formation of Eocene Age, Geologic Unit 124AVPK.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 355 ft, cased to 310 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 32.54 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 3.74 ft above land-surface datum.

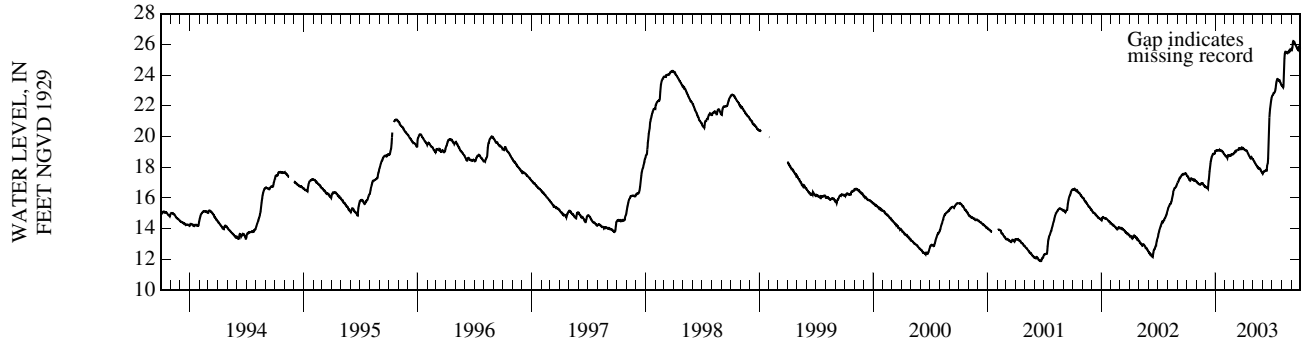
PERIOD OF RECORD.--June 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 26.21 ft NGVD, Sept. 8, 2003; lowest, 11.88 ft NGVD, June 21, 2001.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.50	17.08	16.71	19.04	18.79	18.90	19.22	18.53	17.61	22.59	23.35	25.63
2	17.44	17.05	16.70	19.07	18.75	18.91	19.18	18.50	17.57	22.65	23.32	25.62
3	17.43	17.01	16.68	19.08	18.72	18.93	19.18	18.45	17.62	22.69	23.32	25.71
4	17.43	17.01	16.65	19.09	18.72	19.00	19.17	18.42	17.68	22.71	23.27	25.73
5	17.37	16.99	16.65	19.10	18.69	18.99	19.15	18.39	17.72	22.72	23.23	25.77
6	17.33	16.97	16.66	19.11	18.67	18.99	19.12	18.34	17.73	22.81	23.20	26.08
7	17.32	16.94	16.63	19.11	18.65	19.04	19.11	18.31	17.74	22.82	23.29	26.17
8	17.25	16.93	16.60	19.10	18.61	19.05	19.08	18.28	17.74	22.84	23.77	26.21
9	17.19	16.91	16.87	19.11	18.75	19.09	19.10	18.25	17.77	22.86	24.27	26.20
10	17.19	16.89	17.10	19.11	18.78	19.10	19.09	18.21	17.77	22.88	25.09	26.18
11	17.16	16.89	17.23	19.11	18.77	19.09	19.08	18.18	17.77	22.93	25.37	26.15
12	17.12	16.89	17.47	19.10	18.75	19.10	19.06	18.15	17.79	23.03	25.48	26.11
13	17.15	16.89	17.72	19.11	18.73	19.11	19.01	18.11	17.81	23.14	25.52	26.06
14	17.21	16.86	17.89	19.14	18.73	19.12	18.95	18.08	17.80	23.33	25.53	26.00
15	17.27	16.88	18.07	19.10	18.73	19.13	18.91	18.04	17.91	23.48	25.53	25.96
16	17.27	16.94	18.24	19.10	18.77	19.15	18.89	17.99	18.09	23.59	25.51	25.92
17	17.25	16.94	18.35	19.11	18.78	19.22	18.85	17.97	18.17	23.67	25.49	25.88
18	17.23	16.93	18.45	19.10	18.77	19.21	18.81	17.94	18.24	23.73	25.47	25.85
19	17.23	16.94	18.55	19.10	18.77	19.17	18.76	17.97	18.58	23.74	25.43	25.78
20	17.21	16.94	18.65	19.08	18.76	19.17	18.71	17.95	19.35	23.73	25.42	25.74
21	17.21	16.95	18.70	19.07	18.78	19.21	18.68	17.92	20.12	23.72	25.45	25.72
22	17.17	16.94	18.74	19.04	18.86	19.20	18.67	17.92	20.76	23.69	25.51	25.68
23	17.15	16.87	18.78	19.03	18.86	19.21	18.60	17.92	21.23	23.67	25.54	25.71
24	17.18	16.83	18.86	18.99	18.83	19.21	18.57	17.91	21.53	23.64	25.54	25.69
25	17.20	16.82	18.87	18.98	18.83	19.18	18.65	17.86	21.77	23.65	25.52	25.80
26	17.19	16.80	18.86	18.97	18.83	19.18	18.67	17.81	21.94	23.60	25.58	25.86
27	17.14	16.77	18.88	18.93	18.87	19.27	18.64	17.77	22.10	23.57	25.56	25.86
28	17.15	16.74	18.88	18.90	18.90	19.26	18.59	17.73	22.27	23.54	25.63	25.82
29	17.13	16.75	18.88	18.84	---	19.26	18.55	17.71	22.41	23.51	25.67	25.77
30	17.10	16.75	18.90	18.82	---	19.26	18.53	17.68	22.52	23.44	25.65	25.72
31	17.08	---	19.04	18.81	---	19.23	---	17.64	---	23.39	25.64	---
MAX	17.50	17.08	19.04	19.14	18.90	19.27	19.22	18.53	22.52	23.74	25.67	26.21

CAL YR 2002 MAX 19.04
WTR YR 2003 MAX 26.21



HERNANDO COUNTY—Continued

WELL NUMBER.--282613082381701. ROMP TR 18-3 FLRD Well near Aripeka, FL.

LOCATION.--Lat 28°26'13", long 82°38'17" (1927 North American datum), in SW $^1/_4$ SE $^1/_4$ sec.31, T.23 S., R.17 E., Hydrologic Unit 03100207, 300 ft east of U. S. Highway 19, and 1.7 mi northeast of Aripeka.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 16 in., depth 378 ft, cased to 58 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 20.77 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 0.80 ft above land-surface datum.

REMARKS.--Water level affected by tidal fluctuations.

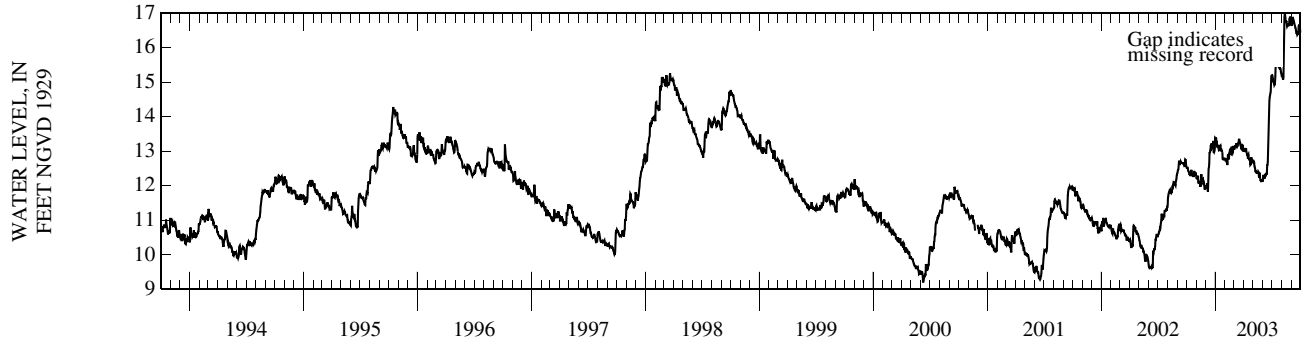
PERIOD OF RECORD.--October 1987 to current year. Prior to October 1988, published as ROMP TR 18-3 Lower Avon Park Well near Aripeka.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 16.96 ft NGVD, Aug. 11, 2003; lowest, 9.20 ft NGVD, June 9, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.52	12.22	11.98	13.38	12.78	13.05	12.99	12.75	12.17	15.18	15.22	16.67
2	12.52	12.21	11.95	13.35	12.75	13.10	13.04	12.69	12.12	15.19	15.15	16.63
3	12.52	12.20	11.95	13.39	12.76	13.09	13.05	12.70	12.24	15.15	15.18	16.70
4	12.52	12.20	11.96	13.26	12.76	13.15	13.09	12.66	12.31	15.10	15.15	16.69
5	12.48	12.24	12.01	13.27	12.73	13.15	13.04	12.66	12.29	15.03	15.10	16.70
6	12.42	12.29	12.07	13.26	12.69	13.14	13.02	12.59	12.25	15.01	15.07	16.89
7	12.41	12.12	11.88	13.11	12.71	13.13	13.03	12.55	12.20	14.99	15.15	16.85
8	12.40	12.08	11.82	13.14	12.60	13.14	13.02	12.51	12.23	14.97	15.72	16.82
9	12.37	12.08	12.21	13.16	12.78	13.23	13.09	12.44	12.30	14.91	16.11	16.78
10	12.31	12.14	12.49	13.16	12.91	13.19	12.99	12.39	12.29	14.93	16.89	16.74
11	12.34	12.09	12.52	13.09	12.86	13.17	12.96	12.42	12.29	14.99	16.96	16.69
12	12.28	12.08	12.65	13.04	12.78	13.13	12.91	12.41	12.35	15.17	16.95	16.66
13	12.32	12.09	12.97	13.05	12.76	13.15	12.91	12.37	12.36	15.45	16.86	16.63
14	12.30	11.97	12.94	13.03	12.93	13.18	12.87	12.37	12.33	15.48	16.73	16.58
15	12.43	12.08	13.01	13.03	12.93	13.22	12.78	12.41	12.32	15.73	16.79	16.56
16	12.46	12.27	13.06	13.16	12.98	13.24	12.88	12.37	12.59	15.68	16.75	16.50
17	12.36	12.33	13.15	13.17	13.07	13.32	12.90	12.37	12.60	15.65	16.75	16.43
18	12.28	12.16	13.15	13.01	12.97	13.36	12.79	12.41	12.68	15.64	16.67	16.43
19	12.30	12.12	13.18	13.08	12.93	13.30	12.76	12.39	12.98	15.56	16.61	16.41
20	12.30	12.17	13.23	13.02	12.92	13.26	12.75	12.29	13.45	15.55	16.63	16.37
21	12.30	12.19	13.10	13.02	12.99	13.25	12.76	12.24	13.71	15.50	16.65	16.39
22	12.31	12.20	13.12	13.00	13.13	13.18	12.73	12.38	14.14	15.46	16.67	16.43
23	12.25	12.05	13.08	12.97	13.04	13.17	12.61	12.27	14.47	15.46	16.67	16.42
24	12.32	12.05	13.17	12.76	12.98	13.09	12.62	12.22	14.56	15.43	16.65	16.44
25	12.43	12.07	13.30	12.78	12.95	13.07	12.75	12.17	14.62	15.43	16.65	16.62
26	12.40	12.03	12.99	12.78	12.99	13.10	12.82	12.17	14.67	15.40	16.82	16.64
27	12.34	11.94	12.99	12.76	13.10	13.21	12.77	12.15	14.70	15.40	16.84	16.63
28	12.32	11.89	12.97	12.76	13.09	13.16	12.72	12.11	14.91	15.39	16.90	16.59
29	12.29	11.93	13.00	12.78	---	13.16	12.72	12.14	15.18	15.38	16.87	16.56
30	12.38	11.98	13.10	12.79	---	13.16	12.71	12.14	15.19	15.30	16.78	16.44
31	12.27	---	13.39	12.79	---	13.03	---	12.16	---	15.26	16.72	---
MAX	12.52	12.33	13.39	13.39	13.13	13.36	13.09	12.75	15.19	15.73	16.96	16.89

CAL YR 2002 MAX 13.39
WTR YR 2003 MAX 16.96



HERNANDO COUNTY—Continued

WELL NUMBER.--282613082381702. ROMP TR 18-3 Upper Avon Park Well near Aripeka, FL.

LOCATION.--Lat 28°26'13", long 82°38'17" (1927 North American datum), in SW $^1/_4$ SE $^1/_4$ sec.31, T.23 S., R.17 E., Hydrologic Unit 03100207, 300 ft east of U. S. Highway 19, and 1.7 mi northeast of Aripeka.

AQUIFER.--Avon Park formation of Eocene Age, Geologic Unit 124AVPK.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 4 in. reduced to 3 in. below 20 ft, depth 510 ft, cased to 480 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Land-surface datum is 20.96 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of coupling, 1.77 ft above land-surface datum.

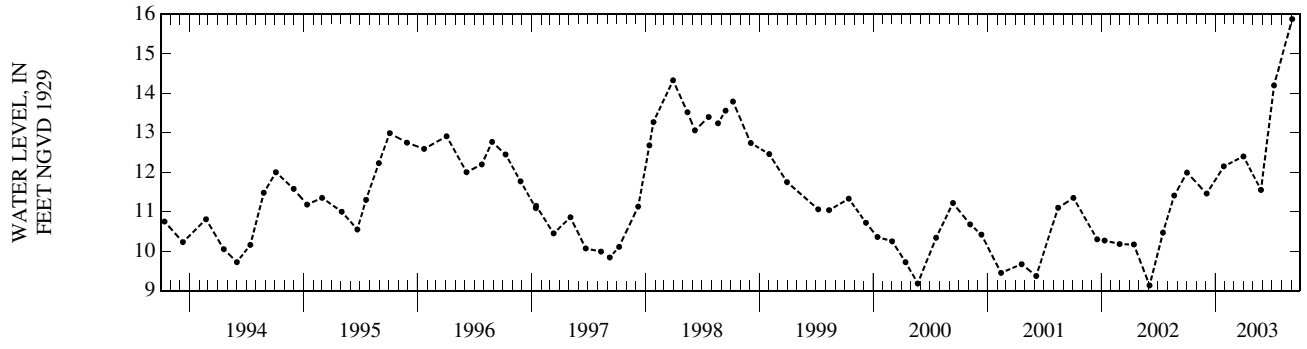
PERIOD OF RECORD.--April 1988 to current year (periodic). The figures of water level as elevation, in feet NGVD, Oct. 1, 1996, to Sept. 30, 1997, are in error. Correct elevations may be obtained by using datum correction of -0.17 ft.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.88 ft NGVD, Sept. 4, 2003; lowest measured, 9.00 ft NGVD, June 7, 1991.

WATER SURFACE ELEVATION IN FEET (NGVD1929), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02	11.99	JAN 28	12.15	MAY 27	11.55	SEP 04	15.88
DEC 04	11.46	APR 01	12.40	JUL 08	14.20		

WATER YEAR 2003 LOWEST 11.46 DEC 04, 2002 HIGHEST 15.88 SEP 04, 2003



HERNANDO COUNTY—Continued

WELL NUMBER.--282613082381703. ROMP TR 18-3 NRSD Well near Aripeka, FL.

LOCATION.--Lat 28°26'13", long 82°38'17" (1927 North American datum), in SW $^1/_4$ SE $^1/_4$ sec.31, T.23 S., R.17 E., Hydrologic Unit 03100207, 300 ft east of U. S. Highway 19, and 1.7 mi northeast of Aripeka.

AQUIFER.--Surficial aquifer system of Quaternary Age, Geologic Unit 112NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-level well, diameter 6 in., depth 10 ft, cased to 7 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

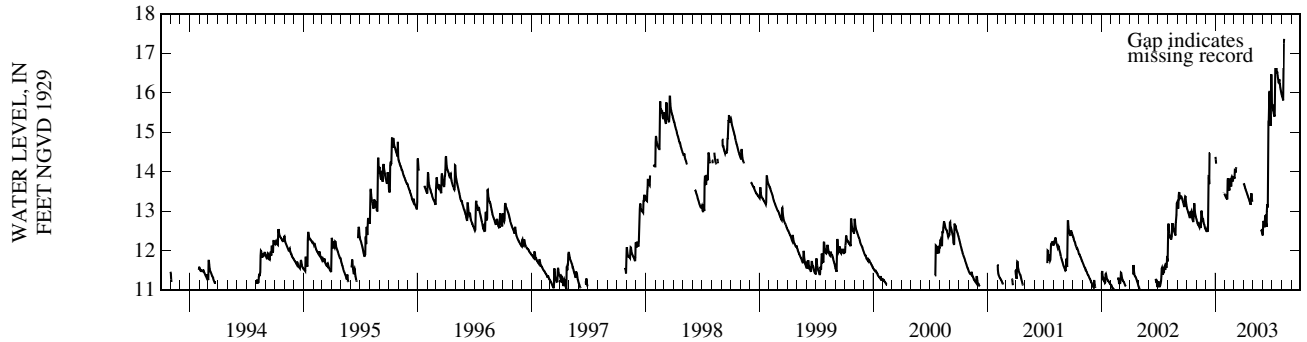
DATUM.--Land-surface datum is 20.88 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 3.04 ft above land-surface datum.

PERIOD OF RECORD.--October 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, unknown, probably occurred September 2003; well dry at times most years.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.12	12.81	12.54	14.38	13.41	13.87	13.71	---	12.42	15.70	15.97	---
2	13.08	12.78	12.53	14.31	13.39	13.86	13.70	---	12.39	15.71	15.94	---
3	13.06	12.75	12.51	14.21	13.37	13.83	13.69	---	12.68	15.70	15.95	---
4	13.03	12.71	12.51	---	13.36	14.04	13.66	---	12.76	15.66	15.90	---
5	13.00	12.69	12.48	---	13.37	14.03	13.64	---	12.74	15.57	15.86	---
6	12.97	12.71	12.55	---	13.34	13.98	13.60	---	12.70	15.54	15.81	---
7	12.95	12.71	12.54	---	13.32	14.01	13.58	---	12.62	15.49	16.43	---
8	12.93	12.67	12.49	---	13.30	14.08	13.55	---	12.62	15.45	17.26	---
9	12.89	12.65	13.37	---	13.79	14.12	13.53	---	12.88	15.42	17.37	---
10	12.86	12.62	13.87	---	13.84	---	13.51	---	12.89	15.40	---	---
11	12.83	12.60	13.86	---	13.78	---	13.49	---	12.79	16.07	---	---
12	12.87	12.64	13.69	---	13.67	---	13.46	---	12.70	16.65	---	---
13	13.00	12.67	14.47	---	13.61	---	13.44	---	12.65	16.66	---	---
14	12.97	12.64	14.47	---	13.56	---	13.41	---	12.61	16.78	---	---
15	12.98	12.58	---	---	13.53	---	13.39	---	13.00	16.98	---	---
16	13.00	12.78	---	---	13.76	---	13.37	---	13.18	16.62	---	---
17	12.95	13.02	---	---	13.83	---	13.35	---	13.16	16.49	---	---
18	12.87	12.99	---	---	13.77	---	13.33	---	13.10	16.54	---	---
19	12.82	12.88	---	---	13.70	---	13.30	---	14.14	16.45	---	---
20	12.79	12.83	---	---	13.66	---	13.27	---	15.27	16.39	---	---
21	12.77	12.80	---	---	13.63	---	13.25	---	15.31	16.34	---	---
22	12.73	12.82	---	---	13.86	---	13.23	---	15.59	16.29	---	---
23	12.83	12.76	---	---	13.88	---	13.20	---	16.03	16.25	---	---
24	13.02	12.71	---	---	13.86	---	13.17	---	16.03	16.33	---	---
25	13.21	12.69	---	---	13.82	---	13.35	---	15.44	16.33	---	---
26	13.15	12.67	---	---	13.76	---	13.46	---	15.26	16.23	---	---
27	13.02	12.65	---	---	13.85	---	13.42	12.53	15.17	16.22	---	---
28	12.94	12.62	---	13.47	13.87	---	13.31	12.53	15.95	16.14	---	---
29	12.90	12.58	---	---	---	---	13.24	12.51	16.47	16.10	---	---
30	12.87	12.56	---	13.45	---	---	---	12.48	15.95	16.05	---	---
31	12.84	---	---	13.43	---	---	---	12.45	---	16.01	---	---
MAX	13.21	13.02	---	---	13.88	---	---	---	16.47	16.98	---	---



HERNANDO COUNTY—Continued

WELL NUMBER.--282636082221401. Weeki Well 11 near Masaryktown, FL.

LOCATION.--Lat 28°26'36", long 82°22'14" (1927 North American datum), in SW $^1/_4$ NW $^1/_4$ sec.36, T.23 S., R.19 E., Hydrologic Unit 03100207, 5 ft east of State Highway 581, and 5.3 mi east of Masaryktown.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 69 ft, cased to 68 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 101.00 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 3.00 ft above land-surface datum.

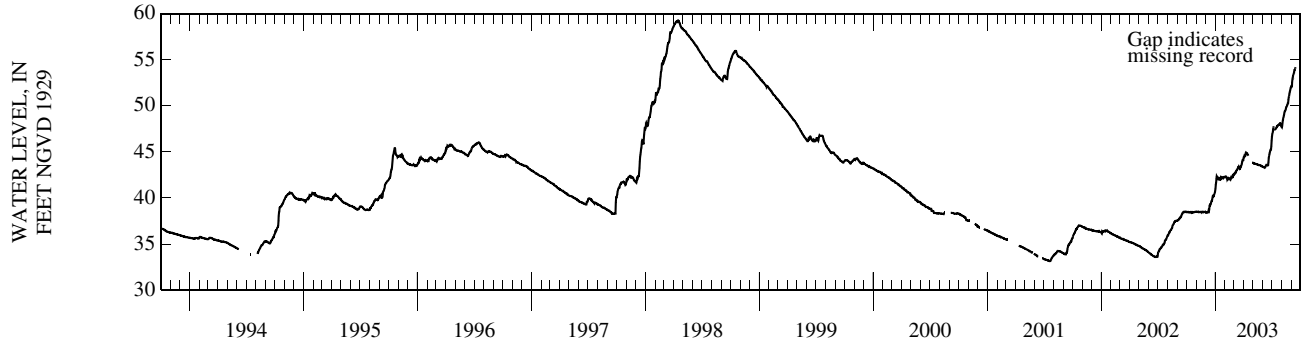
PERIOD OF RECORD.--January to December 1967 (periodic); January 1968 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 59.26 ft NGVD, Apr. 15, 1998; lowest, 33.13 ft NGVD, July 20, 2001.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38.46	38.49	38.43	40.99	42.29	42.56	44.29	43.81	43.41	46.64	47.73	52.13
2	38.46	38.49	38.44	41.43	42.29	42.59	44.38	43.79	43.38	46.91	47.68	52.10
3	38.47	38.50	38.42	41.67	42.32	42.59	44.44	43.75	43.37	47.02	47.83	52.11
4	38.46	38.50	38.43	42.06	42.33	42.69	44.56	43.77	43.36	47.21	48.14	52.57
5	38.45	38.51	38.44	42.35	42.21	42.70	44.51	43.73	43.33	47.45	48.42	52.89
6	38.46	38.50	38.42	42.31	42.22	42.76	44.56	43.72	43.33	47.62	48.59	53.06
7	38.47	38.47	38.40	42.17	42.18	42.75	44.59	43.72	43.32	47.79	48.71	53.26
8	38.44	38.46	38.43	42.24	41.99	42.80	44.84	43.71	43.28	---	48.92	53.36
9	38.45	38.48	38.49	42.22	42.06	42.97	44.94	43.70	43.31	---	49.07	53.47
10	38.46	38.47	38.63	42.17	42.11	43.00	44.89	43.70	43.37	47.48	49.28	53.64
11	38.43	38.47	38.57	42.01	42.01	43.02	44.87	43.69	43.44	47.43	49.42	53.85
12	38.42	38.47	38.75	42.01	42.04	43.08	44.84	43.66	43.51	47.46	49.45	53.87
13	38.42	38.46	39.15	42.10	42.05	43.18	44.82	43.67	43.60	47.49	49.48	53.96
14	38.46	38.46	39.23	42.07	42.12	43.22	44.73	43.66	43.60	47.53	49.58	54.07
15	38.47	38.47	39.20	42.03	42.12	43.31	44.65	43.65	43.60	47.60	49.70	54.20
16	38.45	38.49	39.27	42.15	42.04	43.34	44.64	43.61	43.56	47.64	49.86	---
17	38.40	38.47	39.34	42.20	42.02	43.40	44.58	43.61	43.56	47.74	49.91	---
18	38.41	38.42	39.42	42.02	41.98	43.33	---	43.60	43.53	47.75	49.93	---
19	38.45	38.47	39.60	42.04	42.12	43.23	---	43.58	43.55	47.83	50.04	---
20	38.44	38.50	39.66	42.16	42.21	43.13	---	43.56	43.88	47.85	50.11	---
21	38.45	38.50	39.68	42.23	42.29	43.15	---	43.57	44.30	47.90	50.28	---
22	38.43	38.49	39.89	42.23	42.28	43.26	---	43.57	44.56	47.92	50.31	---
23	38.44	38.46	40.09	42.21	42.19	43.39	---	43.56	44.72	47.93	50.67	---
24	38.46	38.48	40.25	42.05	42.21	43.41	---	43.54	44.90	47.97	50.92	---
25	38.46	38.48	40.24	42.21	42.39	43.50	---	43.53	45.04	47.97	51.03	---
26	38.47	38.48	40.08	42.22	42.50	43.65	---	43.51	45.19	48.00	51.29	---
27	38.47	38.48	40.27	42.17	42.53	43.74	---	43.51	45.25	48.10	51.49	---
28	38.49	38.47	40.33	42.21	42.44	43.93	---	43.46	45.26	48.12	51.62	---
29	38.51	38.46	40.44	42.28	---	44.02	43.84	43.45	45.61	48.07	51.78	---
30	38.50	38.48	40.54	42.28	---	44.19	43.84	43.43	46.21	47.91	51.94	---
31	38.49	---	40.76	42.29	---	44.01	---	43.41	---	47.80	52.02	---
MAX	38.51	38.51	40.76	42.35	42.53	44.19	---	43.81	46.21	---	52.02	---

CAL YR 2002 MAX 40.76



HERNANDO COUNTY—Continued

WELL NUMBER.--282659082391101. ROMP TR 18-2 Lake City Well near Aripeka, FL.

LOCATION.--Lat 28°26'59", long 82°39'11" (1927 North American datum), in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.25, T.23 S., R.16 E., Hydrologic Unit 03100207, 650 ft south of State Highway 595, and 1.4 mi northeast of Aripeka.

AQUIFER.--Floridan aquifer system of Eocene Age, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 3 in., depth 790 ft, cased to 760 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Land-surface datum is 6.69 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.35 ft above land-surface datum.

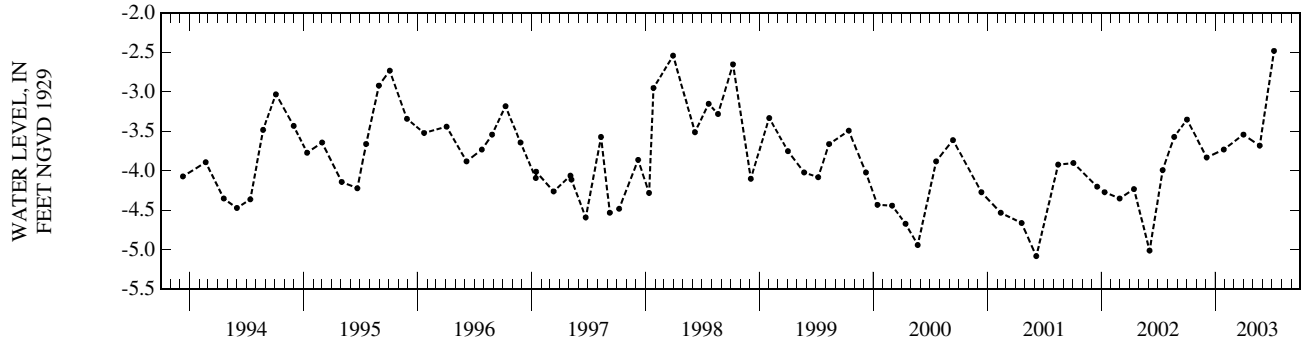
PERIOD OF RECORD.--October 1987 to March 1988; April 1988 to September 2003 (periodic), discontinued. Prior to October 1988, published as ROMP TR 18-2 Avon Park Well near Aripeka.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.48 ft below NGVD, July 8, 2003; lowest measured, 5.08 ft below NGVD, June 6, 2001.

WATER SURFACE ELEVATION IN FEET (NGVD1929), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02	-3.35	DEC 04	-3.83	JAN 28	-3.73	APR 01	-3.54	MAY 23	-3.68	JUL 08	-2.48

WATER YEAR 2003 LOWEST -3.83 DEC 04, 2002 HIGHEST -2.48 JUL 08, 2003



HERNANDO COUNTY—Continued

WELL NUMBER.--282742082375901. ROMP TR 18-1 Deep Well near Aripeka, FL.

LOCATION.--Lat 28°27'42", long 82°37'59" (1927 North American datum), in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.29, T.23 S., R.17 E., Hydrologic Unit 03100207, 100 ft south of State Highway 595, 0.7 mi west of U. S. Highway 19, and 3.2 mi northeast of Aripeka.

AQUIFER.--Avon Park formation of Eocene Age, Geologic Unit 124AVPK.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 580 ft, cased to 445 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 15.29 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 3.88 ft above land-surface datum.

REMARKS.--Water level affected by tidal fluctuations.

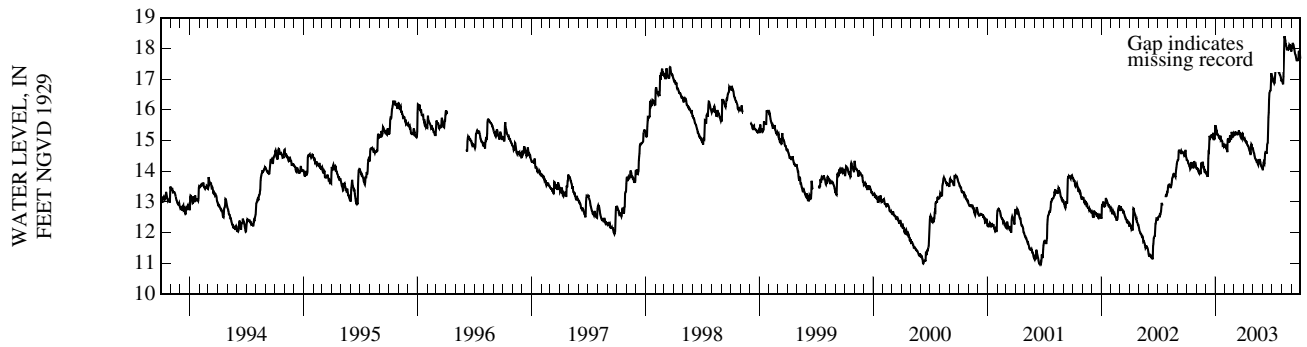
PERIOD OF RECORD.--April 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 18.40 ft NGVD, Aug. 10, 2003; lowest, 10.96 ft NGVD, June 18, 2001.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.37	14.10	13.98	15.50	14.82	15.17	15.07	14.74	14.10	17.09	16.93	17.90
2	14.37	14.07	13.93	15.41	14.78	15.19	15.07	14.68	14.03	17.09	16.96	18.00
3	14.36	14.12	13.93	15.40	14.77	15.16	15.07	14.63	14.16	17.06	16.96	18.05
4	14.35	14.07	13.90	15.31	14.80	15.29	15.08	14.60	14.26	16.98	16.90	18.06
5	14.31	14.07	13.93	15.28	14.76	15.26	15.03	14.58	14.30	16.96	16.86	18.06
6	14.26	14.10	13.98	15.29	14.72	15.23	15.01	14.53	14.27	16.98	16.83	18.18
7	14.25	14.01	13.86	15.17	14.72	15.21	14.98	14.49	14.25	16.98	17.08	18.15
8	14.23	13.98	13.82	15.20	14.62	15.21	14.96	14.44	14.38	16.90	17.52	18.13
9	14.17	13.96	14.40	15.20	15.01	15.28	14.98	14.41	14.58	16.86	17.85	18.07
10	14.15	13.98	14.63	15.18	15.05	15.25	14.97	14.39	14.61	16.89	18.40	18.02
11	14.14	13.95	14.62	15.16	15.05	15.21	14.96	14.37	14.60	17.02	18.36	17.97
12	14.07	13.99	14.85	15.11	14.99	15.20	14.89	14.37	14.61	17.18	18.31	17.90
13	14.09	13.99	15.15	15.12	14.96	15.20	14.86	14.32	14.60	17.37	18.24	17.83
14	14.13	13.90	15.12	15.11	14.96	15.20	14.84	14.32	14.57	17.38	18.14	17.81
15	14.24	13.96	15.08	15.08	14.98	15.21	14.83	14.32	14.67	17.55	18.14	17.79
16	14.30	14.16	15.10	15.09	15.07	15.23	14.83	14.27	14.86	17.49	18.10	17.72
17	14.21	14.28	15.12	15.16	15.17	15.33	14.81	14.23	14.89	17.45	18.06	17.67
18	14.15	14.17	15.12	15.02	15.10	15.30	14.76	14.21	14.94	17.43	17.99	17.62
19	14.15	14.29	15.13	15.04	15.05	15.24	14.72	14.36	15.30	17.36	17.94	17.62
20	14.16	14.25	15.20	15.02	15.07	15.23	14.68	14.36	15.76	17.33	17.98	17.61
21	14.16	14.31	15.15	15.00	15.07	15.23	14.66	14.33	15.91	17.28	17.98	17.61
22	14.12	14.26	15.12	14.99	15.28	15.16	14.62	14.37	16.34	17.24	18.00	17.63
23	14.12	14.12	15.10	14.97	15.24	15.17	14.56	14.37	16.54	17.22	18.01	17.63
24	14.20	14.10	15.20	14.85	15.14	15.09	14.56	14.34	16.57	17.21	17.97	17.60
25	14.33	14.11	15.25	14.86	15.13	15.07	14.83	14.29	16.61	17.20	17.98	17.88
26	14.29	14.04	15.08	14.85	15.14	15.09	14.88	14.24	16.62	17.15	18.10	17.90
27	14.21	13.99	15.06	14.85	15.18	15.22	14.86	14.20	16.64	17.14	18.08	17.90
28	14.19	13.97	15.06	14.81	15.21	15.23	14.79	14.16	16.91	17.13	18.14	17.86
29	14.18	13.97	15.05	14.83	---	15.18	14.75	14.14	17.19	17.09	18.09	17.80
30	14.20	14.00	15.07	14.83	---	15.19	14.74	14.13	17.10	17.04	18.02	17.67
31	14.13	---	15.45	14.85	---	15.05	---	14.12	---	16.98	17.97	---
MAX	14.37	14.31	15.45	15.50	15.28	15.33	15.08	14.74	17.19	17.55	18.40	18.18

WTR YR 2003 MAX 18.40



HERNANDO COUNTY—Continued

WELL NUMBER.--283201082315601. Weeki Wachee Well near Weeki Wachee, FL.

LOCATION.--Lat 28°32'01", long 82°31'56" (1927 North American datum), in SW $^1/_4$ SW $^1/_4$ sec.29, T.22 S., R.18 E., Hydrologic Unit 03100207, 25 ft north of State Highway 50, and 2.6 mi east of Weeki Wachee.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 259 ft, cased to 176 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 36.49 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 2.19 ft above land-surface datum.

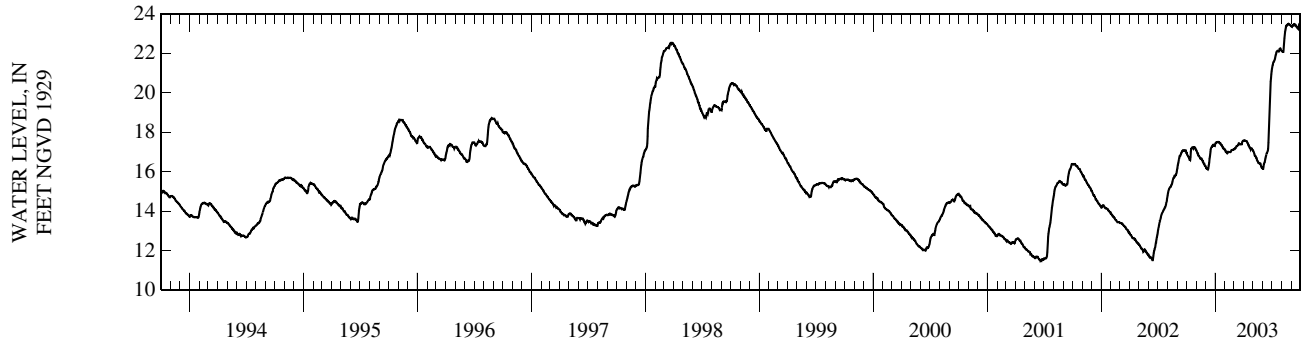
PERIOD OF RECORD.--August 1966 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 23.91 ft NGVD, Aug. 27, 28, 1984; lowest, 11.49 ft NGVD, June 19, 22, 2001.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.97	17.09	16.28	17.43	17.13	17.15	17.58	17.09	16.18	21.22	22.14	23.38
2	16.91	17.07	16.22	17.48	17.07	17.15	17.59	17.07	16.15	21.31	22.12	23.36
3	16.86	17.01	16.21	17.50	17.03	17.15	17.60	17.04	16.15	21.40	22.12	23.35
4	16.84	16.95	16.17	17.50	17.03	17.19	17.60	17.00	16.25	21.44	22.10	23.39
5	16.82	16.95	16.16	17.51	17.02	17.21	17.60	16.95	16.37	21.50	22.10	23.42
6	16.78	16.92	16.16	17.51	16.98	17.21	17.59	16.92	16.44	21.55	22.04	23.42
7	16.75	16.84	16.14	17.51	16.97	17.22	17.57	16.85	16.47	21.57	22.13	23.43
8	16.75	16.82	16.12	17.51	16.95	17.24	17.57	16.81	16.49	21.61	22.36	23.44
9	16.68	16.82	16.15	17.52	16.96	17.27	17.56	16.80	16.60	21.63	22.56	23.43
10	16.62	16.80	16.30	17.52	17.02	17.30	17.56	16.79	16.68	21.67	22.78	23.48
11	16.62	16.76	16.37	17.52	17.02	17.30	17.56	16.76	16.75	21.75	22.95	23.49
12	16.61	16.74	16.48	17.49	17.01	17.31	17.55	16.71	16.82	21.83	23.09	23.47
13	16.75	16.72	16.67	17.48	17.01	17.34	17.50	16.70	16.88	21.91	23.19	23.43
14	17.02	16.68	16.76	17.48	17.01	17.36	17.46	16.62	16.94	21.95	23.26	23.42
15	17.16	16.69	16.90	17.47	17.01	17.38	17.44	16.58	16.95	22.03	23.34	23.44
16	17.17	16.69	17.03	17.44	17.01	17.39	17.41	16.57	16.98	22.07	23.40	23.42
17	17.21	16.69	17.13	17.45	17.01	17.45	17.35	16.53	17.02	22.10	23.41	23.38
18	17.23	16.63	17.18	17.42	17.00	17.45	17.35	16.47	17.06	22.13	23.41	23.35
19	17.25	16.62	17.23	17.39	17.01	17.43	17.32	16.46	17.17	22.14	23.45	23.35
20	17.24	16.60	17.26	17.36	17.03	17.40	17.27	16.46	17.48	22.13	23.46	23.31
21	17.24	16.54	17.28	17.36	17.08	17.40	17.23	16.44	18.04	22.13	23.48	23.28
22	17.24	16.54	17.29	17.31	17.11	17.41	17.23	16.44	18.71	22.12	23.48	23.26
23	17.20	16.48	17.32	17.30	17.11	17.41	17.19	16.44	19.30	22.10	23.51	23.25
24	17.24	16.43	17.36	17.25	17.11	17.41	17.14	16.44	19.72	22.14	23.50	23.24
25	17.26	16.41	17.37	17.23	17.12	17.41	17.19	16.43	20.09	22.21	23.49	23.36
26	17.26	16.41	17.33	17.23	17.12	17.36	17.20	16.39	20.36	22.23	23.48	23.44
27	17.22	16.38	17.34	17.19	17.13	17.43	17.20	16.34	20.58	22.24	23.46	23.50
28	17.20	16.32	17.34	17.19	17.15	17.51	17.18	16.27	20.74	22.26	23.44	23.52
29	17.20	16.31	17.33	17.15	---	17.55	17.14	16.23	20.95	22.25	23.44	23.53
30	17.16	16.31	17.32	17.14	---	17.57	17.10	16.23	21.10	22.20	23.42	23.52
31	17.10	---	17.40	17.13	---	17.57	---	16.22	---	22.16	23.39	---
MAX	17.26	17.09	17.40	17.52	17.15	17.57	17.60	17.09	21.10	22.26	23.51	23.53

CAL YR 2002 MAX 17.40
WTR YR 2003 MAX 23.53



HERNANDO COUNTY—Continued

WELL NUMBER.--283650082313301. ROMP Centralia Deep Well near Weeki Wachee Springs, FL.

LOCATION.--Lat 28°36'50", long 82°31'33" (1927 North American datum), in SE ¼ NW ¼ sec.32, T.21 S., R.18 E., Hydrologic Unit 03100207, 1.5 mi east of intersection U. S. Highway 19 and State Highway 476, and 7.0 mi north of town of Weeki Wachee Springs.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 170 ft, cased to 122 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 39.44 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 3.29 ft above land-surface datum.

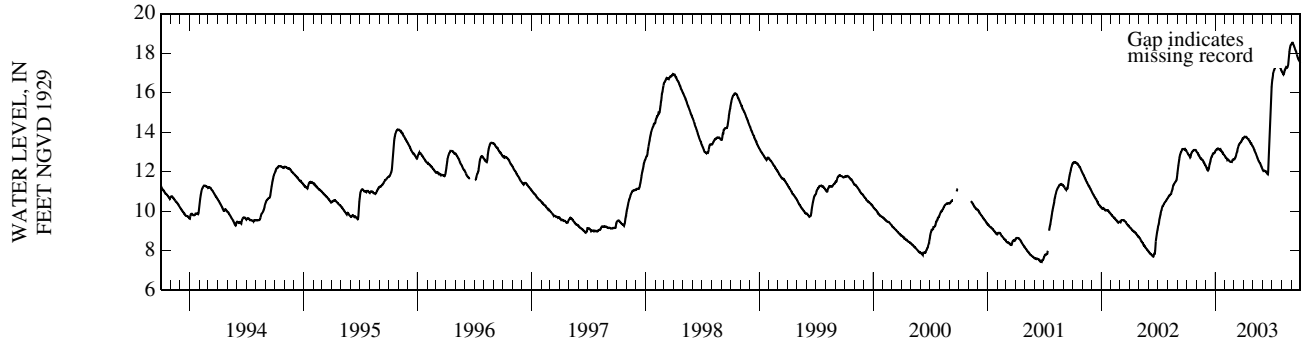
PERIOD OF RECORD.--December 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 18.53 ft NGVD, Sept. 5, 6, 2003; lowest, 7.42 ft NGVD, June 23, 2001.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.03	13.03	12.31	13.04	12.78	12.63	13.70	13.27	12.13	16.49	17.12	18.46
2	13.00	12.99	12.26	13.08	12.74	12.63	13.72	13.24	12.08	16.64	17.08	18.47
3	12.98	12.97	12.23	13.10	12.71	12.63	13.75	13.21	12.05	16.74	17.06	18.50
4	12.94	12.95	12.17	13.10	12.70	12.66	13.76	13.17	12.03	16.85	17.02	18.52
5	12.91	12.94	12.16	13.12	12.68	12.70	13.75	13.13	12.04	16.95	16.99	18.53
6	12.87	12.93	12.11	13.14	12.66	12.72	13.75	13.09	12.05	17.01	16.94	18.53
7	12.85	12.88	12.07	13.14	12.65	12.73	13.75	13.06	12.05	17.08	16.92	18.48
8	12.84	12.84	12.05	13.16	12.59	12.78	13.75	13.02	12.03	17.13	16.96	18.45
9	12.81	12.83	12.08	13.17	12.60	12.86	13.76	12.98	12.03	17.17	16.99	18.40
10	12.78	12.81	12.15	13.17	12.61	12.92	13.75	12.95	12.02	17.22	17.07	18.37
11	12.76	12.79	12.17	13.15	12.59	12.97	13.74	12.91	12.01	17.24	17.15	18.33
12	12.72	12.73	12.27	13.13	12.58	13.04	13.71	12.86	12.01	17.29	17.18	18.29
13	12.74	12.70	12.37	13.14	12.57	13.11	13.69	12.82	11.98	17.33	17.22	18.23
14	12.83	12.68	12.41	13.13	12.55	13.16	13.67	12.78	11.95	17.38	17.24	18.17
15	12.90	12.68	12.48	13.12	12.54	13.22	13.66	12.74	11.92	17.41	17.26	18.14
16	12.94	12.66	12.55	13.11	12.52	13.29	13.65	12.69	11.90	17.41	17.29	18.11
17	12.96	12.65	12.60	13.12	12.51	13.35	13.65	12.65	11.88	17.44	17.27	18.05
18	12.98	12.60	12.65	13.06	12.49	13.37	13.62	12.60	11.87	17.43	17.26	17.99
19	13.02	12.60	12.72	13.05	12.49	13.39	13.58	12.55	11.95	17.43	17.27	17.94
20	13.03	12.60	12.75	13.03	12.49	13.43	13.55	12.53	12.33	17.42	17.29	17.87
21	13.05	12.59	12.77	13.03	12.49	13.45	13.53	12.51	12.91	17.42	17.33	17.82
22	13.05	12.57	12.80	13.02	12.50	13.47	13.53	12.46	13.47	17.40	17.38	17.77
23	13.06	12.51	12.85	13.00	12.49	13.49	13.48	12.44	13.99	17.37	17.56	17.74
24	13.09	12.49	12.91	12.93	12.53	13.51	13.43	12.43	14.45	17.37	17.72	17.70
25	13.10	12.46	12.91	12.91	12.57	13.52	13.44	12.39	14.88	17.34	17.89	17.67
26	13.10	12.44	12.91	12.91	12.60	13.55	13.44	12.36	15.23	17.30	18.06	17.65
27	13.10	12.41	12.93	12.89	12.61	13.57	13.39	12.31	15.51	17.28	18.18	17.63
28	13.10	12.38	12.94	12.86	12.61	13.60	13.34	12.28	15.75	17.27	18.28	17.61
29	13.10	12.33	12.95	12.84	---	13.67	13.32	12.24	16.03	17.26	18.35	17.56
30	13.09	12.33	12.96	12.82	---	13.69	13.30	12.21	16.29	17.20	18.41	17.51
31	13.06	---	13.01	12.81	---	13.68	---	12.17	---	17.14	18.43	---
MAX	13.10	13.03	13.01	13.17	12.78	13.69	13.76	13.27	16.29	17.44	18.43	18.53

CAL YR 2002 MAX 13.15
WTR YR 2003 MAX 18.53



MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2002 TO SEPTEMBER 2003

HERNANDO COUNTY

SITE-ID	STATION NAME	WATER-LEVEL DATE	WATER-LEVEL MSL FEET	WATER-LEVEL DATUM CODE
282659082391104	ROMP TR 18-2 8IN UPPR AVON PARK WELL NR ARIPEKA FL	05-21-2003	7.73	NGVD29
283243082365701	ROMP TR 19-2 DEEP WELL NEAR BAYPORT FL	05-21-2003	5.33	NGVD29
		09-15-2003	5.17	NGVD29
283321082241601	ROMP DEEP 105 AT BROOKSVILLE FL	05-21-2003	38.09	NGVD29
		09-15-2003	42.80	NGVD29
283321082241602	ROMP 105 AT BROOKSVILLE Fl	05-21-2003	38.09	NGVD29
		09-15-2003	43.10	NGVD29
283924082272301	ROMP DEEP WELL 107 NEAR BROOKSVILLE FL	05-21-2003	13.23	NGVD29
		09-15-2003	17.96	NGVD29

KEY TO SITE LOCATIONS ON FIGURE 15

HIGHLANDS COUNTY

INDEX NUMBER	SITE NUMBER
1	272745081232601

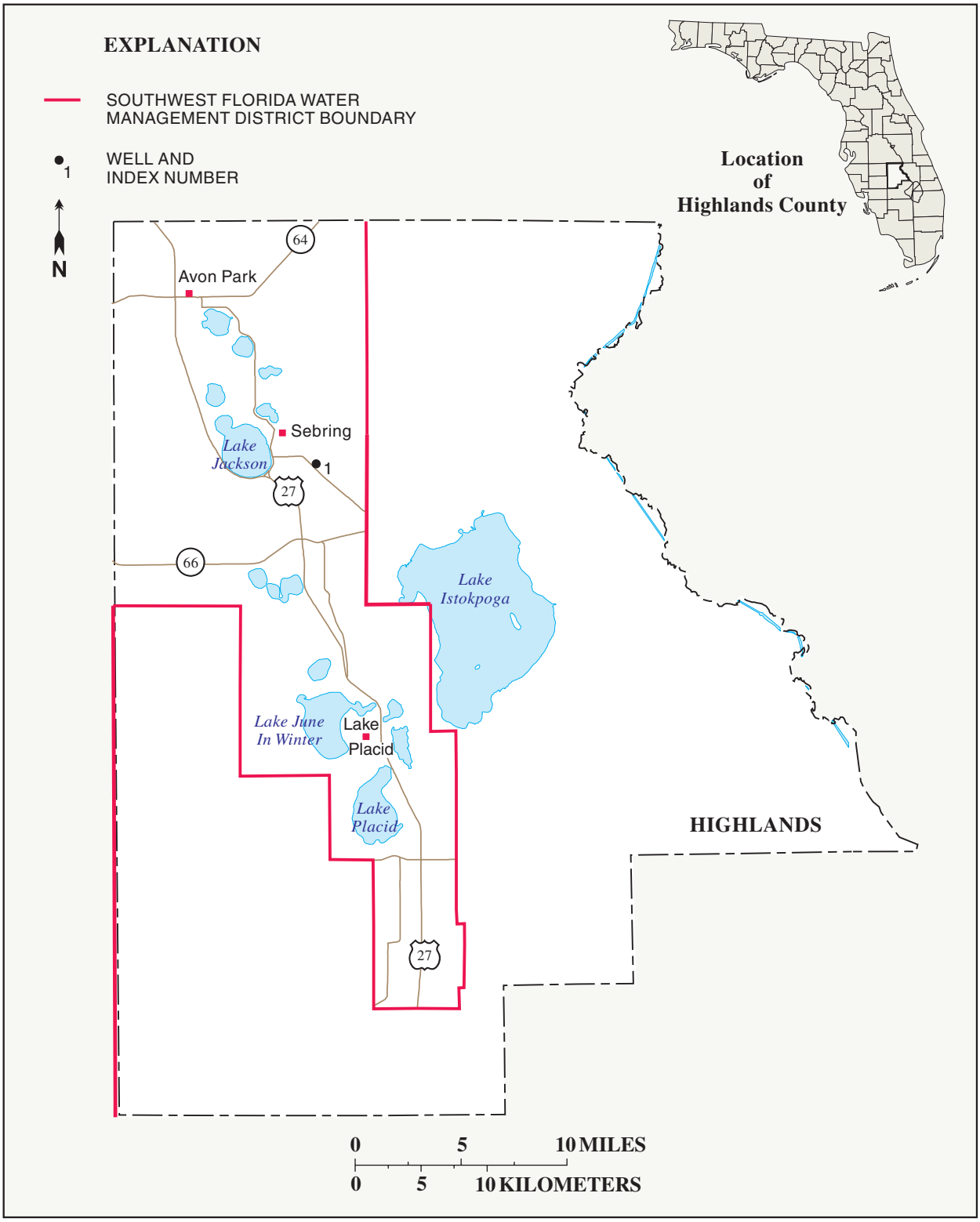


Figure 15.-- Location of wells in Highlands County.

HIGHLANDS COUNTY

WELL NUMBER.--272745081232601. Sebring 412-A NRSD Well near Sebring, Fl.

LOCATION.--Lat 27°27'45", long 81°23'26" (1927 North American datum), in NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.2, T.35 S., R.29 E., Hydrologic Unit 03090101, on south side of State Highway 632, 0.9 mi east of State Highway 17, and 4.0 mi southeast of Sebring.

AQUIFER.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit 112NRSD.

WELL CHARACTERISICS.--Drilled, observation, nonartesian well, diameter 6 in., depth 60 ft, cased to 40 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 118.15 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 2.95 ft above land-surface datum.

REMARKS.--Record is equivalent to that for Sebring Well 412 near Sebring which was previously published as Observation Well H10 near Sebring.

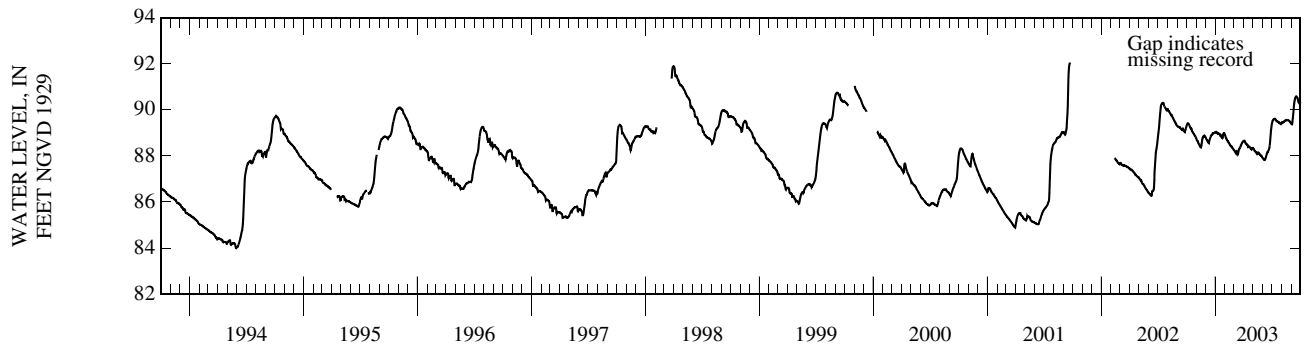
PERIOD OF RECORD.--March 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 92.01 ft NGVD, Sept. 21, 22, 2001; lowest, 83.99 ft NGVD, May 30, 1994.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89.30	88.75	88.81	89.03	88.91	88.25	88.64	88.34	87.92	89.41	89.44	89.40
2	89.36	88.70	88.77	89.03	88.87	88.24	88.65	88.33	87.90	89.47	89.46	89.38
3	89.39	88.67	88.74	89.04	88.82	88.22	88.66	88.31	87.88	89.50	89.45	89.37
4	89.41	88.65	88.70	89.03	88.78	88.20	88.66	88.29	87.86	89.53	89.44	89.37
5	89.41	88.64	88.69	89.03	88.75	88.18	88.63	88.27	87.85	89.56	89.44	89.48
6	89.39	88.61	88.67	89.01	88.72	88.16	88.60	88.25	87.83	89.58	89.45	89.62
7	89.39	88.57	88.63	88.98	88.70	88.13	88.57	88.21	87.82	89.59	89.47	89.74
8	89.38	88.54	88.60	88.97	88.66	88.11	88.54	88.20	87.82	89.60	89.49	89.92
9	89.34	88.52	88.58	88.99	88.64	88.19	88.53	88.19	87.83	89.60	89.49	90.08
10	89.31	88.50	88.57	88.99	88.64	88.20	88.52	88.17	87.86	89.61	89.51	90.22
11	89.29	88.48	88.56	88.98	88.61	88.18	88.50	88.16	87.91	89.61	89.52	90.33
12	89.25	88.44	88.64	88.95	88.59	88.16	88.49	88.14	87.95	89.59	89.53	90.41
13	89.21	88.42	88.69	88.95	88.56	88.12	88.48	88.12	88.01	89.58	89.54	90.48
14	89.19	88.38	88.72	88.94	88.54	88.08	88.45	88.09	88.05	89.56	89.54	90.53
15	89.19	88.37	88.76	88.92	88.52	88.11	88.42	88.07	88.09	89.53	89.54	90.55
16	89.18	88.36	88.80	88.90	88.50	88.20	88.43	88.08	88.13	89.51	89.55	90.57
17	89.13	88.41	88.83	88.91	88.49	88.26	88.42	88.14	88.16	89.50	89.56	90.58
18	89.09	88.55	88.86	88.86	88.46	88.30	88.39	88.15	88.16	89.50	89.55	90.57
19	89.06	88.66	88.89	88.87	88.43	88.32	88.40	88.15	88.20	89.49	89.55	90.55
20	89.04	88.73	88.90	88.84	88.41	88.33	88.39	88.13	88.23	89.49	89.55	90.53
21	89.02	88.79	88.91	88.80	88.41	88.36	88.38	88.11	88.25	89.48	89.55	90.50
22	89.00	88.81	88.93	88.79	88.41	88.39	88.36	88.09	88.29	89.47	89.55	90.47
23	88.97	88.83	88.96	88.77	88.39	88.42	88.34	88.07	88.35	89.45	89.55	90.42
24	88.95	88.86	88.99	88.79	88.35	88.45	88.32	88.05	88.45	89.45	89.54	90.35
25	88.93	88.87	88.99	88.87	88.34	88.48	88.32	88.04	88.59	89.44	89.52	90.33
26	88.91	88.87	88.98	88.94	88.32	88.52	88.30	88.02	88.78	89.42	89.51	90.30
27	88.88	88.88	88.99	88.97	88.30	88.55	88.28	88.01	88.95	89.42	89.50	90.28
28	88.86	88.85	89.00	88.99	88.28	88.57	88.30	88.00	89.10	89.41	89.48	90.30
29	88.84	88.83	89.00	88.99	---	88.60	88.33	87.98	89.22	89.41	89.45	90.32
30	88.81	88.82	89.00	88.98	---	88.62	88.33	87.97	89.33	89.39	89.43	90.34
31	88.78	---	89.02	88.94	---	88.63	---	87.94	---	89.41	89.42	---
MAX	89.41	88.88	89.02	89.04	88.91	88.63	88.66	88.34	89.33	89.61	89.56	90.58

WTR YR 2003 MAX 90.58



MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2002 TO SEPTEMBER 2003

HIGHLANDS COUNTY

SITE-ID	STATION NAME	WATER-LEVEL DATE	WATER-LEVEL MSL FEET	WATER-LEVEL DATUM CODE
270858081211101	ROMP 14 AVON PARK WELL NEAR LAKE PLACID FL	05-21-2003	47.18	NGVD29
		09-16-2003	51.22	NGVD29
270858081211102	ROMP 14 ARCADIA WELL NEAR LAKE PLACID FL	05-21-2003	109.79	NGVD29
		09-16-2003	111.09	NGVD29
270858081211103	ROMP 14 NRSD HICORIA NEAR LAKE PLACID FL	05-21-2003	139.90	NGVD29
		09-16-2003	141.11	NGVD29
270858081211104	ROMP 14 SUWANNEE WELL NEAR LAKE PLACID FL	05-21-2003	47.02	NGVD29
		09-16-2003	51.41	NGVD29
271223081202601	LAKE PLACID GROVES DEEP SOUTH OF LAKE PLACID FL	05-19-2003	47.99	NGVD29
		09-16-2003	53.37	NGVD29
271559081202301	ROMP 28 FLORIDAN WELL NR LAKE PLACID FL	05-19-2003	67.12	NGVD29
		09-16-2003	72.03	NGVD29
272835081251701	728125--34S29E16 NARANATHA VILLAGE NR SEBRING FL	05-19-2003	79.21	NGVD29
		09-16-2003	87.74	NGVD29
273054081234701	JOHN MCCULLOCH WELL 11 NEAR SEBRING FL	05-19-2003	73.06	NGVD29
		09-16-2003	67.67	NGVD29
273252081264101	BONNET LAKE DEEP NEAR SEBRING FL	05-19-2003	75.91	NGVD29
		09-16-2003	83.59	NGVD29
273353081294201	FLOYD DEVANE WELL 18 NEAR AVON PARK FL	05-19-2003	80.00	NGVD29
		09-16-2003	90.00	NGVD29
273615081284901	ROMP 43 FLORIDAN WELL NEAR AVON PARK FL	05-19-2003	82.45	NGVD29
		09-16-2003	91.56	NGVD29
273704081245501	ROBERT RICHARDS WELL 25 NEAR AVON PARK FL	05-19-2003	73.27	NGVD29
		09-16-2003	73.44	NGVD29
273845081321901	CLENNY DEEP NW/O AVON PK FL	05-19-2003	74.64	NGVD29
		09-16-2003	88.27	NGVD29

KEY TO SITE LOCATIONS ON FIGURE 16

HILLSBOROUGH COUNTY

INDEX NUMBER	SITE NUMBER
1	274240082212701
1	274240082212702
1	274240082212703
2	275215082201901
3	275627082150801
4	275724082221001
5	275802082044701
6	280005082324201
7	280022082210501
8	280038082340201
9	280053082350202
10	280055082222701
11	280058082202201
11	280058082202202
12	280145082132501
13	280209082280301
14	280320082203801
15	280503082143701
16	280548082355701
17	280740082271001
18	280944082380501

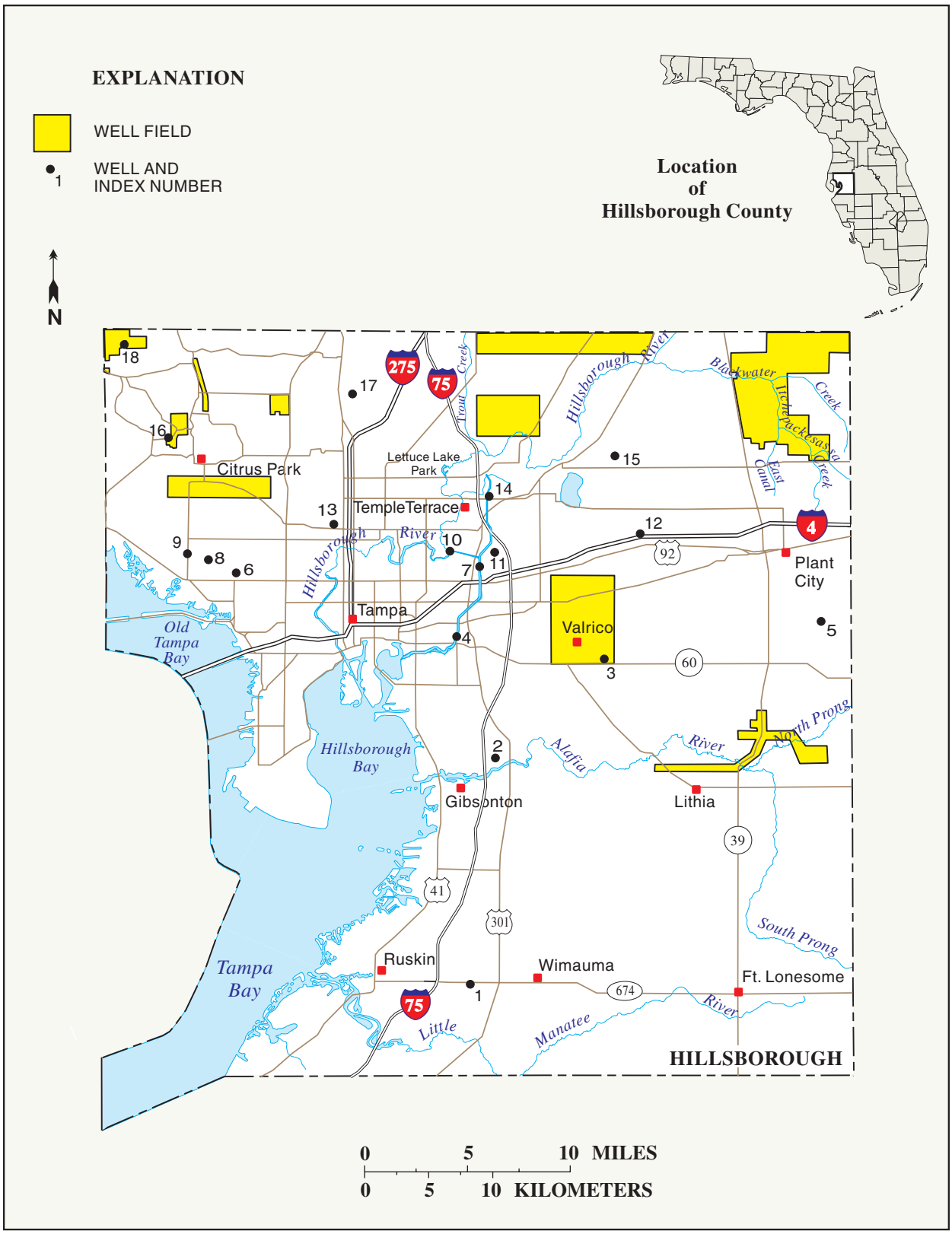


Figure 16.-- Location of wells in Hillsborough County.

HILLSBOROUGH COUNTY

WELL NUMBER.--274240082212701. ROMP 50 Floridan Well near Wimauma, FL.

LOCATION.--Lat 27°42'40", long 82°21'27" (1927 North American datum), in NW $^1/_4$ SE $^1/_4$ sec.12, T.32 S., R.19 E., Hydrologic Unit 03100203, 0.2 mi south of State Highway 674, and 3.5 mi west of Wimauma.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 8 to 6 in., depth 562 ft, cased to 200 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 44.00 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 2.44 ft above land-surface datum.

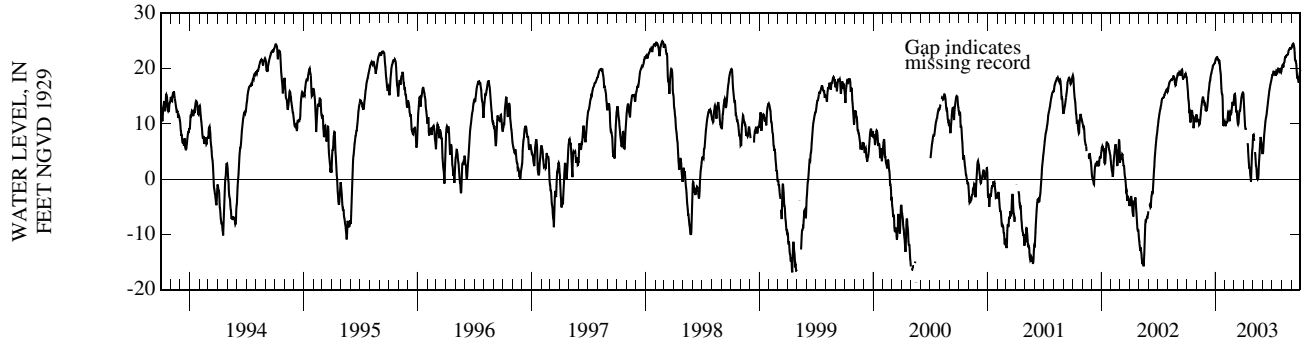
REMARKS.--Water level affected by pumping of nearby irrigation wells.

PERIOD OF RECORD.--February 1976 to current year. Prior to October 1979, published as ROMP Deep Well No. 50 near Wimauma.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 24.97 ft NGVD, Feb. 23, 1998; lowest, 20.87 ft below NGVD, May 27, 1989.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.50	11.71	12.35	21.55	10.16	14.38	15.30	7.20	4.52	18.53	19.78	23.71
2	17.89	11.51	12.54	21.69	9.73	14.97	14.02	8.01	5.00	18.81	20.08	23.84
3	17.31	10.76	12.42	21.87	9.73	15.35	12.94	8.07	4.99	18.82	20.42	23.93
4	16.60	10.88	12.45	21.95	9.99	15.43	11.90	7.58	5.96	18.96	20.67	24.12
5	15.78	10.57	12.74	21.96	10.31	15.07	10.77	6.92	6.96	19.23	20.73	24.33
6	14.58	10.49	13.10	22.03	10.32	14.55	9.55	---	7.85	19.46	20.37	24.41
7	14.16	10.63	13.76	22.06	10.14	13.81	9.21	---	8.51	19.47	20.38	24.51
8	13.61	10.70	14.38	21.72	10.45	12.84	8.97	4.92	9.09	19.36	20.93	24.54
9	12.31	10.70	15.21	21.69	10.97	12.08	9.21	4.39	9.77	19.32	21.05	24.37
10	12.37	9.82	15.80	21.65	11.80	12.33	---	3.46	10.42	19.15	21.16	24.07
11	11.45	9.93	16.18	21.47	12.23	12.18	---	2.45	10.82	19.10	21.74	23.68
12	10.49	10.15	16.80	21.31	12.17	11.09	---	2.27	11.18	18.99	22.00	22.86
13	10.26	10.54	17.37	21.51	11.88	10.48	---	1.70	11.44	18.73	22.12	21.66
14	10.71	11.18	17.71	21.43	11.36	9.99	6.52	0.45	11.80	19.33	22.10	21.49
15	10.96	11.73	17.99	20.79	10.46	9.86	5.99	-0.10	12.12	19.56	22.25	21.47
16	12.05	12.56	18.35	19.95	10.83	10.02	5.10	0.28	12.57	19.43	22.28	21.15
17	12.49	13.03	18.64	19.40	11.73	11.08	4.19	-0.01	13.11	19.09	22.39	20.94
18	12.42	13.54	18.84	19.00	12.26	11.90	3.17	0.07	13.58	19.17	22.39	20.09
19	12.09	14.07	19.14	17.84	12.21	12.34	2.43	0.90	14.14	19.62	22.42	19.00
20	11.44	14.39	19.42	16.46	12.18	12.38	1.92	2.54	14.68	19.86	22.52	18.34
21	11.41	14.69	19.62	15.64	12.07	12.45	2.09	3.53	15.12	19.98	22.58	18.26
22	11.06	14.92	19.87	15.39	12.53	12.95	1.47	4.35	15.65	19.93	22.81	18.38
23	9.21	14.60	20.13	15.34	13.08	13.62	0.62	5.57	16.11	19.87	23.04	18.26
24	9.76	13.94	20.54	14.29	13.64	14.24	0.26	6.54	16.40	19.77	23.23	18.14
25	10.41	14.25	20.61	11.51	13.97	14.74	-0.42	7.12	16.75	19.34	23.42	17.46
26	10.63	13.98	20.65	9.63	13.74	14.99	0.90	7.62	17.11	19.55	23.55	17.92
27	10.57	13.54	20.80	9.97	13.27	15.15	3.00	7.28	17.35	19.43	23.63	18.47
28	10.82	13.57	20.88	9.85	13.73	15.36	4.51	6.66	17.55	19.66	23.61	18.99
29	11.25	13.58	20.98	9.94	---	15.54	5.32	6.24	17.92	19.75	23.67	19.43
30	11.29	12.97	21.00	10.23	---	15.68	5.87	5.71	18.22	19.56	23.75	19.80
31	11.43	---	21.18	10.42	---	15.65	---	5.03	---	19.45	23.75	---
MAX	18.50	14.92	21.18	22.06	13.97	15.68	---	---	18.22	19.98	23.75	24.54



HILLSBOROUGH COUNTY—Continued

WELL NUMBER.--274240082212702. ROMP 50 Shallow Well near Wimauma, FL.

LOCATION.--Lat 27°42'40", long 82°21'27" (1927 North American datum), in NW $^1/_4$ SE $^1/_4$ sec.12, T.32 S., R.19 E., Hydrologic Unit 03100203, 0.2 mi south of State Highway 674, and 3.5 mi west of Wimauma.

AQUIFER.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit 112NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 8 in., depth 37.5 ft, cased to 32.5 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

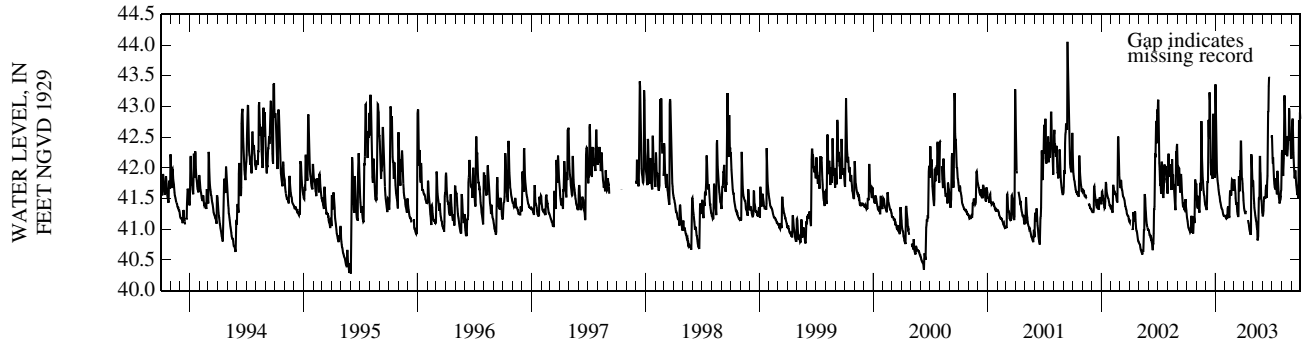
DATUM.--Land-surface datum is 43.96 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 3.10 ft above land-surface datum.

PERIOD OF RECORD.--March 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 44.05 ft NGVD, Sept. 14, 2001; lowest, 39.93 ft NGVD, May 27, June 4, 5, 1989.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41.25	41.73	41.37	43.36	41.22	41.79	41.47	41.80	41.24	42.53	41.92	42.15
2	41.19	41.53	41.36	42.91	41.21	41.80	41.40	41.78	41.21	42.36	42.24	42.48
3	41.16	41.44	41.34	42.49	41.20	41.80	41.34	41.66	41.24	42.16	42.29	42.67
4	41.13	41.37	41.31	42.26	41.19	41.72	41.31	41.50	41.30	42.07	42.14	42.70
5	41.08	41.34	41.45	42.08	41.20	41.64	41.29	41.42	41.46	42.17	42.00	42.79
6	41.04	41.53	41.77	41.95	41.18	41.59	41.27	41.35	41.52	42.06	41.87	42.79
7	41.02	41.53	41.77	41.86	41.19	41.51	41.25	41.31	41.52	41.93	41.98	42.48
8	41.01	41.41	41.77	41.79	41.19	41.44	41.27	41.27	41.52	41.81	42.15	42.25
9	40.99	41.34	42.54	41.75	41.34	41.40	41.30	41.22	41.51	41.74	42.79	42.13
10	40.98	41.30	42.78	41.71	41.36	41.44	---	41.19	41.51	41.69	43.18	42.00
11	40.97	41.27	42.51	41.65	41.36	41.38	---	41.15	41.63	41.67	43.09	41.91
12	40.95	41.45	42.47	41.61	41.29	41.29	---	41.13	41.71	41.65	42.86	41.83
13	40.96	41.74	43.23	41.57	41.23	41.25	---	41.08	41.71	41.77	42.47	41.90
14	40.96	41.74	43.11	41.55	41.20	41.23	---	41.02	41.61	41.83	42.25	41.96
15	41.13	41.63	42.57	41.51	41.20	41.20	41.15	41.00	41.51	41.75	42.21	41.88
16	41.22	42.43	42.29	41.46	41.51	41.24	41.14	40.82	41.77	41.64	42.41	41.79
17	41.15	42.76	42.09	41.44	41.62	41.85	41.11	40.84	41.87	41.57	42.51	41.72
18	41.03	42.51	41.96	41.41	41.62	41.85	41.09	40.89	42.56	41.95	42.37	41.68
19	40.99	42.14	41.88	41.38	41.55	41.76	41.04	41.22	42.91	41.94	42.19	41.62
20	40.96	41.98	42.12	41.35	41.57	41.62	41.00	41.50	42.92	41.84	42.25	41.56
21	40.94	41.84	42.12	41.34	41.55	41.94	40.97	41.50	43.33	41.75	42.31	41.64
22	40.93	41.78	41.94	41.33	41.73	41.94	40.96	41.53	43.48	41.65	42.46	41.55
23	41.06	41.67	41.82	41.32	41.81	42.43	40.93	42.18	43.47	41.53	42.52	41.52
24	41.21	41.61	42.09	41.29	41.80	42.43	40.91	42.18	---	41.49	42.44	41.51
25	41.17	41.57	42.88	41.26	41.71	42.14	40.97	41.92	---	41.43	42.97	42.48
26	41.10	41.55	42.67	41.25	41.66	41.89	42.22	41.90	---	41.42	42.91	42.77
27	41.52	41.52	42.29	41.23	41.63	41.82	42.17	41.69	---	41.44	42.55	42.53
28	41.81	41.46	42.09	41.22	41.68	41.82	41.94	41.49	---	41.54	42.51	42.56
29	41.77	41.41	41.94	41.22	---	41.74	41.80	41.46	---	41.53	42.52	42.90
30	41.73	41.39	41.84	41.22	---	41.62	41.70	41.39	42.49	41.61	42.37	42.80
31	41.73	---	42.76	41.22	---	41.60	---	41.28	---	41.63	42.18	---
MAX	41.81	42.76	43.23	43.36	41.81	42.43	---	42.18	---	42.53	43.18	42.90



HILLSBOROUGH COUNTY—Continued

WELL NUMBER.--274240082212703. ROMP 50 Avon Park Well near Wimauma, FL.

LOCATION.--Lat 27°42'40", long 82°21'27" (1927 North American datum), in NW $^1/_4$ SE $^1/_4$ sec.12, T.32 S., R.19 E., Hydrologic Unit 03100203, 0.2 mi south of State Highway 674, and 3.5 mi west of Wimauma.

AQUIFER.--Avon Park formation of Eocene Age, Geologic Unit 124AVPK.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 1,430 ft, cased to 1,393 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 44.00 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 4.90 ft above land-surface datum.

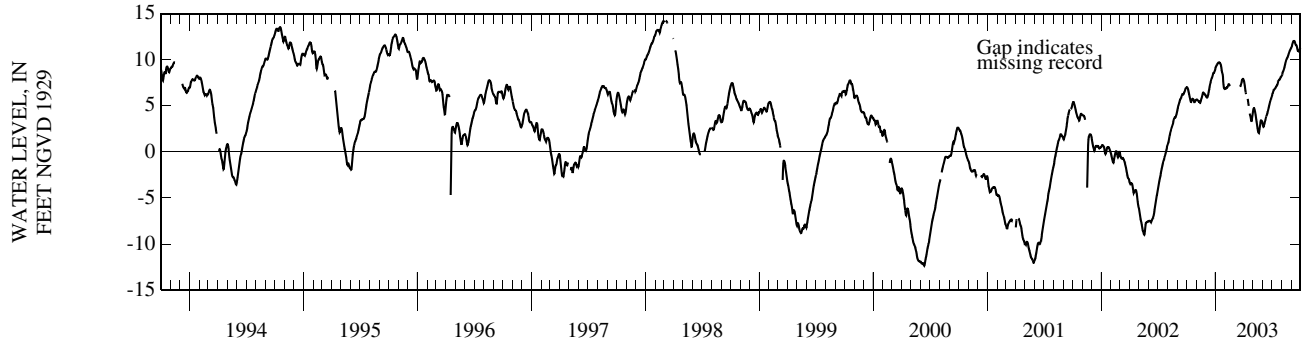
PERIOD OF RECORD.--August 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 14.95 ft NGVD, Aug. 23, 24, 1982; lowest, 13.05 ft below NGVD, May 26, 1981.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.99	5.67	6.13	9.07	6.92	---	7.88	4.31	3.11	6.06	8.23	11.29
2	7.00	5.69	6.04	9.19	6.92	---	7.79	4.53	2.94	6.21	8.29	11.38
3	6.99	5.68	5.97	9.27	6.88	---	7.65	4.69	2.82	6.33	8.40	11.47
4	6.93	5.65	5.92	9.34	6.89	---	7.44	4.74	2.73	6.40	8.53	11.58
5	6.84	5.62	5.90	9.40	6.92	---	7.21	4.74	2.76	6.49	8.66	11.70
6	6.69	5.58	5.91	9.47	6.98	---	6.93	4.70	2.88	6.59	8.75	11.83
7	6.51	5.56	5.96	9.51	7.00	---	6.66	4.57	3.04	6.67	8.80	11.91
8	6.37	5.51	6.06	9.56	7.00	---	6.44	4.40	3.18	6.74	8.90	12.00
9	6.20	5.48	6.24	9.62	7.03	---	6.28	4.21	3.31	6.80	9.03	12.03
10	6.02	5.47	6.47	9.67	7.15	---	---	4.00	3.44	6.85	9.18	12.04
11	5.89	5.41	6.64	9.68	7.25	---	---	3.76	3.59	6.88	9.34	12.04
12	5.74	5.35	6.80	9.67	7.33	---	---	3.50	3.72	6.91	9.48	12.01
13	5.57	5.32	7.04	9.66	7.33	---	---	3.26	3.84	6.96	9.62	11.91
14	5.44	5.35	7.21	9.69	7.32	---	5.75	3.01	3.94	7.02	9.73	11.75
15	5.42	5.46	7.34	9.68	7.27	---	5.62	2.77	4.02	7.09	9.82	11.65
16	5.51	5.64	7.46	9.64	7.19	---	5.40	2.54	4.11	7.18	9.92	11.60
17	5.61	5.76	7.60	9.56	7.14	---	5.20	2.35	4.24	7.21	10.02	11.58
18	5.68	5.84	7.71	9.48	---	---	4.98	2.20	4.36	7.25	10.09	11.55
19	5.74	5.96	7.83	9.33	---	---	---	2.08	4.50	7.34	10.16	11.44
20	5.75	6.12	7.96	9.10	---	---	---	2.05	4.65	7.46	10.24	11.26
21	5.74	6.30	8.03	8.84	---	7.07	4.15	2.23	4.81	7.60	10.32	11.10
22	5.72	6.42	8.10	8.68	---	7.12	4.04	2.44	4.98	7.71	10.42	10.97
23	5.67	6.43	8.22	8.56	---	7.21	3.91	2.67	5.13	7.78	10.52	10.95
24	5.52	6.42	8.40	8.45	---	7.32	3.72	2.92	5.26	7.84	10.64	10.96
25	5.41	6.37	8.51	8.13	---	7.45	3.52	3.14	5.37	7.84	10.74	10.95
26	5.40	6.35	8.54	7.70	---	7.60	3.36	3.31	5.50	7.85	10.84	10.91
27	5.43	6.33	8.58	7.31	---	7.74	3.36	3.40	5.63	7.90	10.94	10.97
28	5.46	6.27	8.62	7.06	---	7.83	3.58	3.41	5.73	7.98	11.02	11.08
29	5.54	6.20	8.71	6.91	---	7.88	3.85	3.39	5.82	8.06	11.08	11.19
30	5.62	6.15	8.79	6.86	---	7.93	4.08	3.36	5.93	8.13	11.16	11.29
31	5.65	---	8.93	6.90	---	7.93	---	3.26	---	8.18	11.23	---
MAX	7.00	6.43	8.93	9.69	---	---	---	4.74	5.93	8.18	11.23	12.04

CAL YR 2002 MAX 8.93



HILLSBOROUGH COUNTY—Continued

WELL NUMBER.--275215082201901. U. S. Phosphoric Well at Riverview, FL.

LOCATION.--Lat 27°52'15", long 82°20'19" (1927 North American datum), in NE ¼ SE ¼ sec.18, T.30 S., R.20 E., Hydrologic Unit 03100204, 20 ft south of Riverview Drive, and 0.7 mi west of Riverview.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, unused industrial, artesian well, diameter 8 in., depth 658 ft, cased to 653 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Land-surface datum is 23.19 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 12 in. coupling, 0.83 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby wells.

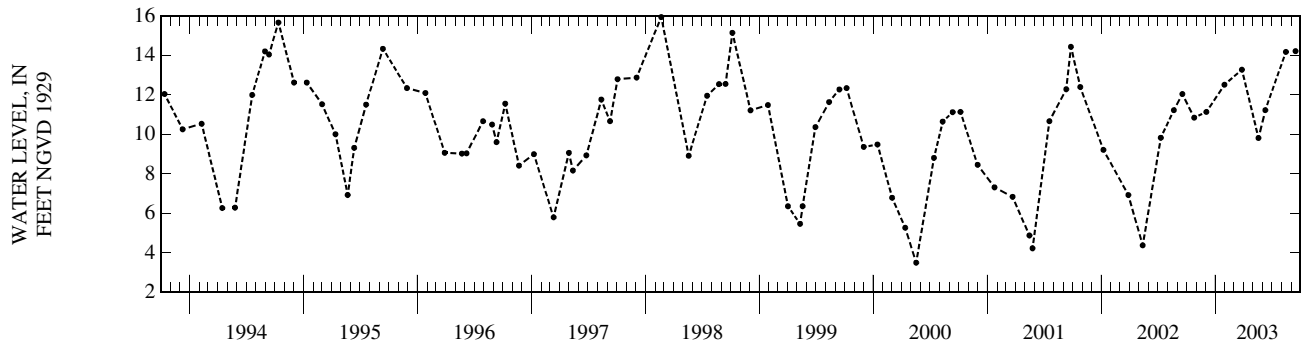
PERIOD OF RECORD.--September 1962 to current year (periodic). Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.95 ft NGVD, Feb. 20, 1998; lowest measured, 0.20 ft below NGVD, May 20, 1981.

WATER SURFACE ELEVATION IN FEET (NGVD1929), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	10.85	JAN 30	12.52	MAY 19	9.82	AUG 15	14.18
DEC 03	11.14	MAR 27	13.28	JUN 10	11.23	SEP 15	14.22

WATER YEAR 2003 LOWEST 9.82 MAY 19, 2003 HIGHEST 14.22 SEP 15, 2003



HILLSBOROUGH COUNTY—Continued

WELL NUMBER.--275627082150801. Turner Well near Brandon, FL.

LOCATION.--Lat 27°56'27", long 82°15'08" (1927 North American datum), in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.19, T.29 S., R.21 E., Hydrologic Unit 03100205, 100 ft east of Valrico Road, 500 ft north of U. S. Highway 60, and 1.5 mi east of Brandon.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, unused irrigation, artesian well, diameter 8 in., depth 342 ft, cased to 60 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval and tipping bucket raingage recorder--15-minute interval.

DATUM.--Land-surface datum is 36.40 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 2.49 ft above land-surface datum.

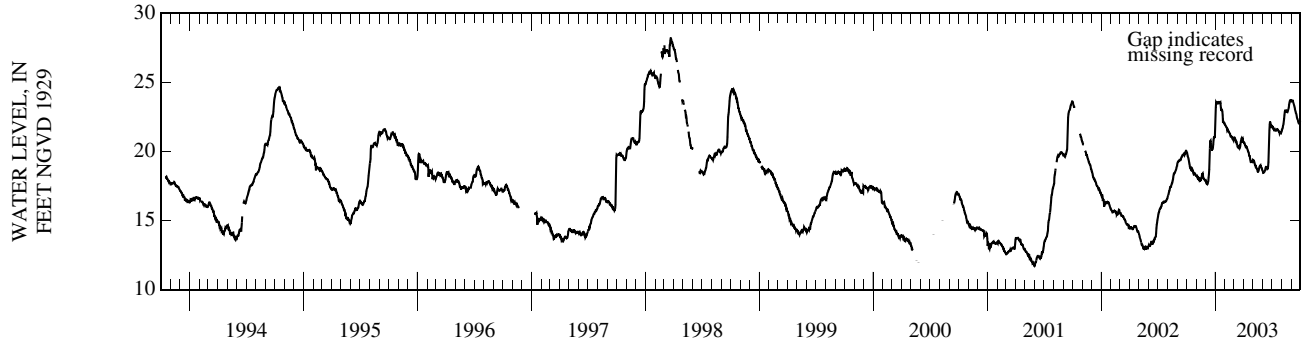
PERIOD OF RECORD.--January 1963 to August 1978 (periodic); September 1978 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 28.20 ft NGVD, Mar. 22, 23, 1998; lowest, 10.87 ft NGVD, May 19, 1981.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.98	18.23	17.90	22.12	21.94	20.94	20.70	19.40	18.64	21.86	21.44	23.70
2	19.88	18.20	17.80	23.18	21.92	21.02	20.66	19.37	18.58	21.84	21.56	23.67
3	19.84	18.22	17.70	23.55	21.86	21.02	20.64	19.32	18.47	21.81	21.62	23.64
4	19.68	18.12	17.67	23.51	21.82	20.98	20.62	19.33	18.48	21.68	21.65	23.65
5	19.63	18.08	17.67	23.52	21.78	20.94	20.52	19.28	18.48	21.67	21.78	23.69
6	19.56	18.10	17.63	23.49	21.73	20.87	20.50	19.19	18.51	21.70	21.86	23.69
7	19.45	18.01	17.67	23.49	21.71	20.82	20.42	19.14	18.53	21.66	21.99	23.62
8	19.32	17.98	17.74	23.48	21.51	20.72	20.34	19.02	18.57	21.59	22.17	23.54
9	19.17	18.05	17.82	23.55	21.55	20.74	20.37	18.99	18.62	21.61	22.37	23.46
10	19.07	18.08	18.12	23.56	21.56	20.69	20.36	18.91	18.74	21.62	22.64	23.38
11	18.91	18.05	18.34	23.53	21.47	20.57	20.35	18.93	18.86	21.53	22.85	23.30
12	18.82	17.87	18.70	23.56	21.46	20.45	20.25	18.85	18.89	21.51	22.96	23.21
13	18.79	17.88	19.30	23.59	21.42	20.38	20.22	18.78	18.88	21.52	22.97	23.06
14	18.74	17.91	20.22	23.59	21.38	20.32	20.14	18.76	18.85	21.51	22.97	22.97
15	18.77	17.92	20.75	23.51	21.35	20.29	20.04	18.71	18.83	21.51	22.91	22.87
16	18.80	18.04	20.79	23.49	21.32	20.36	20.02	18.60	18.80	21.58	22.92	22.80
17	18.72	18.09	20.59	23.53	21.28	20.39	19.96	18.54	18.75	21.60	22.94	22.74
18	18.56	18.15	20.39	23.27	21.16	20.41	19.92	18.54	18.77	21.58	22.90	22.62
19	18.62	18.35	20.27	23.01	21.09	20.36	19.73	18.59	18.92	21.61	22.86	22.48
20	18.67	18.38	20.20	23.01	21.07	20.26	19.69	18.69	19.23	21.59	22.85	22.40
21	18.59	18.41	20.07	23.04	21.10	20.32	19.67	18.79	19.98	21.54	22.93	22.36
22	18.48	18.25	20.15	23.00	21.09	20.50	19.50	18.87	20.88	21.47	22.97	22.28
23	18.40	18.05	20.18	22.90	21.06	20.69	19.40	18.92	21.54	21.45	23.06	22.20
24	18.43	18.04	20.28	22.64	20.94	20.80	19.25	18.99	21.97	21.44	23.17	22.13
25	18.39	18.04	20.52	22.10	20.91	20.90	19.23	19.01	22.18	21.39	23.38	22.06
26	18.43	18.02	20.83	22.21	20.90	20.96	19.24	18.96	22.12	21.32	23.51	22.07
27	18.42	17.98	21.00	22.16	20.85	20.98	19.26	18.92	21.98	21.38	23.62	22.04
28	18.40	17.94	21.02	22.08	20.81	20.94	19.28	18.86	21.84	21.36	23.67	22.10
29	18.34	17.90	21.05	22.05	---	20.82	19.26	18.84	21.79	21.33	23.66	22.12
30	18.31	17.88	20.98	22.06	---	20.87	19.31	18.75	21.82	21.32	23.70	22.20
31	18.24	---	21.47	22.02	---	20.71	---	18.68	---	21.42	23.72	---
MAX	19.98	18.41	21.47	23.59	21.94	21.02	20.70	19.40	22.18	21.86	23.72	23.70
*PREC	2.39	2.47	15.57	0.11	2.96	5.52	3.76	3.91	5.73	10.20	7.83	4.09

CAL YR 2002 MAX 21.47
WTR YR 2003 MAX 23.72



HILLSBOROUGH COUNTY—Continued

WELL NUMBER.--275724082221001. Structure 160 Well near Tampa, FL.

LOCATION.--Lat 27°57'24", long 82°22'10" (1927 North American datum), in NE $^1/_4$ SE $^1/_4$ sec.14, T.29 S., R.19 E., Hydrologic Unit 03100206, on right bank, 50 ft upstream from structure S-160 on Tampa Bypass Canal, at southeastern city limits of Tampa, and 0.4 mi north of State Highway 60.

AQUIFER.--Tampa limestone of Miocene Age, Geologic Unit 122TAMP.

WELL CHARACTERISTICS.--Drilled, unused industrial, artesian well, diameter 10 in., depth 240 ft, cased to 85 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 14.95 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 2.98 ft above land-surface datum.

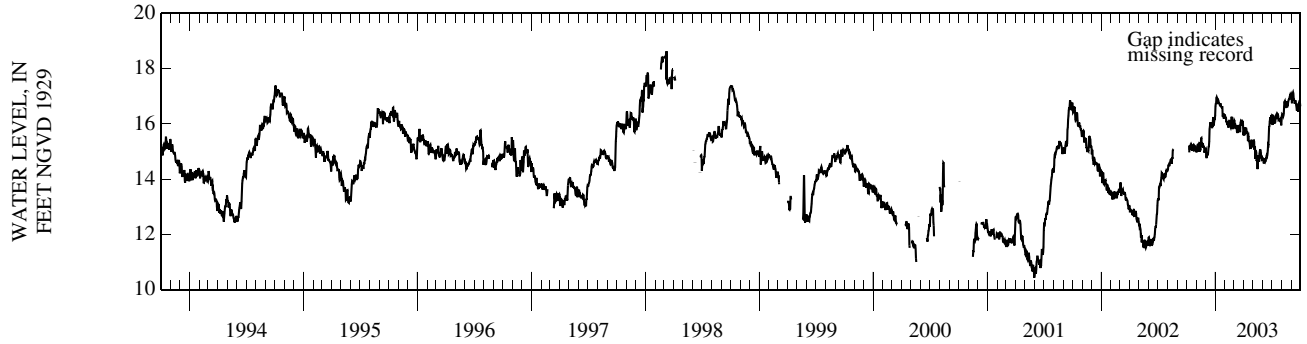
REMARKS.--Water level affected by tidal fluctuations.

PERIOD OF RECORD.--April 1971 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 18.63 ft NGVD, Mar. 9, 1998; lowest, 8.37 ft NGVD, May 5, 1971.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	14.97	15.11	16.64	16.30	16.09	15.59	15.29	14.77	16.28	16.13	17.03
2	---	15.02	14.97	16.73	16.27	16.14	15.70	15.27	14.75	16.25	16.29	16.95
3	---	15.16	14.82	16.76	16.20	16.11	15.72	15.39	14.66	15.96	16.36	16.75
4	---	15.22	14.76	16.93	16.19	15.90	15.59	15.40	14.74	16.30	16.35	16.97
5	---	15.25	14.92	16.97	16.06	15.88	15.83	15.35	14.57	16.30	16.27	17.05
6	---	15.25	14.86	16.95	16.10	15.90	15.87	15.07	14.72	16.27	16.25	17.11
7	---	15.00	14.90	16.72	16.02	15.86	15.78	15.17	14.72	16.19	16.29	17.14
8	---	15.06	14.90	16.77	15.96	15.83	15.76	15.16	14.71	16.01	16.38	17.09
9	14.97	15.27	15.04	16.85	16.04	15.96	15.86	14.74	14.68	16.08	16.64	16.90
10	15.22	15.30	15.17	16.87	16.06	15.91	15.81	15.05	14.64	16.06	16.79	16.88
11	15.07	15.29	15.19	16.83	15.87	15.72	15.73	15.02	14.67	16.02	16.81	16.85
12	15.14	15.00	15.37	16.77	15.90	15.71	15.70	14.99	14.76	16.09	16.69	16.73
13	15.22	15.07	15.81	16.76	15.92	15.67	15.70	14.65	14.79	16.28	16.63	16.81
14	15.25	15.04	15.89	16.73	15.94	15.74	15.64	14.70	14.86	16.30	16.62	16.86
15	15.27	15.17	16.02	16.69	16.08	15.74	15.38	14.78	14.87	16.21	16.64	16.81
16	15.24	15.48	16.03	16.70	16.11	15.85	15.54	14.36	14.84	16.21	16.79	16.73
17	15.07	15.49	16.06	16.75	16.14	15.96	15.56	14.74	14.91	16.25	16.78	16.66
18	15.03	15.23	15.92	16.66	15.91	15.92	15.38	14.87	15.04	16.20	16.71	16.57
19	15.16	15.17	15.95	16.65	15.88	15.87	15.38	14.77	15.26	16.36	16.60	16.48
20	15.21	15.28	16.02	16.62	15.95	15.82	15.37	14.75	15.24	16.34	16.68	16.69
21	15.22	15.28	15.88	16.60	16.07	15.70	15.29	14.64	15.62	16.28	16.65	16.70
22	15.02	15.27	15.88	16.60	16.26	16.00	15.15	14.91	15.88	16.15	16.79	16.70
23	15.07	15.14	15.90	16.64	16.14	16.07	15.16	15.00	15.90	16.16	16.84	16.50
24	15.06	15.19	16.13	16.26	15.92	16.04	15.10	15.08	16.07	16.14	16.88	16.44
25	15.01	15.16	16.25	16.29	15.81	15.95	15.14	15.05	16.17	16.10	16.90	16.66
26	15.21	15.10	15.96	16.37	15.91	16.08	15.40	15.04	16.24	16.13	16.87	16.76
27	15.19	14.96	15.97	16.26	15.95	16.15	15.40	14.94	16.02	16.13	16.98	16.80
28	15.16	15.03	16.10	16.19	15.87	15.98	15.34	14.80	16.22	16.15	17.02	16.79
29	15.13	14.97	16.16	16.28	---	16.09	15.20	14.81	16.32	16.08	16.98	16.77
30	15.10	15.10	16.17	16.33	---	16.11	15.19	14.71	16.23	16.06	17.05	16.64
31	15.06	---	16.31	16.32	---	15.85	---	14.72	---	15.95	17.08	---
MAX	---	15.49	16.31	16.97	16.30	16.15	15.87	15.40	16.32	16.36	17.08	17.14



HILLSBOROUGH COUNTY—Continued

WELL NUMBER.--275802082044701. Fletcher Lett Well near Plant City, FL.

LOCATION.--Lat 27°58'02", long 82°04'47" (1927 North American datum), in SW $^1/_4$ SE $^1/_4$ sec.11, T.29 S., R.22 E., Hydrologic Unit 03100204, 60 ft north of Trapnell Road, 2.6 mi east of State Highway 39, and 3.0 mi south of Plant City.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, irrigation, artesian well, diameter 8 in., depth 530 ft, cased to 100 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Land-surface datum is 122.60 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of access hole in pump base, 1.0 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby irrigation wells.

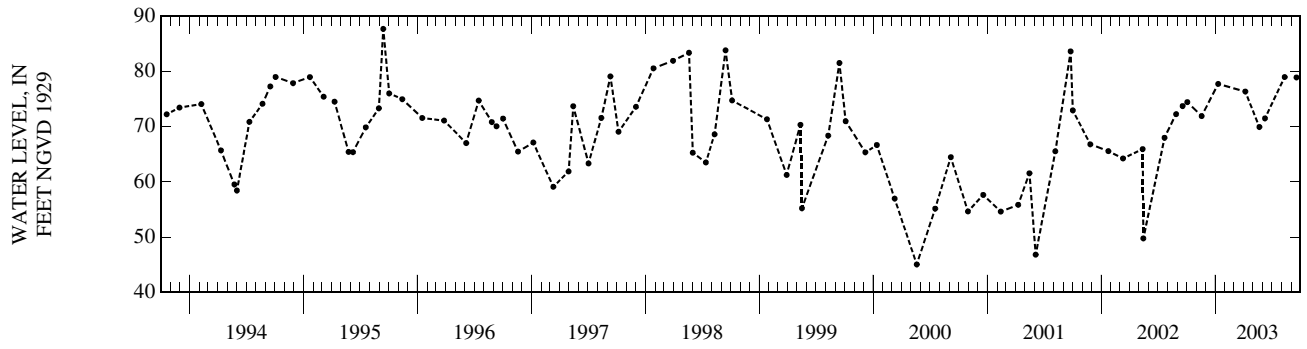
PERIOD OF RECORD.--November 1963 to current year (periodic). Records of water levels prior to January 1974 are available in files of the Geological Survey. The figures of water level as elevation, in feet NGVD, prior to Oct. 1, 1979 are in error. Correct elevations for data published prior to this date may be obtained by using datum correction of -1.40 ft.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 87.68 ft NGVD, Sept. 13, 1995; lowest measured, 43.00 ft NGVD, May 13, 1975.

WATER SURFACE ELEVATION IN FEET (NGVD1929), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03	74.42	JAN 10	77.71	MAY 22	69.91	AUG 11	78.96
NOV 18	71.89	APR 07	76.34	JUN 09	71.48	SEP 18	78.88

WATER YEAR 2003 LOWEST 69.91 MAY 22, 2003 HIGHEST 78.96 AUG 11, 2003



HILLSBOROUGH COUNTY—Continued

WELL NUMBER.--280005082324201. ROMP TR 12-3 SWNN Replacement Well near Tampa, FL.

LOCATION.--Lat 28°00'05", long 82°32'42" (1927 North American datum), in NW $^1/_4$ SE $^1/_4$ sec.31, T.28 S., R.21 E., Hydrologic Unit 03100206, at intersection Southern Comfort Boulevard and Idlewild Avenue, 0.5 mi north of State Highway 580, and 5.0 mi west of Tampa.

AQUIFER.--Upper Floridan aquifer of Oligocene Age, Geologic Unit 123SWNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 342 ft, cased to 294 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 19.25 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 3.84 ft above land-surface datum.

REMARKS.--Drilled in June 1992 as a replacement for ROMP TR 12-3 SWNN Well near Tampa (280034082323702) which was destroyed by construction of Veterans Expressway.

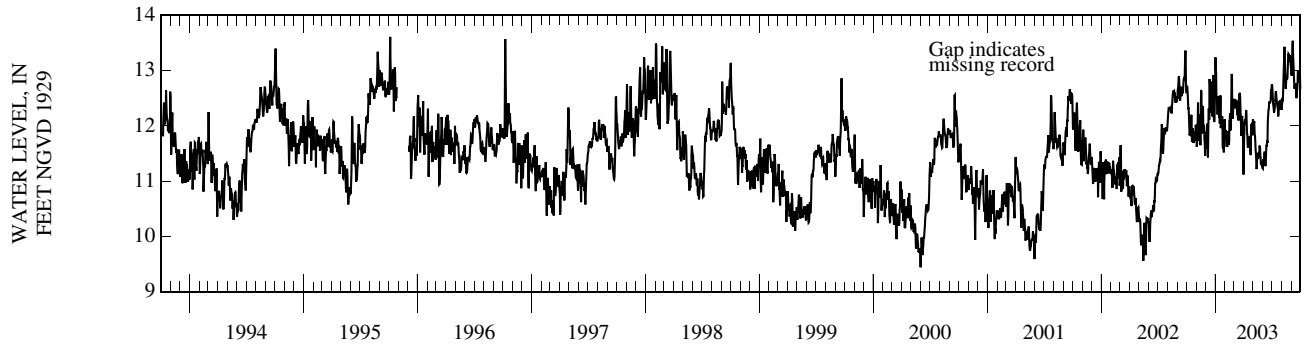
PERIOD OF RECORD.--October 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 13.61 ft NGVD, Oct. 5, 1995; lowest, 9.44 ft NGVD, May 31, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.59	11.76	11.89	13.24	11.94	12.37	11.12	12.12	11.24	12.75	12.29	12.98
2	12.72	11.62	11.67	13.02	11.75	12.49	11.58	12.01	11.23	12.71	12.41	12.91
3	12.71	11.67	11.66	12.97	11.79	12.32	11.84	11.98	11.32	12.60	12.41	13.05
4	12.61	11.98	11.59	12.51	11.92	12.36	12.05	11.99	11.40	12.49	12.46	13.14
5	12.47	12.08	11.95	12.51	11.72	12.41	12.07	12.09	11.36	12.41	12.45	13.45
6	12.32	12.42	12.04	12.53	11.62	12.46	12.06	12.01	11.38	12.36	12.56	13.54
7	12.32	11.83	11.54	12.23	11.73	12.46	12.11	11.85	11.52	12.31	12.71	13.30
8	12.20	11.73	11.43	12.21	11.68	12.34	12.11	11.81	11.52	12.24	12.93	13.17
9	11.99	12.01	11.68	12.44	11.67	12.46	12.27	11.71	11.31	12.26	13.18	13.00
10	11.83	12.21	12.29	12.54	11.89	12.43	12.28	11.55	11.27	12.32	13.43	12.84
11	11.85	12.18	12.32	12.52	11.89	12.28	12.07	11.50	11.32	12.42	13.26	12.70
12	11.84	12.00	12.11	12.22	11.77	12.22	11.86	11.37	11.50	12.47	13.04	12.67
13	11.86	11.81	12.85	12.15	11.66	12.22	11.85	11.22	11.64	12.60	12.82	12.74
14	11.90	11.65	12.76	12.17	11.75	12.16	11.67	11.28	11.64	12.63	12.67	12.73
15	12.18	12.10	12.30	12.04	12.09	12.15	11.60	11.50	11.64	12.54	12.70	12.77
16	12.20	12.65	12.26	12.17	12.10	12.10	11.71	11.42	11.73	12.47	12.83	12.69
17	11.94	12.63	12.26	12.55	12.23	12.47	11.80	11.42	11.69	12.43	12.86	12.50
18	11.71	12.01	12.42	11.96	11.96	12.55	11.76	11.40	12.08	12.38	12.85	12.53
19	11.86	11.86	12.52	12.04	11.92	12.55	11.72	11.51	12.19	12.34	12.85	12.62
20	11.90	11.98	12.80	12.06	12.06	12.60	11.73	11.51	12.28	12.34	12.88	12.67
21	11.96	12.34	12.27	12.06	12.38	12.54	11.80	11.42	12.30	12.17	13.08	12.77
22	11.85	12.36	12.20	12.16	12.94	12.36	11.80	11.63	12.41	12.22	13.23	12.99
23	11.69	11.94	12.17	12.17	12.92	12.12	11.57	11.63	12.44	12.38	13.30	12.97
24	11.77	11.88	12.74	11.65	12.20	12.01	11.47	11.58	12.42	12.45	13.29	12.79
25	11.88	12.02	12.92	11.59	12.13	11.82	11.90	11.44	12.42	12.37	13.24	12.91
26	11.88	11.92	12.27	11.82	12.20	11.98	12.02	11.42	12.43	12.30	13.23	12.92
27	11.73	11.74	12.12	11.82	12.32	12.15	12.03	11.32	12.45	12.36	13.28	12.93
28	11.78	11.70	12.07	11.52	12.40	12.18	11.89	11.31	12.66	12.47	13.16	12.92
29	11.84	11.46	12.11	11.80	---	12.06	11.83	11.30	12.57	12.44	13.17	12.91
30	12.02	11.87	12.36	12.03	---	11.97	11.86	11.31	12.71	12.45	13.10	12.67
31	11.90	---	12.93	12.12	---	11.43	---	11.36	---	12.37	13.05	---
MAX	12.72	12.65	12.93	13.24	12.94	12.60	12.28	12.12	12.71	12.75	13.43	13.54

CAL YR 2002 MAX 13.36
WTR YR 2003 MAX 13.54



HILLSBOROUGH COUNTY—Continued

WELL NUMBER.--280022082210501. SWFWMD Well west of Vandenberg Airport near Temple Terrace, FL.

LOCATION.--Lat 28°00'22", long 82°21'05" (1927 North American datum), in NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.31, T.28 S., R.20 E., Hydrologic Unit 03100206, 0.9 mi northeast of intersection Interstate 4 and U. S. Highway 301, and 3.4 mi southeast of Temple Terrace.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 37 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

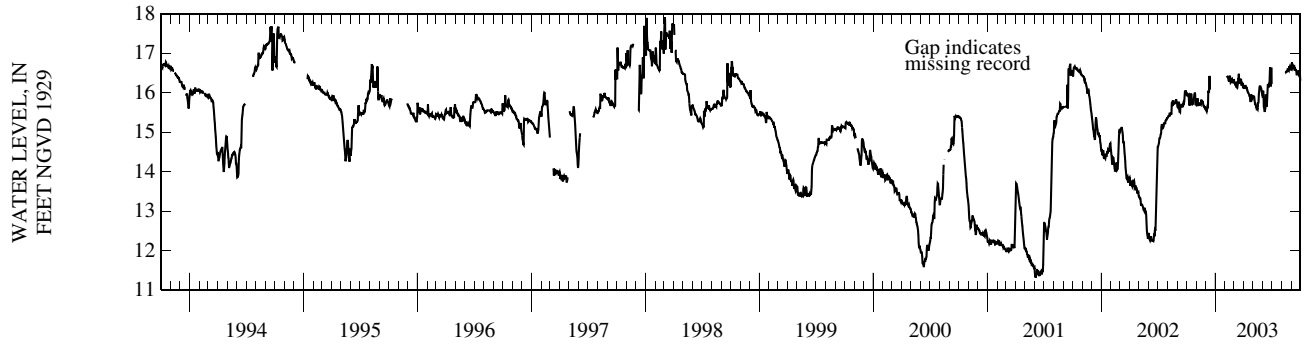
DATUM.--Land-surface datum is 17.98 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 1.94 ft above land-surface datum.

PERIOD OF RECORD.--December 1976 to June 1978 (periodic); July 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 17.92 ft NGVD, Mar. 3, 1998; lowest, 11.32 ft NGVD, June 4, 2001.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.97	15.70	15.60	---	---	16.33	16.13	15.91	15.92	---	---	16.61
2	15.98	15.72	15.57	---	---	16.29	16.13	15.94	15.93	---	---	16.60
3	15.98	15.80	15.56	---	---	16.26	16.18	15.91	16.06	---	---	16.76
4	15.95	15.87	15.54	---	---	16.24	16.18	15.90	15.96	---	---	16.76
5	15.94	15.82	15.58	---	---	16.26	16.18	15.90	15.66	---	---	16.73
6	15.93	15.68	15.64	---	16.43	16.26	16.16	15.86	15.62	---	---	16.67
7	15.94	15.67	15.63	---	16.42	16.23	16.18	15.79	15.58	---	---	16.71
8	15.83	15.73	15.64	---	16.41	16.20	16.18	15.73	15.52	---	---	16.65
9	15.71	15.73	16.03	---	16.41	16.22	16.15	15.73	15.58	---	---	16.65
10	15.70	15.73	16.06	---	16.41	16.19	16.13	15.70	15.62	---	---	16.64
11	15.68	15.72	16.00	---	16.37	16.14	16.13	15.66	15.94	---	---	16.65
12	15.94	15.73	16.11	---	16.32	16.13	16.09	15.64	15.94	---	---	16.57
13	15.98	15.74	16.43	---	16.31	16.20	16.08	15.61	15.66	---	---	16.61
14	15.91	15.71	16.11	---	16.29	16.24	16.04	15.62	15.69	---	16.54	16.59
15	15.98	15.70	16.12	---	16.39	16.36	16.02	15.60	15.66	---	16.53	16.59
16	15.96	15.79	---	---	16.42	16.37	16.01	15.59	15.86	---	16.54	16.59
17	15.80	15.83	---	---	16.42	16.49	16.00	15.76	16.03	---	16.54	16.56
18	15.69	15.77	---	---	16.36	16.29	15.99	15.73	16.20	---	16.55	16.47
19	15.71	15.81	---	---	16.27	16.26	15.96	15.76	16.20	---	16.55	16.47
20	15.83	15.77	---	---	16.28	16.26	15.93	15.96	16.13	---	16.56	16.47
21	15.76	15.77	---	---	16.31	16.34	15.91	16.06	16.20	---	16.62	16.50
22	15.75	15.74	---	---	16.35	16.33	15.90	16.14	16.19	---	16.59	16.51
23	15.81	15.70	---	---	16.36	16.34	15.83	16.17	16.17	---	16.57	16.46
24	15.86	15.67	---	---	16.31	16.34	15.77	16.17	16.39	---	16.56	16.57
25	15.91	15.67	---	---	16.25	16.23	15.91	16.17	16.65	---	16.66	16.50
26	15.89	15.66	---	---	16.28	16.19	15.96	16.16	16.44	---	16.66	16.46
27	16.01	15.64	---	---	16.26	16.26	15.91	16.14	16.17	---	16.66	16.47
28	15.96	15.64	---	---	16.33	16.26	15.89	16.12	16.19	---	16.68	16.47
29	15.72	15.61	---	---	---	16.22	15.89	16.05	16.64	---	16.65	16.45
30	15.72	15.61	---	---	---	16.24	15.87	16.02	16.23	---	16.62	16.31
31	15.72	---	---	---	---	16.15	---	15.98	---	---	16.60	---
MAX	16.01	15.87	---	---	---	16.49	16.18	16.17	16.65	---	---	16.76



HILLSBOROUGH COUNTY—Continued

WELL NUMBER.--280038082340201. Channel G BM Deep Well near Tampa, FL.

LOCATION.--Lat 28°00'38", long 82°34'02" (1927 North American datum), in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.35, T.28 S., R.17 E., Hydrologic Unit 03100206, 40 ft south of Channel G, 100 ft west of Webb Road, and 8.6 mi northwest of Tampa.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 120 ft, cased to 115 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Land-surface datum is 7.80 ft above National Geodetic Vertical Datum of 1929 (levels by Southwest Florida Water Management District). Measuring point: Top of shelter floor, 1.50 ft above land-surface datum.

REMARKS.--Water level affected by tidal fluctuations.

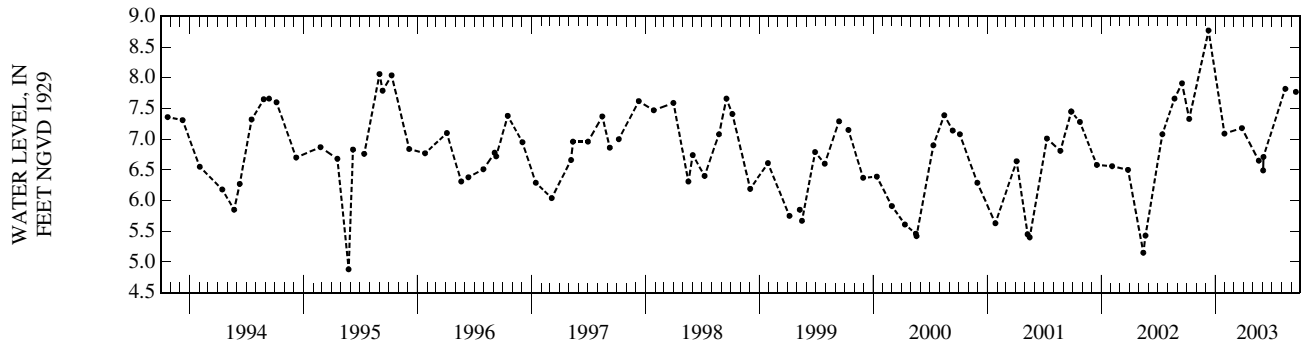
PERIOD OF RECORD.--September 1975 to September 1981; October 1981 to current year (periodic).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.77 ft NGVD, Dec. 10, 2002; lowest, 4.56 ft NGVD, Apr. 3, 1976.

WATER SURFACE ELEVATION IN FEET (NGVD1929), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	7.33	JAN 30	7.09	MAY 20	6.65	JUN 04	6.71	SEP 16	7.77
DEC 10	8.77	MAR 27	7.18	JUN 03	6.49	AUG 13	7.82		

WATER YEAR 2003 LOWEST 6.49 JUN 03, 2003 HIGHEST 8.77 DEC 10, 2002



HILLSBOROUGH COUNTY—Continued

WELL NUMBER.--280053082350202. Sheldon Road Deep Well near Citrus Park, FL.

LOCATION.--Lat 28°00'53", long 82°35'02" (1927 North American datum), in NE $^1/_4$ SE $^1/_4$ sec.27, T.28 S., R.17 E., Hydrologic Unit 03100206, 25 ft west of State Highway 589, and 5.5 mi south of Citrus Park.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 330 ft, cased to 315 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 9.45 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 3.57 ft above land-surface datum.

REMARKS.--Water level affected by tidal fluctuations.

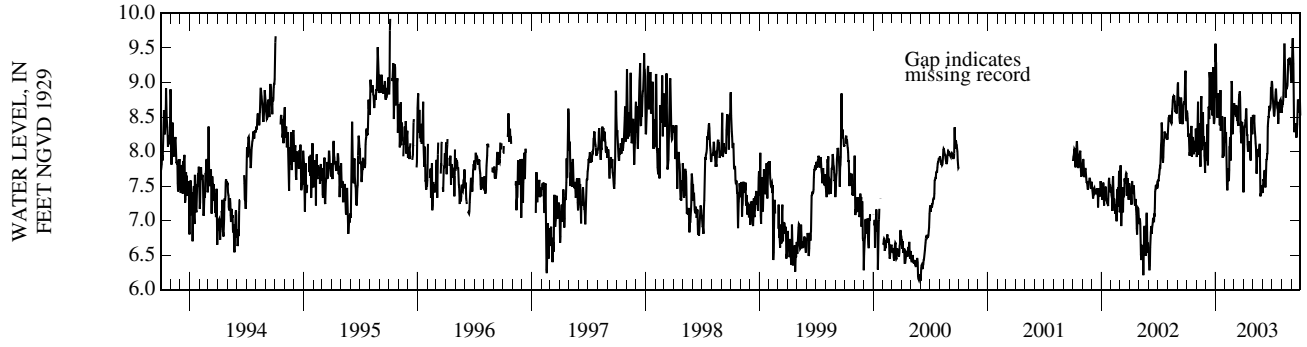
PERIOD OF RECORD.--December 1968 to February 1973 (periodic); March 1973 to September 2000; October 2000 to September 2001 (periodic); October 2001 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 10.25 ft NGVD, Sept. 1, 1985; lowest measured, 5.80 ft NGVD, May 9, 2001.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.44	8.04	8.13	9.56	8.31	8.58	7.41	8.53	7.42	9.02	8.56	9.05
2	8.59	7.92	7.95	9.31	8.13	8.70	7.87	8.45	7.40	8.96	8.66	9.00
3	8.55	7.98	7.95	9.28	8.16	8.53	8.12	8.43	7.53	8.82	8.64	9.12
4	8.48	8.27	7.87	8.80	8.28	8.54	8.35	8.41	7.60	8.75	8.69	9.22
5	8.36	8.44	8.20	8.80	8.08	8.58	8.37	8.53	7.57	8.72	8.69	9.55
6	8.21	8.72	8.39	8.83	7.79	8.63	8.37	8.44	7.63	8.65	8.74	9.64
7	8.26	8.10	7.88	8.49	7.51	8.67	8.45	8.34	7.72	8.58	8.85	9.40
8	8.22	7.95	7.80	8.51	7.44	8.50	8.45	8.27	7.72	8.51	9.06	9.27
9	8.09	8.19	8.06	8.77	7.53	8.67	8.61	8.21	7.51	8.52	9.30	8.83
10	7.94	8.41	8.65	8.83	7.74	8.61	8.61	8.12	7.48	8.59	9.56	8.39
11	7.99	8.34	8.64	8.83	7.74	8.49	8.42	8.06	7.53	8.70	9.39	8.28
12	7.97	8.15	8.47	8.54	7.71	8.46	8.23	7.90	7.73	8.77	9.20	8.31
13	7.95	8.03	9.15	8.49	7.57	8.46	8.25	7.68	7.86	8.86	8.97	8.36
14	8.01	7.78	9.07	8.51	7.73	8.41	8.10	7.79	7.89	8.91	8.78	8.34
15	8.35	8.25	8.62	8.38	8.06	8.41	8.01	8.01	7.88	8.81	8.86	8.41
16	8.37	8.76	8.62	8.53	8.07	8.37	8.01	7.97	7.96	8.73	8.93	8.38
17	8.13	8.80	8.60	8.89	8.21	8.72	8.11	7.92	7.97	8.71	8.94	8.20
18	7.92	8.11	8.75	8.30	7.94	8.82	8.08	7.95	8.36	8.64	8.92	8.22
19	8.10	8.02	8.85	8.39	7.87	8.82	8.05	8.04	8.43	8.62	8.93	8.32
20	8.17	8.18	9.15	8.41	8.13	8.87	8.08	7.99	8.50	8.58	8.96	8.40
21	8.21	8.55	8.63	8.39	8.47	8.78	8.15	7.95	8.50	8.40	9.13	8.53
22	8.15	8.57	8.57	8.51	9.02	8.54	8.13	8.10	8.62	8.48	9.26	8.74
23	7.96	8.17	8.52	8.50	8.98	8.29	7.92	8.10	8.66	8.65	9.34	8.74
24	8.05	8.08	9.07	7.91	8.27	8.23	7.87	7.54	8.63	8.72	9.33	8.58
25	8.15	8.22	9.22	7.97	8.25	8.12	8.26	7.35	8.62	8.64	9.27	8.57
26	8.14	8.12	8.54	8.19	8.37	8.28	8.42	7.39	8.64	8.57	9.30	8.72
27	8.00	7.94	8.40	8.19	8.48	8.41	8.50	7.37	8.70	8.62	9.36	8.73
28	8.05	7.86	8.41	7.93	8.58	8.43	8.28	7.42	8.93	8.74	9.26	8.72
29	8.10	7.69	8.48	8.20	---	8.34	8.25	7.41	8.84	8.75	9.28	8.73
30	8.33	8.06	8.76	8.40	---	8.28	8.28	7.45	8.99	8.70	9.18	8.52
31	8.17	---	9.30	8.50	---	7.65	---	7.51	---	8.62	9.12	---
MAX	8.59	8.80	9.30	9.56	9.02	8.87	8.61	8.53	8.99	9.02	9.56	9.64

CAL YR 2002 MAX 9.30
WTR YR 2003 MAX 9.64



HILLSBOROUGH COUNTY—Continued

WELL NUMBER.--280055082222701. USCE Well TBC-09 near Temple Terrace, FL.

LOCATION.--Lat 28°00'55", long 82°22'27" (1927 North American datum), in NW 1/4 SE 1/4 sec.26, T.28 S., R.19 E., Hydrologic Unit 03100206, 1.6 mi northwest of Intersection Interstate 4 and U.S. Highway 301, and 1.7 mi southeast of Temple Terrace.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 110 ft, cased to 68 ft.

DATUM.--Land-surface datum is 41.04 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.60 ft above land-surface datum.

REMARKS.--Well sampled for water quality.

WATER-QUALITY DATA

PERIOD OF RECORD.--June 1975 to current year.

WATER-QUALITY DATA, OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Elev-ation, feet above NGVD (72020)	Color, water, fltrd, Pt-Co units (00080)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Potas-sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)
SEP 2003 02...	1009	21.19	<5	482	23.5	74.0	8.00	0.80	11.0	24.0	0.2	14.0	55.0

Date	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Nitrite water, unfltrd mg/L as N (00615)	Ortho-phos-phate, water, unfltrd mg/L as P (70507)	Phos-phorus, water, unfltrd mg/L (00665)	Alum-inum, water, unfltrd recover-able, ug/L (01105)	Arsenic water unfltrd ug/L (01002)	Cadmium water, unfltrd ug/L (01027)	Chrom-ium, water, unfltrd recover-able, ug/L (01034)	Copper, water, unfltrd recover-able, ug/L (01042)	Iron, water, unfltrd recover-able, ug/L (01045)
SEP 2003 02...	280	<0.20	0.07	<0.020	<0.01	0.040	0.07	<3	3	<1.0	<1	<1.0	66

Date	Lead, water, unfltrd recover-able, ug/L (01051)	Mercury water, unfltrd recover-able, ug/L (71900)	Nickel, water, unfltrd recover-able, ug/L (01067)	Stront-ium, water, fltrd, ug/L (01080)	Zinc, water, unfltrd recover-able, ug/L (01092)
SEP 2003 02...	<1	<0.1	<1.0	1,150	<2

HILLSBOROUGH COUNTY—Continued

WELL NUMBER.--280058082202201. Eureka Springs Deep Well near Temple Terrace, FL.

LOCATION.--Lat 28°00'58", long 82°20'22" (1927 North American datum), in NE $^1/_4$ SE $^1/_4$ sec.30, T.28 S., R.20 E., Hydrologic Unit 03100206, 1.7 mi northwest of intersection Interstate 4 and U. S. Highway 301, and 2.5 mi southeast of Temple Terrace.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 37 ft, cased to 34.5 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 21.40 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 3.47 ft above land-surface datum.

REMARKS.--Well also sampled for water quality.

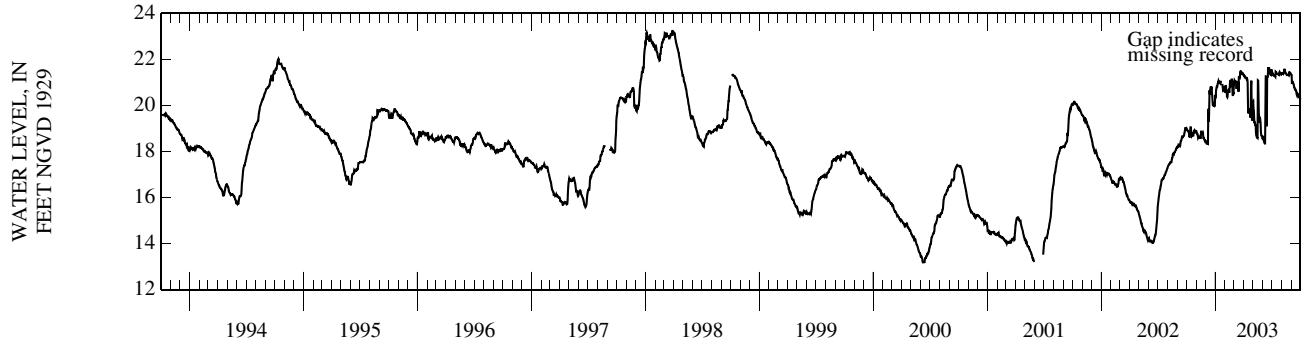
PERIOD OF RECORD.--June 1976 to September 1990; October 1990 to September 1991 (periodic); October 1991 to current year. Prior to October 1976, published as Eureka Springs Landfill Deep Well near Tampa; October 1976 to October 1992, published as Eureka Springs Landfill Deep Well near Temple Terrace.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 23.24 ft NGVD, Mar. 27, 28, 1998; lowest, 13.19 ft NGVD, June 7-12, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.96	18.88	18.46	20.44	20.57	21.05	21.35	20.16	18.56	21.49	21.38	21.34
2	18.94	18.83	18.40	20.42	20.81	21.02	21.30	20.18	18.55	21.44	21.41	21.33
3	18.94	18.77	18.38	20.67	20.88	21.09	21.28	19.82	18.68	21.41	21.41	20.93
4	18.92	18.76	18.35	20.75	20.80	21.06	21.29	19.77	18.61	21.35	21.39	20.98
5	18.89	18.69	18.36	20.82	20.54	20.99	21.27	19.38	18.47	21.35	21.37	21.03
6	18.89	18.68	18.39	20.82	20.65	21.02	21.24	19.23	18.42	21.31	21.36	21.03
7	18.86	18.59	18.34	20.82	20.38	21.04	21.20	19.27	18.38	21.30	21.42	20.98
8	18.81	18.61	18.33	20.91	20.36	21.04	21.21	19.24	18.35	21.32	21.43	20.95
9	18.67	18.61	19.82	20.96	20.45	20.99	21.21	19.13	18.35	21.32	21.51	20.92
10	18.66	18.62	19.82	21.02	20.61	20.72	21.21	19.19	19.93	21.29	21.59	20.82
11	18.61	18.60	19.30	21.07	20.67	20.97	21.15	18.82	21.26	21.27	21.54	20.80
12	18.86	18.60	19.88	21.02	20.68	20.99	21.16	18.71	21.25	21.25	21.51	20.74
13	19.05	18.64	20.66	21.01	20.61	20.79	21.13	18.67	20.26	21.47	21.46	20.70
14	19.05	18.59	20.48	20.98	20.59	20.79	21.01	18.61	19.54	21.46	21.41	20.71
15	18.87	18.59	20.69	20.97	20.56	21.03	20.37	18.60	19.10	21.43	21.40	20.69
16	18.83	18.84	20.78	21.01	20.81	20.60	19.70	18.59	21.17	21.40	21.38	20.66
17	18.77	18.90	20.78	21.07	21.05	21.23	19.66	21.09	21.21	21.38	21.36	20.60
18	18.68	18.78	20.83	20.95	21.04	21.23	19.76	21.08	21.24	21.37	21.33	20.51
19	18.70	18.82	20.71	20.88	20.98	21.22	19.67	20.18	21.65	21.37	21.32	20.46
20	18.73	18.83	20.81	---	20.87	21.21	19.73	19.61	21.61	21.37	21.33	20.50
21	18.71	18.85	20.52	---	20.80	21.42	19.72	19.51	21.69	21.36	21.33	20.47
22	18.66	18.78	20.40	---	21.16	21.41	19.88	19.27	21.63	21.35	21.33	20.47
23	18.76	18.60	20.17	20.94	21.11	21.48	19.47	19.50	21.56	21.33	21.32	20.42
24	18.87	18.60	19.99	20.81	20.94	21.47	19.54	19.45	21.46	21.32	21.31	20.44
25	18.89	18.57	20.13	20.69	20.49	21.42	20.81	19.28	21.38	21.44	21.44	20.42
26	18.92	18.54	19.99	20.70	20.42	21.41	21.08	19.23	21.35	21.45	21.44	20.41
27	18.90	18.51	19.99	20.68	20.57	21.32	20.58	18.87	21.33	21.42	21.43	20.39
28	18.86	18.48	20.00	20.81	20.48	21.40	19.38	18.71	21.32	21.40	21.43	20.37
29	18.83	18.45	19.98	20.71	---	21.41	19.38	18.69	21.57	21.38	21.42	20.33
30	18.84	18.47	20.00	20.76	---	21.40	19.68	18.67	21.50	21.36	21.39	20.27
31	18.89	---	20.42	20.68	---	21.38	---	18.63	---	21.35	21.36	---
MAX	19.05	18.90	20.83	---	21.16	21.48	21.35	21.09	21.69	21.49	21.59	21.34

CAL YR 2002 MAX 20.83



HILLSBOROUGH COUNTY—Continued

WELL NUMBER.--280058082202201. Eureka Springs Deep Well near Temple Terrace, FL.

WATER-QUALITY DATA

PERIOD OF RECORD.--March 1970-1974, 1976-1987, 1990-1992, 1997 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Elev-ation, feet above NGVD (72020)	Color, water, fltrd, Pt-Co units (00080)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Potas-sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)
SEP 2003 02...	0854	21.30	80	419	23.4	63.0	5.10	4.40	13.0	19.0	0.3	9.10	20.0

Date	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Nitrite water, unfltrd mg/L as N (00615)	Ortho-phos-phate, water, unfltrd mg/L as P (70507)	Phos-phorus, water, unfltrd mg/L (00665)	Alum-inum, water, unfltrd recover-able, ug/L (01105)	Arsenic water unfltrd ug/L (01002)	Cadmium water, unfltrd ug/L (01027)	Chrom-ium, water, unfltrd recover-able, ug/L (01034)	Copper, water, unfltrd recover-able, ug/L (01042)	Iron, water, unfltrd recover-able, ug/L (01045)
SEP 2003 02...	272	1.7	0.05	0.090	<0.01	0.030	0.15	388	16	<1.0	5	9.2	473

Date	Lead, water, unfltrd recover-able, ug/L (01051)	Mercury water, unfltrd recover-able, ug/L (71900)	Nickel, water, unfltrd recover-able, ug/L (01067)	Stront-ium, water, fltrd, ug/L (01080)	Zinc, water, unfltrd recover-able, ug/L (01092)
SEP 2003 02...	3	<0.1	1.4	730	50

HILLSBOROUGH COUNTY—Continued

WELL NUMBER.--280058082202202. Eureka Springs Shallow Well near Temple Terrace, FL.

LOCATION.--Lat 28°00'58", long 82°20'22" (1927 North American datum), in NE $^1/_4$ SE $^1/_4$ sec.30, T.28 S., R.20 E., Hydrologic Unit 03100206, 1.7 mi northwest of intersection Interstate 4 and U. S. Highway 301, and 2.5 mi southeast of Temple Terrace.

AQUIFER.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit 112NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 10 ft, cased to 4 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 21.19 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 3.47 ft above land-surface datum.

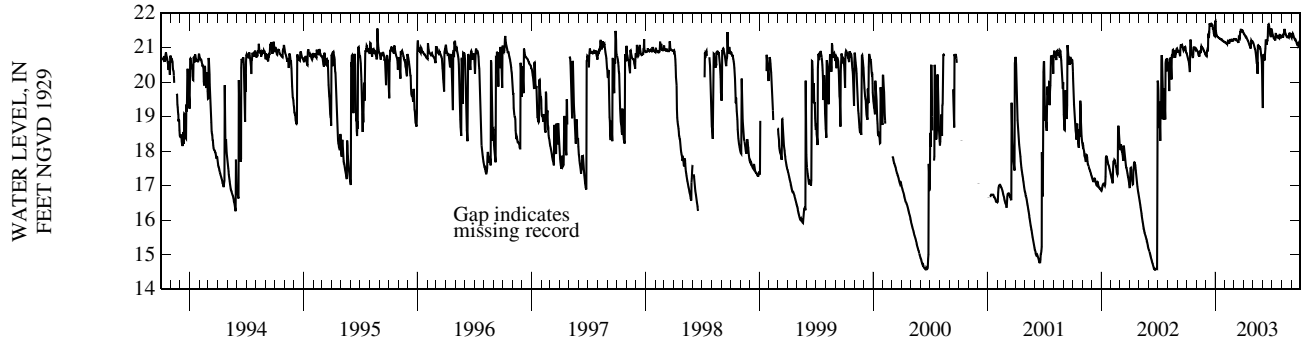
PERIOD OF RECORD.--June 1976 to current year. Prior to October 1976, published as Eureka Springs Landfill Shallow Well near Tampa; October 1976 to October 1992, published as Eureka Springs Landfill Shallow Well near Temple Terrace.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 21.77 ft NGVD, Jan. 1, 2003; lowest, 14.57 ft NGVD, June 21, 22, 23, 2002.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.84	20.95	20.82	21.77	21.16	21.25	21.43	21.16	19.75	21.48	21.32	21.31
2	20.80	20.94	20.78	21.50	21.14	21.25	21.41	21.15	19.25	21.43	21.34	21.29
3	20.77	20.91	20.76	21.43	21.13	21.25	21.39	21.12	20.78	21.40	21.35	21.37
4	20.73	20.89	20.75	21.37	21.13	21.25	21.38	21.09	20.79	21.37	21.33	21.39
5	20.69	20.88	20.89	21.35	21.13	21.25	21.36	21.05	20.79	21.34	21.31	21.39
6	20.65	20.88	20.93	21.33	21.12	21.24	21.35	21.03	20.76	21.32	21.31	21.41
7	20.62	20.83	20.91	21.32	21.13	21.23	21.33	21.00	20.65	21.29	21.36	21.39
8	20.57	20.78	20.89	21.31	21.11	21.24	21.31	20.96	20.63	21.27	21.39	21.35
9	20.50	20.77	21.38	21.31	21.16	21.24	21.32	20.94	20.85	21.27	21.46	21.33
10	20.42	20.77	21.40	21.30	21.19	21.23	21.31	20.86	20.97	21.25	21.54	21.30
11	20.29	20.74	21.28	21.29	21.18	21.21	21.28	20.79	21.21	21.23	21.50	21.28
12	21.02	20.89	21.44	21.28	21.16	21.20	21.26	20.69	21.21	21.21	21.45	21.25
13	21.23	20.90	21.70	21.28	21.15	21.19	21.24	20.59	21.15	21.40	21.41	21.23
14	21.17	20.87	21.67	21.27	21.14	21.17	21.22	20.60	21.12	21.40	21.39	21.24
15	20.98	20.84	21.66	21.26	21.14	21.16	21.20	20.58	21.09	21.38	21.38	21.22
16	20.95	20.99	21.65	21.26	21.22	21.14	21.19	20.24	21.21	21.35	21.36	21.20
17	20.88	21.04	21.63	21.25	21.22	21.29	21.17	21.06	21.21	21.33	21.33	21.18
18	20.84	21.02	21.63	21.24	21.21	21.28	21.14	21.07	21.32	21.31	21.31	21.14
19	20.77	21.01	21.63	21.23	21.19	21.27	21.11	21.05	21.64	21.33	21.30	21.11
20	20.73	21.00	21.68	21.23	21.19	21.26	21.08	21.03	21.67	21.33	21.31	21.13
21	20.70	20.99	21.67	21.22	21.20	21.45	21.05	21.00	21.68	21.32	21.31	21.13
22	20.77	20.98	21.66	21.23	21.23	21.45	21.04	20.99	21.65	21.30	21.32	21.11
23	21.00	20.94	21.65	21.22	21.23	21.52	21.01	21.02	21.56	21.28	21.30	21.08
24	21.01	20.92	21.53	21.20	21.21	21.52	20.97	21.01	21.46	21.27	21.29	21.05
25	21.01	20.91	21.59	21.19	21.20	21.49	21.09	20.98	21.40	21.37	21.40	21.07
26	21.00	20.89	21.47	21.19	21.20	21.48	21.21	20.93	21.35	21.37	21.41	21.12
27	20.97	20.88	21.41	21.18	21.20	21.51	21.19	20.84	21.33	21.35	21.41	21.10
28	20.97	20.86	21.37	21.17	21.22	21.51	21.17	20.76	21.33	21.34	21.41	21.12
29	20.95	20.83	21.34	21.17	---	21.50	21.15	20.70	21.55	21.31	21.40	21.13
30	20.98	20.81	21.33	21.17	---	21.49	21.15	20.54	21.48	21.29	21.36	21.12
31	20.97	---	21.76	21.16	---	21.46	---	20.20	---	21.29	21.34	---
MAX	21.23	21.04	21.76	21.77	21.23	21.52	21.43	21.16	21.68	21.48	21.54	21.41

CAL YR 2002 MAX 21.76
WTR YR 2003 MAX 21.77



HILLSBOROUGH COUNTY—Continued

WELL NUMBER.--280145082132501. Tampa Deep Well 15 near Dover, FL.

LOCATION.--Lat 28°01'50", long 82°13'25" (1927 North American datum), in NE ¼ SE ¼ sec.20, T.28 S., R.21 E., Hydrologic Unit 03100205, 0.3 mi north of Interstate 4, and 2.5 mi north of Dover.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 16 in., depth 413 ft, cased to 67 ft.

INSTRUMENTATION.--Water-stage recorder--60 minute interval.

DATUM.--Land-surface datum is 69.86 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 3.91 ft above land-surface datum.

REMARKS.--Water levels affected by pumping of nearby irrigation wells.

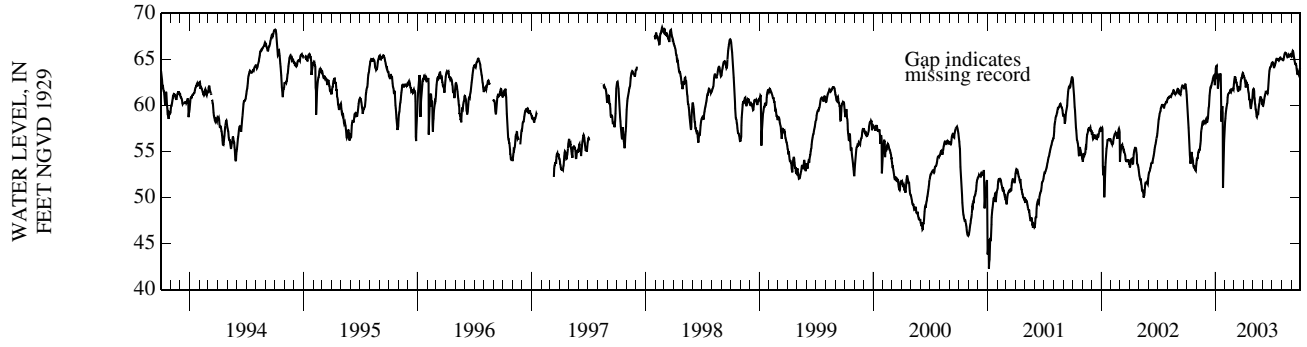
PERIOD OF RECORD.--November 1958 to February 1990; October 1991 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 71.91 ft NGVD, Sept. 15, 1959; lowest, 42.30 ft NGVD, Jan. 5, 2001.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61.15	53.69	58.42	63.49	58.21	62.29	63.17	61.60	60.22	64.64	65.04	65.31
2	60.51	54.13	58.49	64.03	58.59	62.63	63.18	61.76	59.98	64.67	65.03	65.29
3	59.95	54.13	58.19	64.22	59.09	62.90	63.08	61.80	59.97	64.69	65.04	65.40
4	59.29	54.29	58.26	64.30	59.39	63.07	63.04	61.73	60.18	64.62	65.04	65.63
5	58.60	54.31	58.25	64.33	59.69	63.07	62.82	61.55	60.32	64.55	64.95	65.82
6	58.05	54.70	58.24	62.87	59.89	63.04	62.62	60.90	60.57	64.57	64.91	65.92
7	57.57	54.87	58.44	63.33	60.11	62.71	62.45	60.74	60.79	64.26	64.96	65.87
8	56.89	54.98	58.62	63.35	60.21	62.43	61.96	60.23	61.00	64.05	65.17	65.69
9	56.28	55.05	59.19	61.85	60.87	62.58	62.10	60.07	61.14	64.26	65.32	65.46
10	55.51	55.27	59.71	62.13	61.13	62.49	62.28	59.55	61.26	64.40	65.52	65.22
11	54.64	55.13	59.83	62.57	61.23	62.25	62.48	59.53	61.46	64.38	65.66	65.00
12	54.15	55.23	60.39	62.85	61.30	62.12	62.39	59.24	61.44	64.49	65.71	64.83
13	53.68	55.56	61.06	63.14	61.33	61.81	62.25	58.82	61.46	64.69	65.67	64.59
14	53.95	55.82	61.43	63.23	61.36	61.64	62.22	58.75	61.50	64.84	65.64	64.52
15	54.29	56.19	61.75	63.23	61.29	61.59	61.94	58.90	61.43	65.00	65.66	64.54
16	54.94	57.07	61.94	63.36	61.40	61.60	61.71	59.03	61.36	65.07	65.66	64.46
17	54.82	57.32	61.94	63.47	61.58	61.78	61.47	59.12	61.31	65.07	65.59	64.37
18	54.51	57.53	62.06	63.30	61.68	61.98	61.33	59.10	61.48	65.03	65.44	63.99
19	54.42	57.83	62.12	59.60	61.72	61.96	60.86	59.54	61.78	64.99	65.32	63.76
20	54.18	58.06	62.30	58.25	61.61	61.79	60.57	59.84	62.26	65.01	65.23	63.45
21	54.00	58.25	62.42	59.16	61.52	61.78	60.72	60.07	62.79	64.98	65.24	63.47
22	53.60	58.28	62.53	59.68	61.63	62.03	60.34	60.18	63.34	64.91	65.38	63.65
23	53.36	58.06	62.65	59.93	61.68	62.63	59.92	60.63	63.72	64.86	65.48	63.57
24	53.31	58.13	62.90	59.28	61.78	62.80	59.73	60.78	63.95	64.92	65.37	63.45
25	53.38	58.28	63.02	51.07	61.78	62.96	59.73	60.92	64.09	64.96	65.33	63.37
26	53.35	58.06	63.15	52.14	61.78	62.98	59.99	60.97	64.17	65.06	65.46	63.56
27	53.12	58.07	63.22	53.78	61.85	63.06	60.24	60.77	64.18	65.17	65.46	63.55
28	53.07	58.17	63.18	54.69	61.78	63.31	60.44	60.63	64.21	65.21	65.53	63.93
29	52.96	58.29	63.24	56.11	---	63.44	60.65	60.67	64.40	65.19	65.56	63.93
30	52.91	58.30	62.21	56.75	---	63.53	61.07	60.56	64.55	65.11	65.48	64.03
31	53.41	---	62.86	57.48	---	63.47	---	60.21	---	65.06	65.44	---
MAX	61.15	58.30	63.24	64.33	61.85	63.53	63.18	61.80	64.55	65.21	65.71	65.92

CAL YR 2002 MAX 63.24
WTR YR 2003 MAX 65.92



HILLSBOROUGH COUNTY—Continued

WELL NUMBER.--280209082280301. ROMP 66 Deep Well at Sulphur Springs, FL.

LOCATION.--Lat 28°02'09", long 82°28'03" (1927 North American datum), in SW $^1/_4$ NW $^1/_4$ sec.24, T.28 S., R.18 E., Hydrologic Unit 03100205, 50 ft east of North Boulevard, and 0.2 mi north of intersection Busch Boulevard and North Boulevard in Sulphur Springs.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 8 in., depth 250 ft, cased to 42 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

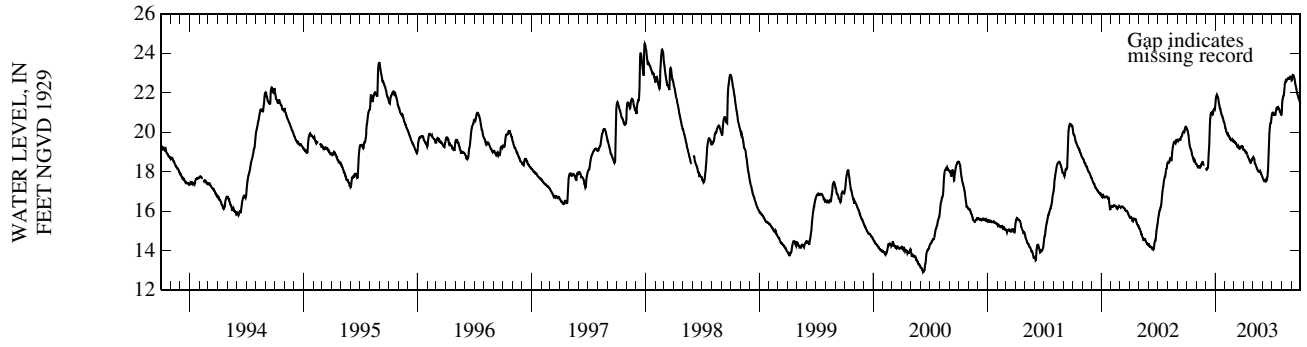
DATUM.--Land-surface datum is 38.08 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 4.00 ft above land-surface datum.

PERIOD OF RECORD.--August 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 24.51 ft NGVD, Dec. 29, 1997; lowest, 12.04 ft NGVD, June 29, 1977.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.22	18.40	---	21.49	20.29	19.56	19.12	18.73	17.74	20.91	20.90	22.72
2	20.17	18.38	18.19	21.69	20.22	19.54	19.11	18.75	17.68	20.98	21.10	22.64
3	20.14	18.34	18.14	21.79	20.19	19.52	19.11	18.70	17.66	21.01	21.50	22.65
4	20.10	18.30	18.11	21.85	20.09	19.52	19.12	18.69	17.59	21.01	21.66	22.78
5	20.01	18.26	18.12	21.88	20.02	19.48	19.10	18.67	17.57	21.01	21.73	22.86
6	19.92	18.23	18.20	21.91	20.00	19.48	19.07	18.62	17.58	21.00	21.80	22.91
7	19.83	18.24	18.21	21.86	19.98	19.47	19.05	18.45	17.57	20.97	21.84	22.90
8	19.68	18.26	18.22	21.84	19.90	19.44	18.99	18.43	17.54	20.90	21.87	22.90
9	19.48	18.29	18.48	21.81	19.89	19.44	19.00	18.40	17.52	20.91	22.00	22.86
10	19.38	18.29	18.85	21.75	19.91	19.39	18.99	18.37	17.51	20.90	22.23	22.82
11	19.29	18.25	19.09	21.62	19.85	19.36	18.98	18.32	17.52	20.89	22.43	22.75
12	19.23	18.22	19.37	21.49	19.85	19.28	18.93	18.27	17.59	20.89	22.49	22.68
13	19.19	18.22	19.90	21.43	19.82	19.28	18.87	18.24	17.63	20.97	22.55	22.56
14	19.16	18.24	20.40	21.35	19.79	19.27	18.80	18.17	17.61	21.11	22.60	22.46
15	19.12	18.27	20.68	21.23	19.75	19.28	18.77	18.15	17.59	21.18	22.59	22.40
16	19.06	18.36	20.84	21.19	19.71	19.21	18.75	18.13	17.65	21.24	22.58	22.33
17	18.97	18.36	20.93	21.19	19.72	19.28	18.73	18.08	17.77	21.24	22.61	22.22
18	18.90	18.41	20.98	21.07	19.68	19.24	18.69	18.04	17.95	21.22	22.68	22.15
19	18.85	18.46	21.01	21.01	19.64	19.19	18.65	18.04	18.22	21.28	22.70	22.05
20	18.79	18.49	21.02	20.93	19.61	19.20	18.60	18.03	18.79	21.28	22.72	21.97
21	18.74	18.50	20.94	20.90	19.62	19.19	18.55	18.01	19.18	21.29	22.74	21.92
22	18.70	18.48	20.92	20.86	19.61	19.20	18.54	18.00	19.60	21.23	22.76	21.89
23	18.63	18.38	20.90	20.84	19.60	19.22	18.48	18.04	19.97	21.21	22.74	21.85
24	18.68	18.34	20.94	20.73	19.64	19.28	18.46	18.06	20.20	21.20	22.68	21.78
25	18.66	18.31	21.05	20.71	19.59	19.30	18.48	18.02	20.35	21.15	22.73	21.72
26	18.60	---	21.13	20.68	19.59	19.31	18.59	17.97	20.46	21.11	22.74	21.71
27	18.57	---	21.17	20.61	19.60	19.30	18.62	17.94	20.50	21.06	22.79	21.66
28	18.50	---	21.19	20.54	19.55	19.30	18.64	17.88	20.50	21.04	22.83	21.59
29	18.48	---	21.20	20.53	---	19.27	18.62	17.86	20.67	21.01	22.83	21.55
30	18.42	---	21.18	20.48	---	19.26	18.68	17.84	20.79	20.91	22.81	21.48
31	18.42	---	21.29	20.38	---	19.15	---	17.78	---	20.89	22.77	---
MAX	20.22	---	---	21.91	20.29	19.56	19.12	18.75	20.79	21.29	22.83	22.91



HILLSBOROUGH COUNTY—Continued

WELL NUMBER.--280320082203801. ROMP 67 Avon Park Well near Temple Terrace, FL.

LOCATION.--Lat 28°03'20", long 82°20'38"(1927 North American datum), in NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.7, T.28 S., R.20 E., Hydrologic Unit 03100205, 0.1 mi north of Fowler Avenue, and 2.0 mi east of Temple Terrace.

AQUIFER.--Avon Park formation of Eocene Age, Geologic Unit 124AVPK.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 8 in., depth 490 ft, cased to 440 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 42.97 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 4.95 ft above land-surface datum.

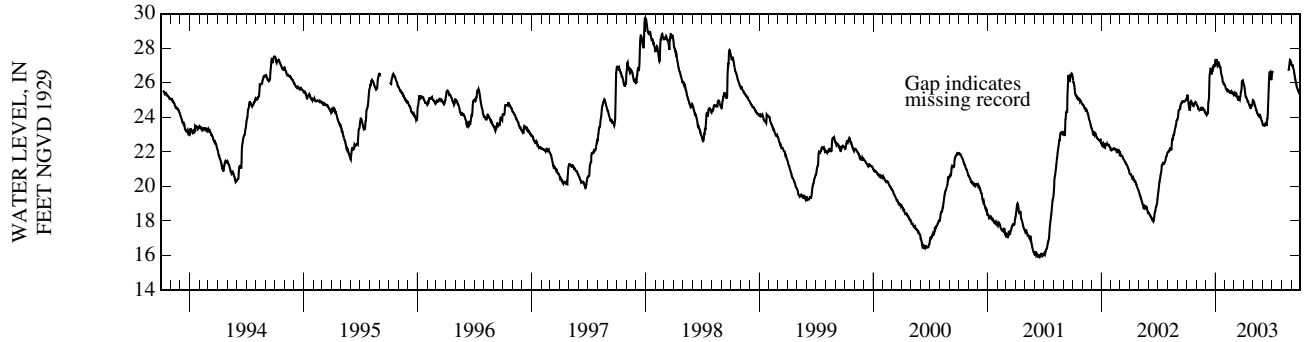
PERIOD OF RECORD.--September 1979 to current year. Records of water levels prior to October 1979 are available in files of the Geological Survey. Prior to October 1990, published as ROMP 67-1 Avon Park Well near Temple Terrace.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 31.78 ft NGVD, Oct. 2, 1979; lowest, 15.87 ft NGVD, June 13, 2001.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.05	24.80	24.26	27.32	25.85	25.41	26.00	24.99	23.64	26.50	---	27.12
2	25.17	24.75	24.20	27.37	25.77	25.40	25.94	24.98	23.55	26.63	---	27.06
3	25.31	24.69	24.17	27.24	25.72	25.36	25.86	24.94	23.54	26.63	---	27.02
4	25.26	24.67	24.13	27.37	25.67	25.40	25.77	24.91	23.54	26.58	---	27.02
5	25.12	24.64	24.18	27.31	25.63	25.34	25.63	24.87	23.55	---	---	26.99
6	24.93	24.61	24.25	27.17	25.63	25.34	25.46	24.83	23.57	---	---	27.00
7	24.78	24.50	24.24	27.04	25.58	25.31	25.28	24.71	23.54	---	---	26.91
8	24.62	24.51	24.24	26.97	25.53	25.36	25.18	24.67	23.47	---	---	26.83
9	24.49	24.49	24.82	27.00	25.56	25.37	25.18	24.61	23.56	---	---	26.77
10	24.44	24.48	24.95	27.19	25.59	25.29	25.15	24.57	23.57	---	---	26.65
11	24.38	24.42	25.00	27.18	25.57	25.23	25.12	24.50	23.66	---	---	26.52
12	24.60	24.44	25.89	27.14	25.53	25.16	25.06	24.41	23.64	---	---	26.42
13	24.86	24.45	26.42	27.11	25.50	25.12	25.00	24.39	23.63	---	---	26.28
14	24.89	24.44	26.53	27.04	25.50	25.09	24.92	24.27	23.59	---	---	26.20
15	24.93	24.44	26.63	26.94	25.50	25.06	24.92	24.25	23.51	---	---	26.11
16	24.89	24.54	26.80	26.90	25.46	24.96	24.91	24.23	23.90	---	---	26.02
17	24.85	24.55	26.87	26.90	25.48	25.16	24.87	24.15	23.92	---	---	25.89
18	24.79	24.50	26.72	26.73	25.44	25.14	24.81	24.13	24.21	---	---	25.82
19	24.79	24.54	26.61	26.57	25.42	25.07	24.74	24.10	24.63	---	---	25.75
20	24.76	24.56	26.49	26.48	25.42	25.03	24.69	24.12	25.17	---	---	25.71
21	24.71	24.56	26.65	26.42	25.46	25.18	24.65	24.04	25.65	---	---	25.65
22	24.66	24.52	26.65	26.35	25.49	25.21	24.67	24.03	26.24	---	---	25.59
23	24.65	24.44	26.68	26.29	25.46	25.44	24.56	24.14	26.50	---	26.77	25.59
24	24.78	24.45	26.90	26.09	25.39	25.48	24.49	24.14	26.64	---	26.72	25.53
25	24.79	24.45	26.95	26.00	25.40	25.56	24.63	24.08	26.54	---	26.93	25.48
26	24.79	24.45	26.89	26.04	25.40	25.78	24.73	23.96	26.58	---	27.02	25.54
27	24.78	24.41	26.96	25.96	25.37	26.06	24.66	23.94	26.38	---	27.21	25.55
28	24.85	24.31	26.99	25.92	25.34	26.10	24.68	23.86	26.23	---	27.32	25.50
29	24.88	24.28	26.98	25.93	---	26.12	24.72	23.82	26.15	---	27.30	25.46
30	24.86	24.29	26.93	25.89	---	26.14	24.89	23.79	26.26	---	27.26	25.42
31	24.84	---	27.23	25.88	---	26.01	---	23.73	---	---	27.21	---
MAX	25.31	24.80	27.23	27.37	25.85	26.14	26.00	24.99	26.64	---	---	27.12

CAL YR 2002 MAX 27.23



HILLSBOROUGH COUNTY—Continued

WELL NUMBER.--280503082143701. ROMP 68 Avon Park Well near Antioch, FL.

LOCATION.--Lat 28°05'03", long 82°14'37" (1927 North American datum), in SW ¼ SW ¼ sec.31, T.27 S., R.21 E., Hydrologic Unit 03100205, 2.0 mi north of Antioch, and 9.4 mi southwest of Zephyrhills.

AQUIFER.--Avon Park formation of Eocene Age, Geologic Unit 124AVPK.

WELL CHARACTERISTICS (corrected).--Drilled, observation, artesian well, diameter 8 in., depth 490 ft, cased to 440 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 56.00 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.39 ft above land-surface datum.

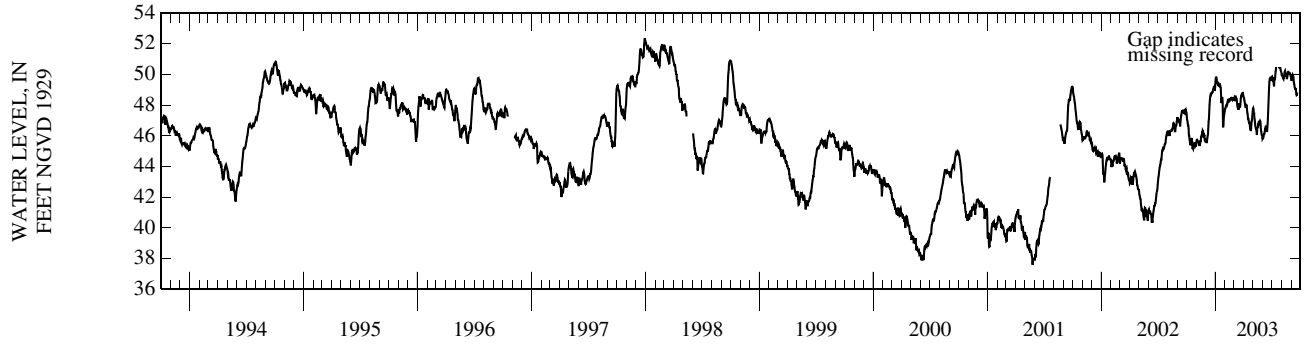
PERIOD OF RECORD.--August 1981 to current year. Prior to October 1990, published as ROMP 68-1 Avon Park Well near Antioch.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 52.36 ft NGVD, Dec. 29, 1997; lowest, 37.60 ft NGVD, May 25, 2001.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47.37	45.62	45.74	49.55	47.76	48.35	48.57	47.76	45.81	49.86	50.06	49.76
2	47.09	45.73	45.77	49.78	47.79	48.41	48.45	47.80	45.85	49.75	49.96	49.58
3	47.03	45.75	45.70	49.81	47.90	48.45	48.43	47.70	45.85	49.81	49.97	49.80
4	46.87	45.70	45.53	49.80	47.92	48.56	48.29	47.45	45.94	49.69	49.91	49.86
5	46.68	45.57	45.67	49.66	47.98	48.55	48.16	47.45	46.05	49.59	49.82	49.87
6	46.68	45.64	45.83	49.57	48.02	48.48	48.04	47.17	46.11	49.56	49.76	49.98
7	46.50	45.63	45.99	49.48	47.98	48.35	48.05	47.07	46.13	49.40	49.72	49.94
8	46.02	45.54	46.11	49.48	48.04	48.37	47.82	46.85	46.29	49.23	49.85	49.87
9	46.01	45.41	46.50	49.33	48.25	48.46	47.96	46.64	46.42	49.63	49.88	49.53
10	45.76	45.41	46.92	49.30	48.34	48.39	48.04	46.53	46.52	49.74	50.08	49.45
11	45.66	45.49	47.10	49.29	48.36	48.26	47.94	46.47	46.45	49.73	50.19	49.31
12	45.39	45.34	47.52	49.27	48.33	48.02	47.72	46.43	46.43	49.96	50.23	49.14
13	45.49	45.50	48.04	49.34	48.24	47.89	47.51	46.25	46.49	50.20	50.12	49.12
14	45.54	45.66	48.32	49.29	48.25	47.81	47.42	46.06	46.41	50.35	49.92	48.99
15	45.67	45.66	48.53	49.27	48.28	47.76	47.16	46.46	46.26	50.58	49.97	49.10
16	45.85	45.91	48.67	49.30	48.29	47.70	47.11	46.54	46.34	50.70	49.91	49.03
17	45.80	45.98	48.71	49.20	48.39	47.97	47.11	46.57	46.68	50.74	49.88	48.72
18	45.45	46.05	48.68	49.14	48.40	48.07	46.91	46.73	46.97	50.66	49.70	48.65
19	45.36	46.12	48.77	48.68	48.42	48.07	46.96	46.83	47.44	50.55	49.76	48.67
20	45.15	46.08	48.80	48.13	48.32	47.88	46.77	46.79	48.03	50.72	49.88	48.82
21	45.21	46.34	48.79	48.40	48.41	47.92	46.86	46.70	48.53	50.76	50.09	---
22	45.16	46.30	48.82	48.47	48.48	48.07	46.50	46.70	49.15	50.61	50.17	---
23	45.25	46.03	48.84	48.53	48.48	48.40	46.39	46.92	49.53	50.54	50.17	---
24	45.33	46.10	48.96	48.17	48.40	48.57	46.37	46.98	49.70	50.58	50.13	---
25	45.53	46.11	49.05	46.71	48.36	48.64	46.37	46.92	49.74	50.64	50.07	---
26	45.52	46.03	49.10	46.56	48.43	48.63	46.74	46.77	49.71	50.55	50.06	---
27	45.50	46.05	49.19	46.76	48.43	48.66	46.95	46.41	49.66	50.46	50.08	---
28	45.47	45.69	49.21	47.16	48.29	48.77	47.04	46.29	49.65	50.44	50.07	48.49
29	45.33	45.66	49.07	47.35	---	48.80	47.28	46.13	49.82	50.29	50.02	---
30	45.36	45.68	48.93	47.50	---	48.80	47.51	46.00	49.84	50.24	49.90	---
31	45.48	---	49.20	47.60	---	48.68	---	46.06	---	50.18	49.77	---
MAX	47.37	46.34	49.21	49.81	48.48	48.80	48.57	47.80	49.84	50.76	50.23	---

CAL YR 2002 MAX 49.21



HILLSBOROUGH COUNTY—Continued

WELL NUMBER.--280548082355701. St. Petersburg Deep Well E-100 near Citrus Park, FL.

LOCATION.--Lat 28°05'48", long 82°35'55" (1927 North American datum), in NW $^1/_4$ NW $^1/_4$ sec.34, T.27 S., R.17 E., Hydrologic Unit 03100206, at Cosme Water Plant, 1.2 mi west of State Highway 587, and 2.0 mi northwest of Citrus Park.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 10 in., depth 1,200 ft, cased to 656 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 41.23 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 1.60 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby wells.

PERIOD OF RECORD.--April 1972 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey.

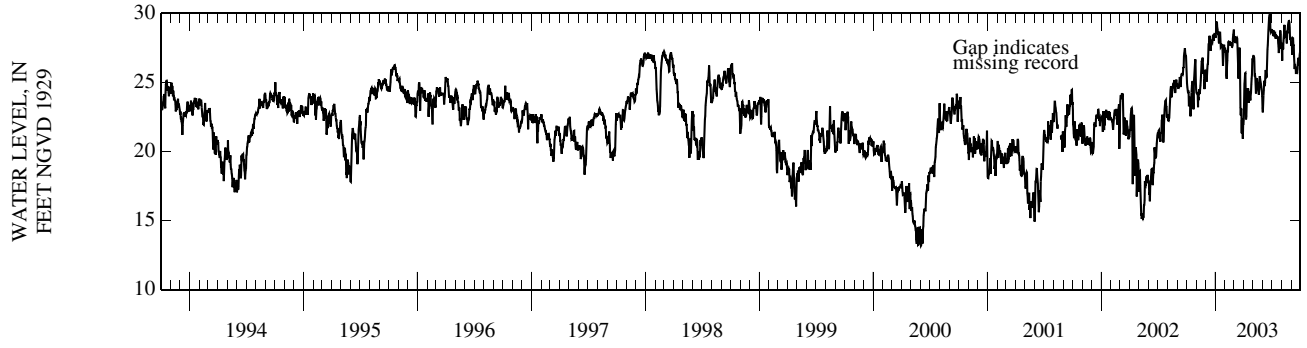
REVISED RECORDS.--WDR FL-75-3: 1975.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 32.14 ft NGVD, Oct. 1, 1979; lowest, 13.18 ft NGVD, June 1, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.63	24.28	25.93	28.22	27.52	28.82	21.99	26.67	23.16	28.87	27.80	27.66
2	24.96	24.24	25.81	28.53	27.23	27.93	22.41	26.92	22.83	28.64	27.41	27.90
3	24.66	24.16	25.26	28.73	27.28	28.08	23.32	26.92	23.52	28.74	26.58	27.59
4	24.47	24.28	25.06	28.79	27.23	28.32	24.90	26.89	24.06	28.61	27.63	26.99
5	24.30	24.08	25.53	29.38	25.54	28.25	25.16	26.78	24.44	28.36	27.76	27.64
6	24.29	23.21	26.00	29.40	25.27	27.85	25.66	26.53	25.05	28.54	27.40	28.21
7	24.31	23.94	26.32	28.97	26.16	27.91	25.68	25.52	25.12	28.48	28.00	28.19
8	23.27	23.72	26.36	28.85	26.59	28.06	23.44	25.53	24.73	28.76	28.30	27.65
9	23.49	24.26	27.07	28.57	27.33	28.18	22.33	25.37	25.00	28.45	28.64	27.73
10	23.96	24.51	27.78	28.59	27.19	28.24	22.56	24.90	25.61	28.31	29.17	26.90
11	23.54	24.22	27.82	28.51	27.92	28.27	23.38	24.20	25.90	28.39	28.29	26.44
12	23.66	24.17	27.96	27.91	27.95	28.20	24.18	24.87	25.68	28.44	28.31	25.98
13	22.55	24.50	28.38	27.83	27.93	27.35	24.58	25.20	25.38	28.18	28.42	26.35
14	23.18	24.77	27.97	27.93	27.76	26.53	24.17	25.32	25.41	28.47	28.66	26.03
15	23.74	25.13	27.95	28.61	28.00	25.80	24.03	25.01	25.94	28.38	28.63	26.14
16	24.26	25.73	28.02	28.67	27.88	25.28	24.56	24.90	26.80	28.37	28.54	25.62
17	24.63	26.20	27.29	28.21	27.73	26.16	24.08	24.68	27.40	28.20	28.22	25.98
18	24.78	26.58	28.01	27.55	27.73	27.28	23.54	24.44	27.71	28.26	27.83	26.09
19	24.92	26.51	27.98	27.58	27.81	27.45	23.78	24.34	28.21	28.28	28.65	25.75
20	25.10	26.74	27.98	27.52	27.81	27.51	24.29	24.12	28.82	28.28	28.64	25.73
21	24.83	26.74	27.95	27.68	27.90	24.82	24.31	24.49	29.20	27.86	28.91	25.99
22	23.54	26.12	27.91	27.72	27.81	23.18	23.93	25.21	29.68	27.60	29.19	26.45
23	23.05	25.64	28.13	27.70	27.58	22.63	23.71	25.46	29.86	27.13	29.33	26.78
24	25.00	25.88	28.39	26.84	27.57	23.06	24.08	25.26	29.90	27.59	29.44	26.59
25	25.34	25.81	28.39	26.20	27.65	23.06	24.25	25.10	29.91	27.48	29.45	26.22
26	25.85	25.34	28.01	26.54	28.20	21.32	24.86	25.02	28.90	27.44	29.38	26.69
27	26.26	24.51	28.38	26.93	28.47	22.26	25.28	24.88	28.74	28.18	28.95	26.24
28	26.59	25.15	28.47	27.35	28.59	22.28	25.58	24.68	28.63	28.77	28.11	26.97
29	26.67	25.35	28.44	27.74	---	21.44	26.57	24.51	28.67	28.47	28.29	27.16
30	25.17	25.82	28.47	27.18	---	20.93	26.74	24.38	28.61	27.90	28.17	27.11
31	24.51	---	28.41	27.24	---	21.95	---	24.01	---	27.80	27.96	---
MAX	26.67	26.74	28.47	29.40	28.59	28.82	26.74	26.92	29.91	28.87	29.45	28.21

CAL YR 2002 MAX 28.47
WTR YR 2003 MAX 29.91



HILLSBOROUGH COUNTY—Continued

WELL NUMBER.--280740082271001. Debuel Road Deep Well near Lutz, FL.

LOCATION.--Lat 28°07'40", long 82°27'10" (1927 North American datum), in SE $^1/_4$ SE $^1/_4$ sec.13, T.27 S., R.18 E., Hydrologic Unit 03100205, 0.7 mi east of intersection U. S. Highway 41 and Debuel Road, and 1.8 mi south of Lutz.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 300 ft, cased to 118 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

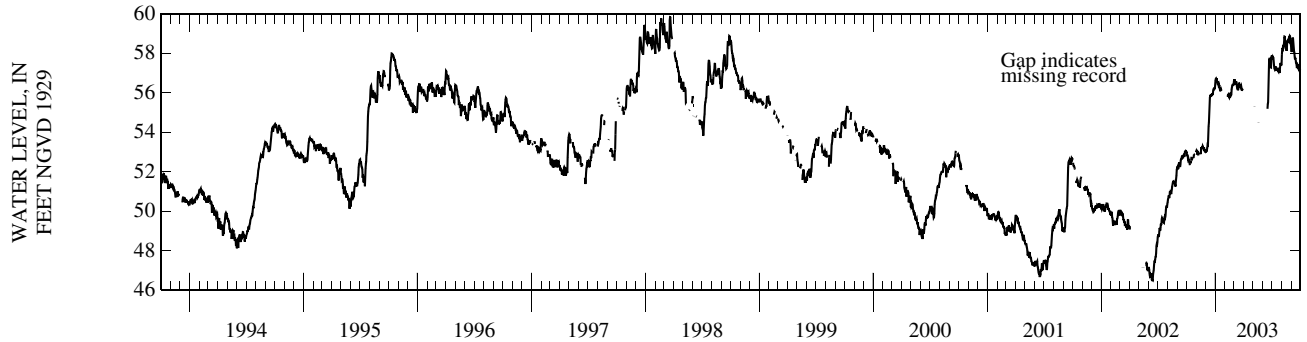
DATUM.--Land-surface datum is 63.68 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 3.10 ft above land-surface datum.

PERIOD OF RECORD.--August 1965 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 60.13 ft NGVD, Sept. 27, 1979; lowest, 46.48 ft NGVD, June 12, 2002.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52.99	53.06	52.99	56.62	---	56.56	---	---	---	57.90	57.43	58.18
2	52.85	53.01	53.07	56.72	---	56.69	---	---	---	57.76	57.93	58.08
3	52.85	53.12	53.06	56.74	---	56.61	---	---	---	57.73	58.21	58.15
4	52.84	52.87	53.06	56.70	---	56.62	---	---	---	57.73	58.22	58.43
5	52.69	52.96	53.14	56.75	---	56.55	---	---	---	57.81	58.30	58.64
6	52.60	52.92	53.24	56.64	---	56.46	---	55.34	---	57.78	58.26	58.81
7	52.63	52.94	53.39	56.59	---	56.46	---	---	---	57.59	58.33	58.73
8	52.56	52.96	53.38	56.51	---	56.49	---	---	---	57.38	58.41	58.49
9	52.51	52.93	53.79	56.53	55.81	56.58	---	---	---	57.26	58.61	58.30
10	52.45	52.97	54.31	56.51	55.90	56.46	---	---	---	57.22	58.86	58.12
11	52.34	---	54.50	56.41	55.92	56.33	---	---	---	57.18	58.85	58.05
12	---	---	54.94	56.45	55.86	56.22	---	---	---	57.20	58.68	57.84
13	52.49	52.97	55.41	56.38	55.81	56.19	---	---	---	57.30	58.45	57.71
14	52.44	52.95	55.75	56.37	55.78	56.20	---	---	---	57.34	58.34	57.79
15	52.59	52.91	55.86	56.21	55.82	56.19	---	---	---	57.21	58.27	57.70
16	52.77	53.15	55.86	56.16	55.92	56.26	---	---	---	57.22	58.16	57.56
17	---	53.25	55.87	56.17	56.00	56.47	---	---	55.20	57.17	58.24	57.52
18	52.71	53.19	55.86	56.15	55.95	56.48	---	---	55.43	57.12	58.15	57.42
19	52.69	53.25	55.87	56.18	55.94	56.38	---	54.49	55.53	57.26	58.60	57.26
20	52.75	53.25	55.87	56.12	55.87	56.28	---	---	56.58	57.22	58.64	57.37
21	---	53.31	55.93	---	55.91	56.38	---	---	57.07	57.10	58.65	57.44
22	---	53.26	55.98	---	56.18	56.43	---	---	57.62	57.07	58.69	57.41
23	52.70	53.18	55.89	---	56.29	56.33	---	---	57.74	57.17	58.61	57.31
24	52.86	53.24	55.99	---	56.38	56.37	---	---	57.74	57.15	58.59	57.24
25	52.87	53.15	56.14	---	56.42	56.29	---	---	57.55	57.07	58.73	57.21
26	52.84	53.16	56.21	---	56.42	56.17	---	---	57.46	57.02	58.85	57.31
27	---	53.08	56.22	---	56.40	56.13	---	---	57.30	57.25	58.89	57.24
28	---	53.05	56.21	---	56.41	56.21	---	---	57.29	57.43	58.86	57.26
29	---	53.04	56.27	---	---	56.14	---	---	57.80	57.52	58.75	57.23
30	---	53.15	56.20	---	---	56.13	---	---	57.86	57.43	58.49	57.17
31	53.00	---	56.42	---	---	---	---	---	---	57.42	58.41	---
MAX	---	---	56.42	---	---	---	---	---	---	57.90	58.89	58.81



HILLSBOROUGH COUNTY—Continued

WELL NUMBER.--280944082380501. Eldridge-Wilde Deep Well N-4 near Tarpon Springs, FL.

LOCATION.--Lat 28°09'44", long 82°38'05" (1927 North American datum), in NE $^1/_4$ SE $^1/_4$ sec.6, T.27 S., R.17 E., Hydrologic Unit 03100207, 3.8 mi northeast of intersection State Highway 582 and East Lake Road, and 6.4 mi east of Tarpon Springs.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 350 ft, cased to 100 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 41.00 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 1.64 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby wells.

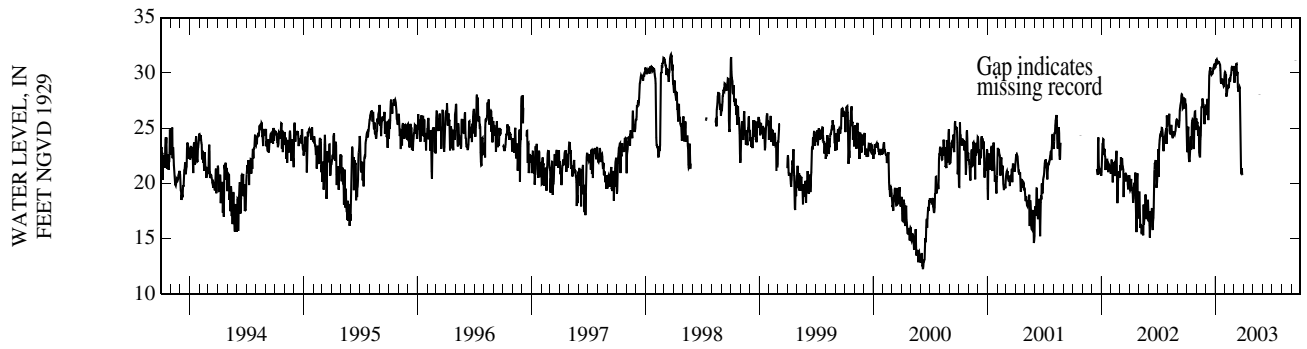
PERIOD OF RECORD.--July 1977 to current year. Records of water levels prior to October 1977 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 31.70 ft NGVD, Oct. 8, 1982; lowest, 12.25 ft NGVD, June 8, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.90	25.83	26.29	30.54	30.09	30.63	---	---	---	---	---	---
2	23.48	25.34	26.42	30.97	30.05	29.86	---	---	---	---	---	---
3	22.83	25.45	27.15	31.16	29.74	29.12	---	---	---	---	---	---
4	23.65	25.57	26.66	31.19	29.85	30.13	---	---	---	---	---	---
5	24.71	25.35	26.95	31.23	27.86	30.31	---	---	---	---	---	---
6	25.14	24.31	27.51	31.17	28.08	30.32	---	---	---	---	---	---
7	22.87	25.12	27.66	30.85	28.16	30.35	---	---	---	---	---	---
8	22.21	25.12	26.52	30.88	28.43	30.64	---	---	---	---	---	---
9	22.04	25.02	25.73	31.03	28.71	30.81	---	---	---	---	---	---
10	21.95	22.84	26.54	31.01	28.79	30.82	---	---	---	---	---	---
11	22.44	22.57	28.36	31.02	28.73	29.73	---	---	---	---	---	---
12	23.11	22.44	29.73	31.00	28.69	30.03	---	---	---	---	---	---
13	23.33	22.44	30.11	30.99	28.71	30.10	---	---	---	---	---	---
14	24.24	24.00	30.23	30.89	29.31	28.67	---	---	---	---	---	---
15	23.07	24.37	30.44	30.80	29.47	28.66	---	---	---	---	---	31.12
16	23.28	25.45	30.49	30.74	29.50	28.29	---	---	---	---	---	---
17	25.12	26.80	29.96	30.22	29.22	28.52	---	---	---	---	---	---
18	25.47	26.97	29.93	29.26	29.41	28.66	---	---	---	---	---	---
19	25.69	26.88	29.97	29.03	29.77	28.74	---	---	---	---	---	---
20	25.80	27.58	29.86	29.11	29.83	28.62	---	---	---	---	---	---
21	25.76	27.68	29.90	29.37	30.00	27.01	---	28.05	---	---	---	---
22	25.36	27.39	29.93	29.50	30.46	23.52	---	---	---	---	---	---
23	24.87	27.12	29.95	29.35	30.55	22.00	---	---	---	---	---	---
24	23.11	27.09	30.12	29.33	30.54	20.94	---	---	---	---	---	---
25	24.26	26.99	30.42	28.98	30.44	20.95	---	---	---	---	---	---
26	26.12	25.92	30.47	29.01	30.42	21.37	---	---	---	---	---	---
27	26.50	25.37	30.62	29.06	30.22	21.29	---	---	---	---	---	---
28	26.51	26.00	30.72	28.80	30.46	20.81	---	---	---	---	---	---
29	25.68	26.71	30.78	28.84	---	20.76	---	---	---	---	---	---
30	24.84	26.18	30.77	29.71	---	---	---	---	---	---	---	---
31	25.83	---	30.50	30.00	---	---	---	---	---	---	---	---
MAX	26.51	27.68	30.78	31.23	30.55	---	---	---	---	---	---	---

CAL YR 2002 MAX 30.78



MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2002 TO SEPTEMBER 2003

HILLSBOROUGH COUNTY

SITE-ID	STATION NAME	WATER-LEVEL DATE	WATER-LEVEL MSL FEET	WATER-LEVEL DATUM CODE
274031082150401	ROMP 123 FLORIDAN WELL NEAR WIMAUMA FL	05-19-2003	-0.35	NGVD29
		09-16-2003	26.82	NGVD29
274214082084401	FT LONESOME WELL 88 AT FORT LONESOME FL	05-19-2003	122.40	NGVD29
		09-16-2003	111.00	NGVD29
274218082035701	BARBER WELL 422 NEAR FORT LONESOME FL	05-19-2003	122.75	NGVD29
		09-16-2003	125.18	NGVD29
274303082280901	SW HILLS CO WELL 71 NEAR RUSKIN FL	05-23-2003	10.34	NGVD29
		09-17-2003	13.98	NGVD29
274421082275401	ROMP TR 9-1 TAMPA WELL NEAR RUSKIN FL	05-23-2003	10.34	NGVD29
		09-17-2003	15.16	NGVD29
274427082083701	ROMP 48 FLORIDAN WELL NEAR FORT LONESOME FL	05-19-2003	27.78	NGVD29
		09-16-2003	47.79	NGVD29
274427082083702	ROMP 48 HAWTHORN WELL NEAR FORT LONESOME FL	05-19-2003	92.28	NGVD29
		09-16-2003	95.27	NGVD29
274428082251502	ROMP TR 9-3 SUWANNEE WELL NEAR RUSKIN FL	05-19-2003	1.73	NGVD29
		09-15-2003	12.25	NGVD29
274428082251503	ROMP TR 9-3 AVON PARK WELL NEAR RUSKIN FL	05-19-2003	-4.44	NGVD29
		09-15-2003	5.92	NGVD29
274546082151403	ROMP 49 AVON PARK WELL AT BALM FL	05-20-2003	10.82	NGVD29
		09-15-2003	33.49	NGVD29
274546082151405	ROMP 49 TAMPA WELL AT BALM FL	05-20-2003	14.94	NGVD29
		09-15-2003	39.11	NGVD29
274554082233801	ROMP TR9-2 AVON PARK WELL AT APOLLO BEACH FL	05-19-2003	2.01	NGVD29
		09-17-2003	11.88	NGVD29
274554082233802	ROMP TR9-2 OCALA WELL AT APOLLO BEACH FL	05-19-2003	3.73	NGVD29
		09-17-2003	13.73	NGVD29
274554082233803	ROMP TR9-2 SUWANNEE WELL AT APOLLO BEACH FL	05-19-2003	2.66	NGVD29
		09-17-2003	14.35	NGVD29
274554082233804	ROMP TR9-2 TAMPA WELL AT APOLLO BEACH FL	05-19-2003	3.33	NGVD29
		09-17-2003	13.21	NGVD29
274554082233805	ROMP TR9-2 SURFICIAL WELL AT APOLLO BEACH FL	05-19-2003	7.74	NGVD29
		09-17-2003	9.26	NGVD29
274748082130201	SIMMONS FISH FARM NEAR LITHIA FL	05-20-2003	5.08	NGVD29
		09-15-2003	31.48	NGVD29
274925082084301	WCRWSA SCHM-6 UPPER FLORIDAN WELL NEAR LITHIA FL	05-20-2003	29.33	NGVD29
		09-17-2003	46.78	NGVD29
274925082084302	WCRWSA SCHM-6 INTERMEDIATE WELL NEAR LITHIA FL	05-20-2003	69.21	NGVD29
		09-17-2003	74.41	NGVD29
274928082225501	SW HILLSBOROUGH COUNTY 220 AT ADAMSVILLE FL	05-19-2003	5.14	NGVD29
		09-17-2003	9.31	NGVD29

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2002 TO SEPTEMBER 2003

HILLSBOROUGH COUNTY

SITE-ID	STATION NAME	WATER-LEVEL DATE	WATER-LEVEL MSL FEET	WATER-LEVEL DATUM CODE
274941082115701	WCRWSA SCHM-7 FLORIDAN WELL NEAR LITHIA FL	05-20-2003	18.02	NGVD29
		09-17-2003	35.81	NGVD29
274947082145401	749 214 113 CAMP DOROTHY THOMAS NEAR BOYETTE FL	05-21-2003	13.00	NGVD29
		09-15-2003	27.20	NGVD29
275034082134001	WCRWSA SCHM-1 UPPER FLORIDAN WELL NEAR LITHIA FL	05-21-2003	16.43	NGVD29
		09-17-2003	29.66	NGVD29
275100082042001	WCRWSA SCHM-5 UPPER FLORIDAN WELL NEAR LITHIA FL	05-21-2003	46.50	NGVD29
		09-17-2003	59.66	NGVD29
275100082042002	WCRWSA SCHM-5 INTERMEDIATE WELL NEAR LITHIA FL	05-21-2003	62.60	NGVD29
		09-17-2003	72.27	NGVD29
275117082090001	BLACK & TURNER FL	05-20-2003	24.54	NGVD29
		09-16-2003	41.54	NGVD29
275130082194501	RIVERCREST WELL NEAR BLOOMINGDALE FL	05-19-2003	11.20	NGVD29
		09-15-2003	16.22	NGVD29
275146082084301	WCRWSA SC-4 UPPER FLORIDAN WELL NEAR LITHIA FL	05-21-2003	23.55	NGVD29
		09-17-2003	42.70	NGVD29
275147082083903	WCRWSA SC-4 UPPER INTERMEDIATE WELL NEAR LITHIA FL	05-21-2003	36.21	NGVD29
		09-17-2003	44.77	NGVD29
275152082035801	EDISON JCT FLORIDAN WELL NEAR KEYSVILLE FL	05-21-2003	49.34	NGVD29
		09-17-2003	60.84	NGVD29
275152082121401	WCRWSA SC-1 FLORIDAN WELL NEAR LITHIA FL	05-21-2003	18.52	NGVD29
		09-17-2003	27.74	NGVD29
275158082085101	WCRWSA GRASSY GULCH FLORIDAN WELL NEAR LITHIA FL	05-21-2003	24.11	NGVD29
		09-17-2003	42.08	NGVD29
275210082171001	MCMULLEN CAMPGROUND SO E RIVERVIEW FL	05-19-2003	9.76	NGVD29
		09-15-2003	9.68	NGVD29
275227082310101	ROBINSON HIGH SCHOOL STADIUM DEEP WELL AT TAMPA FL	05-20-2003	0.23	NGVD29
		09-16-2003	1.10	NGVD29
275232082052603	WCRWSA SC-15 UPPER INTERMEDIATE WELL NR LITHIA FL	05-21-2003	42.67	NGVD29
		09-17-2003	53.22	NGVD29
275235082033601	WCRWSA SCGM-4 FLORIDAN WELL NEAR LITHIA FL	05-21-2003	49.80	NGVD29
		09-17-2003	62.54	NGVD29
275235082033602	WCRWSA SCHM-4 INTERMEDIATE WELL NEAR LITHIA FL	05-21-2003	76.20	NGVD29
		09-17-2003	84.09	NGVD29
275316082285901	TAMPA YACHT AND RIDING STABLES AT BALLAST POINT FL	05-20-2003	2.15	NGVD29
		09-16-2003	2.73	NGVD29
275323082080601	WCRWSA SCHM-11 FLORIDAN WELL NEAR LITHIA FL	05-21-2003	31.97	NGVD29
		09-17-2003	39.49	NGVD29
275336082125401	WCRWSA SCHM-8 FLORIDAN WELL NEAR LITHIA FL	05-21-2003	14.48	NGVD29
		09-17-2003	16.92	NGVD29

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2002 TO SEPTEMBER 2003

HILLSBOROUGH COUNTY

SITE-ID	STATION NAME	WATER-LEVEL DATE	WATER-LEVEL MSL FEET	WATER-LEVEL DATUM CODE
275336082125402	WCRWSA SCHM-8 INTERMEDIATE WELL NEAR LITHIA FL	05-21-2003	14.26	NGVD29
		09-17-2003	16.65	NGVD29
275402082222701	ROMP TR10-2 DEEP WELL NEAR TAMPA FL	05-19-2003	10.84	NGVD29
		09-15-2003	13.47	NGVD29
275402082222702	ROMP TR 10-2 SHALLOW WELL NEAR TAMPA FL	05-19-2003	12.87	NGVD29
		09-15-2003	15.08	NGVD29
275429082093901	ROMP 61 FLORIDAN WELL NEAR PLEASANT GROVE FL	05-20-2003	36.06	NGVD29
		09-16-2003	45.44	NGVD29
275429082093902	WCRWSA SCHM-9 INTERMEDIATE WELL NEAR LITHIA FL	05-21-2003	40.04	NGVD29
		09-17-2003	48.29	NGVD29
275438082162301	OAKMONT DEEP NEAR BRANDON FL	05-21-2003	15.54	NGVD29
		09-17-2003	18.98	NGVD29
275458082310301	M.MURPHY,4317 SAN LUIS AT TAMPA FL	05-20-2003	4.78	NGVD29
		09-16-2003	5 .67	NGVD29
275526082301301	PLANT HIGH SCHOOL STADIUM DEEP WELL AT TAMPA FL	05-20-2003	10.16	NGVD29
		09-16-2003	11.15	NGVD29
275547082044801	WCRWSA SCHM-3 FLORIDAN WELL NEAR LITHIA FL	05-21-2003	59.74	NGVD29
		09-17-2003	69.95	NGVD29
275547082044802	WCRWSA SCHM-3 INTERMEDIATE WELL NEAR LITHIA FL	05-21-2003	68.40	NGVD29
		09-17-2003	68.89	NGVD29
275609082191401	HILLSBOROUGH MEM CEM DEEP NEAR BRANDON FL	05-19-2003	15.42	NGVD29
		09-15-2003	19.09	NGVD29
275613082094401	WCRWSA SCHM-2 FLORIDAN WELL NEAR LITHIA FL	05-21-2003	49.21	NGVD29
		09-17-2003	57.01	NGVD29
275613082094402	WCRWSA SCHM-2 INTERMEDIATE WELL NEAR LITHIA FL	05-21-2003	64.24	NGVD29
		09-17-2003	65.89	NGVD29
275630082275201	NCNB NAT'L BANK,249 SO HYDE PARK AT TAMPA,FL	05-20-2003	7.58	NGVD29
		09-16-2003	9.26	NGVD29
275631082293801	A.MESSINA,305 SO MACDILL AVE AT TAMPA FL	05-20-2003	10.58	NGVD29
		09-16-2003	12.28	NGVD29
275634082305701	CLEVELAND AND HUBERT DEEP WELL AT TAMPA FL	05-20-2003	1.57	NGVD29
		09-16-2003	2.44	NGVD29
275705082222001	ROMP TR 11-2 SUWANNEE WELL NEAR TAMPA FL	05-19-2003	14.65	NGVD29
		09-15-2003	16.87	NGVD29
275759082085402	ROMP DV-2 LOWER HAWTHORN WELL AT DOVER FL	05-20-2003	63.21	NGVD29
		09-16-2003	73.30	NGVD29
275820082324602	ROMP TR 12-1 NRSD RPLC. WELL NEAR TAMPA, FL	05-20-2003	5.07	NGVD29
		09-16-2003	6.23	NGVD29
275843082222201	W.D.FUSSELL 618 WELL NEAR TAMPA FL	05-22-2003	18.06	NGVD29
		09-18-2003	19.53	NGVD29

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2002 TO SEPTEMBER 2003

HILLSBOROUGH COUNTY

SITE-ID	STATION NAME	WATER-LEVEL DATE	WATER-LEVEL MSL FEET	WATER-LEVEL DATUM CODE
275905082292901	THE WOODLANDS APTS,4714 NO HABANA AT TAMPA FL	05-20-2003	14.61	NGVD29
		09-16-2003	18.40	NGVD29
275926082123402	ROMP DV-1 LOWER HAWTHORN WELL AT DOVER FL	05-20-2003	54.84	NGVD29
		09-16-2003	62.11	NGVD29
275926082123403	ROMP DV-1 SUWANNEE WELL AT DOVER FL	05-20-2003	54.74	NGVD29
		09-16-2003	61.87	NGVD29
275926082123404	ROMP DV-1 AVON PARK WELL AT DOVER FL	05-20-2003	55.28	NGVD29
		09-16-2003	62.33	NGVD29
280012082204901	USCE WELL TBC-05 NEAR TEMPLE TERRACE FL	05-22-2003	18.14	NGVD29
		09-16-2003	19.70	NGVD29
280042082142301	GRIFFIN 2 DEEP WELL NEAR DOVER FL	05-22-2003	48.22	NGVD29
		09-18-2003	51.83	NGVD29
280243082203701	USCE TEST TBC-01 802-220-411 NEAR THONOTOSASSA FL	05-22-2003	22.00	NGVD29
		09-16-2003	23.93	NGVD29
280305082185101	J. W. MORRIS WELL NEAR TEMPLE TERRACE FL	05-22-2003	26.35	NGVD29
		09-19-2003	28.99	NGVD29
280320082203802	ROMP 67 TAMPA WELL NEAR TEMPLE TERRACE FL	05-21-2003	23.41	NGVD29
		09-16-2003	25.59	NGVD29
280350082104401	FISHER FL	05-20-2003	81.69	NGVD29
		09-16-2003	85.69	NGVD29
280354082335501	WELL 803 233 5455 FL	05-20-2003	18.99	NGVD29
		09-18-2003	20.24	NGVD29
280354082381901	ROMP TR 13-3 FLRD WELL NEAR CITRUS PARK FL	05-20-2003	15.36	NGVD29
		09-18-2003	16.31	NGVD29
280413082061401	MA QUAGLIANI WELL NEAR PLANT CITY FL	05-20-2003	89.90	NGVD29
		09-16-2003	93.98	NGVD29
280420082285501	USGS DEEP WELL 402 NEAR LUTZ FL	09-16-2003	140.71	NGVD29
280438082075301	MARTIN M GRIFFIN ROAD WELL NEAR KNIGHTS FL	05-21-2003	93.32	NGVD29
		09-16-2003	97.28	NGVD29
280503082143702	ROMP 68 SUWANNEE WELL NEAR ANTIOCH FL	05-20-2003	47.22	NGVD29
		09-16-2003	49.37	NGVD29
280504082365501	ST PETE DEEP WELL E 102 NEAR CITRUS PARK FL	05-19-2003	18.57	NGVD29
		09-18-2003	19.72	NGVD29
280510082043801	T-2 DEEP FLRD WELL ON CONE RANCH NR ZEPHYRHILLS FL	05-14-2003	96.99	NGVD29
		09-24-2003	100.41	NGVD29
280550082202901	MORRIS BRIDGE DEEP 10 NEAR BRANCHTON FL	05-12-2003	26.30	NGVD29
		09-25-2003	28.53	NGVD29
280603082385401	ST PETE E-103 DEEP NEAR OLDSMAR FL	05-20-2003	18.25	NGVD29
		09-16-2003	20.35	NGVD29

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2002 TO SEPTEMBER 2003

HILLSBOROUGH COUNTY

SITE-ID	STATION NAME	WATER-LEVEL DATE	WATER-LEVEL MSL FEET	WATER-LEVEL DATUM CODE
280605082184101	MORRIS BRIDGE DEEP WELL 12 NEAR BRANCHTON FL	05-12-2003	27.31	NGVD29
		09-25-2003	28.88	NGVD29
280655082193001	MORRIS BRIDGE DEEP WELL 3A NEAR BRANCHTON FL	05-12-2003	31.66	NGVD29
		09-25-2003	33.56	NGVD29
280659082175201	MORRIS BRIDGE DEEP 13 NEAR BRANCHTON FL	05-12-2003	29.65	NGVD29
		09-25-2003	32.91	NGVD29
280659082294302	BERGER DEEP WELL NEAR LUTZ FL	05-19-2003	42.62	NGVD29
		09-18-2003	47.87	NGVD29
280659082294303	BERGER SHALLOW WELL 2 NEAR CITRUS PARK FL	05-19-2003	50.13	NGVD29
		09-18-2003	54.18	NGVD29
280702082302801	HILLSBOROUGH DEEP WELL 13 NEAR CITRUS PARK FL	05-19-2003	36.52	NGVD29
		09-18-2003	43.21	NGVD29
280702082302802	HILLSBOROUGH SHALLOW WELL 13 NEAR CITRUS PARK FL	05-19-2003	45.59	NGVD29
		09-18-2003	52.22	NGVD29
280734082313301	SEC 21 GOODWIN WELL NEAR LUTZ FL	05-19-2003	38.43	NGVD29
		09-18-2003	43.34	NGVD29
280738082282701	BRANT LAKE DEEP WELL 472 NEAR LUTZ FL	05-19-2003	52.27	NGVD29
		09-18-2003	55.16	NGVD29
280852082135601	HILLSBOROUGH RD STATE PARK DP NEAR ZEPHYRHILLS FL	05-22-2003	38.57	NGVD29
		09-15-2003	41.33	NGVD29
280901082310401	ROMP-01 DEEP WELL NEAR CITRUS PARK FL	05-20-2003	45.88	NGVD29
		09-16-2003	50.60	NGVD29
280920082322101	LUTZ-LAKE FERN DEEP NEAR LUTZ FL	05-19-2003	42.26	NGVD29
		09-18-2003	46.95	NGVD29
280926082162101	MORRIS BRIDGE DEEP WELL 532 NEAR BRANCHTON FL	05-22-2003	42.94	NGVD29
		09-18-2003	45.44	NGVD29

Samples were collected to characterize and compare ground-water quality around natural and augmented wetlands.

Date	Time	Dis-solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Potas-sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alka-linity, wat flt Gran, field, mg/L as CaCO3 (29802)	Chlor-ide, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
280847082134301 HILLS RIVER ST PK LSW NRSD WELL NR ZEPHYRHILLS FL													
APR 2001 18...	1000	1.7	6.4	381	19.7	67.0	1.10	0.20	7.5	115	27.0	25.0	<0.20
280849082134001 HILLS RIVER ST PK LSE NRSD WELL NR ZEPHYRHILLS FL													
APR 2001 13...	1430	0.9	5.5	115	21.2	12.0	0.50	<0.10	7.3	20.0	7.00	18.0	<0.20
13...	1435	0.9	5.5	115	21.2	13.0	0.50	<0.10	7.3	20.0	7.00	18.0	<0.20
280849082134101 HILLS RIVER ST PK CTR NRSD WELL NR ZEPHYRHILLS FL													
APR 2001 18...	1130	0.3	5.7	104	19.5	11.0	1.20	1.90	7.0	26.6	9.60	<0.20	2.8
280849082134401 HILLS RIVER ST PK UW NRSD WELL NR ZEPHYRHILLS FL													
APR 2001 16...	1045	0.3	7.5	434	21.1	84.0	0.80	0.30	4.8	194	14.0	0.81	0.21
280850082134301 HILLS RIVER ST PK LNW NRSD WELL NR ZEPHYRHILLS FL													
APR 2001 16...	1245	0.6	7.3	422	22.0	77.0	4.30	0.40	5.4	178	11.0	16.0	<0.20
280851082134001 HILLS RIVER ST PK LN NRSD WELL NR ZEPHYRHILLS FL													
APR 2001 13...	1220	1.7	6.8	600	21.2	120	2.30	<0.10	8.5	280	12.0	15.0	<0.20
280852082134301 HILLS RIVER ST PK UNW NRSD WELL NR ZEPHYRHILLS FL													
APR 2001 17...	1000	1.5	7.5	474	20.8	89.0	1.20	0.30	9.7	211	16.0	4.60	<0.20
280854082134201 HILLS RIVER ST PK UN NRSD WELL NR ZEPHYRHILLS FL													
APR 2001 17...	1130	0.3	7.2	576	20.1	120	1.70	<0.10	2.5	290	0.20	6.20	<0.20

WATER QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001—Continued

HILLSBOROUGH COUNTY

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Organic carbon, water, fltrd, mg/L (00681)	Iron, water, fltrd, ug/L (01046)
280847082134301 HILLS RIVER ST PK LSW NRSD WELL NR ZEPHYRHILLS FL									
APR 2001									
18...	<0.20	0.006	<0.002	<0.001	<0.001	<0.002	0.010	2.5	95
280849082134001 HILLS RIVER ST PK LSE NRSD WELL NR ZEPHYRHILLS FL									
APR 2001									
13...	<0.20	0.020	<0.002	<0.001	<0.001	0.004	0.007	2.8	448
13...	<0.20	0.020	0.002	<0.001	<0.001	<0.002	0.006	3.5	440
280849082134101 HILLS RIVER ST PK CTR NRSD WELL NR ZEPHYRHILLS FL									
APR 2001									
18...	3.1	0.110	0.004	0.005	0.010	0.020	0.050	40.0	1,100
280849082134401 HILLS RIVER ST PK UW NRSD WELL NR ZEPHYRHILLS FL									
APR 2001									
16...	0.24	0.090	<0.002	<0.001	<0.001	<0.002	0.040	5.5	4
280850082134301 HILLS RIVER ST PK LNW NRSD WELL NR ZEPHYRHILLS FL									
APR 2001									
16...	--	0.006	<0.002	<0.001	0.007	0.010	--	3.2	<2
280851082134001 HILLS RIVER ST PK LN NRSD WELL NR ZEPHYRHILLS FL									
APR 2001									
13...	<0.20	0.010	<0.002	<0.001	<0.001	0.050	0.060	3.5	1,500
280852082134301 HILLS RIVER ST PK UNW NRSD WELL NR ZEPHYRHILLS FL									
APR 2001									
17...	0.21	0.010	<0.002	<0.001	<0.001	0.002	0.050	5.9	<2
280854082134201 HILLS RIVER ST PK UN NRSD WELL NR ZEPHYRHILLS FL									
APR 2001									
17...	<0.20	0.010	<0.002	<0.001	<0.001	<0.002	0.020	6.4	15

Samples were collected to characterize and compare ground-water quality around natural and augmented wetlands.

Date	Time	Dis-solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Potas-sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alka-linity, wat flt Gran, field, mg/L as CaCO3 (29802)	Chlor-ide, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
280847082134001 HILLS RIVER ST PK USE NRSD WELL NR ZEPHYRHILLS FL													
NOV 2001 01...	1505	1.6	5.7	224	27.0	13.0	1.80	<0.10	8.3	27.0	13.0	27.0	<0.20
280847082134301 HILLS RIVER ST PK LSW NRSD WELL NR ZEPHYRHILLS FL													
OCT 2001 31...	1300	2.1	6.2	373	23.1	62.0	1.00	0.30	8.0	102	29.0	29.0	<0.20
MAY 2002 03...	1210	0.9	6.2	431	21.0	69.0	1.00	0.20	9.5	102	43.0	34.0	<0.20
280849082134001 HILLS RIVER ST PK LSE NRSD WELL NR ZEPHYRHILLS FL													
NOV 2001 02...	0945	1.7	5.1	106	23.6	9.80	0.54	<0.10	7.5	12.7	7.80	18.0	<0.20
MAY 2002 06...	1310	1.2	5.3	120	22.8	10.0	0.67	<0.10	7.8	13.2	8.20	19.0	<0.20
06...	1320	1.2	5.3	120	22.8	9.90	0.68	<0.10	7.7	13.6	8.20	19.0	<0.20
280849082134401 HILLS RIVER ST PK UW NRSD WELL NR ZEPHYRHILLS FL													
OCT 2001 31...	1500	1.3	7.2	475	24.0	92.0	0.95	0.20	5.5	223	13.0	0.50	<0.20
280850082134301 HILLS RIVER ST PK LNW NRSD WELL NR ZEPHYRHILLS FL													
NOV 2001 01...	1330	1.4	7.3	304	23.3	57.0	1.90	0.30	4.2	142	5.00	7.80	E.30
MAY 2002 06...	1545	1.6	7.7	401	23.0	72.0	3.10	0.50	5.1	178	5.60	17.0	0.30
280851082134001 HILLS RIVER ST PK LN NRSD WELL NR ZEPHYRHILLS FL													
NOV 2001 01...	0900	2.0	6.6	576	23.7	121	2.50	<0.10	6.2	284	9.50	18.0	<0.20
280852082134301 HILLS RIVER ST PK UNW NRSD WELL NR ZEPHYRHILLS FL													
NOV 2001 01...	1200	1.5	7.2	474	23.4	90.0	1.10	0.40	8.6	223	15.0	3.60	<0.20
MAY 2002 06...	1430	3.5	7.4	491	21.2	93.0	1.00	0.10	8.1	227	14.0	10.0	<0.20
280854082134201 HILLS RIVER ST PK UN NRSD WELL NR ZEPHYRHILLS FL													
NOV 2001 01...	1030	6.0	7.2	565	23.9	122	1.30	0.30	1.1	299	1.50	5.50	<0.20

HILLSBOROUGH COUNTY

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Organic carbon, water, fltrd, mg/L (00681)	Alum-inum, water, fltrd, ug/L (01106)	Iron, water, fltrd, ug/L (01046)
280847082134001 HILLS RIVER ST PK USE NRSD WELL NR ZEPHYRHILLS FL										
NOV 2001										
01...	E.30	E.015	E.002	E.002	E.008	<0.002	E.016	6.2	87	849
280847082134301 HILLS RIVER ST PK LSW NRSD WELL NR ZEPHYRHILLS FL										
OCT 2001										
31...	<0.20	E.005	E.004	<0.001	<0.001	<0.002	<0.002	2.4	--	497
MAY 2002										
03...	--	<0.01	<0.02	<0.010	<0.01	--	--	2.4	<3	229
280849082134001 HILLS RIVER ST PK LSE NRSD WELL NR ZEPHYRHILLS FL										
NOV 2001										
02...	<0.20	E.024	E.006	<0.001	<0.001	<0.002	<0.002	2.2	--	462
MAY 2002										
06...	--	<0.01	<0.02	<0.010	<0.01	--	--	2.3	8	347
06...	--	<0.01	<0.02	<0.010	<0.01	--	--	2.5	8	370
280849082134401 HILLS RIVER ST PK UW NRSD WELL NR ZEPHYRHILLS FL										
OCT 2001										
31...	E.20	E.096	E.007	E.001	<0.001	E.003	E.008	4.8	--	8
280850082134301 HILLS RIVER ST PK LNW NRSD WELL NR ZEPHYRHILLS FL										
NOV 2001										
01...	E.30	<0.002	<0.002	<0.001	E.033	E.049	E.030	8.0	--	20
MAY 2002										
06...	--	<0.01	<0.02	<0.010	0.02	--	--	1.9	<3	<2
280851082134001 HILLS RIVER ST PK LN NRSD WELL NR ZEPHYRHILLS FL										
NOV 2001										
01...	<0.20	<0.002	<0.002	E.002	<0.001	E.004	E.022	3.6	--	1,520
280852082134301 HILLS RIVER ST PK UNW NRSD WELL NR ZEPHYRHILLS FL										
NOV 2001										
01...	<0.20	<0.002	<0.002	<0.001	<0.001	E.009	E.020	4.2	--	57
MAY 2002										
06...	--	<0.01	<0.02	<0.010	0.02	--	--	4.2	<3	4
280854082134201 HILLS RIVER ST PK UN NRSD WELL NR ZEPHYRHILLS FL										
NOV 2001										
01...	<0.20	<0.002	E.006	E.001	<0.001	E.003	E.024	1.6	--	11

Samples were collected to characterize and compare ground-water quality around natural and augmented wetlands.

Date	Time	Dis-solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Potas-sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alka-linity, wat flt Gran, field, mg/L as CaCO3 (29802)	Chlor-ide, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
280847082134001 HILLS RIVER ST PK USE NRSD WELL NR ZEPHYRHILLS FL													
NOV 2002 01...	1400	0.8	5.8	328	24.8	45.0	2.80	<0.10	12.0	75.0	18.0	35.0	0.20
280847082134301 HILLS RIVER ST PK LSW NRSD WELL NR ZEPHYRHILLS FL													
OCT 2002 31...	1600	1.0	6.2	502	23.9	88.0	1.40	<0.10	10.0	182	22.0	38.0	<0.20
280849082134001 HILLS RIVER ST PK LSE NRSD WELL NR ZEPHYRHILLS FL													
OCT 2002 30...	1015	0.9	4.9	101	25.0	8.40	0.70	<0.10	7.9	12.7	10.0	16.0	<0.20
280850082134301 HILLS RIVER ST PK LNW NRSD WELL NR ZEPHYRHILLS FL													
NOV 2002 01...	1200	2.9	6.6	190	25.1	33.0	0.95	<0.10	4.2	74.5	4.50	9.80	<0.20
280852082134301 HILLS RIVER ST PK UNW NRSD WELL NR ZEPHYRHILLS FL													
NOV 2002 01...	1100	0.6	7.1	507	24.2	98.0	1.10	<0.10	7.9	228	14.0	12.0	0.30

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Organic carbon, water, fltrd, mg/L (00681)	Iron, water, fltrd, ug/L (01046)
280847082134001 HILLS RIVER ST PK USE NRSD WELL NR ZEPHYRHILLS FL							
NOV 2002 01...	0.030	<0.002	<0.001	0.009	0.005	4.2	592
280847082134301 HILLS RIVER ST PK LSW NRSD WELL NR ZEPHYRHILLS FL							
OCT 2002 31...	0.012	<0.002	<0.001	0.001	0.008	1.3	539
280849082134001 HILLS RIVER ST PK LSE NRSD WELL NR ZEPHYRHILLS FL							
OCT 2002 30...	0.018	<0.002	<0.001	0.003	0.005	2.8	533
280850082134301 HILLS RIVER ST PK LNW NRSD WELL NR ZEPHYRHILLS FL							
NOV 2002 01...	0.003	0.072	<0.001	0.106	0.120	1.5	3
280852082134301 HILLS RIVER ST PK UNW NRSD WELL NR ZEPHYRHILLS FL							
NOV 2002 01...	0.017	0.013	<0.001	0.021	0.020	3.2	5

KEY TO SITE LOCATIONS ON FIGURE 17

MANATEE COUNTY

INDEX NUMBER	SITE NUMBER
1	271832082064801
1	271832082064802
2	272058082143701
3	272356082181302
4	272404082161701
5	272539082292001
5	272539082292002
5	272539082292003
5	272539082292004
5	272539082292005
6	272838082142201
7	273718082315501

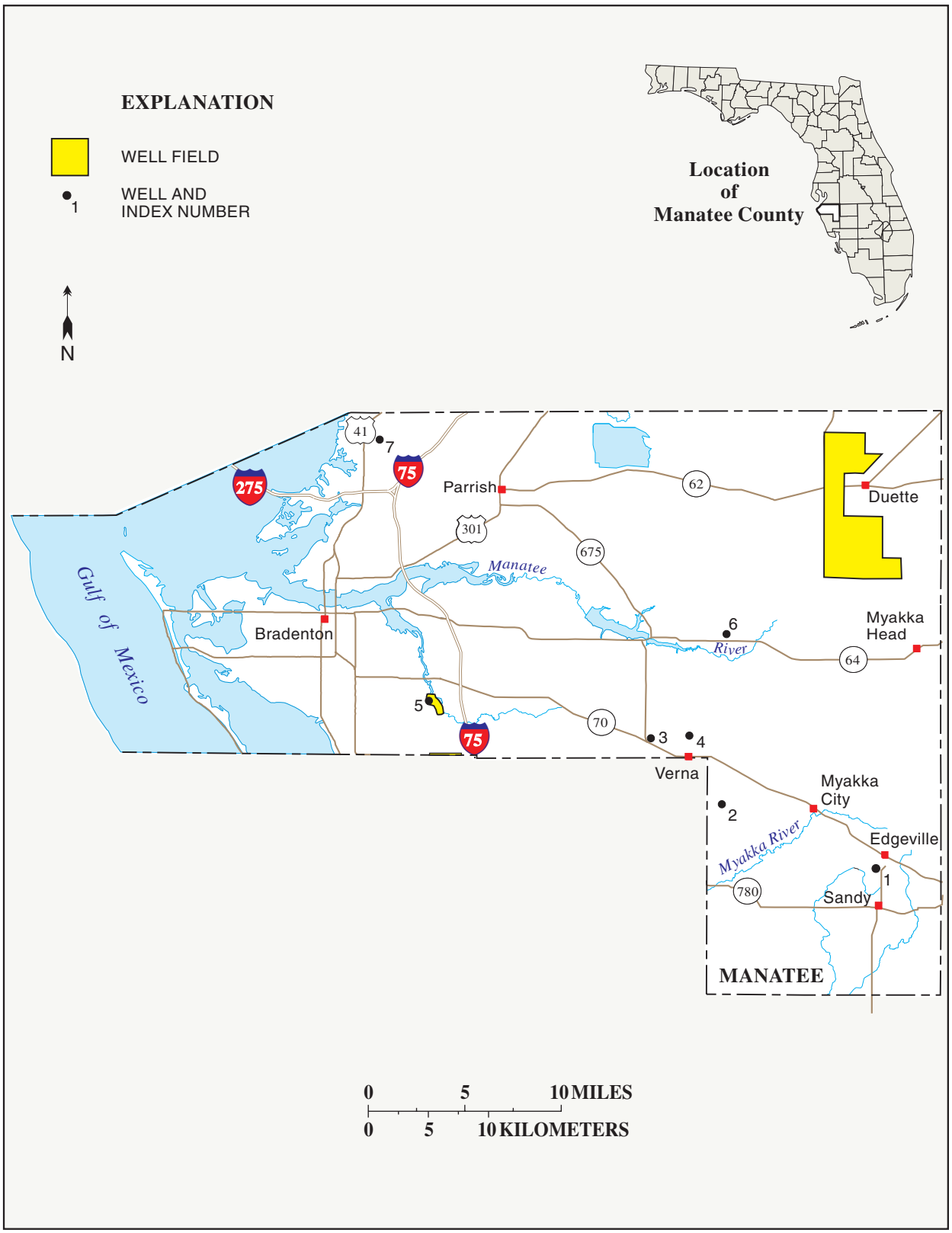


Figure 17.-- Location of wells in Manatee County.

MANATEE COUNTY

WELL NUMBER.--271832082064801. Edgeville Deep Well 3 at Edgeville, FL.

LOCATION.--Lat 27°18'32", long 82°06'48" (1927 North American datum), in NE $^1/_4$ NW $^1/_4$ sec.33, T.36 S., R.22 E., Hydrologic Unit 03100102, 0.5 mi southwest of Edgeville, and 4.3 mi east of Myakka City.

AQUIFER.--Limestone aquifer of Oligocene Age, Geologic Unit 123LMSN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 600 ft, cased to 487 ft.

INSTRUMENTATION.--Water-stage and tipping bucket raingage recorders--60-minute interval.

DATUM.--Elevation of land-surface datum is 70 ft, from topographic map. Measuring point: Top of flange, 2.95 ft above land-surface datum.

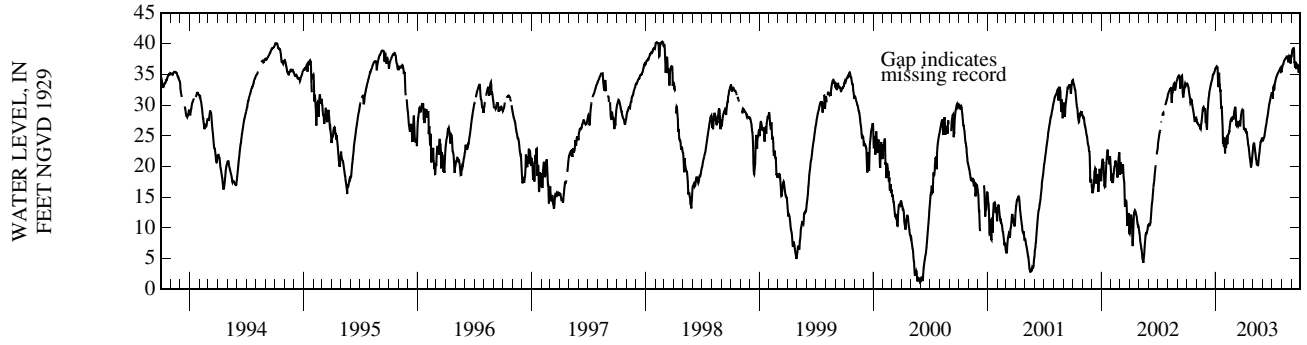
REMARKS.--Water level affected by pumping of nearby irrigation wells.

PERIOD OF RECORD.--October 1965 to February 1978 (periodic); March 1978 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 46.40 ft NGVD, Oct. 31, 1965; lowest daily maximum, 1.13 ft NGVD, May 29, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33.41	27.73	27.13	35.92	22.16	28.44	28.10	22.80	24.46	32.08	35.36	37.90
2	33.44	27.36	27.42	36.03	24.15	28.93	26.27	23.40	24.42	31.64	35.74	37.97
3	33.48	27.21	26.89	36.13	24.64	29.09	25.97	23.65	24.32	32.09	36.16	38.46
4	33.38	27.24	26.48	36.23	23.01	29.44	26.28	23.76	24.42	31.00	36.39	38.77
5	33.22	27.11	25.97	36.32	24.05	29.59	26.00	23.90	24.61	32.21	36.54	39.05
6	33.06	26.93	27.89	36.30	24.74	29.57	25.93	23.51	24.73	32.93	36.67	39.15
7	32.77	26.91	29.20	36.21	25.02	29.25	26.22	23.13	24.99	33.05	36.80	39.21
8	32.25	26.87	29.61	36.18	23.63	27.90	25.94	22.72	25.31	32.40	36.96	39.25
9	31.89	26.77	30.45	34.74	24.68	26.79	25.67	22.26	25.69	32.57	37.11	39.26
10	31.57	26.71	31.09	32.94	25.13	26.68	25.71	21.90	26.02	33.27	37.28	39.05
11	31.23	26.72	31.41	34.08	25.22	27.03	25.64	21.28	26.45	33.64	37.43	37.04
12	30.90	26.47	31.91	35.01	25.28	27.18	25.38	21.17	26.66	33.90	37.51	37.03
13	30.31	26.25	32.30	35.28	25.38	27.11	24.72	20.62	26.95	34.14	37.56	36.14
14	30.41	26.27	32.49	33.59	25.75	26.87	24.53	20.23	27.26	34.37	37.64	36.80
15	30.75	26.15	32.77	33.39	25.75	26.71	23.84	20.46	27.58	34.49	37.69	37.09
16	30.85	26.77	33.09	32.21	26.47	26.94	23.65	20.55	27.86	34.63	37.67	36.38
17	30.78	27.11	33.26	32.54	26.90	27.12	23.42	20.07	28.12	34.78	37.87	35.89
18	30.45	27.51	33.45	31.20	27.31	27.28	23.09	20.22	28.43	34.88	37.94	36.50
19	30.03	28.07	33.68	30.00	27.56	27.30	22.54	20.89	28.79	35.06	37.95	36.77
20	29.69	28.63	33.86	29.44	27.66	27.16	21.98	21.50	29.23	35.17	37.77	36.56
21	29.37	29.15	34.04	29.84	27.58	26.55	21.53	21.91	29.61	35.30	37.46	36.42
22	29.05	29.50	34.27	28.34	27.33	26.98	21.22	22.25	30.00	35.39	37.36	36.58
23	28.77	29.59	34.57	27.31	27.71	27.78	20.82	22.86	30.27	35.50	36.98	36.16
24	28.46	29.42	34.94	26.21	27.99	28.35	20.34	23.30	30.49	35.58	37.76	35.79
25	28.02	29.55	35.00	23.69	28.01	28.65	19.85	23.78	30.77	35.60	37.95	35.29
26	27.55	29.40	35.03	24.38	27.72	28.93	20.04	24.04	31.03	35.66	37.81	35.44
27	27.28	29.40	35.15	24.81	27.94	29.07	20.62	24.09	31.29	35.85	38.03	35.75
28	27.54	29.35	35.27	23.29	27.87	29.18	20.95	24.07	31.48	36.02	37.54	35.92
29	27.83	29.44	35.39	23.87	---	29.00	21.69	24.39	31.69	36.08	37.66	36.01
30	27.76	28.19	35.57	23.17	---	---	22.17	24.57	31.94	35.46	36.79	36.07
31	27.62	---	35.81	23.33	---	29.33	---	24.61	---	35.52	37.62	---
MAX	33.48	29.59	35.81	36.32	28.01	---	28.10	24.61	31.94	36.08	38.03	39.26
*PREC	3.80	3.20	5.80	0.10	1.80	3.00	3.30	5.10	15.10	4.90	7.20	8.40



MANATEE COUNTY—Continued

WELL NUMBER.--271832082064802. Edgeville Well 4 at Edgeville, FL.

LOCATION.--Lat 27°18'32", long 82°06'48" (1927 North American datum), in NE $^1/_4$ NW $^1/_4$ sec.33, T.36 S., R.22 E., Hydrologic Unit 03100102, 0.5 mi southwest of Edgeville, and 4.3 mi east of Myakka City.

AQUIFER.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit 112NRSD (corrected).

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 70 ft, cased to 65 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 70 ft, from topographic map. Measuring point: Top of casing, 3.20 ft above land-surface datum.

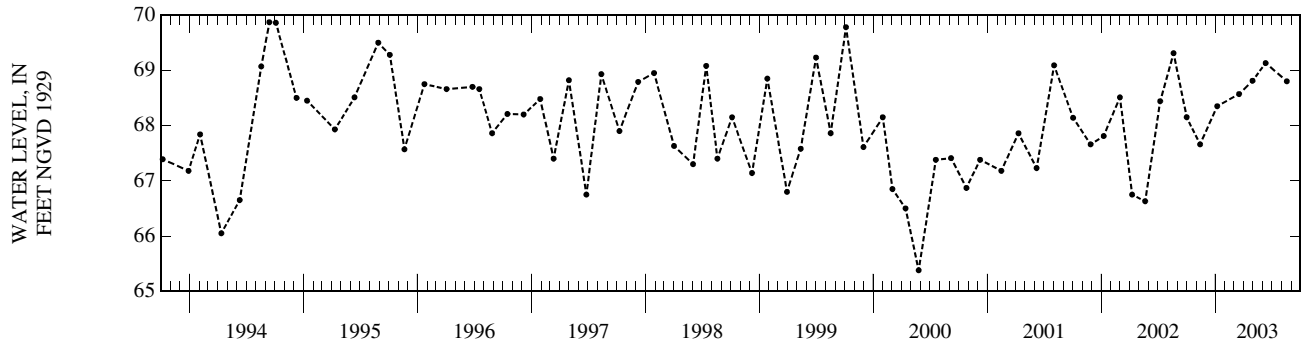
PERIOD OF RECORD.--October 1965 to September 2003 (periodic), discontinued. Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 69.93 ft NGVD, Sept. 16, 1971; lowest measured, 63.85 ft NGVD, May 14, 1975.

WATER SURFACE ELEVATION IN FEET (NGVD1929), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	68.15	JAN 07	68.35	APR 30	68.81	AUG 18	68.80
NOV 13	67.66	MAR 18	68.57	JUN 11	69.13		

WATER YEAR 2003 LOWEST 67.66 NOV 13, 2002 HIGHEST 69.13 JUN 11, 2003



MANATEE COUNTY—Continued

WELL NUMBER.--272058082143701. Verna T Well 0-2 near Verna, FL.

LOCATION.--Lat 27°20'58", long 82°14'37" (1927 North American datum), in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.18, T.36 S., R.21 E., Hydrologic Unit 03100102, 2.5 mi south of State Highway 70, and 4.0 mi southeast of Verna.

AQUIFER.--Tampa limestone of Miocene Age, Geologic Unit 122TAMP.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 530 ft, cased to 140 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 68.92 ft above National Geodetic Vertical Datum of 1929 (levels by Southwest Florida Water Management District). Measuring point: Top of recorder shelter floor, 2.60 ft above land-surface datum.

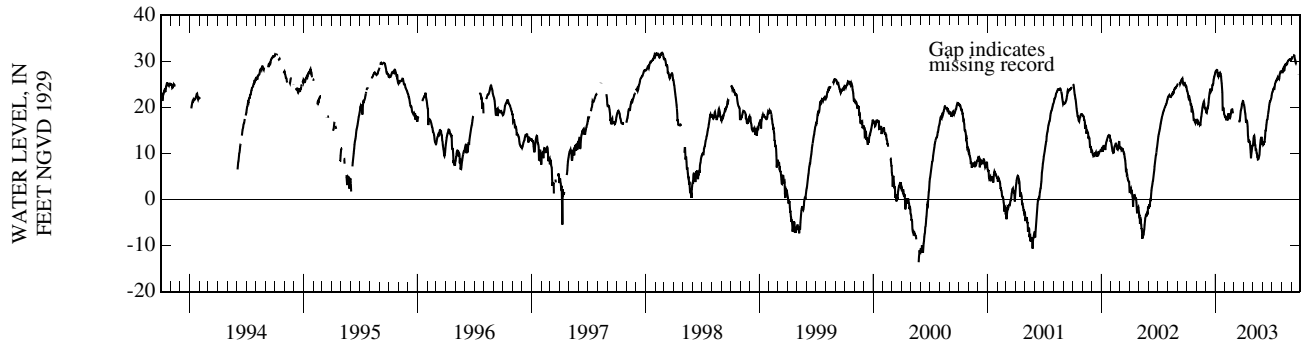
REMARKS.--Water level affected by pumping of nearby wells.

PERIOD OF RECORD.--March 1978 to current year. Prior to October 1978, published as City of Sarasota Well TH 0-2 near Verna.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 32.59 ft NGVD, Aug. 22, 1982; lowest, 13.59 ft below NGVD, May 25, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.05	17.12	19.51	27.70	17.96	---	20.93	11.64	12.33	23.00	27.42	30.46
2	23.69	17.30	19.37	27.86	17.99	---	20.74	12.40	12.32	23.23	27.76	30.52
3	23.59	17.31	18.88	27.89	17.89	---	20.46	13.29	11.89	23.38	27.97	30.82
4	23.28	17.22	18.83	28.05	17.45	---	20.07	13.75	12.00	23.66	28.05	30.87
5	22.94	17.19	19.15	28.11	17.51	---	19.48	13.86	12.05	23.85	27.97	30.88
6	22.56	16.48	19.87	28.14	18.16	---	18.91	13.61	12.63	24.08	28.39	31.08
7	22.13	16.53	19.82	28.05	17.96	---	18.59	13.30	12.34	24.18	28.56	---
8	22.31	16.63	20.14	27.44	17.41	---	17.70	11.88	13.03	23.99	28.30	---
9	22.33	16.58	20.47	26.90	17.19	---	16.71	11.84	13.57	23.99	28.03	30.96
10	22.05	16.66	21.11	26.89	17.85	---	17.11	10.82	14.92	24.49	28.09	31.28
11	21.61	16.61	21.95	26.67	18.51	---	17.18	10.87	14.95	24.99	28.65	31.27
12	21.47	16.22	22.54	26.90	18.73	---	16.98	10.79	15.38	25.24	29.18	30.71
13	20.74	16.31	23.12	27.39	18.29	---	16.64	10.08	16.22	25.55	29.35	30.48
14	20.77	16.29	23.49	27.50	18.46	---	15.95	10.00	16.68	25.66	29.39	30.31
15	20.70	16.99	23.82	27.45	18.10	---	13.91	9.35	17.11	25.72	29.21	29.74
16	19.91	17.74	24.09	27.19	17.68	---	13.66	9.31	17.31	26.03	29.48	29.59
17	18.95	18.09	23.73	27.40	17.63	---	12.74	8.69	17.42	26.12	29.56	29.80
18	19.53	18.70	23.44	27.22	17.83	16.77	12.76	8.75	18.05	26.12	29.37	---
19	19.73	19.19	23.58	26.74	18.48	17.11	12.62	8.85	18.53	26.44	29.47	---
20	19.48	19.82	23.78	25.80	18.82	17.20	12.71	9.13	19.08	26.59	29.78	---
21	19.05	20.26	23.84	25.23	19.36	17.94	12.56	9.45	19.52	26.48	29.99	---
22	18.56	20.60	24.76	24.30	19.53	18.65	12.12	9.75	20.16	26.37	30.13	---
23	17.58	20.83	24.79	23.20	19.52	19.27	11.22	10.77	20.67	26.31	30.21	---
24	17.07	21.15	25.06	19.51	19.56	19.54	10.26	11.82	21.09	26.22	30.32	27.12
25	17.35	21.27	25.15	19.54	19.28	19.83	8.98	12.46	21.33	26.67	30.32	---
26	17.30	20.78	25.97	19.89	18.70	20.18	9.94	12.86	21.33	27.11	30.41	---
27	16.87	20.24	26.24	19.87	---	20.58	10.42	13.21	21.54	27.35	30.50	---
28	16.81	19.90	26.68	19.37	---	20.85	10.96	13.44	21.74	27.65	30.49	---
29	16.60	19.79	26.84	18.65	---	21.11	11.52	13.62	21.98	27.78	30.14	---
30	16.83	19.67	27.04	18.48	---	21.38	11.87	13.12	22.56	27.82	30.35	27.03
31	16.61	---	27.46	18.17	---	21.35	---	12.26	---	27.80	30.43	---
MAX	24.05	21.27	27.46	28.14	---	---	20.93	13.86	22.56	27.82	30.50	---



MANATEE COUNTY—Continued

WELL NUMBER.--272356082181302. Verna Deep Well 1A near Verna, FL.

LOCATION.--Lat 27°23'56", long 82°18'13" (1927 North American datum), in NW $^1/_4$ NW $^1/_4$ sec.34, T.35 S., R.20 E., Hydrologic Unit 03100201, 60 ft north of State Highway 70, and 2.2 mi northwest of Verna.

AQUIFER.--Suwannee limestone of Oligocene Age, Geologic Unit 123SWNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 to 4 in., depth 480 ft, cased to 412 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 81.94 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.10 ft above land-surface datum.

REMARKS.--Water level affected by seasonal pumping of nearby irrigation wells.

PERIOD OF RECORD.--March 1970 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey.

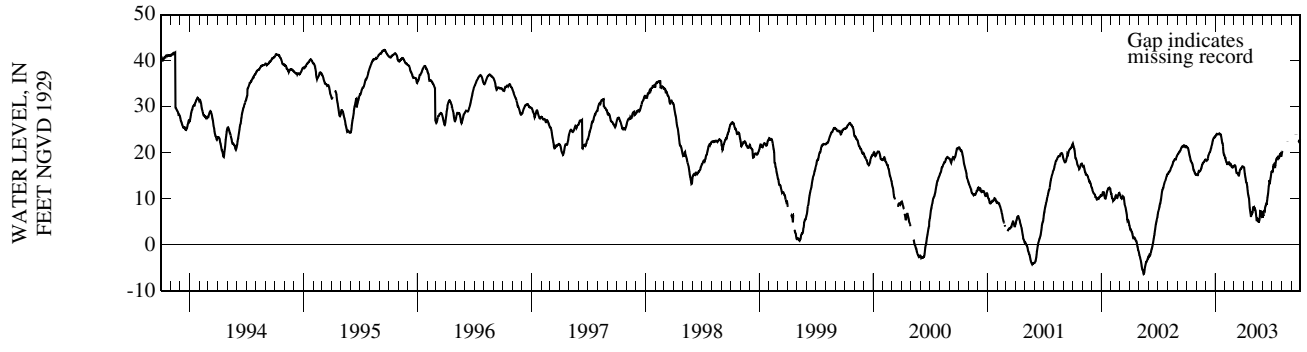
REVISED RECORDS.--WDR FL-76-3: 1975.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 48.39 ft NGVD, Apr. 3, 1970; lowest, 6.30 ft below NGVD, May 16, 2002.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.28	15.27	18.54	23.60	18.91	17.07	16.94	7.75	6.64	15.96	19.62	---
2	21.19	15.27	18.49	23.69	18.90	17.18	16.91	8.18	5.93	16.04	19.93	---
3	21.20	15.21	18.38	23.88	18.46	17.24	16.83	8.20	6.51	15.96	20.23	---
4	21.16	15.20	18.31	24.04	18.26	17.20	16.24	8.10	6.31	16.27	20.41	---
5	21.09	15.16	18.41	24.10	18.03	17.22	15.54	8.20	7.28	16.64	---	---
6	20.88	15.28	18.49	24.07	17.91	17.12	15.07	8.10	7.42	17.24	---	---
7	20.53	15.58	18.51	24.03	17.67	16.86	14.71	7.79	7.43	17.18	---	---
8	20.14	15.88	18.82	24.00	17.39	16.38	14.26	7.85	7.34	16.70	---	---
9	19.76	16.02	19.33	24.00	17.69	15.82	13.75	7.66	8.05	17.02	---	---
10	19.50	15.95	19.54	24.06	17.86	15.64	13.59	7.36	8.39	17.86	---	---
11	19.16	15.96	19.65	24.10	17.87	15.62	13.51	6.71	8.49	17.34	---	---
12	18.95	15.97	19.87	24.14	17.76	15.60	13.10	6.06	8.71	17.24	---	---
13	18.50	16.01	20.09	24.17	17.65	15.62	12.52	5.51	8.88	17.81	---	---
14	18.23	16.14	20.14	24.22	17.75	15.58	11.79	5.16	8.70	18.21	---	---
15	18.18	16.29	20.24	24.03	17.60	15.41	11.20	5.71	9.21	18.63	---	---
16	17.96	16.58	20.47	24.02	17.50	15.12	11.02	5.69	9.60	18.77	---	23.97
17	17.88	16.68	20.73	24.04	17.67	15.07	10.70	5.58	10.31	18.87	---	---
18	17.83	17.00	20.96	24.01	17.64	15.23	10.34	5.25	10.72	18.75	---	---
19	17.69	17.28	21.24	23.70	17.61	15.74	9.95	5.19	11.20	18.84	22.38	---
20	17.39	17.45	21.48	23.27	17.47	16.12	8.94	4.81	11.97	18.95	---	---
21	17.04	17.70	21.75	22.89	17.17	16.33	8.06	5.08	12.75	18.76	---	---
22	16.60	17.75	22.10	22.40	16.98	16.42	7.52	5.44	13.11	18.87	---	---
23	16.26	17.84	22.49	22.13	16.92	16.58	7.06	6.10	14.08	19.00	---	---
24	16.19	17.94	22.79	22.02	16.84	16.63	6.59	7.12	13.81	19.06	---	22.35
25	16.14	18.10	22.91	21.48	16.81	16.62	6.07	7.01	13.71	19.30	---	22.34
26	15.92	18.17	23.12	20.80	17.03	16.73	6.77	7.49	14.25	19.19	---	22.56
27	15.59	18.18	23.28	20.09	17.13	16.83	7.11	6.67	14.61	19.40	---	22.60
28	15.53	18.23	23.34	19.75	17.10	17.00	7.11	6.52	15.11	19.59	---	22.74
29	15.46	18.49	23.37	19.53	---	17.06	6.90	7.34	15.76	19.72	---	22.90
30	15.26	18.52	23.37	19.52	---	16.99	7.06	6.86	15.80	19.53	---	23.01
31	15.20	---	23.57	19.27	---	16.99	---	6.64	---	19.17	---	---
MAX	21.28	18.52	23.57	24.22	18.91	17.24	16.94	8.20	15.80	19.72	---	---

CAL YR 2002 MAX 23.57



MANATEE COUNTY—Continued

WELL NUMBER.--272404082161701. Verna T Well 0-1 near Verna, FL.

LOCATION.--Lat 27°24'04", long 82°16'17" (1927 North American datum), in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.26, T.35 S., R.20 E., Hydrologic Unit 03100201, 1.0 mi north of State Highway 70, and 1.2 mi northwest of Verna.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 480 ft, cased to 140 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 98.92 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 2.14 ft above land-surface datum.

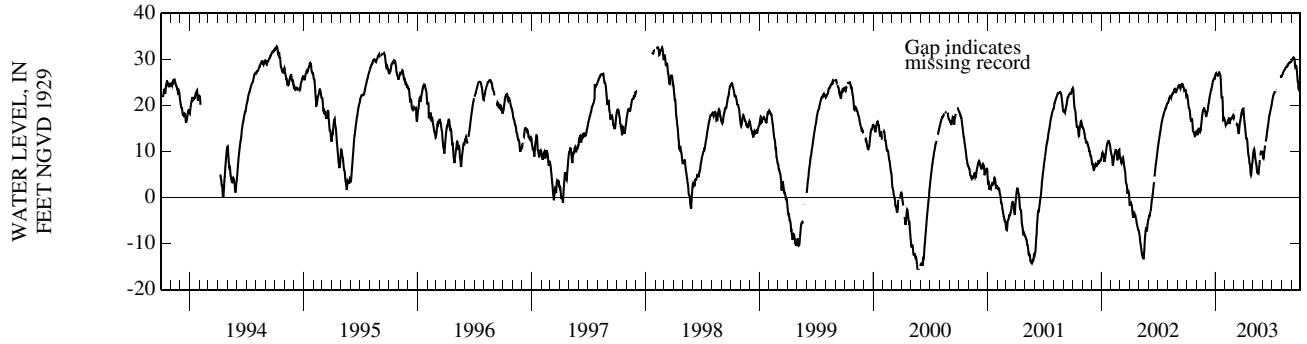
REMARKS.--Water level affected by pumping of nearby wells.

PERIOD OF RECORD.--March 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 33.32 ft NGVD, Jan. 24, 1984; lowest, 15.73 ft below NGVD, May 25, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.08	14.20	18.02	26.69	16.59	17.52	19.35	8.89	9.82	20.64	26.29	29.58
2	22.31	14.66	17.70	26.93	16.14	17.97	18.33	9.63	9.63	21.06	26.48	29.74
3	22.17	14.42	17.71	27.03	15.71	---	17.29	10.11	8.59	21.39	26.58	29.80
4	21.58	13.53	18.00	26.79	15.91	18.89	16.62	10.34	8.51	21.65	26.73	29.95
5	21.13	14.08	18.40	26.51	15.97	---	15.83	10.50	8.97	21.96	26.94	30.13
6	20.38	14.59	18.55	26.74	16.04	---	15.35	10.36	9.66	22.20	27.07	30.24
7	19.68	14.82	18.84	26.79	16.05	---	14.59	9.87	10.16	22.35	27.30	30.31
8	19.52	14.89	19.28	26.61	16.08	---	13.89	9.28	10.69	22.50	27.45	30.41
9	19.39	14.75	19.97	26.34	16.30	15.77	12.93	8.47	11.32	22.73	27.57	30.33
10	19.21	14.68	20.40	26.70	16.69	15.82	12.85	8.05	---	22.87	27.73	30.28
11	18.65	14.23	20.69	26.87	16.89	16.00	12.89	7.61	12.19	22.89	27.78	30.18
12	17.94	14.17	21.26	26.99	17.06	15.95	12.69	7.32	12.49	22.93	27.96	29.71
13	17.20	14.46	21.74	27.19	17.23	15.63	12.18	6.74	12.93	23.06	28.00	28.94
14	16.86	14.90	22.07	27.15	17.23	15.18	11.21	5.92	13.32	---	28.21	28.41
15	16.53	14.84	22.34	26.90	16.77	14.36	10.21	5.56	13.86	23.40	28.26	28.55
16	16.98	15.56	22.82	26.69	15.96	14.08	9.78	5.39	14.41	23.44	28.38	28.63
17	17.05	16.17	23.00	26.43	16.40	13.83	9.21	5.61	14.81	---	28.47	28.59
18	17.03	16.82	23.21	25.62	16.80	14.77	9.01	5.43	15.36	---	28.45	28.10
19	16.65	17.52	23.50	23.94	17.03	15.48	8.44	5.35	15.75	---	28.46	27.48
20	15.55	18.03	23.80	22.32	17.13	16.09	7.51	6.02	16.36	---	28.65	26.48
21	14.55	18.50	23.99	21.61	17.22	16.50	7.29	6.62	16.92	---	28.83	25.65
22	14.32	18.88	24.57	21.81	17.27	16.80	7.15	7.24	17.48	---	28.80	24.92
23	14.23	18.89	24.93	21.81	17.24	17.31	6.12	8.15	17.91	---	28.91	25.15
24	14.18	19.04	25.31	20.76	17.50	17.76	5.05	---	18.05	---	29.12	23.83
25	14.01	19.39	25.40	18.32	17.60	18.22	4.85	9.17	18.47	---	29.22	23.59
26	13.70	19.33	25.68	16.82	17.75	18.51	5.12	9.62	18.87	---	29.26	23.44
27	13.33	18.88	25.83	16.89	17.26	18.41	6.05	9.92	19.18	---	29.34	23.74
28	13.36	18.88	25.85	17.10	17.14	18.68	6.92	10.16	19.47	26.23	29.41	24.36
29	13.58	18.80	25.60	17.30	---	19.03	7.43	9.82	19.73	26.29	29.39	24.85
30	13.86	18.63	26.01	17.15	---	19.17	8.03	9.50	20.15	26.21	29.46	25.23
31	14.08	---	26.42	16.71	---	19.34	---	9.74	---	26.29	29.47	---
MAX	22.31	19.39	26.42	27.19	17.75	---	19.35	---	---	---	29.47	30.41



MANATEE COUNTY—Continued

WELL NUMBER.--272539082292001. ROMP TR 7-4 Avon Park Well near Bradenton, FL.

LOCATION.--Lat 27°25'39", long 82°29'20" (1927 North American datum), in SW $^1/_4$ NE $^1/_4$ sec.22, T.35 S., R.18 E., Hydrologic Unit 03100202, on southwest shore of Ward Lake Reservoir, 1.25 mi south of State Highway 70, 2.0 mi west of Interstate I-75, and 5.0 mi southeast of Bradenton.

AQUIFER.--Upper Floridan aquifer of Eocene Age, Geologic Unit 124AVPK.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 1,250 ft, cased to 1,162 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 17.00 ft above National Geodetic Vertical Datum of 1929 (levels by Southwest Florida Water Management District). Measuring point: Top of flange, 10.57 ft above land-surface datum.

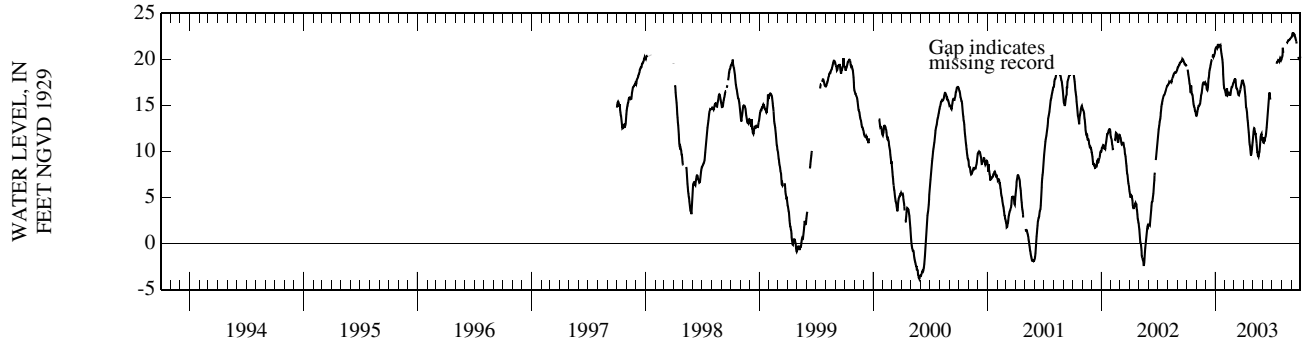
REMARKS.--Water level affected by pumping of nearby irrigation wells.

PERIOD OF RECORD.--November 1989 to September 1991; October 1991 to September 1997 (periodic); October 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 22.87 ft NGVD, Sept. 6, 7, 2003; lowest, 3.80 ft below NGVD, May 27, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.27	13.89	17.37	21.14	16.65	17.55	17.48	11.40	11.25	---	20.03	22.39
2	---	14.04	17.29	21.22	16.53	17.71	17.36	11.78	11.19	---	20.15	22.42
3	---	14.10	17.24	21.31	16.31	17.81	17.20	12.14	11.15	---	20.29	22.50
4	18.90	14.34	16.82	21.30	16.37	17.87	17.01	12.42	10.97	---	20.46	22.60
5	18.68	14.55	16.72	21.35	16.12	17.87	16.69	12.53	10.96	---	21.27	22.83
6	18.38	14.69	16.66	21.35	16.09	17.83	16.36	12.52	11.58	---	20.80	22.87
7	18.18	14.73	16.83	21.28	16.88	17.65	15.97	12.27	11.09	---	20.70	22.87
8	17.96	14.94	16.96	21.47	16.24	17.20	15.34	12.13	11.17	---	---	22.84
9	17.69	14.94	17.57	21.59	16.14	16.92	14.84	11.91	11.39	---	---	22.76
10	17.37	14.98	17.96	21.59	16.24	16.88	14.76	11.90	11.51	---	---	22.67
11	17.25	15.01	18.09	21.55	16.30	16.81	14.50	11.55	11.66	---	---	22.72
12	16.82	15.11	18.53	21.47	16.35	16.77	14.25	11.23	11.90	---	---	22.65
13	16.53	15.18	18.82	21.58	16.22	16.65	13.75	10.92	12.28	---	---	22.52
14	16.36	15.49	18.97	21.58	16.22	16.39	13.39	10.42	12.62	---	---	22.35
15	17.17	15.71	19.11	21.49	16.24	16.30	13.11	9.95	12.84	---	---	22.22
16	16.54	16.10	19.32	21.46	16.17	16.15	12.82	9.87	13.22	19.54	---	22.10
17	16.28	16.24	19.45	21.52	16.15	16.12	12.45	9.57	13.64	19.67	---	21.96
18	16.24	16.37	19.61	21.25	16.15	16.27	12.08	9.55	14.10	19.73	21.77	21.72
19	16.22	16.67	19.79	20.98	16.34	16.30	11.63	9.45	14.66	19.75	21.78	---
20	16.08	16.97	19.93	20.67	16.61	16.40	11.04	9.66	15.16	19.83	21.89	---
21	15.79	17.27	19.93	20.44	16.84	16.59	10.74	9.79	15.62	19.93	21.96	---
22	15.44	17.34	---	20.22	16.99	16.76	10.55	9.96	16.03	19.92	22.02	---
23	15.16	17.23	20.21	20.00	16.99	16.99	10.23	10.42	16.31	19.85	22.08	---
24	14.94	17.36	20.46	19.64	17.01	17.14	9.80	10.87	16.40	19.86	22.09	20.29
25	14.88	17.49	20.46	19.08	17.12	17.28	9.57	11.26	15.82	19.80	22.09	20.14
26	14.79	17.49	20.29	18.41	17.30	17.47	9.66	11.58	15.64	19.86	22.10	20.04
27	14.55	17.43	20.37	17.84	17.40	17.65	9.96	11.74	---	20.05	22.19	20.00
28	14.39	17.37	20.41	17.25	17.47	17.70	10.25	11.83	---	20.18	22.24	20.06
29	14.34	17.40	20.53	16.92	---	17.71	10.65	11.90	---	20.13	22.28	20.10
30	14.13	17.47	20.64	16.84	---	17.71	10.95	11.49	---	20.05	22.32	20.30
31	13.91	---	21.00	16.72	---	17.56	---	11.36	---	19.96	22.35	---
MAX	---	17.49	---	21.59	17.47	17.87	17.48	12.53	---	---	---	---



MANATEE COUNTY—Continued

WELL NUMBER.--272539082292002. ROMP TR 7-4 Suwannee Well near Bradenton, FL.

LOCATION.--Lat 27°25'39", long 82°29'20" (1927 North American datum), in SW $^1/_4$ NE $^1/_4$ sec.22, T.35 S., R.18 E., Hydrologic Unit 03100202, on southwest shore of Ward Lake Reservoir, 1.25 mi south of State Highway 70, 2.0 mi west of Interstate I-75, and 5.0 mi southeast of Bradenton.

AQUIFER.--Upper Floridan aquifer of Oligocene Age, Geologic Unit 123SWNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 800 ft, cased to 560 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 17.00 ft above National Geodetic Vertical Datum of 1929 (levels by Southwest Florida Water Management District). Measuring point: Top of flange, 13.35 ft above land-surface datum.

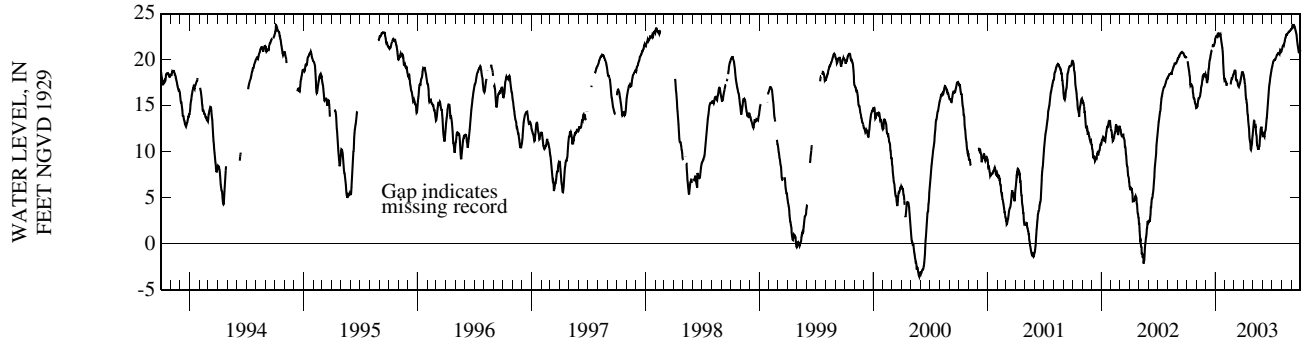
REMARKS.--Water level affected by pumping of nearby irrigation wells.

PERIOD OF RECORD.--November 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 23.78 ft NGVD, Oct. 4, 1994, Sept. 6, 2003; lowest, 3.55 ft below NGVD, May 27, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.18	14.76	18.22	22.33	17.91	18.49	18.45	12.23	11.87	19.10	20.93	23.33
2	---	14.94	18.25	22.44	17.78	18.66	18.33	12.62	11.95	19.30	21.06	23.35
3	---	14.97	18.19	22.52	17.53	18.75	17.97	12.99	11.99	19.45	21.19	23.42
4	19.83	14.86	17.78	22.53	17.62	18.81	17.90	13.30	11.79	19.57	21.36	23.54
5	19.60	15.16	17.48	22.59	17.33	18.82	17.42	13.37	11.82	19.74	21.49	23.76
6	19.31	15.48	17.64	22.60	17.36	18.79	17.34	13.36	11.72	19.81	21.58	23.78
7	19.11	15.56	17.85	22.54	17.17	18.62	16.69	12.92	11.65	19.90	21.60	23.77
8	18.90	15.81	17.94	22.72	---	17.88	16.15	12.73	12.01	19.95	21.56	23.75
9	18.65	15.82	18.57	22.85	---	17.81	15.75	12.72	12.14	19.96	21.72	23.68
10	18.31	15.83	18.97	22.85	---	17.82	15.70	12.76	12.32	20.00	21.81	23.59
11	18.19	15.87	19.11	22.81	---	17.76	15.30	12.19	12.47	20.02	22.05	23.65
12	17.46	15.96	19.57	22.71	---	17.72	15.20	11.87	12.86	20.03	22.22	23.58
13	17.20	16.04	19.88	22.84	---	17.60	14.45	11.78	13.27	20.11	22.34	23.46
14	17.26	16.34	20.02	22.83	---	17.29	14.06	10.97	13.63	20.19	22.41	23.31
15	17.34	16.46	20.16	22.73	---	17.25	13.93	10.71	13.70	20.29	22.55	23.16
16	17.31	16.98	20.39	22.71	---	17.10	13.49	10.70	14.23	20.40	22.72	23.02
17	17.16	17.12	20.53	22.76	---	17.05	13.13	10.36	14.65	20.53	22.73	22.88
18	17.15	17.22	20.67	22.50	---	17.20	12.76	10.36	15.12	20.55	22.71	22.66
19	17.13	17.54	20.88	22.25	17.31	17.23	12.47	10.23	15.64	20.56	22.72	22.26
20	16.99	17.83	21.02	21.94	17.57	17.34	11.61	10.46	16.14	20.65	22.85	21.99
21	16.45	18.15	21.03	21.73	17.77	17.51	11.34	10.55	16.61	20.74	22.90	21.67
22	16.31	18.22	---	21.49	17.94	17.68	11.12	10.59	17.02	20.74	22.94	21.45
23	15.85	18.12	21.34	21.24	17.93	17.91	11.01	11.23	17.30	20.69	23.00	21.28
24	15.83	18.26	21.61	20.91	17.95	18.07	10.30	11.67	17.52	20.67	23.02	21.13
25	15.78	18.42	21.61	20.38	18.07	18.22	10.22	12.08	17.84	20.61	23.01	20.84
26	15.71	18.42	21.44	19.72	18.25	18.41	10.41	12.41	18.14	20.75	23.08	20.83
27	15.41	18.31	21.53	19.14	18.36	18.62	10.71	12.54	18.33	20.92	23.11	20.78
28	15.28	18.31	21.60	18.48	18.42	18.63	10.87	12.65	18.56	21.09	23.18	20.84
29	15.24	18.36	21.71	18.11	---	18.65	11.44	12.73	18.76	21.06	23.21	20.86
30	15.06	18.44	21.83	17.86	---	18.65	11.75	12.22	19.01	20.95	23.25	21.06
31	14.74	---	22.23	17.92	---	18.49	---	12.18	---	20.87	23.28	---
MAX	---	18.44	---	22.85	---	18.82	18.45	13.37	19.01	21.09	23.28	23.78



MANATEE COUNTY—Continued

WELL NUMBER.--272539082292003. ROMP TR 7-4 Tampa Well near Bradenton, FL.

LOCATION.--Lat 27°25'39", long 82°29'20" (1927 North American datum), in SW $^1/_4$ NE $^1/_4$ sec.22, T.35 S., R.18 E., Hydrologic Unit 03100202, on southwest shore of Ward Lake Reservoir, 1.25 mi south of State Highway 70, 2.0 mi west of Interstate I-75, and 5.0 mi southeast of Bradenton.

AQUIFER.--Upper Floridan aquifer of Miocene Age, Geological Unit 122TAMP.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 8 in., depth 500 ft, cased to 380 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 17.00 ft above National Geodetic Vertical Datum of 1929 (levels by Southwest Florida Water Management District). Measuring point: Top of flange, 13.02 ft above land-surface datum.

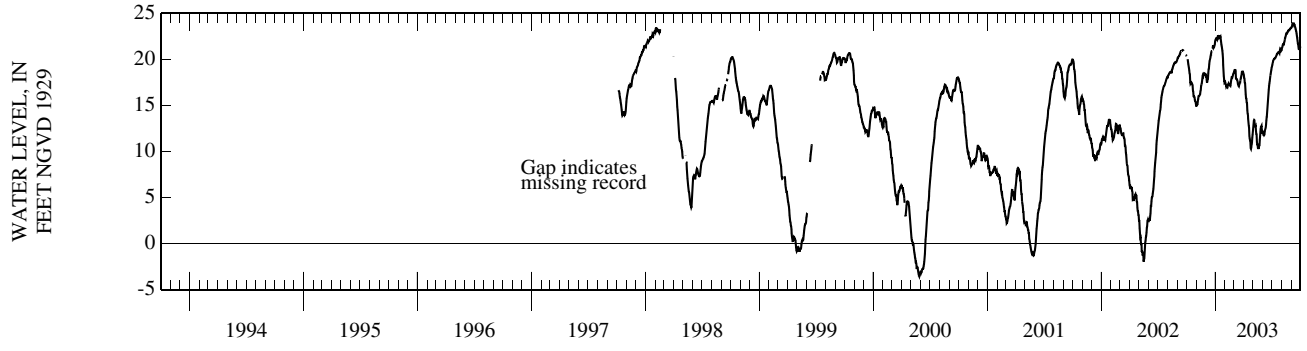
REMARKS.--Water level affected by pumping of nearby irrigation wells.

PERIOD OF RECORD.--November 1989 to September 1991; October 1991 to September 1997 (periodic); October 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 23.91 ft NGVD, Sept. 6, 7, 2003; lowest, 3.54 ft below NGVD, May 27, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.39	14.96	18.23	22.12	17.62	18.55	18.49	12.30	11.92	19.20	21.02	23.46
2	---	15.14	18.26	22.18	17.50	18.70	18.37	12.70	12.01	19.40	21.15	23.48
3	---	15.15	18.20	22.28	17.23	18.79	18.04	13.06	12.05	19.55	21.26	23.57
4	20.02	15.05	17.80	22.28	17.31	18.85	17.96	13.35	11.86	19.67	21.44	23.67
5	19.79	15.35	17.47	22.31	17.02	18.86	17.49	13.44	11.87	19.81	21.57	23.90
6	19.50	15.65	17.62	22.31	17.06	18.84	17.42	13.42	11.78	19.90	21.68	23.91
7	19.30	15.73	17.81	22.23	16.99	18.68	16.76	12.99	11.84	19.99	21.71	23.91
8	19.09	15.99	17.91	22.41	16.97	17.93	16.22	12.76	12.18	20.04	21.67	23.90
9	18.83	16.01	18.51	22.54	17.13	17.88	15.80	12.78	12.30	20.06	21.81	23.83
10	18.49	16.03	18.91	22.54	17.21	17.88	15.77	12.83	12.43	20.11	21.90	23.73
11	18.38	16.07	19.04	22.50	17.30	17.83	15.34	12.25	12.58	20.13	22.13	23.79
12	17.64	16.16	19.49	22.41	17.38	17.78	15.26	11.93	12.92	20.14	22.31	23.72
13	17.38	16.22	19.80	22.52	17.27	17.66	14.50	11.85	13.37	20.21	22.41	23.60
14	17.45	16.52	19.92	22.51	17.26	17.36	14.12	11.02	13.73	20.29	22.50	23.47
15	17.53	16.64	20.07	22.42	17.28	17.32	13.99	10.77	13.81	20.36	22.62	23.31
16	17.51	17.11	20.28	22.42	17.20	17.14	13.56	10.76	14.32	20.46	22.81	23.17
17	17.35	17.25	20.40	22.47	17.16	17.09	13.20	10.41	14.76	20.60	22.82	23.02
18	17.35	17.34	20.57	22.19	17.12	17.26	12.82	10.42	15.23	20.61	22.80	22.80
19	17.31	17.63	20.76	21.92	17.35	17.29	12.56	10.28	15.74	20.63	22.86	22.54
20	17.17	17.95	20.88	21.62	17.61	17.40	11.69	10.50	16.24	20.72	22.99	22.32
21	16.65	18.25	20.88	21.44	17.83	17.56	11.40	10.61	16.72	20.77	23.03	22.01
22	16.49	18.33	---	21.19	18.00	17.72	11.21	10.65	17.11	20.78	23.06	21.79
23	16.03	18.22	21.18	20.94	17.99	17.94	11.09	11.29	17.40	20.75	23.15	21.62
24	16.03	18.33	21.44	20.59	17.99	18.10	10.39	11.71	17.63	20.76	23.16	21.48
25	15.98	18.46	21.44	20.07	18.11	18.24	10.31	12.14	17.94	20.70	23.16	21.17
26	15.90	18.47	21.25	19.42	18.29	18.43	10.48	12.45	18.23	20.82	23.22	21.17
27	15.61	18.35	21.32	18.84	18.41	18.65	10.79	12.59	18.43	21.01	23.24	21.12
28	15.49	18.37	21.35	18.19	18.47	18.67	10.96	12.70	18.66	21.18	23.31	21.17
29	15.44	18.38	21.47	17.83	---	18.69	11.51	12.77	18.86	21.15	23.33	21.20
30	15.27	18.47	21.66	17.56	---	18.69	11.83	12.26	19.10	21.04	23.39	21.40
31	14.96	---	21.99	17.62	---	18.54	---	12.23	---	20.96	23.41	---
MAX	---	18.47	---	22.54	18.47	18.86	18.49	13.44	19.10	21.18	23.41	23.91



MANATEE COUNTY—Continued

WELL NUMBER.--272539082292004. ROMP TR 7-4 Hawthorn Well near Bradenton, FL.

LOCATION.--Lat 27°25'39", long 82°29'20" (1927 North American datum), in SW $^1/_4$ NE $^1/_4$ sec.22, T.35 S., R.18 E., Hydrologic Unit 03100202, on southwest shore of Ward Lake Reservoir, 1.25 mi south of State Highway 70, 2.0 mi west of Interstate I-75, and 5.0 mi southeast of Bradenton.

AQUIFER.--Intermediate aquifer of Miocene Age, Geologic Unit 122HTRN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 268 ft, cased to 213 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 17.01 ft above National Geodetic Vertical Datum of 1929 (levels by Southwest Florida Water Management District). Measuring point: Top of recorder shelter floor, 13.09 ft above land-surface datum.

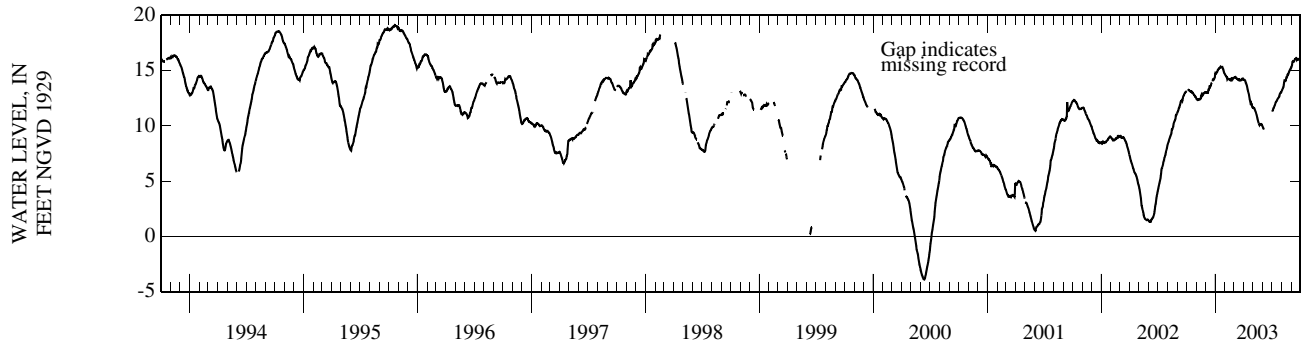
REMARKS.--Water level affected by pumping of nearby irrigation wells.

PERIOD OF RECORD.--November 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 19.12 ft NGVD, Oct. 20, 1995; lowest, 3.90 ft below NGVD, June 12, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.15	12.46	13.06	14.79	14.67	14.34	14.17	11.67	9.98	---	13.09	15.35
2	---	12.41	13.04	14.76	14.61	14.36	14.19	11.66	9.91	11.29	13.18	15.37
3	---	12.38	13.03	14.74	14.55	14.39	14.18	11.63	9.83	11.37	13.26	15.44
4	13.25	12.37	13.03	14.76	14.52	14.40	14.19	11.63	9.78	11.42	13.30	15.55
5	13.25	12.37	13.01	14.82	14.47	14.41	14.16	11.63	9.72	11.49	13.39	15.81
6	13.24	12.38	13.02	14.85	14.41	14.42	14.11	11.61	9.67	11.57	13.45	15.84
7	13.26	12.34	12.98	14.88	14.41	14.39	14.06	11.54	---	11.62	13.51	15.80
8	13.24	12.36	12.99	14.97	14.21	14.36	13.93	11.45	---	11.67	13.71	15.81
9	13.20	12.40	13.21	15.08	14.26	14.32	13.86	11.37	---	11.77	13.94	15.83
10	13.19	12.41	13.30	15.11	14.28	14.32	13.79	11.30	---	11.83	14.08	15.84
11	13.17	12.41	13.29	15.12	14.27	14.29	13.72	11.22	---	11.89	14.07	15.91
12	13.14	12.41	13.38	15.14	14.24	14.25	13.59	11.11	---	11.98	14.08	15.95
13	13.10	12.41	13.59	15.21	14.22	14.21	13.45	11.01	---	12.08	14.07	16.04
14	13.10	12.43	13.59	15.23	14.22	14.19	13.30	10.90	---	12.17	14.08	16.05
15	13.15	12.50	13.53	15.24	14.24	14.16	13.18	10.76	---	12.21	14.16	16.10
16	13.14	12.71	13.59	15.31	14.24	14.14	13.13	10.62	---	12.24	14.32	16.12
17	13.07	12.78	13.65	15.36	14.23	14.25	13.03	10.51	---	12.29	14.40	16.14
18	13.02	12.67	13.70	15.32	14.13	14.24	12.92	10.41	---	12.34	14.39	16.11
19	13.02	12.73	13.79	15.30	14.12	14.19	12.75	10.32	---	12.40	14.45	15.98
20	13.02	12.81	13.88	15.33	14.16	14.13	12.58	10.22	---	12.46	14.65	16.02
21	13.00	12.91	13.89	15.35	14.24	14.13	12.41	10.13	---	12.52	14.68	16.03
22	12.93	12.92	---	15.35	14.30	14.11	12.29	10.08	---	12.57	14.67	16.03
23	12.87	12.87	14.02	15.34	14.29	14.13	12.17	10.14	---	12.60	14.70	16.02
24	12.84	12.92	14.20	15.25	14.19	14.14	11.99	10.17	---	12.64	14.83	16.01
25	12.80	12.97	14.21	15.18	14.23	14.14	11.88	10.17	---	12.69	14.90	16.02
26	12.77	13.00	14.17	15.15	14.29	14.19	12.05	10.16	---	12.82	14.95	16.06
27	12.71	13.01	14.19	15.04	14.31	14.25	11.97	10.15	---	12.91	15.01	16.03
28	12.65	13.01	14.23	14.91	14.33	14.26	11.82	10.13	---	12.97	15.07	16.02
29	12.65	13.01	14.31	14.83	---	14.25	11.71	10.15	---	13.01	15.09	16.04
30	12.61	13.06	14.39	14.78	---	14.28	11.66	10.11	---	13.02	15.15	16.02
31	12.55	---	14.70	14.71	---	14.19	---	10.03	---	13.04	15.22	---
MAX	---	13.06	---	15.36	14.67	14.42	14.19	11.67	---	---	15.22	16.14



MANATEE COUNTY—Continued

WELL NUMBER.--272539082292005. ROMP TR 7-4 NRSD Well near Bradenton, FL.

LOCATION.--Lat 27°25'39", long 82°29'20" (1927 North American datum), in SW $^1/_4$ NE $^1/_4$ sec.22, T.35 S., R.18 E., Hydrologic Unit 03100202, on southwest shore of Ward Lake Reservoir, 1.25 mi south of State Highway 70, 2.0 mi west of Interstate I-75, and 5.0 mi southeast of Bradenton.

AQUIFER.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit 112NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 20 ft, cased to 15 ft.

INSTRUMENTATION.--Water-stage recorder--60 minute interval.

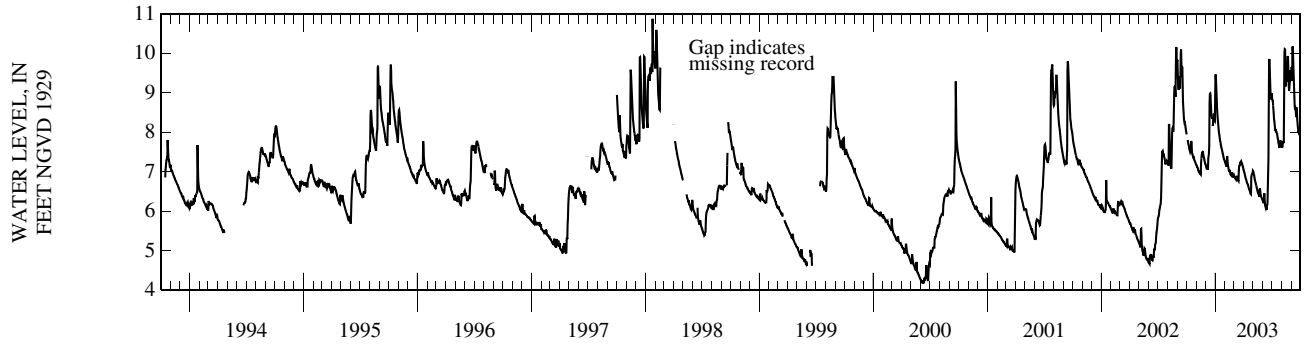
DATUM.--Land-surface datum is 16.88 ft above National Geodetic Vertical Datum of 1929 (levels by Southwest Florida Water Management District). Measuring point: Top of recorder shelter floor, 3.07 ft above land-surface datum.

PERIOD OF RECORD.--March 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 10.88 ft NGVD, Jan. 23, 1998; lowest, 4.17 ft NGVD, June 8, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.95	7.17	7.19	9.45	7.25	6.89	7.05	7.03	6.29	8.93	7.67	9.52
2	---	7.16	7.14	9.45	7.23	6.88	7.04	7.02	6.27	8.83	7.63	9.66
3	---	7.13	7.12	9.21	7.20	6.87	7.01	6.98	6.25	8.80	7.63	9.59
4	7.81	7.12	7.09	9.01	7.18	6.86	6.99	6.95	6.23	8.79	7.64	9.31
5	7.77	7.10	7.09	8.84	7.16	6.85	6.94	6.91	6.21	8.69	7.73	10.15
6	7.72	7.09	7.16	8.68	7.13	6.84	6.91	6.87	6.44	8.59	7.78	10.18
7	7.69	7.04	7.10	8.52	7.38	6.82	6.87	6.83	6.44	8.48	7.73	9.89
8	7.66	7.03	7.06	8.40	7.38	6.81	6.84	6.79	6.26	8.33	7.78	9.46
9	7.60	7.02	7.34	8.31	7.23	6.87	6.82	6.76	6.16	8.29	8.66	9.17
10	7.57	7.00	7.40	8.22	7.17	6.90	6.79	6.73	6.14	8.20	10.01	8.96
11	7.53	6.98	7.46	8.12	7.14	6.85	6.76	6.69	6.10	8.11	10.11	8.79
12	7.50	6.97	7.67	8.02	7.07	6.82	6.74	6.65	6.07	8.05	10.10	8.66
13	7.53	7.02	8.73	7.96	7.04	6.80	6.71	6.62	6.09	8.07	9.72	8.62
14	7.54	6.95	8.98	7.91	7.02	6.79	6.69	6.58	6.04	8.01	9.36	8.63
15	7.78	6.94	8.99	7.84	7.00	6.78	6.68	6.55	6.14	8.03	9.17	8.56
16	7.76	7.23	8.94	7.79	7.03	6.77	6.66	6.51	6.16	8.01	9.47	8.47
17	7.59	7.34	8.80	7.77	7.03	7.04	6.63	6.48	6.18	7.98	9.63	8.39
18	7.50	7.42	8.64	7.69	6.95	7.14	6.60	6.49	6.74	7.93	9.57	8.63
19	7.46	7.48	8.49	7.65	6.93	7.16	6.57	6.45	7.01	7.88	9.28	8.60
20	7.43	7.50	8.39	7.62	6.92	7.17	6.55	6.42	7.32	7.84	9.82	8.33
21	7.41	7.51	8.34	7.59	6.91	7.23	6.53	6.40	8.78	7.79	9.94	8.22
22	7.37	7.50	---	7.56	6.97	7.24	6.51	6.37	9.80	7.74	9.82	8.13
23	7.35	7.43	8.20	7.52	6.97	7.26	6.47	6.58	9.86	7.70	9.45	8.07
24	7.36	7.39	8.17	7.46	6.89	7.27	6.44	6.56	9.69	7.65	9.19	8.01
25	7.32	7.37	8.36	7.45	6.88	7.24	6.43	6.48	9.45	7.61	9.06	8.00
26	7.30	7.33	8.45	7.42	6.88	7.23	6.88	6.43	9.10	7.73	9.14	8.05
27	7.27	7.30	8.46	7.38	6.92	7.21	6.91	6.39	8.87	7.76	9.27	7.97
28	7.26	7.26	8.41	7.34	6.93	7.20	6.94	6.37	8.84	7.78	9.51	7.93
29	7.24	7.22	8.30	7.32	---	7.17	6.96	6.36	8.94	7.78	9.58	7.97
30	7.22	7.21	8.29	7.30	---	7.13	6.97	6.33	8.99	7.74	9.43	7.94
31	7.19	---	8.95	7.28	---	7.11	---	6.31	---	7.70	9.30	---
MAX	---	7.51	---	9.45	7.38	7.27	7.05	7.03	9.86	8.93	10.11	10.18



MANATEE COUNTY—Continued

WELL NUMBER.--272838082142201. Kibler Deep Well 26B near Bethany, FL.

LOCATION.--Lat 27°28'38", long 82°14'22" (1927 North American datum), in SE ¼ NE ¼ sec.31, T.34 S., R.21 E., Hydrologic Unit 03100102, 0.2 mi north of State Highway 64, and 1.6 mi east of Bethany.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, unused irrigation, artesian well, diameter 8 in., depth 1,123 ft, cased to 208 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 101 ft, from topographic map. Measuring point: Top of recorder shelter floor, 3.0 ft above land-surface datum.

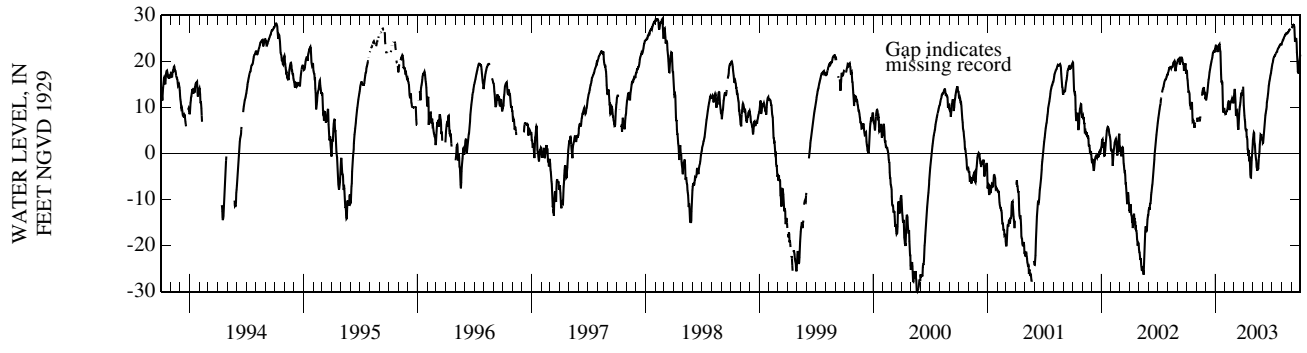
REMARKS.--Water level affected by pumping of nearby irrigation wells.

PERIOD OF RECORD.--June 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 29.30 ft NGVD, estimated, Aug. 20, 1978; lowest, 29.95 ft below NGVD, May 20, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.98	---	12.24	23.15	8.90	11.73	12.59	2.88	3.09	18.92	23.64	---
2	17.82	---	11.57	23.41	8.53	12.98	10.44	3.55	2.28	19.30	23.89	27.27
3	16.31	7.76	11.87	23.61	8.57	13.70	9.36	4.15	2.38	19.55	24.14	27.33
4	15.92	6.87	12.28	22.90	8.93	14.02	8.25	4.57	3.47	19.90	24.35	27.42
5	14.88	7.78	12.83	22.56	9.07	12.82	7.46	4.45	4.34	20.21	24.51	27.73
6	14.08	---	13.24	23.19	9.16	11.34	6.87	2.56	5.13	20.53	24.67	27.85
7	13.19	---	13.84	23.42	9.20	10.02	5.51	2.13	5.92	20.73	24.84	27.89
8	13.58	---	14.54	22.04	9.46	8.21	5.23	1.63	6.77	20.94	25.04	27.95
9	13.33	7.89	15.40	22.58	9.91	8.59	4.90	0.22	7.57	21.06	25.17	27.87
10	12.88	7.71	16.00	22.94	10.61	9.32	5.36	-0.50	8.31	21.21	25.40	27.81
11	10.93	7.20	16.41	23.10	11.11	9.37	3.59	-1.14	8.73	21.26	25.58	27.44
12	10.33	6.98	17.07	23.33	11.32	8.10	3.46	-1.43	9.19	21.40	25.68	25.70
13	10.47	7.60	17.63	23.64	11.28	7.69	3.08	-2.90	9.62	21.57	25.71	24.27
14	9.50	8.05	18.03	23.75	10.84	6.00	0.85	-3.15	10.11	21.73	25.87	24.51
15	---	---	18.46	23.17	9.69	5.16	0.84	-3.76	11.04	21.86	25.94	24.88
16	10.87	---	18.85	22.42	9.44	5.46	-0.42	-3.20	11.48	22.01	26.08	24.91
17	11.08	---	19.18	22.08	10.40	6.84	0.60	-2.85	11.92	22.09	26.12	24.89
18	11.18	---	19.46	20.15	10.94	8.55	0.59	-3.40	12.55	22.26	26.07	24.20
19	9.09	12.57	19.88	17.23	11.16	9.55	-1.69	-2.23	13.09	22.46	26.04	22.07
20	7.02	13.24	20.19	15.60	11.13	10.14	-1.01	-0.99	13.81	22.69	26.13	20.73
21	7.10	13.66	20.43	15.47	11.37	10.59	-0.66	-0.24	14.67	22.81	26.28	19.51
22	7.21	13.96	20.82	15.58	11.06	11.13	-2.80	0.38	15.10	22.93	26.33	17.63
23	7.11	14.02	21.28	15.50	11.65	12.05	-4.63	1.93	15.69	23.09	26.44	17.96
24	6.68	14.23	21.85	13.20	11.99	12.54	-5.17	2.74	15.96	23.22	26.55	18.16
25	5.97	14.40	21.93	9.53	11.79	12.99	-5.23	3.52	16.40	23.24	26.81	17.34
26	5.57	12.99	22.10	8.93	11.92	13.22	-3.15	4.06	16.89	23.33	26.89	18.32
27	6.25	13.00	22.23	9.12	10.90	12.58	-1.51	3.96	17.20	23.56	26.89	19.21
28	6.73	13.17	22.34	9.57	11.27	13.49	-0.45	4.22	17.51	23.68	27.03	20.23
29	---	12.93	21.96	9.90	---	13.84	0.47	3.25	18.03	23.80	27.12	20.99
30	---	11.80	22.26	9.63	---	---	1.43	2.95	18.45	23.80	---	21.46
31	---	---	22.75	8.91	---	14.53	---	3.40	---	23.70	---	---
MAX	---	---	22.75	23.75	11.99	---	12.59	4.57	18.45	23.80	---	---



MANATEE COUNTY—Continued

WELL NUMBER.--273718082315501. Florida Power and Light Well at Piney Point, FL.

LOCATION.--Lat 27°37'18", long 82°31'55" (1927 North American datum), in NE $^1/_4$ SE $^1/_4$ sec.7, T.33 S., R.18 E., Hydrologic Unit 03100206, 0.4 mi east of U. S. Highway 41, and 0.8 mi southeast of Piney Point.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, unused private, artesian well, diameter 12 in., depth 950 ft, cased to 104 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 11.24 ft (corrected) above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 14.34 ft (corrected) above land-surface datum. The figures of water level as elevation, in feet NGVD, between July 19, 2002 and Sept. 30, 2002, are in error. Correct elevations for these data may be obtained by using datum correction of 0.34 ft. Correct elevations are in files of the Geological Survey.

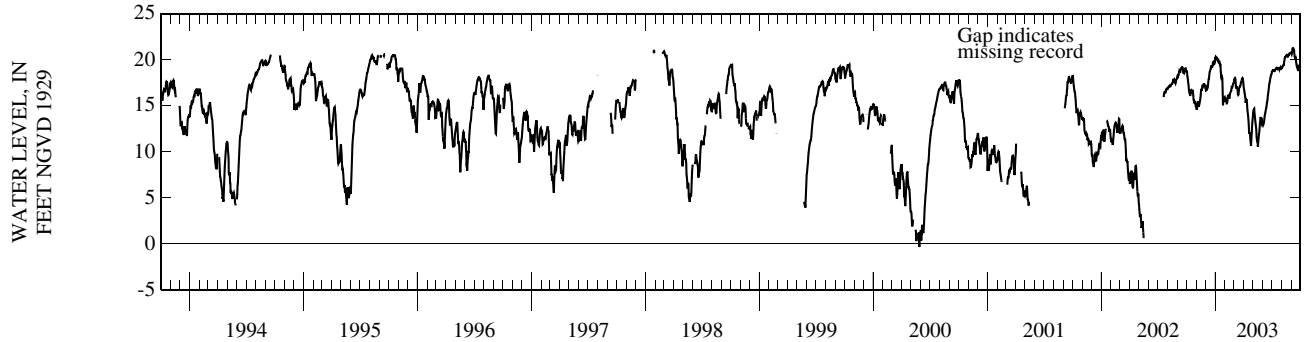
PERIOD OF RECORD.--May 1978 to current year. Prior to October 1979, published as (273718082315401) Willis Well at Piney Point.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 21.26 ft NGVD, Sept. 7, 2003; lowest, 4.84 ft below NGVD, May 26, 1989.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.74	14.76	16.83	20.23	15.71	17.62	17.29	13.94	13.11	18.65	19.10	20.72
2	18.72	14.57	16.91	20.11	15.67	17.84	16.94	14.34	13.04	18.77	19.11	20.64
3	18.27	14.71	16.71	20.24	15.84	17.92	16.76	14.55	12.90	18.82	19.16	20.80
4	18.04	15.16	16.75	20.17	15.74	18.02	16.49	14.63	12.99	18.81	19.21	20.91
5	17.78	15.33	16.80	20.14	15.58	18.03	16.30	14.68	13.19	18.85	19.30	21.18
6	17.44	15.46	16.87	20.16	15.27	17.83	16.03	14.45	13.34	18.85	19.39	21.24
7	17.17	15.30	16.93	20.02	15.26	17.49	15.87	14.00	13.66	18.86	19.44	21.26
8	16.75	15.03	17.15	19.95	15.37	16.98	15.32	13.76	13.96	18.80	19.44	21.22
9	16.49	14.90	17.57	20.04	15.86	17.00	15.61	13.31	14.13	18.77	19.75	21.16
10	16.39	15.10	17.89	20.04	16.10	17.07	15.69	13.02	14.30	18.82	19.94	21.06
11	16.26	15.18	17.91	19.87	16.13	17.04	15.65	12.77	14.48	18.83	20.14	20.62
12	16.07	15.47	18.26	19.72	16.15	16.94	15.32	12.44	14.69	18.87	20.28	20.37
13	16.31	15.61	18.63	19.74	16.07	16.72	14.64	11.56	14.87	18.99	20.31	20.23
14	16.47	15.86	18.70	19.75	15.77	16.25	14.35	11.38	15.05	19.07	20.32	20.20
15	16.70	16.23	18.81	19.52	15.84	16.19	14.05	11.11	15.29	19.10	20.40	20.23
16	16.73	16.72	18.93	19.46	16.12	16.24	13.89	11.05	15.44	19.08	20.44	19.88
17	16.60	16.83	19.03	19.57	16.29	16.67	13.49	10.58	15.67	19.10	20.49	19.62
18	16.50	16.65	19.13	18.76	16.42	16.89	12.97	11.04	16.04	19.02	20.45	19.42
19	16.34	16.89	19.24	18.25	16.48	17.00	12.11	11.42	16.28	18.99	20.42	19.24
20	16.57	17.16	19.41	18.01	16.57	17.04	11.97	11.80	16.58	19.05	20.37	19.14
21	16.59	17.15	19.21	18.06	16.70	17.16	12.09	12.03	16.84	19.06	20.44	19.28
22	16.19	17.09	19.22	18.13	17.05	17.20	11.84	12.35	17.22	19.08	20.49	19.33
23	15.68	17.18	19.39	18.00	17.05	17.41	11.36	12.91	17.44	19.09	20.45	19.31
24	15.62	17.35	19.73	16.32	17.04	17.54	11.03	13.30	17.58	19.07	20.57	19.12
25	15.27	17.43	19.76	15.05	17.17	17.57	10.65	13.65	17.82	18.93	20.56	18.78
26	15.42	17.19	19.49	15.49	17.27	17.77	11.27	13.77	18.00	18.98	20.67	19.11
27	15.44	17.22	19.50	15.52	17.39	17.92	12.03	13.69	18.16	19.06	20.70	19.30
28	15.53	17.21	19.52	15.39	17.48	17.98	12.62	13.61	18.32	19.12	20.71	19.41
29	15.17	17.21	19.55	15.62	---	17.83	13.13	13.64	18.38	19.20	20.74	19.52
30	14.94	16.98	19.66	15.88	---	17.89	13.48	13.56	18.52	19.12	20.78	19.60
31	14.90	---	20.16	15.93	---	17.79	---	13.04	---	19.05	20.75	---
MAX	18.74	17.43	20.16	20.24	17.48	18.03	17.29	14.68	18.52	19.20	20.78	21.26

WTR YR 2003 MAX 21.26



MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2002 TO SEPTEMBER 2003

MANATEE COUNTY

SITE-ID	STATION NAME	WATER-LEVEL DATE	WATER-LEVEL MSL FEET	WATER-LEVEL DATUM CODE
271906082112401	ROMP 23 MYAKKA CITY OCALA WELL NEAR MYAKKA CITY FL	05-20-2003	17.35	NGVD29
		09-16-2003	33.66	NGVD29
271906082112402	ROMP 23 MYAKKA CITY TAMPA WELL NEAR MYAKKA CITY	05-20-2003	17.54	NGVD29
		09-16-2003	33.53	NGVD29
272051082094601	MYAKKA CITY COMM CNTR WELL NEAR MYAKKA CITY FL	05-19-2003	26.04	NGVD29
		09-16-2003	35.76	NGVD29
272510082345701	ROMP TR 7-1 TAMPA WELL NEAR BRADENTON FL	09-19-2003	22.33	NGVD29
272537082033301	GOUGH FLORIDAN NEAR MYAKKA HEAD FL	05-20-2003	17.08	NGVD29
		09-16-2003	40.44	NGVD29
272612082330101	ROMP TR7-2 AVON PARK WELL NR BRADENTON FL	05-22-2003	15.52	NGVD29
		09-15-2003	22.70	NGVD29
272612082330102	ROMP TR 7-2 SUWANNEE WELL NR BRADENTON FL	05-22-2003	15.26	NGVD29
		09-15-2003	22.53	NGVD29
272612082330103	ROMP TR 7-2 ARCADIA 290 FT WELL NEAR BRADENTON FL	05-22-2003	14.92	NGVD29
		09-15-2003	20.13	NGVD29
272612082330104	ROMP TR7-2 ARCADIA 105FT WELL NR BRADENTON FL	05-22-2003	14.59	NGVD29
		09-15-2003	17.73	NGVD29
272728082153002	ROMP 33 SUWANNEE WELL NEAR BETHANY FL	05-20-2003	1.36	NGVD29
		09-16-2003	26.96	NGVD29
272728082153003	ROMP 33 HAWTHORN WELL NEAR BETHANY FL	05-20-2003	32.59	NGVD29
		09-16-2003	40.86	NGVD29
272728082153004	ROMP 33 NSRD NEAR BETHANY FL	05-20-2003	68.47	NGVD29
		09-16-2003	70.64	NGVD29
272735082083401	USGS DEEP WELL NEAR MYAKKA HEAD FL	05-20-2003	10.09	NGVD29
		09-16-2003	35.30	NGVD29
272814082034802	ROMP 32 SUWANNEE WELL NEAR MYAKKA HEAD FL	05-20-2003	19.56	NGVD29
		09-16-2003	42.42	NGVD29
272855082362001	MEADOWCROFT FLORIDAN WELL AT BRADENTON FL	05-19-2003	12.49	NGVD29
		09-15-2003	17.72	NGVD29
272940082360801	MILLER ELEMENTARY SCH HAWTHORN WELL BRADENTON FL	05-19-2003	12.21	NGVD29
		09-15-2003	19.77	NGVD29
273253082072801	ESTECH HAWTHORN 44 NEAR DUETTE FL	09-17-2003	110.17	NGVD29
273255082072601	SWIFT-AVON PARK ON DUETTE ROAD NEAR DUETTE FL	09-17-2003	44.15	NGVD29
273354082352401	GEORGE STEVENS WELL 27A NEAR TERRA CEIA FL	05-19-2003	8.22	NGVD29
		09-19-2003	15.60	NGVD29
273458082324704	ROMP TR 8-1 ARCADIA REPLACE WELL AT RUBONIA FL	05-19-2003	14.47	NGVD29
		09-15-2003	18.69	NGVD29

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2002 TO SEPTEMBER 2003

MANATEE COUNTY

SITE-ID	STATION NAME	WATER-LEVEL DATE	WATER-LEVEL MSL FEET	WATER-LEVEL DATUM CODE
273458082324705	ROMP TR 8-1 SUWANNEE WELL AT RUBONIA FL	05-19-2003	15.18	NGVD29
		09-19-2003	21.99	NGVD29
273458082324707	ROMP TR 8-1 NRSD WELL AT RUBONIA FL	05-19-2003	9.10	NGVD29
		09-15-2003	10.86	NGVD29
273521082150501	ROMP 39 OAK KNOLL AVON PARK WELL NR PARRISH FL	05-22-2003	0.54	NGVD29
		09-17-2003	25.65	NGVD29
273521082150502	ROMP 39 SUWANNEE WELL NEAR PARRISH FL	05-22-2003	0.38	NGVD29
		09-17-2003	25.61	NGVD29
273521082150503	ROMP 39 INTERMEDIATE WELL NEAR PARRISH FL	05-22-2003	86.36	NGVD29
		09-17-2003	87.09	NGVD29
273605082071101	BUSBY DEEP WELL ON DUETTE ROAD AT DUETTE FL	09-17-2003	48.43	NGVD29

KEY TO SITE LOCATIONS ON FIGURE 18

PASCO COUNTY

INDEX NUMBER	SITE NUMBER
1	281023082075701
2	281025082384601
3	281053082310402
4	281101082292502
5	281124082353001
6	281424082192701
7	281448082301801
8	281558082264601
9	281622082241301
10	281636082372001
10	281636082372002
11	281715082164401
11	281715082164402
12	281918082264601
13	281926082212901
14	281949082332001
15	282009082373801

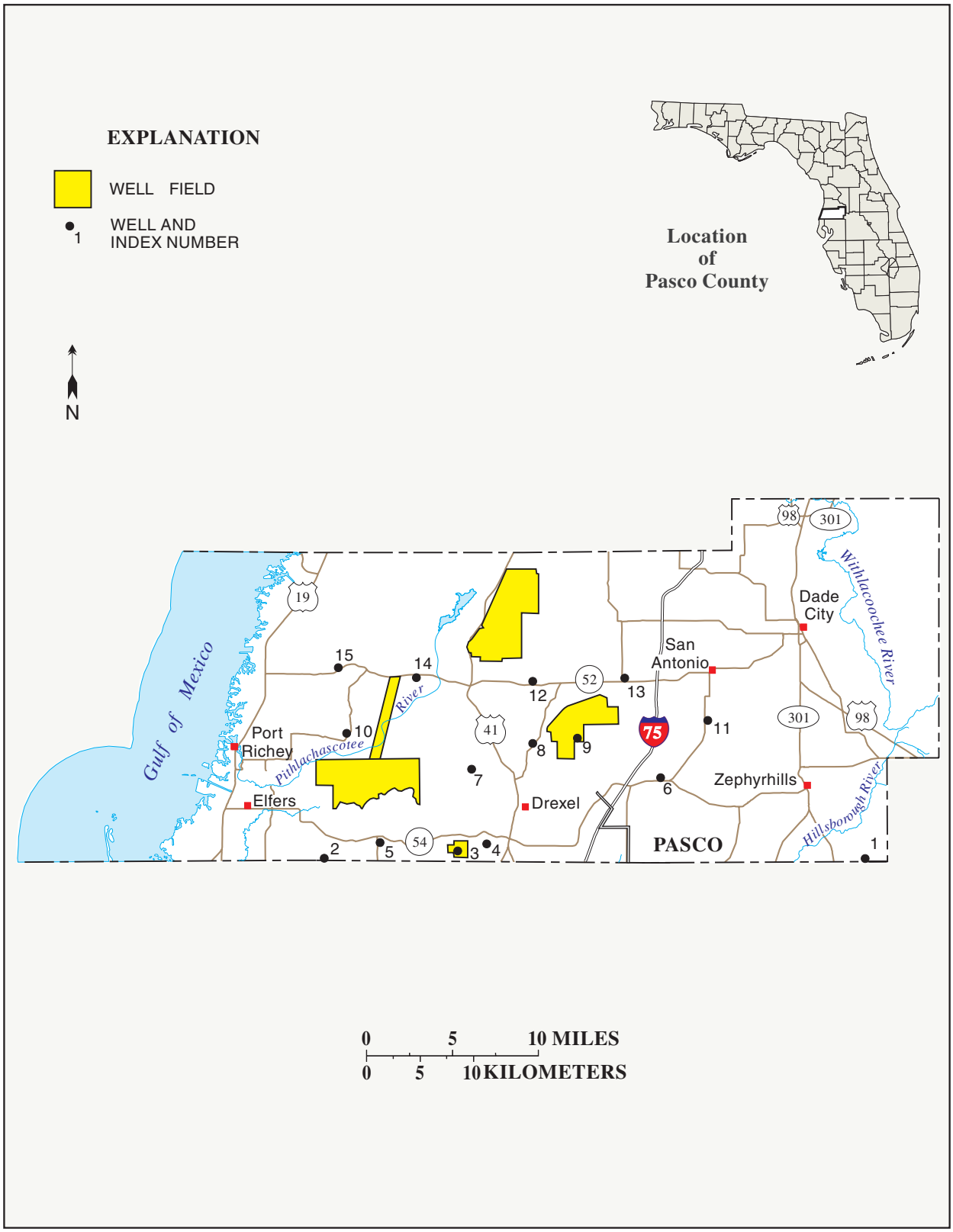


Figure 18.-- Location of wells in Pasco County.

PASCO COUNTY

WELL NUMBER.--281023082075701. Weicht Deep Well near Crystal Springs, FL.

LOCATION.--Lat 28°10'23", long 82°07'57" (1927 North American datum), in SE $^1/_4$ SW $^1/_4$ sec.32, T.26 S., R.22 E., Hydrologic Unit 03100205, 1.5 mi east of State Highway 39, and 1.8 mi southeast of Crystal Springs.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, diameter 3 in., depth 100 ft, cased to 60 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 90 ft, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

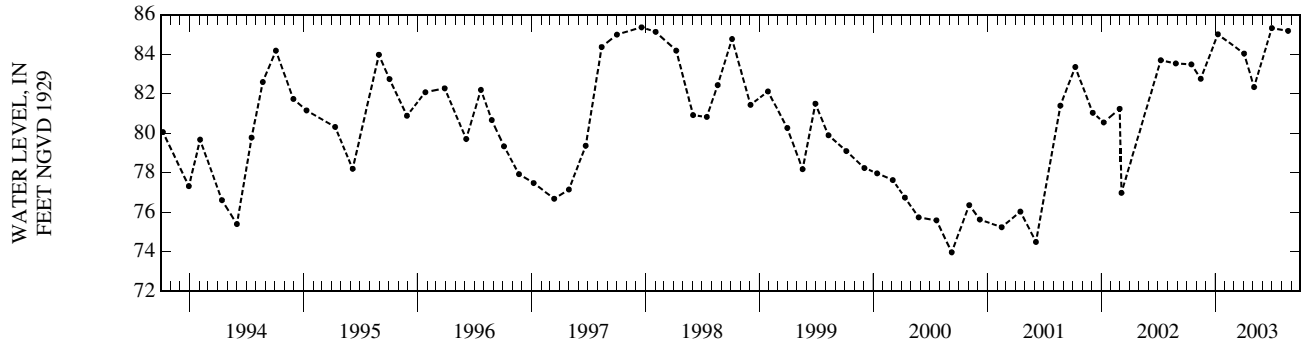
PERIOD OF RECORD.--May 1973 to current year (periodic). Records of water levels prior to October 1977 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 85.36 ft NGVD, Dec.19, 1997; lowest measured, 73.58 ft NGVD, June 14, 1990.

WATER SURFACE ELEVATION IN FEET (NGVD1929), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 16	83.48	JAN 09	85.01	MAY 05	82.33	AUG 22	85.18
NOV 15	82.75	APR 03	84.03	JUL 01	85.32		

WATER YEAR 2003 LOWEST 82.33 MAY 05, 2003 HIGHEST 85.32 JUL 01, 2003



PASCO COUNTY—Continued

WELL NUMBER.--281025082384601. Eldridge-Wilde Mitchell Well near Tarpon Springs, FL.

LOCATION.--Lat 28°10'25", long 82°38'46" (1927 North American datum), in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.31, T.26 S., R.17 E., Hydrologic Unit 03100207, 2.1 mi north of State Highway 582, and 7.0 mi east of Tarpon Springs.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, unused test, artesian well, diameter 10 in., depth 608 ft, cased to 42 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 36.42 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of extension, 1.76 ft above land-surface datum.

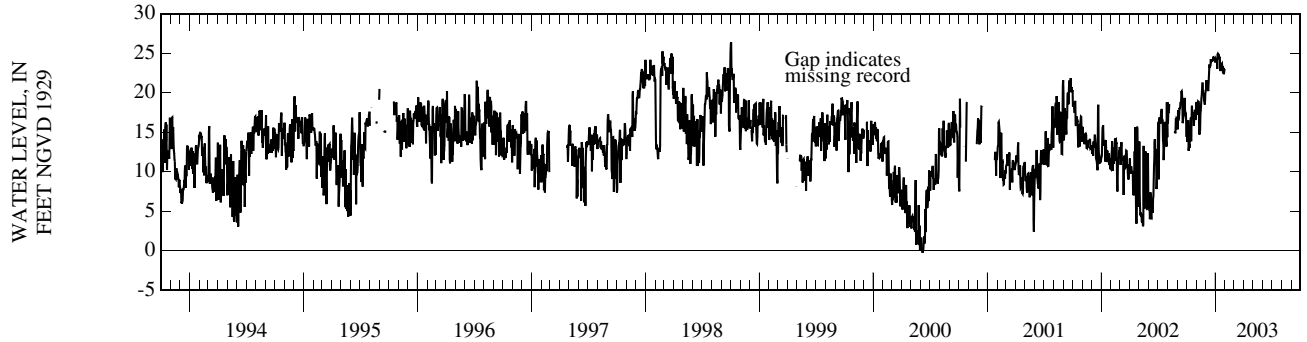
REMARKS.--Water level affected by pumping of nearby wells.

PERIOD OF RECORD.--November 1972 to July 1974; December 1974 to June 1977 (periodic); July 1977 to January 2003 (discontinued). Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 26.39 ft NGVD, Oct. 2, 1998; lowest, 0.27 ft below NGVD, June 7, 2000.

ELEVATION ABOVE NGVD 1929, FEET
PERIOD OCTOBER 2002 TO JANUARY 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.38	18.71	20.27	24.18	---	---	---	---	---	---	---	---
2	15.68	18.35	20.43	24.35	---	---	---	---	---	---	---	---
3	13.78	18.60	21.57	24.23	---	---	---	---	---	---	---	---
4	15.21	18.76	21.30	24.23	---	---	---	---	---	---	---	---
5	16.40	18.61	20.63	23.93	---	---	---	---	---	---	---	---
6	16.40	17.20	21.34	24.23	---	---	---	---	---	---	---	---
7	12.65	18.89	21.43	23.02	---	---	---	---	---	---	---	---
8	13.03	18.85	20.36	24.82	---	---	---	---	---	---	---	---
9	13.45	18.49	20.20	24.91	---	---	---	---	---	---	---	---
10	13.00	15.00	21.16	24.79	---	---	---	---	---	---	---	---
11	14.40	14.70	22.14	24.73	---	---	---	---	---	---	---	---
12	14.79	15.25	23.05	24.54	---	---	---	---	---	---	---	---
13	15.71	15.27	23.58	24.63	---	---	---	---	---	---	---	---
14	16.82	17.39	23.15	24.49	---	---	---	---	---	---	---	---
15	13.85	17.70	23.41	24.45	---	---	---	---	---	---	---	---
16	15.87	18.40	23.46	23.67	---	---	---	---	---	---	---	---
17	18.00	19.25	24.13	22.73	---	---	---	---	---	---	---	---
18	18.34	19.62	24.14	23.52	---	---	---	---	---	---	---	---
19	17.19	20.33	24.14	23.56	---	---	---	---	---	---	---	---
20	17.22	21.13	24.01	23.61	---	---	---	---	---	---	---	---
21	17.23	21.27	24.09	23.52	---	---	---	---	---	---	---	---
22	17.34	19.99	24.10	23.62	---	---	---	---	---	---	---	---
23	17.36	19.79	24.07	23.18	---	---	---	---	---	---	---	---
24	15.78	19.76	24.14	23.37	---	---	---	---	---	---	---	---
25	16.65	19.23	24.46	22.48	---	---	---	---	---	---	---	---
26	17.35	19.29	24.49	22.55	---	---	---	---	---	---	---	---
27	17.84	18.98	24.25	23.05	---	---	---	---	---	---	---	---
28	17.67	18.50	24.28	22.34	---	---	---	---	---	---	---	---
29	16.58	19.01	24.32	22.47	---	---	---	---	---	---	---	---
30	16.68	20.06	24.29	22.90	---	---	---	---	---	---	---	---
31	18.71	---	23.83	22.84	---	---	---	---	---	---	---	---
MAX	18.71	21.27	24.49	24.91	---	---	---	---	---	---	---	---



PASCO COUNTY—Continued

WELL NUMBER.--281053082310402. St. Petersburg Shallow Well 105 near Land O'Lakes, FL.

LOCATION.--Lat 28°10'53", long 82°31'04" (1927 North American datum), in SW $^1/_4$ NW $^1/_4$ sec.33, T.26 S., R.18 E., Hydrologic Unit 03100207, 1.2 mi south of State Highway 54, and 3.2 mi west of Land O'Lakes.

AQUIFER.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit 111NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 20 ft, cased to 18 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 57.82 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 3.20 ft above land-surface datum.

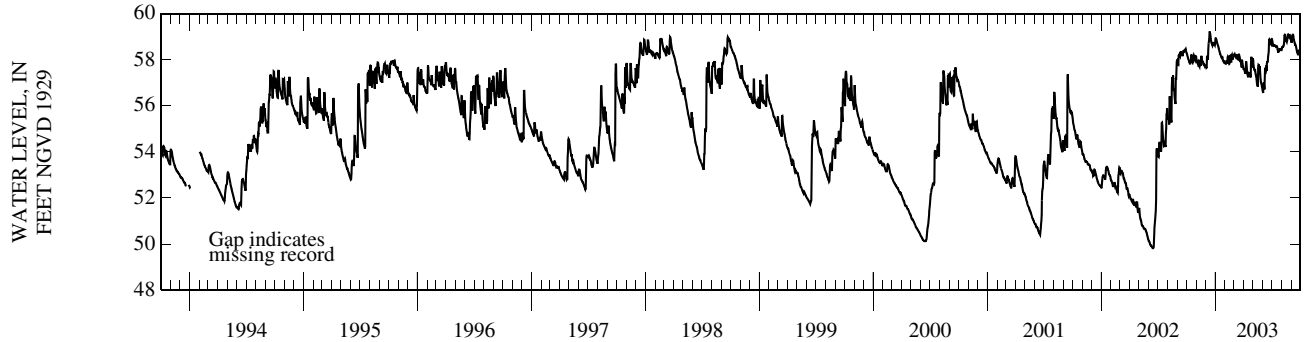
PERIOD OF RECORD.--March 1973 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 59.23 ft NGVD, Sept. 9, 10, 1988; lowest, 49.82 ft NGVD, June 14, 15, 2002.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58.30	58.02	57.78	58.92	57.87	58.21	57.60	58.06	56.70	58.89	58.42	58.81
2	58.24	57.95	57.69	58.93	57.84	58.19	57.60	57.96	56.63	58.83	58.51	58.74
3	58.20	57.89	57.65	58.92	57.83	58.21	57.59	57.74	56.56	58.74	58.55	58.89
4	58.14	57.87	57.66	58.87	57.93	58.24	57.59	57.65	56.96	58.66	58.55	59.02
5	58.09	57.90	58.12	58.82	57.93	58.20	57.50	57.61	57.00	58.62	58.57	59.04
6	58.04	57.92	58.17	58.79	57.83	58.15	57.45	57.56	56.88	58.63	58.57	59.09
7	58.01	57.79	58.09	58.73	57.92	58.17	57.40	57.55	56.71	58.61	58.59	59.09
8	57.97	57.73	57.99	58.68	57.88	58.24	57.57	57.60	57.11	58.60	58.65	59.02
9	57.91	57.73	58.44	58.64	58.10	58.20	57.93	57.47	57.65	58.60	58.73	58.89
10	57.88	57.74	58.70	58.60	58.14	58.20	57.90	57.39	57.52	58.63	59.06	58.85
11	57.84	57.71	58.79	58.54	58.12	58.13	57.70	57.33	57.50	58.62	59.08	58.80
12	57.84	57.93	58.91	58.47	57.98	58.06	57.53	57.26	57.71	58.61	59.05	58.73
13	57.97	58.00	59.20	58.42	57.87	58.05	57.39	57.14	57.71	58.59	58.98	58.67
14	57.89	57.84	59.20	58.38	57.82	58.02	57.35	56.98	57.51	58.56	58.91	58.68
15	58.19	57.74	59.12	58.32	57.83	58.01	57.29	56.91	57.82	58.57	58.86	58.64
16	58.20	58.11	59.02	58.26	58.16	58.17	57.24	56.87	57.90	58.58	58.82	58.59
17	58.10	58.17	58.93	58.25	58.17	58.26	57.40	56.83	57.90	58.59	58.82	58.52
18	57.94	58.08	58.84	58.20	58.08	58.20	57.43	57.63	57.93	58.55	58.78	58.45
19	57.89	57.94	58.78	58.15	57.96	58.14	57.42	57.78	58.14	58.45	58.84	58.38
20	57.87	57.93	58.72	58.11	57.92	58.07	57.40	57.77	58.24	58.40	58.96	58.32
21	57.93	57.93	58.69	58.11	57.92	58.03	57.38	57.36	58.38	58.31	59.09	58.29
22	57.93	57.90	58.65	58.09	58.18	57.89	57.38	57.58	58.85	58.37	59.10	58.25
23	58.14	57.81	58.61	58.10	58.21	57.97	57.29	57.73	58.88	58.38	59.08	58.23
24	58.20	57.79	58.65	58.01	58.14	57.96	57.23	57.46	58.85	58.45	59.00	58.20
25	58.16	57.80	58.72	57.98	58.06	57.78	57.85	57.26	58.76	58.46	58.98	58.39
26	58.07	57.77	58.73	57.98	58.05	57.66	58.13	57.15	58.73	58.46	59.04	58.40
27	58.01	57.76	58.72	57.95	58.18	57.93	58.03	57.04	58.70	58.44	59.04	58.35
28	58.00	57.74	58.70	57.91	58.19	57.94	57.77	56.98	58.68	58.45	59.06	58.33
29	57.97	57.70	58.67	57.92	---	57.83	57.67	56.95	58.88	58.45	59.03	58.29
30	58.15	57.71	58.64	57.90	---	57.75	58.02	56.86	58.90	58.42	58.94	58.26
31	58.14	---	58.74	57.89	---	57.70	---	56.79	---	58.42	58.88	---
MAX	58.30	58.17	59.20	58.93	58.21	58.26	58.13	58.06	58.90	58.89	59.10	59.09

CAL YR 2002 MAX 59.20
WTR YR 2003 MAX 59.20



PASCO COUNTY—Continued

WELL NUMBER.--281101082292502. Harry Matts Shallow Well near Land O'Lakes, FL.

LOCATION.--Lat 28°11'01", long 82°29'25" (1927 North American datum), in NW $^1/_4$ NE $^1/_4$ sec.34, T.26 S., R.18 E., Hydrologic Unit 03100207, 1.5 mi west of U. S. Highway 41, and 3.2 mi southwest of Land O'Lakes.

AQUIFER.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit 112NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 10.4 ft, cased to 8 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Land-surface datum is 68.09 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of male adapter, 1.50 ft above land-surface datum.

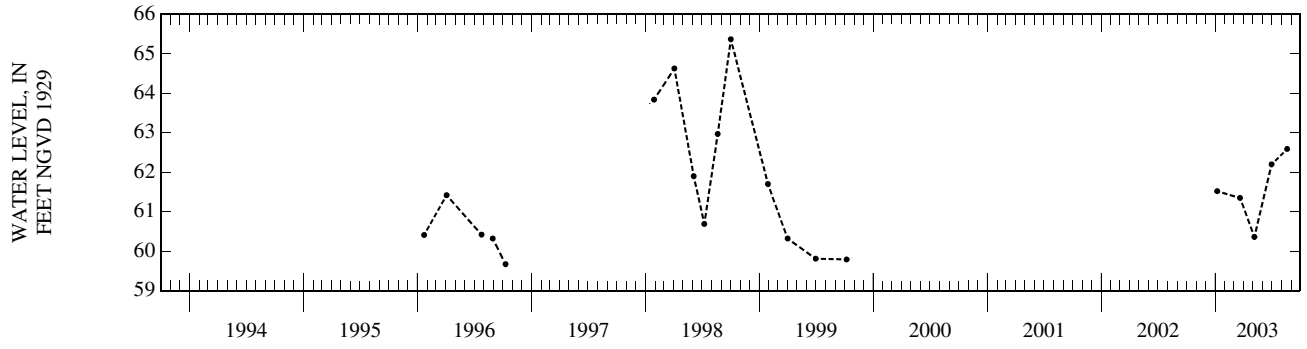
PERIOD OF RECORD.--May 1972 to September 2003 (periodic), discontinued. Records of water levels prior to October 1977 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 65.45 ft NGVD, Sept. 19, 1979; well observed dry at times some years.

WATER SURFACE ELEVATION IN FEET (NGVD1929), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07	DRY	JAN 07	61.52	MAY 06	60.36	AUG 19	62.59
NOV 19	DRY	MAR 21	61.35	JUN 30	62.20		

WATER YEAR 2003 LOWEST DRY OCT 07, NOV. 19, 2002 HIGHEST 62.59 AUG 19, 2003



PASCO COUNTY—Continued

WELL NUMBER.--281124082353001. Swains Well at Odessa, FL.

LOCATION.--Lat 28°11'24", long 82°35'30" (1927 North American datum), in SW $^1/_4$ SE $^1/_4$ sec.27, T.26 S., R.17 E., Hydrologic Unit 03100207, 0.3 mi south of Odessa, and 7.7 mi west of Land O'Lakes.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, unused irrigation, artesian well, diameter 6 in., depth 316 ft, cased to 65 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Land-surface datum is 50.69 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of sanitation seal, 4.59 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby wells.

PERIOD OF RECORD.--August 1963 to November 1967; July 1969 to September 1981; October 1981 to current year (periodic). Records of water levels prior to January 1974 are available in files of the Geological Survey.

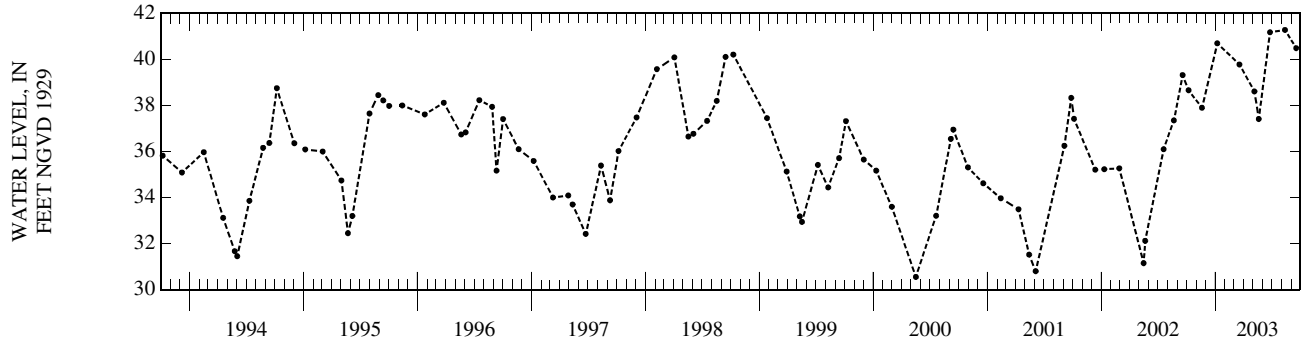
REVISED RECORDS.--WRD FL-76-3: 1975.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 42.08 ft NGVD, Sept. 30, 1979; lowest measured, 30.55 ft NGVD, May 16, 2000.

WATER SURFACE ELEVATION IN FEET (NGVD1929), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07	38.66	JAN 07	40.70	MAY 06	38.61	JUN 25	41.18	SEP 17	40.49
NOV 19	37.90	MAR 19	39.78	20	37.41	AUG 12	41.28		

WATER YEAR 2003 LOWEST 37.41 MAY 20, 2003 HIGHEST 41.28 AUG 12, 2003



PASCO COUNTY—Continued

WELL NUMBER.--281424082192701. ROMP 85 Avon Park Well near Zephyrhills, FL.

LOCATION.--Lat 28°14'24", long 82°19'27" (1927 North American datum), in SE $^1/_4$ NE $^1/_4$ sec.8, T.26 S., R.20 E., Hydrologic Unit 03100205, 30 ft south of State Highway 54, and 9.0 mi west of Zephyrhills.

AQUIFER.--Avon Park formation of Eocene Age, Geologic Unit 124AVPK.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 8 in., depth 505 ft, cased to 450 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 107.94 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 3.39 ft above land-surface datum.

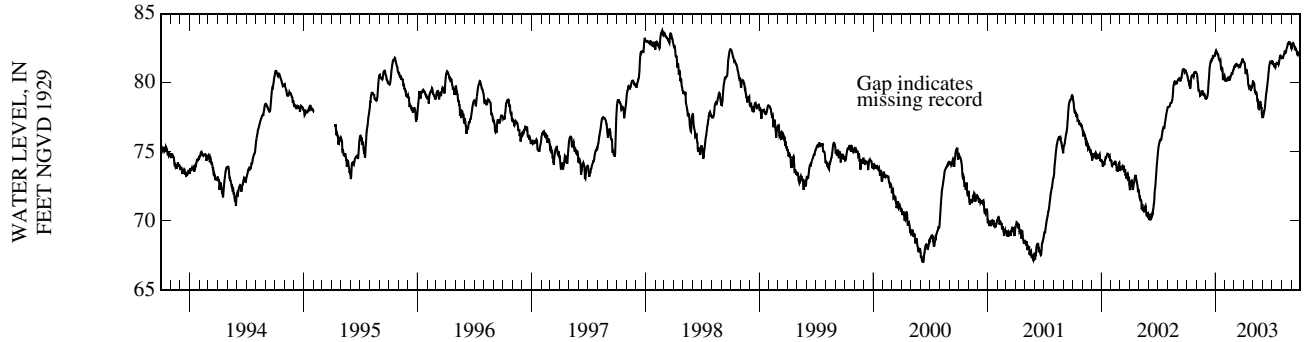
PERIOD OF RECORD.--February 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 83.78 ft NGVD, Feb. 23, 1998; lowest, 66.98 ft NGVD, June 9, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80.69	80.70	78.81	82.21	80.30	81.06	81.52	80.10	77.45	81.57	81.78	82.54
2	80.61	80.65	78.90	82.30	80.10	81.15	81.53	80.09	77.51	81.57	81.78	82.46
3	80.54	80.62	78.87	82.34	80.16	81.19	81.51	80.04	77.54	81.54	81.80	82.53
4	80.42	80.39	78.88	82.27	80.17	81.24	81.47	80.00	77.67	81.45	81.83	82.68
5	80.32	80.08	78.91	82.25	80.17	81.28	81.37	79.96	77.78	81.38	81.86	82.79
6	80.18	79.97	78.97	82.22	80.26	81.25	81.19	79.90	77.97	81.39	81.84	82.85
7	80.17	79.73	79.14	82.13	80.25	81.21	80.83	79.49	77.99	81.34	81.90	82.89
8	80.04	79.43	79.29	82.06	80.12	81.25	80.63	79.35	78.12	81.22	81.99	82.88
9	79.85	79.42	79.67	82.04	80.31	81.35	80.82	79.29	78.40	81.19	82.07	82.80
10	79.77	79.44	80.06	82.04	80.37	81.36	80.87	79.35	78.65	81.23	82.20	82.73
11	79.71	79.42	80.27	81.89	80.36	81.33	80.90	79.34	78.89	81.18	82.27	82.64
12	79.56	79.31	80.68	81.72	80.38	81.30	80.76	79.33	79.11	81.13	82.27	82.54
13	79.63	79.07	81.04	81.70	80.33	81.28	80.62	79.26	79.29	81.25	82.21	82.36
14	80.00	79.09	81.21	81.67	80.37	81.27	80.51	79.08	79.40	81.37	82.17	82.44
15	80.33	79.13	81.37	81.58	80.16	81.20	80.19	78.76	79.56	81.42	82.19	82.49
16	80.46	79.24	81.50	81.56	80.22	81.16	79.96	78.69	79.72	81.45	82.33	82.45
17	80.50	79.26	81.54	81.60	80.33	81.26	79.86	78.71	79.94	81.45	82.43	82.40
18	80.52	79.18	81.55	81.31	80.36	81.28	79.74	78.31	80.15	81.41	82.49	82.32
19	80.56	79.34	81.60	80.99	80.41	81.23	79.64	78.13	80.37	81.40	82.56	82.20
20	80.59	79.45	81.67	80.95	80.49	81.18	79.67	78.10	80.65	81.40	82.70	82.00
21	80.58	79.33	81.65	81.04	80.56	81.15	79.71	78.25	80.84	81.39	82.82	82.05
22	80.48	79.15	81.71	81.09	80.67	81.20	79.72	78.45	81.12	81.34	82.88	82.13
23	80.43	79.12	81.77	81.07	80.65	81.33	79.70	78.59	81.27	81.43	82.90	82.07
24	80.61	79.22	81.95	80.77	80.59	81.40	79.47	78.59	81.39	81.57	82.84	82.02
25	80.74	79.22	81.95	80.19	80.71	81.43	79.47	78.60	81.46	81.63	82.83	82.06
26	80.74	79.21	81.89	80.27	80.84	81.53	79.68	78.55	81.53	81.79	82.92	82.18
27	80.76	79.20	81.93	80.35	80.91	81.59	79.65	78.46	81.52	81.90	82.93	82.19
28	80.76	79.14	81.94	80.34	80.94	81.64	79.72	78.16	81.50	81.96	82.91	82.18
29	80.78	79.06	81.96	80.45	---	81.69	79.77	78.16	81.46	81.97	82.88	82.10
30	80.76	78.90	81.96	80.49	---	81.75	79.90	77.71	81.55	81.92	82.76	82.02
31	80.75	---	82.10	80.30	---	81.54	---	77.58	---	81.81	82.66	---
MAX	80.78	80.70	82.10	82.34	80.94	81.75	81.53	80.10	81.55	81.97	82.93	82.89

CAL YR 2002 MAX 82.10
WTR YR 2003 MAX 82.93



PASCO COUNTY—Continued

WELL NUMBER.--281448082301801. Bexley Well 2 near Drexel, FL.

LOCATION.--Lat 28°14'48", long 82°30'18" (1927 North American datum), in SE ¼ SE ¼ sec.4, T.26 S., R.18 E., Hydrologic Unit 03100207, 2.0 mi west of U. S. Highway 41, and 2.8 mi west of Drexel.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, unused irrigation, artesian well, diameter 8 in., depth 743 ft, cased to 44 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 67.43 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 3.02 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby irrigation wells.

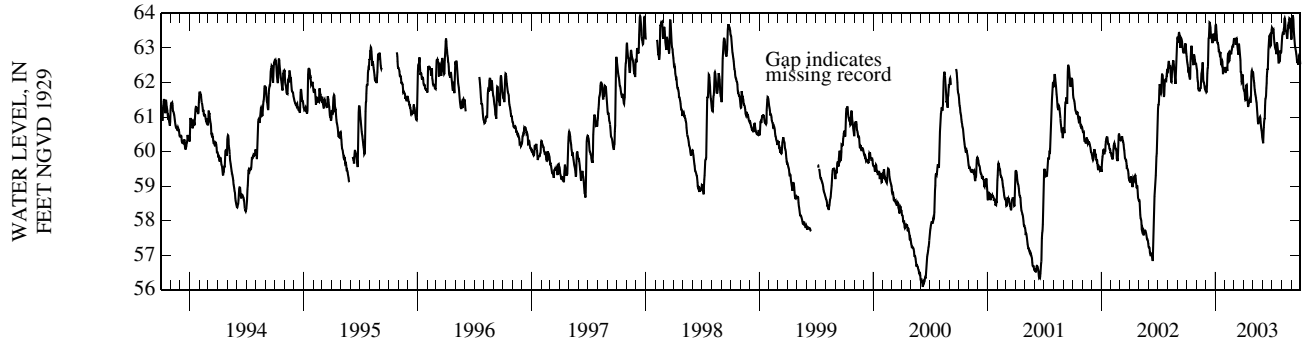
PERIOD OF RECORD.--November 1969 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 64.07 ft NGVD, Sept. 9, 1988; lowest, 55.84 ft NGVD, May 14, 1974 (corrected).

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62.75	62.47	61.82	63.63	62.37	63.25	61.83	62.31	60.36	63.59	63.01	63.24
2	62.64	62.40	61.75	63.67	62.30	63.25	61.79	62.27	60.31	63.57	63.16	63.31
3	62.57	62.35	61.72	63.65	62.30	63.20	61.77	62.14	60.24	63.45	63.34	63.61
4	62.52	62.15	61.73	63.48	62.40	63.29	61.76	62.04	60.45	63.42	63.39	63.79
5	62.43	62.04	61.93	63.37	62.39	63.26	61.65	61.98	60.70	63.53	63.44	63.87
6	62.35	62.00	62.26	63.28	62.41	63.21	61.55	61.91	60.85	63.54	63.44	63.94
7	62.36	61.83	62.41	63.17	62.40	63.09	61.49	61.80	60.95	63.44	63.38	63.91
8	62.29	61.80	62.45	63.14	62.33	63.22	61.50	61.73	60.96	63.27	63.54	63.81
9	62.19	61.81	62.94	63.14	62.68	63.27	61.82	61.66	61.32	63.16	63.60	63.56
10	62.16	61.79	63.28	63.11	62.81	63.28	61.92	61.61	61.53	63.10	63.83	63.40
11	62.09	61.74	63.29	63.01	62.83	63.21	61.93	61.55	61.54	63.02	63.86	63.29
12	62.13	61.77	63.47	62.88	62.77	63.10	61.79	61.47	61.61	62.99	63.82	63.18
13	62.60	61.82	63.74	62.91	62.66	63.01	61.63	61.42	61.84	62.97	63.64	63.05
14	62.83	61.83	63.73	62.89	62.62	62.93	61.47	61.27	61.98	62.92	63.48	63.00
15	63.01	61.84	63.64	62.81	62.63	62.87	61.35	61.14	62.17	62.82	63.51	62.95
16	63.06	62.07	63.59	62.83	62.70	62.80	61.29	61.00	62.30	62.94	63.47	62.90
17	63.00	62.25	63.47	62.88	62.89	63.12	61.32	60.88	62.40	63.16	63.43	62.82
18	62.85	62.29	63.37	62.67	62.88	63.08	61.40	60.79	62.37	63.13	63.34	62.76
19	62.77	62.36	63.31	62.54	62.85	62.98	61.42	60.85	62.61	63.04	63.26	62.65
20	62.71	62.38	63.32	62.52	62.84	62.87	61.44	60.86	62.95	62.95	63.34	62.56
21	62.63	62.58	63.22	62.63	62.84	62.77	61.49	60.86	63.11	62.77	63.49	62.63
22	62.53	62.27	63.17	62.65	62.93	62.65	61.52	60.86	63.25	62.58	63.60	62.62
23	62.50	62.04	63.14	62.62	62.97	62.29	61.48	60.98	63.34	62.58	63.67	62.58
24	62.79	62.01	63.34	62.41	63.04	62.31	61.41	61.00	63.36	62.58	63.65	62.51
25	62.79	62.00	63.39	62.24	63.06	62.15	61.63	60.96	63.29	62.69	63.72	62.57
26	62.75	61.94	63.39	62.34	63.07	62.00	62.18	60.86	63.14	62.67	63.86	62.78
27	62.67	61.91	63.37	62.33	63.06	62.01	62.32	60.76	63.06	62.66	63.85	62.80
28	62.60	61.84	63.32	62.34	63.16	62.19	62.35	60.67	63.08	62.88	63.78	62.78
29	62.57	61.81	63.24	62.42	---	62.21	62.31	60.61	63.41	62.93	63.67	62.65
30	62.54	61.84	63.20	62.42	---	62.21	62.25	60.54	63.51	62.85	63.51	62.53
31	62.54	---	63.40	62.40	---	61.98	---	60.42	---	62.87	63.37	---
MAX	63.06	62.58	63.74	63.67	63.16	63.29	62.35	62.31	63.51	63.59	63.86	63.94

CAL YR 2002 MAX 63.74
WTR YR 2003 MAX 63.94



PASCO COUNTY—Continued

WELL NUMBER.--281558082264601. Pasco Well 13 near Drexel, FL.

LOCATION.--Lat 28°15'58", long 82°26'46" (1927 North American datum), in SE $^1/_4$ NW $^1/_4$ sec.31, T.25 S., R.19 E., Hydrologic Unit 03100205, 300 ft southeast of State Highway 583, and 1.9 mi northeast of Drexel.

AQUIFER.--Tampa limestone of Miocene Age, Geologic Unit 122TAMP.

WELL CHARACTERISTICS.--Drilled, unused irrigation, artesian well, diameter 6 in., depth 49 ft, cased to 43 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 80.54 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 2.19 ft above land-surface datum.

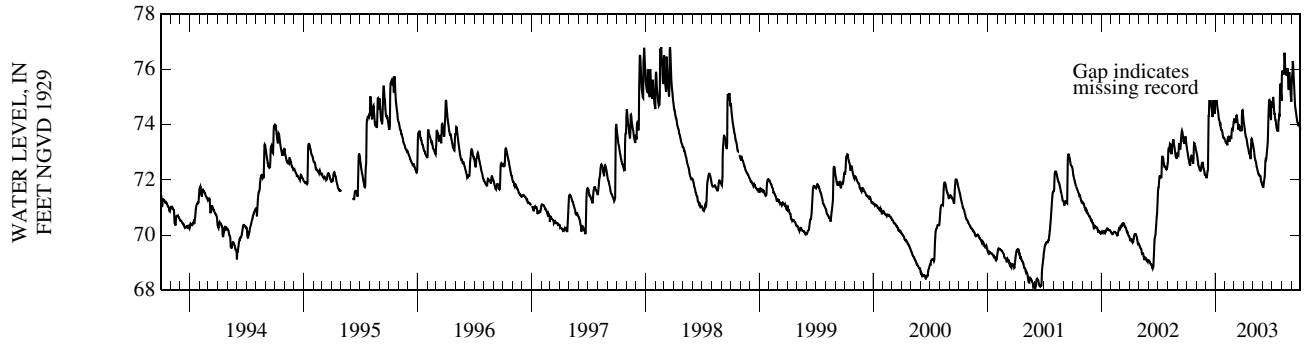
PERIOD OF RECORD.--March to September 1934; February 1936 to April 1950 (periodic); June 1951 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 77.24 ft NGVD, Mar. 18, 1960; lowest, 68.00 ft NGVD, June 1, 2001.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73.21	73.01	72.14	75.52	73.45	74.13	74.16	73.28	71.79	74.83	74.86	74.83
2	73.12	72.95	72.12	75.45	73.40	74.11	74.07	73.23	71.77	74.68	75.78	75.48
3	73.05	72.89	72.10	75.33	73.36	74.10	73.99	73.14	71.71	74.61	75.92	75.72
4	72.98	72.82	72.06	75.14	73.36	74.19	73.92	73.08	71.77	74.86	75.94	75.73
5	72.90	72.72	72.12	74.94	73.35	74.19	73.84	73.00	71.88	75.00	75.94	75.87
6	72.83	72.66	72.26	74.80	73.32	74.13	73.72	72.92	71.96	74.93	75.80	76.30
7	72.77	72.56	72.33	74.68	73.31	74.07	73.65	72.83	72.04	74.75	75.87	76.21
8	72.72	72.51	72.36	74.57	73.25	74.18	73.57	72.77	72.12	74.54	75.89	75.84
9	72.64	72.47	73.28	74.53	73.45	74.31	73.56	72.71	72.39	74.37	75.94	75.49
10	72.58	72.45	74.31	74.44	73.54	74.33	73.52	72.69	72.67	74.41	76.60	75.23
11	72.54	72.39	74.31	74.33	73.55	74.30	73.47	72.65	72.74	74.26	76.54	75.04
12	72.51	72.35	74.67	74.21	73.52	74.18	73.38	72.58	72.73	74.18	76.23	74.89
13	72.68	72.34	75.39	74.17	73.47	74.08	73.30	72.49	72.78	74.16	75.82	74.73
14	72.75	72.33	75.38	74.14	73.43	73.99	73.23	72.44	72.93	74.06	76.01	74.60
15	72.83	72.33	75.20	74.05	73.38	73.90	73.19	72.40	73.00	73.96	76.05	74.53
16	72.87	72.37	75.04	74.01	73.48	73.82	73.17	72.35	73.13	73.88	75.83	74.45
17	72.86	72.50	74.88	74.02	73.56	74.01	73.12	72.29	73.25	73.83	75.83	74.37
18	72.81	72.56	74.75	73.90	73.56	73.97	73.04	72.24	73.38	73.85	75.76	74.27
19	72.76	72.61	74.64	73.83	73.53	73.92	72.97	72.20	73.70	73.85	75.99	74.20
20	72.72	72.62	74.60	73.80	73.50	73.82	72.94	72.19	74.29	73.83	76.01	74.12
21	72.65	72.62	74.49	73.80	73.48	73.79	72.91	72.19	74.54	73.75	76.01	74.07
22	72.59	72.56	74.37	73.78	73.71	73.79	72.90	72.15	74.88	74.13	75.69	74.03
23	72.79	72.45	74.27	73.75	73.84	73.91	72.84	72.15	74.89	74.18	75.41	73.99
24	73.19	72.39	74.73	73.63	73.86	73.92	72.75	72.15	74.84	74.32	75.25	73.94
25	73.33	72.37	75.00	73.57	73.85	73.86	73.04	72.14	74.63	74.36	75.83	74.01
26	73.32	72.33	74.93	73.57	73.83	73.76	73.46	72.08	74.44	74.35	75.89	74.07
27	73.28	72.27	74.78	73.55	73.95	74.30	73.49	71.99	74.25	75.13	75.63	74.01
28	73.22	72.19	74.65	73.51	74.06	74.51	73.47	71.94	74.16	75.45	75.53	73.95
29	73.17	72.18	74.52	73.51	---	74.52	73.40	71.92	74.78	75.45	75.42	73.88
30	73.10	72.18	74.40	73.49	---	74.46	73.33	71.88	74.78	75.21	75.12	73.80
31	73.07	---	75.16	73.47	---	74.31	---	71.82	---	75.00	74.94	---
MAX	73.33	73.01	75.39	75.52	74.06	74.52	74.16	73.28	74.89	75.45	76.60	76.30

CAL YR 2002 MAX 75.39
WTR YR 2003 MAX 76.60



PASCO COUNTY—Continued

WELL NUMBER.--281622082241301. Cypress Creek Deep Well 3 near Ehren, FL.

LOCATION.--Lat 28°16'22", long 82°24'13" (1927 North American datum), in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.33, T.25 S., R.19 E., Hydrologic Unit 03100205, 2.7 mi east of Ehren, and 6.6 mi south of Darby.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 352 ft, cased to 136 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 64.48 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 1.00 ft above land-surface datum.

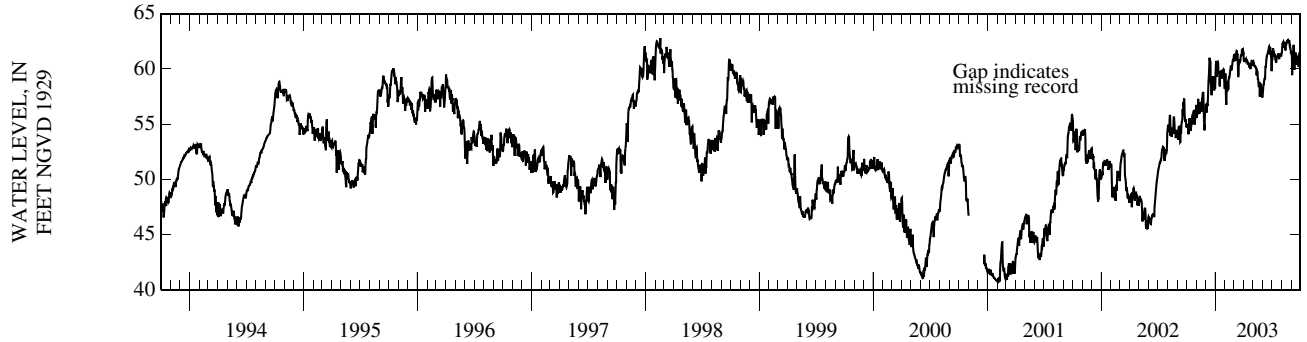
PERIOD OF RECORD.--June 1974 to current year. Prior to October 1977, published as Cypress Creek Deep Well 3 near Darby.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 63.68 ft NGVD, Sept. 10, 1974; lowest, 40.77 ft NGVD, Feb. 2, 2001.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54.71	56.75	56.74	59.39	58.86	61.20	61.43	60.71	57.54	61.05	61.36	61.45
2	54.93	55.58	56.85	60.25	59.59	61.35	60.77	60.72	57.82	61.18	61.46	61.45
3	54.93	56.07	56.61	60.66	58.14	60.70	60.67	60.59	58.19	61.11	61.95	60.96
4	54.72	55.88	56.07	60.66	57.08	61.06	60.84	60.55	58.58	61.58	62.29	59.44
5	54.67	56.38	56.61	59.28	56.76	61.31	60.82	60.31	58.62	61.87	62.34	60.93
6	54.24	56.67	56.75	59.89	58.41	61.36	60.77	60.31	58.88	61.43	62.01	61.61
7	54.10	57.29	56.66	60.38	58.43	60.85	60.82	60.29	59.07	61.49	62.02	61.09
8	55.13	56.50	57.32	60.58	57.97	60.86	60.82	60.27	59.15	61.37	62.07	62.05
9	54.72	55.96	58.06	60.62	58.92	61.45	60.88	60.18	59.07	61.22	62.38	62.19
10	55.56	56.23	59.08	60.48	58.81	61.62	60.71	60.18	60.17	61.38	62.32	61.63
11	54.93	56.23	59.47	59.55	58.13	61.60	60.77	60.15	60.19	61.23	62.24	59.92
12	54.96	55.98	60.11	59.61	59.00	61.31	60.78	60.07	60.44	60.87	62.27	61.23
13	55.25	56.61	61.02	59.79	59.22	61.36	60.73	59.43	60.83	60.78	61.68	61.37
14	54.40	56.97	60.74	58.72	59.21	60.13	60.61	59.76	61.07	60.65	62.04	61.13
15	54.83	56.57	60.72	58.43	59.27	59.27	60.38	59.81	61.17	60.65	62.17	61.48
16	55.08	56.50	60.61	59.26	59.37	59.55	60.51	59.74	61.24	60.87	62.18	60.38
17	55.08	56.14	58.77	59.55	59.76	60.62	60.53	59.01	61.32	61.11	62.39	61.02
18	55.56	57.00	58.64	59.77	59.93	60.58	60.43	59.09	61.45	61.17	62.46	61.20
19	55.73	57.26	58.00	59.78	60.18	60.84	60.31	58.63	61.52	61.22	62.50	61.06
20	55.68	57.35	57.62	59.12	60.31	60.53	60.34	58.36	61.36	61.23	62.60	61.17
21	55.02	57.80	58.18	59.56	59.87	60.68	60.12	58.45	61.94	61.16	62.62	60.92
22	56.05	57.82	59.08	59.64	59.96	60.82	60.19	58.83	62.00	61.40	62.52	61.11
23	56.15	57.91	59.34	59.21	60.19	61.16	59.99	57.49	61.75	61.25	62.57	60.98
24	56.23	56.30	59.00	59.59	60.36	61.31	60.15	58.31	62.02	60.89	62.46	60.20
25	56.23	55.39	59.15	59.63	60.68	61.19	60.23	57.81	61.30	61.12	62.49	60.58
26	54.96	55.01	59.17	59.92	60.81	61.29	60.55	58.30	61.56	61.18	62.60	61.26
27	55.56	54.44	58.45	59.96	60.81	61.71	60.72	58.67	61.62	61.25	62.07	61.44
28	55.47	55.20	58.06	59.84	60.90	61.83	60.71	58.18	61.27	61.28	62.09	61.48
29	55.60	56.17	58.25	59.08	---	61.70	60.28	58.01	61.32	61.31	61.82	61.46
30	56.03	56.55	58.29	58.61	---	61.74	60.55	57.78	59.80	61.22	61.76	61.40
31	56.59	---	58.29	58.21	---	61.41	---	57.43	---	61.21	61.35	---
MAX	56.59	57.91	61.02	60.66	60.90	61.83	61.43	60.72	62.02	61.87	62.62	62.19

CAL YR 2002 MAX 61.02
WTR YR 2003 MAX 62.62



PASCO COUNTY—Continued

WELL NUMBER.--281636082372001. Moon Lake Deep Well near New Port Richey, FL.

LOCATION.--Lat 28°16'36", long 82°37'20" (1927 North American datum), in NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.29, T.25 S., R.17 E., Hydrologic Unit 03100207, 20 ft west of State Highway 587, and 5.9 mi east of New Port Richey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 115 ft, cased to 65 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 38.87 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 3.30 ft above land-surface datum.

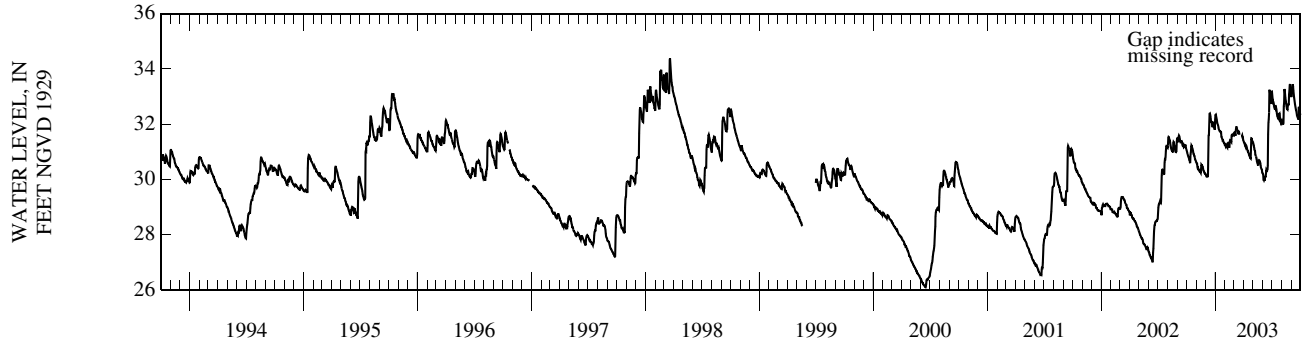
PERIOD OF RECORD.--April 1966 to September 1981; October 1981 to April 1983 (periodic); May 1983 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 34.38 ft NGVD, Mar. 20, 1998; lowest, 26.10 ft NGVD, June 16, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31.06	30.62	30.19	32.34	31.26	31.68	31.41	31.35	30.23	33.18	32.05	32.98
2	31.01	30.58	30.16	32.35	31.23	31.66	31.37	31.32	30.22	33.06	32.12	33.12
3	30.96	30.57	30.12	32.29	31.20	31.63	31.34	31.26	30.19	32.93	32.14	33.20
4	30.92	30.46	30.12	32.22	31.23	31.66	31.33	31.21	30.00	32.82	32.11	33.23
5	30.88	30.41	30.11	32.17	31.20	31.64	31.27	31.17	30.00	32.83	32.04	33.31
6	30.85	30.42	30.12	32.13	31.18	31.58	31.26	31.10	29.97	32.81	31.99	33.45
7	30.81	30.39	30.12	32.05	31.17	31.73	31.21	31.06	30.00	32.75	32.03	33.37
8	30.78	30.36	30.12	32.02	31.15	31.82	31.18	31.04	29.96	32.66	32.65	33.22
9	30.72	30.36	31.18	31.99	31.31	31.90	31.23	30.91	30.10	32.61	32.78	33.10
10	30.71	30.33	31.60	31.95	31.32	31.90	31.21	30.88	30.11	32.58	33.27	32.99
11	30.63	30.32	31.61	31.87	31.29	31.86	31.18	30.84	30.11	32.53	33.23	32.90
12	30.59	30.28	31.90	31.83	31.24	31.81	31.13	30.79	30.24	32.66	33.10	32.81
13	30.91	30.28	32.38	31.80	31.19	31.78	31.09	30.74	30.35	32.66	32.95	32.72
14	30.98	30.27	32.39	31.77	31.17	31.75	31.04	30.66	30.33	32.54	32.86	32.65
15	31.14	30.25	32.34	31.75	31.15	31.74	31.01	30.62	30.31	32.55	32.83	32.58
16	31.23	30.38	32.28	31.74	31.35	31.64	31.01	30.59	30.33	32.47	32.73	32.52
17	31.21	30.54	32.20	31.74	31.41	31.76	30.98	30.54	30.35	32.38	32.66	32.49
18	31.18	30.52	32.13	31.71	31.40	31.69	30.94	30.51	30.50	32.31	32.58	32.41
19	31.15	30.51	32.08	31.70	31.40	31.62	30.89	30.69	31.63	32.28	32.54	32.33
20	31.11	30.48	32.07	31.55	31.38	---	30.87	30.70	32.05	32.24	32.53	32.30
21	31.06	30.47	32.04	31.53	31.36	---	30.84	30.68	32.18	32.18	32.67	32.27
22	30.98	30.41	32.02	31.50	31.59	---	30.81	30.65	32.42	32.22	32.69	32.23
23	30.92	30.33	31.89	31.47	31.62	---	30.77	30.66	33.21	32.20	32.72	32.22
24	30.91	30.32	32.06	31.41	31.62	---	30.76	30.63	33.25	32.38	32.72	32.17
25	30.87	30.30	32.06	31.42	31.62	---	31.17	30.57	33.12	32.39	33.09	32.59
26	30.85	30.27	32.00	31.41	31.59	---	31.49	30.51	32.96	32.31	33.21	32.63
27	30.78	30.25	31.94	31.37	31.59	31.56	31.48	30.44	32.82	32.25	33.41	32.57
28	30.73	30.22	31.88	31.34	31.66	31.59	31.43	30.41	32.73	32.19	33.45	32.49
29	30.70	30.21	31.84	31.32	---	31.52	31.38	30.38	33.06	32.11	33.37	32.40
30	30.68	30.21	31.80	31.30	---	31.52	31.37	30.36	33.17	32.05	33.21	32.33
31	30.65	---	32.18	31.26	---	31.44	---	30.26	---	32.07	33.08	---
MAX	31.23	30.62	32.39	32.35	31.66	---	31.49	31.35	33.25	33.18	33.45	33.45

CAL YR 2002 MAX 32.39



PASCO COUNTY—Continued

WELL NUMBER.--281636082372002. Moon Lake Shallow Well near New Port Richey, FL.

LOCATION.--Lat 28°16'36", long 82°37'20" (1927 North American datum), in NW ¼ SE ¼ sec.29, T.25 S., R.17 E., Hydrologic Unit 03100207, 20 ft west of State Highway 587, and 5.9 mi east of New Port Richey.

AQUIFER.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit 112NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 25 ft, cased to 22 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 38.87 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of flange, 2.80 ft above land-surface datum.

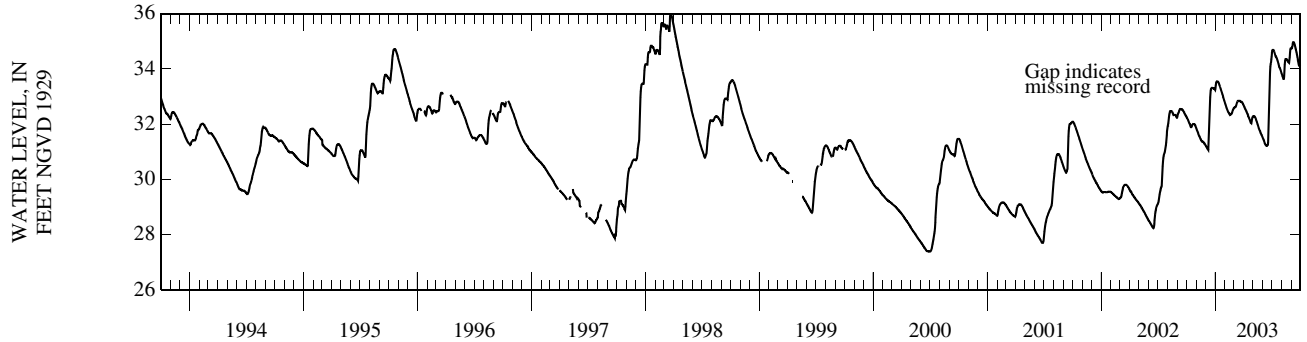
PERIOD OF RECORD.--April 1966 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 35.98 ft NGVD, Mar. 21, 22, 23, 1998; lowest, 27.39 ft NGVD, June 27-30, July 1, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32.26	31.85	31.23	33.31	32.77	32.58	32.70	32.28	31.54	34.58	33.85	34.75
2	32.23	31.81	31.21	33.41	32.74	32.59	32.68	32.29	31.51	34.67	33.82	34.74
3	32.21	31.78	31.19	33.49	32.70	32.60	32.65	32.29	31.48	34.69	33.78	34.75
4	32.19	31.75	31.17	33.53	32.66	32.62	32.62	32.29	31.45	34.69	33.74	34.79
5	32.17	31.73	31.15	33.55	32.62	32.62	32.60	32.29	31.43	34.69	33.71	34.82
6	32.14	31.70	31.13	33.55	32.59	32.62	32.57	32.29	31.40	34.69	33.69	34.92
7	32.11	31.67	31.11	33.55	32.56	32.63	32.55	32.28	31.36	34.67	33.65	34.96
8	32.08	31.64	31.09	33.55	32.53	32.65	32.52	32.26	31.32	34.65	33.62	34.97
9	32.05	31.61	31.07	33.54	32.50	32.68	32.50	32.24	31.29	34.62	33.71	34.97
10	32.02	31.58	31.38	33.53	32.47	32.72	32.47	32.22	31.27	34.58	33.92	34.95
11	32.01	31.56	31.72	33.51	32.44	32.76	32.45	32.19	31.25	34.54	34.16	34.93
12	31.97	31.54	31.97	33.49	32.42	32.80	32.42	32.15	31.23	34.50	34.29	34.89
13	31.94	31.51	32.32	33.46	32.41	32.82	32.39	32.12	31.22	34.46	34.34	34.84
14	31.90	31.48	32.72	33.42	32.39	32.84	32.37	32.09	31.22	34.45	34.35	34.80
15	31.89	31.46	32.98	33.39	32.37	32.85	32.34	32.05	31.23	34.43	34.36	34.74
16	31.90	31.43	33.14	33.35	32.35	32.85	32.30	32.01	31.23	34.41	34.36	34.69
17	31.92	31.41	33.22	33.32	32.33	32.85	32.28	31.98	31.24	34.38	34.36	34.65
18	31.95	31.39	33.27	33.28	32.34	32.85	32.25	31.94	31.25	34.35	34.35	34.59
19	31.98	31.37	33.30	33.24	32.35	32.85	32.23	31.90	31.33	34.31	34.33	34.53
20	31.99	31.37	33.31	33.21	32.36	32.85	32.20	31.86	31.69	34.27	34.31	34.47
21	32.00	31.37	33.32	33.17	32.37	32.83	32.17	31.83	32.11	34.23	34.29	34.41
22	32.01	31.37	33.32	33.14	32.38	32.82	32.14	31.80	32.45	34.19	34.26	34.35
23	32.01	31.36	33.31	33.10	32.40	32.82	32.11	31.77	32.89	34.14	34.25	34.29
24	32.01	31.35	33.31	33.07	32.43	32.82	32.08	31.75	33.51	34.09	34.23	34.23
25	32.01	31.33	33.30	33.03	32.47	32.81	32.05	31.72	33.88	34.06	34.22	34.17
26	32.00	31.31	33.30	32.99	32.51	32.81	32.04	31.70	34.08	34.04	34.32	34.13
27	31.99	31.31	33.30	32.96	32.54	32.80	32.11	31.67	34.18	34.03	34.42	34.13
28	31.96	31.29	33.29	32.92	32.56	32.79	32.17	31.64	34.22	34.00	34.60	34.13
29	31.94	31.27	33.28	32.88	---	32.77	32.22	31.62	34.34	33.97	34.71	34.11
30	31.91	31.25	33.26	32.85	---	32.75	32.25	31.60	34.44	33.93	34.74	34.10
31	31.88	---	33.24	32.81	---	32.73	---	31.57	---	33.89	34.75	---
MAX	32.26	31.85	33.32	33.55	32.77	32.85	32.70	32.29	34.44	34.69	34.75	34.97

CAL YR 2002 MAX 33.32
WTR YR 2003 MAX 34.97



PASCO COUNTY—Continued

WELL NUMBER.--281715082164401. State Highway 577 Well near San Antonio, FL.

LOCATION.--Lat 28°17'15", long 82°16'44" (1927 North American datum), in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.26., T.25 S., R.20 E., Hydrologic Unit 03100205, 21 ft west of State Highway 577, and 3.1 mi south of San Antonio.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 150 ft, cased to 57 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval and tipping bucket raingage recorder--15-minute interval.

DATUM.--Land-surface datum is 130.01 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 2.75 ft above land-surface datum.

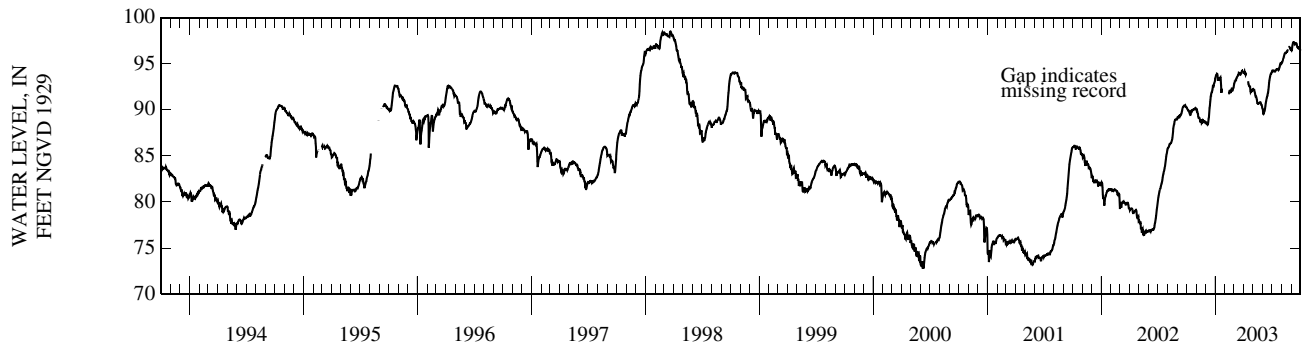
PERIOD OF RECORD.--August 1964 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 98.51 ft NGVD, Mar. 21, 1998; lowest, 72.76 ft NGVD, June 7, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90.26	89.97	88.68	93.47	---	92.63	94.04	92.23	90.14	94.16	95.06	96.48
2	90.18	89.91	88.58	93.63	---	92.83	94.04	92.24	90.07	94.25	95.13	96.43
3	90.12	89.96	88.54	93.75	---	92.93	94.09	92.18	89.57	94.27	95.15	96.52
4	90.04	89.83	88.51	93.76	---	93.07	94.17	92.16	89.54	94.22	95.22	96.75
5	89.99	89.58	88.53	93.83	---	93.14	94.01	92.16	89.61	94.19	95.34	96.99
6	89.92	89.52	88.52	93.91	---	93.19	94.03	92.05	89.72	94.23	95.48	97.15
7	89.92	89.27	88.39	93.89	---	93.22	94.00	91.97	89.80	94.24	95.59	97.31
8	89.87	89.15	88.43	93.74	---	93.22	93.81	91.80	89.98	94.19	95.74	97.35
9	89.77	89.15	88.68	93.17	---	93.39	93.89	91.58	90.17	94.18	95.87	97.36
10	89.63	89.13	89.00	93.29	---	93.47	93.86	91.45	90.41	94.21	96.02	97.33
11	89.55	89.12	89.19	93.29	---	93.51	93.88	91.45	90.69	94.20	96.13	97.29
12	89.45	89.02	89.72	93.27	91.84	93.58	---	91.39	90.89	94.18	96.18	97.23
13	89.46	88.77	90.18	93.39	91.82	93.65	---	91.24	91.06	94.24	96.15	97.12
14	89.62	88.70	90.43	93.43	91.90	93.71	---	91.09	91.19	94.31	96.16	97.14
15	89.89	88.72	90.85	93.38	92.00	93.77	---	90.77	91.32	94.37	96.15	97.22
16	89.91	88.88	91.16	93.46	92.08	93.84	93.09	90.76	91.43	94.39	96.24	97.23
17	89.85	88.88	91.42	93.52	92.08	94.02	92.81	90.66	91.58	94.42	96.29	97.23
18	89.83	88.57	91.59	93.23	91.95	94.01	92.74	90.66	91.77	94.42	96.31	97.19
19	89.93	88.61	91.78	92.66	91.92	93.96	92.60	90.71	91.93	94.43	96.31	97.03
20	89.98	88.78	91.92	91.85	91.97	93.84	92.55	90.72	92.17	94.43	96.36	96.81
21	90.00	88.92	91.96	92.14	92.12	93.83	92.54	90.72	92.51	94.41	96.48	96.79
22	90.00	88.90	92.10	92.26	92.26	93.81	92.52	90.77	92.93	94.33	96.55	96.81
23	89.98	88.76	92.28	92.29	92.23	93.92	92.14	90.81	93.19	94.39	---	96.80
24	90.06	88.70	92.61	---	92.00	93.96	91.91	90.83	93.37	94.48	96.76	96.74
25	90.08	88.73	92.62	---	92.11	93.99	91.98	90.82	93.58	94.55	96.80	96.66
26	90.11	88.73	92.57	---	92.22	94.11	92.07	90.78	93.74	94.68	96.81	96.68
27	90.11	88.72	92.74	---	92.36	94.22	92.03	90.72	93.85	94.85	96.79	96.70
28	90.15	88.67	92.85	---	92.41	94.26	92.08	90.55	93.91	94.98	96.73	96.67
29	90.20	88.62	92.93	---	---	94.26	92.11	90.53	93.92	95.04	96.63	96.61
30	90.17	88.70	93.05	---	---	---	92.16	90.49	94.02	95.03	96.54	96.44
31	90.11	---	93.38	---	---	94.18	---	90.24	---	95.00	96.51	---
MAX	90.26	89.97	93.38	---	---	---	---	92.24	94.02	95.04	---	97.36
*PREC	5.28	1.89	11.93	0.13	4.74	5.54	---	2.14	12.93	6.93	8.65	7.46

CAL YR 2002 MAX 93.38



PASCO COUNTY—Continued

WELL NUMBER.--281715082164402. State Highway 577 Shallow Well near San Antonio, FL.

LOCATION.--Lat 28°17'15", long 82°16'44" (1927 North American datum), in NE $^1/_4$ NW $^1/_4$ sec.26, T.25 S., R.20 E., Hydrologic Unit 03100205, 21 ft west of State Highway 577, and 3.1 mi south of San Antonio.

AQUIFER.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit 112SAND.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 20.7 ft, cased to 17.7 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Land-surface datum is 129.78 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of coupling, 3.56 ft above land-surface datum.

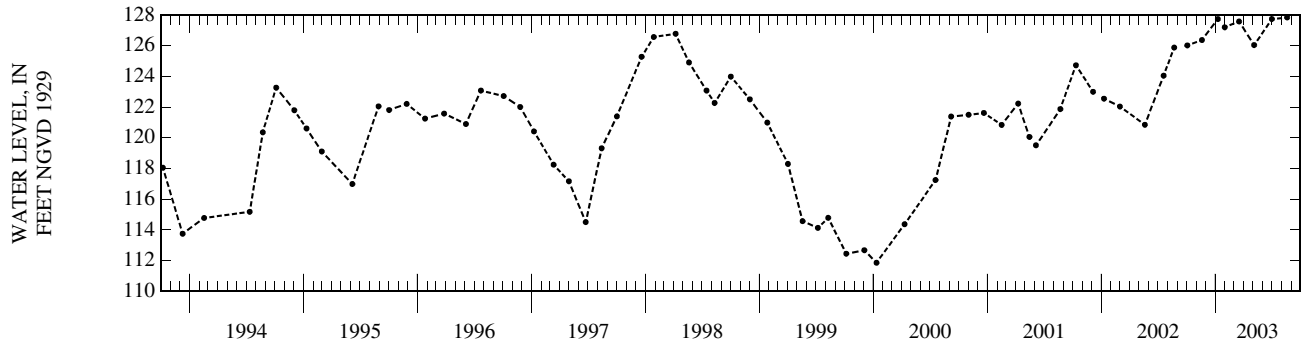
PERIOD OF RECORD.--January 1970 to current year (periodic). Records of water levels prior to January 1974 are available in files of the Geological Survey. The figures of water level as elevation in feet, NGVD from June 26, 1984 to September 3, 1991 are in error. Correct elevations published during this period may be obtained by using datum correction of +0.56 ft.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 127.84 ft NGVD, Aug. 19, 2003; well observed dry Jan. 8, Mar. 5, May 1, 1991, Apr. 19, May 30, 1994, Mar. 1, 2000.

WATER SURFACE ELEVATION IN FEET (NGVD1929), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03	126.02	JAN 09	127.74	MAR 18	127.58	JUL 01	127.74
NOV 19	126.37	31	127.20	MAY 05	126.04	AUG 19	127.84

WATER YEAR 2003 LOWEST 126.02 OCT 03, 2002 HIGHEST 127.84 AUG 19, 2003



PASCO COUNTY—Continued

WELL NUMBER.--281918082264601. State Highway 52 Well near Gowers Corner, FL.

LOCATION.--Lat 28°19'18", long 82°26'46" (1927 North American datum), in NE $^1/_4$ SW $^1/_4$ sec.7, T.25 S., R.19 E., Hydrologic Unit 03100207, 30 ft north of State Highway 52, and 3.3 mi east of Gowers Corner.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 73 ft, cased to 38 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 79.50 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 2.43 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby wells.

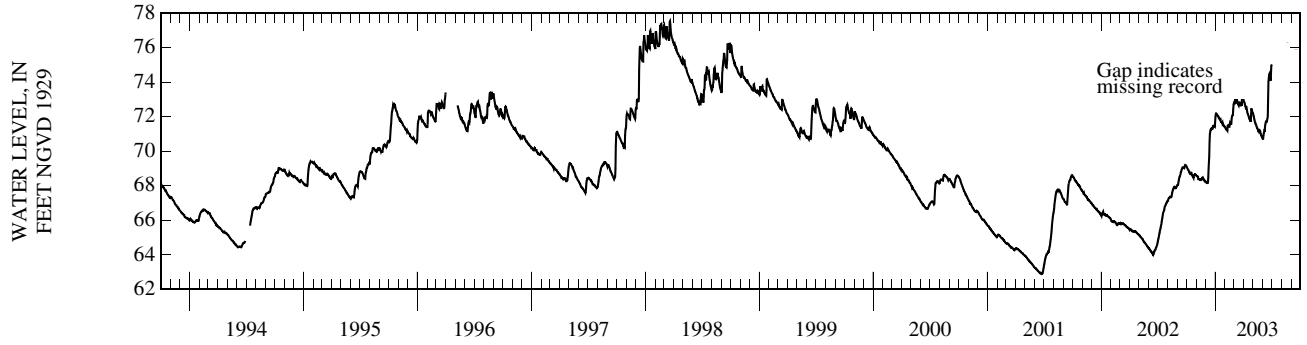
PERIOD OF RECORD.--May 1965 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey. Prior to October 1978, published as State Highway 52 Well east of Gowers Corner.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 77.93 ft NGVD, Dec. 10, 1969; lowest, 62.90 ft NGVD, June 22, 2001.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69.11	68.59	68.23	72.01	71.39	72.78	72.97	72.22	70.75	75.03	---	---
2	69.07	68.57	68.21	72.14	71.34	72.81	72.92	72.16	70.72	---	---	---
3	69.02	68.56	68.18	72.18	71.31	72.81	72.86	72.05	70.73	---	---	---
4	68.98	68.55	68.16	72.17	71.29	72.91	72.83	71.98	70.91	---	---	---
5	68.95	68.51	68.16	72.14	71.25	72.87	72.75	71.91	71.03	---	---	---
6	68.92	68.51	68.17	72.13	71.24	72.79	72.68	71.83	71.10	---	---	---
7	68.90	68.39	68.16	72.07	71.22	72.80	72.60	71.75	71.21	---	---	---
8	68.85	68.39	68.18	72.06	71.19	72.90	72.53	71.69	71.20	---	---	---
9	68.78	68.39	68.50	72.06	71.48	73.00	72.57	71.62	71.46	---	---	---
10	68.76	68.37	68.99	72.04	71.50	73.03	72.57	71.57	71.57	---	---	---
11	68.72	68.36	69.30	71.98	71.51	72.98	72.48	71.55	71.66	---	---	---
12	68.68	68.35	69.72	71.92	71.47	72.90	72.37	71.48	71.72	---	---	---
13	68.68	68.35	70.54	71.93	71.43	72.83	72.25	71.45	71.75	---	---	---
14	68.72	68.35	70.98	71.91	71.41	72.77	72.18	71.37	71.75	---	---	---
15	68.75	68.34	71.13	71.85	71.41	72.71	72.15	71.35	71.74	---	---	---
16	68.74	68.38	71.22	71.85	71.57	72.67	72.13	71.31	71.82	---	---	75.92
17	68.66	68.38	71.25	71.86	71.65	72.87	72.08	71.25	71.88	---	---	---
18	68.60	68.39	71.25	71.72	71.62	72.82	72.00	71.19	72.05	---	---	---
19	68.58	68.46	71.26	71.69	71.59	72.71	71.93	71.21	72.89	---	---	---
20	68.56	68.46	71.32	71.68	71.61	72.62	71.87	71.17	74.04	---	---	---
21	68.54	68.48	71.31	71.68	71.61	72.68	71.83	71.12	74.21	---	76.31	---
22	68.49	68.40	71.28	71.65	71.88	72.67	71.82	71.14	74.39	---	---	---
23	68.46	68.36	71.29	71.68	72.00	72.79	71.76	71.21	74.47	---	---	---
24	68.60	68.37	71.45	71.53	72.07	72.81	71.70	71.19	74.51	---	---	---
25	68.63	68.37	71.46	71.54	72.09	72.70	71.97	71.13	74.29	---	---	---
26	68.65	68.34	71.47	71.54	72.10	72.62	72.44	71.04	74.13	---	---	---
27	68.64	68.30	71.46	71.50	72.47	73.00	72.44	70.97	74.08	---	---	---
28	68.64	68.25	71.44	71.46	72.68	73.12	72.38	70.93	74.51	---	---	---
29	68.65	68.25	71.44	71.47	---	73.12	72.31	70.88	74.96	---	---	---
30	68.62	68.26	71.42	71.44	---	73.13	72.25	70.84	75.00	---	---	---
31	68.60	---	71.72	71.41	---	73.05	---	70.78	---	---	---	---
MAX	69.11	68.59	71.72	72.18	72.68	73.13	72.97	72.22	75.00	---	---	---

CAL YR 2002 MAX 71.72



PASCO COUNTY—Continued

WELL NUMBER.--281926082212901. Junction of State Highways 52 and 581 Well near Darby, FL.

LOCATION.--Lat 28°19'26", long 82°21'29" (1927 North American datum), in NE ¼ SE ¼ sec.12, T.25 S., R.19 E., Hydrologic Unit 03100205, 45 ft south of State Highway 52, 800 ft east of State Highway 581, and 2.6 mi south of Darby.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 113 ft, cased to 83 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

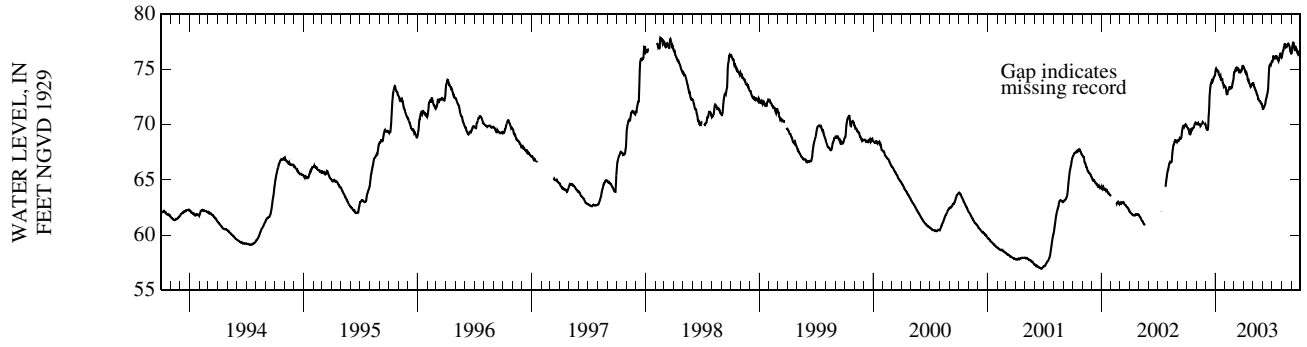
DATUM.--Land-surface datum is 89.47 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 2.42 ft above land-surface datum.

PERIOD OF RECORD.--April 1966 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 79.44 ft NGVD, Sept. 30, 1966; lowest, 56.96 ft NGVD, June 22, 2001.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69.88	70.05	69.95	74.81	73.39	74.50	75.21	73.76	71.58	75.73	76.06	76.44
2	69.81	70.03	69.73	75.00	73.35	74.70	75.19	73.76	71.41	75.74	76.14	76.47
3	69.73	70.03	69.65	75.07	73.35	74.71	75.10	73.56	71.42	75.73	76.31	76.69
4	69.70	70.07	69.61	74.98	73.18	74.81	75.06	73.56	71.43	75.80	76.46	76.97
5	69.68	70.12	69.61	74.97	72.94	74.91	74.98	73.48	71.52	76.12	76.63	77.09
6	69.62	70.16	69.52	74.97	72.76	74.96	74.81	73.37	71.57	76.18	76.69	77.27
7	69.61	70.03	69.53	74.88	72.76	74.92	74.78	73.32	71.66	76.16	76.73	77.43
8	69.45	70.01	69.58	74.85	72.68	74.90	74.70	73.27	71.72	76.09	76.93	77.42
9	69.27	70.07	69.95	74.87	72.94	75.03	74.79	73.14	71.79	76.04	77.03	77.37
10	69.14	70.06	70.75	74.86	73.08	75.15	74.74	73.11	71.95	76.04	77.22	77.11
11	69.13	70.04	71.05	74.73	73.13	75.13	74.61	73.05	72.16	75.98	77.30	76.91
12	69.12	70.02	71.64	74.55	73.15	75.09	74.51	72.96	72.32	75.91	77.30	76.83
13	69.16	70.02	72.56	74.52	73.17	75.11	74.39	72.82	72.35	76.11	77.17	76.64
14	69.37	69.86	72.95	74.47	73.31	75.00	74.13	72.75	72.52	76.21	77.08	76.83
15	69.59	69.91	73.28	74.37	73.40	74.94	74.05	72.71	72.57	76.21	76.99	77.02
16	69.61	70.06	73.45	74.34	73.40	74.87	74.11	72.64	72.67	76.17	77.02	76.99
17	69.47	---	73.61	74.40	73.36	74.99	74.09	72.49	72.84	76.13	77.20	76.92
18	69.50	---	73.67	74.10	73.17	74.96	73.97	72.31	72.99	76.06	77.20	76.84
19	69.62	70.00	73.77	74.04	73.26	74.90	73.81	72.31	73.28	75.97	77.14	76.71
20	69.66	70.13	73.87	74.03	73.39	74.77	73.74	72.22	73.98	75.91	77.22	76.54
21	69.67	70.24	73.77	74.12	73.40	74.71	73.66	72.17	74.59	75.83	77.26	76.45
22	69.69	70.21	73.81	74.11	73.44	74.72	73.62	72.15	75.04	75.76	77.24	76.44
23	69.70	70.07	73.88	74.10	73.41	74.79	73.48	72.15	75.26	75.87	77.29	76.37
24	69.74	---	74.07	73.78	73.54	74.86	73.42	72.13	75.37	75.94	77.25	76.33
25	69.85	70.11	74.09	73.75	73.77	74.84	73.46	72.06	75.44	76.03	77.19	76.35
26	69.96	70.07	74.17	73.72	73.83	74.92	73.52	71.98	75.48	76.22	77.13	76.56
27	70.04	---	74.31	73.60	73.93	75.01	73.57	71.94	75.46	76.34	77.04	76.61
28	70.12	---	74.35	73.46	74.16	75.13	73.63	71.89	75.39	76.39	76.75	76.60
29	70.19	69.94	74.39	73.52	---	75.25	73.64	71.89	75.50	76.35	76.60	76.56
30	70.15	70.02	74.41	73.53	---	75.38	73.67	71.85	75.63	76.28	76.56	76.47
31	70.11	---	74.57	73.50	---	75.14	---	71.70	---	76.12	76.51	---
MAX	70.19	---	74.57	75.07	74.16	75.38	75.21	73.76	75.63	76.39	77.30	77.43



PASCO COUNTY—Continued

WELL NUMBER.--281949082332001. State Highway 52 Deep Well near Fivay Junction, FL.

LOCATION.--Lat 28°19'49", long 82°33'20" (1927 North American datum), in NW $^1/_4$ NE $^1/_4$ sec.12, T.25 S., R.17 E., Hydrologic Unit 03100207, 20 ft south of State Highway 52, and 2.3 mi west of Fivay Junction.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 73 ft, cased to 60 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 55.89 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 3.64 ft above land-surface datum.

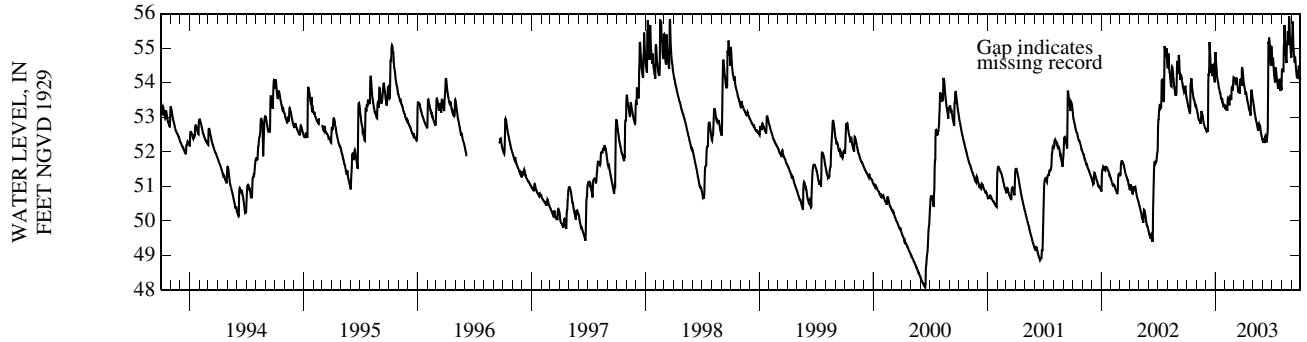
PERIOD OF RECORD.--April 1966 to current year. Record of water levels prior to January 1974 are available in files of the Geological Survey. Prior to October 1978, published as State Highway 52 Deep Well near Gowers Corner.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 56.75 ft NGVD, Sept. 8, 1988; lowest, 48.08 ft NGVD, June 15, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53.56	53.27	52.67	54.89	53.29	54.15	54.06	53.50	52.34	54.77	53.79	54.73
2	53.51	53.23	52.63	54.77	53.25	54.13	53.99	53.45	52.31	54.59	54.35	55.01
3	53.47	53.20	52.61	54.62	53.24	54.07	53.93	53.38	52.27	54.57	54.41	55.29
4	53.41	53.14	52.59	54.44	53.32	54.13	53.89	53.31	52.30	54.71	54.33	55.25
5	53.36	53.09	52.60	54.33	53.31	54.10	53.82	53.26	52.35	54.73	---	55.52
6	53.32	53.07	52.62	54.24	53.27	54.03	53.76	53.19	52.34	54.56	---	55.77
7	53.28	53.00	52.60	54.14	53.24	53.98	53.71	53.13	52.28	54.38	54.30	55.34
8	53.23	52.97	52.58	54.09	53.19	53.99	53.65	53.08	52.26	54.24	55.05	55.07
9	53.19	52.94	54.02	54.04	53.50	54.13	53.71	53.03	52.44	54.17	55.12	54.91
10	53.15	52.92	54.26	54.00	53.56	54.13	53.69	52.98	52.46	54.10	55.67	54.79
11	53.11	52.89	54.21	53.93	53.55	54.08	53.61	52.93	52.40	54.01	55.38	54.69
12	53.18	52.88	54.50	53.85	53.50	53.98	53.55	52.88	52.35	54.43	55.14	54.59
13	53.93	52.88	55.18	53.83	53.44	53.90	53.49	52.85	52.32	54.45	54.93	54.66
14	53.99	52.83	55.01	53.80	53.39	53.83	53.44	52.80	52.33	54.36	54.80	54.68
15	54.11	52.81	54.78	53.74	53.35	53.77	53.41	52.75	52.28	54.33	54.77	54.56
16	54.11	52.98	54.61	53.70	53.57	53.72	53.39	52.70	52.44	54.18	54.63	54.43
17	54.03	53.18	54.47	53.69	53.61	53.88	53.34	52.65	52.51	54.13	54.57	54.32
18	53.91	53.15	54.36	53.60	53.60	53.84	53.29	52.61	52.69	54.03	55.11	54.24
19	53.81	53.12	54.28	53.55	53.56	53.76	53.24	52.79	54.49	53.97	55.11	54.15
20	53.74	53.08	54.53	53.53	53.52	53.68	53.20	52.81	55.19	53.88	55.28	54.18
21	53.68	53.04	54.44	53.52	53.50	54.08	53.18	52.76	55.14	53.83	55.49	54.17
22	53.60	52.98	54.30	53.49	53.85	54.08	53.16	52.74	55.31	54.04	55.44	54.11
23	53.54	52.89	54.19	53.50	53.87	54.10	53.10	52.77	55.23	54.05	55.09	54.26
24	53.54	52.84	54.51	53.40	53.85	54.10	53.05	52.75	55.15	54.08	55.35	54.25
25	53.51	52.81	54.52	53.38	53.82	53.99	53.59	52.68	54.85	54.09	55.93	54.46
26	53.46	52.78	54.36	53.37	53.78	53.91	53.80	52.61	54.67	53.98	55.82	54.50
27	53.41	52.76	54.24	53.32	54.05	54.42	53.78	52.55	54.52	53.90	55.46	54.38
28	53.37	52.73	54.13	53.29	54.16	54.45	53.71	52.51	54.52	53.82	55.21	54.26
29	53.33	52.70	54.06	53.36	---	54.39	53.62	52.47	55.07	53.76	55.07	54.16
30	53.35	52.69	54.01	53.34	---	54.30	53.55	52.43	54.90	53.87	54.93	54.09
31	53.32	---	54.81	53.32	---	54.20	---	52.37	---	53.86	54.81	---
MAX	54.11	53.27	55.18	54.89	54.16	54.45	54.06	53.50	55.31	54.77	---	55.77

CAL YR 2002 MAX 55.18



PASCO COUNTY—Continued

WELL NUMBER.--282009082373801. State Highway 52 Deep Well near Hudson, FL.

LOCATION.--Lat 28°20'09", long 82°37'38" (1927 North American datum), in NE $^1/_4$ SW $^1/_4$ sec.5, T.25 S., R.17 E., Hydrologic Unit 03100207, 1.6 mi west of junction State Highways 52 and 587, and 5.0 mi southeast of Hudson.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 73 ft, cased to 59 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 33 ft, from topographic map. Measuring point: Top of casing, 1.46 ft above land-surface datum.

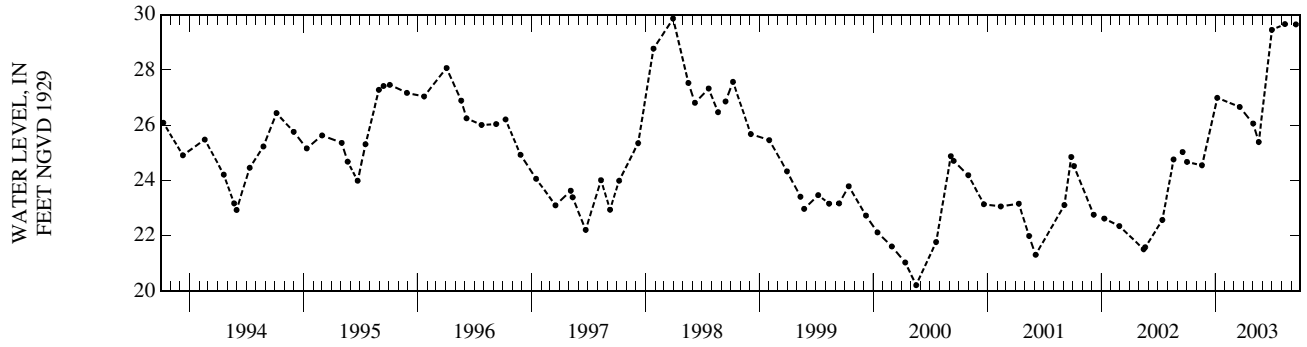
PERIOD OF RECORD.--January 1965 to current year (periodic). Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 30.06 ft NGVD, Mar. 10, 1970; lowest measured, 20.21 ft NGVD, May 17, 2000.

WATER SURFACE ELEVATION IN FEET (NGVD1929), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02	24.67	JAN 07	26.99	MAY 02	26.06	JUL 01	29.45	SEP 16	29.65
NOV 19	24.55	MAR 20	26.66	20	25.39	AUG 12	29.66		

WATER YEAR 2003 LOWEST 24.55 NOV 19, 2002 HIGHEST 29.66 AUG 12, 2003



MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2002 TO SEPTEMBER 2003

PASCO COUNTY

SITE-ID	STATION NAME	WATER-LEVEL DATE	WATER-LEVEL MSL FEET	WATER-LEVEL DATUM CODE
281023082450701	COASTAL PASCO DEEP WELL 13 NEAR NEW PORT RICHEY FL	05-22-2003	4.28	NGVD29
		09-17-2003	4.96	NGVD29
281031082071801	ALSTON FLRD WELL NEAR ZEPHYRHILLS FL	05-21-2003	85.41	NGVD29
		09-15-2003	87.76	NGVD29
281035082305701	ST PETE WELL 42 NEAR LAND O LAKES FL	05-19-2003	48.23	NGVD29
281037082071801	J O ALSTON WELL NEAR CRYSTAL SPRINGS FL	05-19-2003	87.35	NGVD29
		09-18-2003	89.76	NGVD29
281046082470801	FPC WELL NO 1 NEAR TARPON SPRINGS FL	05-20-2003	1.16	NGVD29
		09-17-2003	1.47	NGVD29
281124082274101	WINTER QUARTERS ROAD WELL NEAR CITRUS PARK FL	05-22-2003	61.17	NGVD29
		09-18-2003	62.40	NGVD29
281138082120201	ZEPHYRHILLS PRISON DEEP FLRD NR ZEPHYRHILLS FL	05-21-2003	61.80	NGVD29
		09-15-2003	64.38	NGVD29
281143082304702	STATE HWY 54 DEEP WELL NEAR LAND O LAKES FL	05-19-2003	50.45	NGVD29
		09-19-2003	56.78	NGVD29
281144082100401	ROMP 86A AVON PARK WELL AT CRYSTAL SPRINGS FL	05-21-2003	60.60	NGVD29
		09-18-2003	62.62	NGVD29
281144082100402	ROMP 86A SWUANNEE WELL AT CRYSTAL SPRINGS FL	05-21-2003	59.45	NGVD29
		09-18-2003	60.82	NGVD29
281322082084501	CHANCEY ROAD SWNN WELL NEAR ZEPHYRHILLS FL	05-21-2003	73.67	NGVD29
		09-15-2003	77.39	NGVD29
281353082110401	ZEPHYRHILLS PARK FLRD WELL AT ZEPHYRHILLS FL	05-21-2003	68.50	NGVD29
		09-15-2003	74.38	NGVD29
281424082192702	ROMP 85 FLORIDAN WELL NEAR ZEPHYRHILLS FL	05-19-2003	78.76	NGVD29
		09-18-2003	83.11	NGVD29
281437082271401	NININGER DEEP WELL 857 AT DREXEL FL	05-19-2003	71.61	NGVD29
		09-18-2003	73.42	NGVD29
281446082354101	STARKEY WELL MW-1 NEAR NEW PORT RICHEY FL	05-22-2003	24.44	NGVD29
		09-18-2003	28.59	NGVD29
281451082380701	STARKEY DEEP 10 NEAR ODESSA FL	05-22-2003	28.10	NGVD29
		09-18-2003	30.87	NGVD29
281504082104801	ROMP 86 AVON PARK DEEP WELL NEAR ZEPHYRHILLS FL	05-19-2003	70.08	NGVD29
		09-16-2003	73.58	NGVD29
281533082130601	AUSTIN SMITH FLRD WELL NEAR ZEPHYRHILLS FL	05-21-2003	71.54	NGVD29
		09-18-2003	79.10	NGVD29
281535082241301	CYPRESS CREEK DEEP TMR-5 NEAR SAN ANTONIO FL	05-19-2003	58.08	NGVD29
		09-16-2003	60.24	NGVD29

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2002 TO SEPTEMBER 2003

PASCO COUNTY

SITE-ID	STATION NAME	WATER-LEVEL DATE	WATER-LEVEL MSL FEET	WATER-LEVEL DATUM CODE
281548082220601	815 222 FL	05-19-2003	66.66	NGVD29
		09-18-2003	69.35	NGVD29
281631082261601	CATCHING'S D. WELL 849 NR DREXEL FL	05-19-2003	68.21	NGVD29
		09-16-2003	71.30	NGVD29
281642082440201	COASTAL PASCO DEEP WELL 04 AT PORT RICHEY FL	05-20-2003	0.04	NGVD29
		09-17-2003	-.22	NGVD29
281650082244501	CYPRESS CREEK DEEP WELL TMR-4 NEAR SAN ANTONIO FL	05-19-2003	58.53	NGVD29
		09-16-2003	60.88	NGVD29
281654082201601	CARR DEEP WELL 846 NEAR SAN ANTONIO FL	05-19-2003	78.25	NGVD29
		09-16-2003	81.22	NGVD29
281917082420901	ROMP TR 17-1 DEEP WELL AT BAYONET POINT FL	05-20-2003	3.66	NGVD29
		09-17-2003	4.03	NGVD29
281922082403901	ROMP TR 17-3 DEEP WELL NEAR BAYONET POINT FL	05-20-2003	1.92	NGVD29
		09-17-2003	2.70	NGVD29
281923082252201	ROMP 93 DEEP NEAR DARBY FL	05-19-2003	69.83	NGVD29
		09-16-2003	75.22	NGVD29
281938082141501	ROMP BR-3 LAKE PASADENA FLRD WELL NR DADE CITY FL	05-21-2003	79.21	NGVD29
		09-15-2003	85.24	NGVD29
281948082415301	WITHLACOOCHEE ELEC 01 AT BAYONET POINT FL	05-20-2003	1.28	NGVD29
		09-17-2003	2.79	NGVD29
281954082413401	PONDEROSA DEV DEEP WELL AT BAYONET POINT FL	05-20-2003	2.09	NGVD29
		09-17-2003	3.78	NGVD29
282044082312401	H. KENT GROVE WELL NEAR GOWERS CORNER FL	05-20-2003	59.88	NGVD29
		09-16-2003	62.56	NGVD29
282148082281801	CROSSBAR A-1 DEEP NEAR LOYCE FL	05-19-2003	57.08	NGVD29
		09-15-2003	60.75	NGVD29
282229082405801	COASTAL PASCO DEEP WELL 02 AT HUDSON FL	05-20-2003	1.32	NGVD29
		09-17-2003	2.13	NGVD29
282238082362101	JUSTICE DEEP NEAR HUDSON FL	05-20-2003	25.19	NGVD29
		09-17-2003	35.10	NGVD29
282434082200301	AIRSTREAM TRL PARK DEEP WELL 833 NEAR DARBY FL	05-19-2003	68.20	NGVD29
		09-18-2003	77.26	NGVD29
282434082283601	D. A. SUTYAK WELL NEAR MASARYKTOWN FL	05-20-2003	33.16	NGVD29
		09-18-2003	45.12	NGVD29
282534082222802	BARTHLE RANCH FLORIDAN WELL NEAR MASARYKTOWN FL	05-19-2003	50.16	NGVD29
282540082275701	MASARYKTOWN DEEP WELL NEAR MASARYKTOWN FL	05-20-2003	33.28	NGVD29
		09-17-2003	45.10	NGVD29
282557082364301	COUNTY LINE TRADE CENTER NEAR HUDSON FL	05-20-2003	15.05	NGVD29
		09-17-2003	21.42	NGVD29

PASCO COUNTY

Samples were collected to characterize and compare ground-water quality around natural and augmented wetlands.

Date	Time	Dis-solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Potas-sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alka-linity, wat flt Gran, field, mg/L as CaCO3 (29802)	Chlor-ide, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
282156082280201 CROSSBAR DUCK PD MSE NRSD WELL NEAR MASARYKTOWN FL													
MAR 2001 28...	1000	0.8	6.6	245	21.7	47.0	2.20	0.50	3.8	124	6.50	1.70	<0.20
282157082280201 CROSSBAR DUCK PD LSE NRSD WELL NEAR MASARYKTOWN FL													
MAR 2001 28...	1200	0.8	6.9	341	21.3	65.0	2.50	0.40	3.9	168	6.50	0.50	0.44
282157082280801 CROSSBAR DUCK PD USW NRSD WELL NEAR MASARYKTOWN FL													
MAR 2001 26...	1545	2.8	5.2	62	21.2	4.40	1.40	0.30	3.2	13.2	6.60	0.21	1.0
282158082280601 CROSSBAR DUCK PD LSW NRSD WELL NEAR MASARYKTOWN FL													
MAR 2001 29...	1000	1.6	6.9	323	18.8	60.0	2.10	1.10	3.9	153	6.70	1.40	0.64
282201082280701 CROSSBAR DUCK PD LNW NRSD WELL NEAR MASARYKTOWN FL													
APR 2001 02...	1145	2.0	6.0	136	19.5	16.0	1.10	0.40	4.0	50.0	6.90	1.00	2.3
282202082280401 CROSSBAR DUCK PD MNE NRSD WELL NEAR MASARYKTOWN FL													
APR 2001 03...	0945	2.0	6.1	175	21.2	22.0	1.50	0.40	3.8	57.0	7.40	5.70	0.52
282203082280401 CROSSBAR DUCK PD UNE NRSD WELL NEAR MASARYKTOWN FL													
APR 2001 03...	1300	3.8	5.1	63	22.6	1.80	1.80	0.50	4.4	6.7	8.60	0.51	0.65

WATER QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001—Continued

PASCO COUNTY

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Organic carbon, water, fltrd, mg/L (00681)	Iron, water, fltrd, ug/L (01046)
282156082280201 CROSSBAR DUCK PD MSE NRSD WELL NEAR MASARYKTOWN FL								
MAR 2001 28...	0.77	0.020	<0.002	<0.001	0.002	0.190	3.9	3
282157082280201 CROSSBAR DUCK PD LSE NRSD WELL NEAR MASARYKTOWN FL								
MAR 2001 28...	0.81	0.140	<0.002	<0.001	0.005	0.310	6.4	10
282157082280801 CROSSBAR DUCK PD USW NRSD WELL NEAR MASARYKTOWN FL								
MAR 2001 26...	1.0	0.210	0.003	<0.001	0.002	0.008	17.0	241
282158082280601 CROSSBAR DUCK PD LSW NRSD WELL NEAR MASARYKTOWN FL								
MAR 2001 29...	0.59	0.310	0.002	<0.001	0.010	0.020	4.5	9
282201082280701 CROSSBAR DUCK PD LNW NRSD WELL NEAR MASARYKTOWN FL								
APR 2001 02...	2.5	2.00	0.002	<0.001	0.003	0.040	6.2	1,100
282202082280401 CROSSBAR DUCK PD MNE NRSD WELL NEAR MASARYKTOWN FL								
APR 2001 03...	0.52	0.180	<0.002	<0.001	0.040	0.050	11.0	86
282203082280401 CROSSBAR DUCK PD UNE NRSD WELL NEAR MASARYKTOWN FL								
APR 2001 03...	0.68	0.240	<0.002	<0.001	0.010	0.090	8.6	384

Samples were collected to characterize and compare ground-water quality around natural and augmented wetlands.

Date	Time	Dis-solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Potas-sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alka-linity, wat flt Gran, field, mg/L as CaCO3 (29802)	Chlor-ide, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
281753082231402 CYPRESS CRK MARSH W29 NRSD WELL B2MSW NR DREXEL FL													
DEC 2001													
12...	1100	0.5	5.5	77	21.7	6.40	1.10	0.30	3.9	18.1	6.90	8.40	E1.0
281754082231201 CYPRESS CRK MARSH W29 NRSD WELL B2LSE NR DREXEL FL													
DEC 2001													
12...	1015	1.4	4.1	186	21.6	18.0	4.00	0.60	1.6	--	3.60	61.0	E2.0
281754082231202 CYPRESS CRK MARSH W29 NRSD WELL B2MSE NR DREXEL FL													
DEC 2001													
11...	1430	1.7	4.3	236	21.9	28.0	3.10	0.60	2.0	--	4.00	22.0	E1.4
APR 2002													
30...	1515	0.7	4.4	115	20.7	12.0	1.40	0.60	0.9	--	1.80	20.0	1.0
281755082231301 CYPRESS CRK MARSH W29 NRSD WELL B2LNE NR DREXEL FL													
DEC 2001													
11...	1300	0.5	5.1	250	21.3	30.0	7.20	0.60	2.3	7.0	8.00	78.0	E2.1
APR 2002													
30...	1400	0.6	5.1	279	21.0	30.0	9.40	0.70	1.5	10.5	6.60	93.0	2.5
281756082231201 CYPRESS CRK MARSH W29 NRSD WELL B2MNE NR DREXEL FL													
DEC 2001													
11...	1030	1.1	4.3	140	22.4	13.0	2.10	0.30	2.2	--	3.60	14.0	E.70
APR 2002													
30...	1300	1.1	4.4	149	21.7	15.0	2.30	0.50	2.5	--	5.20	26.0	0.80
281757082231801 CYPRESS CRK MARSH W29 NRSD WELL B1MSW NR DREXEL FL													
DEC 2001													
10...	1300	1.0	4.9	85	22.6	8.00	1.40	0.60	2.0	1.7	3.70	13.0	E.50
10...	1302	1.0	4.9	85	22.6	8.00	1.50	0.60	2.0	1.7	3.70	13.0	E.50
MAY 2002													
01...	1130	1.0	4.8	95	21.9	7.70	1.40	0.50	2.3	0.1	4.20	13.0	0.50
281758082231501 CYPRESS CRK MARSH W29 NRSD WELL B1MSE NR DREXEL FL													
DEC 2001													
11...	1130	0.8	4.2	169	21.5	6.80	0.77	0.50	2.1	--	4.70	16.0	E.80
281758082231701 CYPRESS CRK MARSH W29 NRSD WELL B1CTR NR DREXEL FL													
DEC 2001													
10...	1130	4.0	4.2	172	22.3	11.0	1.40	0.60	1.9	--	5.40	22.0	E1.0
MAY 2002													
01...	1000	4.0	4.2	139	20.8	7.90	1.10	0.50	2.1	--	3.80	20.0	0.90
281759082231601 CYPRESS CRK MARSH W29 NRSD WELL B1MNE NR DREXEL FL													
DEC 2001													
10...	1040	1.4	4.0	162	22.4	7.80	1.00	0.60	1.6	--	2.80	15.0	E.70
MAY 2002													
01...	0910	1.0	4.2	60	21.6	2.70	0.55	0.40	0.7	--	1.40	8.80	0.60
282156082280201 CROSSBAR DUCK PD MSE NRSD WELL NEAR MASARYKTOWN FL													
NOV 2001													
07...	1000	2.0	6.6	274	25.3	52.0	2.20	0.50	3.5	127	6.00	1.90	E.30
07...	1001	2.0	6.6	274	25.3	51.0	2.20	0.40	3.6	126	6.00	1.90	E.30
MAY 2002													
08...	1220	0.8	6.7	296	22.3	55.0	2.40	0.40	3.4	144	5.90	2.30	0.30

WATER QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002—Continued

PASCO COUNTY

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Organic carbon, water, fltrd, mg/L (00681)	Alum-inum, water, fltrd, ug/L (01106)	Iron, water, fltrd, ug/L (01046)
281753082231402 CYPRESS CRK MARSH W29 NRSD WELL B2MSW NR DREXEL FL									
DEC 2001									
12...	E1.7	E.702	E.005	E.001	<0.002	E.016	8.4	--	2,600
281754082231201 CYPRESS CRK MARSH W29 NRSD WELL B2LSE NR DREXEL FL									
DEC 2001									
12...	E2.0	E.641	E.687	E.002	<0.002	<0.002	21.0	--	543
281754082231202 CYPRESS CRK MARSH W29 NRSD WELL B2MSE NR DREXEL FL									
DEC 2001									
11...	E1.4	E.426	E17.9	E.004	E.002	E.009	8.1	--	143
APR 2002									
30...	--	0.17	4.70	<0.010	--	--	10.0	1,150	104
281755082231301 CYPRESS CRK MARSH W29 NRSD WELL B2LNE NR DREXEL FL									
DEC 2001									
11...	E2.4	E.543	E1.98	E.011	<0.002	E.007	23.0	--	379
APR 2002									
30...	--	0.89	<0.02	<0.010	--	--	22.0	430	1,650
281756082231201 CYPRESS CRK MARSH W29 NRSD WELL B2MNE NR DREXEL FL									
DEC 2001									
11...	E.70	E.030	E9.00	E.003	<0.002	E.002	6.4	--	21
APR 2002									
30...	--	0.10	5.70	<0.010	--	--	9.0	963	29
281757082231801 CYPRESS CRK MARSH W29 NRSD WELL B1MSW NR DREXEL FL									
DEC 2001									
10...	E.80	E.042	E3.38	E.003	E.002	<0.002	6.2	--	238
10...	E.80	E.044	E3.48	E.003	<0.002	E.019	6.1	743	230
MAY 2002									
01...	--	0.04	3.90	<0.010	--	--	5.7	1,330	196
281758082231501 CYPRESS CRK MARSH W29 NRSD WELL B1MSE NR DREXEL FL									
DEC 2001									
11...	E1.1	E.016	E11.8	E.003	<0.002	E.004	7.6	7,260	221
281758082231701 CYPRESS CRK MARSH W29 NRSD WELL B1CTR NR DREXEL FL									
DEC 2001									
10...	E1.7	E.154	E9.67	E.002	<0.002	E.007	9.2	4,800	491
MAY 2002									
01...	--	0.06	6.80	<0.010	--	--	8.9	4,360	370
281759082231601 CYPRESS CRK MARSH W29 NRSD WELL B1MNE NR DREXEL FL									
DEC 2001									
10...	E.70	E.007	E10.9	E.008	E.002	<0.002	6.5	5,080	86
MAY 2002									
01...	--	0.02	1.40	<0.010	--	--	9.6	1,510	129
282156082280201 CROSSBAR DUCK PD MSE NRSD WELL NEAR MASARYKTOWN FL									
NOV 2001									
07...	E.60	E.009	<0.002	<0.001	E.005	E.268	9.9	--	4
07...	E.60	E.004	<0.002	<0.001	E.005	E.175	8.7	--	4
MAY 2002									
08...	--	<0.01	<0.02	<0.010	--	--	5.4	15	<2

WATER QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002—Continued

PASCO COUNTY

Date	Time	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt Gran, field, mg/L as CaCO3 (29802)	Chloride, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
282157082280201 CROSSBAR DUCK PD LSE NRSD WELL NEAR MASARYKTOWN FL													
NOV 2001													
07...	1130	1.7	6.8	368	24.2	72.0	2.70	0.30	3.2	182	5.80	0.40	E.50
MAY 2002													
08...	1330	0.7	6.7	310	23.5	58.0	2.10	0.30	3.4	153	6.10	1.90	0.60
282157082280701 CROSSBAR DUCK PD MSW NRSD WELL NEAR MASARYKTOWN FL													
NOV 2001													
08...	1130	1.8	6.6	295	23.4	56.0	2.20	0.30	4.0	143	5.40	1.70	E1.1
282157082280801 CROSSBAR DUCK PD USW NRSD WELL NEAR MASARYKTOWN FL													
NOV 2001													
08...	1230	1.3	5.6	123	23.3	18.0	1.60	0.30	4.2	44.0	6.20	1.60	E1.5
282158082280601 CROSSBAR DUCK PD LSW NRSD WELL NEAR MASARYKTOWN FL													
NOV 2001													
08...	1000	1.6	6.7	431	24.8	83.0	3.10	1.30	3.2	220	6.10	0.60	E1.1
282201082280401 CROSSBAR DUCK PD LNE NRSD WELL NEAR MASARYKTOWN FL													
NOV 2001													
09...	1020	1.6	6.3	202	25.1	39.0	1.40	0.60	2.4	91.0	5.60	0.70	E.90
282201082280701 CROSSBAR DUCK PD LNW NRSD WELL NEAR MASARYKTOWN FL													
NOV 2001													
08...	1530	2.0	6.2	196	26.1	25.0	2.20	0.70	4.2	79.6	5.40	0.80	E2.3
MAY 2002													
09...	1120	1.7	6.4	225	23.5	40.0	2.50	0.50	3.4	100	6.60	0.70	1.3
282202082280401 CROSSBAR DUCK PD MNE NRSD WELL NEAR MASARYKTOWN FL													
NOV 2001													
09...	1120	1.5	5.4	76	25.0	6.60	1.70	0.20	4.2	12.0	5.70	8.80	E.30
282202082280801 CROSSBAR DUCK PD MNW NRSD WELL NEAR MASARYKTOWN FL													
NOV 2001													
08...	1320	1.3	5.6	92	23.1	8.60	3.10	0.30	4.0	32.0	5.80	2.00	E1.5
MAY 2002													
09...	1300	1.1	6.0	129	22.0	15.0	3.20	0.50	3.5	53.0	6.60	0.40	1.8
282203082280401 CROSSBAR DUCK PD UNE NRSD WELL NEAR MASARYKTOWN FL													
NOV 2001													
09...	1250	1.4	5.4	74	23.3	6.90	1.70	0.40	3.4	18.8	6.70	0.20	E.90
282203082280901 CROSSBAR DUCK PD UNW NRSD WELL NEAR MASARYKTOWN FL													
NOV 2001													
08...	1430	4.5	4.5	75	23.5	1.70	1.40	1.20	1.8	--	2.70	5.40	E.30
MAY 2002													
10...	1100	4.1	4.6	60	21.6	1.30	1.80	0.30	2.8	0.0	9.00	6.40	0.30
282154082280402 CROSSBAR A-2 SHALLOW NEAR LOYCE FL													
NOV 2001													
09...	1500	6.0	4.5	98	24.4	3.90	3.40	3.20	1.6	--	3.40	3.40	<0.20
MAY 2002													
10...	0910	4.0	4.9	80	22.9	2.60	2.60	3.40	2.9	0.5	6.50	5.30	0.20
10...	0920	4.0	4.9	80	22.9	2.90	2.70	3.60	2.8	0.5	6.40	5.30	<0.20

WATER QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002—Continued

PASCO COUNTY

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Organic carbon, water, fltrd, mg/L (00681)	Alum-inum, water, fltrd, ug/L (01106)	Iron, water, fltrd, ug/L (01046)
282157082280201 CROSSBAR DUCK PD LSE NRSD WELL NEAR MASARYKTOWN FL									
NOV 2001									
07...	E.80	E.068	<0.002	<0.001	E.007	E.151	13.0	--	9
MAY 2002									
08...	--	0.10	<0.02	<0.010	--	--	9.2	49	42
282157082280701 CROSSBAR DUCK PD MSW NRSD WELL NEAR MASARYKTOWN FL									
NOV 2001									
08...	E1.1	E.234	<0.002	E.001	E.003	E.006	14.0	--	12
282157082280801 CROSSBAR DUCK PD USW NRSD WELL NEAR MASARYKTOWN FL									
NOV 2001									
08...	E1.6	E.238	E.004	E.002	E.005	E.006	29.0	249	107
282158082280601 CROSSBAR DUCK PD LSW NRSD WELL NEAR MASARYKTOWN FL									
NOV 2001									
08...	E1.4	E.705	E.004	E.002	E.033	E.086	9.6	--	35
282201082280401 CROSSBAR DUCK PD LNE NRSD WELL NEAR MASARYKTOWN FL									
NOV 2001									
09...	E.90	E.066	<0.002	E.002	E.009	E.018	19.0	--	10
282201082280701 CROSSBAR DUCK PD LNW NRSD WELL NEAR MASARYKTOWN FL									
NOV 2001									
08...	E2.4	E1.72	E.005	E.002	<0.002	E.002	13.0	--	2,640
MAY 2002									
09...	--	0.76	<0.02	<0.010	--	--	8.4	10	2,170
282202082280401 CROSSBAR DUCK PD MNE NRSD WELL NEAR MASARYKTOWN FL									
NOV 2001									
09...	E.40	E.005	E.496	E.008	E.010	E.014	7.9	--	43
282202082280801 CROSSBAR DUCK PD MNW NRSD WELL NEAR MASARYKTOWN FL									
NOV 2001									
08...	E1.5	E.734	E.002	E.002	<0.002	E.019	12.0	--	691
MAY 2002									
09...	--	1.20	<0.02	<0.010	--	--	11.0	59	708
282203082280401 CROSSBAR DUCK PD UNE NRSD WELL NEAR MASARYKTOWN FL									
NOV 2001									
09...	E.80	E.251	E.003	E.002	E.004	E.004	17.0	--	315
282203082280901 CROSSBAR DUCK PD UNW NRSD WELL NEAR MASARYKTOWN FL									
NOV 2001									
08...	E.30	E.007	E3.83	<0.001	E.003	E.008	5.2	1,300	6
MAY 2002									
10...	--	0.01	0.35	<0.010	--	--	2.8	776	5
282154082280402 CROSSBAR A-2 SHALLOW NEAR LOYCE FL									
NOV 2001									
09...	<0.20	<0.002	E7.54	<0.001	E.003	E.002	3.9	--	2
MAY2002 2002									
10...	--	<0.01	4.40	<0.010	--	--	1.3	287	3
10...	--	<0.01	3.20	<0.010	--	--	1.4	302	2

PASCO COUNTY

Samples were collected to characterize and compare ground-water quality around natural and augmented wetlands.

Date	Time	Dis-solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Potas-sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alka-linity, wat flt Gran, field, mg/L as CaCO3 (29802)	Chlor-ide, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
282156082280201 CROSSBAR DUCK PD MSE NRSD WELL NEAR MASARYKTOWN FL													
NOV 2002 07...	1200	0.9	6.4	290	25.2	53.0	2.30	0.30	3.6	137	6.60	0.90	0.30
282157082280201 CROSSBAR DUCK PD LSE NRSD WELL NEAR MASARYKTOWN FL													
NOV 2002 07...	1315	0.9	6.4	291	24.2	55.0	2.00	0.40	3.5	138	6.20	1.80	0.50
282201082280701 CROSSBAR DUCK PD LNW NRSD WELL NEAR MASARYKTOWN FL													
NOV 2002 05...	1120	1.3	6.4	250	27.1	44.0	2.50	0.60	3.4	111	5.60	0.60	0.90
282202082280801 CROSSBAR DUCK PD MNW NRSD WELL NEAR MASARYKTOWN FL													
NOV 2002 04...	1200	0.9	5.7	126	24.4	17.0	1.90	0.30	3.8	60.2	6.00	0.60	1.4
04...	1205	0.9	5.7	126	24.4	18.0	2.10	0.40	3.8	60.2	6.10	0.60	1.4
282203082280901 CROSSBAR DUCK PD UNW NRSD WELL NEAR MASARYKTOWN FL													
NOV 2002 05...	1500	3.1	4.6	55	23.9	0.57	1.90	<0.10	2.8	--	3.60	6.40	0.40
282154082280402 CROSSBAR A-2 SHALLOW NEAR LOYCE FL													
NOV 2002 07...	1100	4.2	4.4	78	24.5	2.20	3.10	2.60	2.2	--	5.30	4.10	0.20

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Phos-phorus, water, fltrd, mg/L (00666)	Organic carbon, water, fltrd, mg/L (00681)	Alum-inum, water, fltrd, ug/L (01106)	Iron, water, fltrd, ug/L (01046)
282156082280201 CROSSBAR DUCK PD MSE NRSD WELL NEAR MASARYKTOWN FL							
NOV 2002 07...	0.022	<0.002	<0.001	0.006	4.7	--	5
282157082280201 CROSSBAR DUCK PD LSE NRSD WELL NEAR MASARYKTOWN FL							
NOV 2002 07...	0.070	0.002	<0.001	0.003	8.1	--	72
282201082280701 CROSSBAR DUCK PD LNW NRSD WELL NEAR MASARYKTOWN FL							
NOV 2002 05...	0.346	0.003	<0.001	<0.020	8.9	--	1,370
282202082280801 CROSSBAR DUCK PD MNW NRSD WELL NEAR MASARYKTOWN FL							
NOV 2002 04...	0.755	0.004	<0.001	0.017	12.0	92	523
04...	0.774	0.003	<0.001	0.019	11.0	--	559
282203082280901 CROSSBAR DUCK PD UNW NRSD WELL NEAR MASARYKTOWN FL							
NOV 2002 05...	0.004	1.75	<0.001	<0.002	2.7	--	6
282154082280402 CROSSBAR A-2 SHALLOW NEAR LOYCE FL							
NOV 2002 07...	0.003	4.01	<0.001	<0.002	1.2	--	2

KEY TO SITE LOCATIONS ON FIGURE 19

PINELLAS COUNTY

INDEX NUMBER	SITE NUMBER
1	275430082431401
1	275430082431402
1	275430082431403
2	275458082464002
2	275458082464003
2	275458082464004
3	275753082433701
4	275815082440401
5	275843082474201
6	280118082434501
6	280118082434502
6	280118082434503
7	280132082452801
7	280132082452802
7	280132082452803
8	280734082442101
9	280747082452001
10	280753082465201
11	280907082424801
11	280907082424802
12	281022082400201

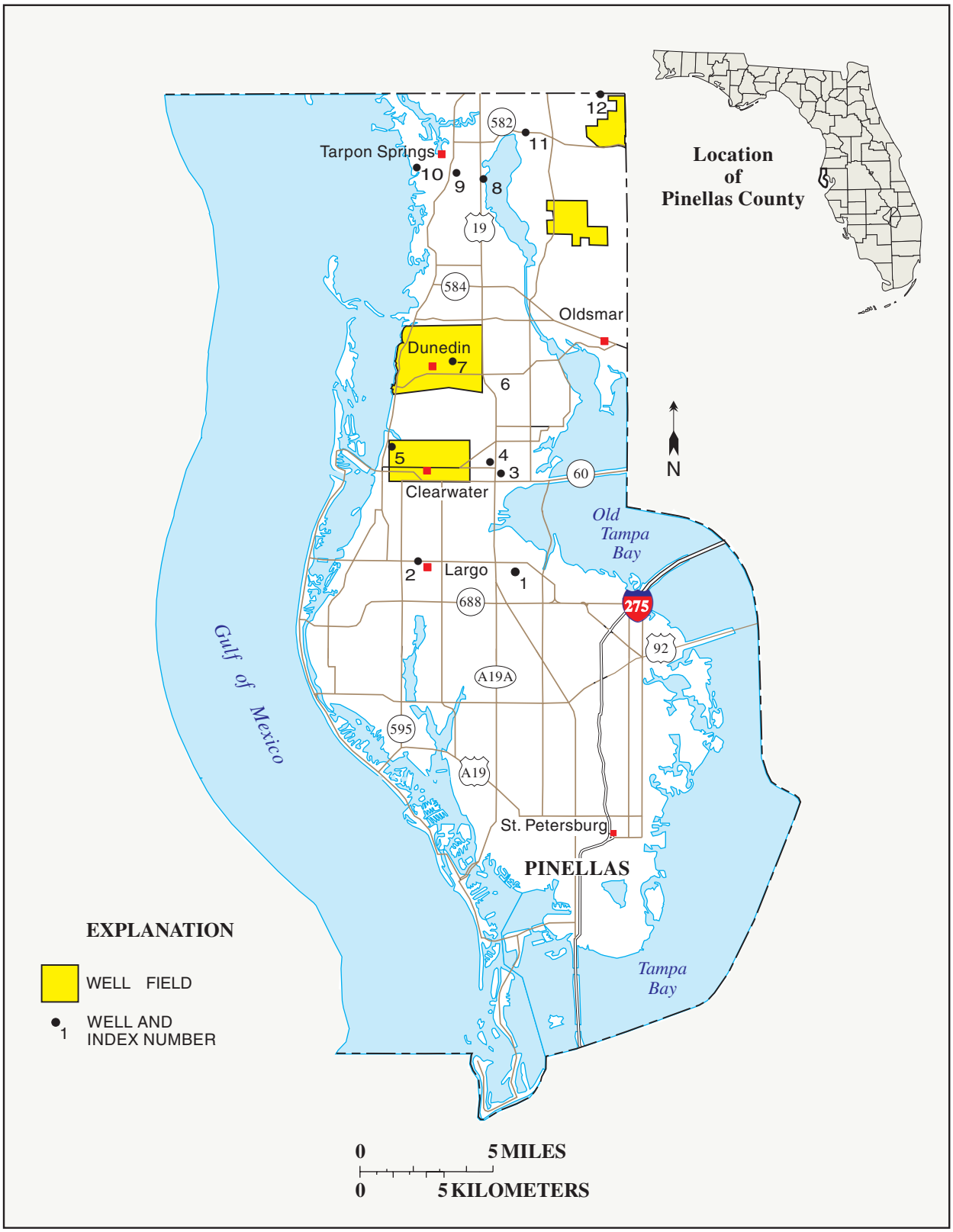


Figure 19.-- Location of wells in Pinellas County.

PINELLAS COUNTY

WELL NUMBER.--275430082431401. ROMP TR 13-2A Lower Suwannee Well near Largo, FL.

LOCATION.--Lat 27°54'30", long 82°43'14" (1927 North American datum), in SW $^1/_4$ SE $^1/_4$ sec.32, T.29 S., R.16 E., Hydrologic Unit 03100206, 0.5 mi south of East Bay Drive, and 4.4 mi east of Largo.

AQUIFER.--Suwannee limestone of Oligocene Age, Geologic Unit 123SWNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 551 ft, cased to 530 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Land-surface datum is 16.78 ft above National Geodetic Vertical Datum of 1929 (levels by Southwest Florida Water Management District). Measuring point: Top of shelter floor, 3.26 ft above land-surface datum.

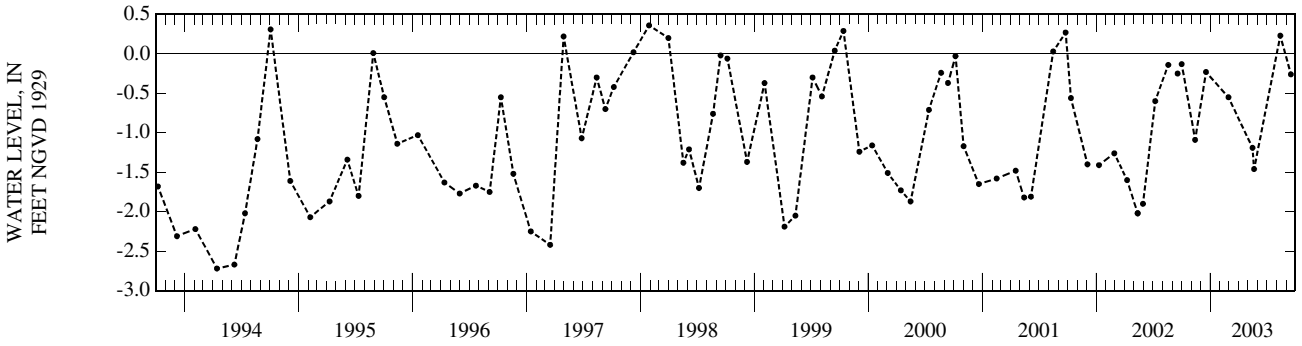
PERIOD OF RECORD.--April 1988 to current year (periodic).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.36 ft NGVD, Jan. 28, 1998; lowest measured, 4.65 ft below NGVD, June 20, 1988.

WATER SURFACE ELEVATION IN FEET (NGVD1929), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	-.13	DEC 18	-.23	MAY 16	-1.19	AUG 13	.23
NOV 13	-1.09	FEB 28	-.55	21	-1.46	SEP 16	-.26

WATER YEAR 2003 LOWEST -1.46 MAY 21, 2003 HIGHEST .23 AUG 13, 2003



PINELLAS COUNTY—Continued

WELL NUMBER.--275430082431402. ROMP TR 13-2A Upper Suwannee Well near Largo, FL.

LOCATION.--Lat 27°54'30", long 82°43'14" (1927 North American datum), in SW $^1/_4$ SE $^1/_4$ sec.32, T.29 S., R.16 E., Hydrologic Unit 03100206, 0.5 mi south of East Bay Drive, and 4.4 mi east of Largo.

AQUIFER.--Suwannee limestone of Oligocene Age, Geologic Unit 123SWNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 279 ft, cased to 269 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Land-surface datum is 17.64 ft above National Geodetic Vertical Datum of 1929 (levels by Southwest Florida Water Management District). Measuring point: Top of coupling, 2.45 ft above land-surface datum.

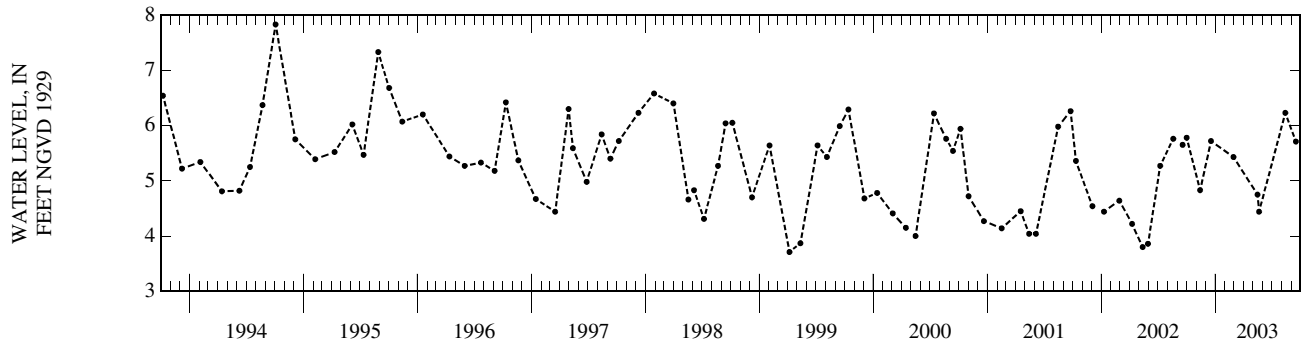
PERIOD OF RECORD.--April 1988 to current year (periodic).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.83 ft NGVD, Oct. 3, 1994; lowest measured, 3.46 ft NGVD, June 20, 1988.

WATER SURFACE ELEVATION IN FEET (NGVD1929), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	5.78	DEC 18	5.72	MAY 16	4.75	AUG 13	6.23
NOV 13	4.83	FEB 28	5.43	21	4.44	SEP 16	5.71

WATER YEAR 2003 LOWEST 4.44 MAY 21, 2003 HIGHEST 6.23 AUG 13, 2003



PINELLAS COUNTY—Continued

WELL NUMBER.--275430082431403. ROMP TR 13-2 NRSD Well near Largo, FL.

LOCATION.--Lat 27°54'30", long 82°43'14" (1927 North American datum), in SW ¼ SE ¼ sec.32, T.29 S., R.16 E., Hydrologic Unit 03100206, 0.5 mi south of East Bay Drive, and 2.0 mi east of Largo.

AQUIFER.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit 112NRSD.

WELL CHARACTERISTICS (corrected).--Drilled, observation, water-table well, diameter 6 in., depth 15 ft, cased to 10 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 17.49 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 2.95 ft above land-surface datum.

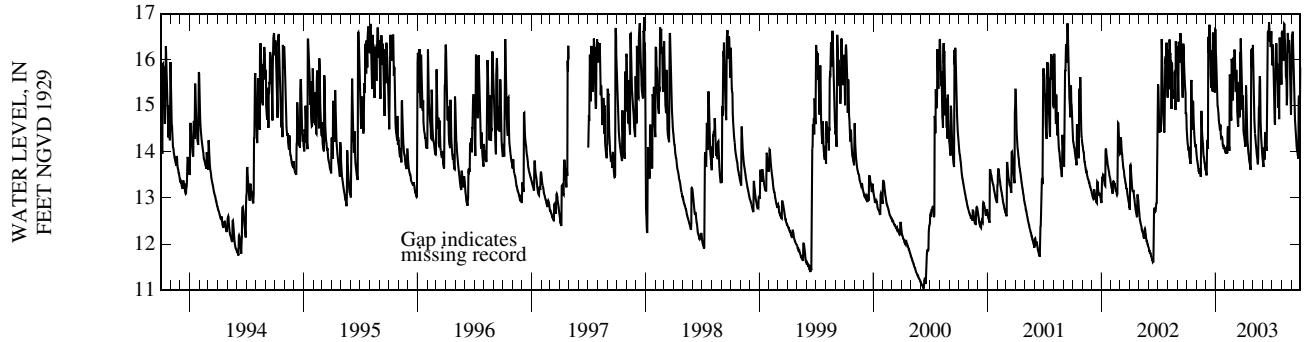
PERIOD OF RECORD.--October 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 17.03 ft NGVD, Sept. 8, 1988; lowest, 11.04 ft NGVD, June 9, 10, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.50	13.97	13.62	16.65	14.04	15.96	14.47	16.32	13.87	16.20	15.46	15.31
2	14.39	13.90	13.56	16.16	14.02	16.01	14.38	15.93	13.82	15.88	16.60	15.85
3	14.27	13.83	13.52	16.06	13.97	16.22	14.36	15.53	13.73	16.00	16.46	16.52
4	14.18	13.80	13.49	15.77	14.07	16.14	14.30	15.14	13.67	16.33	16.63	16.52
5	14.14	13.74	14.03	15.53	14.08	15.85	14.22	14.88	14.09	16.26	16.37	16.54
6	14.05	13.71	14.26	15.38	13.96	15.52	14.19	14.70	14.01	15.86	16.13	16.61
7	14.05	13.66	14.18	15.17	14.01	15.32	14.11	14.53	13.83	15.46	15.98	16.25
8	14.06	13.58	14.07	15.00	13.97	15.32	14.76	14.40	14.00	15.09	16.55	16.02
9	13.93	13.57	16.50	14.97	14.49	15.78	15.44	14.33	14.43	14.86	16.78	15.75
10	13.88	13.57	16.47	14.90	14.56	15.75	15.23	14.24	14.37	14.68	16.77	15.45
11	13.85	13.52	16.15	14.82	14.48	15.22	14.77	14.14	14.17	14.59	16.47	15.14
12	13.78	13.62	16.71	14.69	14.30	14.88	14.53	14.08	14.09	15.51	16.29	14.92
13	13.74	13.64	16.76	14.62	14.14	14.77	14.32	14.00	14.11	15.63	16.05	14.70
14	13.88	13.54	16.30	14.58	14.10	14.62	14.19	13.91	14.02	15.90	15.90	14.59
15	15.52	13.46	16.06	14.50	14.02	14.55	14.13	13.87	14.25	16.36	15.64	14.45
16	15.56	14.09	15.88	14.47	15.68	14.83	14.05	13.79	15.54	16.15	15.61	14.34
17	15.15	14.89	15.68	14.59	15.66	15.52	13.97	13.73	16.01	15.89	15.53	14.23
18	14.77	14.65	15.50	14.40	15.24	15.36	13.93	13.89	16.60	15.92	15.01	14.13
19	14.55	14.45	15.39	14.31	14.89	15.06	13.84	14.58	16.61	15.63	15.23	14.05
20	14.48	14.32	16.21	14.32	14.78	14.75	13.78	14.92	16.60	15.24	16.29	14.03
21	15.11	14.23	15.88	14.33	14.68	16.16	13.76	14.91	16.62	14.96	16.58	13.97
22	15.08	14.17	15.55	14.32	16.02	15.97	13.71	15.42	16.81	15.34	16.45	13.92
23	14.73	14.00	15.31	14.30	15.96	16.46	13.64	15.64	16.67	15.15	16.15	13.89
24	14.59	13.90	16.57	14.17	15.56	16.25	13.61	15.56	16.40	14.71	16.31	13.85
25	14.42	13.88	16.59	14.12	15.25	15.88	15.46	14.98	16.48	16.15	16.43	15.15
26	14.32	13.81	16.09	14.16	15.12	15.61	16.22	14.65	16.43	16.48	16.30	15.22
27	14.20	13.77	15.88	14.13	15.48	15.38	15.84	14.45	16.28	16.38	15.93	15.01
28	14.14	13.76	15.70	14.06	16.05	15.16	16.25	14.28	16.48	16.06	15.68	14.78
29	14.10	13.66	15.42	14.10	---	14.91	16.14	14.17	16.62	16.21	15.32	15.10
30	14.17	13.62	15.29	14.09	---	15.22	15.84	14.08	16.32	15.83	15.02	15.83
31	14.08	---	16.66	14.05	---	14.80	---	13.96	---	15.48	14.81	---
MAX	15.56	14.89	16.76	16.65	16.05	16.46	16.25	16.32	16.81	16.48	16.78	16.61

CAL YR 2002 MAX 16.76
WTR YR 2003 MAX 16.81



PINELLAS COUNTY—Continued

WELL NUMBER.--275458082464002. ROMP TR 13-1A Suwannee Well at Largo, FL.

LOCATION.--Lat 27°54'58", long 82°46'40" (1927 North American datum), in NW $^1/_4$ SW $^1/_4$ sec.35, T.29 S., R.15 E., Hydrologic Unit 03100207, 50 ft south of East Bay Drive, and 0.9 mi northeast of Largo.

AQUIFER.--Suwannee limestone of Oligocene Age, Geologic Unit 123SWNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 264 ft, cased to 254 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Land-surface datum is 10.16 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.68 ft above land-surface datum.

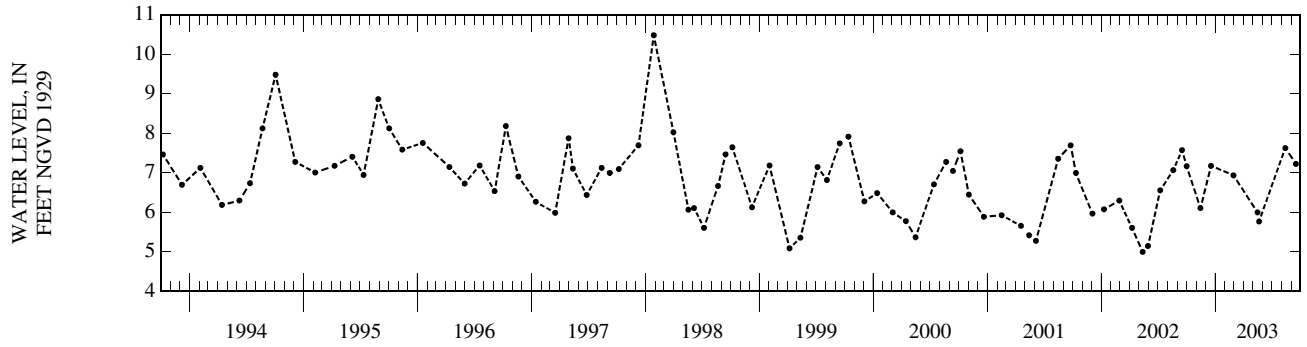
PERIOD OF RECORD.--April 1988 to current year (periodic).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.48 ft NGVD, Jan. 27, 1998; lowest measured, 4.45 ft NGVD, June 20, 1988.

WATER SURFACE ELEVATION IN FEET (NGVD1929), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	7.16	DEC 18	7.17	MAY 16	5.99	AUG 13	7.62
NOV 14	6.10	FEB 28	6.93	21	5.76	SEP 16	7.22

WATER YEAR 2003 LOWEST 5.76 MAY 21, 2003 HIGHEST 7.62 AUG 13, 2003



PINELLAS COUNTY—Continued

WELL NUMBER.--275458082464003. ROMP TR 13-1A Tampa Well at Largo, FL.

LOCATION.--Lat 27°54'58", long 82°46'40" (1927 North American datum), in NW $^1/_4$ SW $^1/_4$ sec.35, T.29 S., R.15 E., Hydrologic Unit 03100207, 50 ft south of East Bay Drive, and 0.9 mi northeast of Largo.

AQUIFER.--Tampa limestone of Miocene Age, Geologic Unit 122TAMP.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 188 ft, cased to 173 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Land-surface datum is 9.95 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.10 ft above land-surface datum.

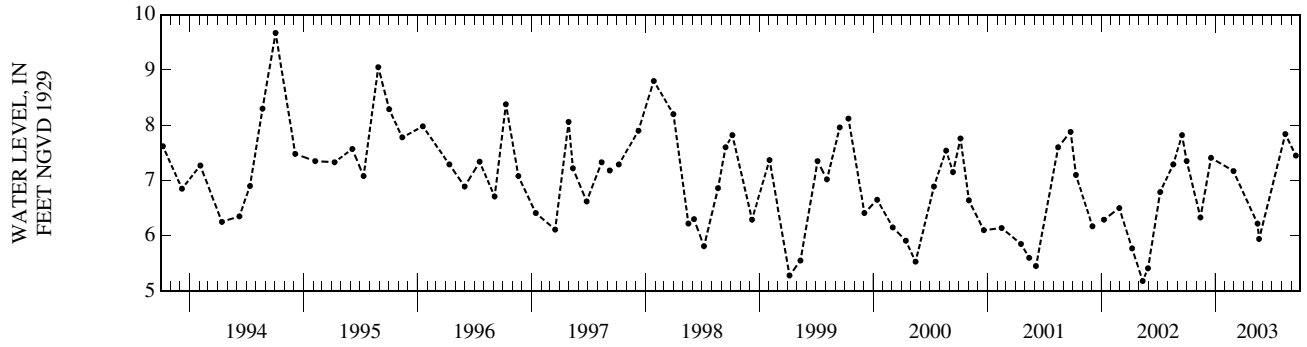
PERIOD OF RECORD.--April 1988 to current year (periodic).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.67 ft NGVD, Oct. 3, 1994; lowest measured, 4.45 ft NGVD, June 20, 1988.

WATER SURFACE ELEVATION IN FEET (NGVD1929), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	7.35	DEC 18	7.41	MAY 16	6.22	AUG 13	7.84
NOV 14	6.33	FEB 28	7.17	21	5.94	SEP 16	7.45

WATER YEAR 2003 LOWEST 5.94 MAY 21, 2003 HIGHEST 7.84 AUG 13, 2003



PINELLAS COUNTY—Continued

WELL NUMBER.--275458082464004. ROMP TR 13-1A NRSD Well at Largo, FL.

LOCATION.--Lat 27°54'58", long 82°46'40" (1927 North American datum), in NW $^1/_4$ SW $^1/_4$ sec.35, T.29 S., R.15 E., Hydrologic Unit 03100207, 50 ft south of East Bay Drive, and 0.9 mi northeast of Largo.

AQUIFER.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit 112NRSD.

WELL CHARACTERISTICS.--Drilled, water-table well, diameter 6 in., depth 20 ft, cased to 10 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 10.20 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 3.13 ft above land-surface datum.

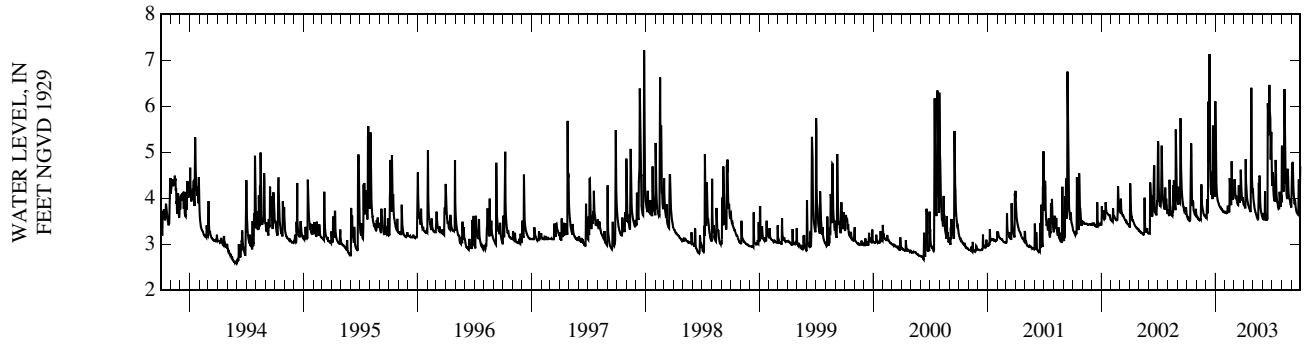
PERIOD OF RECORD.--October 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 9.38 ft NGVD, Sept. 8, 1988; lowest, 2.59 ft NGVD, June 20, 1990, May 29, 30, June 1, 1994.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.65	3.63	3.61	6.09	3.69	4.19	3.87	4.22	3.58	4.42	3.91	3.80
2	3.61	3.62	3.58	4.79	3.68	4.17	3.86	4.05	3.56	4.27	5.12	4.07
3	3.59	3.59	3.58	4.48	3.68	4.41	3.85	3.96	3.56	4.52	5.14	4.52
4	3.57	3.58	3.57	4.30	3.70	4.37	3.84	3.90	3.53	4.56	4.80	4.73
5	3.55	3.58	3.98	4.18	3.69	4.17	3.82	3.86	3.68	4.48	4.51	4.73
6	3.54	3.58	3.89	4.10	3.68	4.06	3.80	3.81	3.56	4.16	4.27	4.79
7	3.56	3.55	3.72	4.02	3.69	4.00	3.78	3.77	3.52	4.05	4.14	4.46
8	3.54	3.55	3.67	3.97	3.69	4.00	4.85	3.74	3.68	3.99	4.30	4.24
9	3.52	3.54	6.07	3.94	3.82	4.06	4.35	3.71	4.15	3.94	5.74	4.10
10	3.52	3.54	6.10	3.92	3.82	4.02	4.25	3.69	3.74	3.96	6.37	4.00
11	3.51	3.53	4.78	3.90	3.79	3.94	4.12	3.67	3.61	3.92	5.26	3.93
12	3.52	3.55	6.07	3.87	3.74	3.91	4.03	3.64	3.60	4.28	4.82	3.87
13	3.82	3.55	7.13	3.85	3.71	3.87	3.96	3.62	3.55	4.83	4.51	3.97
14	4.31	3.55	5.36	3.84	3.70	3.86	3.92	3.59	3.51	4.63	4.32	3.90
15	5.19	3.54	4.66	3.82	3.69	3.85	3.90	3.57	3.65	4.22	4.38	3.81
16	4.94	4.07	4.41	3.81	4.44	4.05	3.87	3.55	3.57	4.06	4.31	3.77
17	4.22	4.30	4.24	3.81	4.31	4.28	3.84	3.54	3.54	3.97	4.10	3.73
18	4.00	3.97	4.14	3.78	4.01	4.02	3.82	3.55	6.06	3.92	4.03	3.71
19	3.90	3.86	4.07	3.77	3.91	3.95	3.80	4.03	5.86	3.91	3.98	3.69
20	3.83	3.80	4.57	3.77	3.87	3.90	3.77	4.33	5.41	3.84	4.64	3.67
21	3.95	3.76	4.17	3.76	3.85	4.16	3.75	4.05	5.37	3.81	4.52	3.66
22	3.90	3.73	4.03	3.76	4.80	4.05	3.74	4.49	5.86	3.78	4.47	3.65
23	3.75	3.68	3.98	3.75	4.58	4.62	3.72	4.47	6.46	3.79	4.19	3.64
24	3.72	3.66	5.56	3.72	4.13	4.45	3.70	3.97	5.90	3.76	4.08	3.65
25	3.70	3.65	5.56	3.72	4.04	4.20	5.95	3.85	5.83	4.00	4.00	4.39
26	3.67	3.64	4.60	3.71	3.97	4.09	6.40	3.78	5.73	4.14	3.99	4.39
27	3.65	3.63	4.33	3.70	4.02	4.04	4.88	3.73	4.84	4.02	3.97	3.97
28	3.64	3.61	4.20	3.70	4.25	3.98	4.41	3.69	5.09	3.83	3.95	3.87
29	3.63	3.60	4.10	3.71	---	3.95	4.26	3.66	5.44	3.92	3.88	4.26
30	3.77	3.60	4.03	3.70	---	4.02	4.12	3.63	4.72	3.81	3.87	4.69
31	3.69	---	6.09	3.70	---	3.92	---	3.60	---	4.06	3.83	---
MAX	5.19	4.30	7.13	6.09	4.80	4.62	6.40	4.49	6.46	4.83	6.37	4.79

CAL YR 2002 MAX 7.13
WTR YR 2003 MAX 7.13



PINELLAS COUNTY—Continued

WELL NUMBER.--275753082433701. Clearwater-Dunedin Deep Well 27 near Clearwater, FL.

LOCATION.--Lat 27°57'53", long 82°43'37" (1927 North American datum), in SE ¼ NW ¼ sec.17, T.29 S., R.16 E., Hydrologic Unit 03100207, 0.3 mi north of State Highway 60, and 4.3 mi east of Clearwater.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 6 in., depth 560 ft, cased to 523 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Land-surface datum is 48.06 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.00 ft above land-surface datum.

PERIOD OF RECORD.--October 1982 to current year (periodic).

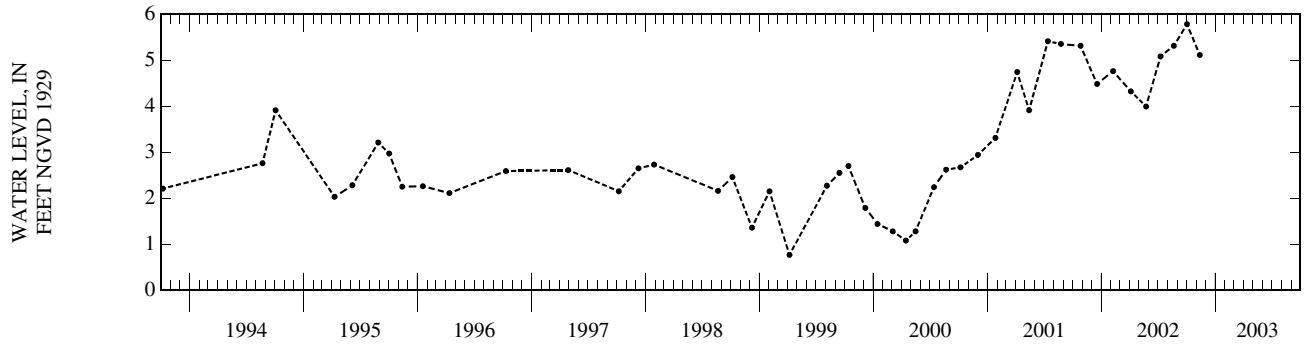
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.78 ft NGVD, Oct. 2, 2002; well observed dry June 5, July 2, 1998; May 12, July 6, 1999.

WATER SURFACE ELEVATION IN FEET (NGVD1929), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02	5.78	NOV 12	5.11	DEC 19	*	FEB 27	*

* OBSTRUCTED

WATER YEAR 2003 LOWEST 5.11 NOV 12, 2002 HIGHEST 5.78 OCT 02, 2002



PINELLAS COUNTY—Continued

WELL NUMBER.--275815082440401. Pinellas Well 665 near Clearwater, FL.

LOCATION.--Lat 27°58'15", long 82°44'04" (1927 North American datum), in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.7, T.29 S., R.16 E., Hydrologic Unit 03100206, 1.1 mi north of State Highway 60, and 4.0 mi east of Clearwater.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 10 in., depth 299 ft, cased to 81 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 33.64 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 2.97 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby wells.

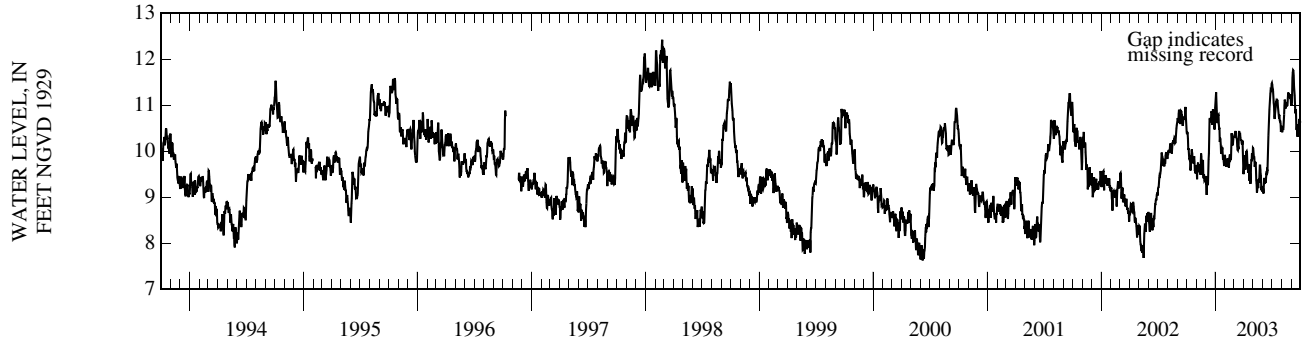
PERIOD OF RECORD.--June 1954 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 14.79 ft NGVD, Sept. 15, 1959; lowest, 7.18 ft NGVD, May 14, 15, 22, 1981.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.42	9.68	9.40	11.05	9.89	10.31	9.50	10.07	9.12	11.48	10.53	11.01
2	10.37	9.58	9.32	11.16	9.71	10.31	9.58	10.06	9.19	11.44	10.53	11.01
3	10.42	9.39	9.27	11.28	9.77	10.35	9.71	9.97	9.18	11.37	10.41	11.06
4	10.38	9.68	9.05	11.10	9.79	10.37	9.91	9.87	9.08	11.34	10.51	11.29
5	10.27	9.70	9.40	10.88	9.66	10.36	9.83	9.89	9.27	11.30	10.51	11.59
6	10.03	9.75	9.45	10.81	9.69	10.42	9.67	9.85	9.40	11.17	10.46	11.70
7	10.06	9.59	9.34	10.74	9.84	10.44	9.60	9.66	9.40	11.05	10.52	11.76
8	9.94	9.58	9.26	10.61	9.72	10.35	9.82	9.70	9.29	10.98	10.66	11.75
9	9.84	9.61	9.54	10.78	9.68	10.30	9.94	9.77	9.34	10.76	10.79	11.64
10	9.82	9.62	9.82	10.78	9.84	10.28	9.99	9.75	9.35	10.70	10.99	11.41
11	9.84	9.71	9.95	10.79	9.76	10.26	10.00	9.61	9.31	10.80	11.12	11.30
12	9.81	9.59	10.26	10.58	9.69	10.11	9.96	9.37	9.40	10.88	11.09	11.21
13	9.58	9.53	10.69	10.49	9.64	10.03	9.76	9.29	9.51	10.95	11.00	11.03
14	9.68	9.49	10.72	10.49	9.78	10.02	9.69	9.10	9.50	11.04	10.93	10.82
15	9.87	9.73	10.63	10.20	9.86	10.10	9.63	9.15	9.51	11.08	11.01	10.91
16	9.94	9.95	10.71	10.29	9.91	10.04	9.53	9.38	9.59	11.06	11.02	10.89
17	10.04	9.88	10.70	10.25	9.91	10.38	9.67	9.33	9.58	11.09	11.00	10.54
18	9.99	9.71	10.66	10.14	9.85	10.44	9.72	9.20	9.84	11.11	10.99	10.46
19	9.95	9.63	10.82	9.94	9.82	10.34	9.61	9.36	10.11	11.10	10.99	10.52
20	9.76	9.49	10.87	10.06	9.84	10.38	9.36	9.37	10.35	10.98	11.00	10.52
21	9.89	9.72	10.62	10.07	10.15	10.38	9.52	9.31	10.49	10.90	11.13	10.31
22	9.82	9.81	10.57	10.03	10.39	10.29	9.51	9.51	10.69	10.83	11.26	10.59
23	9.73	9.47	10.66	10.08	10.29	10.23	9.29	9.69	10.90	10.76	11.26	10.53
24	9.84	9.41	10.91	9.95	10.12	10.26	9.34	9.69	10.99	10.77	11.20	10.35
25	9.89	9.50	10.81	9.82	10.16	10.23	9.66	9.59	11.10	10.79	11.20	10.47
26	9.77	9.45	10.71	9.83	10.14	10.17	9.80	9.51	11.25	10.68	11.21	10.67
27	9.57	9.36	10.75	9.83	10.25	10.16	9.80	9.47	11.33	10.65	11.19	10.70
28	9.61	9.37	10.73	9.77	10.31	10.14	9.95	9.21	11.32	10.65	11.21	10.62
29	9.52	9.37	10.47	9.68	---	10.23	9.87	9.15	11.34	10.60	11.23	10.66
30	9.58	9.46	10.63	9.84	---	10.07	9.82	9.22	11.46	10.42	11.16	10.62
31	9.68	---	10.95	9.92	---	9.87	---	9.21	---	10.48	11.03	---
MAX	10.42	9.95	10.95	11.28	10.39	10.44	10.00	10.07	11.46	11.48	11.26	11.76

CAL YR 2002 MAX 10.96
WTR YR 2003 MAX 11.76



PINELLAS COUNTY—Continued

WELL NUMBER.--275843082474201. Garden Street Triangle Well at Clearwater, FL.

LOCATION.--Lat 27°58'43", long 82°47'42" (1927 North American datum), in NE $^1/_4$ NE $^1/_4$ sec.9, T.29 S., R.15 E., Hydrologic Unit 03100207, 0.9 mi north of State Highway 60, and 1.0 mi north of City Hall at Clearwater.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 10 in., depth 208 ft, cased to 54 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 32.27 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 1.17 ft above land-surface datum.

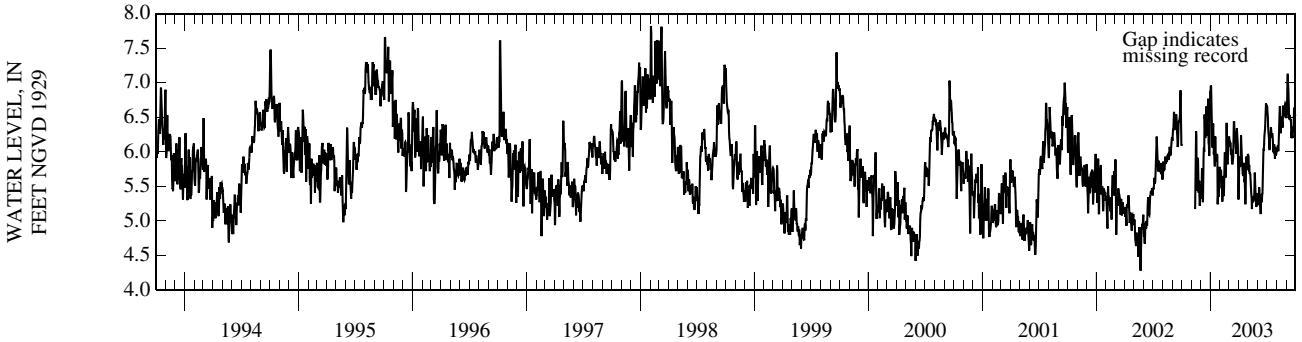
REMARKS.--Water level affected by tidal fluctuations.

PERIOD OF RECORD.--March 1946 to September 1983; October 1983 to December 1990 (periodic); January 1991 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.63 ft NGVD, Sept. 6, 1950; lowest, 3.55 ft NGVD, May 25, 1956.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.09	---	5.42	6.86	5.73	6.21	5.31	5.97	5.23	6.67	6.00	6.49
2	6.11	---	5.38	6.96	5.57	6.21	5.51	5.95	5.25	6.64	6.02	6.55
3	---	---	5.32	6.95	5.70	6.17	5.66	5.93	5.26	6.55	6.03	6.57
4	---	---	5.46	6.63	5.74	6.14	5.93	5.72	5.28	6.50	6.06	6.78
5	---	---	5.75	6.46	5.58	6.14	5.89	5.81	5.35	6.37	6.09	7.02
6	---	---	5.75	6.42	5.47	6.13	5.78	5.75	5.49	6.29	6.01	7.13
7	---	---	5.41	6.26	5.62	6.12	5.89	5.68	5.45	6.24	6.03	6.99
8	---	---	5.27	6.06	5.28	5.96	5.94	5.70	5.30	6.18	6.20	6.90
9	---	---	5.52	6.30	5.41	6.03	6.24	5.67	5.24	6.04	6.34	6.73
10	---	---	5.95	6.41	5.65	6.01	6.11	5.56	5.19	6.04	6.50	6.54
11	---	---	6.06	6.23	5.48	5.88	6.00	5.48	5.10	6.19	6.65	6.47
12	---	---	6.00	5.96	5.36	5.82	5.87	5.39	5.34	6.22	6.65	6.52
13	---	5.17	6.54	6.06	5.38	5.84	5.81	5.34	5.39	6.25	6.50	6.51
14	---	5.44	6.44	5.92	5.75	5.88	5.69	5.17	5.33	6.36	6.27	6.47
15	---	5.93	6.20	5.79	5.84	5.92	5.69	5.32	5.27	6.30	6.43	6.46
16	---	6.30	6.23	6.22	5.98	6.12	5.65	5.36	5.38	6.21	6.46	6.47
17	---	6.22	6.29	6.21	5.98	6.43	5.80	5.32	5.40	6.25	6.52	6.26
18	---	5.47	6.31	5.87	5.84	6.43	5.84	5.27	5.59	6.27	6.45	6.20
19	---	5.44	6.65	5.87	5.63	6.30	5.70	5.36	5.85	6.23	6.43	6.30
20	---	5.69	6.65	5.86	5.74	6.26	5.56	5.30	6.03	6.16	6.35	6.22
21	---	5.90	6.35	5.92	6.08	6.30	5.60	5.32	6.03	6.01	6.45	6.20
22	---	5.90	6.23	5.97	6.42	6.19	5.47	5.54	6.10	6.00	6.65	6.37
23	---	5.63	6.30	5.94	6.13	6.07	5.24	5.70	6.23	6.01	6.67	6.36
24	---	5.41	6.67	5.24	5.85	6.03	5.38	5.56	6.28	6.11	6.59	6.28
25	---	5.51	6.77	5.37	5.82	5.97	5.81	5.43	6.33	6.07	6.55	6.37
26	---	5.58	6.13	5.53	5.90	6.10	5.93	5.40	6.43	5.99	6.54	6.61
27	---	5.36	6.10	5.36	6.11	6.34	5.88	5.35	6.56	5.90	6.61	6.64
28	---	5.22	5.94	5.35	6.07	6.26	5.82	5.20	6.70	6.06	6.67	6.61
29	---	5.28	6.05	5.56	---	6.18	5.80	5.32	6.59	6.01	6.70	6.54
30	---	5.53	6.37	5.77	---	6.10	5.74	5.40	6.67	5.95	6.69	6.52
31	---	---	6.88	5.77	---	5.59	---	5.33	---	5.96	6.59	---
MAX	---	---	6.88	6.96	6.42	6.43	6.24	5.97	6.70	6.67	6.70	7.13



PINELLAS COUNTY—Continued

WELL NUMBER.--280118082434501. ROMP TR 14-3 Suwannee Well near Dunedin, FL.

LOCATION.--Lat 28°01'18", long 82°43'45" (1927 North American datum), in SW $^1/_4$ NW $^1/_4$ sec.29, T.28 S., R. 16 E., Hydrologic Unit 03100206, 1,000 ft north of State Highway 580, and 3.5 mi northeast of Dunedin.

AQUIFER.--Suwannee limestone of Oligocene Age, Geologic Unit 123SWNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 319 ft, cased to 299 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Land-surface datum is 95.23 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.26 ft above land-surface datum.

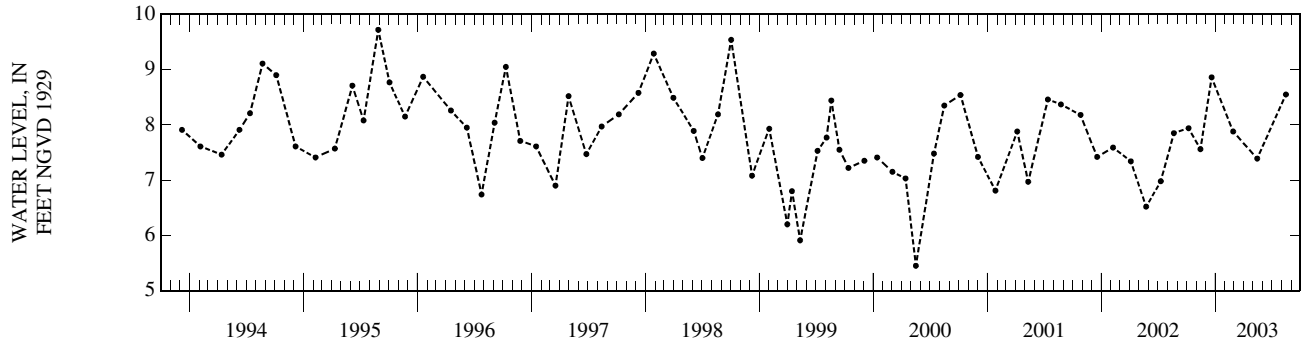
PERIOD OF RECORD.--April 1988 to current year (periodic).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.72 ft NGVD, Aug. 28, 1995; lowest measured, 5.45 ft NGVD, May 16, 2000.

WATER SURFACE ELEVATION IN FEET (NGVD1929), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07	7.94	NOV 14	7.56	DEC 20	8.86	FEB 27	7.88	MAY 15	7.39	AUG 15	8.55

WATER YEAR 2003 LOWEST 7.39 MAY 15, 2003 HIGHEST 8.86 DEC 20, 2002



PINELLAS COUNTY—Continued

WELL NUMBER.--280118082434502. ROMP TR 14-3 Tampa Well near Dunedin, FL.

LOCATION.--Lat 28°01'18", long 82°43'45" (1927 North American datum), in SW $^1/_4$ NW $^1/_4$ sec.29, T.28 S., R.16 E., Hydrologic Unit 03100206, 1,000 ft north of State Highway 580, and 3.5 mi northeast of Dunedin.

AQUIFER.--Tampa limestone of Miocene Age, Geologic Unit 112TAMP.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 10 in., depth 176 ft, cased to 125 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Land-surface datum is 95.23 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter floor, 2.40 ft above land-surface datum.

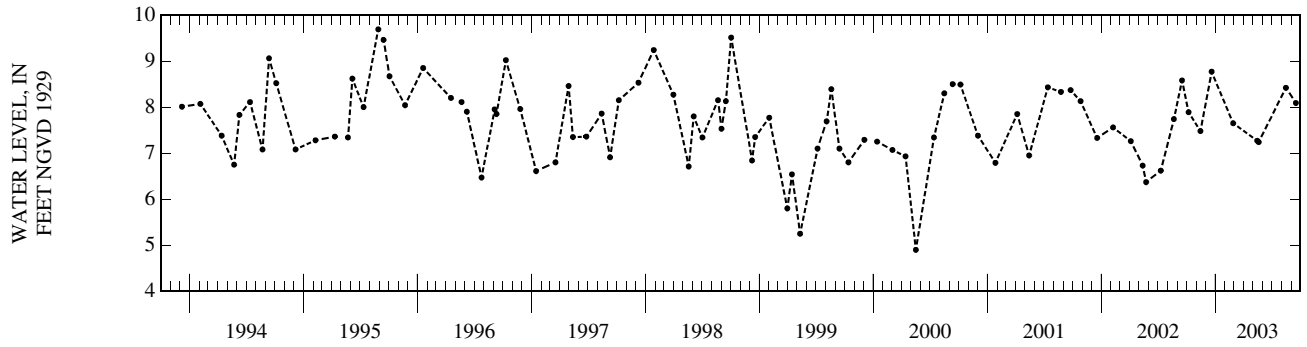
PERIOD OF RECORD.--October 1988 to current year (periodic).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.69 ft NGVD, Aug. 28, 1995; lowest measured, 4.90 ft NGVD, May 16, 2000.

WATER SURFACE ELEVATION IN FEET (NGVD1929), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07	7.89	DEC 20	8.77	MAY 15	7.27	AUG 15	8.42
NOV 14	7.48	FEB 27	7.65	20	7.24	SEP 16	8.09

WATER YEAR 2003 LOWEST 7.24 MAY 20, 2003 HIGHEST 8.77 DEC 20, 2002



PINELLAS COUNTY—Continued

WELL NUMBER.--280118082434503. ROMP TR 14-3 NRSD Well near Dunedin, FL.

LOCATION.--Lat 28°01'18", long 82°43'45" (1927 North American datum), in SW $^1/_4$ NW $^1/_4$ sec.29, T.28 S., R.16 E., Hydrologic Unit 03100206, 1,000 ft north of State Highway 580, and 3.5 mi northeast of Dunedin.

AQUIFER.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit 112NRSD.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 6 in., depth 30 ft, cased to 10 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 95.49 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 3.31 ft above land-surface datum.

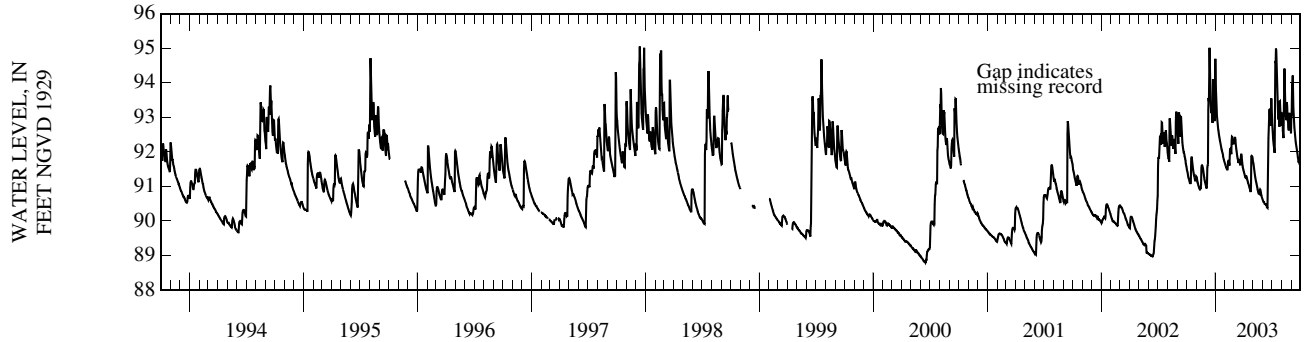
PERIOD OF RECORD.--October 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 95.17 ft NGVD, Sept. 8, 1988; lowest, 88.79 ft NGVD, June 16, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91.53	91.28	91.04	94.67	91.66	92.29	91.47	91.73	90.63	93.07	93.12	93.02
2	91.47	91.26	91.01	93.92	91.62	92.32	91.43	91.69	90.61	92.78	92.84	93.06
3	91.44	91.20	90.97	93.64	91.60	92.35	91.40	91.65	90.58	92.62	92.91	93.57
4	91.40	91.15	90.94	93.37	91.56	92.41	91.37	91.56	90.55	92.49	92.89	93.93
5	91.33	91.10	91.09	93.19	91.54	92.41	91.32	91.49	90.55	92.38	92.62	93.99
6	91.27	91.08	91.54	93.05	91.52	92.34	91.29	91.46	90.54	92.28	92.49	94.21
7	91.24	91.05	91.61	92.93	91.50	92.25	91.26	91.39	90.51	92.19	92.40	93.69
8	91.22	91.02	91.63	92.82	91.47	92.16	91.25	91.31	90.49	92.12	93.25	93.26
9	91.18	90.99	93.22	92.73	91.51	92.08	91.30	91.25	90.49	92.03	93.85	93.03
10	91.15	90.96	93.56	92.65	91.67	92.02	91.30	91.20	90.49	91.97	94.41	92.86
11	91.10	90.94	93.46	92.60	91.74	91.94	91.28	91.15	90.48	92.82	93.90	92.72
12	91.10	90.91	94.20	92.52	91.74	91.87	91.23	91.11	90.48	94.63	93.58	92.61
13	91.07	90.91	95.01	92.46	91.72	91.82	91.19	91.07	90.47	94.57	93.23	92.50
14	91.14	90.96	94.23	92.41	91.66	91.78	91.16	91.02	90.44	94.99	93.02	92.40
15	91.73	90.96	93.83	92.35	91.60	91.72	91.12	90.98	90.41	94.93	93.11	92.30
16	91.84	91.06	93.58	92.30	91.83	91.68	91.10	90.92	90.39	94.38	93.10	92.23
17	91.84	91.53	93.38	92.25	92.08	91.77	91.08	90.88	90.38	93.82	92.92	92.17
18	91.78	91.60	93.23	92.20	92.09	91.77	91.05	90.84	91.33	93.54	93.43	92.11
19	91.70	91.61	93.12	92.15	92.05	91.73	91.01	90.80	91.72	93.30	93.34	92.05
20	91.62	91.60	93.38	92.10	92.00	91.67	90.97	90.80	92.39	93.10	93.08	91.99
21	91.54	91.57	93.11	92.06	91.93	91.63	90.95	90.79	92.63	92.94	92.91	91.92
22	91.45	91.52	92.92	92.02	92.33	91.61	90.91	90.78	92.89	93.23	92.91	91.85
23	91.40	91.45	92.84	91.99	92.44	91.82	90.88	90.89	93.22	93.20	92.71	91.80
24	91.34	91.38	94.08	91.95	92.43	91.92	90.84	90.91	93.23	92.85	92.62	91.74
25	91.30	91.31	94.08	91.91	92.36	91.92	90.99	90.90	92.99	92.73	93.11	91.69
26	91.26	91.25	93.67	91.86	92.29	91.86	91.86	90.87	92.84	93.46	93.13	91.73
27	91.21	91.21	93.36	91.83	92.24	91.79	91.88	90.82	92.75	93.47	92.94	91.68
28	91.18	91.16	93.15	91.78	92.22	91.70	91.87	90.76	93.13	93.18	92.70	91.64
29	91.15	91.12	93.00	91.75	---	91.61	91.86	90.72	93.55	92.97	92.70	91.63
30	91.24	91.09	92.89	91.72	---	91.55	91.82	90.69	93.24	92.76	92.72	91.64
31	91.29	---	94.67	91.69	---	91.51	---	90.66	---	93.15	92.54	---
MAX	91.84	91.61	95.01	94.67	92.44	92.41	91.88	91.73	93.55	94.99	94.41	94.21

CAL YR 2002 MAX 95.01
WTR YR 2003 MAX 95.01



PINELLAS COUNTY—Continued

WELL NUMBER.--280132082452801. ROMP TR 14-2 Ocala Well near Dunedin, FL.

LOCATION.--Lat 28°01'32", long 82°45'28" (1927 North American datum), in SE $^1/_4$ NW $^1/_4$ sec.25, T.28 S., R.15 E., Hydrologic Unit 03100207, 0.5 mi north of State Highway 580, and 2.0 mi northeast of Dunedin.

AQUIFER.--Ocala limestone of Eocene Age, Geologic Unit 124OCAL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 460 ft, cased to 440 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Land-surface datum is 54.52 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.85 ft above land-surface datum.

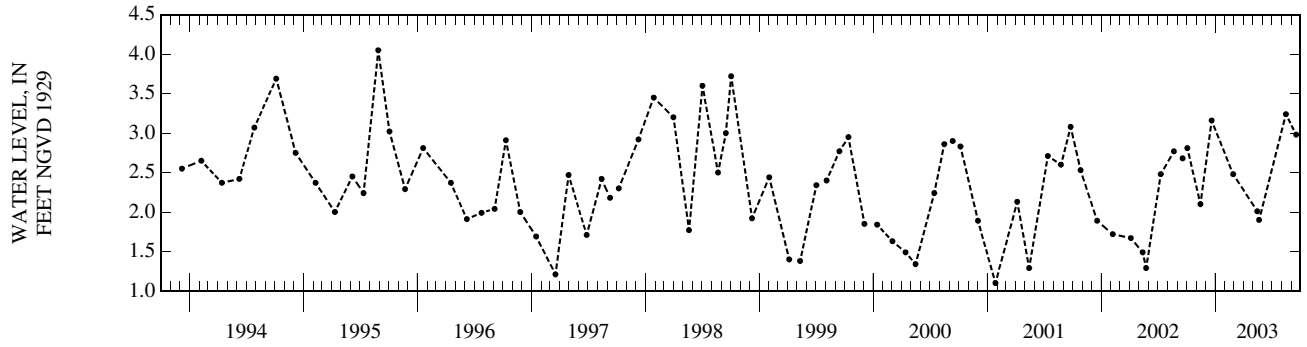
PERIOD OF RECORD.--April 1988 to current year (periodic).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.05 ft NGVD, Aug. 28, 1995; lowest measured, 1.10 ft NGVD, Jan. 26, 2001.

WATER SURFACE ELEVATION IN FEET (NGVD1929), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03	2.81	DEC 20	3.16	MAY 15	2.01	AUG 15	3.24
NOV 14	2.10	FEB 27	2.48	21	1.9	SEP 17	2.98

WATER YEAR 2003 LOWEST 1.9 MAY 21, 2003 HIGHEST 3.24 AUG 15, 2003



PINELLAS COUNTY—Continued

WELL NUMBER.--280132082452802. ROMP TR 14-2 Tampa Well near Dunedin, FL.

LOCATION.--Lat 28°01'32", long 82°45'28" (1927 North American datum), in SE $^1/_4$ NW $^1/_4$ sec.25, T.28 S., R.15 E., Hydrologic Unit 03100207, 0.5 mi north of State Highway 580, and 2.0 mi northeast of Dunedin.

AQUIFER.--Tampa limestone of Miocene Age, Geologic Unit 122TAMP.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 2 in., depth 218 ft, cased to 213 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Land-surface datum is 54.57 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.65 ft above land-surface datum.

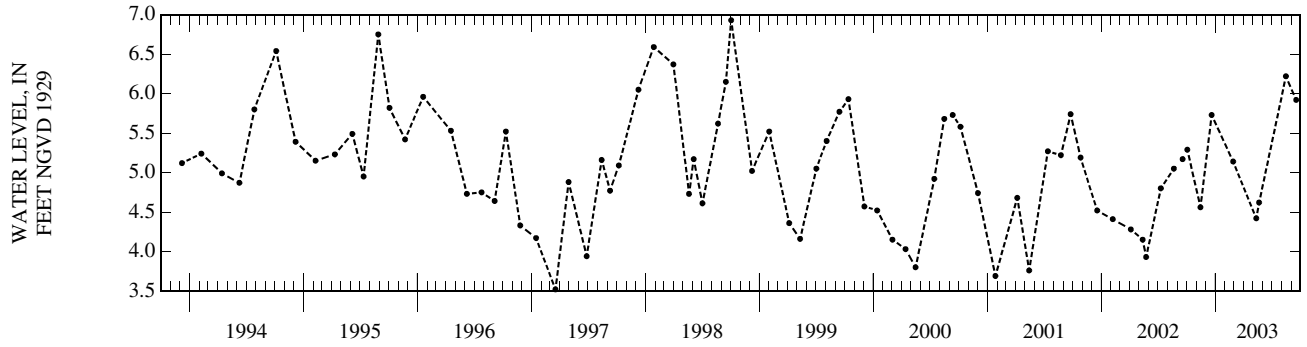
PERIOD OF RECORD.--April 1988 to current year (periodic).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.93 ft NGVD, Oct. 2, 1998; lowest measured, 3.48 ft NGVD, June 17, 1988.

WATER SURFACE ELEVATION IN FEET (NGVD1929), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03	5.29	DEC 20	5.73	MAY 12	4.42	AUG 15	6.22
NOV 14	4.56	FEB 27	5.14	21	4.62	SEP 17	5.92

WATER YEAR 2003 LOWEST 4.42 MAY 12, 2003 HIGHEST 6.22 AUG 15, 2003



PINELLAS COUNTY—Continued

WELL NUMBER.--280132082452803. ROMP TR 14-2 NRSD Well near Dunedin, FL.

LOCATION.--Lat 28°01'32", long 82°45'28" (1927 North American datum), in SE $^1/_4$ NW $^1/_4$ sec.25, T.28 S., R.15 E., Hydrologic Unit 03100207, 0.5 mi north of State Highway 580, and 2.0 mi northeast of Dunedin.

AQUIFER.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit 112NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 22 ft, cased to 18 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 54.50 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 2.22 ft above land-surface datum.

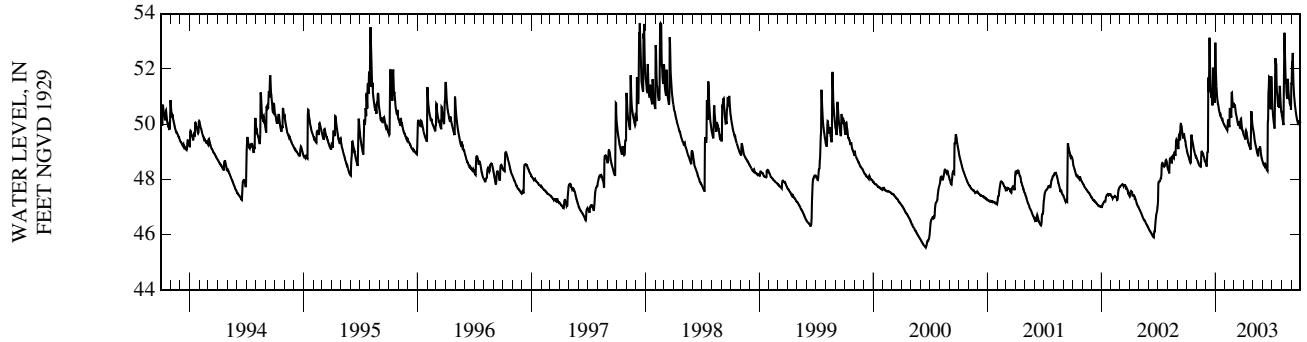
PERIOD OF RECORD.--October 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 53.87 ft NGVD, Sept. 8, 1988; lowest, 45.53 ft NGVD, June 17, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49.11	48.79	48.61	52.92	49.93	50.74	49.65	49.86	48.67	50.95	50.44	51.46
2	49.03	48.77	48.58	51.98	49.90	50.70	49.61	49.81	48.63	50.71	50.31	51.46
3	48.98	48.74	48.54	51.62	49.88	50.69	49.58	49.72	48.60	50.55	50.27	52.03
4	48.93	48.71	48.47	51.36	49.87	50.69	49.56	49.65	48.56	50.40	50.19	52.28
5	48.90	48.67	48.70	51.19	49.85	50.61	49.52	49.57	48.58	50.29	50.12	52.21
6	48.87	48.65	48.98	51.06	49.82	50.52	49.48	49.50	48.57	50.19	50.03	52.58
7	48.84	48.61	49.00	50.94	49.81	50.44	49.45	49.41	48.51	50.08	49.97	51.96
8	48.79	48.59	49.01	50.83	49.79	50.38	49.75	49.35	48.48	49.99	51.85	51.52
9	48.73	48.56	51.48	50.77	49.97	50.34	49.78	49.29	48.51	49.89	52.48	51.26
10	48.70	48.53	51.70	50.71	50.14	50.29	49.75	49.23	48.53	49.84	53.31	51.07
11	48.67	48.52	51.16	50.64	50.14	50.21	49.69	49.19	48.48	50.74	52.93	50.93
12	48.64	48.49	52.04	50.55	50.08	50.14	49.60	49.13	48.44	52.39	52.27	50.80
13	48.60	48.49	53.13	50.49	50.00	50.08	49.52	49.08	48.41	52.36	51.77	50.68
14	48.62	48.47	52.24	50.45	49.95	50.03	49.45	49.00	48.38	52.16	51.47	50.58
15	49.52	48.46	51.70	50.39	49.89	50.00	49.39	48.96	48.35	52.16	51.57	50.49
16	49.62	48.67	51.43	50.35	50.55	49.95	49.35	48.93	48.33	51.48	51.51	50.40
17	49.57	49.00	51.24	50.36	50.58	50.11	49.33	48.88	48.31	51.19	51.18	50.33
18	49.48	49.01	51.10	50.29	50.49	50.08	49.29	48.84	50.08	51.09	51.03	50.26
19	49.40	49.01	50.97	50.26	50.36	49.98	49.24	49.00	50.14	50.94	50.92	50.18
20	49.34	48.98	51.07	50.22	50.31	49.90	49.21	49.12	51.15	50.76	51.64	50.16
21	49.29	48.96	50.87	50.21	50.24	49.91	49.18	49.09	51.29	50.63	51.61	50.10
22	49.22	48.94	50.75	50.18	51.14	49.89	49.16	49.05	51.72	50.98	51.50	50.03
23	49.14	48.88	50.68	50.19	51.15	50.20	49.11	49.17	51.71	50.97	51.20	49.99
24	49.10	48.84	52.02	50.11	50.92	50.21	49.08	49.17	51.47	50.71	51.03	49.97
25	49.05	48.82	52.02	50.09	50.78	50.06	49.59	49.12	50.97	50.59	50.93	50.05
26	48.99	48.78	51.46	50.08	50.67	49.93	50.47	49.04	50.71	51.36	50.90	50.14
27	48.95	48.72	51.19	50.05	50.60	49.87	50.37	48.95	50.54	51.36	50.76	50.07
28	48.91	48.69	51.02	50.01	50.73	49.82	50.17	48.85	50.90	51.02	50.73	50.02
29	48.86	48.66	50.88	49.99	---	49.77	50.03	48.80	51.73	50.81	50.71	50.00
30	48.82	48.64	50.78	49.98	---	49.75	49.90	48.74	51.27	50.59	50.72	50.10
31	48.83	---	52.92	49.95	---	49.70	---	48.71	---	50.46	50.52	---
MAX	49.62	49.01	53.13	52.92	51.15	50.74	50.47	49.86	51.73	52.39	53.31	52.58

CAL YR 2002 MAX 53.13
WTR YR 2003 MAX 53.31



PINELLAS COUNTY—Continued

WELL NUMBER.--280734082442101. ROMP TR 15-3 Deep Well near Tarpon Springs, FL.

LOCATION.--Lat 28°07'34", long 82°44'21" (1927 North American datum), in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.19, T.27 S., R.16 E., Hydrologic Unit 03100207, 400 ft east of U. S. 19, and 1.4 mi south of Tarpon Springs.

AQUIFER.--Tampa limestone of Miocene Age, Geologic Unit 122TAMP.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 150 ft, cased to 147 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 25.02 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 3.40 ft above land-surface datum.

REMARKS.--Water level affected by tidal fluctuations.

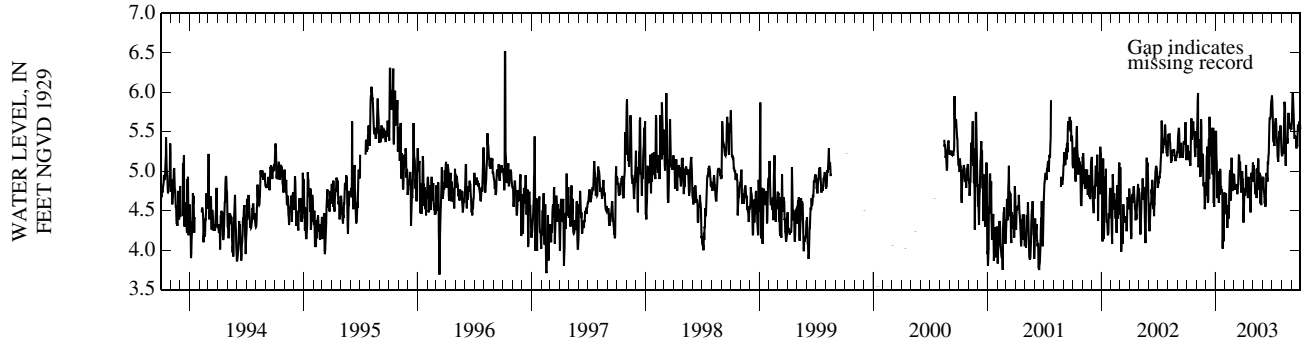
PERIOD OF RECORD.--April 1978 to April 1990; January 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 6.80 ft NGVD, estimated, Sept. 9, 1988; lowest, 2.88 ft NGVD, June 10, 11, 1985.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.17	5.30	4.69	5.50	4.62	4.95	4.35	5.11	4.90	5.96	5.24	5.53
2	5.23	5.33	4.80	5.50	4.48	4.95	4.53	5.04	4.81	5.90	5.21	5.59
3	5.32	5.44	4.85	5.50	4.58	4.86	4.64	5.08	4.93	5.76	5.19	5.68
4	5.33	5.70	5.18	5.18	4.72	4.77	4.77	4.87	4.91	5.62	5.26	5.79
5	5.26	5.91	5.21	5.11	4.54	4.79	4.79	5.03	4.77	5.41	5.26	5.92
6	5.15	5.99	5.31	5.01	4.45	4.84	4.69	5.02	4.72	5.38	5.22	5.99
7	5.16	5.23	4.74	4.66	4.53	4.80	4.76	4.87	4.68	5.37	5.27	5.92
8	5.25	5.05	4.60	4.70	4.28	4.77	4.76	4.80	4.59	5.41	5.46	5.82
9	5.22	5.09	4.64	4.88	4.40	4.83	5.08	4.71	4.66	5.32	5.67	5.68
10	5.14	5.40	5.28	5.00	4.57	4.80	4.90	4.72	4.55	5.47	5.88	5.56
11	5.13	5.20	5.41	4.84	4.53	4.77	4.79	4.78	4.61	5.59	5.86	5.45
12	5.07	5.11	4.90	4.60	4.40	4.71	4.79	4.77	4.83	5.62	5.80	5.41
13	5.09	5.15	5.69	4.74	4.43	4.72	4.76	4.66	4.97	5.67	5.60	5.44
14	5.32	4.93	5.38	4.77	4.74	4.79	4.71	4.77	4.94	5.66	5.07	5.44
15	5.65	5.29	5.27	4.70	4.78	4.84	4.66	5.04	4.98	5.58	5.41	5.44
16	5.67	5.66	5.19	5.03	4.94	4.98	4.81	4.98	4.93	5.44	5.38	5.43
17	5.57	5.56	5.40	4.99	5.01	5.20	4.93	5.05	4.87	5.40	5.40	5.30
18	5.40	5.02	5.34	4.78	4.79	5.21	4.89	5.16	5.12	5.33	5.37	5.30
19	5.51	4.99	5.54	4.81	4.63	5.10	4.78	5.13	5.09	5.20	5.42	5.38
20	5.56	5.17	5.54	4.74	4.66	5.07	4.80	4.83	5.19	5.16	5.35	5.31
21	5.58	5.21	5.12	4.77	4.86	5.12	4.76	4.77	5.22	5.12	5.52	5.42
22	5.63	5.22	5.16	4.74	5.17	4.96	4.62	4.98	5.40	5.21	5.66	5.58
23	5.53	4.85	4.96	4.71	4.81	4.89	4.49	4.77	5.60	5.39	5.74	5.59
24	5.46	4.81	5.15	4.02	4.78	4.78	4.49	4.65	5.68	5.51	5.69	5.57
25	5.47	4.85	5.55	4.34	4.75	4.73	4.78	4.59	5.66	5.46	5.62	5.52
26	5.42	4.85	4.61	4.45	4.77	4.83	4.98	4.60	5.68	5.42	5.60	5.58
27	5.27	4.67	4.61	4.11	4.97	4.94	4.93	4.63	5.70	5.45	5.61	5.63
28	5.18	4.52	4.55	4.32	4.79	5.00	4.90	4.57	5.84	5.57	5.55	5.58
29	5.21	4.61	4.79	4.57	---	4.91	4.87	4.76	5.89	5.57	5.55	5.62
30	5.51	4.84	5.12	4.73	---	4.90	4.99	4.85	5.90	5.47	5.54	5.53
31	5.41	---	5.48	4.69	---	4.55	---	4.91	---	5.33	5.55	---
MAX	5.67	5.99	5.69	5.50	5.17	5.21	5.08	5.16	5.90	5.96	5.88	5.99

CAL YR 2002 MAX 5.99
WTR YR 2003 MAX 5.99



PINELLAS COUNTY—Continued

WELL NUMBER.--280747082452001. ROMP TR 15-2 Deep Well near Tarpon Springs, FL.

LOCATION.--Lat 28°07'47", long 82°45'20" (1927 North American datum), in NE $^1/_4$ NW $^1/_4$ sec.24, T.27 S., R.15 E., Hydrologic Unit 03100207, 30 ft north of Curlew Place, 400 ft east of U. S. Alternate Highway 19, and 1.1 mi south of Tarpon Springs.

AQUIFER.--Tampa limestone of Miocene Age, Geologic Unit 122TAMP.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 8 in., depth 54 ft, cased to 50 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Land-surface datum is 12.98 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter floor, 3.30 ft above land-surface datum.

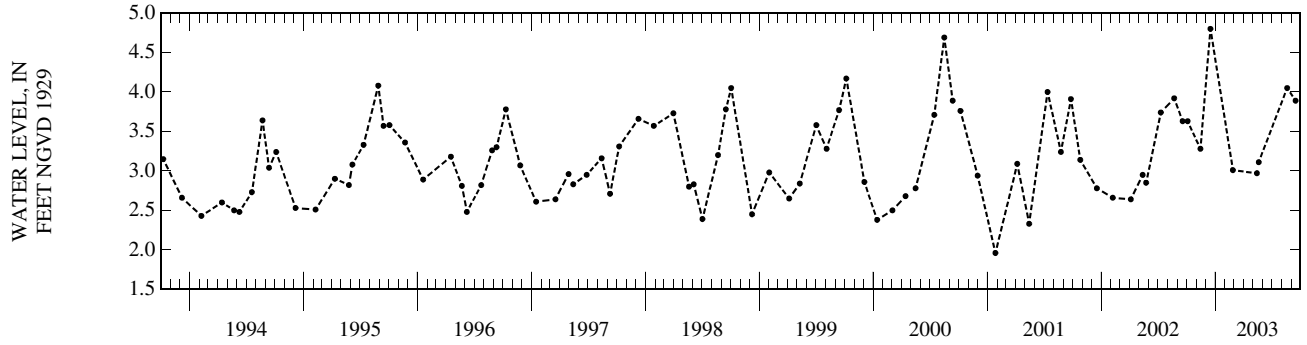
PERIOD OF RECORD.--April 1978 to September 1981; October 1981 to September 2003 (periodic), discontinued.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.80 ft NGVD, Dec. 16, 2002; lowest measured, 1.96 ft NGVD, Jan. 26, 2001.

WATER SURFACE ELEVATION IN FEET (NGVD1929), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	3.63	DEC 16	4.80	MAY 14	2.97	AUG 19	4.05
NOV 14	3.28	FEB 26	3.01	20	3.11	SEP 15	3.89

WATER YEAR 2003 LOWEST 2.97 MAY 14, 2003 HIGHEST 4.80 DEC 16, 2002



PINELLAS COUNTY—Continued

WELL NUMBER.--280753082465201. ROMP TR 15-1 Deep Well near Tarpon Springs, FL.

LOCATION.--Lat 28°07'53", long 82°46'52" (1927 North American datum), in NW $^1/_4$ SW $^1/_4$ sec.14, T.27 S., R.15 E., Hydrologic Unit 03100207, 70 ft south of Castleworks Lane, 200 ft east of Florida Avenue, and 1.7 mi southwest of Tarpon Springs.

AQUIFER.--Tampa limestone of Miocene Age, Geologic Unit 122TAMP.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 8 in., depth 87 ft, cased to 68 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Land-surface datum is 8.15 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter floor, 2.40 ft above land-surface datum.

REMARKS.--Water level affected by tidal fluctuations.

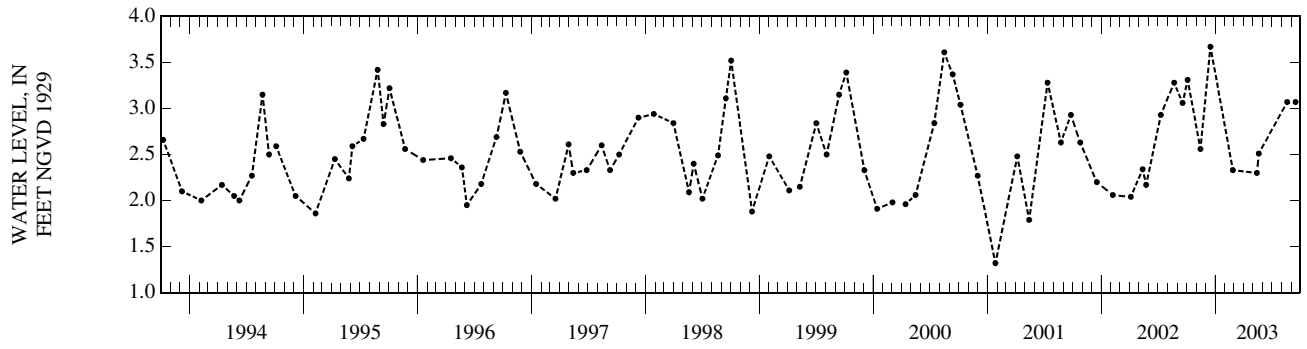
PERIOD OF RECORD.--April 1978 to April 1990; May 1990 to September 2003 (periodic), discontinued.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 5.08 ft NGVD, Sept. 9, 1988; lowest measured, 1.32 ft NGVD, Jan. 26, 2001.

WATER SURFACE ELEVATION IN FEET (NGVD1929), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	3.31	DEC 16	3.67	MAY 14	2.30	AUG 19	3.07
NOV 14	2.56	FEB 26	2.33	20	2.51	SEP 15	3.07

WATER YEAR 2003 LOWEST 2.30 MAY 14, 2003 HIGHEST 3.67 DEC 16, 2002



PINELLAS COUNTY—Continued

WELL NUMBER.--280907082424801. Tarpon Road Deep Well near Tarpon Springs, FL.

LOCATION.--Lat 28°09'07", long 82°42'48" (1927 North American datum), in SW $^1/_4$ NW $^1/_4$ sec.9, T.27 S., R.16 E., Hydrologic Unit 03100207, 25 ft north of State Highway 582, and 2.6 mi east of Tarpon Springs.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 305 ft, cased to 205 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 21.77 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 3.23 ft above land-surface datum.

REMARKS.--Water level affected by tidal fluctuations.

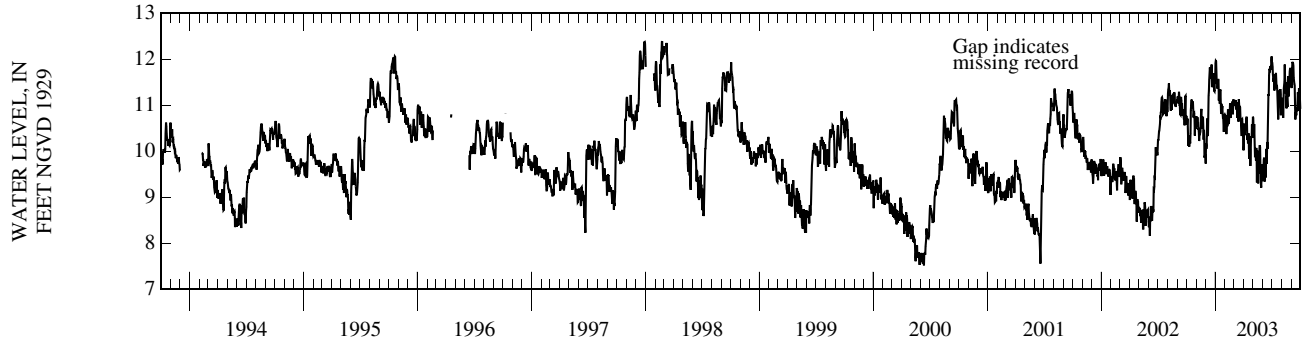
PERIOD OF RECORD.--July 1965 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 13.06 ft NGVD, Sept. 15, 1971; lowest, 7.52 ft NGVD, June 11, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.66	10.76	9.73	11.91	10.78	11.06	10.02	10.75	9.44	11.93	11.02	11.53
2	10.58	10.58	10.17	11.96	10.54	11.01	10.12	10.73	9.70	11.92	10.85	11.37
3	10.71	10.53	10.05	11.95	10.75	11.11	10.45	10.46	9.35	11.83	10.83	11.60
4	10.69	10.74	10.12	11.66	10.71	10.98	10.60	10.30	9.65	11.66	11.16	11.80
5	10.45	10.59	10.55	11.46	10.37	11.02	10.45	10.59	9.81	11.63	11.13	11.94
6	10.12	10.63	10.71	11.55	10.58	11.10	10.35	10.37	9.86	11.51	10.72	11.92
7	10.35	10.49	10.40	11.36	10.78	11.11	10.51	10.10	9.76	11.59	11.11	11.91
8	10.27	10.49	10.33	11.41	10.54	10.94	10.44	9.87	9.34	11.56	11.36	11.85
9	10.10	10.42	10.91	11.54	10.69	10.91	10.53	10.04	9.74	11.32	11.44	11.59
10	10.26	10.22	11.20	11.57	10.89	11.06	10.73	10.03	9.74	11.45	11.51	11.53
11	10.24	10.38	11.31	11.54	10.89	10.94	10.73	9.80	9.43	11.67	11.88	11.46
12	10.17	10.35	11.56	11.10	10.67	10.72	10.58	10.07	9.76	11.62	11.64	11.44
13	10.38	10.39	11.67	11.32	10.59	10.90	10.25	9.96	10.05	11.64	11.26	11.06
14	10.89	10.41	11.82	11.23	10.80	10.91	10.37	9.32	9.73	11.70	11.43	10.69
15	10.99	10.67	11.72	11.03	10.80	10.90	10.19	9.86	9.75	11.52	11.50	10.80
16	11.10	10.85	11.79	11.31	10.83	10.64	10.19	10.01	10.20	11.37	11.21	10.85
17	11.12	10.92	11.68	11.34	11.04	11.13	10.39	9.61	10.05	11.44	10.93	10.78
18	10.99	10.61	11.58	11.05	10.87	10.99	10.26	9.30	10.44	11.33	11.20	10.90
19	10.96	10.49	11.76	10.81	10.72	10.88	9.84	9.60	10.99	11.16	11.08	10.95
20	10.94	10.53	11.88	11.03	10.92	10.98	9.94	9.51	11.24	10.89	10.96	10.87
21	11.08	10.72	11.39	10.92	11.04	10.96	10.15	9.62	11.20	10.69	11.47	11.04
22	10.87	10.75	11.41	10.93	10.91	10.73	10.04	10.07	11.65	10.88	11.63	11.28
23	10.73	10.46	11.47	10.98	11.02	10.70	9.68	10.13	11.79	11.03	11.50	11.14
24	10.81	10.25	11.42	10.80	11.08	10.65	9.91	10.08	11.77	11.30	11.19	10.89
25	10.82	10.46	11.69	10.71	11.04	10.52	10.26	9.60	11.76	11.30	11.49	11.20
26	10.71	10.26	11.49	10.77	10.80	10.33	10.33	9.64	11.85	11.10	11.53	11.37
27	10.34	9.86	11.45	10.60	11.11	10.68	10.29	9.28	11.82	10.98	11.73	11.07
28	10.61	9.90	11.31	10.42	11.11	10.69	10.58	9.21	11.77	11.35	11.79	10.88
29	10.48	9.87	11.30	10.62	---	10.57	10.38	9.39	11.98	11.24	11.79	11.12
30	10.54	9.92	11.55	10.79	---	10.40	10.44	9.72	12.06	10.78	11.48	10.92
31	10.71	---	11.51	10.80	---	10.31	---	9.46	---	11.13	11.41	---
MAX	11.12	10.92	11.88	11.96	11.11	11.13	10.73	10.75	12.06	11.93	11.88	11.94

CAL YR 2002 MAX 11.88
WTR YR 2003 MAX 12.06



PINELLAS COUNTY—Continued

WELL NUMBER.--280907082424802. Tarpon Road Shallow Well near Tarpon Springs, FL.

LOCATION.--Lat 28°09'07", long 82°42'48" (1927 North American datum), in SW $^1/_4$ NW $^1/_4$ sec.9, T.27 S., R.16 E., Hydrologic Unit 03100207, 25 ft north of State Highway 582, and 2.6 mi east of Tarpon Springs.

AQUIFER.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit 112NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 1.25 in., depth 12 ft, cased to 10 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Land-surface datum is 21.48 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.00 ft above land-surface datum.

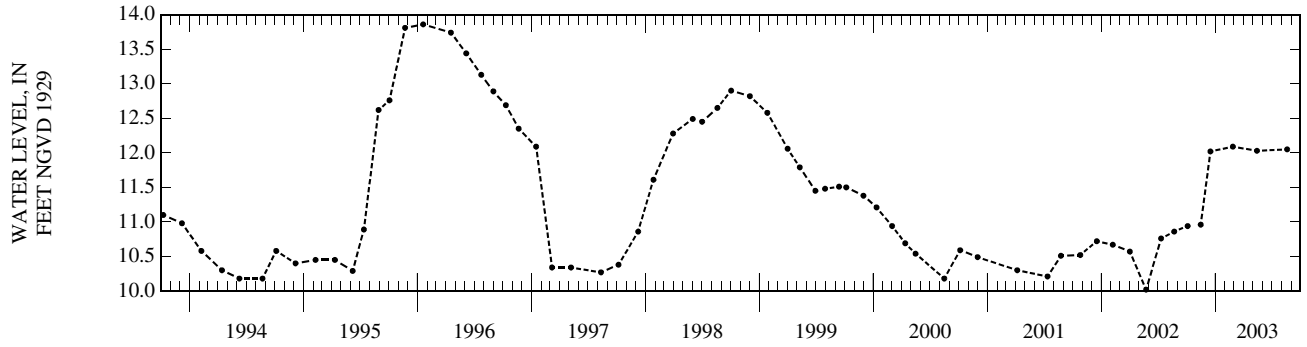
PERIOD OF RECORD.--November 1965 to current year (periodic). Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.93 ft NGVD, Sept. 15, 1971; well observed dry at times some years.

WATER SURFACE ELEVATION IN FEET (NGVD1929), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	10.94	NOV 15	10.96	DEC 16	12.02	FEB 26	12.09	MAY 14	12.03	AUG 19	12.05

WATER YEAR 2003 LOWEST 10.94 OCT 04, 2002 HIGHEST 12.09 FEB 26, 2003



PINELLAS COUNTY—Continued

WELL NUMBER.--281022082400201. Eldridge-Wilde Deep Well N3 near Tarpon Springs, FL.

LOCATION.--Lat 28°10'22", long 82°40'02" (1927 North American datum), in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.1, T.27 S., R.16 E., Hydrologic Unit 03100207, 2.4 mi northeast of intersection State Highway 582 and East Lake Road, and 4.8 mi east of Tarpon Springs.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 350 ft, cased to 100 ft.

INSTRUMENTATION.--Water-stage and tipping bucket raingage recorders--60-minute interval.

DATUM.--Land-surface datum is 28.78 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.10 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby wells.

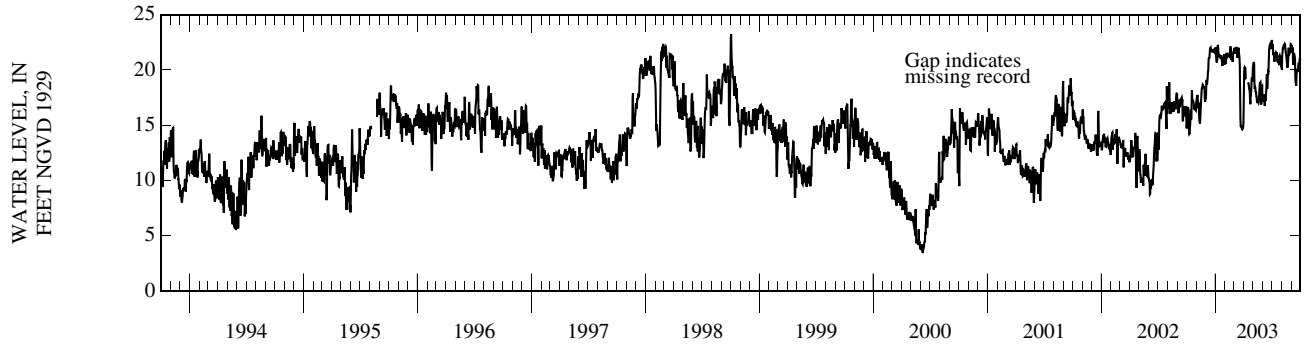
PERIOD OF RECORD.--July 1977 to current year. Records of water levels prior to October 1977 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 23.47 ft NGVD, Apr. 3, 1987; lowest, 3.44 ft NGVD, June 7, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.71	17.09	17.38	21.96	20.94	21.72	15.25	20.31	17.12	22.64	20.34	22.11
2	15.23	17.48	17.67	22.04	20.83	21.97	18.14	20.45	17.43	22.13	20.02	22.18
3	14.89	17.63	18.95	21.16	20.57	21.83	19.73	20.65	17.43	22.22	21.29	22.18
4	15.53	17.74	19.11	21.05	20.86	22.01	20.17	20.65	17.35	22.31	21.56	21.58
5	16.56	17.58	18.66	20.68	21.43	21.49	20.25	20.52	17.10	21.50	21.99	21.83
6	16.54	16.54	19.02	21.00	21.55	21.69	20.18	19.06	17.79	21.44	22.01	22.03
7	15.39	17.02	19.26	20.89	21.28	21.75	20.15	18.30	17.43	21.46	21.90	20.69
8	14.51	17.02	19.82	22.01	21.23	21.92	19.28	18.45	16.74	21.23	22.28	20.47
9	14.21	16.70	19.98	22.27	21.43	22.02	19.31	18.41	17.42	20.76	22.01	21.18
10	14.26	15.71	20.90	21.95	21.47	22.02	---	18.02	17.53	21.05	22.26	21.54
11	14.73	15.38	21.13	21.51	21.43	21.80	---	18.09	17.22	21.42	22.35	21.43
12	15.06	15.23	21.02	21.16	21.24	21.12	---	17.65	17.86	21.34	22.29	21.22
13	15.78	15.24	21.28	21.43	21.33	21.24	---	17.62	18.27	21.51	21.95	20.99
14	16.39	15.77	21.78	21.35	21.28	21.52	---	17.20	19.14	21.59	21.61	19.37
15	15.51	16.55	21.97	21.17	21.25	21.84	---	17.00	19.58	21.53	21.58	18.87
16	16.06	17.05	22.01	21.06	21.29	22.02	18.87	17.17	18.28	21.50	21.34	18.73
17	17.88	17.57	21.83	21.26	21.36	21.57	18.81	17.17	18.57	21.58	21.07	18.58
18	18.17	18.32	21.81	21.26	22.04	21.37	18.63	17.14	19.44	20.81	20.68	19.79
19	17.17	18.34	21.73	21.34	22.13	21.09	18.41	17.06	19.86	20.78	20.51	20.11
20	17.08	18.46	21.70	21.11	20.93	20.43	18.18	17.22	19.82	20.81	20.21	19.83
21	17.24	18.67	21.73	20.91	21.40	18.62	18.09	17.79	20.72	20.81	20.48	19.90
22	17.20	18.62	21.76	20.97	21.57	15.57	17.29	18.31	21.76	20.61	20.80	19.91
23	17.00	18.49	21.71	20.36	21.47	14.85	16.91	18.80	22.10	20.75	21.74	20.08
24	16.68	18.43	21.76	20.95	21.42	14.90	17.62	18.84	22.25	20.44	22.01	20.41
25	16.48	18.43	21.81	21.00	20.74	14.88	17.73	18.88	22.30	21.27	21.41	20.36
26	16.48	18.54	21.82	21.07	21.33	14.83	18.44	18.55	22.23	21.30	21.45	20.26
27	16.59	18.36	21.64	21.10	21.53	14.63	19.13	18.37	22.03	21.16	21.54	20.68
28	16.51	17.55	21.65	21.27	21.64	14.62	19.32	16.87	21.90	21.16	21.74	20.90
29	16.40	17.13	21.69	21.42	---	14.75	18.99	18.05	22.49	21.12	21.71	21.17
30	16.35	17.34	21.63	21.31	---	14.85	19.44	18.56	22.64	20.82	22.34	20.87
31	17.01	---	21.70	20.50	---	14.84	---	18.59	---	20.38	22.32	---
MAX	18.17	18.67	22.01	22.27	22.13	22.02	---	20.65	22.64	22.64	22.35	22.18
*PREC	3.32	2.12	13.45	0.11	4.44	2.32	2.21	0.70	19.60	3.46	11.70	3.76

CAL YR 2002 MAX 22.01



MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2002 TO SEPTEMBER 2003

PINELLAS COUNTY

SITE-ID	STATION NAME	WATER-LEVEL DATE	WATER-LEVEL MSL FEET	WATER-LEVEL DATUM CODE
273655082440901	FT DESOTO PARK NEAR PASS-A-GRILLE BEACH FL	05-19-2003	11.06	NGVD29
		09-17-2003	12.76	NGVD29
274614082425205	BEAR CREEK B5 INJECTION MON 300 WELL NR ST PETE FL	05-21-2003	9.28	NGVD29
		09-17-2003	11.20	NGVD29
274624082383701	7462382437 MIRROR LAKE CTY WELL NEAR GULFPORT FL	05-19-2003	8.71	NGVD29
		09-17-2003	10.80	NGVD29
274848082461201	WAR VETS MEM PK DEEP WELL 1 NEAR MEDEIRA BEACH FL	05-19-2003	5.24	NGVD29
		09-17-2003	6.50	NGVD29
274859082390701	ROBERTS COMM CTR DEEP NEAR LEALMAN FL	05-20-2003	6.39	NGVD29
		09-17-2003	8.00	NGVD29
274904082423601	NO 749242344114 NEAR LEALMAN FL	05-20-2003	9.13	NGVD29
		09-17-2003	10.93	NGVD29
274929082443504	SOUTH CROSS BAYOU A4 AT ST PETERSBURG FL	05-19-2003	15.98	NGVD29
		09-16-2003	17.33	NGVD29
274937082480801	TIDES GOLF DEEP WELL NEAR PINELLAS PARK FL	05-19-2003	6.48	NGVD29
		09-17-2003	6.95	NGVD29
275121082412601	TAMERAK DEEP WELL NEAR PINELLAS PARK FL	05-19-2003	5.99	NGVD29
		09-17-2003	7.38	NGVD29
275241082503901	MK C1 NEAR INDIAN ROCKS BEACH FL	05-19-2003	8.28	NGVD29
		09-17-2003	8.01	NGVD29
275458082464001	ROMP TR 13-1 OCALA WELL NEAR LARGO FL	05-21-2003	-1.34	NGVD29
		09-16-2003	.06	NGVD29
275521082444301	ST CATHERINE DEEP WELL NEAR HIGH POINT FL	05-19-2003	4.90	NGVD29
		09-16-2003	6.10	NGVD29
275604082431701	COVE CAY DEEP WELL NEAR HIGH POINT FL	05-19-2003	5.33	NGVD29
		09-17-2003	5.78	NGVD29
275842082430301	MISSION HILLS NEAR SAFETY HARBOR FL	05-20-2003	11.10	NGVD29
		09-16-2003	12.52	NGVD29
275949082442401	SYL ABBEY DEEP WELL 3 NR SAFETY HARBOR FL	05-20-2003	7.77	NGVD29
		09-16-2003	9.30	NGVD29
280002082412602	ROMP TR 14-1 TAMPA WELL NEAR SAFETY HARBOR FL	05-19-2003	8.13	NGVD29
		09-16-2003	9.94	NGVD29
280129082445501	SWFWMD 6 IN TEST WELL 1 AT DUNEDIN FL	05-20-2003	4.98	NGVD29
		09-16-2003	4.76	NGVD29
280134082454801	DUNEDIN 10A AT DUNEDIN FL	05-20-2003	4.50	NGVD29
		09-16-2003	5.90	NGVD29
280446082390701	EAST LAKE DEEP WELL 17 NEAR TARPOPN SPRINGS FL	05-21-2003	15.94	NGVD29
		09-15-2003	17.23	NGVD29
280546082390701	EAST LAKE DEEP WELL 14 NEAR OLDSMAR FL	05-21-2003	16.88	NGVD29
		09-15-2003	18.87	NGVD29

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2002 TO SEPTEMBER 2003

PINELLAS COUNTY

SITE-ID	STATION NAME	WATER-LEVEL DATE	WATER-LEVEL MSL FEET	WATER-LEVEL DATUM CODE
280632082455001	NW PINELLAS MTR DEEP NEAR TARPON SPRINGS FL	05-20-2003	2.48	NGVD29
		09-15-2003	3.54	NGVD29
280852082414301	NORTH LAKE TARPON NEAR TARPON SPRINGS FL	05-20-2003	12.16	NGVD29
		09-15-2003	13.87	NGVD29
280856082401201	ELDRIDGE-WILDE 2S NEAR TARPON SPRINGS FL	05-20-2003	16.13	NGVD29
		09-15-2003	20.35	NGVD29
280942082390601	PINELLAS SHALLOW WELL N1A NEAR TARPON SPRINGS FL	05-21-2003	14.20	NGVD29
		09-15-2003	19.38	NGVD29

KEY TO SITE LOCATIONS ON FIGURE 20

POLK COUNTY

INDEX NUMBER	SITE NUMBER
1	274155081573201
2	284841081480901
3	274908081480901
4	275220081480101
5	275314081514201
5	275314081514202
5	275314081514203
6	275348081335701
6	275348081335703
7	275411081372001
7	275411081372002
7	275411081372003
8	275815081444201
9	275959081552501
10	280229081325201
11	281532081345001
11	281532081345002

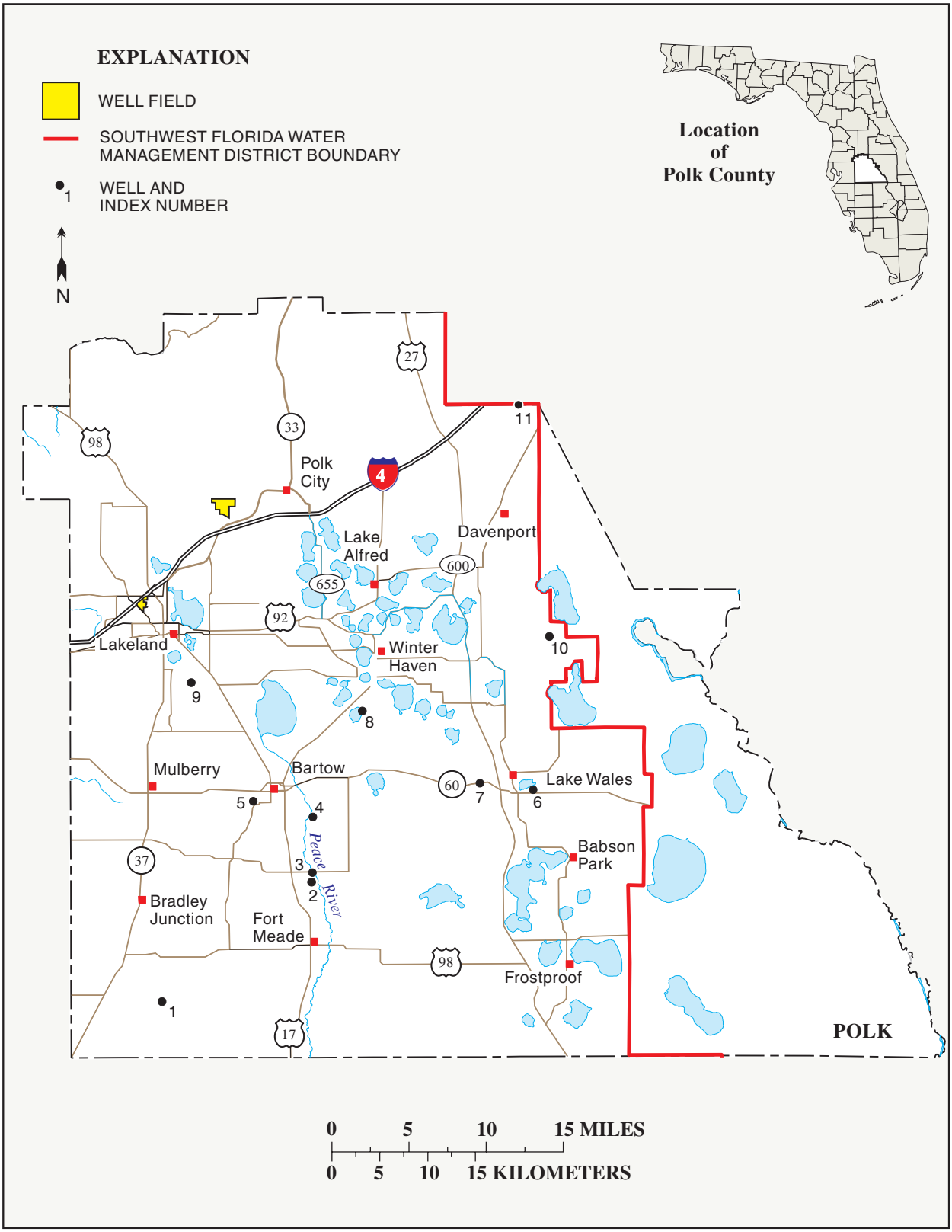


Figure 20.-- Location of wells in Polk County.

POLK COUNTY

WELL NUMBER.--274155081573201. Fort Green Springs Road Well near Bradley Junction, FL.

LOCATION.--Lat 27°41'55", long 81°57'32" (1927 North American datum), in SE $^1/_4$ SE $^1/_4$ sec.13, T.32 S., R.23 E., Hydrologic Unit 03100101, 3.0 mi south of Brewster on Fort Green Springs Road, and 3.0 mi south of Bradley Junction.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 302 ft, cased to 280 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Land-surface datum is 134.48 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of aluminum plate, 0.16 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby industrial wells.

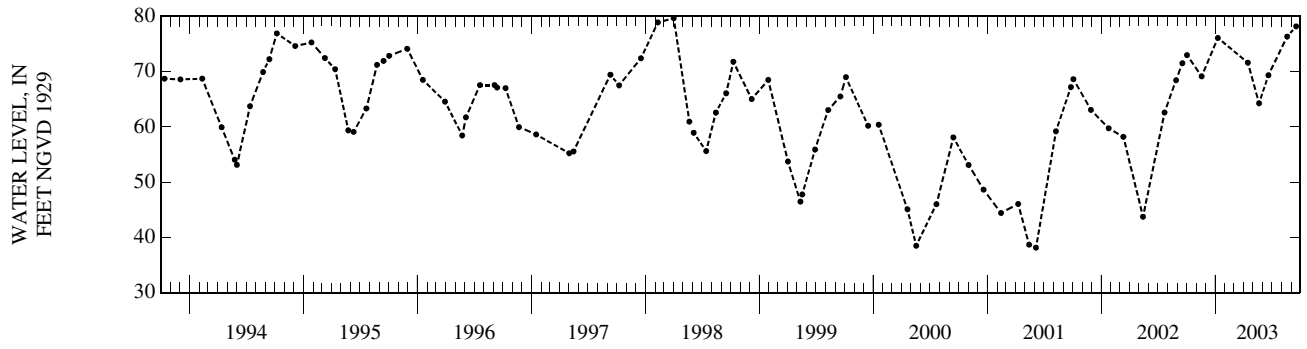
PERIOD OF RECORD.--August 1964 to current year (periodic). Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 79.66 ft NGVD, Apr. 1, 1998; lowest measured, 25.76 ft NGVD, May 14, 1975.

WATER SURFACE ELEVATION IN FEET (NGVD1929), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02	72.99	JAN 09	76.09	MAY 21	64.26	AUG 19	76.34
NOV 18	69.14	APR 15	71.62	JUN 20	69.34	SEP 17	78.19

WATER YEAR 2003 LOWEST 64.26 MAY 21, 2003 HIGHEST 78.19 SEP 17, 2003



POLK COUNTY—Continued

WELL NUMBER.--274841081480901. Homeland No 9 Well near Homeland, FL.

LOCATION.--Lat 27°48'41", long 81°48'09" (1927 North American datum), in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.3, T.31 S., R.25 E., Hydrologic Unit 03100101, 0.6 mi south of State Highway 640, 1.5 mi east of U.S. Highway 17/98, and 2.0 mi southeast of Homeland.

AQUIFER.--Floridan aquifer system of the Tertiary System, Eocene Age, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 12 in., depth 746 ft, casing unknown.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 104.11 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 3.75 ft above land-surface datum.

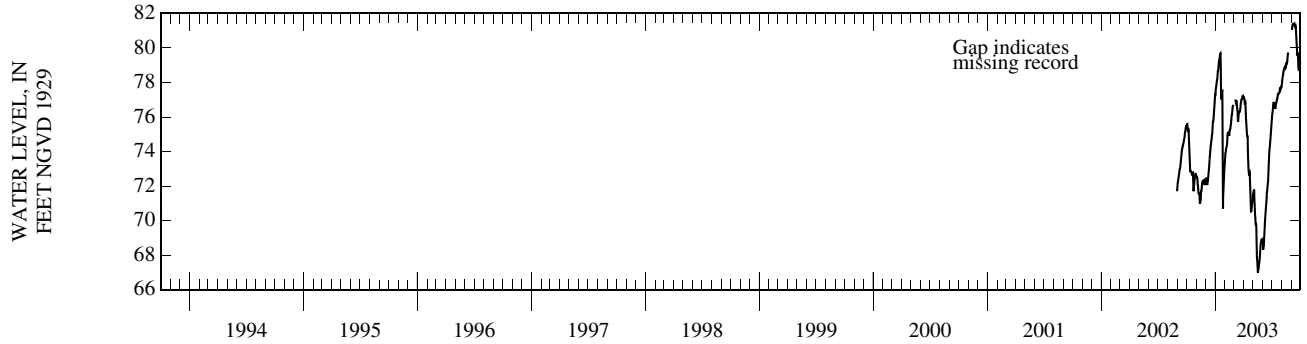
REMARKS.--Water level affected by pumping of nearby wells.

PERIOD OF RECORD.--October 2002 to September 2003.

EXTREMES FOR CURRENT YEAR.--Highest daily maximum water level, 81.36 ft NGVD, Sept. 7, 12, 2003; lowest, 66.99 ft NGVD, May 17, 2003.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75.50	72.54	72.42	77.30	73.56	---	77.16	71.49	68.80	75.96	77.73	---
2	75.57	72.44	72.43	77.62	73.89	---	77.16	71.55	68.82	76.18	77.92	---
3	75.58	72.50	72.29	77.73	73.95	---	77.11	71.66	68.30	76.28	78.10	81.04
4	75.38	72.46	72.16	77.87	74.12	---	77.01	71.76	68.51	76.48	78.24	81.17
5	75.18	72.05	72.12	78.02	74.24	---	76.79	71.76	68.55	76.66	78.40	81.31
6	75.18	71.99	72.06	78.14	74.28	77.02	76.80	71.21	68.92	76.82	78.48	81.32
7	75.21	71.81	72.20	78.17	74.34	76.91	76.82	70.93	69.34	76.82	78.64	81.36
8	74.62	71.62	72.34	78.39	74.67	76.84	76.28	70.39	69.74	76.82	78.70	81.34
9	74.22	71.55	72.53	78.66	75.06	76.91	75.88	70.16	70.05	76.70	78.77	81.32
10	73.84	71.55	72.76	78.70	75.08	76.91	75.62	69.78	70.27	76.71	78.86	81.33
11	73.27	71.55	72.98	78.89	75.01	76.64	75.33	69.79	70.52	76.60	78.91	81.33
12	72.86	71.03	73.18	79.15	75.03	76.49	74.97	69.72	70.84	76.46	78.94	81.36
13	72.86	71.03	73.53	79.28	75.04	76.32	74.89	68.61	71.04	76.64	78.83	81.29
14	72.86	71.12	73.78	79.35	74.92	75.83	74.87	67.87	71.34	76.75	78.86	81.23
15	72.82	71.27	74.00	79.45	75.05	75.74	73.86	67.71	71.62	76.82	78.92	81.25
16	72.82	71.71	74.15	79.65	75.25	76.08	73.61	67.32	71.72	76.92	79.07	81.04
17	72.75	71.71	74.34	79.68	75.28	76.20	73.06	66.99	71.91	77.00	79.12	80.60
18	72.62	71.88	74.42	79.02	75.35	76.29	72.79	67.16	72.14	77.04	79.09	80.24
19	72.66	72.13	74.65	77.13	75.47	76.31	72.62	67.19	72.31	77.16	79.15	79.92
20	72.69	72.19	74.72	77.02	75.65	76.31	72.77	67.38	72.72	77.31	79.39	79.56
21	72.72	72.29	74.94	77.41	75.83	76.37	72.79	67.52	73.27	77.32	79.60	79.61
22	72.20	72.30	75.05	77.48	76.09	76.56	72.12	67.64	73.74	77.32	79.71	79.63
23	71.70	72.15	75.35	77.50	76.13	76.77	71.58	67.93	74.04	77.39	79.73	79.23
24	71.90	72.26	75.72	73.19	76.34	76.87	70.93	68.16	74.24	77.40	---	78.90
25	72.15	72.28	75.72	70.67	76.53	77.00	70.52	68.42	74.44	77.42	---	78.76
26	72.34	72.18	75.91	71.41	76.65	77.04	70.53	68.62	74.70	77.50	---	78.78
27	72.51	72.06	76.18	71.88	76.68	77.04	70.71	68.72	74.92	77.66	---	78.93
28	72.62	72.11	76.42	72.35	76.69	77.06	70.89	68.82	75.19	77.69	---	79.07
29	72.70	72.21	76.70	72.75	---	77.20	71.14	68.90	75.46	77.71	---	79.10
30	72.69	72.40	76.99	73.08	---	77.22	71.30	68.92	75.69	77.65	---	79.19
31	72.63	---	77.30	73.28	---	77.09	---	68.72	---	77.71	---	---
MAX	75.58	72.54	77.30	79.68	76.69	---	77.16	71.76	75.69	77.71	---	---



POLK COUNTY—Continued

WELL NUMBER.--274908081480901. Homeland No 4 Well near Homeland, FL.

LOCATION.--Lat 27°49'10", long 81°48'04" (1927 North American datum), in NE $^1/_4$ NW $^1/_4$ sec.3, T.30 S., R.25 E., Hydrologic Unit 03100101, 0.1 mi south of State Highway 640, 1.5 mi east of U.S. Highway 17/98, and 2.0 mi east of Homeland.

AQUIFER.--Hawthorn formation of Miocene Age, Geologic Unit 122HTRN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 202 ft, cased to 56 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 103.11 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 1.57 ft above land-surface datum.

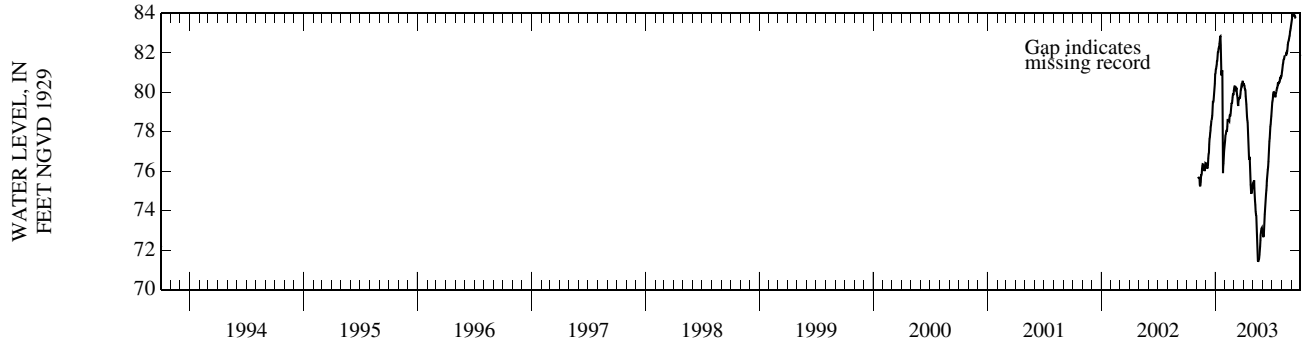
REMARKS.--Water level affected by pumping of nearby wells.

PERIOD OF RECORD.--November 2002 to September 2003.

EXTREMES FOR CURRENT YEAR.--Highest daily maximum water level, 83.96 ft NGVD, Sept. 6, 7, 2003; lowest, 71.45 ft NGVD, May 18, 19, 2003.

ELEVATION ABOVE NGVD 1929, FEET
PERIOD NOVEMBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	76.39	80.94	77.54	80.09	80.43	75.38	73.03	79.28	80.84	83.47
2	---	---	76.39	81.16	77.79	80.21	80.43	75.40	73.02	79.50	80.99	83.58
3	---	---	76.31	81.19	77.84	80.30	80.38	75.46	72.66	79.58	81.10	83.70
4	---	---	76.24	81.33	77.95	80.30	80.35	75.50	72.73	79.73	81.24	83.83
5	---	---	76.22	81.41	78.05	80.27	80.20	75.50	72.74	79.87	81.39	83.95
6	---	---	76.14	81.56	78.06	80.27	80.15	75.15	73.03	79.99	81.48	83.96
7	---	75.72	76.22	81.59	78.06	80.15	80.12	74.87	73.42	80.00	81.62	83.96
8	---	75.68	76.32	81.80	78.27	80.12	79.80	74.51	73.82	80.01	81.68	83.95
9	---	75.67	76.66	82.03	78.60	80.19	79.60	74.30	74.08	79.96	81.70	83.90
10	---	75.67	76.86	82.04	78.60	80.19	79.40	73.97	74.35	79.95	81.80	83.90
11	---	75.67	76.92	82.19	78.56	79.92	79.08	73.83	74.58	79.84	81.85	83.90
12	---	75.32	77.38	82.27	78.56	79.83	78.77	73.77	74.85	79.75	81.88	83.90
13	---	75.24	77.64	82.28	78.56	79.71	78.59	73.01	75.04	79.86	---	83.85
14	---	75.32	77.74	82.46	78.54	79.41	78.48	72.46	75.27	79.92	---	83.77
15	---	75.46	77.94	82.59	78.67	79.31	77.84	72.11	75.51	80.03	81.85	83.75
16	---	75.79	78.05	82.83	78.82	79.57	77.57	71.80	75.68	80.10	81.98	---
17	---	75.79	78.24	82.84	78.82	79.66	77.20	71.46	75.87	80.20	82.02	---
18	---	75.85	78.34	82.39	78.82	79.69	76.91	71.45	76.07	80.22	81.98	---
19	---	76.12	78.53	81.42	78.94	79.70	76.59	71.45	76.21	80.31	82.03	---
20	---	76.28	78.58	80.86	79.11	79.71	76.69	71.49	76.49	80.46	82.22	---
21	---	76.35	78.69	81.07	79.31	79.77	76.69	71.60	76.92	80.47	82.39	---
22	---	76.34	78.83	81.08	79.47	79.92	76.26	71.77	77.26	80.44	82.51	---
23	---	76.14	79.12	81.08	79.43	80.10	75.76	71.98	77.52	80.48	82.56	---
24	---	76.20	79.51	78.32	79.56	80.18	75.32	72.20	77.68	80.50	82.65	---
25	---	76.22	79.51	75.90	79.75	80.31	75.03	72.50	77.99	80.52	82.72	---
26	---	76.14	79.58	76.20	79.89	80.42	74.86	72.76	78.26	80.55	82.82	---
27	---	76.01	79.76	76.40	79.90	80.42	74.91	72.88	78.38	80.69	82.89	---
28	---	76.08	79.98	76.74	79.90	80.39	74.99	73.02	78.61	80.75	83.06	81.84
29	---	76.24	80.20	77.03	---	80.54	75.14	73.09	78.80	80.78	83.14	81.85
30	---	76.41	80.44	77.22	---	80.54	75.19	73.12	79.03	80.74	83.24	81.91
31	---	---	80.88	77.38	---	80.35	---	72.96	---	80.78	83.36	---
MAX	---	---	80.88	82.84	79.90	80.54	80.43	75.50	79.03	80.78	---	---



POLK COUNTY—Continued

WELL NUMBER.--275220081480101. Clear Springs Development 6-In IAS Well near Bartow, FL

LOCATION.--Lat 27°52'20", long 81°48'01" (1927 North American datum), in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.15, T.30 S., R.25 E., Hydrologic Unit 03100101, 1.5 mi southeast of Bartow, 2.0 mi east of U.S. Highway 17/98, and 2.5 mi south of State Highway 60.

AQUIFER.--Hawthorn formation of Miocene Age, Geologic Unit 122HTRN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 153 ft, casing unknown.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 95.24 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 3.76 ft above land-surface datum.

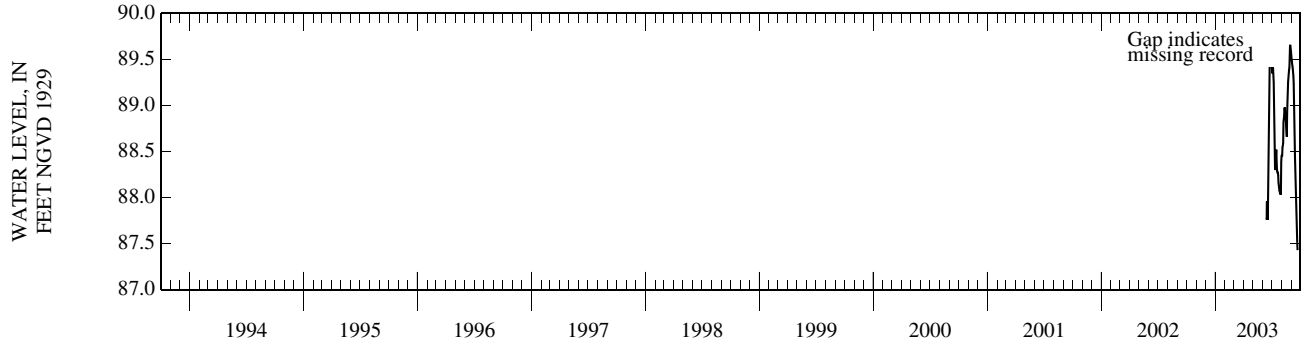
REMARKS.--Water level affected by pumping of agricultural wells.

PERIOD OF RECORD.--June to September 2003.

EXTREMES FOR CURRENT YEAR.--Highest daily maximum water level, 89.78 ft NGVD, June 26, 2003; lowest, 87.43 ft NGVD, Sept. 21, 2003.

ELEVATION ABOVE NGVD 1929, FEET
PERIOD JUNE TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	89.41	88.45	89.54
2	---	---	---	---	---	---	---	---	---	89.35	88.46	89.50
3	---	---	---	---	---	---	---	---	---	89.41	88.46	89.47
4	---	---	---	---	---	---	---	---	---	89.41	88.55	89.45
5	---	---	---	---	---	---	---	---	---	89.40	88.56	89.43
6	---	---	---	---	---	---	---	---	---	89.33	88.59	89.40
7	---	---	---	---	---	---	---	---	---	89.25	88.82	89.36
8	---	---	---	---	---	---	---	---	---	89.06	88.85	89.32
9	---	---	---	---	---	---	---	---	---	88.76	88.88	89.23
10	---	---	---	---	---	---	---	---	---	88.48	88.96	89.03
11	---	---	---	---	---	---	---	---	---	88.34	88.98	88.79
12	---	---	---	---	---	---	---	---	---	88.30	88.93	88.64
13	---	---	---	---	---	---	---	---	87.76	88.31	88.87	88.43
14	---	---	---	---	---	---	---	---	87.77	88.45	88.87	88.33
15	---	---	---	---	---	---	---	---	87.95	88.52	88.85	88.24
16	---	---	---	---	---	---	---	---	87.96	88.42	88.77	88.11
17	---	---	---	---	---	---	---	---	87.91	88.31	88.72	87.97
18	---	---	---	---	---	---	---	---	87.76	88.28	88.66	87.81
19	---	---	---	---	---	---	---	---	87.95	88.27	88.93	87.69
20	---	---	---	---	---	---	---	---	88.51	88.27	89.04	87.51
21	---	---	---	---	---	---	---	---	88.88	88.24	89.13	87.43
22	---	---	---	---	---	---	---	---	89.12	88.16	89.26	---
23	---	---	---	---	---	---	---	---	89.25	88.13	89.30	---
24	---	---	---	---	---	---	---	---	89.57	88.10	89.35	---
25	---	---	---	---	---	---	---	---	89.75	88.08	89.39	---
26	---	---	---	---	---	---	---	---	89.78	88.08	89.41	---
27	---	---	---	---	---	---	---	---	89.73	88.05	89.54	---
28	---	---	---	---	---	---	---	---	89.55	88.06	89.65	---
29	---	---	---	---	---	---	---	---	89.46	88.03	89.65	---
30	---	---	---	---	---	---	---	---	89.45	88.07	89.61	---
31	---	---	---	---	---	---	---	---	---	88.39	89.58	---
MAX	---	---	---	---	---	---	---	---	---	89.41	89.65	---



POLK COUNTY—Continued

WELL NUMBER.--275314081514201. ROMP 59 Avon Park Well at Bartow, FL.

LOCATION.--Lat 27°53'14", long 81°51'42" (1927 North American datum), in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.12, T.30 S., R.24 E., Hydrologic Unit 03100101, 950 ft west of State Highway 555, 0.6 mi south of State Highway 60, and 0.8 mi west of Bartow.

AQUIFER.--Avon Park formation of Eocene Age, Geologic Unit 124AVPK.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 12 in., depth 1,050 ft, cased to 200 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 117.41 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 4.39 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby wells.

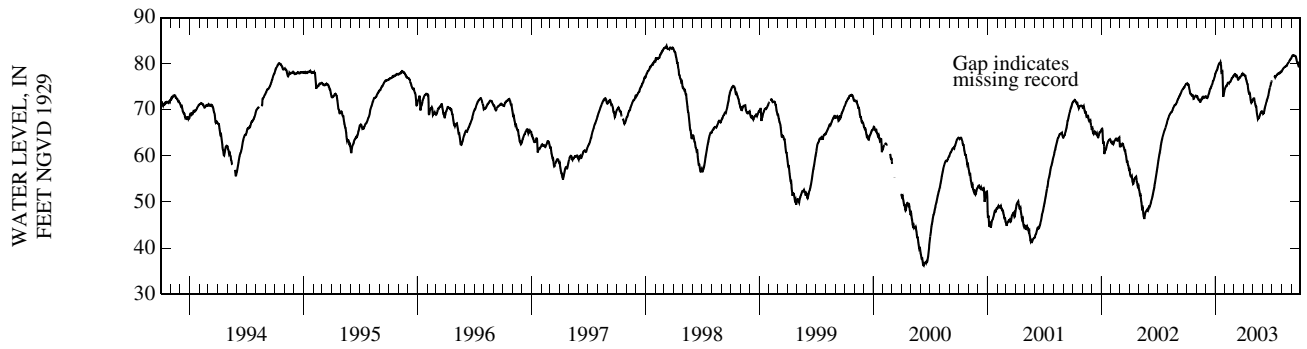
PERIOD OF RECORD.--February 1977 to current year. Prior to October 1979, published as Bartow Avon Park Well at Bartow.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 83.84 ft NGVD, Mar. 9, 1998; lowest, 33.33 ft NGVD, May 16, 1981.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75.65	72.93	72.92	77.87	74.56	77.45	77.71	72.27	69.50	76.36	78.28	81.26
2	75.69	72.83	72.93	78.04	74.80	77.63	77.71	72.34	69.49	---	78.40	81.36
3	75.75	72.93	72.78	78.24	74.93	77.69	77.66	72.39	69.16	---	78.56	81.52
4	75.65	72.90	72.67	78.42	75.07	77.77	77.58	72.48	69.21	---	78.68	81.62
5	75.48	72.61	72.65	78.53	75.13	77.74	77.40	72.49	69.29	---	78.84	81.75
6	75.44	72.53	72.58	78.66	75.28	77.70	77.38	72.14	69.60	---	78.93	81.77
7	75.44	72.34	72.65	78.75	75.29	77.57	77.38	71.89	69.97	---	79.06	81.83
8	75.04	72.21	72.81	79.03	75.47	77.43	76.96	71.49	70.31	77.36	79.12	81.78
9	74.67	72.17	73.10	79.32	75.78	77.51	76.68	71.19	70.59	77.29	79.17	81.79
10	74.42	72.18	73.32	79.49	75.89	77.52	76.46	70.83	70.82	77.30	79.27	81.78
11	73.95	72.18	73.48	79.66	75.87	77.30	76.19	70.72	71.06	77.23	79.28	81.75
12	73.58	71.83	73.80	79.89	75.88	77.17	75.87	70.66	71.32	77.03	79.37	81.77
13	73.44	71.73	74.11	80.07	75.88	77.00	75.69	69.83	71.53	77.18	79.36	81.71
14	73.37	71.72	74.29	80.09	75.79	76.65	75.61	69.22	71.81	77.34	79.40	81.64
15	73.30	71.84	74.47	80.09	75.88	76.53	74.89	68.79	72.07	77.44	79.47	81.64
16	73.34	72.19	74.61	80.15	76.01	76.59	74.55	68.43	72.23	77.53	79.58	81.47
17	73.27	72.29	74.76	80.33	76.08	76.87	74.14	68.01	72.41	77.59	79.63	81.17
18	73.10	72.28	74.88	79.98	76.09	76.95	73.84	68.15	72.64	77.61	79.59	80.83
19	73.14	72.53	75.00	79.52	76.18	76.95	73.54	68.28	72.89	77.68	79.67	80.56
20	73.13	72.67	75.19	78.18	76.31	76.98	73.58	68.23	73.18	77.83	79.92	80.20
21	73.14	72.78	75.34	78.24	76.50	76.99	73.62	68.38	73.64	77.89	80.08	80.16
22	72.74	72.82	75.51	78.36	76.80	77.09	73.28	68.50	74.03	77.90	80.21	80.18
23	72.36	72.68	75.74	78.39	76.81	77.31	72.65	68.70	74.37	77.91	80.27	79.91
24	72.41	72.78	76.21	76.94	76.88	77.41	72.14	68.97	74.62	77.98	80.34	79.63
25	72.60	72.79	76.28	73.77	77.06	77.50	71.76	69.16	74.84	78.00	80.44	79.43
26	72.72	72.72	76.37	72.84	77.17	77.55	71.55	69.32	75.10	77.96	80.64	79.42
27	72.88	72.65	76.55	73.14	77.28	77.64	71.63	69.42	75.32	78.10	80.74	79.63
28	72.98	72.66	76.79	73.47	77.29	77.58	71.72	69.50	75.60	78.19	80.87	79.68
29	73.05	72.70	76.99	73.84	---	77.67	71.92	69.62	75.86	78.25	80.93	79.74
30	73.06	72.88	77.27	74.10	---	77.78	72.03	69.65	76.12	78.17	81.06	79.76
31	73.03	---	77.74	74.34	---	77.65	---	69.46	---	78.24	81.14	---
MAX	75.75	72.93	77.74	80.33	77.29	77.78	77.71	72.49	76.12	---	81.14	81.83

CAL YR 2002 MAX 77.74



POLK COUNTY—Continued

WELL NUMBER.--275314081514202. ROMP 59 Hawthorn Well at Bartow, FL.

LOCATION.--Lat 27°53'14", long 81°51'42" (1927 North American datum), in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.12, T.30 S., R.24 E., Hydrologic Unit 0310010l, 930 ft west of State Highway 555, 0.6 mi south of State Highway 60, and 0.8 mi west of Bartow.

AQUIFER.--Hawthorn formation of Miocene Age, Geologic Unit 122HTRN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 142 ft, cased to 122 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 117.84 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 3.00 ft above land-surface datum.

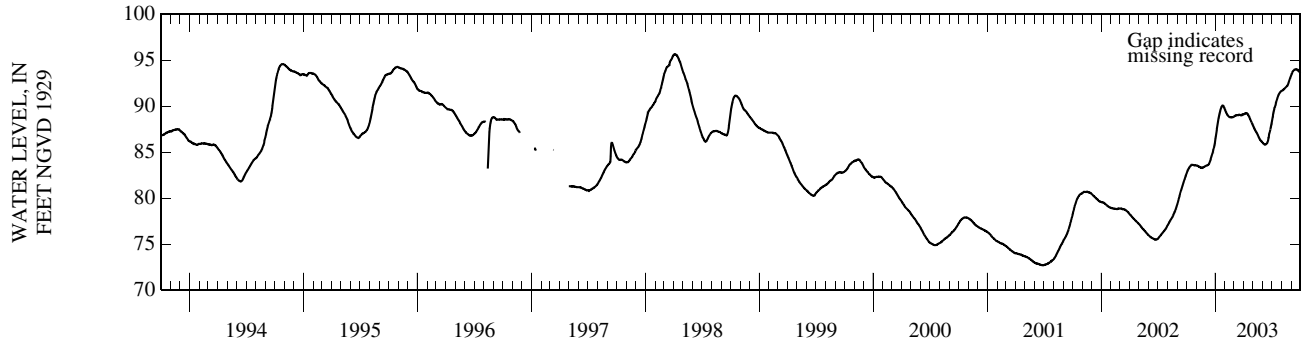
PERIOD OF RECORD.--February 1977 to current year. Prior to October 1979, published as Bartow Hawthorn Well at Bartow.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 95.64 ft NGVD, Apr. 4, 5, 6, 1998; lowest, 72.73 ft NGVD, June 27, 28, 29, 2001.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82.70	83.57	83.50	86.48	89.60	88.85	89.12	87.93	86.05	88.35	91.64	93.36
2	82.79	83.56	83.52	86.68	89.52	88.88	89.11	87.86	86.01	88.55	91.66	93.45
3	82.88	83.55	83.53	86.91	89.43	88.90	89.13	87.77	85.97	88.75	91.68	93.53
4	82.97	83.54	83.55	87.12	89.35	88.93	89.16	87.70	85.94	88.92	91.70	93.60
5	83.05	83.52	83.57	87.35	89.28	88.95	89.19	87.63	85.91	89.10	91.72	93.68
6	83.12	83.50	83.59	87.58	89.20	88.97	89.21	87.56	85.87	89.27	91.76	93.76
7	83.19	83.49	83.59	87.79	89.14	88.99	89.22	87.50	85.84	89.44	91.79	93.81
8	83.27	83.46	83.60	88.01	89.09	89.00	89.22	87.44	85.82	89.58	91.83	93.86
9	83.33	83.43	83.63	88.23	89.02	89.01	89.24	87.37	85.82	89.71	91.86	93.89
10	83.39	83.42	83.68	88.45	88.97	89.03	89.25	87.31	85.82	89.83	91.90	93.92
11	83.44	83.41	83.72	88.65	88.94	89.04	89.25	87.25	85.84	89.93	91.94	93.95
12	83.48	83.40	83.78	88.82	88.90	89.04	89.23	87.20	85.86	90.03	91.98	93.97
13	83.51	83.39	83.87	88.99	88.86	89.03	89.20	87.13	85.90	90.11	92.01	93.97
14	83.54	83.37	83.95	89.15	88.83	89.03	89.15	87.07	85.93	90.38	92.04	93.98
15	83.59	83.31	84.04	89.29	88.81	89.03	89.10	87.00	85.97	90.46	92.07	93.98
16	83.63	83.31	84.13	89.43	88.81	89.03	89.04	86.94	86.01	90.56	92.10	93.99
17	83.63	83.32	84.23	89.57	88.81	89.05	89.00	86.86	86.06	90.67	92.14	94.00
18	83.63	83.32	84.34	89.68	88.81	89.07	88.94	86.79	86.14	90.78	92.16	94.00
19	83.62	83.29	84.45	89.77	88.79	89.07	88.88	86.70	86.25	90.90	92.18	93.99
20	83.61	83.29	84.57	89.85	88.77	89.06	88.81	86.62	86.53	91.00	92.22	93.97
21	83.61	83.33	84.67	89.93	88.78	89.04	88.72	86.55	86.60	91.11	92.28	93.95
22	83.61	83.36	84.78	90.01	88.81	89.03	88.63	86.48	86.93	91.20	92.37	93.91
23	83.60	83.36	84.88	90.07	88.82	89.01	88.57	86.42	87.02	91.27	92.46	93.88
24	83.59	83.37	85.03	90.07	88.82	89.00	88.48	86.37	87.15	91.34	92.58	93.85
25	83.58	83.39	85.21	90.06	88.80	89.00	88.39	86.33	87.30	91.40	92.69	93.80
26	83.58	83.41	85.32	90.04	88.80	89.01	88.31	86.28	87.46	91.44	92.79	93.76
27	83.58	83.43	85.46	90.01	88.82	89.05	88.25	86.24	87.65	91.49	92.89	93.73
28	83.57	83.44	85.61	89.95	88.83	89.08	88.17	86.20	87.82	91.54	93.00	93.70
29	83.57	83.46	85.77	89.85	---	89.09	88.08	86.16	87.98	91.58	93.09	93.67
30	83.57	83.48	85.94	89.78	---	89.12	88.01	86.13	88.16	91.61	93.19	93.63
31	83.57	---	86.22	89.70	---	89.12	---	86.09	---	91.63	93.28	---
MAX	83.63	83.57	86.22	90.07	89.60	89.12	89.25	87.93	88.16	91.63	93.28	94.00

CAL YR 2002 MAX 86.22
WTR YR 2003 MAX 94.00



POLK COUNTY—Continued

WELL NUMBER.--275314081514203. ROMP 59 Upper Hawthorn Well at Bartow, FL.

LOCATION.--Lat 27°53'14", long 81°51'42" (1927 North American datum), in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.12, T.30 S., R.24 E., Hydrologic Unit 03100101, 970 ft west of State Highway 555, 0.6 mi south of State Highway 60, and 0.8 mi west of Bartow.

AQUIFER.--Hawthorn formation of Miocene Age, Geologic Unit 122HTRN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 60 ft, cased to 50 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 118.71 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of flange, 2.94 ft above land-surface datum.

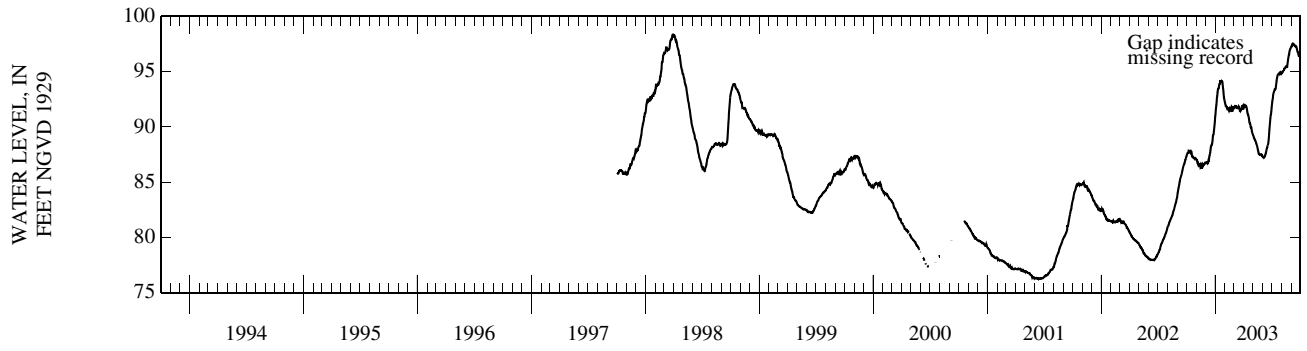
PERIOD OF RECORD.--February 1977 to September 1979; October 1979 to September 1997 (periodic); October 1997 to current year. Prior to October 1979, published as Bartow Upper Hawthorn Well at Bartow.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 98.36 ft NGVD, Mar. 30, 1998; lowest, 75.24 ft NGVD, June 13, 16, 17, 18, 1977.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87.38	87.00	86.78	91.11	92.18	91.70	91.65	89.32	87.36	92.03	94.86	97.23
2	87.47	86.96	86.75	91.54	92.02	91.79	91.76	89.25	87.26	92.30	94.87	97.31
3	87.57	86.97	86.75	91.81	91.92	91.79	91.86	89.16	87.25	92.46	94.89	97.32
4	87.64	86.78	86.76	92.05	91.92	91.85	91.97	89.08	87.24	92.64	94.92	97.41
5	87.64	86.79	86.82	92.39	91.86	91.82	91.94	89.01	87.21	92.86	94.98	97.52
6	87.64	86.78	86.82	92.62	91.77	91.85	91.88	88.99	87.25	93.00	95.05	97.54
7	87.81	86.60	86.68	92.79	91.77	91.83	91.83	88.89	87.28	93.10	95.11	97.48
8	87.79	86.53	86.72	93.11	91.61	91.78	91.83	88.82	87.30	93.17	95.18	97.46
9	87.77	86.59	86.91	93.36	91.61	91.87	91.88	88.76	87.38	93.28	95.19	97.41
10	87.80	86.61	87.03	93.44	91.66	91.85	91.84	88.71	87.47	93.38	95.26	97.40
11	87.74	86.60	87.00	93.45	91.62	91.79	91.72	88.63	87.60	93.38	95.34	97.43
12	87.68	86.52	87.25	93.56	91.53	91.74	91.55	88.50	87.72	93.40	95.38	97.37
13	87.64	86.51	87.45	93.77	91.48	91.70	91.35	88.44	87.85	93.45	95.37	97.32
14	87.69	86.37	87.49	93.87	91.59	91.69	91.20	88.33	87.95	93.66	95.40	97.28
15	87.78	86.42	87.67	93.88	91.68	91.70	91.13	88.24	88.05	93.90	95.40	97.32
16	87.75	86.61	87.89	94.09	91.72	91.69	91.11	88.09	88.11	94.16	95.49	97.31
17	87.53	86.57	88.04	94.23	91.68	91.82	90.97	87.95	88.22	94.37	95.49	97.28
18	87.35	86.21	88.23	94.08	91.48	91.77	90.89	87.80	88.32	94.52	95.46	97.17
19	87.31	86.37	88.28	94.05	91.46	91.66	90.64	87.68	88.41	94.61	95.45	97.06
20	87.34	86.53	88.38	94.08	91.59	91.50	90.43	87.60	88.62	94.71	95.68	96.92
21	87.33	86.67	88.40	94.16	91.70	91.49	90.34	87.52	88.92	94.77	95.91	96.83
22	87.26	86.65	88.56	94.13	91.82	91.43	90.34	87.51	89.34	94.79	96.12	96.76
23	87.19	86.50	88.81	94.10	91.78	91.50	90.26	87.52	89.75	94.83	96.28	96.73
24	87.20	86.55	89.19	93.82	91.39	91.55	89.96	87.51	90.09	94.85	96.46	96.62
25	87.16	86.64	89.25	93.55	91.55	91.58	89.94	87.50	90.44	94.84	96.61	96.48
26	87.13	86.65	89.30	93.43	91.67	91.74	89.94	87.47	90.77	94.81	96.78	96.47
27	87.09	86.65	89.60	93.16	91.66	91.85	89.77	87.45	91.05	94.88	96.90	96.44
28	87.12	86.67	89.85	92.78	91.65	91.87	89.58	87.45	91.17	94.95	96.98	96.40
29	87.16	86.68	90.15	92.56	---	91.80	89.47	87.49	91.38	94.97	97.05	96.33
30	87.14	86.77	90.43	92.45	---	91.86	89.39	87.47	91.75	94.89	97.11	96.24
31	87.09	---	90.90	92.29	---	91.67	---	87.38	---	94.82	97.17	---
MAX	87.81	87.00	90.90	94.23	92.18	91.87	91.97	89.32	91.75	94.97	97.17	97.54

CAL YR 2002 MAX 90.90
WTR YR 2003 MAX 97.54



POLK COUNTY—Continued

WELL NUMBER.--275348081335701. ROMP 57A Ocala Well near Lake Wales, FL.

LOCATION.--Lat 27°53'48", long 81°33'55" (1927 North American datum), in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.1, T.30 S., R.27 E., Hydrologic Unit 03090101, 300 ft west of 11th Street, 0.5 mi north of State Highway 60, and 1.4 mi east of Lake Wales.

AQUIFER.--Floridan aquifer system of Eocene Age, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 315 ft, cased to 274 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 197.58 ft above National Geodetic Vertical Datum of 1929 (levels by Southwest Florida Water Management District). Measuring point: Top of recorder shelter floor, 3.10 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby well.

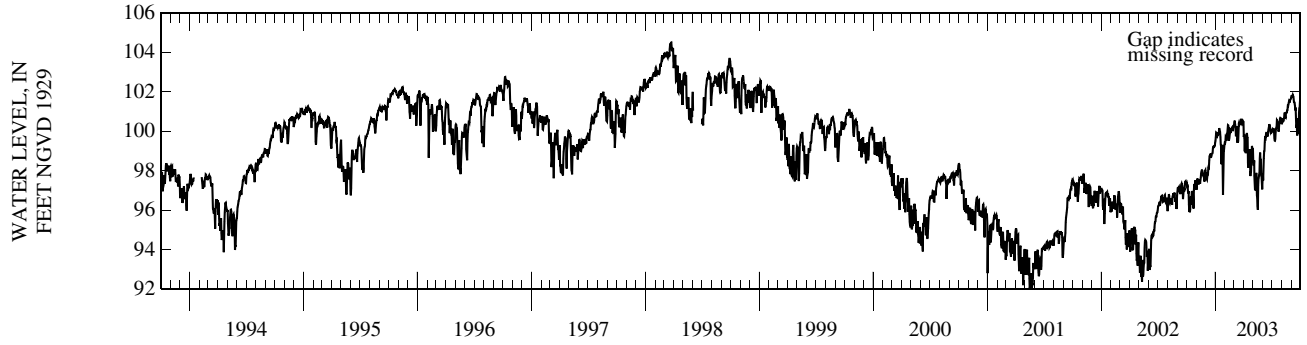
PERIOD OF RECORD.--November 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 104.50 ft NGVD, Mar. 24, 1998; lowest, 89.72 ft NGVD, Dec. 25, 1989.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97.42	97.04	97.86	99.53	99.41	100.32	100.48	99.15	97.53	100.10	100.55	101.76
2	97.34	97.23	97.87	99.70	99.48	100.38	99.72	98.53	97.89	100.04	100.37	101.75
3	97.20	97.38	97.74	99.91	99.77	100.51	99.86	98.35	97.52	99.96	100.47	101.77
4	97.22	97.62	97.60	99.89	99.75	100.51	99.64	98.27	97.93	100.04	100.61	101.79
5	96.97	97.55	97.57	99.85	99.53	100.35	98.99	98.53	98.64	100.12	100.62	101.81
6	96.86	97.45	97.75	99.89	99.85	100.24	99.54	97.75	98.97	100.11	100.52	101.86
7	96.98	97.49	97.81	99.86	99.85	100.06	99.74	97.42	99.00	100.15	100.54	101.80
8	96.31	97.32	97.82	99.79	99.92	99.76	98.90	97.05	99.43	100.02	100.62	101.78
9	95.95	97.39	98.15	99.83	100.11	100.14	99.28	97.09	99.72	99.66	100.71	101.62
10	96.18	97.47	98.22	99.90	100.32	100.27	99.81	97.01	99.73	99.54	100.82	101.45
11	95.91	97.56	98.19	99.91	100.30	100.07	99.88	97.47	99.70	99.53	100.96	101.50
12	96.05	97.45	98.53	99.93	99.91	99.44	99.88	97.90	99.88	99.62	100.75	101.40
13	96.45	97.36	98.75	100.17	99.53	99.65	99.70	97.18	99.86	99.97	100.69	101.29
14	96.69	97.55	98.76	100.11	99.62	99.44	99.68	96.77	99.89	100.18	100.68	101.07
15	96.31	97.65	98.70	99.92	99.67	99.52	98.43	96.60	99.77	100.12	100.89	101.21
16	96.68	97.87	98.88	99.94	99.85	99.93	98.17	96.22	99.88	100.25	100.98	100.68
17	96.91	97.96	98.86	99.72	100.09	100.41	98.27	96.03	99.88	100.58	100.92	100.19
18	96.98	98.02	98.66	99.35	100.07	100.46	98.47	97.26	99.75	100.55	100.97	100.33
19	96.93	98.03	98.71	99.22	99.92	100.41	98.40	97.62	99.92	100.51	101.06	100.16
20	96.87	98.01	98.78	98.34	100.07	100.37	98.89	97.70	100.09	100.44	101.09	99.80
21	96.89	97.92	98.83	99.10	100.14	100.39	99.11	97.81	100.17	100.42	101.29	100.42
22	96.47	97.78	98.87	99.27	100.14	100.41	98.25	97.91	100.27	99.99	101.28	100.66
23	96.09	97.75	98.91	99.32	100.10	100.52	97.74	98.64	100.37	100.07	101.38	100.50
24	97.01	97.82	99.15	98.42	100.22	100.64	97.99	98.93	100.31	100.33	101.45	99.89
25	97.30	97.87	99.22	96.78	100.24	100.56	97.94	98.58	100.25	100.38	101.54	100.17
26	97.32	97.67	99.23	97.85	100.02	100.42	98.51	98.61	100.02	100.40	101.52	100.94
27	97.20	97.46	99.17	98.55	100.20	100.44	98.95	98.52	99.96	100.64	101.46	101.17
28	97.47	97.79	99.22	98.98	100.27	100.42	99.26	97.77	100.02	100.69	101.57	101.19
29	97.52	98.00	99.25	99.12	---	100.46	99.21	97.71	99.99	100.68	101.61	101.51
30	97.42	98.03	99.27	99.31	---	100.42	99.00	97.41	100.14	100.52	101.65	101.50
31	97.41	---	99.45	99.42	---	100.51	---	97.07	---	100.54	101.67	---
MAX	97.52	98.03	99.45	100.17	100.32	100.64	100.48	99.15	100.37	100.69	101.67	101.86

CAL YR 2002 MAX 99.45
WTR YR 2003 MAX 101.86



POLK COUNTY—Continued

WELL NUMBER.--275348081335703. ROMP 57A NRSD Well near Lake Wales, FL.

LOCATION.--Lat 27°53'48", long 81°33'57" (1927 North American datum), in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.1, T.30 S., R.27 E., Hydrologic Unit 03090101, 300 ft west of 11th Street, 0.5 mi north of State Highway 60, and 1.4 mi east of Lake Wales.

AQUIFER.--Surficial aquifer system of Quaternary Age, Geologic Unit 112NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 135 ft, cased to 114 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Land-surface datum is 197.59 ft above National Geodetic Vertical Datum of 1929 (levels by Southwest Florida Water Management District). Measuring point: Top of shelter floor, 3.25 ft above land-surface datum.

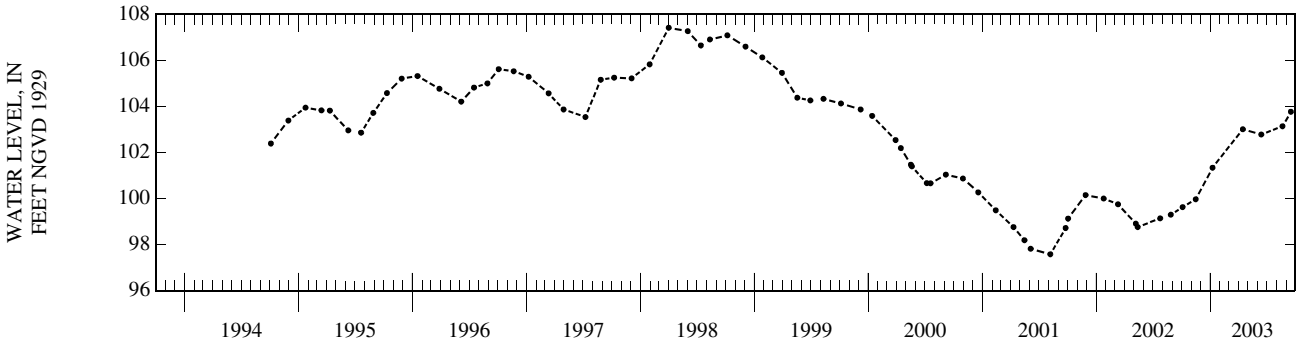
PERIOD OF RECORD.--November 1987 to September 1994; October 1994 to current year (periodic).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 107.42 ft NGVD, Apr. 1, 1998; lowest daily maximum water level, 97.48 ft NGVD, May 31, June 1, 2, 1990.

WATER SURFACE ELEVATION IN FEET (NGVD1929), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	99.63	JAN 08	101.34	JUN 13	102.78	SEP 16	103.77
NOV 15	99.97	APR 15	103.01	AUG 20	103.14		

WATER YEAR 2003 LOWEST 99.63 OCT 04, 2002 HIGHEST 103.77 SEP 16, 2003



POLK COUNTY—Continued

WELL NUMBER.--275411081372001. ROMP 57 Floridan Well near Lake Wales, FL.

LOCATION.--Lat 27°54'11", long 81°37'20" (1927 North American datum), in NE $^1/_4$ NE $^1/_4$ sec.4, T.30 S., R.27 E., Hydrologic Unit 03100101, 40 ft south of State Highway 60, 1.5 mi west of U. S. Highway 27, and 2.0 mi west of Lake Wales.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 7 in., depth 634 ft, cased to 160 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 128.22 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 4.21 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby well.

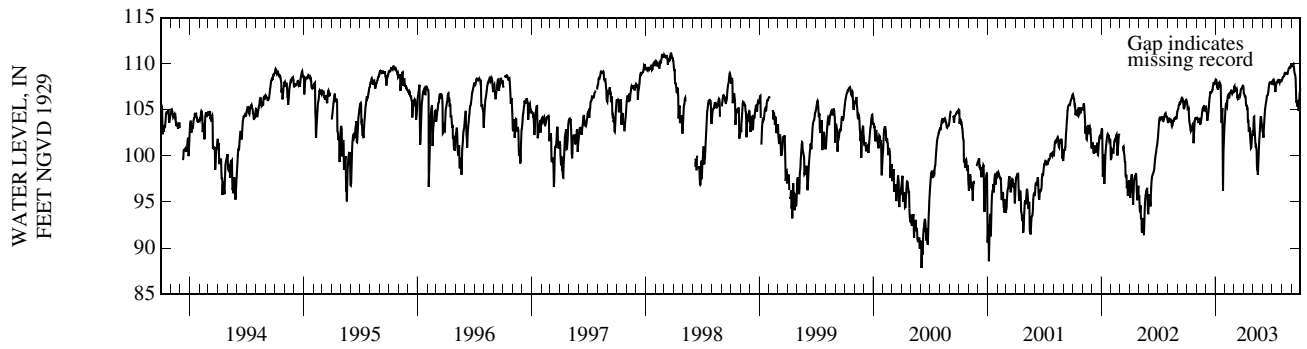
PERIOD OF RECORD.--July 1981 to current year. Prior to October 1, 1982, published as ROMP 57-1 Floridan Well near Lake Wales.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 111.20 ft NGVD, Mar. 23, 1998; lowest, 87.82 ft NGVD, June 3, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105.98	104.12	105.32	108.26	104.27	107.21	107.43	102.79	102.72	108.07	108.09	109.90
2	105.88	103.90	105.33	108.31	104.98	107.47	106.82	102.18	102.73	107.99	108.21	109.86
3	105.58	104.09	105.13	108.28	105.45	107.55	106.79	103.56	102.32	107.70	108.29	109.76
4	105.12	104.10	104.76	108.13	105.62	107.18	106.67	104.23	101.98	107.88	108.46	109.75
5	105.16	104.01	104.46	107.99	105.68	107.24	106.47	104.26	102.86	108.20	108.53	109.79
6	105.11	103.76	103.82	107.54	105.35	107.29	106.44	103.50	103.43	108.28	108.57	109.83
7	105.17	103.67	104.10	107.58	105.28	107.14	106.45	102.78	103.98	108.31	108.59	109.96
8	104.50	103.69	104.30	107.51	105.83	106.93	106.17	102.18	104.59	108.19	108.62	109.99
9	103.83	103.80	104.70	107.17	106.39	107.23	105.51	101.48	105.04	107.96	108.64	109.80
10	103.56	103.99	104.91	107.34	106.52	107.29	105.47	101.10	105.32	107.77	108.89	109.48
11	103.44	104.02	105.34	107.48	106.58	106.98	105.56	101.13	105.58	107.49	108.99	109.11
12	103.22	103.88	105.91	107.71	106.47	106.42	105.20	100.94	105.79	106.94	109.02	109.01
13	102.83	103.37	106.25	107.92	106.32	106.28	105.23	100.65	106.00	107.32	108.98	108.88
14	102.69	103.49	106.50	107.98	106.24	106.37	105.08	98.98	106.22	107.52	108.92	108.70
15	102.80	103.54	106.84	107.80	106.47	106.06	103.64	98.52	106.49	107.82	108.89	108.39
16	102.83	103.84	106.91	107.66	106.73	106.34	103.95	98.51	106.56	107.97	108.94	107.31
17	102.72	104.04	106.98	107.70	106.84	106.49	103.82	97.93	106.61	108.00	108.96	105.80
18	102.90	104.27	106.84	107.48	106.88	106.44	102.62	98.83	106.63	107.99	108.98	105.93
19	103.08	104.66	106.89	105.95	106.94	106.57	102.75	99.71	106.81	108.08	108.94	105.71
20	103.37	104.89	106.94	103.59	107.07	106.63	103.03	100.77	107.07	108.21	108.92	105.37
21	103.45	105.17	106.98	103.99	107.09	106.56	103.09	101.47	107.42	108.25	109.10	105.79
22	103.15	105.21	107.14	104.91	107.04	106.77	102.23	101.95	107.70	108.24	109.21	105.88
23	101.37	105.24	107.18	105.18	106.88	107.15	101.71	102.57	107.88	108.08	109.30	106.07
24	101.96	105.37	107.57	102.14	106.74	107.24	101.33	103.14	107.94	108.04	109.50	105.35
25	102.88	105.40	107.77	96.22	106.83	107.30	100.86	103.75	107.90	108.01	109.56	104.87
26	103.43	105.37	107.92	98.65	106.97	107.33	100.92	104.17	107.89	107.96	109.61	105.44
27	103.81	104.83	107.92	100.47	107.01	107.35	101.57	104.30	107.91	108.12	109.63	106.19
28	104.06	104.97	107.82	101.40	106.98	107.42	102.06	104.10	107.90	108.22	109.58	106.75
29	104.08	105.24	107.88	102.36	---	107.54	102.42	103.60	107.99	108.20	109.58	107.04
30	104.09	105.30	107.77	103.19	---	107.61	102.68	103.41	108.07	108.11	109.76	107.33
31	104.10	---	107.97	103.63	---	107.59	---	103.04	---	108.08	109.89	---
MAX	105.98	105.40	107.97	108.31	107.09	107.61	107.43	104.30	108.07	108.31	109.89	109.99

WTR YR 2003 MAX 109.99



POLK COUNTY—Continued

WELL NUMBER.--275411081372002. ROMP 57 Hawthorn Well near Lake Wales, FL.

LOCATION.--Lat 27°54'11", long 81°37'20" (1927 North American datum), in NE $^1/_4$ NE $^1/_4$ sec.4, T.30 S., R.27 E., Hydrologic Unit 03100101, 25 ft south of State Highway 60, 1.5 mi west of U. S. Highway 27, and 2.0 mi west of Lake Wales.

AQUIFER.--Hawthorn formation of Miocene Age, Geologic Unit 122HTRN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 7 in., depth 140 ft, cased to 95 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 128.10 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 4.08 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby wells.

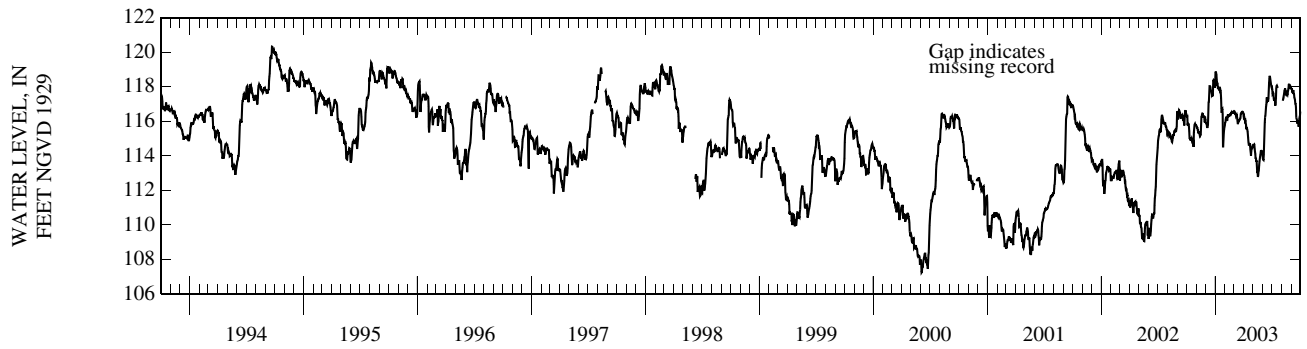
PERIOD OF RECORD.--July 1981 to current year. Prior to October 1, 1982, published as ROMP 57-2 Hawthorn Well near Lake Wales.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 120.68 ft NGVD, July 29, 1982; lowest, 107.25 ft NGVD, June 3, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	116.29	115.74	115.95	118.81	115.90	116.52	116.39	114.54	114.05	117.98	---	117.88
2	116.28	115.64	115.90	118.88	115.94	116.55	116.24	114.46	113.86	117.84	---	117.87
3	116.29	115.63	115.87	118.80	116.11	116.57	116.28	114.56	113.78	117.58	---	117.87
4	115.76	115.62	115.86	118.69	116.21	116.50	116.18	114.65	113.76	117.61	---	117.73
5	115.90	115.48	115.70	118.40	116.26	116.45	116.15	114.67	114.08	117.65	117.19	117.68
6	115.84	115.47	115.62	118.20	116.16	116.46	116.01	114.63	114.64	117.62	117.29	117.66
7	115.84	115.37	115.71	118.23	116.08	116.43	116.04	114.41	115.33	117.34	117.38	117.75
8	115.71	115.30	115.77	118.19	116.08	116.32	115.88	114.24	115.91	117.20	117.49	117.81
9	115.44	115.36	116.48	117.95	116.30	116.36	115.78	114.10	116.23	117.35	117.61	117.62
10	115.02	115.36	117.10	117.95	116.39	116.39	115.54	113.83	116.34	117.27	117.76	117.58
11	115.01	115.29	117.17	117.88	116.25	116.31	115.62	113.88	116.56	117.16	117.80	117.38
12	114.90	115.19	117.58	117.86	116.32	116.16	115.59	113.67	116.84	116.91	117.90	117.33
13	115.00	115.23	118.04	117.91	116.30	115.98	115.51	113.73	116.98	117.10	117.80	117.23
14	114.95	115.19	118.04	117.93	116.31	115.84	115.40	113.33	117.30	117.35	117.71	117.03
15	114.95	115.24	118.02	117.82	116.34	115.90	115.16	113.01	117.39	117.91	117.63	117.01
16	114.99	115.84	117.93	117.75	116.36	115.98	115.06	113.07	117.30	118.05	117.67	116.82
17	114.90	116.24	117.80	117.79	116.40	116.00	114.80	112.79	117.19	118.08	117.63	116.22
18	114.86	116.29	117.77	117.68	116.39	116.06	114.67	112.83	117.22	118.03	117.56	116.16
19	114.91	116.39	117.68	117.35	116.37	116.07	114.68	113.09	117.15	117.93	117.59	116.10
20	114.86	116.45	117.64	116.74	116.42	116.10	114.65	113.17	117.33	---	117.55	115.95
21	114.90	116.44	117.51	116.49	116.51	116.14	114.72	113.45	117.74	---	117.67	115.86
22	114.89	116.28	117.55	116.68	116.54	116.18	114.66	113.67	118.23	---	117.79	115.96
23	114.52	116.29	117.45	116.71	116.48	116.42	114.37	113.82	118.49	---	117.88	116.04
24	115.36	116.31	117.66	116.42	116.48	116.47	114.23	113.96	118.63	---	118.12	115.93
25	115.59	116.29	118.34	114.55	116.48	116.49	114.01	114.07	118.56	---	118.17	115.69
26	115.79	116.27	118.38	114.55	116.53	116.50	114.29	114.15	118.41	---	118.07	115.87
27	115.83	116.12	118.36	114.98	116.55	116.54	114.34	114.31	118.27	---	118.02	116.13
28	115.86	115.94	118.23	115.33	116.45	116.56	114.42	114.24	118.14	---	117.99	116.25
29	115.81	116.08	118.09	115.53	---	116.56	114.49	114.28	118.04	---	118.03	116.33
30	115.78	116.11	117.95	115.66	---	116.51	114.57	114.27	117.96	---	118.00	116.57
31	115.78	---	118.24	115.72	---	116.50	---	114.23	---	---	117.91	---
MAX	116.29	116.45	118.38	118.88	116.55	116.57	116.39	114.67	118.63	---	---	117.88

CAL YR 2002 MAX 118.38



POLK COUNTY—Continued

WELL NUMBER.--275411081372003. ROMP 57 NRSD Well near Lake Wales, FL.

LOCATION.--Lat 27°54'11", long 81°37'20" (1927 North American datum), in NE $^1/_4$ NE $^1/_4$ sec.4, T.30 S., R.27 E., Hydrologic Unit 03100101, 40 ft south of State Highway 60, 1.5 mi west of U. S. Highway 27, and 2.0 mi west of Lake Wales.

AQUIFER.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit 112NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 40 ft, cased to 15 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 128.82 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 3.31 ft above land-surface datum.

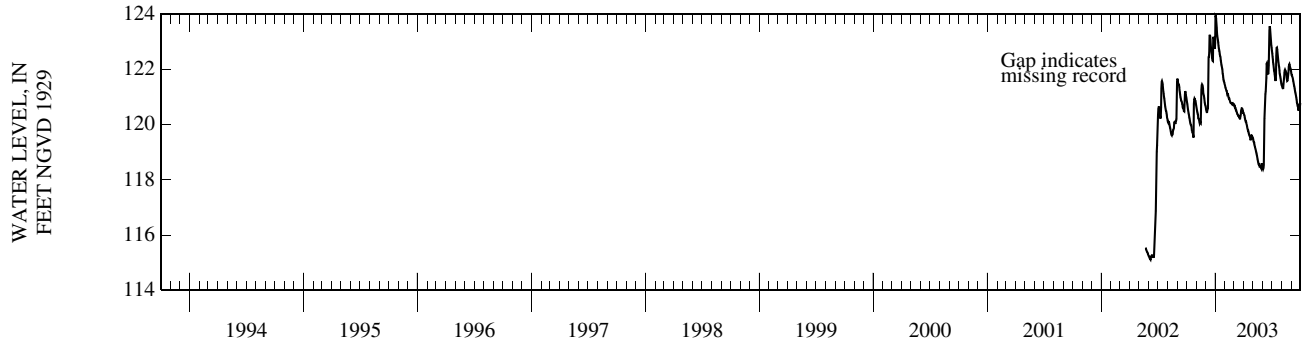
PERIOD OF RECORD.--August 1981 to April 2002 (periodic); May 2002 to current year. Prior to October 1990, published as ROMP 57-3 Shallow Well near Lake Wales.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 123.95 ft NGVD, Jan. 1, 2003; lowest measured, 114.62 ft NGVD, June 5, 2001.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120.89	120.63	120.64	123.95	121.41	120.73	120.43	119.52	118.47	122.66	121.44	121.85
2	120.81	120.56	120.56	123.93	121.34	120.72	120.40	119.46	118.41	122.57	121.42	121.79
3	120.74	120.49	120.51	123.83	121.32	120.66	120.37	119.39	118.38	122.45	121.38	121.78
4	120.64	120.44	120.46	123.66	121.28	120.66	120.34	119.36	118.41	122.35	121.33	121.76
5	120.55	120.38	120.42	123.50	121.23	120.61	120.26	119.35	118.54	122.26	121.32	121.73
6	120.48	120.35	120.52	123.37	121.22	120.60	120.20	119.28	119.16	122.18	121.29	121.69
7	120.41	120.24	120.58	123.22	121.17	120.56	120.15	119.24	120.21	122.07	121.47	121.61
8	120.35	120.22	120.59	123.14	121.09	120.52	120.11	119.19	120.50	121.97	121.59	121.55
9	120.27	120.20	121.25	123.06	121.10	120.52	120.11	119.15	120.85	121.91	121.70	121.48
10	120.22	120.15	122.44	122.97	121.10	120.48	120.05	119.10	121.10	121.82	121.87	121.42
11	120.14	120.10	122.46	122.85	121.03	120.43	120.01	119.04	121.20	121.71	121.96	121.37
12	120.07	120.04	122.61	122.76	120.98	120.39	119.94	118.99	121.46	121.62	121.99	121.30
13	120.02	120.07	123.21	122.70	120.94	120.38	119.88	118.94	121.69	121.58	121.96	121.22
14	119.99	120.08	123.25	122.64	120.94	120.35	119.84	118.88	122.20	121.77	121.94	121.16
15	119.98	120.06	123.19	122.54	120.92	120.31	119.79	118.81	122.21	122.49	121.91	121.11
16	119.93	120.80	123.07	122.48	120.89	120.30	119.79	118.75	122.10	122.78	121.86	121.04
17	119.82	121.26	122.92	122.46	120.85	120.34	119.74	118.69	121.99	122.79	121.78	120.98
18	119.76	121.42	122.78	122.33	120.80	120.27	119.69	118.63	121.90	122.71	121.65	120.90
19	119.74	121.45	122.67	122.25	120.79	120.25	119.64	118.58	121.82	122.60	121.58	120.81
20	119.71	121.43	122.59	122.17	120.78	120.22	119.61	118.55	121.85	122.49	121.59	120.75
21	119.67	121.40	122.45	122.12	120.78	120.22	119.58	118.55	122.15	122.37	121.67	120.68
22	119.59	121.31	122.40	122.05	120.76	120.30	119.56	118.50	122.90	122.23	121.78	120.65
23	119.53	121.13	122.31	122.00	120.74	120.36	119.48	118.51	123.39	122.14	121.88	120.61
24	120.75	121.09	122.30	121.84	120.76	120.49	119.43	118.51	123.56	122.07	122.08	120.54
25	120.89	121.04	123.12	121.80	120.76	120.54	119.47	118.50	123.50	121.96	122.16	120.51
26	120.94	120.95	123.18	121.72	120.77	120.59	119.61	118.47	123.32	121.86	122.18	120.64
27	120.92	120.89	123.13	121.63	120.75	120.59	119.61	118.44	123.16	121.80	122.13	120.62
28	120.88	120.79	123.03	121.58	120.67	120.58	119.60	118.42	123.00	121.73	122.03	120.67
29	120.86	120.73	122.87	121.55	---	120.56	119.57	118.57	122.86	121.67	122.04	120.67
30	120.78	120.70	122.75	121.50	---	120.52	119.54	118.57	122.78	121.58	121.99	120.78
31	120.70	---	122.95	121.46	---	120.43	---	118.53	---	121.50	121.94	---
MAX	120.94	121.45	123.25	123.95	121.41	120.73	120.43	119.52	123.56	122.79	122.18	121.85

WTR YR 2003 MAX 123.95



POLK COUNTY—Continued

WELL NUMBER.--275815081444201. Lake McLeod Shallow Well near Eagle Lake, FL.

LOCATION.--Lat 27°58'15", long 81°44'42" (1927 North American datum), in SE $^1/_4$ SE $^1/_4$ sec.7, T.29 S., R.26 E., Hydrologic Unit 0310010l, at intersection Eagle Loop Road and Lake McLeod Road, and 1.0 mi east of Eagle Lake.

AQUIFER.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit 111NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 1.25 in., depth 26 ft, cased to 24 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Land-surface datum is 139.25 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.50 ft above land-surface datum.

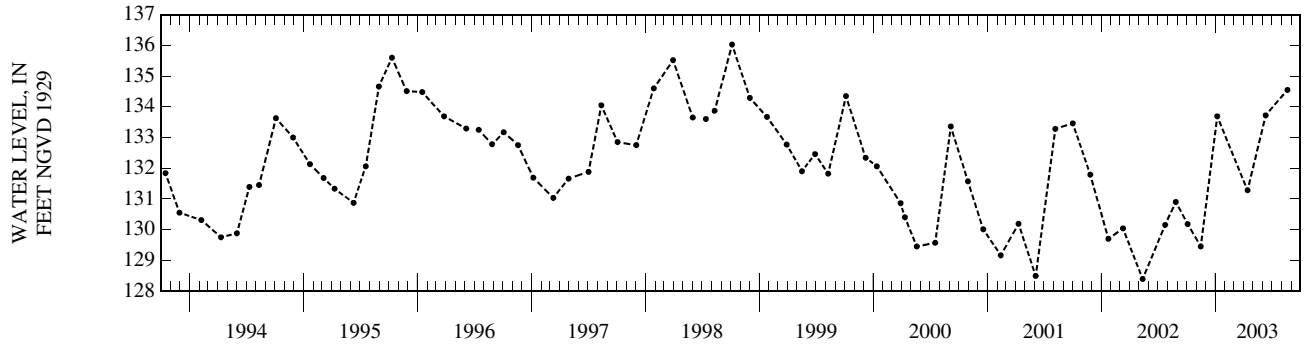
PERIOD OF RECORD.--May 1965 to current year (periodic). Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 136.03 ft NGVD, Oct. 5, 1998; lowest measured, 122.93 ft NGVD, June 1, 1977.

WATER SURFACE ELEVATION IN FEET (NGVD1929), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	130.18	NOV 15	129.45	JAN 07	133.69	APR 14	131.28	JUN 11	133.72	AUG 20	134.55

WATER YEAR 2003 LOWEST 129.45 NOV 15, 2002 HIGHEST 134.55 AUG 20, 2003



POLK COUNTY—Continued

WELL NUMBER.--275959081552501. Sanlon Ranch Deep Well near Eaton Park, FL.

LOCATION.--Lat 27°59'59", long 81°55'25" (1927 North American datum), in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.33, T.28 S., R.24 E., Hydrologic Unit 03100101, 200 ft east of State Highway 37, and 1.1 mi southwest of Eaton Park.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, unused industrial, artesian well, diameter 24 in., depth 1,220 ft, cased to 293 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 125.22 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 3.50 ft above land-surface datum.

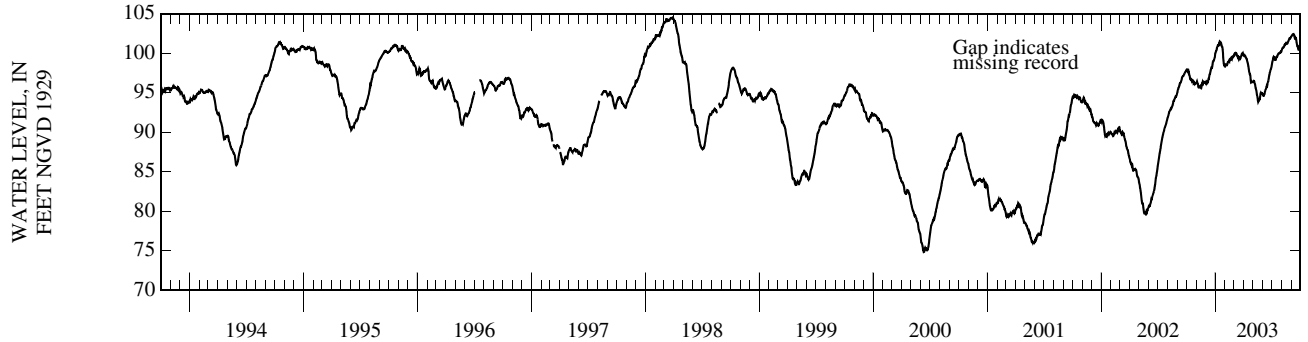
PERIOD OF RECORD.--January 1970 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 104.51 ft NGVD, Mar. 28, 1998; lowest, 66.38 ft NGVD, May 9, 1975.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97.93	96.23	96.23	100.02	98.30	99.68	99.73	96.40	94.82	98.64	100.25	102.14
2	97.94	96.34	96.33	100.14	98.41	99.80	99.68	96.41	94.79	98.85	100.39	102.20
3	97.85	96.45	96.18	100.25	98.56	99.92	99.81	96.43	94.72	98.97	100.53	102.23
4	97.70	96.29	96.28	100.34	98.59	99.99	99.79	96.49	94.59	99.12	100.61	102.27
5	97.71	96.15	96.38	100.52	98.48	100.01	99.71	96.44	94.59	99.31	100.69	102.34
6	97.60	96.08	96.36	100.68	98.47	100.03	99.66	96.35	94.70	99.47	100.69	102.37
7	97.69	95.83	96.28	100.73	98.46	99.96	99.62	96.19	94.80	99.55	100.71	102.39
8	97.54	95.68	96.39	100.86	98.56	99.89	99.47	96.10	94.96	99.49	100.76	102.42
9	97.29	95.66	96.58	100.98	98.76	99.95	99.40	95.84	95.11	99.45	100.87	102.40
10	97.20	95.75	96.78	100.98	98.90	99.93	99.34	95.56	95.27	99.44	101.02	102.35
11	96.96	95.79	96.78	100.99	98.93	99.78	99.30	95.48	95.39	99.31	101.10	102.17
12	96.73	95.78	97.04	101.12	98.94	99.64	99.11	95.35	95.48	99.05	101.14	101.98
13	96.67	95.74	97.31	101.21	98.95	99.59	98.98	95.04	95.66	99.23	101.10	101.84
14	96.72	95.66	97.36	101.36	98.91	99.49	98.82	94.76	95.79	99.35	101.14	101.85
15	96.74	95.62	97.52	101.26	99.15	99.43	98.63	94.62	95.90	99.44	101.19	101.96
16	96.71	95.93	97.73	101.45	99.23	99.32	98.51	94.37	95.86	99.46	101.32	101.90
17	96.54	95.99	97.85	101.42	99.28	99.55	98.31	94.01	96.10	99.54	101.32	101.66
18	96.46	95.87	97.95	101.33	99.20	99.51	98.00	93.83	96.24	99.56	101.27	101.37
19	96.53	96.05	98.13	101.26	99.15	99.44	97.74	93.92	96.39	99.67	101.20	101.12
20	96.56	96.20	98.11	101.10	99.19	99.37	97.60	93.99	96.59	99.84	101.22	100.90
21	96.57	96.36	98.15	100.96	99.34	99.27	97.35	94.06	96.80	99.91	101.31	100.81
22	96.44	96.24	98.35	100.87	99.51	99.33	97.31	94.18	97.09	99.95	101.43	100.77
23	96.15	96.15	98.62	100.78	99.49	99.52	97.15	94.18	97.28	99.96	101.54	100.81
24	96.20	96.30	98.93	100.46	99.35	99.59	96.62	94.50	97.44	99.99	101.62	100.61
25	96.27	96.38	98.97	100.00	99.48	99.69	96.33	94.71	97.57	99.99	101.75	100.35
26	96.19	96.37	98.97	99.50	99.58	99.81	96.36	94.91	97.77	100.01	101.83	100.53
27	96.10	96.35	99.10	99.04	99.62	99.92	96.31	95.01	97.91	100.10	101.82	100.64
28	96.15	96.31	99.18	98.69	99.59	99.94	96.35	94.94	97.98	100.16	101.84	100.73
29	96.17	96.33	99.31	98.48	---	99.95	96.35	94.95	98.12	100.19	101.90	100.82
30	96.15	96.30	99.46	98.47	---	100.00	96.35	94.86	98.38	100.11	101.96	100.87
31	96.20	---	99.89	98.33	---	99.85	---	94.88	---	100.13	102.03	---
MAX	97.94	96.45	99.89	101.45	99.62	100.03	99.81	96.49	98.38	100.19	102.03	102.42

CAL YR 2002 MAX 99.89
WTR YR 2003 MAX 102.42



POLK COUNTY—Continued

WELL NUMBER.--280229081325201. Lake Hatchineha Road Well near Lake Hamilton, FL.

LOCATION.--Lat 28°02'29", long 81°32'52" (1927 North American datum), in SE $^1/_4$ SE $^1/_4$ sec.18, T.28 S., R.28 E., Hydrologic Unit 03090101, on north side of State Highway 542, 5.0 mi east of town of Lake Hamilton.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 8 in., depth 463, cased to 137 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Land-surface datum is 93.90 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.10 ft above land-surface datum.

REMARKS.--The figures of water level as elevation, in feet NGVD, prior to Oct. 1, 1978, are in error. Revised records are in files of the Geological Survey.

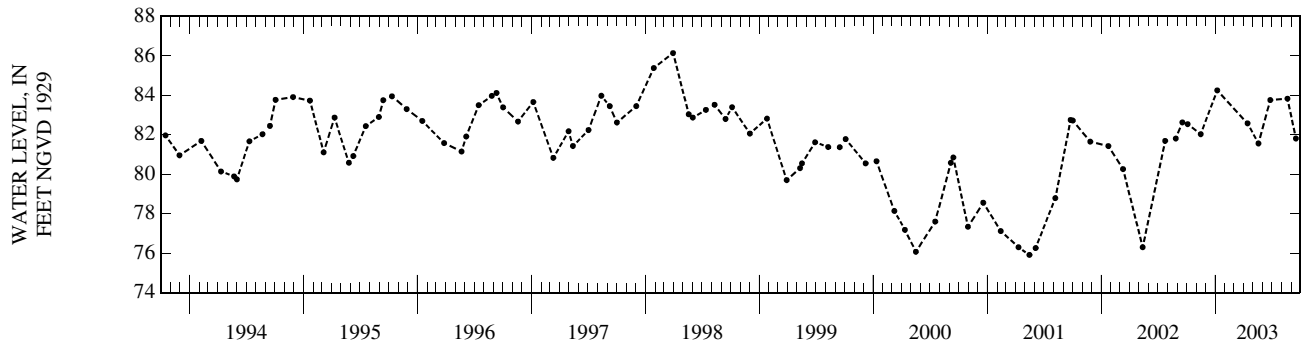
PERIOD OF RECORD.--January 1963 to current year (periodic). Records of water levels prior to January 1974 are available in files of the Geological Survey. Prior to October 1979, published as Lake Hamilton Well near Lake Hamilton.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 86.14 ft NGVD, Mar. 30, 1998; lowest measured, 74.43 ft NGVD, June 6, 1985.

WATER SURFACE ELEVATION IN FEET (NGVD1929), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	82.54	JAN 07	84.25	MAY 19	81.56	AUG 20	83.83
NOV 15	82.03	APR 14	82.58	JUN 26	83.76	SEP 16	81.81

WATER YEAR 2003 LOWEST 81.56 MAY 19, 2003 HIGHEST 84.25 JAN 07, 2003



POLK COUNTY—Continued

WELL NUMBER.--281532081345001. Loughman Deep Well near Loughman, FL.

LOCATION.--Lat 28°15'32", long 81°34'50" (1927 North American datum), in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.2, T.26 S., R.27 E., Hydrologic Unit 03090101, 10 ft south of Lake Wilson Road, 0.6 mi east of State Highway 545, and 1.6 mi northwest of Loughman.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 250 ft, cased to 85 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 104.29 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 2.72 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby irrigation wells.

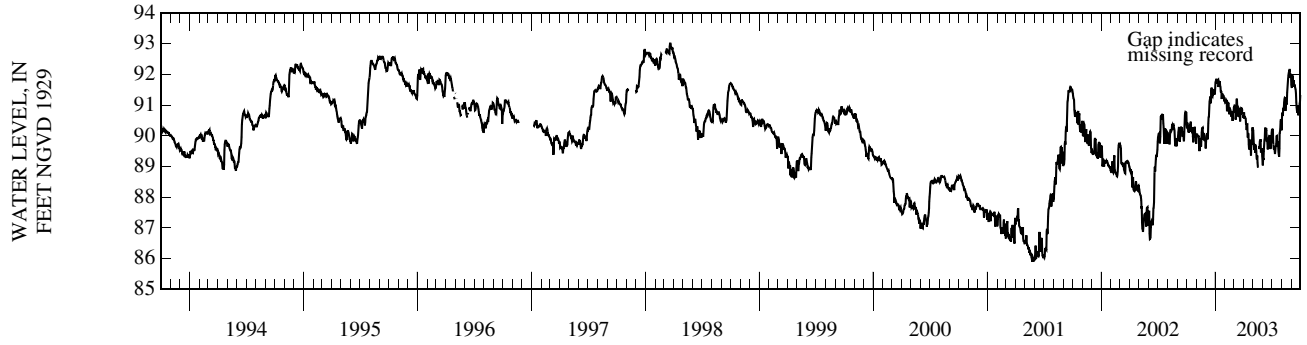
PERIOD OF RECORD.--August 1960 to November 1970 (periodic); December 1970 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 93.23 ft NGVD, Oct. 1, 1979; lowest, 85.90 ft NGVD, May 24, 2001.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90.36	89.94	89.59	91.74	91.10	90.92	90.58	90.17	89.18	90.20	90.18	91.66
2	90.25	90.02	89.79	91.77	91.12	90.95	90.74	90.17	89.04	90.21	90.53	91.59
3	90.43	90.07	89.99	91.83	91.12	90.93	90.74	89.94	89.28	90.21	90.71	91.56
4	90.34	89.99	90.04	91.83	91.10	90.95	90.56	89.68	89.21	90.20	90.76	91.86
5	90.21	89.96	90.03	91.83	91.16	90.92	90.60	89.54	89.50	89.92	90.65	91.94
6	90.15	90.03	90.08	91.82	91.14	90.90	90.61	89.69	89.69	89.72	90.86	91.97
7	90.14	89.97	89.89	91.70	90.80	90.53	90.58	89.71	89.86	89.59	90.89	91.74
8	90.10	90.01	90.02	91.80	90.84	90.66	90.56	89.70	89.91	89.56	90.84	91.69
9	90.16	89.91	90.40	91.82	91.01	90.88	90.37	89.45	90.22	89.67	91.09	91.81
10	90.29	89.59	90.60	91.83	91.05	91.17	90.39	89.59	90.27	89.52	91.19	91.60
11	90.33	89.50	90.63	91.59	91.07	91.21	90.19	89.61	90.20	89.41	91.24	91.68
12	90.32	89.60	90.88	91.69	91.06	90.96	90.36	89.50	90.17	89.54	91.23	91.65
13	90.41	89.84	91.12	91.72	90.82	90.88	90.37	89.29	90.18	89.65	90.81	91.59
14	90.46	89.89	91.17	91.68	90.86	90.63	89.97	89.23	89.86	89.67	91.00	91.55
15	90.16	89.93	91.25	91.78	90.70	90.75	89.95	89.36	89.81	89.75	91.19	91.51
16	90.16	89.65	91.28	91.64	90.88	90.78	90.09	89.12	89.87	89.99	91.23	91.39
17	90.26	89.92	91.06	91.61	90.89	90.89	90.03	88.99	89.71	90.00	91.02	91.10
18	90.18	90.11	91.13	91.45	90.86	90.87	89.73	88.96	89.56	89.66	91.07	90.93
19	90.20	90.23	91.47	91.45	90.78	90.61	89.56	---	89.70	89.76	91.41	90.83
20	90.28	90.26	91.57	91.44	90.77	90.69	89.84	---	89.85	89.81	91.55	90.76
21	89.98	90.27	91.31	91.20	90.63	90.47	89.87	89.67	89.94	89.62	91.71	90.91
22	89.79	89.98	91.32	91.34	90.78	90.68	89.76	89.57	89.97	89.47	91.87	90.98
23	89.86	89.87	91.30	91.38	90.78	90.87	89.83	89.81	90.00	89.38	91.97	90.94
24	90.19	90.07	91.38	91.31	90.71	90.90	89.58	89.86	90.02	89.32	92.04	90.69
25	90.24	90.09	91.44	91.29	90.49	90.89	89.36	89.82	89.81	89.59	92.10	90.67
26	90.27	89.86	91.42	91.33	90.73	90.89	89.79	89.89	89.57	90.08	92.15	90.89
27	90.27	89.91	91.45	91.29	90.75	90.70	89.88	89.46	89.63	90.13	92.15	90.79
28	90.05	89.83	91.43	91.27	90.77	90.85	89.70	89.58	89.74	90.23	91.91	91.05
29	89.94	89.90	91.38	91.25	---	90.87	90.17	89.47	89.82	90.47	92.03	91.10
30	90.00	89.83	91.35	91.12	---	---	90.28	89.59	90.10	90.54	91.89	91.33
31	89.74	---	91.55	91.15	---	90.69	---	89.34	---	90.47	91.99	---
MAX	90.46	90.27	91.57	91.83	91.16	---	90.74	---	90.27	90.54	92.15	91.97

CAL YR 2002 MAX 91.57



POLK COUNTY—Continued

WELL NUMBER.--281532081345002. Loughman Shallow Well near Loughman, FL.

LOCATION.--Lat 28°15'32", long 81°34'50" (1927 North American datum), in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.2, T.26 S., R.27 E., Hydrologic Unit 03090101, 10 ft south of Lake Wilson Road, 0.6 mi east of State Highway 545, and 1.6 mi northwest of Loughman.

AQUIFER.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, nonartesian well, diameter 6 in., depth 32 ft, cased to 29 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 104.29 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of nipple, 2.70 ft above land-surface datum.

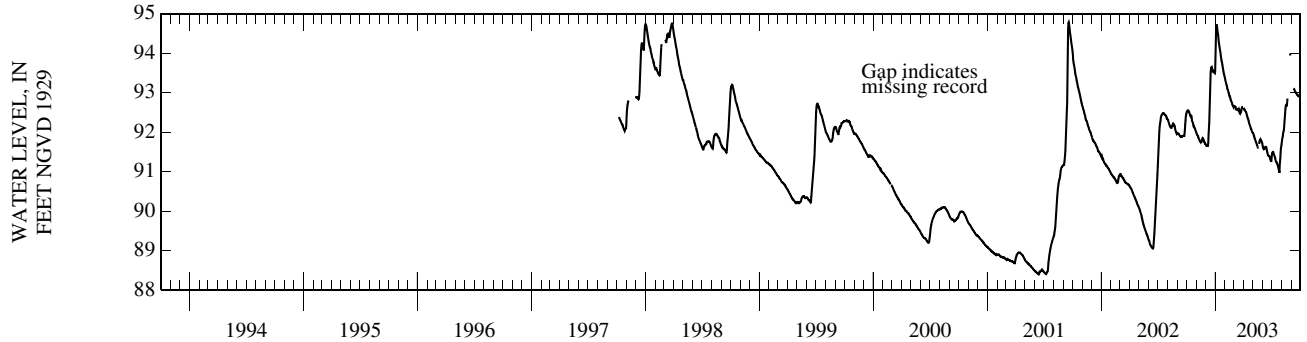
PERIOD OF RECORD.--January 1967 to September 1997 (periodic); October 1997 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 94.78 ft NGVD, Sept. 18, 2001; lowest, 88.40 ft NGVD, June 14, 2001.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92.50	91.98	91.69	93.98	93.36	92.66	92.58	91.98	91.68	91.44	91.69	---
2	92.52	91.96	91.67	94.37	93.31	92.66	92.58	91.97	91.64	91.48	91.75	---
3	92.54	91.94	91.66	94.62	93.28	92.65	92.59	91.95	91.60	91.49	91.82	---
4	92.55	91.92	91.65	94.71	93.25	92.65	92.58	91.91	91.58	91.50	91.85	---
5	92.55	91.91	91.65	94.73	93.21	92.64	92.57	91.90	91.57	91.50	91.90	---
6	92.54	91.90	91.66	94.70	93.19	92.64	92.55	91.87	91.58	91.49	91.97	---
7	92.54	91.87	91.65	94.62	93.16	92.60	92.53	91.84	91.59	91.46	92.00	---
8	92.52	91.86	91.65	94.55	93.10	92.58	92.52	91.83	91.59	91.43	92.04	---
9	92.50	91.84	91.74	94.50	93.08	92.58	92.51	91.80	91.60	91.41	92.13	93.11
10	92.48	91.82	91.95	94.44	93.07	92.59	92.49	91.78	91.62	91.39	92.27	93.10
11	92.46	91.80	92.08	94.35	93.04	92.59	92.46	91.76	91.61	91.36	92.39	93.08
12	92.43	91.78	92.24	94.27	93.00	92.58	92.42	91.74	91.64	91.32	92.49	93.06
13	92.41	91.77	92.49	94.22	92.97	92.58	92.40	91.71	91.60	91.29	92.58	93.04
14	92.42	91.75	92.84	94.17	92.94	92.56	92.36	91.69	91.58	91.26	92.64	93.02
15	92.42	91.74	93.17	94.11	92.92	92.56	92.34	91.66	91.54	91.24	92.68	93.01
16	92.41	91.76	93.40	94.06	92.90	92.55	92.33	91.64	91.50	91.23	92.69	93.00
17	92.34	91.77	93.53	94.03	92.90	92.57	92.31	91.61	91.47	91.23	92.68	92.99
18	92.30	91.77	93.60	93.94	92.85	92.54	92.27	91.58	91.44	91.20	92.65	92.98
19	92.28	91.81	93.64	93.89	92.82	92.51	92.24	---	91.41	91.17	92.77	92.96
20	92.26	91.83	93.65	93.83	92.80	92.53	92.21	---	91.40	91.15	92.85	92.94
21	92.24	91.85	93.60	93.79	92.78	92.50	92.19	91.70	91.40	91.12	---	92.93
22	92.19	91.84	93.59	93.76	92.77	92.48	92.17	91.76	91.40	91.08	---	92.93
23	92.15	91.78	93.55	93.72	92.75	92.50	92.14	91.79	91.39	91.05	---	92.93
24	92.15	91.77	93.56	93.65	92.70	92.52	92.11	91.81	91.37	91.01	---	92.92
25	92.13	91.78	93.56	93.61	92.68	92.56	92.09	91.82	91.34	90.97	---	92.91
26	92.11	91.76	93.53	93.58	92.67	92.60	92.08	91.81	91.32	91.14	---	92.92
27	92.10	91.75	93.53	93.53	92.67	92.61	92.05	91.80	91.29	91.23	---	92.92
28	92.08	91.73	93.52	93.49	92.64	92.63	92.02	91.78	91.27	91.33	93.99	92.92
29	92.05	91.71	93.50	93.46	---	92.63	92.00	91.77	91.25	91.48	93.94	92.92
30	92.03	91.71	93.49	93.43	---	---	91.99	91.75	91.36	91.58	---	92.93
31	92.01	---	93.54	93.39	---	92.58	---	91.72	---	91.64	---	---
MAX	92.55	91.98	93.65	94.73	93.36	---	92.59	---	91.68	91.64	---	---

CAL YR 2002 MAX 93.65



MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2002 TO SEPTEMBER 2003

POLK COUNTY

SITE-ID	STATION NAME	WATER-LEVEL DATE	WATER-LEVEL MSL FEET	WATER-LEVEL DATUM CODE
273851082031501	ROMP 40 AVON PARK WELL NEAR DUETTE FL	05-21-2003	34.07	NGVD29
		09-17-2003	46.61	NGVD29
273851082031502	ROMP 40 HAWTHORN WELL NEAR DUETTE FL	05-21-2003	127.58	NGVD29
		09-17-2003	128.80	NGVD29
273851082031503	ROMP 40 NRSD WELL NEAR DUETTE FL	09-17-2003	135.31	NGVD29
273913081331801	NEUMAN WEGUAR WELL 29 NEAR BEREAH FL	05-20-2003	75.06	NGVD29
		09-16-2003	88.12	NGVD29
274009081452202	MOBIL WELL UF5 HAWTHORN WELL NEAR BOWLING GREEN FL	05-21-2003	72.99	NGVD29
		09-17-2003	82.90	NGVD29
274134081401801	LASTINGER ROAD NEAR FORT MEADE FL	05-20-2003	119.62	NGVD29
		09-17-2003	122.30	NGVD29
274151081513201	GARDINIER WELL NEAR BOWLING GREEN FL	05-21-2003	65.75	NGVD29
		09-17-2003	79.28	NGVD29
274238081415801	MOBIL WELL UF 1 NORTH WELL NEAR FORT MEADE FL	05-20-2003	82.34	NGVD29
		09-17-2003	88.66	NGVD29
274432081493401	J.C.BARNETTE NEAR FORT MEADE FL	05-21-2003	64.37	NGVD29
		09-17-2003	76.93	NGVD29
274440081314801	COLEY WELL AT FROSTPROOF FL	05-19-2003	76.65	NGVD29
		09-17-2003	86.74	NGVD29
274522081303901	ROMP CL-2 WELL NEAR FROSTPROOF FL	05-20-2003	76.63	NGVD29
		09-16-2003	79.68	NGVD29
274522081303902	ROMP CL-2 ARCADIA WELL AT FROSTPROOF FL	05-20-2003	77.30	NGVD29
		09-16-2003	80.03	NGVD29
274522081303903	ROMP CL-2 NRSD WELL NEAR FROSPROOF FL	09-16-2003	83.60	NGVD29
274522081303904	ROMP CL-2 NRSD WELL NEAR FROSTPROOOF FL	09-16-2003	84.00	NGVD29
274545081342501	ROMP CL-3 FLORIDAN WELL NEAR FROSTPROOF FL	05-20-2003	77.90	NGVD29
		09-16-2003	88.68	NGVD29
274545081342502	CL-3 HAWTHORN WELL NEAR FROSTPROOF FL	05-20-2003	77.80	NGVD29
		09-16-2003	88.44	NGVD29
274545081342503	ROMP CL-3 NRSD WELL NEAR FROSTPROOF FL	09-16-2003	120.12	NGVD29
274547081470901	ROMP 45 HAWTHORN WELL AT FORT MEADE FL	05-21-2003	69.59	NGVD29
		09-16-2003	80.92	NGVD29
274547081470902	ROMP 45 SUWANNEE WELL AT FORT MEADE FL	05-21-2003	66.44	NGVD29
		09-16-2003	79.94	NGVD29
274547081470903	ROMP 45 AVON PARK WELL AT FORT MEADE FL	09-17-2003	79.94	NGVD29
274730081333801	ROMP 55 FLORIDAN WELL NEAR BABSON PARK FL	05-20-2003	81.50	NGVD29
		09-16-2003	89.76	NGVD29

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2002 TO SEPTEMBER 2003

POLK COUNTY

SITE-ID	STATION NAME	WATER-LEVEL DATE	WATER-LEVEL MSL FEET	WATER-LEVEL DATUM CODE
274730081333802	ROMP 55 NRSD WELL NEAR BABSON PARK FL	09-16-2003	118.53	NGVD29
274847081414501	140 FL	05-21-2003	127.45	NGVD29
		09-17-2003	133.17	NGVD29
274926081355301	ROMP 44 FLORIDAN WELL NEAR BABSON PARK FL	05-20-2003	84.47	NGVD29
		09-16-2003	95.81	NGVD29
274926081355302	ROMP 44 NRSD WELL NEAR BABSON PARK FL	09-17-2003	127.57	NGVD29
275023081321501	CL-1 FLORIDAN WELL NEAR BABSON PARK FL	05-20-2003	94.56	NGVD29
		09-16-2003	96.29	NGVD29
275040081493001	IMC TEST WELL ON HWY 98 NEAR BARTOW FL	05-21-2003	83.09	NGVD29
		09-15-2003	90.94	NGVD29
275059081562201	164 FL	05-21-2003	86.20	NGVD29
		09-17-2003	94.62	NGVD29
275326081585801	ROMP 60 FLORIDAN WELL AT MULBERRY FL	05-21-2003	66.37	NGVD29
		09-16-2003	79.52	NGVD29
275348081335702	ROMP 57X HAWTHORN WELL AT LAKE WALES FL	09-16-2003	92.70	NGVD29
275403081391301	SR 60 DEEP WELL NEAR LAKE WALES FL	05-20-2003	96.89	NGVD29
		09-16-2003	104.51	NGVD29
275433081460501	210 FL	05-20-2003	89.46	NGVD29
		09-15-2003	99.47	NGVD29
275440081493701	CNTRL FL TRUSS HTRNN AT BARTOW FL	05-19-2003	83.36	NGVD29
		09-15-2003	91.14	NGVD29
275507081353701	ROMP 58 OCALA WELL NEAR LAKE WALES FL	05-20-2003	94.20	NGVD29
		09-16-2003	99.69	NGVD29
275507081353702	ROMP 58 NRSD WELL NEAR LAKE WALES FL	09-16-2003	123.52	NGVD29
275538082031901	KNOX DEEP WELL NEAR MULBERRY FL	05-21-2003	60.39	NGVD29
		09-17-2003	71.21	NGVD29
275545081362701	222 FL	05-20-2003	101.72	NGVD29
		09-16-2003	107.38	NGVD29
275615082022001	WARREN HAWTHORN NEAR MULBERRY FL	05-21-2003	91.75	NGVD29
		09-17-2003	95.43	NGVD29
275628081541201	TILLERY ROAD DEEP NEAR LAKELAND FL	05-19-2003	73.75	NGVD29
		09-17-2003	81.79	NGVD29
275723081465701	FOODTWN DEEP NEAR EAGLE LAKE FL	09-15-2003	100.60	NGVD29
275800081523001	CNTL HAWTHORN AT HIGHLAND CITY FL	05-19-2003	82.97	NGVD29
		09-16-2003	92.76	NGVD29
275824081363201	FREEMAN HAWTHORN NEAR DUNDEE FL	05-20-2003	99.42	NGVD29
		09-16-2003	99.60	NGVD29

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SITE-ID	STATION NAME	WATER-LEVEL DATE	WATER-LEVEL MSL FEET	WATER-LEVEL DATUM CODE
280045081504001	POLK COUNTY LANDFILL NEAR LAKELAND FL	05-19-2003	95.23	NGVD29
		09-15-2003	99.49	NGVD29
280053081572301	ORLEANS ST DEEP AT LAKELAND FL	09-15-2003	88.51	NGVD29
280113081435301	ROMP 73 FLORIDAN WELL AT WINTER HAVEN FL	09-15-2003	118.70	NGVD29
280247082015301	PRECISION TRUSS NEAR LAKELAND FL	05-19-2003	86.20	NGVD29
		09-16-2003	94.90	NGVD29
280338081572901	N FLORIDA AVE D AT LAKELAND FL	05-19-2003	84.84	NGVD29
		09-15-2003	91.88	NGVD29
280420081570101	LAKELAND STADIUM WELL AT LAKELAND FL	05-19-2003	92.61	NGVD29
		09-15-2003	99.41	NGVD29
280455082021501	PLANT CITY QUAD FL	05-21-2003	94.79	NGVD29
		09-18-2003	100.59	NGVD29
280520081575201	CRESENT DR DEEP AT LAKELND FL	05-19-2003	93.41	NGVD29
		09-15-2003	99.98	NGVD29

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The following data were collected from October 2002 to September 2003 as part of a study to understand ground-water flow patterns around Lake Starr. Water levels were measured with an electronic or a steel water-level tape.

SITE-ID	STATION NAME	WATER-LEVEL DATE	WATER-LEVEL MSL FEET	WATER-LEVEL DATUM CODE
275726081354701	LAKE STARR WTS-1 NRSD WELL NEAR LAKE WALES FL	10-17-2002	102.88	NGVD29
		11-20-2002	103.30	NGVD29
		12-16-2002	103.78	NGVD29
		01-21-2003	106.47	NGVD29
		02-19-2003	106.82	NGVD29
		03-28-2003	106.63	NGVD29
		04-29-2003	106.11	NGVD29
		05-30-2003	105.73	NGVD29
		06-27-2003	105.95	NGVD29
		07-29-2003	106.41	NGVD29
		08-25-2003	106.76	NGVD29
		09-23-2003	107.15	NGVD29
275749081354001	LAKE STARR WTS-4 NRSD WELL NEAR LAKE WALES FL	10-17-2002	104.55	NGVD29
		11-20-2002	105.05	NGVD29
		12-16-2002	105.34	NGVD29
		01-21-2003	107.35	NGVD29
		02-19-2003	109.01	NGVD29
		03-28-2003	108.47	NGVD29
		04-29-2003	107.83	NGVD29
		05-30-2003	107.23	NGVD29
		06-27-2003	106.98	NGVD29
		07-29-2003	107.18	NGVD29
		08-25-2003	107.53	NGVD29
		09-23-2003	107.88	NGVD29
275753081350201	LAKE STARR WTS-7 NRSD WELL NEAR LAKE WALES FL	10-17-2002	101.23	NGVD29
		11-20-2002	101.53	NGVD29
		12-16-2002	101.85	NGVD29
		01-21-2003	103.74	NGVD29
		02-19-2003	104.94	NGVD29
		03-28-2003	104.97	NGVD29
		04-29-2003	104.59	NGVD29
		05-30-2003	104.24	NGVD29
		06-27-2003	104.14	NGVD29
		07-29-2003	104.18	NGVD29
		08-25-2003	104.38	NGVD29
		09-23-2003	104.56	NGVD29
275723081344201	LAKE STARR WTS-8 NRSD WELL NEAR LAKE WALES FL	01-21-2003	100.18	NGVD29
		02-19-2003	102.82	NGVD29
		03-28-2003	103.75	NGVD29
		04-29-2003	103.66	NGVD29
		05-30-2003	103.32	NGVD29
		06-27-2003	103.00	NGVD29
		07-29-2003	102.66	NGVD29
		08-25-2003	102.48	NGVD29
		09-23-2003	102.37	NGVD29

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SITE-ID	STATION NAME	WATER-LEVEL DATE	WATER-LEVEL MSL FEET	WATER-LEVEL DATUM CODE
275704081345401	LAKE STARR WTS-9 NRSD WELL NEAR LAKE WALES FL	12-16-2002	97.70	NGVD29
		01-21-2003	98.99	NGVD29
		02-19-2003	101.04	NGVD29
		03-28-2003	102.40	NGVD29
		04-29-2003	102.38	NGVD29
		05-30-2003	101.99	NGVD29
		06-27-2003	101.84	NGVD29
		07-29-2003	101.77	NGVD29
		08-25-2003	101.74	NGVD29
		09-23-2003	101.64	NGVD29
275706081351001	LAKE STARR WTS-15 NRSD WELL NEAR LAKE WALES FL	12-16-2002	98.89	NGVD29
		01-21-2003	100.73	NGVD29
		02-19-2003	101.19	NGVD29
		03-28-2003	101.68	NGVD29
		04-29-2003	101.64	NGVD29
		05-30-2003	101.61	NGVD29
		06-27-2003	101.90	NGVD29
		07-29-2003	102.17	NGVD29
		08-25-2003	102.36	NGVD29
		09-23-2003	102.34	NGVD29
275710081352801	LAKE STARR WTS-21 NRSD WELL NEAR LAKE WALES FL	10-17-2002	99.79	NGVD29
		11-20-2002	100.48	NGVD29
		12-16-2002	101.32	NGVD29
		01-21-2003	102.16	NGVD29
		02-19-2003	102.39	NGVD29
		03-28-2003	102.83	NGVD29
		04-29-2003	102.56	NGVD29
		05-30-2003	102.46	NGVD29
		06-27-2003	103.20	NGVD29
		07-29-2003	103.42	NGVD29
		08-25-2003	103.78	NGVD29
		09-23-2003	103.66	NGVD29
275659081353501	LAKE STARR WTS-22 NRSD WELL NEAR LAKE WALES FL	11-20-2002	102.02	NGVD29
		12-16-2002	102.46	NGVD29
		01-21-2003	104.69	NGVD29
		02-19-2003	105.80	NGVD29
		03-28-2003	106.02	NGVD29
		04-29-2003	105.63	NGVD29
		07-29-2003	105.77	NGVD29
		09-23-2003	106.53	NGVD29
275712081354601	LAKE STARR WTS-23 NRSD WELL NEAR LAKE WALES FL	10-17-2002	102.97	NGVD29
		11-20-2002	103.46	NGVD29
		12-16-2002	104.00	NGVD29
		01-21-2003	106.18	NGVD29
		02-19-2003	107.29	NGVD29
		03-28-2003	107.25	NGVD29
		04-29-2003	106.69	NGVD29
		05-30-2003	106.29	NGVD29
		06-27-2003	106.46	NGVD29
		07-29-2003	106.95	NGVD29
		08-25-2003	107.33	NGVD29
		09-23-2003	107.73	NGVD29

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SITE-ID	STATION NAME	WATER-LEVEL DATE	WATER-LEVEL MSL FEET	WATER-LEVEL DATUM CODE
275659081351201	LAKE STARR WTS-26 NRSD WELL NEAR LAKE WALES FL	10-17-2002	97.17	NGVD29
		11-20-2002	97.85	NGVD29
		12-16-2002	98.36	NGVD29
		01-21-2003	99.77	NGVD29
		02-19-2003	100.53	NGVD29
		03-28-2003	101.18	NGVD29
		04-29-2003	100.96	NGVD29
		05-30-2003	100.76	NGVD29
		06-27-2003	101.10	NGVD29
		07-29-2003	101.39	NGVD29
		08-25-2003	101.67	NGVD29
		09-23-2003	101.32	NGVD29
275732081352402	LAKE STARR 1PNS-25 NRSD WELL NEAR LAKE WALES FL	10-17-2002	100.09	NGVD29
		11-20-2002	100.71	NGVD29
		12-16-2002	101.56	NGVD29
		01-21-2003	102.34	NGVD29
		02-19-2003	102.54	NGVD29
		03-28-2003	103.09	NGVD29
		04-29-2003	102.93	NGVD29
		05-30-2003	102.74	NGVD29
		06-27-2003	103.43	NGVD29
		07-29-2003	103.61	NGVD29
		08-25-2003	103.95	NGVD29
		09-23-2003	103.93	NGVD29
275732081352403	LAKE STARR 1PNS-50 NRSD WELL NEAR LAKE WALES FL	10-17-2002	100.10	NGVD29
		11-20-2002	100.72	NGVD29
		12-16-2002	101.57	NGVD29
		01-21-2003	102.36	NGVD29
		02-19-2003	102.57	NGVD29
		03-28-2003	103.10	NGVD29
		04-29-2003	102.96	NGVD29
		05-30-2003	102.77	NGVD29
		06-27-2003	103.45	NGVD29
		07-29-2003	103.64	NGVD29
		08-25-2003	103.98	NGVD29
		09-23-2003	103.95	NGVD29
275732081352404	LAKE STARR 1PNS-75 NRSD WELL NEAR LAKE WALES FL	10-17-2002	100.11	NGVD29
		11-20-2002	100.73	NGVD29
		12-16-2002	101.55	NGVD29
		01-21-2003	102.38	NGVD29
		02-19-2003	102.57	NGVD29
		03-28-2003	103.12	NGVD29
		04-29-2003	102.96	NGVD29
		05-30-2003	102.77	NGVD29
		06-27-2003	103.46	NGVD29
		07-29-2003	103.66	NGVD29
		08-25-2003	103.96	NGVD29
		09-23-2003	103.98	NGVD29

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SITE-ID	STATION NAME	WATER-LEVEL DATE	WATER-LEVEL MSL FEET	WATER-LEVEL DATUM CODE
275732081352405	LAKE STARR 1PNS-100 ICU WELL NEAR LAKE WALES FL	10-17-2002	100.15	NGVD29
		11-20-2002	100.78	NGVD29
		12-16-2002	101.58	NGVD29
		01-21-2003	102.37	NGVD29
		02-19-2003	102.59	NGVD29
		03-28-2003	103.17	NGVD29
		04-29-2003	103.00	NGVD29
		05-30-2003	102.82	NGVD29
		06-27-2003	103.51	NGVD29
		07-29-2003	103.69	NGVD29
		08-25-2003	104.00	NGVD29
		09-23-2003	104.00	NGVD29
275732081352406	LAKE STARR 1PNS-125 FLORIDAN WELL NR LAKE WALES FL	10-17-2002	98.31	NGVD29
		11-20-2002	100.82	NGVD29
		12-16-2002	102.01	NGVD29
		01-21-2003	101.27	NGVD29
		02-19-2003	102.64	NGVD29
		03-28-2003	103.44	NGVD29
		04-29-2003	101.23	NGVD29
		05-30-2003	100.48	NGVD29
		06-27-2003	102.99	NGVD29
		07-29-2003	103.31	NGVD29
		08-25-2003	104.00	NGVD29
		09-23-2003	100.03	NGVD29
275709081352002	LAKE STARR 2PNS-27 NRSD WELL NEAR LAKE WALES FL	10-17-2002	99.13	NGVD29
		11-20-2002	99.76	NGVD29
		12-16-2002	100.55	NGVD29
		01-21-2003	101.51	NGVD29
		02-19-2003	101.79	NGVD29
		03-28-2003	102.36	NGVD29
		04-29-2003	102.28	NGVD29
		05-30-2003	102.15	NGVD29
		06-27-2003	102.86	NGVD29
		07-29-2003	103.10	NGVD29
		08-25-2003	103.49	NGVD29
		09-23-2003	103.37	NGVD29
275709081352003	LAKE STARR 2PNS-51 NRSD WELL NEAR LAKE WALES FL	10-17-2002	99.09	NGVD29
		11-20-2002	99.70	NGVD29
		12-16-2002	100.46	NGVD29
		01-21-2003	101.53	NGVD29
		02-19-2003	101.81	NGVD29
		03-28-2003	102.41	NGVD29
		04-29-2003	102.21	NGVD29
		05-30-2003	102.09	NGVD29
		06-27-2003	102.79	NGVD29
		07-29-2003	103.03	NGVD29
		08-25-2003	103.42	NGVD29
		09-23-2003	103.28	NGVD29

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SITE-ID	STATION NAME	WATER-LEVEL DATE	WATER-LEVEL MSL FEET	WATER-LEVEL DATUM CODE
275709081352004	LAKE STARR 2PNS-101 NRSD WELL NEAR LAKE WALES FL	10-17-2002	99.04	NGVD29
		11-20-2002	99.67	NGVD29
		12-16-2002	100.42	NGVD29
		01-21-2003	101.48	NGVD29
		02-19-2003	101.82	NGVD29
		03-28-2003	102.36	NGVD29
		04-29-2003	102.17	NGVD29
		05-30-2003	102.04	NGVD29
		06-27-2003	102.75	NGVD29
		07-29-2003	103.00	NGVD29
		08-25-2003	103.37	NGVD29
		09-23-2003	103.22	NGVD29
275709081352005	LAKE STARR 2PNS-156 NRSD WELL NEAR LAKE WALES FL	10-17-2002	98.61	NGVD29
		11-20-2002	99.29	NGVD29
		12-16-2002	100.04	NGVD29
		01-21-2003	101.09	NGVD29
		02-19-2003	101.44	NGVD29
		03-28-2003	102.02	NGVD29
		04-29-2003	101.66	NGVD29
		05-30-2003	101.54	NGVD29
		06-27-2003	102.29	NGVD29
		07-29-2003	102.59	NGVD29
		08-25-2003	102.97	NGVD29
		09-23-2003	102.64	NGVD29
275734081345502	LAKE STARR 3PNS-40 NRSD WELL NEAR LAKE WALES FL	10-17-2002	99.41	NGVD29
		11-20-2002	99.97	NGVD29
		12-16-2002	100.75	NGVD29
		01-21-2003	101.68	NGVD29
		02-19-2003	102.03	NGVD29
		03-28-2003	102.68	NGVD29
		04-29-2003	102.65	NGVD29
		05-30-2003	102.51	NGVD29
		06-27-2003	103.13	NGVD29
		07-29-2003	103.28	NGVD29
		08-25-2003	103.63	NGVD29
		09-23-2003	103.55	NGVD29
275654081350601	NELSON FLORIDAN WELL NEAR LAKE WALES FL	10-17-2002	91.33	NGVD29
		11-20-2002	92.30	NGVD29
		12-16-2002	92.78	NGVD29
		01-21-2003	93.24	NGVD29
		02-19-2003	93.28	NGVD29
		03-28-2003	94.89	NGVD29
		04-29-2003	93.70	NGVD29
		05-30-2003	92.68	NGVD29
		07-29-2003	94.61	NGVD29
		08-25-2003	94.59	NGVD29

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SITE-ID	STATION NAME	WATER-LEVEL DATE	WATER-LEVEL MSL FEET	WATER-LEVEL DATUM CODE
275707081351901	HART FLORIDAN WELL NEAR LAKE WALES FL	10-17-2002	92.82	NGVD29
		11-20-2002	93.96	NGVD29
		12-16-2002	94.77	NGVD29
		01-21-2003	94.87	NGVD29
		02-19-2003	95.43	NGVD29
		03-28-2003	96.48	NGVD29
		04-29-2003	94.57	NGVD29
		05-30-2003	94.67	NGVD29
		06-27-2003	95.99	NGVD29
		07-29-2003	96.47	NGVD29
		08-25-2003	97.02	NGVD29
		09-23-2003	94.22	NGVD29
275708081354501	ESTEVE FLORIDAN WELL NEAR LAKE WALES FL	10-17-2002	98.55	NGVD29
		11-20-2002	102.19	NGVD29
		12-16-2002	103.53	NGVD29
		01-21-2003	101.21	NGVD29
		02-19-2003	104.34	NGVD29
		03-28-2003	104.89	NGVD29
		04-29-2003	100.33	NGVD29
		05-30-2003	100.34	NGVD29
		06-27-2003	104.20	NGVD29
		07-29-2003	104.81	NGVD29
		08-25-2003	105.93	NGVD29
		09-23-2003	102.92	NGVD29
275737081344401	PERRY FLORIDAN WELL NEAR LAKE WALES FL	10-17-2002	91.42	NGVD29
		11-20-2002	92.46	NGVD29
		12-16-2002	93.52	NGVD29
		01-21-2003	93.63	NGVD29
		02-19-2003	94.12	NGVD29
		03-28-2003	94.08	NGVD29
		04-29-2003	94.06	NGVD29
		05-30-2003	92.92	NGVD29
		07-29-2003	95.02	NGVD29
		08-25-2003	95.02	NGVD29
		09-23-2003	89.60	NGVD29
275731081354001	LAKE STARR STUNW NRSD WELL NEAR LAKE WALES FL	10-17-2002	101.39	NGVD29
		11-20-2002	102.02	NGVD29
		12-16-2002	102.87	NGVD29
		01-21-2003	104.31	NGVD29
		02-19-2003	104.63	NGVD29
		03-28-2003	104.81	NGVD29
		04-29-2003	104.16	NGVD29
		05-30-2003	103.96	NGVD29
		06-27-2003	104.66	NGVD29
		07-29-2003	104.92	NGVD29
		08-25-2003	105.29	NGVD29
		09-23-2003	105.26	NGVD29

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SITE-ID	STATION NAME	WATER-LEVEL DATE	WATER-LEVEL MSL FEET	WATER-LEVEL DATUM CODE
275729081353701	LAKE STARR STLNW NRSD WELL NEAR LAKE WALES FL	10-17-2002	100.88	NGVD29
		11-20-2002	101.57	NGVD29
		12-16-2002	102.44	NGVD29
		01-21-2003	103.53	NGVD29
		02-19-2003	103.83	NGVD29
		03-28-2003	104.19	NGVD29
		04-29-2003	103.59	NGVD29
		05-30-2003	103.44	NGVD29
		06-27-2003	104.18	NGVD29
		07-29-2003	104.40	NGVD29
		08-25-2003	104.77	NGVD29
		09-23-2003	104.66	NGVD29
275736081352301	LAKE STARR STUN NRSD WELL NEAR LAKE WALES FL	10-17-2002	100.66	NGVD29
		11-20-2002	101.25	NGVD29
		12-16-2002	102.01	NGVD29
		01-21-2003	103.24	NGVD29
		02-19-2003	103.37	NGVD29
		03-28-2003	103.67	NGVD29
		04-29-2003	103.51	NGVD29
		05-30-2003	103.29	NGVD29
		06-27-2003	103.90	NGVD29
		07-29-2003	104.08	NGVD29
		08-25-2003	104.37	NGVD29
		09-23-2003	104.56	NGVD29
275739081350401	LAKE STARR STLNE NRSD WELL NEAR LAKE WALES FL	10-17-2002	99.50	NGVD29
		11-20-2002	100.07	NGVD29
		12-16-2002	100.84	NGVD29
		01-21-2003	101.74	NGVD29
		02-19-2003	102.13	NGVD29
		03-28-2003	102.69	NGVD29
		04-29-2003	102.40	NGVD29
		06-27-2003	103.07	NGVD29
		07-29-2003	103.26	NGVD29
		09-23-2003	103.53	NGVD29
275737081345101	LAKE STARR STUE NRSD WELL NEAR LAKE WALES FL	10-17-2002	99.77	NGVD29
		11-20-2002	100.13	NGVD29
		12-16-2002	100.42	NGVD29
		01-21-2003	101.77	NGVD29
		02-19-2003	103.04	NGVD29
275717081345801	LAKE STARR STUSE NRSD WELL NEAR LAKE WALES FL	01-21-2003	100.59	NGVD29
		02-19-2003	101.43	NGVD29
		03-28-2003	101.96	NGVD29
		04-29-2003	101.80	NGVD29
		05-30-2003	101.69	NGVD29
		06-27-2003	101.92	NGVD29
		07-29-2003	102.09	NGVD29
		08-25-2003	102.26	NGVD29
		09-23-2003	102.14	NGVD29

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2002 TO SEPTEMBER 2003

POLK COUNTY

SITE-ID	STATION NAME	WATER-LEVEL DATE	WATER-LEVEL MSL FEET	WATER-LEVEL DATUM CODE
275721081350301	LAKE STARR STLSE NRSD WELL NEAR LAKE WALES FL	10-17-2002	99.18	NGVD29
		11-20-2002	99.80	NGVD29
		12-16-2002	100.52	NGVD29
		01-21-2003	101.42	NGVD29
		02-19-2003	101.72	NGVD29
		03-28-2003	102.45	NGVD29
		04-29-2003	102.33	NGVD29
		05-30-2003	102.18	NGVD29
		06-27-2003	102.88	NGVD29
		07-29-2003	103.10	NGVD29
		08-25-2003	103.49	NGVD29
		09-23-2003	103.34	NGVD29
275704081351901	LAKE STARR STUS NRSD WELL NEAR LAKE WALES FL	10-17-2002	98.42	NGVD29
		11-20-2002	99.06	NGVD29
		12-16-2002	99.62	NGVD29
		01-21-2003	101.24	NGVD29
		02-19-2003	101.63	NGVD29
		03-28-2003	102.04	NGVD29
		04-29-2003	101.82	NGVD29
		05-30-2003	101.72	NGVD29
		06-27-2003	102.22	NGVD29
		07-29-2003	102.52	NGVD29
		08-25-2003	102.83	NGVD29
		09-23-2003	102.72	NGVD29
275708081352001	LAKE STARR STLS NRSD WELL NEAR LAKE WALES FL	10-17-2002	99.10	NGVD29
		11-20-2002	99.70	NGVD29
		12-16-2002	100.51	NGVD29
		01-21-2003	101.61	NGVD29
		02-19-2003	101.88	NGVD29
		03-28-2003	102.45	NGVD29
		04-29-2003	102.21	NGVD29
		05-30-2003	102.10	NGVD29
		06-27-2003	102.82	NGVD29
		07-29-2003	103.06	NGVD29
		08-25-2003	103.40	NGVD29
		09-23-2003	103.31	NGVD29
275719081353401	LAKE STARR STLW NRSD WELL NEAR LAKE WALES FL	10-17-2002	99.89	NGVD29
		11-20-2002	100.53	NGVD29
		12-16-2002	101.36	NGVD29
		01-21-2003	102.22	NGVD29
		02-19-2003	102.47	NGVD29
		03-28-2003	103.01	NGVD29
		04-29-2003	102.69	NGVD29
		05-30-2003	102.59	NGVD29
		06-27-2003	103.33	NGVD29
		07-29-2003	103.54	NGVD29
		08-25-2003	103.94	NGVD29
		09-23-2003	103.82	NGVD29

KEY TO SITE LOCATIONS ON FIGURE 21

SARASOTA COUNTY

INDEX NUMBER	SITE NUMBER	INDEX NUMBER	SITE NUMBER
1	270137082235301	12	270959082203003
2	270808082152601	13	271001082190701
2	270808082152603	14	271017082123101
2	270808082152604	14	271017082123102
3	270816082192601	14	271017082123103
3	270816082192602	15	271100082172701
3	270816082192603	15	271100082172702
4	270835082194101	15	271100082172703
5	270852082164801	16	271134082092201
6	270901082193101	16	271134082092202
6	270901082193102	17	271207082154301
6	270901082193103	18	271227082084801
6	270901082193104	19	271601082330501
7	270926082155101	20	271619082240201
7	270926082155103	21	271938082251801
8	270928082172601	22	272020082194801
9	270932082195201	23	272127082323801
10	270933082203601	24	272129082330202
11	270952082095901	25	272316082302601
12	270959082203001	26	272317082290502
12	270959082203002		

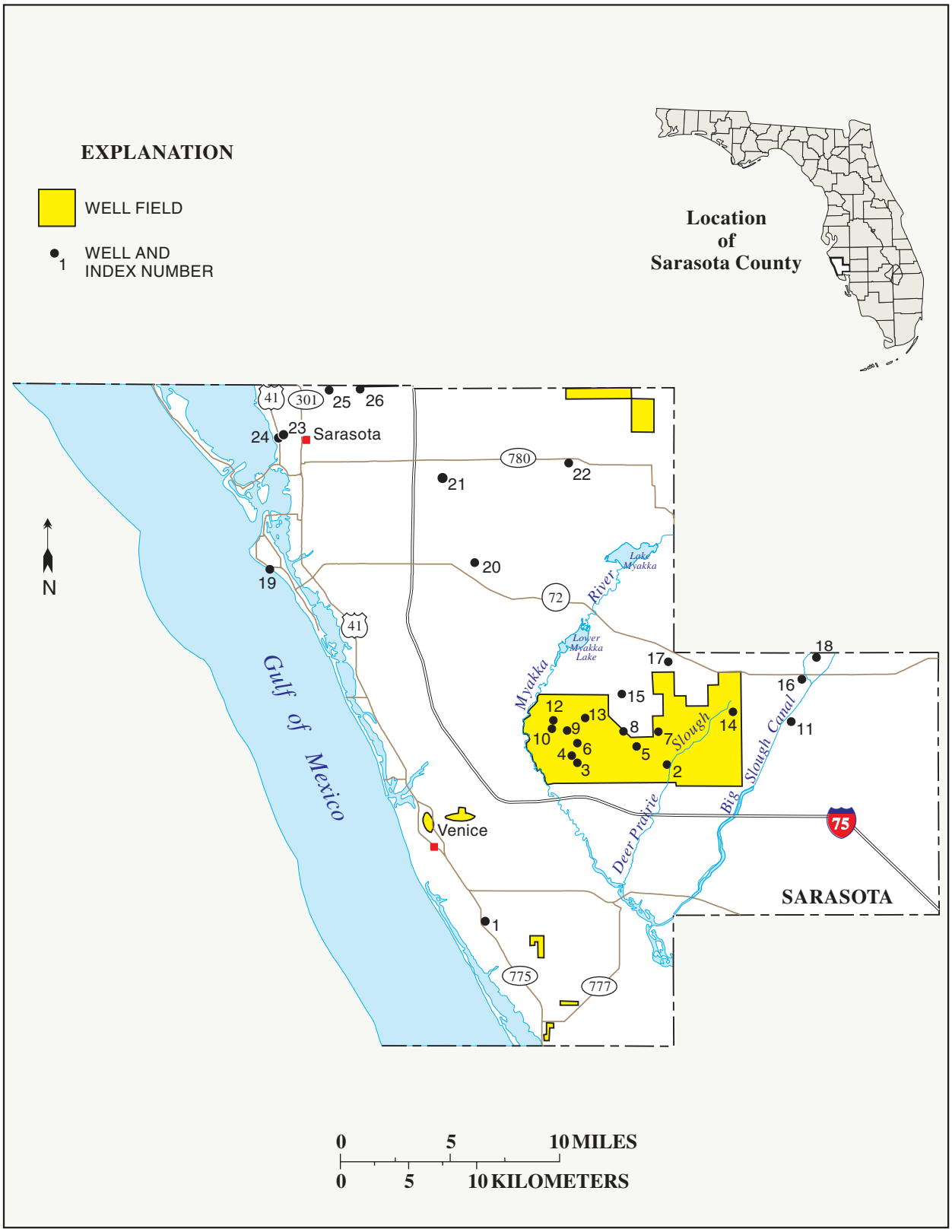


Figure 21.-- Location of wells in Sarasota County.

SARASOTA COUNTY

WELL NUMBER.--270137082235301. Manasota Deep Well 14 near Englewood, FL.

LOCATION.--Lat 27°01'37", long 82°23'53" (1927 North American datum), in NW¼SW¼ sec.3, T.40 S., R.19 E., Hydrologic Unit 03100201, 100 ft west of State Highway 775, and 5.0 mi northwest of Englewood.

AQUIFER.--Hawthorn formation of Miocene Age, Geologic Unit 122HTRN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 305 ft, cased to 263 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

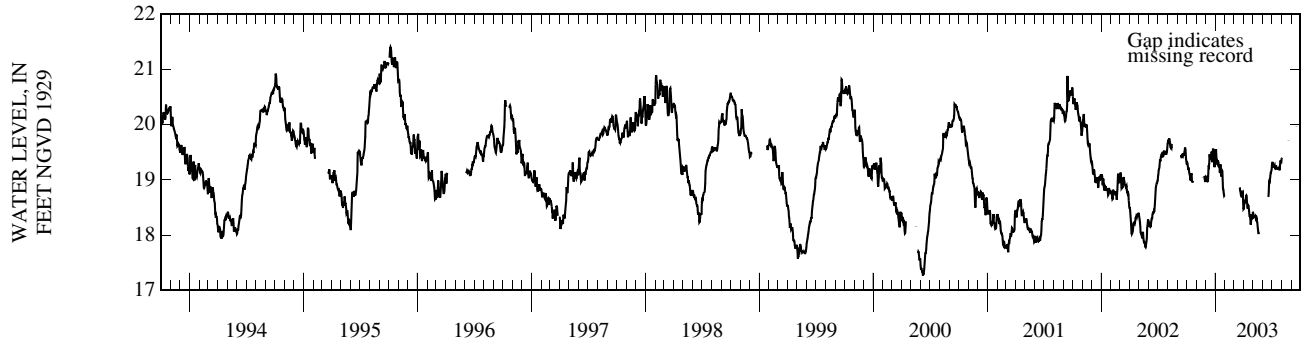
DATUM.--Land-surface datum is 15.92 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 10.60 ft above land-surface datum.

PERIOD OF RECORD.--November 1966 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 22.70 ft NGVD, Nov. 30, 1971; lowest, 17.27 ft NGVD, June 8, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.29	---	19.05	19.55	---	---	18.47	18.42	---	19.27	19.38	---
2	19.29	---	19.04	19.53	---	---	18.48	18.40	---	19.31	19.39	---
3	19.30	---	19.02	19.53	---	---	18.53	18.35	---	19.31	19.40	---
4	19.27	---	19.01	19.41	---	---	18.60	18.34	---	19.27	---	---
5	19.23	---	19.05	19.35	---	---	18.59	18.34	---	19.26	---	---
6	19.18	---	19.07	19.35	---	---	18.59	18.34	---	19.25	---	---
7	19.22	---	18.97	19.29	---	---	18.60	18.32	---	19.24	---	---
8	19.17	---	18.96	19.28	---	---	18.62	18.35	---	19.22	---	---
9	19.13	---	19.13	19.34	---	---	18.71	18.33	---	19.25	---	---
10	19.11	---	19.26	19.34	---	---	18.72	18.35	---	19.26	---	---
11	19.08	---	19.25	19.32	---	---	18.70	18.34	---	19.21	---	---
12	19.03	---	19.30	19.23	---	---	18.60	18.29	---	19.20	---	---
13	18.99	---	19.46	19.28	---	---	18.53	18.30	---	19.20	---	---
14	19.06	---	19.42	19.25	---	---	18.48	18.25	---	19.25	---	---
15	19.08	---	19.36	19.13	---	---	18.51	18.24	---	19.25	---	---
16	19.12	---	19.38	19.18	---	---	18.54	18.18	---	19.23	---	---
17	19.04	---	19.39	19.28	---	---	18.53	18.11	---	19.21	---	---
18	18.96	---	19.39	19.13	---	---	18.49	18.07	---	19.21	---	19.96
19	18.98	---	19.43	19.08	---	18.85	18.44	18.02	---	---	---	---
20	18.95	---	19.51	19.06	---	18.85	18.37	18.05	18.69	---	---	---
21	18.98	19.05	19.36	19.16	---	18.81	18.33	---	18.78	---	---	---
22	---	---	19.32	19.17	---	18.79	18.35	---	18.95	19.21	19.71	---
23	---	---	19.38	19.16	---	18.74	18.29	---	18.98	19.21	---	---
24	---	---	19.55	19.02	---	18.74	18.19	---	18.97	19.22	---	---
25	---	---	19.55	18.83	---	18.70	18.22	---	19.02	19.17	---	---
26	---	19.07	19.41	18.84	---	18.70	18.38	---	19.07	19.19	---	---
27	---	19.05	19.35	18.80	---	18.78	18.31	---	19.13	19.23	---	---
28	---	19.01	19.29	18.75	---	18.80	18.30	---	19.13	19.31	---	---
29	---	18.96	19.23	18.71	---	18.76	18.31	---	19.15	19.35	---	---
30	---	19.02	19.30	18.72	---	18.77	18.29	---	19.19	19.32	---	---
31	---	---	19.48	---	---	18.58	---	---	---	19.30	---	---
MAX	---	---	19.55	---	---	---	18.72	---	---	---	---	---



SARASOTA COUNTY—Continued

WELL NUMBER.--270808082152601. Mabry Carlton CW-6 (14-FS) SWNN Well near Sarasota, FL.

LOCATION.--Lat 27°08'08", long 82°15'26" (1927 North American datum), in NE $^1/_4$ NE $^1/_4$ sec.36, T.38 S., R.20 E., Hydrologic Unit 03100102, 5.1 mi south of State Highway 72, and 22 mi southeast of Sarasota.

AQUIFER.--Suwannee limestone of Oligocene Age, Geologic Unit 123SWNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 550 ft, cased to 500 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

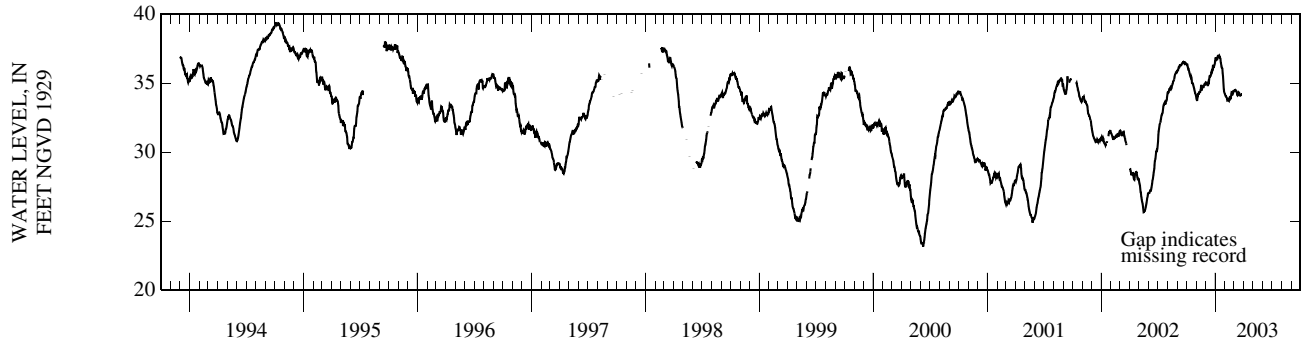
DATUM.--Land-surface datum is 25.26 ft above National Geodetic Vertical Datum of 1929 (levels by Sarasota County). Measuring point: Top of recorder shelter floor, 18.71 ft above land-surface datum.

PERIOD OF RECORD.--September 1987 to September 1993 (periodic); November 1993 to March 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 39.34 ft NGVD, Oct. 3, 11, 1994; lowest, 23.22 ft NGVD, June 8, 9, 2000.

ELEVATION ABOVE NGVD 1929, FEET
PERIOD OCTOBER 2002 TO MARCH 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36.33	33.89	35.06	36.80	34.20	34.44	---	---	---	---	---	---
2	36.32	33.83	35.03	36.80	34.12	34.45	---	---	---	---	---	---
3	36.33	33.71	35.02	36.78	34.06	34.46	---	---	---	---	---	---
4	36.21	33.88	34.96	36.71	34.05	34.46	---	---	---	---	---	---
5	36.12	34.12	34.99	36.75	34.01	34.50	---	---	---	---	---	---
6	36.01	34.23	34.94	36.72	33.96	34.51	---	---	---	---	---	---
7	36.02	34.19	34.86	36.72	33.88	34.50	---	---	---	---	---	---
8	35.94	34.26	34.79	36.89	33.75	34.44	---	---	---	---	---	---
9	35.81	34.29	35.00	36.97	33.76	34.41	---	---	---	---	---	---
10	35.72	34.27	35.12	36.98	33.81	34.40	---	---	---	---	---	---
11	35.64	34.34	35.09	36.92	33.77	34.29	---	---	---	---	---	---
12	35.54	34.34	35.30	36.81	33.73	34.14	---	---	---	---	---	---
13	35.46	34.35	35.50	36.91	33.71	34.11	---	---	---	---	---	---
14	35.41	34.47	35.50	36.96	33.84	34.14	---	---	---	---	---	---
15	35.49	34.54	35.48	36.87	33.94	34.18	---	---	---	---	---	---
16	35.43	34.81	35.51	36.83	33.98	34.21	---	---	---	---	---	---
17	35.20	34.81	35.56	36.78	33.96	34.33	---	---	---	---	---	---
18	35.02	34.46	35.62	36.51	33.86	34.30	---	---	---	---	---	---
19	34.99	34.62	35.76	36.39	33.90	34.13	---	---	---	---	---	---
20	34.97	34.75	35.84	36.26	34.01	34.12	---	---	---	---	---	---
21	34.97	34.77	35.78	36.14	34.22	34.12	---	---	---	---	---	---
22	34.86	34.77	35.85	36.10	34.34	34.11	---	---	---	---	---	---
23	34.79	34.65	35.99	36.06	34.32	34.14	---	---	---	---	---	---
24	34.69	34.73	36.26	35.73	34.12	34.18	---	---	---	---	---	---
25	34.59	34.80	36.26	35.51	34.20	34.17	---	---	---	---	---	---
26	34.48	34.89	36.14	35.34	34.34	---	---	---	---	---	---	---
27	34.39	34.92	36.20	34.96	34.38	---	---	---	---	---	---	---
28	34.28	34.92	36.21	34.57	34.36	---	---	---	---	---	---	---
29	34.23	34.91	36.29	34.39	---	---	---	---	---	---	---	---
30	34.15	35.02	36.39	34.31	---	---	---	---	---	---	---	---
31	34.02	---	36.70	34.25	---	---	---	---	---	---	---	---
MAX	36.33	35.02	36.70	36.98	34.38	---	---	---	---	---	---	---



SARASOTA COUNTY—Continued

WELL NUMBER.--270808082152603. Mabry Carlton CW-6 (14-ES) HTRN Well near Sarasota, FL.

LOCATION.--Lat 27°08'08", long 82°15'26" (1927 North American datum), in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.36, T.38 S., R.20 E., Hydrologic Unit 03100102, 5.1 mi south of State Highway 72, and 22 mi southeast of Sarasota.

AQUIFER.--Hawthorn formation of Miocene Age, Geologic Unit 122HTRN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 14 in., depth 210 ft, cased to 41 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

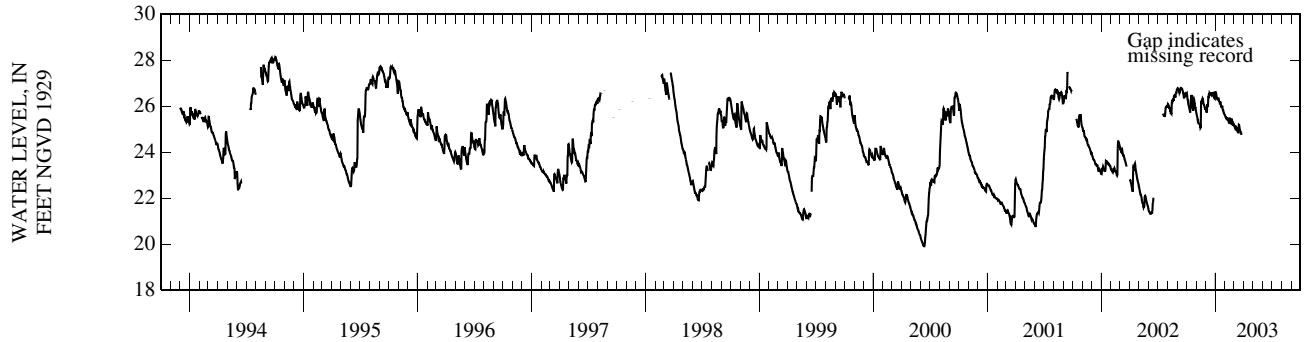
DATUM.--Land-surface datum is 25.26 ft above National Geodetic Vertical Datum of 1929 (levels by Sarasota County). Measuring point: Top of recorder shelter floor, 5.61 ft above land-surface datum.

PERIOD OF RECORD.--December 1993 to March 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 28.14 ft NGVD, Oct. 2, 1994; lowest, 19.92 ft NGVD, June 11, 12, 2000.

ELEVATION ABOVE NGVD 1929, FEET
PERIOD OCTOBER 2002 TO MARCH 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.49	25.68	25.89	26.64	25.60	25.20	---	---	---	---	---	---
2	26.52	25.63	25.83	26.59	25.55	25.18	---	---	---	---	---	---
3	26.39	25.55	25.79	26.56	25.52	25.12	---	---	---	---	---	---
4	26.27	25.51	25.72	26.45	25.52	25.12	---	---	---	---	---	---
5	26.25	25.40	25.81	26.40	25.46	25.06	---	---	---	---	---	---
6	26.10	25.43	26.08	26.36	25.46	25.04	---	---	---	---	---	---
7	26.05	25.30	26.03	26.30	25.47	25.00	---	---	---	---	---	---
8	25.99	25.25	25.98	26.30	25.42	24.95	---	---	---	---	---	---
9	25.93	25.24	26.37	26.32	25.43	25.03	---	---	---	---	---	---
10	25.87	25.22	26.44	26.30	25.46	25.06	---	---	---	---	---	---
11	25.79	---	26.41	26.32	25.46	25.01	---	---	---	---	---	---
12	25.71	25.14	26.45	26.24	25.34	24.94	---	---	---	---	---	---
13	26.10	25.17	26.58	26.22	25.28	24.89	---	---	---	---	---	---
14	26.26	25.05	26.56	26.20	25.27	24.87	---	---	---	---	---	---
15	26.34	25.08	26.53	26.13	25.27	24.86	---	---	---	---	---	---
16	26.49	26.16	26.53	26.14	25.44	24.86	---	---	---	---	---	---
17	26.20	26.20	26.50	26.20	25.50	25.19	---	---	---	---	---	---
18	26.06	26.15	26.49	26.06	25.36	25.18	---	---	---	---	---	---
19	25.98	26.18	26.48	25.98	25.28	25.06	---	---	---	---	---	---
20	25.91	26.26	26.60	25.97	25.26	24.99	---	---	---	---	---	---
21	25.87	26.33	26.56	25.99	25.29	24.95	---	---	---	---	---	---
22	25.80	26.30	26.55	25.99	25.42	24.90	---	---	---	---	---	---
23	26.30	26.14	26.52	25.99	25.42	24.85	---	---	---	---	---	---
24	26.34	26.09	26.56	25.85	25.21	24.85	---	---	---	---	---	---
25	26.29	26.07	26.57	25.83	25.19	24.75	---	---	---	---	---	---
26	26.13	26.03	26.44	25.83	25.18	---	---	---	---	---	---	---
27	26.10	26.00	26.40	25.77	25.18	---	---	---	---	---	---	---
28	25.93	25.94	26.37	25.70	25.23	---	---	---	---	---	---	---
29	25.93	25.88	26.33	25.68	---	---	---	---	---	---	---	---
30	25.83	25.88	26.32	25.65	---	---	---	---	---	---	---	---
31	25.76	---	26.55	25.62	---	---	---	---	---	---	---	---
MAX	26.52	---	26.60	26.64	25.60	---	---	---	---	---	---	---



SARASOTA COUNTY—Continued

WELL NUMBER.--270808082152604. Mabry Carlton CW-6 (14S) NRSD Well near Sarasota, FL.

LOCATION.--Lat 27°08'08", long 82°15'26" (1927 North American datum), in NE ¼ NE ¼ sec.36, T.38 S., R.20 E., Hydrologic Unit 03100102, 5.1 mi south of State Highway 72, and 22 mi southeast of Sarasota.

AQUIFER.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit 112NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 37 ft, cased to 5 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

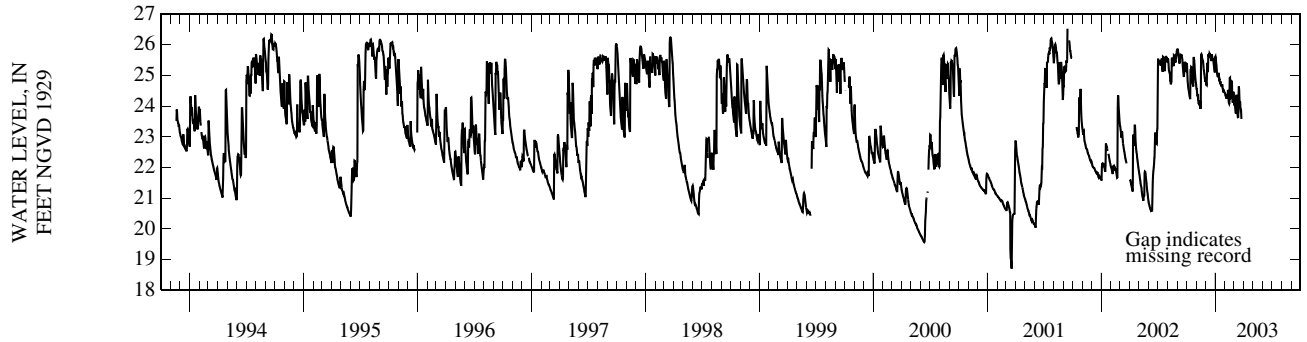
DATUM.--Land-surface datum is 25.26 ft above National Geodetic Vertical Datum of 1929 (levels by Sarasota County). Measuring point: Top of recorder shelter floor, 2.89 ft above land-surface datum.

PERIOD OF RECORD.--November 1993 to March 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 26.52 ft NGVD, Sept. 14, 2001; lowest, 18.71 ft NGVD, Mar. 19, 2001.

ELEVATION ABOVE NGVD 1929, FEET
PERIOD OCTOBER 2002 TO MARCH 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.38	24.57	24.82	25.61	24.41	24.25	---	---	---	---	---	---
2	25.37	24.56	24.76	25.52	24.37	24.16	---	---	---	---	---	---
3	25.07	24.43	24.69	25.43	24.33	24.02	---	---	---	---	---	---
4	24.82	24.35	24.68	25.33	24.36	24.16	---	---	---	---	---	---
5	24.72	24.32	25.08	25.19	24.35	23.95	---	---	---	---	---	---
6	24.59	24.39	25.41	25.10	24.25	23.86	---	---	---	---	---	---
7	24.53	24.19	25.29	25.03	24.32	23.80	---	---	---	---	---	---
8	24.47	24.10	25.11	24.98	24.31	23.76	---	---	---	---	---	---
9	24.39	24.10	25.67	24.98	24.35	24.34	---	---	---	---	---	---
10	24.33	24.06	25.68	24.95	24.53	24.34	---	---	---	---	---	---
11	24.28	24.04	25.62	25.09	24.47	24.02	---	---	---	---	---	---
12	24.23	24.15	25.59	24.94	24.19	23.81	---	---	---	---	---	---
13	25.18	24.15	25.72	24.87	24.11	23.73	---	---	---	---	---	---
14	25.19	23.91	25.70	24.88	24.08	23.64	---	---	---	---	---	---
15	25.28	24.01	25.66	24.79	24.10	23.61	---	---	---	---	---	---
16	25.27	25.68	25.62	24.77	24.92	24.34	---	---	---	---	---	---
17	25.06	25.70	25.57	24.81	24.93	24.64	---	---	---	---	---	---
18	24.89	25.66	25.53	24.72	24.56	24.54	---	---	---	---	---	---
19	24.81	25.59	25.47	24.67	24.35	24.21	---	---	---	---	---	---
20	24.74	25.55	25.68	24.67	24.27	24.04	---	---	---	---	---	---
21	24.71	25.49	25.66	24.66	24.28	24.15	---	---	---	---	---	---
22	24.64	25.47	25.59	24.68	24.81	23.94	---	---	---	---	---	---
23	25.57	25.37	25.54	24.71	24.80	23.84	---	---	---	---	---	---
24	25.57	25.22	25.49	24.57	24.29	23.85	---	---	---	---	---	---
25	25.49	25.15	25.56	24.54	24.15	23.58	---	---	---	---	---	---
26	25.35	25.07	25.40	24.56	24.11	---	---	---	---	---	---	---
27	25.14	25.03	25.33	24.51	24.44	---	---	---	---	---	---	---
28	25.01	24.92	25.25	24.44	24.44	---	---	---	---	---	---	---
29	24.86	24.85	25.16	24.47	---	---	---	---	---	---	---	---
30	24.77	24.79	25.10	24.45	---	---	---	---	---	---	---	---
31	24.70	---	25.59	24.44	---	---	---	---	---	---	---	---
MAX	25.57	25.70	25.72	25.61	24.93	---	---	---	---	---	---	---



SARASOTA COUNTY—Continued

WELL NUMBER.--270816082192601. Mabry Carlton CW-1 (3F) SWNN Well near Sarasota, FL.

LOCATION.--Lat 27°08'16", long 82°19'26" (1927 North American datum), in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.29, T.38 S., R.20 E., Hydrologic Unit 03100102, 7.2 mi south of State Highway 72, and 19 mi southeast of Sarasota.

AQUIFER.--Suwannee limestone of Oligocene Age, Geologic Unit 123SWNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 554 ft, cased to 500 ft.

INSTRUMENTATION.--Water-stage and tipping bucket raingage recorders--60-minute interval.

DATUM.--Land-surface datum is 20.77 ft above National Geodetic Vertical Datum of 1929 (levels by Sarasota County). Measuring point: Top of recorder shelter floor, 18.92 ft above land-surface datum.

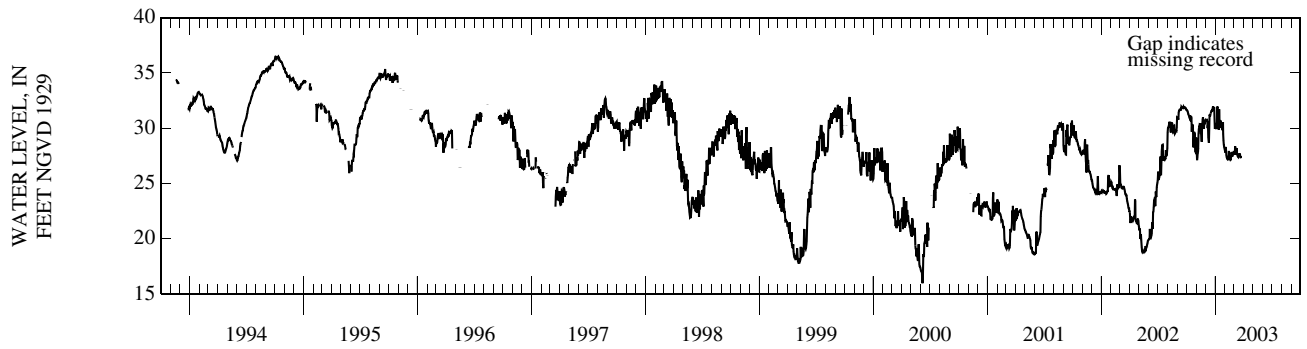
PERIOD OF RECORD.--May 1990 to September 1993 (periodic); November 1993 to March 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 36.48 ft NGVD, Oct. 3, 1994; lowest, 15.98 ft NGVD, June 6, 2000.

ELEVATION ABOVE NGVD 1929, FEET
PERIOD OCTOBER 2002 TO MARCH 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31.67	29.15	30.78	30.19	27.99	27.93	---	---	---	---	---	---
2	31.63	27.81	30.73	30.47	27.79	27.78	---	---	---	---	---	---
3	31.60	27.11	30.71	30.22	28.31	27.73	---	---	---	---	---	---
4	31.54	27.39	30.72	30.01	28.03	27.76	---	---	---	---	---	---
5	31.41	27.75	30.75	30.02	27.55	28.36	---	---	---	---	---	---
6	31.28	27.88	30.65	30.33	27.38	28.12	---	---	---	---	---	---
7	31.24	28.15	30.01	31.91	27.38	27.84	---	---	---	---	---	---
8	31.17	29.48	30.28	31.91	27.21	27.74	---	---	---	---	---	---
9	31.04	29.90	29.16	30.33	27.18	27.60	---	---	---	---	---	---
10	30.95	30.08	28.95	30.07	27.23	28.19	---	---	---	---	---	---
11	30.89	30.24	28.67	29.98	27.21	27.79	---	---	---	---	---	---
12	31.17	30.18	30.35	29.86	27.29	27.65	---	---	---	---	---	---
13	30.96	30.25	31.24	31.71	27.95	27.50	---	---	---	---	---	---
14	30.65	30.42	31.15	30.56	27.30	27.47	---	---	---	---	---	---
15	31.06	29.66	31.15	30.02	27.28	27.38	---	---	---	---	---	---
16	30.88	29.69	31.29	30.34	27.21	27.35	---	---	---	---	---	---
17	29.67	29.30	31.34	30.65	27.17	27.44	---	---	---	---	---	---
18	30.10	28.78	31.41	30.63	27.12	27.55	---	---	---	---	---	---
19	30.30	29.98	31.57	30.41	27.15	27.73	---	---	---	---	---	---
20	30.29	30.34	31.60	30.37	27.31	27.58	---	---	---	---	---	---
21	30.24	30.80	31.57	30.45	27.71	27.54	---	---	---	---	---	---
22	28.78	30.99	31.60	30.20	27.85	27.41	---	---	---	---	---	---
23	28.27	30.61	31.78	29.94	27.70	27.39	---	---	---	---	---	---
24	28.97	30.42	31.92	29.82	27.43	27.43	---	---	---	---	---	---
25	29.67	29.95	31.92	30.56	27.51	27.44	---	---	---	---	---	---
26	29.57	30.49	31.90	29.48	27.70	---	---	---	---	---	---	---
27	29.48	30.61	31.82	28.89	27.72	---	---	---	---	---	---	---
28	27.95	30.64	31.90	28.53	27.71	---	---	---	---	---	---	---
29	27.89	30.58	31.04	28.32	---	---	---	---	---	---	---	---
30	27.82	30.73	29.95	28.20	---	---	---	---	---	---	---	---
31	27.87	---	30.04	28.07	---	---	---	---	---	---	---	---
MAX	31.67	30.99	31.92	31.91	28.31	---	---	---	---	---	---	---
*PREC	---	4.34	4.46	0.10	0.51	---	---	---	---	---	---	---

CAL YR 2002 MAX 31.94



SARASOTA COUNTY—Continued

WELL NUMBER.--270816082192602. Mabry Carlton CW-1 (3E) HTRN Well near Sarasota, FL.

LOCATION.--Lat 27°08'16", long 82°19'26" (1927 North American datum), in SW ¼ SE ¼ sec.29, T.38 S., R.20 E., Hydrologic Unit 03100102, 7.2 mi south of State Highway 72, and 19 mi southeast of Sarasota.

AQUIFER.--Hawthorn formation of Miocene Age, Geologic Unit 112HTRN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 8 in., depth 230 ft, cased to 65 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

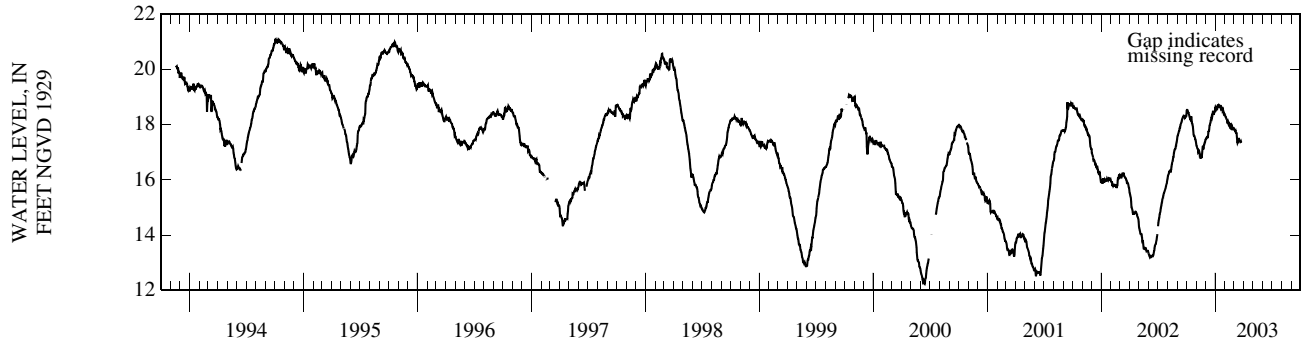
DATUM.--Land-surface datum is 20.77 ft above National Geodetic Vertical Datum of 1929 (levels by Sarasota County). Measuring point: Top of recorder shelter floor, 2.87 ft above land-surface datum.

PERIOD OF RECORD.--September 1987 to September 1993 (periodic); November 1993 to March 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 21.09 ft NGVD, Oct. 3, 1994; lowest, 12.23 ft NGVD, June 13, 2000.

ELEVATION ABOVE NGVD 1929, FEET
PERIOD OCTOBER 2002 TO MARCH 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.50	17.24	17.47	18.63	18.34	17.83	---	---	---	---	---	---
2	18.53	17.22	17.49	18.60	18.29	17.84	---	---	---	---	---	---
3	18.53	17.18	17.49	18.61	18.27	17.82	---	---	---	---	---	---
4	18.52	17.13	17.52	18.55	18.26	17.81	---	---	---	---	---	---
5	18.48	17.12	17.55	18.57	18.22	17.78	---	---	---	---	---	---
6	18.42	17.10	17.56	18.59	18.19	17.79	---	---	---	---	---	---
7	18.42	16.98	17.51	18.58	18.18	17.76	---	---	---	---	---	---
8	18.38	16.99	17.57	18.66	18.07	17.71	---	---	---	---	---	---
9	18.34	17.04	17.69	18.70	18.07	17.70	---	---	---	---	---	---
10	18.29	17.05	17.77	18.70	18.10	17.69	---	---	---	---	---	---
11	18.24	17.01	17.74	18.66	18.05	17.53	---	---	---	---	---	---
12	18.20	16.88	17.83	18.62	18.01	17.39	---	---	---	---	---	---
13	18.18	16.89	17.97	18.69	17.98	17.33	---	---	---	---	---	---
14	18.21	16.80	17.99	18.67	18.00	17.36	---	---	---	---	---	---
15	18.30	16.77	18.02	18.60	18.04	17.41	---	---	---	---	---	---
16	18.25	16.86	18.08	18.65	18.02	17.43	---	---	---	---	---	---
17	18.10	16.86	18.13	18.71	17.99	17.51	---	---	---	---	---	---
18	18.05	16.79	18.17	18.60	17.87	17.48	---	---	---	---	---	---
19	18.04	16.94	18.23	18.55	17.86	17.42	---	---	---	---	---	---
20	17.98	17.08	18.28	18.56	17.91	17.40	---	---	---	---	---	---
21	17.92	17.20	18.25	18.61	17.96	17.39	---	---	---	---	---	---
22	17.78	17.21	18.30	18.61	17.99	17.36	---	---	---	---	---	---
23	17.65	17.10	18.37	18.61	17.96	17.37	---	---	---	---	---	---
24	17.60	17.18	18.47	18.48	17.80	17.39	---	---	---	---	---	---
25	17.59	17.22	18.47	18.49	17.84	17.35	---	---	---	---	---	---
26	17.58	17.26	18.35	18.50	17.88	---	---	---	---	---	---	---
27	17.54	17.31	18.39	18.44	17.88	---	---	---	---	---	---	---
28	17.47	17.34	18.42	18.39	17.83	---	---	---	---	---	---	---
29	17.46	17.36	18.44	18.41	---	---	---	---	---	---	---	---
30	17.40	17.44	18.47	18.39	---	---	---	---	---	---	---	---
31	17.32	---	18.59	18.37	---	---	---	---	---	---	---	---
MAX	18.53	17.44	18.59	18.71	18.34	---	---	---	---	---	---	---



SARASOTA COUNTY—Continued

WELL NUMBER.--270816082192603. Mabry Carlton CW-1 (3G) NRSD Well near Sarasota, FL.

LOCATION.--Lat 27°08'16", long 82°19'26" (1927 North American datum), in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.29, T.38 S., R.20 E., Hydrologic Unit 03100102, 7.2 mi south of State Highway 72, and 19 mi southeast of Sarasota.

AQUIFER.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit 112NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 35 ft, cased to 5 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 20.77 ft above National Geodetic Vertical Datum of 1929 (levels by Sarasota County). Measuring point: Top of recorder shelter floor, 2.55 ft above land-surface datum.

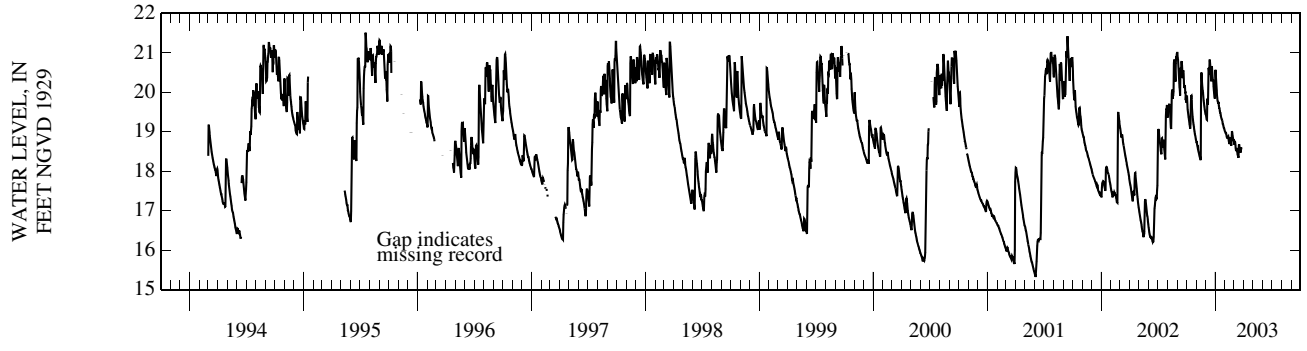
PERIOD OF RECORD.--March 1994 to March 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 21.51 ft NGVD, July 18, 1995; lowest, 15.32 ft NGVD, June 4, 2001.

ELEVATION ABOVE NGVD 1929, FEET
PERIOD OCTOBER 2002 TO MARCH 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.90	18.74	19.45	20.57	19.01	18.77	---	---	---	---	---	---
2	19.92	18.74	19.41	20.45	18.98	18.73	---	---	---	---	---	---
3	19.72	18.68	19.36	20.32	18.98	18.67	---	---	---	---	---	---
4	19.57	18.64	19.31	20.18	18.97	18.75	---	---	---	---	---	---
5	19.50	18.60	19.30	20.05	18.93	18.74	---	---	---	---	---	---
6	19.43	18.61	19.84	19.95	18.88	18.66	---	---	---	---	---	---
7	19.37	18.54	19.81	19.86	18.85	18.59	---	---	---	---	---	---
8	19.32	18.50	19.69	19.79	18.85	18.54	---	---	---	---	---	---
9	19.25	18.47	20.28	19.76	18.85	18.51	---	---	---	---	---	---
10	19.19	18.43	20.62	19.71	18.87	18.59	---	---	---	---	---	---
11	19.14	18.39	20.57	19.76	18.88	18.56	---	---	---	---	---	---
12	19.08	18.36	20.46	19.66	18.80	18.49	---	---	---	---	---	---
13	19.20	18.36	20.81	19.61	18.75	18.44	---	---	---	---	---	---
14	19.68	18.31	20.81	19.60	18.72	18.40	---	---	---	---	---	---
15	19.91	18.28	20.71	19.53	18.69	18.38	---	---	---	---	---	---
16	19.92	20.15	20.60	19.49	18.71	18.34	---	---	---	---	---	---
17	19.82	20.50	20.48	19.48	18.85	18.65	---	---	---	---	---	---
18	19.61	20.42	20.38	19.42	18.82	18.68	---	---	---	---	---	---
19	19.48	20.24	20.28	19.38	18.75	18.62	---	---	---	---	---	---
20	19.38	20.13	20.66	19.35	18.69	18.56	---	---	---	---	---	---
21	19.32	20.05	20.64	19.32	18.65	18.51	---	---	---	---	---	---
22	19.24	20.00	20.49	19.30	18.83	18.49	---	---	---	---	---	---
23	19.18	19.90	20.37	19.28	19.02	18.49	---	---	---	---	---	---
24	19.13	19.79	20.29	19.21	18.97	18.61	---	---	---	---	---	---
25	19.06	19.73	20.32	19.19	18.90	18.55	---	---	---	---	---	---
26	19.01	19.66	20.15	19.18	18.85	---	---	---	---	---	---	---
27	18.95	19.63	20.04	19.14	18.79	---	---	---	---	---	---	---
28	18.92	19.56	19.98	19.10	18.78	---	---	---	---	---	---	---
29	18.87	19.51	19.90	19.09	---	---	---	---	---	---	---	---
30	18.82	19.46	19.84	19.06	---	---	---	---	---	---	---	---
31	18.78	---	20.16	19.03	---	---	---	---	---	---	---	---
MAX	19.92	20.50	20.81	20.57	19.02	---	---	---	---	---	---	---

CAL YR 2002 MAX 21.00



SARASOTA COUNTY—Continued

WELL NUMBER.--270835082194101. Mabry Carlton (STM-24A) Tampa Well near Sarasota, FL.

LOCATION.--Lat 27°08'35", long 82°19'41" (1927 North American datum), in NE $^1/_4$ SW $^1/_4$ sec.29, T.38 S., R.20 E., Hydrologic Unit 03100102, 6.8 mi south of State Highway 72, and 18.5 mi southeast of Sarasota.

AQUIFER.--Tampa limestone of Miocene Age, Geologic Unit 122TAMP.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 400 ft, cased to 280 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 22.82 ft above National Geodetic Vertical Datum of 1929 (levels by Sarasota County). Measuring point: Top of recorder shelter floor, 15.94 ft above land-surface datum.

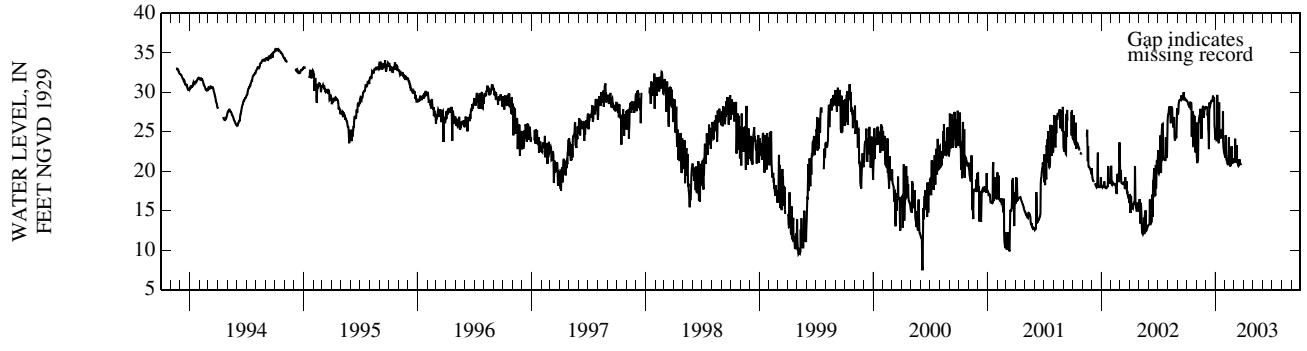
PERIOD OF RECORD.--November 1993 to to March 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 35.49 ft NGVD, Oct. 3, 1994; lowest, 7.45 ft NGVD, June 6, 2000.

ELEVATION ABOVE NGVD 1929, FEET
PERIOD OCTOBER 2002 TO MARCH 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.99	26.16	28.13	24.77	21.91	21.65	---	---	---	---	---	---
2	28.93	22.10	28.09	25.48	21.71	21.27	---	---	---	---	---	---
3	28.87	21.17	28.09	24.19	24.56	21.20	---	---	---	---	---	---
4	28.79	21.04	28.12	23.97	22.13	21.22	---	---	---	---	---	---
5	28.66	21.39	28.12	24.02	21.49	24.12	---	---	---	---	---	---
6	28.48	21.44	28.06	24.57	21.36	21.77	---	---	---	---	---	---
7	28.41	24.17	27.05	29.68	21.28	21.37	---	---	---	---	---	---
8	28.33	26.05	27.40	27.73	21.03	21.21	---	---	---	---	---	---
9	28.20	26.41	25.39	24.27	20.94	21.23	---	---	---	---	---	---
10	28.14	26.75	24.85	23.87	20.97	23.30	---	---	---	---	---	---
11	28.05	27.00	22.83	23.71	20.97	21.31	---	---	---	---	---	---
12	28.81	27.12	27.46	23.55	22.44	21.27	---	---	---	---	---	---
13	28.21	27.32	28.71	28.70	24.28	21.05	---	---	---	---	---	---
14	27.81	27.90	28.00	24.53	21.13	20.97	---	---	---	---	---	---
15	28.72	26.08	28.39	24.12	20.93	20.75	---	---	---	---	---	---
16	28.16	26.40	28.57	24.76	20.75	20.67	---	---	---	---	---	---
17	24.39	24.12	28.65	25.12	20.70	20.76	---	---	---	---	---	---
18	27.09	24.79	28.74	25.15	20.70	21.27	---	---	---	---	---	---
19	27.50	26.87	28.92	24.63	20.72	21.52	---	---	---	---	---	---
20	27.51	27.47	28.92	24.62	20.87	21.09	---	---	---	---	---	---
21	27.50	27.94	28.88	24.71	22.73	21.06	---	---	---	---	---	---
22	23.19	28.30	28.91	24.31	23.17	20.89	---	---	---	---	---	---
23	23.20	27.99	29.13	24.22	21.23	20.89	---	---	---	---	---	---
24	25.45	27.77	29.48	24.22	20.95	20.89	---	---	---	---	---	---
25	26.68	26.81	29.48	27.56	21.05	20.94	---	---	---	---	---	---
26	26.92	27.71	29.35	23.75	21.26	---	---	---	---	---	---	---
27	26.86	27.91	29.23	23.05	21.29	---	---	---	---	---	---	---
28	22.66	27.99	29.30	22.67	21.30	---	---	---	---	---	---	---
29	22.48	27.94	25.76	22.40	---	---	---	---	---	---	---	---
30	22.40	28.09	25.38	22.21	---	---	---	---	---	---	---	---
31	24.59	---	24.04	22.04	---	---	---	---	---	---	---	---
MAX	28.99	28.30	29.48	29.68	24.56	---	---	---	---	---	---	---

CAL YR 2002 MAX 30.01



SARASOTA COUNTY—Continued

WELL NUMBER.--270852082164801. Mabry Carlton 8-B NRSD Well near Sarasota, FL.

LOCATION.--Lat 27°08'52", long 82°16'48" (1927 North American datum), in SE ¼ NW ¼ sec.26, T.38 S., R.20 E., Hydrologic Unit 03100102, 4.8 mi south of State Highway 72, and 20.5 mi southeast of Sarasota.

AQUIFER.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit 112NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 45 ft, cased to 45 ft, screened interval 10-15 ft, 25-30 ft, and 40-45 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 25.83 ft above National Geodetic Vertical Datum of 1929 (levels by Sarasota County). Measuring point: Top of recorder shelter floor, 3.00 ft above land-surface datum.

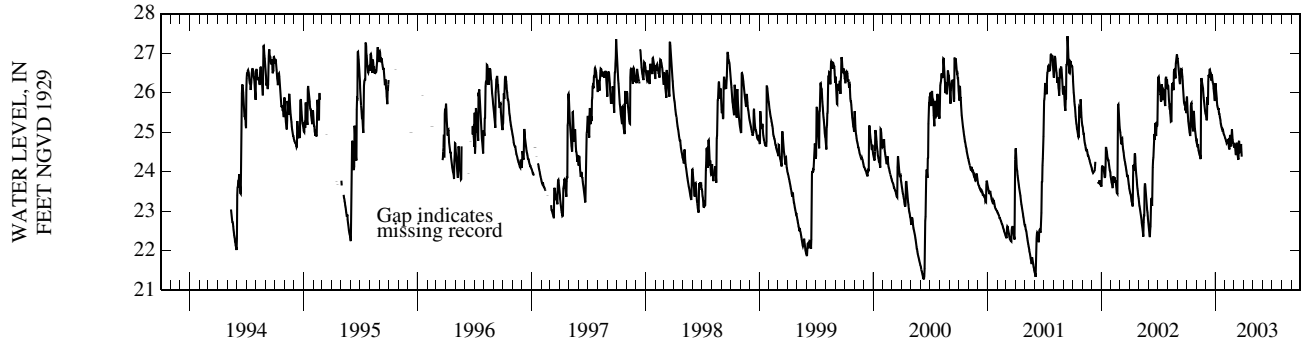
PERIOD OF RECORD.--May 1994 to to March 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 27.43 ft NGVD, Sept. 14, 2001; lowest, 21.27 ft NGVD, June 11, 2000.

ELEVATION ABOVE NGVD 1929, FEET
PERIOD OCTOBER 2002 TO MARCH 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.85	24.77	25.46	26.24	24.86	24.70	---	---	---	---	---	---
2	25.90	24.78	25.41	26.16	24.84	24.66	---	---	---	---	---	---
3	25.70	24.70	25.36	26.07	24.81	24.60	---	---	---	---	---	---
4	25.52	24.66	25.30	25.96	24.79	24.69	---	---	---	---	---	---
5	25.40	24.62	25.34	25.86	24.77	24.60	---	---	---	---	---	---
6	25.28	24.70	25.89	25.77	24.72	24.53	---	---	---	---	---	---
7	25.20	24.61	25.84	25.68	24.73	24.46	---	---	---	---	---	---
8	25.13	24.54	25.69	25.64	24.74	24.42	---	---	---	---	---	---
9	25.06	24.51	26.29	25.61	24.75	24.56	---	---	---	---	---	---
10	25.00	24.47	26.45	25.57	24.80	24.73	---	---	---	---	---	---
11	24.95	24.43	26.42	25.61	24.81	24.68	---	---	---	---	---	---
12	24.90	24.41	26.39	25.51	24.69	24.54	---	---	---	---	---	---
13	25.05	24.41	26.58	25.47	24.62	24.44	---	---	---	---	---	---
14	25.66	24.34	26.59	25.46	24.59	24.37	---	---	---	---	---	---
15	25.73	24.32	26.54	25.39	24.56	24.32	---	---	---	---	---	---
16	25.74	26.19	26.50	25.35	24.77	24.30	---	---	---	---	---	---
17	25.57	26.37	26.44	25.30	24.93	24.75	---	---	---	---	---	---
18	25.36	26.32	26.37	25.22	24.85	24.78	---	---	---	---	---	---
19	25.24	26.26	26.31	25.18	24.74	24.64	---	---	---	---	---	---
20	25.14	26.21	26.45	25.14	24.67	24.56	---	---	---	---	---	---
21	25.09	26.16	26.44	25.11	24.64	24.51	---	---	---	---	---	---
22	25.02	26.11	26.36	25.09	24.94	24.47	---	---	---	---	---	---
23	25.48	25.99	26.28	25.09	25.07	24.59	---	---	---	---	---	---
24	25.54	25.88	26.24	25.01	24.95	24.70	---	---	---	---	---	---
25	25.35	25.81	26.23	25.04	24.82	24.54	---	---	---	---	---	---
26	25.22	25.73	26.11	25.03	24.75	24.38	---	---	---	---	---	---
27	25.10	25.68	26.02	24.98	24.70	---	---	---	---	---	---	---
28	25.03	25.60	25.95	24.95	24.73	---	---	---	---	---	---	---
29	24.95	25.53	25.86	24.94	---	---	---	---	---	---	---	---
30	24.88	25.48	25.79	24.92	---	---	---	---	---	---	---	---
31	24.82	---	25.97	24.89	---	---	---	---	---	---	---	---
MAX	25.90	26.37	26.59	26.24	25.07	---	---	---	---	---	---	---

CAL YR 2002 MAX 26.95



SARASOTA COUNTY—Continued

WELL NUMBER.--270901082193101. Mabry Carlton CW-2 (OM-21) Ocala Well near Sarasota, FL.

LOCATION.--Lat 27°09'01", long 82°19'31" (1927 North American datum), in NW ¼ NE ¼ sec.29, T.38 S., R.20 E., Hydrologic Unit 03100102, 6.3 mi south of State Highway 72, and 18 mi southeast of Sarasota.

AQUIFER.--Ocala Group of Eocene Age, Geologic Unit 124OCAL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 1,000 ft, cased to 690 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 24.00 ft above National Geodetic Vertical Datum of 1929 (levels by Sarasota County). Measuring point: Top of recorder shelter floor, 19.93 ft above land-surface datum.

REMARKS.--Water levels affected by pumping of nearby production well.

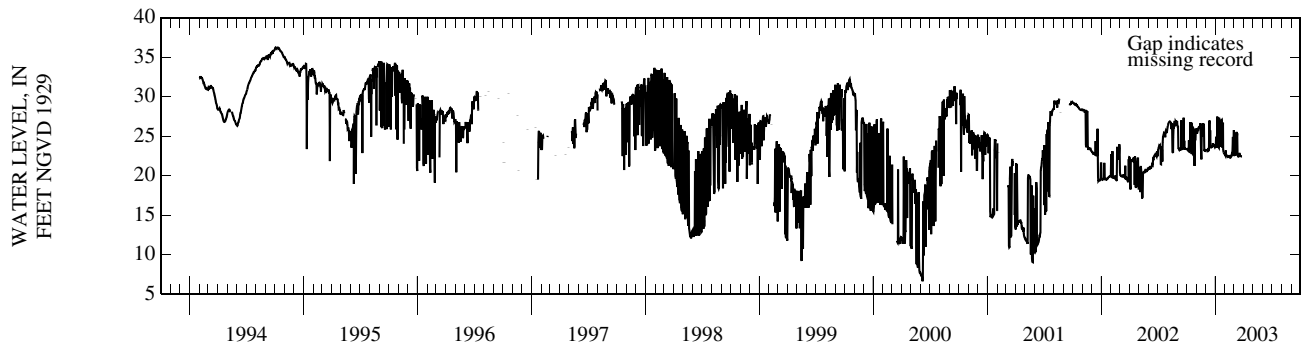
PERIOD OF RECORD.--September 1987, May 1990, May 1991 to September 1993 (periodic); February 1994 to March 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 36.24 ft NGVD, Oct. 3, 1994; lowest, 6.61 ft NGVD, June 6, 2000.

ELEVATION ABOVE NGVD 1929, FEET
PERIOD OCTOBER 2002 TO MARCH 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.36	25.99	23.23	23.74	22.65	25.76	---	---	---	---	---	---
2	23.34	25.68	23.22	23.90	22.57	22.61	---	---	---	---	---	---
3	23.35	25.33	23.23	24.91	23.19	22.58	---	---	---	---	---	---
4	23.29	25.54	23.24	23.65	22.71	22.61	---	---	---	---	---	---
5	23.23	25.65	23.24	23.68	22.58	25.35	---	---	---	---	---	---
6	23.16	25.72	23.26	23.97	22.56	22.78	---	---	---	---	---	---
7	23.15	25.74	23.10	27.47	22.50	22.67	---	---	---	---	---	---
8	24.46	26.09	23.11	25.14	22.42	22.58	---	---	---	---	---	---
9	23.06	26.13	23.13	23.67	22.37	24.94	---	---	---	---	---	---
10	23.06	26.18	23.51	23.66	22.39	25.55	---	---	---	---	---	---
11	23.00	26.19	23.12	23.60	22.41	24.91	---	---	---	---	---	---
12	26.74	26.15	26.60	23.54	22.43	25.37	---	---	---	---	---	---
13	23.34	26.30	26.98	27.33	22.59	22.61	---	---	---	---	---	---
14	23.31	26.61	23.47	23.80	22.44	22.60	---	---	---	---	---	---
15	26.71	24.48	25.70	23.66	22.40	22.43	---	---	---	---	---	---
16	26.19	22.85	23.52	24.09	22.30	22.40	---	---	---	---	---	---
17	26.27	22.06	23.55	24.12	22.28	22.43	---	---	---	---	---	---
18	26.14	25.04	23.56	24.13	22.29	22.74	---	---	---	---	---	---
19	22.81	25.27	23.67	23.82	22.30	22.86	---	---	---	---	---	---
20	22.74	25.10	23.66	27.03	22.41	22.66	---	---	---	---	---	---
21	26.12	26.41	23.64	27.06	22.53	22.53	---	---	---	---	---	---
22	26.06	26.62	23.68	23.68	22.65	22.48	---	---	---	---	---	---
23	25.92	24.97	23.77	23.70	22.53	22.49	---	---	---	---	---	---
24	25.86	26.37	24.11	23.87	22.45	22.47	---	---	---	---	---	---
25	25.58	26.39	23.85	26.69	23.87	22.43	---	---	---	---	---	---
26	21.22	23.10	23.81	23.31	24.89	22.45	---	---	---	---	---	---
27	24.25	23.16	23.78	23.05	22.63	---	---	---	---	---	---	---
28	24.50	23.16	23.82	22.91	24.47	---	---	---	---	---	---	---
29	24.57	23.14	23.67	22.81	---	---	---	---	---	---	---	---
30	25.56	23.22	23.59	22.75	---	---	---	---	---	---	---	---
31	25.62	---	23.69	22.69	---	---	---	---	---	---	---	---
MAX	26.74	26.62	26.98	27.47	24.89	---	---	---	---	---	---	---

CAL YR 2002 MAX 27.33



SARASOTA COUNTY—Continued

WELL NUMBER.--270901082193102. Mabry Carlton CW-2 (SM 21A) SWNN Well near Sarasota, FL.

LOCATION.--Lat 27°09'01", long 82°19'31" (1927 North American datum), in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.29, T.38 S., R.20 E., Hydrologic Unit 03100102, 6.3 mi south of State Highway 72, and 18 mi southeast of Sarasota.

AQUIFER.--Suwannee limestone of Oligocene Age, Geologic Unit 123SWNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 690 ft, cased to 440 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 24.00 ft above National Geodetic Vertical Datum of 1929 (levels by Sarasota County). Measuring point: Top of recorder shelter floor, 19.54 ft above land-surface datum.

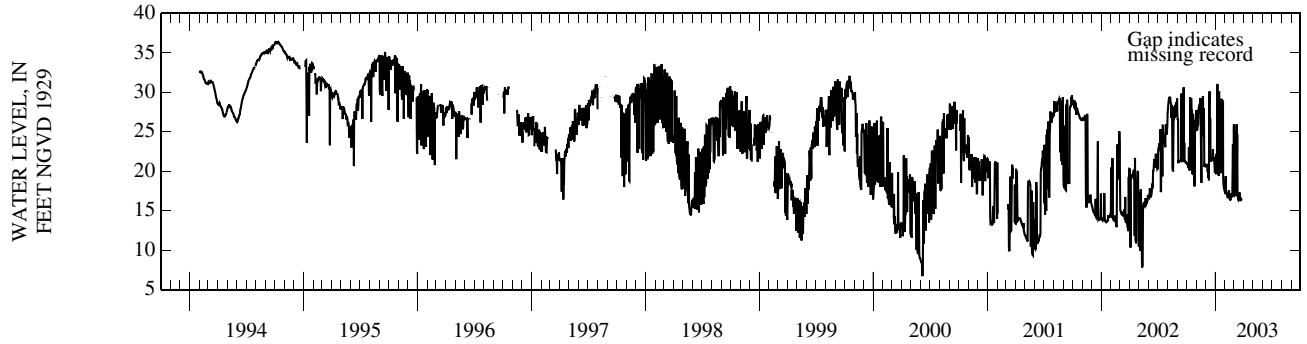
PERIOD OF RECORD.--February 1994 to March 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 36.39 ft NGVD, Oct. 3, 1994; lowest, 6.71 ft NGVD, June 6, 2000.

ELEVATION ABOVE NGVD 1929, FEET
PERIOD OCTOBER 2002 TO MARCH 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.02	27.72	20.83	20.02	17.34	25.93	---	---	---	---	---	---
2	20.97	26.19	20.76	20.43	17.10	17.00	---	---	---	---	---	---
3	20.97	25.16	20.78	22.20	19.38	16.91	---	---	---	---	---	---
4	20.85	25.45	20.74	19.80	17.60	16.95	---	---	---	---	---	---
5	20.71	25.78	20.77	19.84	17.23	25.05	---	---	---	---	---	---
6	20.53	25.89	20.63	20.48	17.18	17.55	---	---	---	---	---	---
7	20.47	25.99	19.94	30.95	17.02	17.08	---	---	---	---	---	---
8	23.01	27.71	20.25	30.95	16.80	16.88	---	---	---	---	---	---
9	20.25	28.08	19.15	19.93	16.69	23.81	---	---	---	---	---	---
10	20.22	28.27	20.33	19.69	16.72	25.94	---	---	---	---	---	---
11	20.10	28.40	18.85	19.58	16.74	20.20	---	---	---	---	---	---
12	29.35	28.36	28.80	19.44	16.97	24.67	---	---	---	---	---	---
13	21.00	28.46	30.12	30.10	17.60	16.82	---	---	---	---	---	---
14	20.55	29.28	21.30	20.32	16.84	16.77	---	---	---	---	---	---
15	29.26	24.79	26.70	19.73	16.68	16.43	---	---	---	---	---	---
16	27.51	20.53	21.23	21.44	16.45	16.34	---	---	---	---	---	---
17	27.55	18.53	21.28	20.82	16.39	16.40	---	---	---	---	---	---
18	26.95	25.90	21.30	20.89	16.38	16.98	---	---	---	---	---	---
19	19.73	25.93	21.52	20.27	16.41	17.32	---	---	---	---	---	---
20	19.69	25.21	21.48	29.09	16.63	16.87	---	---	---	---	---	---
21	27.27	28.94	21.43	29.17	17.05	16.66	---	---	---	---	---	---
22	26.98	29.53	21.46	19.91	17.22	16.48	---	---	---	---	---	---
23	26.47	24.45	21.64	19.79	16.94	16.55	---	---	---	---	---	---
24	26.34	27.98	22.78	20.15	16.69	16.49	---	---	---	---	---	---
25	26.46	27.79	21.85	28.95	20.42	16.42	---	---	---	---	---	---
26	18.08	20.56	21.68	19.17	23.39	16.48	---	---	---	---	---	---
27	24.75	20.71	21.58	18.38	17.04	---	---	---	---	---	---	---
28	25.03	20.72	21.72	18.02	17.05	---	---	---	---	---	---	---
29	25.13	20.65	20.86	17.81	---	---	---	---	---	---	---	---
30	25.82	20.80	19.76	17.61	---	---	---	---	---	---	---	---
31	26.15	---	19.90	17.45	---	---	---	---	---	---	---	---
MAX	29.35	29.53	30.12	30.95	23.39	---	---	---	---	---	---	---

CAL YR 2002 MAX 30.63



SARASOTA COUNTY—Continued

WELL NUMBER.--270901082193103. Mabry Carlton CW-2 (HM-21) HTRN Well near Sarasota, FL.

LOCATION.--Lat 27°09'01", long 82°19'31" (1927 North American datum), in NW $^1/_4$ NE $^1/_4$ sec.29, T.38 S., R.20 E., Hydrologic Unit 03100102, 6.3 mi south of State Highway 72, and 18 mi southeast of Sarasota.

AQUIFER.--Hawthorn formation of Miocene Age, Geologic Unit 122HTRN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 240 ft, cased to 93 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 24.00 ft above National Geodetic Vertical Datum of 1929 (levels by Sarasota County). Measuring point: Top of recorder shelter floor, 3.16 ft above land-surface datum.

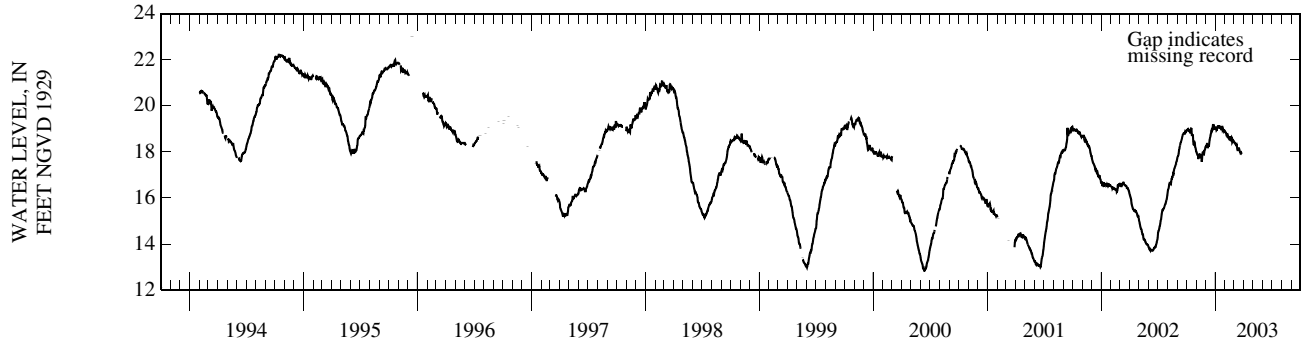
PERIOD OF RECORD.--September 1987 to September 1993 (periodic); February 1994 to March 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 24.41 ft NGVD, May 11, 1992; lowest daily maximum, 12.84 ft NGVD, June 12, 13, 2000.

ELEVATION ABOVE NGVD 1929, FEET
PERIOD OCTOBER 2002 TO MARCH 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.91	18.01	18.23	19.09	18.90	18.43	---	---	---	---	---	---
2	18.95	17.95	18.25	19.01	18.85	18.44	---	---	---	---	---	---
3	18.97	17.91	18.25	19.01	18.83	18.40	---	---	---	---	---	---
4	18.98	17.87	18.30	18.94	18.83	18.39	---	---	---	---	---	---
5	18.96	17.86	18.35	18.96	18.76	18.37	---	---	---	---	---	---
6	18.94	17.84	18.35	18.97	18.77	18.37	---	---	---	---	---	---
7	18.97	17.69	18.16	19.04	18.76	18.34	---	---	---	---	---	---
8	18.94	17.76	18.22	19.07	18.66	18.30	---	---	---	---	---	---
9	18.92	17.85	18.24	19.11	18.66	18.31	---	---	---	---	---	---
10	18.90	17.89	18.29	19.11	18.69	18.32	---	---	---	---	---	---
11	18.87	17.89	18.24	19.08	18.63	18.24	---	---	---	---	---	---
12	18.84	17.88	18.36	19.03	18.59	18.13	---	---	---	---	---	---
13	18.85	17.88	18.51	19.14	18.57	18.08	---	---	---	---	---	---
14	18.91	17.79	18.57	19.09	18.60	18.08	---	---	---	---	---	---
15	19.01	17.73	18.62	19.02	18.65	18.09	---	---	---	---	---	---
16	19.00	17.89	18.70	19.07	18.65	18.10	---	---	---	---	---	---
17	18.74	17.82	18.75	19.13	18.63	18.18	---	---	---	---	---	---
18	18.69	17.57	18.80	19.02	18.51	18.14	---	---	---	---	---	---
19	18.74	17.67	18.89	18.98	18.50	18.07	---	---	---	---	---	---
20	18.74	17.89	18.94	18.98	18.53	18.02	---	---	---	---	---	---
21	18.73	17.97	18.91	19.08	18.60	18.01	---	---	---	---	---	---
22	18.45	17.99	18.96	19.09	18.63	17.96	---	---	---	---	---	---
23	18.32	17.91	19.03	19.09	18.60	17.98	---	---	---	---	---	---
24	18.31	17.90	19.17	18.95	18.41	17.99	---	---	---	---	---	---
25	18.42	17.89	19.17	18.98	18.44	17.95	---	---	---	---	---	---
26	18.43	17.98	19.02	18.99	18.49	17.97	---	---	---	---	---	---
27	18.39	18.05	19.04	18.94	18.50	---	---	---	---	---	---	---
28	18.22	18.08	19.07	18.90	18.45	---	---	---	---	---	---	---
29	18.19	18.11	19.00	18.93	---	---	---	---	---	---	---	---
30	18.12	18.20	18.96	18.93	---	---	---	---	---	---	---	---
31	18.03	---	19.04	18.92	---	---	---	---	---	---	---	---
MAX	19.01	18.20	19.17	19.14	18.90	---	---	---	---	---	---	---

CAL YR 2002 MAX 19.17



SARASOTA COUNTY—Continued

WELL NUMBER.--270901082193104. Mabry Carlton CW-2 (N5) NRSD Well near Sarasota, FL.

LOCATION.--Lat 27°09'01", long 82°19'31" (1927 North American datum), in NW ¼ NE ¼ sec.29, T.38 S., R.20 E., Hydrologic Unit 03100102, 6.3 mi south of State Highway 72, and 18 mi southeast of Sarasota.

AQUIFER.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit 112NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 45 ft, cased to 5 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 24.00 ft above National Geodetic Vertical Datum of 1929 (levels by Sarasota County). Measuring point: Top of recorder shelter floor, 3.12 ft above land-surface datum.

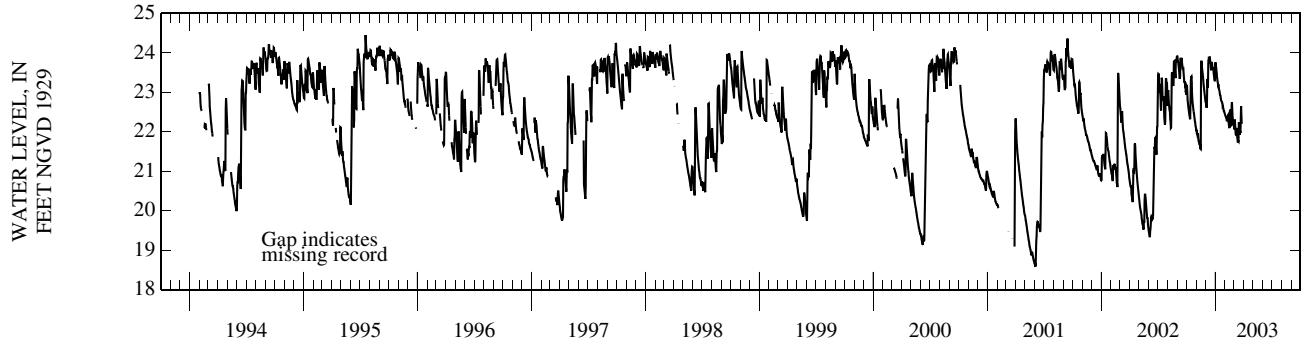
PERIOD OF RECORD.--February 1994 to March 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 24.45 ft NGVD, July 18, 1995; lowest, 18.59 ft NGVD, June 4, 2001.

ELEVATION ABOVE NGVD 1929, FEET
PERIOD OCTOBER 2002 TO MARCH 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.17	22.03	22.76	23.76	22.44	22.19	---	---	---	---	---	---
2	23.19	22.05	22.71	23.69	22.41	22.13	---	---	---	---	---	---
3	22.97	21.96	22.65	23.63	22.39	22.06	---	---	---	---	---	---
4	22.80	21.92	22.61	23.55	22.37	22.31	---	---	---	---	---	---
5	22.72	21.94	22.80	23.48	22.36	22.17	---	---	---	---	---	---
6	22.64	21.96	23.34	23.41	22.29	22.04	---	---	---	---	---	---
7	22.58	21.85	23.28	23.34	22.29	21.96	---	---	---	---	---	---
8	22.52	21.79	23.11	23.28	22.29	21.91	---	---	---	---	---	---
9	22.45	21.75	23.73	23.23	22.31	22.01	---	---	---	---	---	---
10	22.41	21.72	23.82	23.18	22.42	22.10	---	---	---	---	---	---
11	22.35	21.68	23.80	23.20	22.43	22.02	---	---	---	---	---	---
12	22.32	21.67	23.73	23.11	22.25	21.87	---	---	---	---	---	---
13	22.69	21.69	23.91	23.07	22.17	21.79	---	---	---	---	---	---
14	23.30	21.57	23.88	23.04	22.12	21.73	---	---	---	---	---	---
15	23.39	21.56	23.79	22.97	22.09	21.77	---	---	---	---	---	---
16	23.40	23.66	23.72	22.93	22.46	21.76	---	---	---	---	---	---
17	23.26	23.80	23.65	22.92	22.56	22.24	---	---	---	---	---	---
18	23.02	23.72	23.60	22.85	22.41	22.18	---	---	---	---	---	---
19	22.85	23.62	23.56	22.81	22.27	22.03	---	---	---	---	---	---
20	22.73	23.53	23.77	22.78	22.18	21.93	---	---	---	---	---	---
21	22.67	23.47	23.75	22.77	22.14	22.02	---	---	---	---	---	---
22	22.59	23.41	23.67	22.75	22.68	21.97	---	---	---	---	---	---
23	22.52	23.30	23.61	22.73	22.75	22.39	---	---	---	---	---	---
24	22.48	23.19	23.57	22.63	22.54	22.65	---	---	---	---	---	---
25	22.41	23.11	23.63	22.64	22.37	22.44	---	---	---	---	---	---
26	22.35	23.04	23.52	22.61	22.29	22.20	---	---	---	---	---	---
27	22.28	22.99	23.44	22.57	22.22	---	---	---	---	---	---	---
28	22.24	22.91	23.40	22.53	22.23	---	---	---	---	---	---	---
29	22.16	22.84	23.33	22.52	---	---	---	---	---	---	---	---
30	22.12	22.78	23.28	22.49	---	---	---	---	---	---	---	---
31	22.07	---	23.64	22.47	---	---	---	---	---	---	---	---
MAX	23.40	23.80	23.91	23.76	22.75	---	---	---	---	---	---	---

CAL YR 2002 MAX 23.91



SARASOTA COUNTY—Continued

WELL NUMBER.--270926082155101. Mabry Carlton CW-5 (14-FN) SWNN Well near Sarasota, FL.

LOCATION.--Lat 27°09'26", long 82°15'51" (1927 North American datum), in NE $^1/_4$ SW $^1/_4$ sec.24, T.38 S., R.20 E., Hydrologic Unit 03100102, 3.9 mi south of State Highway 72, and 20.5 mi southeast of Sarasota.

AQUIFER.--Suwannee limestone of Oligocene Age, Geologic Unit 123SWNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 550 ft, cased to 500 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 28.71 ft above National Geodetic Vertical Datum of 1929 (levels by Sarasota County). Measuring point: Top of recorder shelter floor, 15.76 ft above land-surface datum.

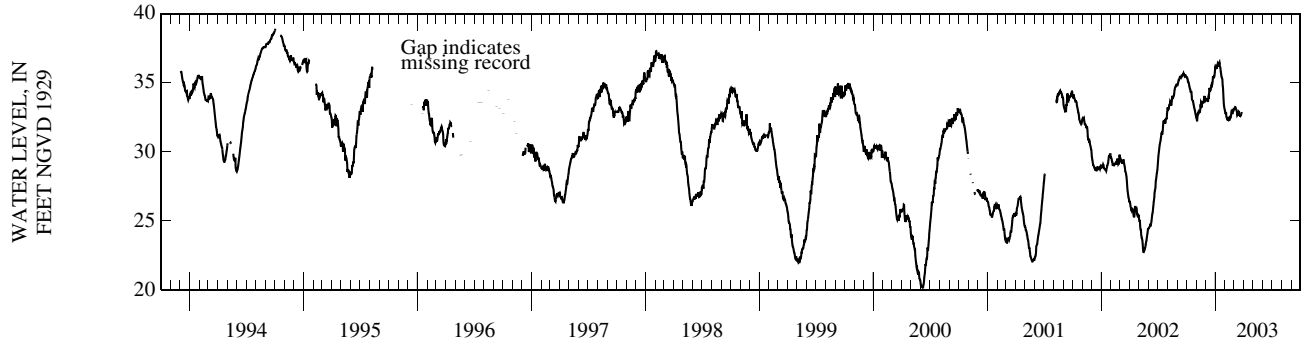
PERIOD OF RECORD.--September 1987 to September 1993 (periodic); November 1993 to March 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 41.15 ft NGVD, Sept. 12, 1991; lowest daily maximum, 20.12 ft NGVD, June 8, 2000.

ELEVATION ABOVE NGVD 1929, FEET
PERIOD OCTOBER 2002 TO MARCH 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35.41	32.47	33.85	36.21	32.97	33.17	---	---	---	---	---	---
2	35.38	32.38	33.81	36.17	32.81	33.11	---	---	---	---	---	---
3	35.37	32.21	33.79	36.05	32.73	33.12	---	---	---	---	---	---
4	35.28	32.48	33.74	36.06	32.87	33.15	---	---	---	---	---	---
5	35.16	32.72	33.76	36.11	32.56	33.25	---	---	---	---	---	---
6	35.04	32.81	33.77	36.05	32.48	33.23	---	---	---	---	---	---
7	35.03	32.80	33.70	36.24	32.43	33.20	---	---	---	---	---	---
8	34.95	32.89	33.62	36.32	32.34	33.13	---	---	---	---	---	---
9	34.79	32.83	33.90	36.43	32.33	33.06	---	---	---	---	---	---
10	34.69	32.88	34.04	36.39	32.38	33.01	---	---	---	---	---	---
11	34.58	32.88	34.01	36.32	32.33	32.90	---	---	---	---	---	---
12	34.54	32.88	34.42	36.18	32.29	32.64	---	---	---	---	---	---
13	34.39	32.98	34.63	36.42	32.32	32.68	---	---	---	---	---	---
14	34.30	33.31	34.50	36.47	32.44	32.71	---	---	---	---	---	---
15	34.40	33.29	34.43	36.26	32.52	32.77	---	---	---	---	---	---
16	34.27	33.62	34.45	36.18	32.54	32.79	---	---	---	---	---	---
17	33.99	33.57	34.54	36.06	32.53	32.88	---	---	---	---	---	---
18	33.79	33.22	34.65	35.80	32.44	32.84	---	---	---	---	---	---
19	33.74	33.46	34.78	35.67	32.50	32.64	---	---	---	---	---	---
20	33.72	33.51	34.87	35.49	32.61	32.62	---	---	---	---	---	---
21	33.70	33.62	34.82	35.39	32.83	32.62	---	---	---	---	---	---
22	33.58	33.62	34.91	35.35	32.97	32.60	---	---	---	---	---	---
23	33.44	33.52	35.06	35.28	32.94	32.65	---	---	---	---	---	---
24	33.33	33.61	35.41	34.81	32.73	32.69	---	---	---	---	---	---
25	33.21	33.80	35.41	34.63	32.83	32.75	---	---	---	---	---	---
26	33.13	33.81	35.39	34.35	33.01	32.89	---	---	---	---	---	---
27	33.01	34.06	35.43	33.90	33.03	---	---	---	---	---	---	---
28	32.88	33.72	35.42	33.49	33.01	---	---	---	---	---	---	---
29	32.76	33.70	35.55	33.28	---	---	---	---	---	---	---	---
30	32.66	33.81	35.75	33.15	---	---	---	---	---	---	---	---
31	32.53	---	36.10	33.03	---	---	---	---	---	---	---	---
MAX	35.41	34.06	36.10	36.47	33.03	---	---	---	---	---	---	---

CAL YR 2002 MAX 36.10



SARASOTA COUNTY—Continued

WELL NUMBER.--270926082155103. Mabry Carlton CW-5 (14-GN) NRSD Well near Sarasota, FL.

LOCATION.--Lat 27°09'26", long 82°15'51" (1927 North American datum), in NE $^1/_4$ SW $^1/_4$ sec.24, T.38 S., R.20 E., Hydrologic Unit 03100102, 3.9 mi south of State Highway 72, and 20.5 mi southeast of Sarasota.

AQUIFER.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit 112NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 42 ft, cased to 7 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 28.69 ft above National Geodetic Vertical Datum of 1929 (levels by Sarasota County). Measuring point: Top of recorder shelter floor, 2.69 ft above land-surface datum.

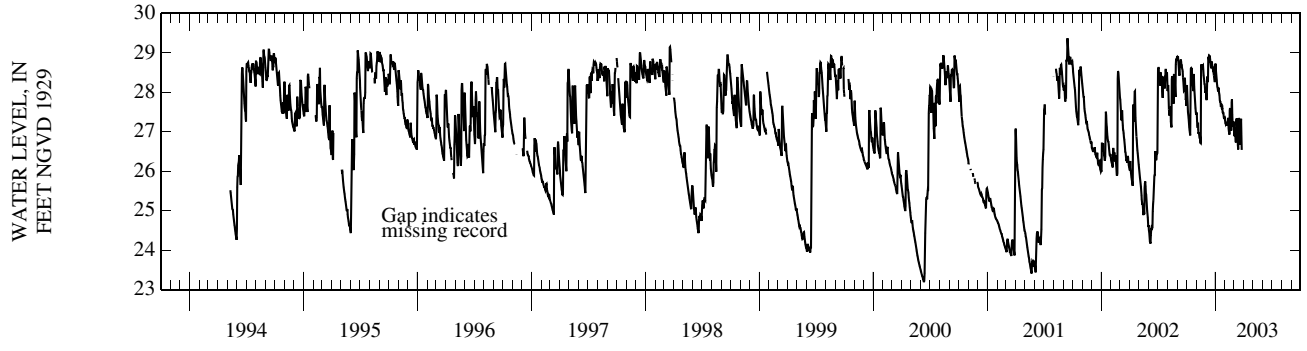
PERIOD OF RECORD.--May 1994 to March 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 29.37 ft NGVD, Sept. 14, 2001; lowest, 23.19 ft NGVD, June 11, 2000.

ELEVATION ABOVE NGVD 1929, FEET
PERIOD OCTOBER 2002 TO MARCH 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.16	27.45	28.03	28.73	27.28	27.05	---	---	---	---	---	---
2	28.16	27.49	27.97	28.59	27.23	27.00	---	---	---	---	---	---
3	27.93	27.26	27.85	28.49	27.20	26.89	---	---	---	---	---	---
4	27.67	27.16	27.80	28.40	27.23	27.11	---	---	---	---	---	---
5	27.50	27.10	28.04	28.31	27.25	27.00	---	---	---	---	---	---
6	27.43	27.23	28.40	28.24	27.15	26.83	---	---	---	---	---	---
7	27.35	27.06	28.33	28.16	27.25	26.76	---	---	---	---	---	---
8	27.22	26.95	28.26	28.12	27.22	26.73	---	---	---	---	---	---
9	27.12	26.99	28.87	28.06	27.23	27.24	---	---	---	---	---	---
10	27.04	26.93	28.89	28.07	27.33	27.34	---	---	---	---	---	---
11	26.98	26.85	28.84	28.12	27.33	27.15	---	---	---	---	---	---
12	26.91	26.85	28.75	28.03	27.08	26.94	---	---	---	---	---	---
13	28.10	26.86	28.92	27.97	27.01	26.84	---	---	---	---	---	---
14	28.60	26.72	28.91	27.93	27.00	26.66	---	---	---	---	---	---
15	28.61	26.71	28.82	27.80	26.93	26.55	---	---	---	---	---	---
16	28.59	28.62	28.75	27.77	27.54	26.77	---	---	---	---	---	---
17	28.62	28.71	28.70	27.76	27.60	27.35	---	---	---	---	---	---
18	28.51	28.66	28.63	27.66	27.30	27.31	---	---	---	---	---	---
19	28.37	28.62	28.63	27.66	27.15	27.04	---	---	---	---	---	---
20	28.22	28.63	28.78	27.71	27.06	26.90	---	---	---	---	---	---
21	28.14	28.67	28.73	27.60	27.03	26.78	---	---	---	---	---	---
22	28.03	28.68	28.68	27.59	27.74	26.67	---	---	---	---	---	---
23	28.44	28.55	28.63	27.60	27.82	27.15	---	---	---	---	---	---
24	28.44	28.43	28.58	27.49	27.43	27.33	---	---	---	---	---	---
25	28.14	28.35	28.59	27.48	27.22	26.92	---	---	---	---	---	---
26	27.99	28.28	28.50	27.50	27.16	26.54	---	---	---	---	---	---
27	27.86	28.22	28.43	27.45	27.15	---	---	---	---	---	---	---
28	27.72	28.20	28.38	27.37	27.26	---	---	---	---	---	---	---
29	27.60	28.07	28.33	27.37	---	---	---	---	---	---	---	---
30	27.51	27.99	28.26	27.35	---	---	---	---	---	---	---	---
31	27.43	---	28.58	27.36	---	---	---	---	---	---	---	---
MAX	28.62	28.71	28.92	28.73	27.82	---	---	---	---	---	---	---

CAL YR 2002 MAX 28.92



SARASOTA COUNTY—Continued

WELL NUMBER.--270928082172601. Mabry Carlton OM-41 SWNN Well near Sarasota, FL.

LOCATION.--Lat 27°09'28", long 82°17'26" (1927 North American datum), in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.22, T.38 S., R.20 E., Hydrologic Unit 03100102, 4.3 mi south of State Highway 72, and 19.5 mi southeast of Sarasota.

AQUIFER.--Suwannee limestone of Oligocene Age, Geologic Unit 123SWNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 750 ft, cased to 700 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 31.04 ft above National Geodetic Vertical Datum of 1929 (levels by Sarasota County). Measuring point: Top of recorder shelter floor, 10.00 ft above land-surface datum.

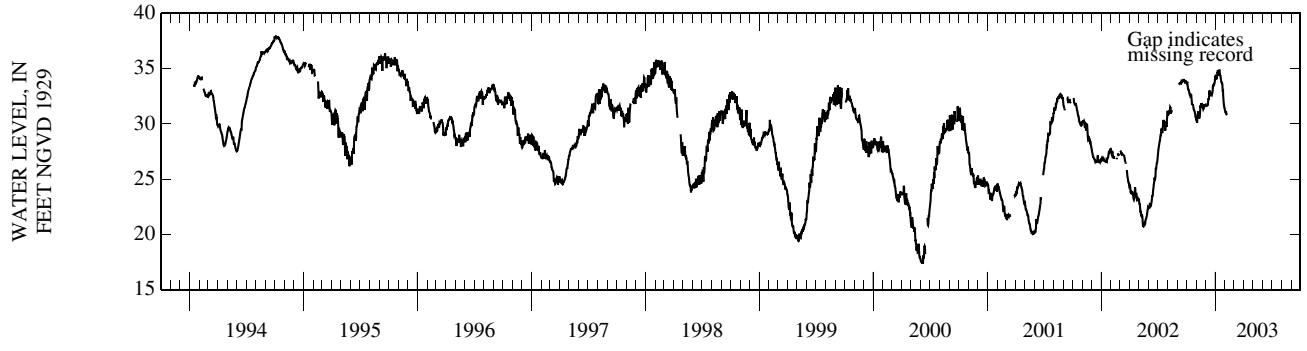
REMARKS.--Water levels affected by pumping of nearby wells.

PERIOD OF RECORD.--January 1994 to February 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 37.91 ft NGVD, Sept. 30, 1994; lowest, 17.35 ft NGVD, June 8, 2000.

ELEVATION ABOVE NGVD 1929, FEET
PERIOD OCTOBER 2002 TO FEBRUARY 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33.70	30.58	31.75	34.32	31.24	---	---	---	---	---	---	---
2	33.65	30.35	31.69	34.28	31.06	---	---	---	---	---	---	---
3	33.83	30.11	31.67	34.10	31.01	---	---	---	---	---	---	---
4	33.42	30.56	31.62	34.11	31.14	---	---	---	---	---	---	---
5	33.24	30.82	31.64	34.16	30.96	---	---	---	---	---	---	---
6	33.12	30.91	31.70	34.06	30.85	---	---	---	---	---	---	---
7	33.10	30.90	31.79	34.62	30.78	---	---	---	---	---	---	---
8	33.01	31.14	31.78	34.62	---	---	---	---	---	---	---	---
9	32.85	30.51	32.18	34.86	---	---	---	---	---	---	---	---
10	32.73	30.56	32.32	34.64	---	---	---	---	---	---	---	---
11	32.60	30.56	32.22	34.51	---	---	---	---	---	---	---	---
12	32.76	30.69	32.73	34.35	---	---	---	---	---	---	---	---
13	32.45	31.24	33.03	34.77	---	---	---	---	---	---	---	---
14	32.47	31.67	32.62	34.92	---	---	---	---	---	---	---	---
15	32.67	31.46	32.72	34.52	---	---	---	---	---	---	---	---
16	32.32	31.87	32.50	34.41	---	---	---	---	---	---	---	---
17	32.03	31.66	32.56	34.37	---	---	---	---	---	---	---	---
18	31.81	31.44	32.80	34.13	---	---	---	---	---	---	---	---
19	31.77	31.61	32.76	33.97	---	---	---	---	---	---	---	---
20	31.75	31.66	32.76	33.75	---	---	---	---	---	---	---	---
21	31.72	31.53	32.70	33.73	---	---	---	---	---	---	---	---
22	31.59	31.47	32.81	33.69	---	---	---	---	---	---	---	---
23	31.39	31.34	32.94	33.62	---	---	---	---	---	---	---	---
24	31.27	31.41	33.48	33.00	---	---	---	---	---	---	---	---
25	31.24	31.66	33.52	33.01	---	---	---	---	---	---	---	---
26	31.16	31.65	33.45	32.59	---	---	---	---	---	---	---	---
27	31.04	31.61	33.52	32.16	---	---	---	---	---	---	---	---
28	30.92	31.62	33.58	31.79	---	---	---	---	---	---	---	---
29	30.67	31.62	33.70	31.59	---	---	---	---	---	---	---	---
30	30.55	31.72	33.86	31.45	---	---	---	---	---	---	---	---
31	30.47	---	34.23	31.33	---	---	---	---	---	---	---	---
MAX	33.83	31.87	34.23	34.92	---	---	---	---	---	---	---	---



SARASOTA COUNTY—Continued

WELL NUMBER.--270932082195201. Mabry Carlton 26 NRSD Well near Sarasota, FL.

LOCATION.--Lat 27°09'32", long 82°19'52" (1927 North American datum), in NE $^1/_4$ SW $^1/_4$ sec.20, T.38 S., R.20 E., Hydrologic Unit 03100102, 5.7 mi south of State Highway 72, and 17.5 mi southeast of Sarasota.

AQUIFER.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit 112NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 11 ft, cased to 6 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

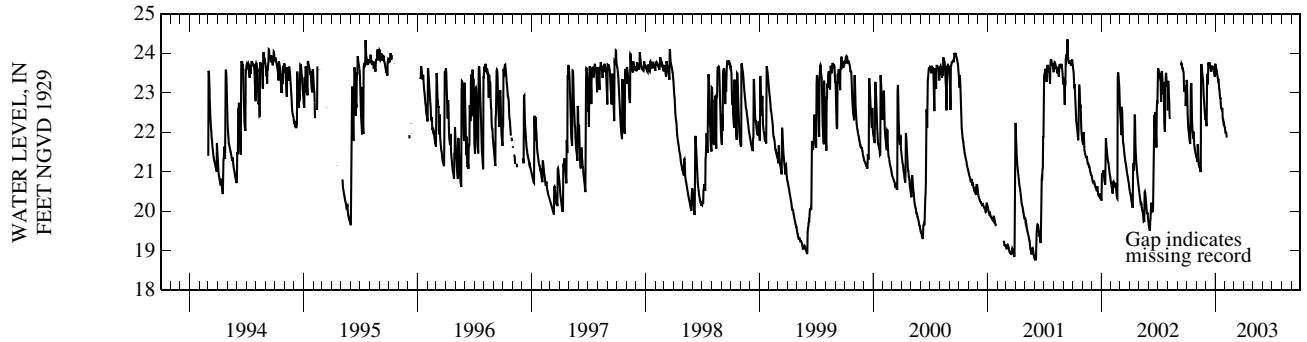
DATUM.--Land-surface datum is 22.00 ft above National Geodetic Vertical Datum of 1929 (levels by Sarasota County). Measuring point: Top of casing, 5.55 ft above land-surface datum.

PERIOD OF RECORD.--March 1994 to February 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 24.36 ft NGVD, Sept. 14. 2001; lowest, 18.76 ft NGVD, June 4, 2001.

ELEVATION ABOVE NGVD 1929, FEET
PERIOD OCTOBER 2002 TO FEBRUARY 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.33	21.41	22.36	23.72	22.08	---	---	---	---	---	---	---
2	23.29	21.42	22.26	23.66	22.00	---	---	---	---	---	---	---
3	22.81	21.30	22.19	23.64	21.97	---	---	---	---	---	---	---
4	22.46	21.26	22.16	23.60	22.00	---	---	---	---	---	---	---
5	22.28	21.70	23.17	23.56	21.99	---	---	---	---	---	---	---
6	22.12	21.61	23.48	23.51	21.87	---	---	---	---	---	---	---
7	22.06	21.45	23.39	23.47	---	---	---	---	---	---	---	---
8	21.97	21.26	23.22	23.42	---	---	---	---	---	---	---	---
9	21.88	21.18	23.77	23.38	---	---	---	---	---	---	---	---
10	21.82	21.15	23.75	23.33	---	---	---	---	---	---	---	---
11	21.75	21.12	23.71	23.35	---	---	---	---	---	---	---	---
12	21.71	21.10	23.66	23.23	---	---	---	---	---	---	---	---
13	22.04	21.11	23.77	23.12	---	---	---	---	---	---	---	---
14	23.12	21.02	23.71	23.08	---	---	---	---	---	---	---	---
15	23.25	21.00	23.67	22.95	---	---	---	---	---	---	---	---
16	23.21	23.65	23.63	22.85	---	---	---	---	---	---	---	---
17	22.85	23.73	23.59	22.89	---	---	---	---	---	---	---	---
18	22.37	23.66	23.57	22.73	---	---	---	---	---	---	---	---
19	22.15	23.56	23.54	22.64	---	---	---	---	---	---	---	---
20	22.02	23.47	23.70	22.61	---	---	---	---	---	---	---	---
21	21.96	23.39	23.67	22.59	---	---	---	---	---	---	---	---
22	21.84	23.34	23.63	22.60	---	---	---	---	---	---	---	---
23	22.02	23.20	23.59	22.62	---	---	---	---	---	---	---	---
24	21.90	22.96	23.66	22.37	---	---	---	---	---	---	---	---
25	21.70	22.82	23.68	22.33	---	---	---	---	---	---	---	---
26	21.64	22.70	23.62	22.33	---	---	---	---	---	---	---	---
27	21.58	22.63	23.56	22.25	---	---	---	---	---	---	---	---
28	21.53	22.51	23.53	22.18	---	---	---	---	---	---	---	---
29	21.48	22.42	23.46	22.20	---	---	---	---	---	---	---	---
30	21.44	22.33	23.41	22.16	---	---	---	---	---	---	---	---
31	21.40	---	23.72	22.13	---	---	---	---	---	---	---	---
MAX	23.33	23.73	23.77	23.72	---	---	---	---	---	---	---	---



SARASOTA COUNTY—Continued

WELL NUMBER.--270933082203601. Mabry Carlton 27 NRSD Well near Sarasota, FL.

LOCATION.--Lat 27°09'33", long 82°20'36" (1927 North American datum), in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.19, T.38 S., R.20 E., Hydrologic Unit 03100102, 5.8 mi south of State Highway 72, and 17 mi southeast of Sarasota.

AQUIFER.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit 112NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 13 ft, cased to 8 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval, and tipping bucket raingage recorder--15-minute interval.

DATUM.--Land-surface datum is 20.00 ft above National Geodetic Vertical Datum of 1929 (levels by Sarasota County). Measuring point: Top of recorder shelter floor, 1.33 ft above land-surface datum.

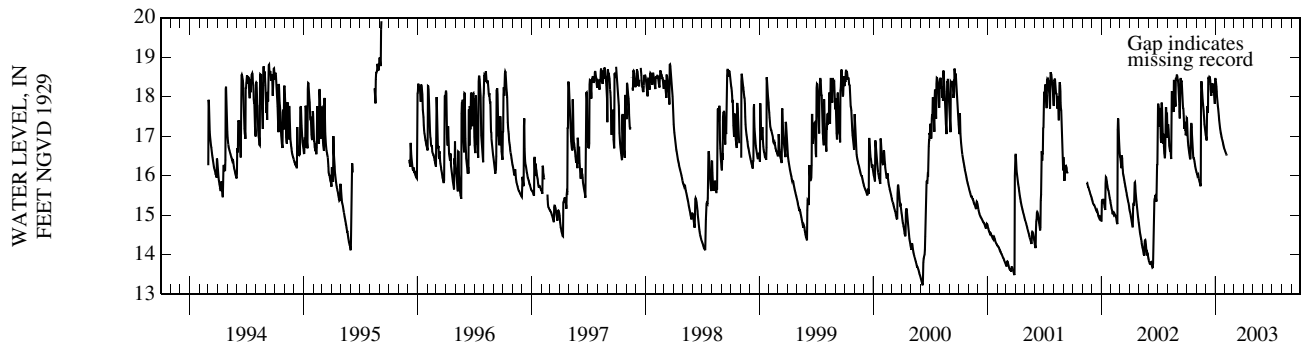
PERIOD OF RECORD.--March 1994 to February 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 19.91 ft NGVD, Sept. 7, 1995; lowest, 13.22 ft NGVD, June 7, 2000.

ELEVATION ABOVE NGVD 1929, FEET
PERIOD OCTOBER 2002 TO FEBRUARY 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.46	16.09	17.03	18.45	16.63	---	---	---	---	---	---	---
2	17.45	16.07	16.99	18.42	16.61	---	---	---	---	---	---	---
3	17.22	16.05	16.94	18.34	16.59	---	---	---	---	---	---	---
4	17.00	16.01	16.89	18.25	16.56	---	---	---	---	---	---	---
5	16.86	16.03	17.50	18.13	16.54	---	---	---	---	---	---	---
6	16.76	16.04	17.76	18.03	16.51	---	---	---	---	---	---	---
7	16.69	16.02	17.74	17.94	---	---	---	---	---	---	---	---
8	16.63	15.97	17.59	17.85	---	---	---	---	---	---	---	---
9	16.57	15.92	18.48	17.76	---	---	---	---	---	---	---	---
10	16.52	15.89	18.48	17.69	---	---	---	---	---	---	---	---
11	16.46	15.85	18.46	17.60	---	---	---	---	---	---	---	---
12	16.41	15.82	18.39	17.52	---	---	---	---	---	---	---	---
13	16.46	15.80	18.50	17.41	---	---	---	---	---	---	---	---
14	17.12	15.75	18.49	17.33	---	---	---	---	---	---	---	---
15	17.31	15.73	18.42	17.26	---	---	---	---	---	---	---	---
16	17.31	18.11	18.30	17.19	---	---	---	---	---	---	---	---
17	17.23	18.39	18.19	17.14	---	---	---	---	---	---	---	---
18	17.05	18.31	18.09	17.09	---	---	---	---	---	---	---	---
19	16.87	18.15	18.02	17.05	---	---	---	---	---	---	---	---
20	16.73	18.02	18.34	17.00	---	---	---	---	---	---	---	---
21	16.59	17.91	18.31	16.96	---	---	---	---	---	---	---	---
22	16.47	17.83	18.22	16.93	---	---	---	---	---	---	---	---
23	16.44	17.74	18.11	16.90	---	---	---	---	---	---	---	---
24	16.44	17.64	18.30	16.87	---	---	---	---	---	---	---	---
25	16.41	17.50	18.33	16.83	---	---	---	---	---	---	---	---
26	16.35	17.39	18.27	16.80	---	---	---	---	---	---	---	---
27	16.30	17.30	18.15	16.77	---	---	---	---	---	---	---	---
28	16.24	17.22	18.04	16.73	---	---	---	---	---	---	---	---
29	16.20	17.15	17.93	16.70	---	---	---	---	---	---	---	---
30	16.16	17.09	17.82	16.68	---	---	---	---	---	---	---	---
31	16.13	---	18.45	16.66	---	---	---	---	---	---	---	---
MAX	17.46	18.39	18.50	18.45	---	---	---	---	---	---	---	---
*PREC	---	4.26	5.37	0.10	---	---	---	---	---	---	---	---

CAL YR 2002 MAX 18.54



SARASOTA COUNTY—Continued

WELL NUMBER.--270952082095901. Mabry Carlton Well 13 near Myakka City, FL.

LOCATION.--Lat 27°09'52", long 82°09'59" (1927 North American datum), in SE $^1/_4$ SW $^1/_4$ sec.13, T.38 S., R.21 E., Hydrologic Unit 03100102, 2.0 mi south of State Highway 72, and 12.5 mi southwest of Myakka City.

AQUIFER.--Tampa limestone of Miocene Age, Geologic Unit 122TAMP.

WELL CHARACTERISTICS.--Drilled, irrigation, artesian well, diameter 6 in., depth 287 ft, cased to 65 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 30 ft, from topographic map. Measuring point: Top of recorder shelter floor, 12.15 ft above land-surface datum.

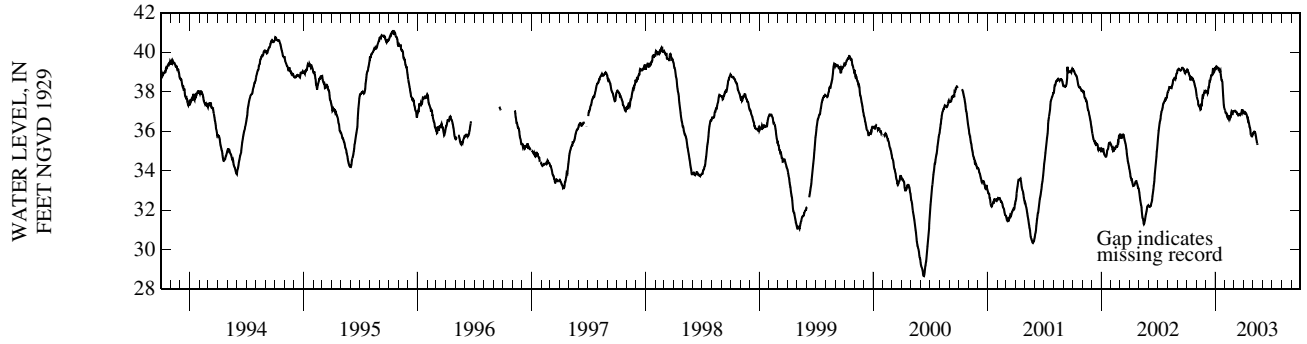
PERIOD OF RECORD.--May 1984 to May 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 41.09 ft NGVD, Oct. 14, 15, 1995; lowest, 28.18 ft NGVD, May 24, 1984.

ELEVATION ABOVE NGVD 1929, FEET
PERIOD OCTOBER 2002 TO MAY 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39.08	37.89	38.07	39.23	37.07	37.01	36.98	35.89	---	---	---	---
2	39.11	37.77	38.05	39.22	36.98	37.03	36.97	35.89	---	---	---	---
3	39.14	37.71	38.02	39.25	36.94	37.04	37.00	35.92	---	---	---	---
4	39.12	37.65	38.02	39.21	36.94	37.04	36.99	35.98	---	---	---	---
5	39.06	37.60	38.02	39.24	36.93	37.05	36.95	35.99	---	---	---	---
6	39.01	37.55	37.98	39.25	36.85	37.04	36.92	35.99	---	---	---	---
7	38.99	37.39	37.92	39.22	36.85	37.03	36.91	35.97	---	---	---	---
8	38.90	37.33	37.98	39.21	36.74	36.99	36.85	35.97	---	---	---	---
9	38.89	37.30	38.15	39.23	36.71	36.99	36.92	35.93	---	---	---	---
10	38.84	37.31	38.25	39.23	36.74	36.98	36.89	35.82	---	---	---	---
11	38.80	37.29	38.25	39.18	36.69	36.93	36.85	35.75	---	---	---	---
12	38.69	37.21	38.39	39.08	36.66	36.90	36.78	35.63	---	---	---	---
13	38.59	37.19	38.55	39.13	36.62	36.90	36.70	35.57	---	---	---	---
14	38.66	37.10	38.54	39.09	36.68	36.86	36.65	35.45	---	---	---	---
15	38.76	37.12	38.58	38.99	36.76	36.81	36.58	35.39	---	---	---	---
16	38.75	37.36	38.65	39.04	36.77	36.81	36.60	35.32	---	---	---	---
17	38.67	37.37	38.71	39.07	36.76	36.87	36.54	---	---	---	---	---
18	38.66	37.27	38.76	38.87	36.69	36.88	36.49	---	---	---	---	---
19	38.70	37.49	38.83	38.76	36.74	36.85	36.38	---	---	---	---	---
20	38.69	37.68	38.89	38.63	36.83	36.86	36.29	---	---	---	---	---
21	38.67	37.83	38.82	38.59	36.96	36.85	36.21	---	---	---	---	---
22	38.60	37.84	38.89	38.58	37.02	36.84	36.18	---	---	---	---	---
23	38.56	37.79	38.99	38.53	37.00	36.88	36.07	---	---	---	---	---
24	38.55	37.85	39.17	38.26	36.83	36.91	35.89	---	---	---	---	---
25	38.49	37.95	39.17	37.99	36.92	36.93	35.84	---	---	---	---	---
26	38.40	37.98	39.00	37.82	37.01	37.02	35.80	---	---	---	---	---
27	38.33	38.01	39.03	37.57	37.01	37.08	35.76	---	---	---	---	---
28	38.27	37.99	39.02	37.34	37.00	37.08	35.75	---	---	---	---	---
29	38.22	37.98	39.06	37.23	---	37.07	35.77	---	---	---	---	---
30	38.14	38.05	39.10	37.18	---	37.07	35.81	---	---	---	---	---
31	38.02	---	39.22	37.12	---	36.95	---	---	---	---	---	---
MAX	39.14	38.05	39.22	39.25	37.07	37.08	37.00	---	---	---	---	---

CAL YR 2002 MAX 39.23



SARASOTA COUNTY—Continued

WELL NUMBER.--270959082203001. ROMP 19 WLAM Well near Sarasota, FL.

LOCATION.--Lat 27°09'59", long 82°20'30" (1927 North American datum), in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.18, T.38 S., R.20 E., Hydrologic Unit 03100102, 5.2 mi south of State Highway 72, and 15.5 mi southeast of Sarasota.

AQUIFER.--Suwannee limestone of Oligocene Age, Geologic Unit 123SWNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 425 ft, cased to 410 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval and tipping bucket raingage recorder--15-minute interval.

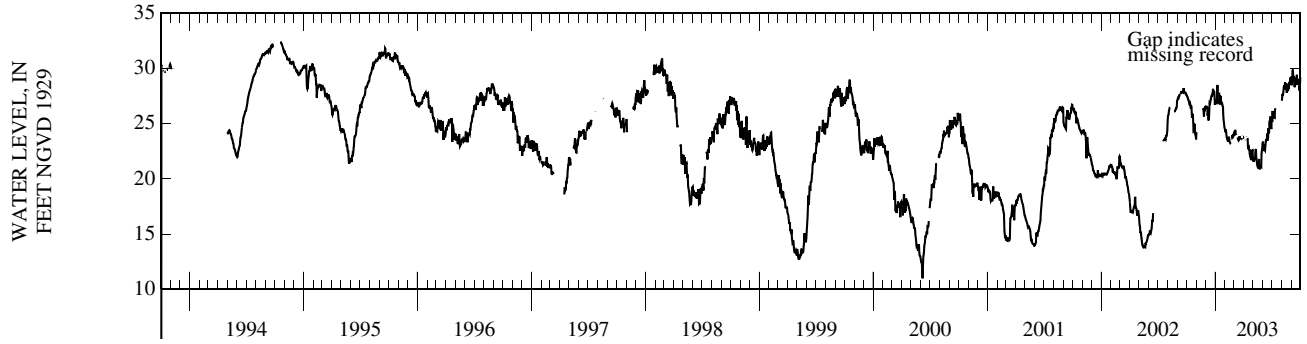
DATUM.--Elevation of land-surface datum is 20 ft, from topographic map. Measuring point: Top of casing, 12.62 ft above land-surface datum.

PERIOD OF RECORD.--July 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 33.04 ft NGVD, Jan. 27, 1984; lowest, 10.99 ft NGVD, June 6, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27.59	24.23	26.55	26.95	24.44	24.09	23.74	21.72	23.20	25.47	---	29.26
2	27.49	---	26.52	27.02	24.22	24.02	23.71	21.66	23.31	25.15	27.06	28.94
3	27.43	---	26.51	26.97	24.46	23.99	23.71	21.67	23.30	26.14	27.35	28.47
4	27.38	---	26.51	26.83	24.38	24.03	---	21.54	22.50	25.62	27.68	28.79
5	27.27	---	26.52	26.83	24.03	24.43	---	21.83	22.88	25.47	27.51	29.55
6	27.16	---	26.40	27.22	23.75	24.34	23.56	21.83	23.01	25.63	27.70	29.89
7	27.12	---	25.70	28.42	23.72	24.16	---	21.77	23.01	25.65	27.99	29.49
8	27.03	---	25.92	28.42	23.55	23.95	23.45	21.70	22.65	25.61	28.30	28.93
9	26.85	---	25.37	27.18	23.46	---	---	22.36	22.59	25.53	28.45	29.23
10	26.71	---	25.35	26.93	23.48	---	23.85	22.62	22.99	25.52	28.07	29.23
11	26.68	---	25.28	26.79	23.46	---	---	22.70	23.26	26.21	28.33	28.46
12	26.76	---	26.11	---	23.47	---	---	21.85	23.55	26.39	28.74	28.29
13	26.63	---	26.85	27.81	23.81	23.75	---	21.81	23.44	---	28.35	28.44
14	26.34	---	26.80	27.28	23.58	23.68	23.69	21.43	23.57	---	28.60	28.47
15	26.62	---	26.86	26.74	23.41	23.57	22.92	21.23	23.63	---	28.20	29.00
16	26.49	---	27.06	27.14	23.34	23.47	22.68	21.17	23.91	---	28.61	29.01
17	25.84	---	27.18	27.44	23.29	23.52	22.89	21.01	24.12	---	28.11	29.13
18	25.55	---	27.25	27.43	23.23	23.62	22.91	21.00	23.48	---	27.78	29.19
19	25.84	---	27.48	26.87	23.26	23.85	22.54	21.11	23.79	---	28.44	29.41
20	25.83	---	27.51	26.84	---	23.72	22.70	21.43	24.58	---	28.10	28.50
21	25.78	---	27.51	26.97	---	23.69	22.24	21.80	24.18	---	28.12	28.96
22	24.91	26.40	27.58	26.85	23.95	23.56	22.24	21.11	24.12	---	27.94	28.94
23	24.27	26.29	27.79	26.69	23.93	---	22.04	20.86	24.93	---	28.60	28.89
24	24.30	26.10	28.07	26.56	23.69	23.54	22.06	21.03	25.27	---	28.16	28.91
25	24.89	25.65	28.07	26.51	23.72	23.57	21.70	21.18	24.79	---	28.39	28.93
26	24.92	26.21	27.99	25.97	23.92	23.70	22.42	21.24	25.64	---	28.73	28.85
27	24.87	26.37	27.84	25.44	23.95	---	22.41	21.10	25.20	---	28.76	28.00
28	24.07	26.42	27.94	25.15	23.96	---	22.40	21.07	24.70	---	28.53	28.15
29	23.94	26.36	27.49	24.90	---	23.92	22.58	22.30	24.50	---	29.01	28.40
30	23.90	26.52	26.69	24.67	---	---	22.60	22.55	25.16	---	29.19	29.19
31	23.57	---	26.85	24.56	---	---	---	22.70	---	---	28.54	---
MAX	27.59	---	28.07	---	---	---	---	22.70	25.64	---	---	29.89
*PREC	1.82	4.52	5.95	0.13	1.32	2.93	4.05	5.29	16.48	7.22	16.84	11.04



SARASOTA COUNTY—Continued

WELL NUMBER.--270959082203002. ROMP 19 WUAM Well near Sarasota, FL.

LOCATION.--Lat 27°09'59", long 82°20'30" (1927 North American datum), in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.18, T.38 S., R.20 E., Hydrologic Unit 03100102, 5.2 mi south of State Highway 72, and 15.5 mi southeast of Sarasota.

AQUIFER.--Hawthorn formation of Miocene Age, Geologic Unit 122HTRN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 18 in., depth 205 ft, cased to 87 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

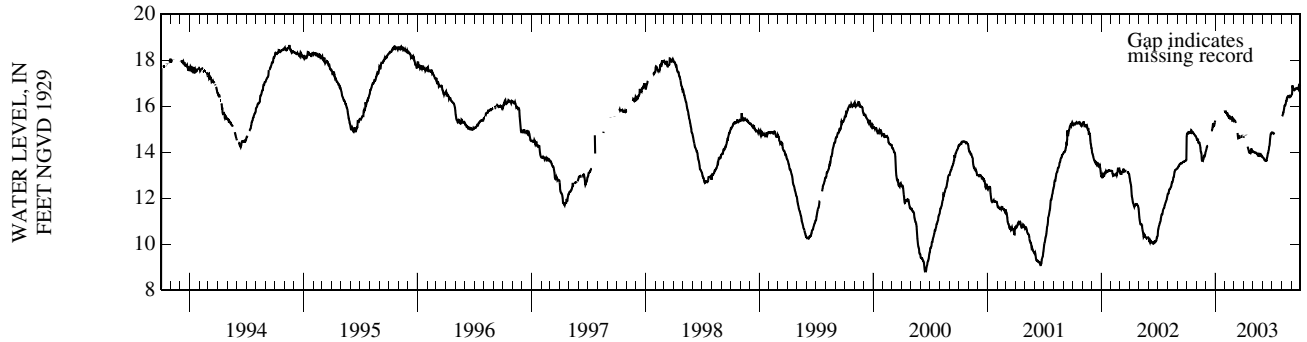
DATUM.--Elevation of land-surface datum is 20 ft, from topographic map. Measuring point: Top of recorder shelter floor, 12.31 ft above land-surface datum.

PERIOD OF RECORD.--July 1981 to September 1991; October 1991 to September 1993 (periodic); October 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 19.70 ft NGVD, estimated, Sept. 3, 1988; lowest, 8.83 ft NGVD, June 14, 17, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.68	14.63	14.02	---	15.77	15.37	14.62	14.04	13.80	14.86	---	16.47
2	14.80	14.60	14.05	---	15.74	15.39	14.66	14.04	13.77	14.86	---	16.50
3	14.81	14.50	14.10	---	15.73	15.37	14.69	14.01	13.76	14.86	15.56	16.52
4	14.82	14.54	14.19	---	15.75	15.37	---	14.01	13.75	14.84	15.58	16.58
5	14.81	14.55	14.25	---	15.71	15.36	---	14.01	13.74	14.82	15.63	16.90
6	14.81	14.55	14.27	---	15.69	15.33	14.74	14.01	13.72	14.82	15.71	16.82
7	14.88	14.44	14.26	---	15.69	15.32	---	13.98	13.66	14.81	15.72	16.74
8	14.88	14.41	14.27	---	15.61	15.27	14.71	13.98	13.65	14.84	15.80	16.72
9	14.87	14.42	---	---	15.60	---	---	13.98	13.64	14.86	15.89	16.71
10	14.86	14.42	---	---	15.63	---	14.75	13.98	13.63	---	16.01	16.70
11	14.86	14.41	---	---	15.59	---	---	13.98	13.62	---	16.02	16.75
12	14.84	14.34	---	---	15.53	---	---	13.96	13.62	---	16.04	16.74
13	14.84	14.28	---	---	15.49	14.84	---	13.96	13.65	---	16.05	16.72
14	14.91	14.18	---	---	15.49	14.69	14.24	13.93	13.65	---	16.11	16.72
15	14.96	14.03	---	---	15.54	14.60	14.20	13.93	13.74	---	16.15	16.75
16	14.95	14.00	---	---	15.56	14.61	14.17	13.91	13.77	---	16.23	16.77
17	14.91	13.97	---	---	15.54	14.68	14.13	13.86	13.84	---	16.23	16.79
18	14.86	13.71	---	---	15.44	14.69	14.06	13.86	13.94	---	16.33	16.79
19	14.87	13.60	---	---	15.41	14.66	14.01	13.86	13.96	---	16.33	16.76
20	14.87	13.66	14.98	---	---	14.63	13.98	13.89	14.03	---	16.40	16.75
21	14.87	13.74	14.96	---	---	14.63	13.98	13.85	14.08	---	16.40	16.75
22	14.83	13.74	14.99	---	15.56	14.61	14.00	13.84	14.21	---	16.43	16.75
23	14.81	13.70	15.08	---	15.54	---	13.99	13.93	14.25	---	16.42	16.76
24	14.80	13.75	15.21	---	15.37	14.66	13.97	13.93	14.36	---	16.40	16.75
25	14.78	13.83	15.22	---	15.38	14.66	14.00	13.93	14.56	---	16.40	16.83
26	14.76	13.82	15.12	---	15.42	14.74	14.16	13.89	14.67	---	16.43	16.90
27	14.74	13.78	15.13	---	15.44	---	14.10	13.85	14.79	---	16.41	16.89
28	14.72	13.85	15.16	---	15.41	---	14.04	13.84	14.81	---	16.44	16.90
29	14.71	13.88	15.21	15.76	---	14.77	14.01	13.85	14.84	---	16.44	16.87
30	14.70	13.97	15.28	15.77	---	---	14.01	13.85	14.85	---	16.43	16.85
31	14.67	---	15.37	15.77	---	---	---	13.81	---	---	16.43	---
MAX	14.96	14.63	---	---	---	---	---	14.04	14.85	---	---	16.90



SARASOTA COUNTY—Continued

WELL NUMBER.--270959082203003. ROMP 19 WS Well near Sarasota, FL.

LOCATION.--Lat 27°09'59", long 82°20'30" (1927 North American datum), in SW ¼ SE ¼ sec.18, T.38 S., R.20 E., Hydrologic Unit 03100102, 5.2 mi south of State Highway 72, and 15.5 mi southeast of Sarasota.

AQUIFER.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit 112NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 67 ft, cased to 32 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 20 ft, from topographic map. Measuring point: Top of recorder shelter floor, 2.90 ft above land-surface datum.

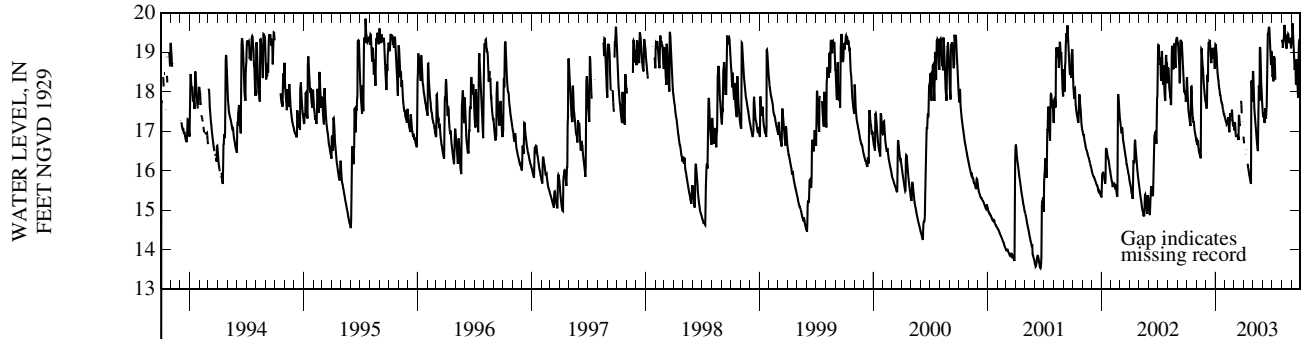
PERIOD OF RECORD.--July 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 19.86 ft NGVD, July 18, 1995; lowest, 13.54 ft NGVD, June 19, 2001.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.28	16.77	17.75	19.20	17.34	17.20	16.87	18.51	17.59	18.72	---	19.22
2	18.37	16.78	17.70	19.19	17.31	17.11	16.78	18.51	17.46	18.48	19.28	19.28
3	18.17	16.70	17.63	19.11	17.27	17.03	16.70	18.27	17.36	18.38	19.32	19.29
4	17.91	16.66	17.58	19.01	17.25	17.23	---	17.99	17.47	18.44	19.28	19.31
5	17.73	16.74	17.71	18.88	17.24	17.20	---	17.76	17.45	18.50	19.12	19.74
6	17.59	16.78	18.44	18.74	17.18	17.06	---	17.57	17.32	18.27	19.21	19.66
7	17.50	16.68	18.42	18.62	17.19	16.93	---	17.44	17.22	18.45	19.24	19.44
8	17.43	16.57	18.26	18.49	17.20	16.86	16.41	17.31	17.24	18.90	19.34	19.30
9	17.37	16.52	19.01	18.40	17.20	---	---	17.20	17.52	18.86	19.53	19.14
10	17.31	16.48	19.24	18.33	17.34	---	16.55	17.11	17.59	18.85	19.70	18.96
11	17.24	16.44	19.24	18.28	17.36	---	---	17.01	17.41	18.63	19.61	18.77
12	17.18	16.41	19.18	18.17	17.23	---	---	16.92	17.32	18.31	19.49	18.56
13	17.14	16.40	19.30	18.10	17.09	16.94	---	16.83	17.52	---	19.44	18.66
14	17.71	16.35	19.29	18.08	17.02	16.82	16.18	16.73	17.62	---	19.31	18.73
15	18.13	16.32	19.19	17.98	16.98	16.87	16.13	16.65	18.27	---	19.30	18.47
16	18.14	18.60	19.07	17.93	17.27	16.78	16.09	16.58	18.80	---	19.21	18.19
17	18.00	19.10	18.95	17.92	17.46	17.39	16.04	16.50	19.18	---	19.10	18.64
18	17.74	19.09	18.83	17.85	17.39	17.42	15.99	16.85	19.47	---	19.30	18.83
19	17.54	18.93	18.73	17.79	17.26	17.28	15.93	17.73	19.47	---	19.33	18.64
20	17.41	18.76	19.09	17.76	---	17.16	15.89	18.16	19.54	---	19.43	18.33
21	17.35	18.65	19.11	17.72	---	17.15	15.84	18.05	19.62	---	19.43	18.15
22	17.27	18.58	19.02	17.71	17.37	17.14	15.80	17.78	19.65	---	19.47	17.97
23	17.22	18.41	18.90	17.69	17.55	---	15.76	19.10	19.59	---	19.45	17.86
24	17.25	18.25	18.85	17.59	17.44	17.78	15.71	19.14	19.42	---	19.32	17.99
25	17.13	18.15	19.12	17.56	17.28	17.68	15.67	19.04	19.28	---	19.24	19.02
26	17.05	18.06	19.09	17.54	17.18	17.46	18.25	18.78	19.10	---	19.28	19.26
27	16.99	18.02	18.97	17.49	17.13	---	18.29	18.49	18.91	---	19.28	19.32
28	16.96	17.92	18.86	17.44	17.24	---	18.14	18.20	18.69	---	19.33	19.33
29	16.90	17.85	18.70	17.44	---	17.24	17.93	18.07	19.04	---	19.34	19.33
30	16.85	17.77	18.58	17.40	---	---	17.75	17.87	18.98	---	19.26	19.33
31	16.81	---	18.95	17.37	---	---	---	17.70	---	---	19.11	---
MAX	18.37	19.10	19.30	19.20	---	---	---	19.14	19.65	---	---	19.74

CAL YR 2002 MAX 19.37



SARASOTA COUNTY—Continued

WELL NUMBER.--271001082190701. Mabry Carlton 4-B NRSD Well near Sarasota, FL.

LOCATION.--Lat 27°10'01", long 82°19'07" (1927 North American datum), in SW ¼ SW ¼ sec.16, T.38 S., R.20 E., Hydrologic Unit 03100102, 5.0 mi south of State Highway 72, and 17.5 mi southeast of Sarasota.

AQUIFER.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit 112NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 50 ft, cased to 50 ft, screened interval 10-20 ft, 30-35 ft, and 45-50 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 25.68 ft above National Geodetic Vertical Datum of 1929 (levels by Sarasota County). Measuring point: Top of recorder shelter floor, 3.00 ft above land-surface datum.

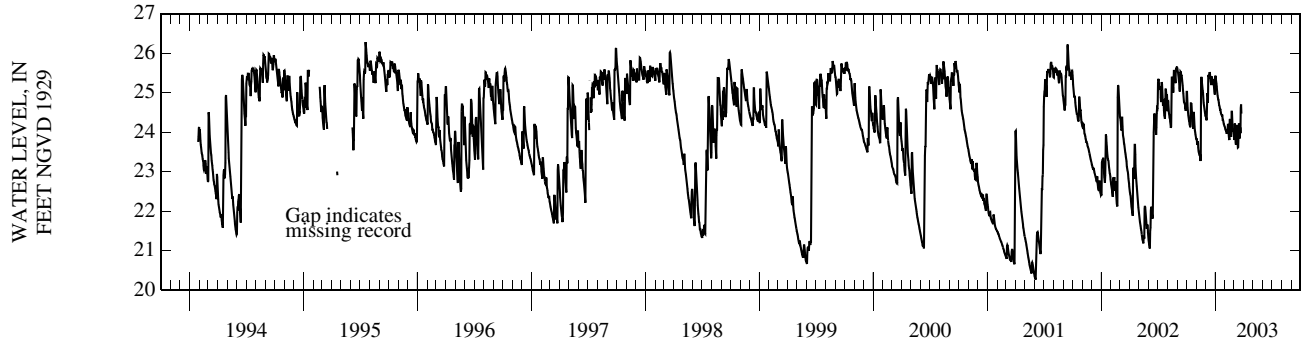
PERIOD OF RECORD.--January 1994 to March 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 26.28 ft NGVD, July 18, 1995; lowest, 20.26 ft NGVD, June 4, 2001.

ELEVATION ABOVE NGVD 1929, FEET
PERIOD OCTOBER 2002 TO MARCH 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.02	23.82	24.42	25.43	24.11	23.96	---	---	---	---	---	---
2	25.02	23.82	24.37	25.35	24.07	23.89	---	---	---	---	---	---
3	24.78	23.72	24.33	25.29	24.05	23.80	---	---	---	---	---	---
4	24.62	23.68	24.30	25.23	24.05	24.22	---	---	---	---	---	---
5	24.53	23.77	24.61	25.16	24.02	24.01	---	---	---	---	---	---
6	24.43	23.74	24.99	25.09	23.96	23.85	---	---	---	---	---	---
7	24.37	23.61	24.91	25.01	24.00	23.74	---	---	---	---	---	---
8	24.31	23.53	24.75	24.93	24.00	23.68	---	---	---	---	---	---
9	24.27	23.49	25.42	24.88	24.04	24.16	---	---	---	---	---	---
10	24.21	23.45	25.45	24.83	24.21	24.18	---	---	---	---	---	---
11	24.17	23.42	25.41	24.82	24.17	24.00	---	---	---	---	---	---
12	24.12	23.42	25.36	24.74	23.97	23.83	---	---	---	---	---	---
13	24.15	23.42	25.52	24.69	23.87	23.72	---	---	---	---	---	---
14	24.73	23.27	25.50	24.67	23.82	23.61	---	---	---	---	---	---
15	24.73	23.35	25.42	24.61	23.80	23.62	---	---	---	---	---	---
16	24.72	25.28	25.35	24.57	24.31	23.86	---	---	---	---	---	---
17	24.55	25.40	25.29	24.57	24.33	24.22	---	---	---	---	---	---
18	24.38	25.32	25.24	24.51	24.13	24.20	---	---	---	---	---	---
19	24.28	25.23	25.19	24.47	23.99	23.97	---	---	---	---	---	---
20	24.20	25.15	25.41	24.45	23.91	23.84	---	---	---	---	---	---
21	24.16	25.06	25.37	24.43	23.88	24.12	---	---	---	---	---	---
22	24.09	25.00	25.29	24.42	24.52	23.97	---	---	---	---	---	---
23	24.49	24.87	25.22	24.42	24.52	24.61	---	---	---	---	---	---
24	24.49	24.74	25.20	24.31	24.29	24.70	---	---	---	---	---	---
25	24.29	24.68	25.35	24.31	24.10	24.47	---	---	---	---	---	---
26	24.15	24.62	25.26	24.30	24.02	---	---	---	---	---	---	---
27	24.05	24.59	25.17	24.25	24.05	---	---	---	---	---	---	---
28	24.00	24.53	25.11	24.20	24.05	---	---	---	---	---	---	---
29	23.94	24.47	25.02	24.19	---	---	---	---	---	---	---	---
30	23.89	24.42	24.95	24.16	---	---	---	---	---	---	---	---
31	23.84	---	25.36	24.14	---	---	---	---	---	---	---	---
MAX	25.02	25.40	25.52	25.43	24.52	---	---	---	---	---	---	---

CAL YR 2002 MAX 25.64



SARASOTA COUNTY—Continued

WELL NUMBER.--271017082123101. Mabry Carlton CW-7 (20F) SWNN Well near Sarasota, FL.

LOCATION.--Lat 27°10'17", long 82°12'31" (1927 North American datum), in NW $^1/_4$ SE $^1/_4$ sec.16, T.38 S., R.21 E., Hydrologic Unit 03100102, 1.6 mi south of State Highway 72, and 23 mi southwest of Sarasota.

AQUIFER.--Suwannee limestone of Oligocene Age, Geologic Unit 123SWNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 629 ft, cased to 500 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

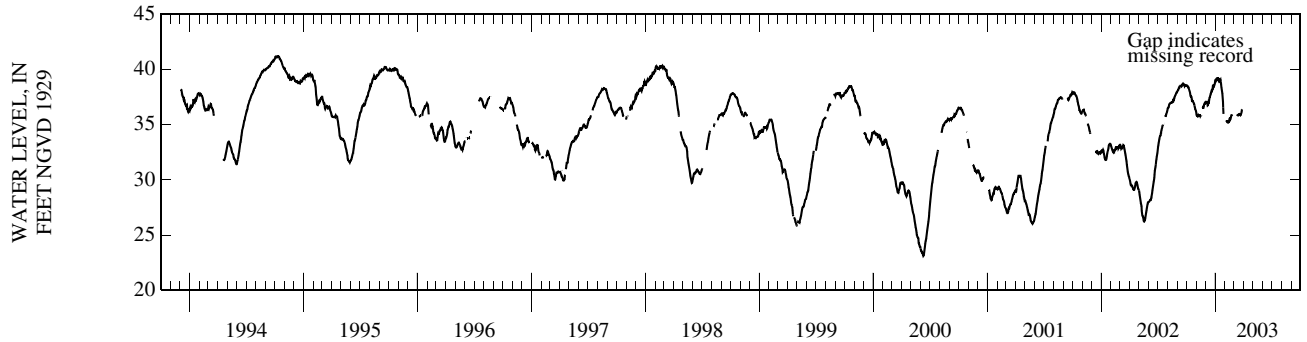
DATUM.--Land-surface datum is 30.78 ft above National Geodetic Vertical Datum of 1929 (levels by Sarasota County). Measuring point: Top of recorder shelter floor, 18.54 ft above land-surface datum.

PERIOD OF RECORD.--September 1987 to September 1993 (periodic); December 1993 to March 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 41.18 ft NGVD, Oct. 10, 1994; lowest, 23.12 ft NGVD, June 9, 2000.

ELEVATION ABOVE NGVD 1929, FEET
PERIOD OCTOBER 2002 TO MARCH 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38.48	36.00	37.07	39.03	---	---	---	---	---	---	---	---
2	38.48	35.85	37.06	39.05	---	---	---	---	---	---	---	---
3	38.52	35.78	37.02	39.09	---	---	---	---	---	---	---	---
4	38.49	35.77	36.99	39.01	---	---	---	---	---	---	---	---
5	38.44	35.78	36.99	39.06	35.25	---	---	---	---	---	---	---
6	38.36	35.82	36.92	39.10	35.32	---	---	---	---	---	---	---
7	38.36	35.75	36.73	39.06	35.32	---	---	---	---	---	---	---
8	38.26	35.76	36.77	39.13	35.21	---	---	---	---	---	---	---
9	38.16	35.82	36.93	39.21	35.20	---	---	---	---	---	---	---
10	38.05	35.87	37.08	39.21	35.25	---	---	---	---	---	---	---
11	37.96	35.87	37.05	39.15	35.21	35.93	---	---	---	---	---	---
12	37.77	35.86	37.26	39.01	35.20	35.88	---	---	---	---	---	---
13	37.59	35.86	37.45	39.07	35.21	35.87	---	---	---	---	---	---
14	37.55	35.77	37.49	39.04	35.33	35.84	---	---	---	---	---	---
15	37.54	35.82	37.57	38.96	35.47	35.82	---	---	---	---	---	---
16	37.50	---	37.69	39.02	35.53	35.83	---	---	---	---	---	---
17	37.30	---	37.77	39.06	35.51	35.93	---	---	---	---	---	---
18	37.15	35.83	37.85	38.81	35.46	35.94	---	---	---	---	---	---
19	37.17	---	37.98	38.65	35.55	35.90	---	---	---	---	---	---
20	37.15	---	38.07	38.38	35.69	35.89	---	---	---	---	---	---
21	37.14	36.48	38.04	38.18	35.83	35.89	---	---	---	---	---	---
22	37.05	36.53	38.11	38.00	35.84	35.85	---	---	---	---	---	---
23	36.98	36.45	38.27	37.81	35.84	35.89	---	---	---	---	---	---
24	36.93	36.60	38.53	37.45	35.78	35.94	---	---	---	---	---	---
25	36.86	36.73	38.53	37.05	---	36.02	---	---	---	---	---	---
26	36.71	36.82	38.38	36.56	---	36.20	---	---	---	---	---	---
27	36.57	36.91	38.44	35.97	---	36.35	---	---	---	---	---	---
28	36.42	36.93	38.49	---	---	36.37	---	---	---	---	---	---
29	36.37	36.92	38.57	---	---	---	---	---	---	---	---	---
30	36.30	37.04	38.72	---	---	---	---	---	---	---	---	---
31	36.16	---	38.94	---	---	---	---	---	---	---	---	---
MAX	38.52	---	38.94	---	---	---	---	---	---	---	---	---



SARASOTA COUNTY—Continued

WELL NUMBER.--271017082123102. Mabry Carlton CW-7 (20E) HTRN Well near Sarasota, FL.

LOCATION.--Lat 27°10'17", long 82°12'31" (1927 North American datum), in NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.16, T.38 S., R.21 E., Hydrologic Unit 03100102, 1.6 mi south of State Highway 72, and 23 mi southwest of Sarasota.

AQUIFER.--Hawthorn formation of Miocene Age, Geologic Unit 122HTRN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 14 in., depth 250 ft, cased to 100 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

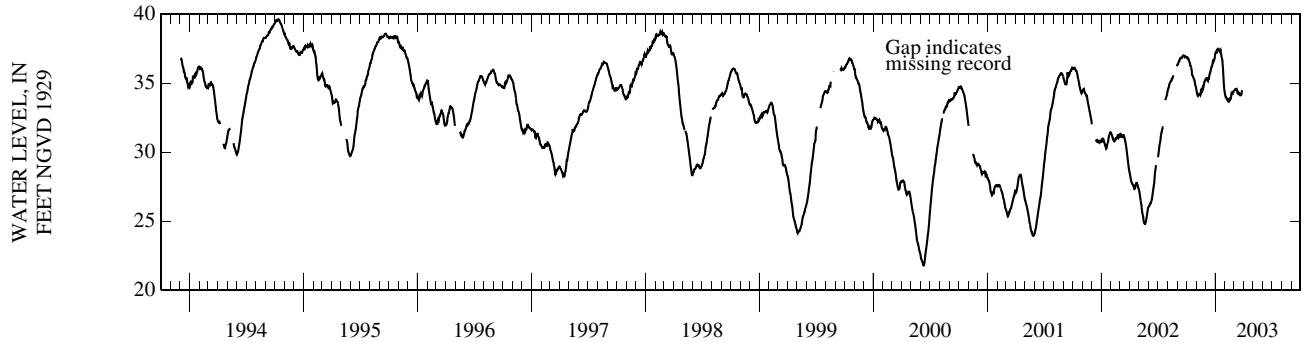
DATUM.--Land-surface datum is 30.78 ft above National Geodetic Vertical Datum of 1929 (levels by Sarasota County). Measuring point: Top of recorder shelter floor, 16.15 ft above land-surface datum.

PERIOD OF RECORD.--December 1993 to March 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 39.61 ft NGVD, Oct. 13, 1994; lowest, 21.80 ft NGVD, June 10, 2000.

ELEVATION ABOVE NGVD 1929, FEET
PERIOD OCTOBER 2002 TO MARCH 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36.85	34.49	35.31	37.18	34.20	34.42	---	---	---	---	---	---
2	36.85	34.35	35.32	37.23	34.08	34.47	---	---	---	---	---	---
3	36.86	34.26	35.31	37.27	33.99	34.50	---	---	---	---	---	---
4	36.85	34.15	35.32	37.25	33.97	34.52	---	---	---	---	---	---
5	36.81	34.12	35.34	37.28	33.92	34.55	---	---	---	---	---	---
6	36.74	34.14	35.31	37.32	33.88	34.58	---	---	---	---	---	---
7	36.74	34.08	35.16	37.29	33.87	34.58	---	---	---	---	---	---
8	36.68	34.11	35.14	37.38	33.78	34.56	---	---	---	---	---	---
9	36.60	34.18	35.28	37.48	33.75	34.56	---	---	---	---	---	---
10	36.52	34.22	35.36	37.49	33.78	34.57	---	---	---	---	---	---
11	36.45	34.23	35.34	37.47	33.73	34.46	---	---	---	---	---	---
12	36.32	34.23	35.48	37.39	33.67	34.36	---	---	---	---	---	---
13	36.22	34.23	35.65	37.41	33.65	34.27	---	---	---	---	---	---
14	36.20	34.18	35.69	37.39	33.72	34.25	---	---	---	---	---	---
15	36.12	34.27	35.75	37.33	33.83	34.22	---	---	---	---	---	---
16	36.05	34.53	35.84	37.37	33.88	34.21	---	---	---	---	---	---
17	35.85	34.53	35.92	37.41	33.89	34.30	---	---	---	---	---	---
18	35.66	34.30	36.00	37.23	33.83	34.27	---	---	---	---	---	---
19	35.57	34.39	36.13	37.10	33.87	34.22	---	---	---	---	---	---
20	35.54	34.53	36.21	36.96	33.98	34.17	---	---	---	---	---	---
21	35.51	34.72	36.21	36.88	34.15	34.16	---	---	---	---	---	---
22	35.43	34.75	36.28	36.78	34.29	34.12	---	---	---	---	---	---
23	35.39	34.70	36.42	36.64	34.27	34.13	---	---	---	---	---	---
24	35.33	34.82	36.64	36.36	34.14	34.15	---	---	---	---	---	---
25	35.27	34.92	36.64	36.05	34.21	34.18	---	---	---	---	---	---
26	35.17	35.03	36.57	35.81	34.33	34.31	---	---	---	---	---	---
27	35.05	35.10	36.63	35.43	34.38	34.45	---	---	---	---	---	---
28	34.92	35.15	36.68	34.98	34.38	34.49	---	---	---	---	---	---
29	34.84	35.17	36.77	34.67	---	---	---	---	---	---	---	---
30	34.76	35.27	36.88	34.47	---	---	---	---	---	---	---	---
31	34.64	---	37.09	34.31	---	---	---	---	---	---	---	---
MAX	36.86	35.27	37.09	37.49	34.38	---	---	---	---	---	---	---



SARASOTA COUNTY—Continued

WELL NUMBER.--271017082123103. Mabry Carlton CW-7 (20) NRSD Well near Sarasota, FL.

LOCATION.--Lat 27°10'17", long 82°12'31" (1927 North American datum), in NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.16, T.38 S., R.21 E., Hydrologic Unit 03100102, 1.6 mi south of State Highway 72, and 23 mi southeast of Sarasota.

AQUIFER.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit 112NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 46.5 ft, cased to 6.5 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 30.78 ft above National Geodetic Vertical Datum of 1929 (levels by Sarasota County). Measuring point: Top of recorder shelter floor, 3.27 ft above land-surface datum.

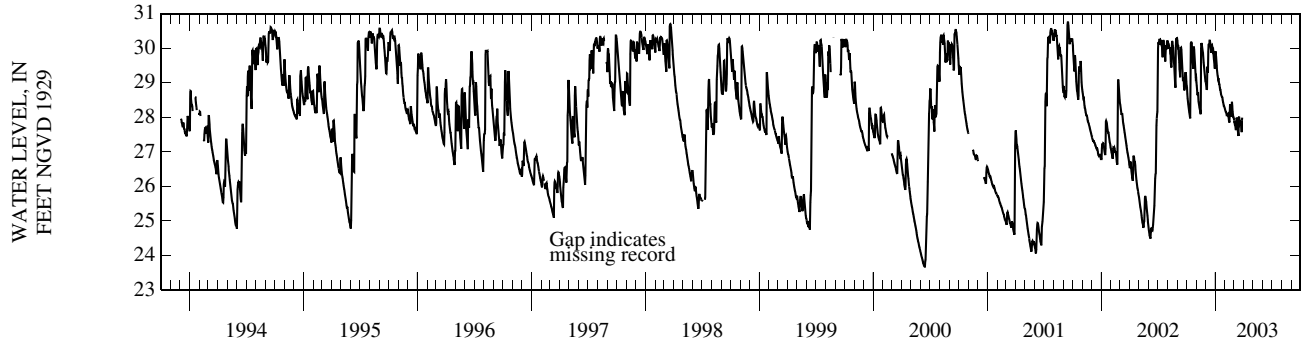
PERIOD OF RECORD.--December 1993 to March 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 30.75 ft NGVD, Sept. 15, 16, 2001; lowest, 23.68 ft NGVD, June 13, 14, 2000.

ELEVATION ABOVE NGVD 1929, FEET
PERIOD OCTOBER 2002 TO MARCH 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.92	29.01	29.02	29.91	28.23	27.96	---	---	---	---	---	---
2	28.87	28.92	28.97	29.85	28.20	27.91	---	---	---	---	---	---
3	28.68	28.79	28.88	29.75	28.16	27.85	---	---	---	---	---	---
4	28.55	28.67	28.80	29.62	28.15	27.87	---	---	---	---	---	---
5	28.46	28.64	28.82	29.50	28.13	27.79	---	---	---	---	---	---
6	28.37	28.73	29.47	29.39	28.06	27.73	---	---	---	---	---	---
7	28.30	28.65	29.45	29.31	28.06	27.67	---	---	---	---	---	---
8	28.23	28.46	29.30	29.22	28.08	27.63	---	---	---	---	---	---
9	28.15	28.40	29.89	29.17	28.07	27.75	---	---	---	---	---	---
10	28.10	28.34	30.10	29.11	28.10	27.99	---	---	---	---	---	---
11	28.03	28.28	30.10	29.13	28.11	27.97	---	---	---	---	---	---
12	27.97	28.23	30.05	29.04	28.00	27.82	---	---	---	---	---	---
13	29.40	28.21	30.22	28.96	27.92	27.70	---	---	---	---	---	---
14	30.14	28.13	30.22	28.95	27.88	27.60	---	---	---	---	---	---
15	30.17	28.09	30.16	28.87	27.85	27.52	---	---	---	---	---	---
16	30.17	30.00	30.10	28.80	28.17	27.46	---	---	---	---	---	---
17	30.15	30.15	30.02	28.80	28.38	27.99	---	---	---	---	---	---
18	30.00	30.13	29.95	28.73	28.30	28.02	---	---	---	---	---	---
19	29.82	30.06	29.87	28.67	28.17	27.93	---	---	---	---	---	---
20	29.66	29.98	30.09	28.64	28.08	27.80	---	---	---	---	---	---
21	29.55	29.91	30.10	28.61	28.01	27.82	---	---	---	---	---	---
22	29.41	29.86	30.04	28.59	28.31	27.84	---	---	---	---	---	---
23	29.94	29.73	29.96	28.58	28.45	27.81	---	---	---	---	---	---
24	30.05	29.59	29.91	28.50	28.33	27.89	---	---	---	---	---	---
25	29.95	29.50	29.93	28.45	28.17	27.74	---	---	---	---	---	---
26	29.79	29.41	29.81	28.43	28.09	27.57	---	---	---	---	---	---
27	29.62	29.36	29.69	28.38	28.01	27.90	---	---	---	---	---	---
28	29.46	29.25	29.61	28.33	28.00	27.99	---	---	---	---	---	---
29	29.29	29.15	29.50	28.33	---	---	---	---	---	---	---	---
30	29.14	29.05	29.41	28.30	---	---	---	---	---	---	---	---
31	29.16	---	29.57	28.27	---	---	---	---	---	---	---	---
MAX	30.17	30.15	30.22	29.91	28.45	---	---	---	---	---	---	---

CAL YR 2002 MAX 30.28



SARASOTA COUNTY—Continued

WELL NUMBER.--271100082172701. Mabry Carlton CW-3 (6F) SWNN Well near Sarasota, FL.

LOCATION.--Lat 27°11'00", long 82°17'27" (1927 North American datum), in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.10, T.38 S., R.20 E., Hydrologic Unit 03100102, 2.6 mi south of State Highway 72, and 18.5 mi southeast of Sarasota.

AQUIFER.--Suwannee limestone of Oligocene Age, Geologic Unit 123SWNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 551 ft, cased to 500 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval, and tipping bucket raingage recorder--15-minute interval.

DATUM.--Land-surface datum is 30.00 ft above National Geodetic Vertical Datum of 1929 (levels by Sarasota County). Measuring point: Top of recorder shelter floor, 12.51 ft above land-surface datum.

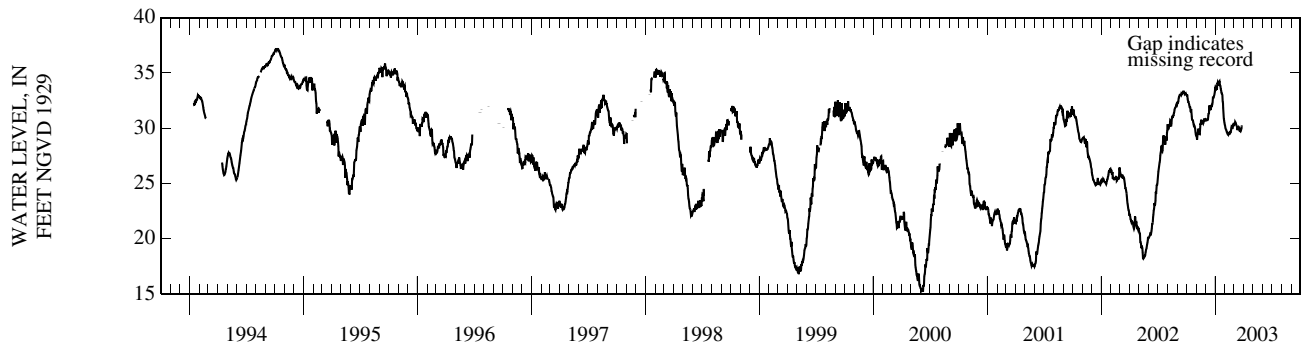
PERIOD OF RECORD.--September 1987 to September 1993 (periodic); January 1994 to March 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 37.18 ft NGVD, Oct. 10, 1994; lowest, 15.19 ft NGVD, June 8, 2000.

ELEVATION ABOVE NGVD 1929, FEET
PERIOD OCTOBER 2002 TO MARCH 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33.02	29.40	30.82	33.74	30.23	30.48	---	---	---	---	---	---
2	32.98	29.18	30.78	33.69	30.03	30.33	---	---	---	---	---	---
3	32.97	28.97	30.76	33.49	29.93	30.36	---	---	---	---	---	---
4	32.66	29.32	30.71	33.52	29.89	30.40	---	---	---	---	---	---
5	32.51	29.57	30.73	33.57	29.83	30.57	---	---	---	---	---	---
6	32.38	29.65	30.74	33.50	29.69	30.52	---	---	---	---	---	---
7	32.36	29.71	30.75	34.01	29.63	30.50	---	---	---	---	---	---
8	32.26	29.96	30.80	34.03	29.55	30.43	---	---	---	---	---	---
9	32.10	29.42	31.11	34.18	29.49	30.32	---	---	---	---	---	---
10	31.97	29.47	31.35	34.10	29.52	30.25	---	---	---	---	---	---
11	31.84	29.48	31.28	34.02	29.52	30.15	---	---	---	---	---	---
12	31.95	29.47	31.81	33.86	29.43	29.96	---	---	---	---	---	---
13	31.62	29.91	32.07	34.20	29.49	29.83	---	---	---	---	---	---
14	31.46	30.43	31.73	34.25	29.60	29.94	---	---	---	---	---	---
15	31.75	30.34	31.78	33.96	29.62	30.01	---	---	---	---	---	---
16	31.39	30.77	31.64	33.89	29.66	30.02	---	---	---	---	---	---
17	31.07	30.66	31.74	33.83	29.65	30.09	---	---	---	---	---	---
18	30.84	30.37	32.00	33.55	29.58	30.05	---	---	---	---	---	---
19	30.76	30.57	32.00	33.46	29.65	29.79	---	---	---	---	---	---
20	30.74	30.59	32.08	33.25	29.78	29.76	---	---	---	---	---	---
21	30.70	30.50	32.05	33.14	30.02	29.74	---	---	---	---	---	---
22	30.55	30.51	32.16	33.12	30.16	29.72	---	---	---	---	---	---
23	30.38	30.44	32.32	33.03	30.13	29.83	---	---	---	---	---	---
24	30.24	30.54	32.77	32.44	29.93	29.86	---	---	---	---	---	---
25	30.27	30.80	32.77	32.27	30.07	29.98	---	---	---	---	---	---
26	30.22	30.80	32.77	31.84	30.22	30.16	---	---	---	---	---	---
27	30.09	30.81	32.83	31.35	30.29	30.26	---	---	---	---	---	---
28	29.95	30.69	32.93	30.91	30.28	---	---	---	---	---	---	---
29	29.66	30.69	33.10	30.68	---	---	---	---	---	---	---	---
30	29.45	30.79	33.28	30.50	---	---	---	---	---	---	---	---
31	29.29	---	33.64	30.34	---	---	---	---	---	---	---	---
MAX	33.02	30.81	33.64	34.25	30.29	---	---	---	---	---	---	---
*PREC	---	3.53	---	0.07	1.28	---	---	---	---	---	---	---

CAL YR 2002 MAX 33.64



SARASOTA COUNTY—Continued

WELL NUMBER.--271100082172702. Mabry Carlton CW-3 (6E) HTRN Well near Sarasota, FL.

LOCATION.--Lat 27°11'00", long 82°17'27" (1927 North American datum), in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.10, T.38 S., R.20 E., Hydrologic Unit 03100102, 2.6 mi south of State Highway 72, and 18.5 mi southeast of Sarasota.

AQUIFER.--Hawthorn formation of Miocene Age, Geologic Unit 122HTRN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 8 in., depth 240 ft, cased to 60 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

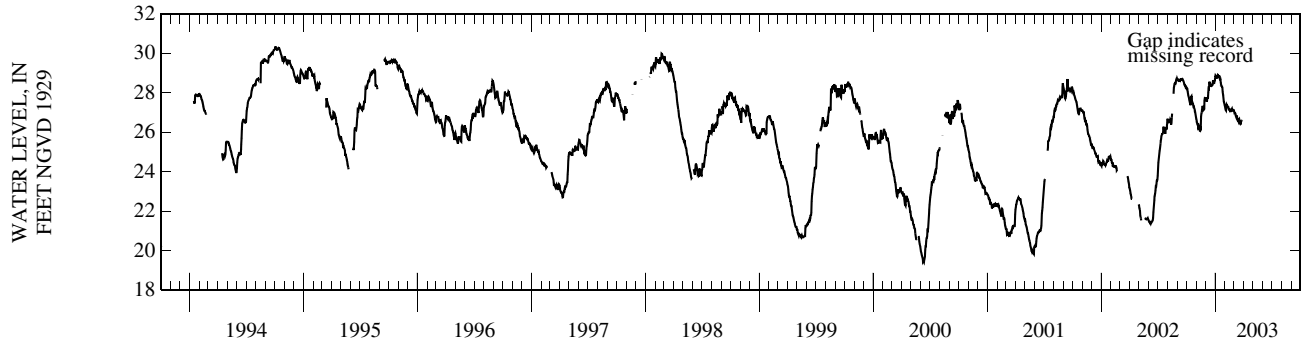
DATUM.--Land-surface datum is 30.00 ft above National Geodetic Vertical Datum of 1929 (levels by Sarasota County). Measuring point: Top of recorder shelter floor, 3.02 ft above land-surface datum.

PERIOD OF RECORD.--September 1987 to September 1993 (periodic); January 1994 to March 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 30.33 ft NGVD, Oct. 2, 3, 1994; lowest, 19.43 ft NGVD, June 11, 2000.

ELEVATION ABOVE NGVD 1929, FEET
PERIOD OCTOBER 2002 TO MARCH 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.21	26.66	27.73	28.89	27.30	27.11	---	---	---	---	---	---
2	28.25	26.57	27.60	28.86	27.21	27.06	---	---	---	---	---	---
3	28.22	26.49	27.64	28.80	27.14	26.98	---	---	---	---	---	---
4	28.08	26.40	27.60	28.78	27.11	26.99	---	---	---	---	---	---
5	27.98	26.39	27.60	28.79	27.31	26.98	---	---	---	---	---	---
6	27.88	26.40	27.74	28.74	27.41	26.95	---	---	---	---	---	---
7	27.83	26.27	27.76	28.81	27.38	26.89	---	---	---	---	---	---
8	27.76	26.30	27.73	28.86	27.31	26.82	---	---	---	---	---	---
9	27.66	26.19	28.03	28.92	27.30	26.78	---	---	---	---	---	---
10	27.59	26.19	28.24	28.90	27.31	26.83	---	---	---	---	---	---
11	27.52	26.14	28.22	28.85	27.30	26.83	---	---	---	---	---	---
12	27.47	26.09	28.43	28.76	27.22	26.73	---	---	---	---	---	---
13	27.38	26.08	28.57	28.85	27.17	26.63	---	---	---	---	---	---
14	27.64	26.26	28.46	28.85	27.18	26.60	---	---	---	---	---	---
15	27.82	26.24	28.43	28.72	27.17	26.60	---	---	---	---	---	---
16	27.84	26.81	28.36	28.69	27.14	26.56	---	---	---	---	---	---
17	27.72	26.95	28.36	28.70	27.19	26.65	---	---	---	---	---	---
18	27.61	27.02	28.39	28.52	27.12	26.67	---	---	---	---	---	---
19	27.56	27.17	28.39	28.43	27.08	26.56	---	---	---	---	---	---
20	27.52	27.26	28.41	28.35	27.08	26.50	---	---	---	---	---	---
21	27.48	27.35	28.38	28.34	27.12	26.45	---	---	---	---	---	---
22	27.37	27.25	28.39	28.32	27.16	26.42	---	---	---	---	---	---
23	27.30	27.14	28.42	28.29	27.19	26.44	---	---	---	---	---	---
24	27.31	27.16	28.60	28.05	27.12	26.55	---	---	---	---	---	---
25	27.25	27.18	28.60	27.94	27.12	26.57	---	---	---	---	---	---
26	27.20	27.19	28.53	27.88	27.15	26.62	---	---	---	---	---	---
27	27.11	27.61	28.51	27.72	27.14	26.64	---	---	---	---	---	---
28	27.03	27.72	28.51	27.57	27.10	---	---	---	---	---	---	---
29	26.93	27.70	28.59	27.51	---	---	---	---	---	---	---	---
30	26.83	27.73	28.62	27.45	---	---	---	---	---	---	---	---
31	26.73	---	28.80	27.37	---	---	---	---	---	---	---	---
MAX	28.25	27.73	28.80	28.92	27.41	---	---	---	---	---	---	---



SARASOTA COUNTY—Continued

WELL NUMBER.--271100082172703. Mabry Carlton CW-3 (6G) NRSD Well near Sarasota, FL.

LOCATION.--Lat 27°11'00", long 82°17'27" (1927 North American datum), in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.10, T.38 S., R.20 E., Hydrologic Unit 03100102, 2.6 mi south of State Highway 72, and 18.5 mi southeast of Sarasota.

AQUIFER.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit 112NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 55 ft, cased to 55 ft, screened interval 5 to 35 ft, and 45 to 55 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 30.00 ft above National Geodetic Vertical Datum of 1929 (levels by Sarasota County). Measuring point: Top of recorder shelter floor, 3.49 ft above land-surface datum.

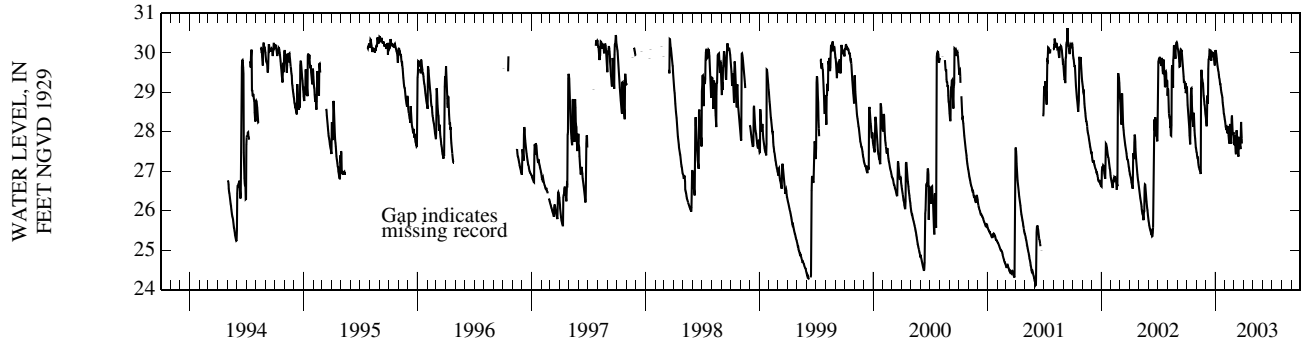
PERIOD OF RECORD.--May 1994 to March 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 30.63 ft NGVD, Sept. 14, 2001: lowest, 24.12 ft NGVD, June 4, 2001.

ELEVATION ABOVE NGVD 1929, FEET
PERIOD OCTOBER 2002 TO MARCH 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29.10	27.50	28.40	30.07	28.27	27.87	---	---	---	---	---	---
2	29.11	27.48	28.32	30.04	28.20	27.77	---	---	---	---	---	---
3	28.86	27.39	28.23	30.01	28.13	27.66	---	---	---	---	---	---
4	28.68	27.34	28.14	29.94	28.09	27.91	---	---	---	---	---	---
5	28.56	27.32	28.38	29.86	28.10	27.77	---	---	---	---	---	---
6	28.45	27.33	28.92	29.80	28.11	27.61	---	---	---	---	---	---
7	28.34	27.23	28.87	29.73	28.02	27.50	---	---	---	---	---	---
8	28.22	27.16	28.72	29.66	27.96	27.43	---	---	---	---	---	---
9	28.11	27.11	29.59	29.61	27.99	27.89	---	---	---	---	---	---
10	27.91	27.09	29.83	29.56	28.12	28.04	---	---	---	---	---	---
11	27.79	27.04	29.85	29.53	28.12	27.95	---	---	---	---	---	---
12	27.68	27.03	29.91	29.44	27.90	27.76	---	---	---	---	---	---
13	28.50	27.04	30.07	29.38	27.79	27.61	---	---	---	---	---	---
14	28.92	26.96	30.06	29.35	27.74	27.49	---	---	---	---	---	---
15	29.10	26.93	29.99	29.28	27.70	27.39	---	---	---	---	---	---
16	29.11	29.26	29.93	29.21	28.11	27.39	---	---	---	---	---	---
17	28.90	29.57	29.90	29.21	28.20	27.85	---	---	---	---	---	---
18	28.66	29.48	29.84	29.12	28.01	27.87	---	---	---	---	---	---
19	28.48	29.36	29.80	29.05	27.84	27.72	---	---	---	---	---	---
20	28.33	29.31	30.02	29.00	27.74	27.58	---	---	---	---	---	---
21	28.25	29.25	30.01	28.96	27.70	27.63	---	---	---	---	---	---
22	28.13	29.23	29.96	28.92	28.33	27.56	---	---	---	---	---	---
23	28.46	29.06	29.92	28.87	28.41	28.00	---	---	---	---	---	---
24	28.46	28.92	29.92	28.74	28.22	28.25	---	---	---	---	---	---
25	28.24	28.85	30.02	28.67	28.02	28.08	---	---	---	---	---	---
26	28.04	28.77	29.96	28.64	27.92	27.83	---	---	---	---	---	---
27	27.91	28.70	29.88	28.57	27.95	27.70	---	---	---	---	---	---
28	27.83	28.66	29.82	28.47	27.99	---	---	---	---	---	---	---
29	27.72	28.56	29.74	28.43	---	---	---	---	---	---	---	---
30	27.61	28.45	29.68	28.38	---	---	---	---	---	---	---	---
31	27.57	---	29.98	28.32	---	---	---	---	---	---	---	---
MAX	29.11	29.57	30.07	30.07	28.41	---	---	---	---	---	---	---

CAL YR 2002 MAX 30.27



SARASOTA COUNTY—Continued

WELL NUMBER.--271134082092201. Big Slough Deep Well near Arcadia, FL.

LOCATION.--Lat 27°11'34", long 82°09'22" (1927 North American datum), in NE $^1/_4$ NE $^1/_4$ sec.12, T.38 S., R.22 E., Hydrologic Unit 03100102, 30 ft south of State Highway 72, and 17.5 mi west of Arcadia.

AQUIFER.--Hawthorn formation of Miocene Age, Geologic Unit 122HTRN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 100 ft, cased to 78 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 33.26 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of PVC extension, 3.33 ft above land-surface datum.

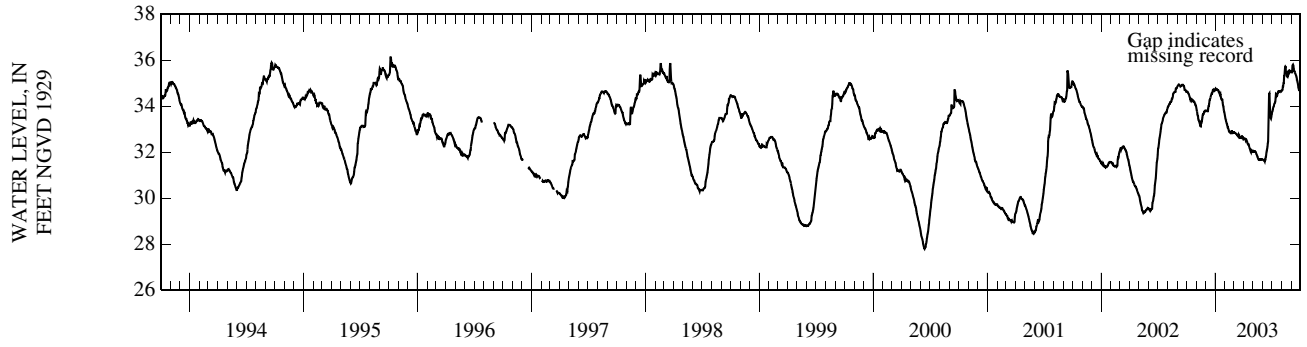
PERIOD OF RECORD.--December 1977 to current year. The figures of water level as elevation, in feet NGVD, prior to Oct. 1, 1982, are in error. Correct elevations for data published prior to this date may be obtained by using datum correction of +0.11 ft.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 36.12 ft NGVD, Oct. 6, 7, 1995; lowest, 27.80 ft NGVD, June 13, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34.62	33.90	33.81	34.76	33.55	32.85	32.55	32.04	31.69	33.70	34.65	35.47
2	34.63	33.82	33.80	34.73	33.47	32.86	32.56	32.05	31.68	33.75	34.68	35.47
3	34.62	33.76	33.79	34.74	33.43	32.85	32.57	32.03	31.66	33.78	34.69	35.47
4	34.62	33.64	33.79	34.73	33.36	32.84	32.60	32.04	31.66	33.88	34.71	35.47
5	34.59	33.59	33.79	34.72	33.32	32.84	32.60	32.05	31.66	33.91	34.86	35.74
6	34.56	33.56	33.81	34.73	33.24	32.83	32.59	32.05	31.64	33.95	34.86	35.79
7	34.55	33.46	33.78	34.72	33.22	32.82	32.57	32.04	31.64	33.98	34.99	35.81
8	34.52	33.40	33.78	34.70	33.16	32.80	32.52	32.04	31.61	34.04	35.00	35.78
9	34.47	33.37	33.93	34.70	33.08	32.79	32.55	32.03	31.68	34.09	35.31	35.63
10	34.42	33.35	34.01	34.70	33.08	32.79	32.55	32.02	31.68	34.13	35.32	35.54
11	34.38	33.29	34.02	34.67	33.04	32.77	32.52	31.99	31.79	34.15	35.53	35.53
12	34.31	33.24	34.12	34.61	32.99	32.75	32.48	31.95	31.82	34.21	35.69	35.51
13	34.26	33.19	34.27	34.60	32.92	32.72	32.42	31.91	31.96	34.35	35.72	35.46
14	34.29	33.13	34.28	34.58	32.89	32.70	32.37	31.87	32.03	34.53	35.70	35.43
15	34.32	33.12	34.32	34.52	32.89	32.70	32.35	31.84	32.09	34.52	35.44	35.39
16	34.32	33.33	34.37	34.49	32.88	32.68	32.36	31.79	32.15	34.42	35.47	35.35
17	34.29	33.35	34.41	34.52	32.88	32.76	32.36	31.76	32.23	34.43	35.47	35.32
18	34.24	33.33	34.45	34.42	32.84	32.73	32.33	31.72	32.38	34.46	35.35	35.25
19	34.26	33.40	34.50	34.35	32.82	32.70	32.27	31.70	32.46	34.56	35.28	35.17
20	34.26	33.50	34.55	34.30	32.82	32.66	32.22	31.67	32.94	34.58	35.27	35.10
21	34.26	33.61	34.54	34.29	32.88	32.62	32.17	31.66	34.03	34.64	35.33	35.05
22	34.23	33.64	34.57	34.29	32.92	32.62	32.13	31.66	34.54	34.65	35.34	34.97
23	34.20	33.64	34.63	34.28	32.92	32.62	32.10	31.69	34.56	34.65	35.47	34.88
24	34.20	33.66	34.71	34.14	32.84	32.63	32.03	31.69	34.20	34.65	35.46	34.82
25	34.20	33.73	34.72	34.04	32.83	32.62	32.00	31.69	33.85	34.64	35.58	34.77
26	34.18	33.74	34.68	34.02	32.86	32.64	32.10	31.69	33.62	34.64	35.55	34.71
27	34.14	33.77	34.67	33.96	32.87	32.69	32.09	31.68	33.49	34.62	35.47	34.69
28	34.08	33.77	34.66	33.83	32.87	32.69	32.02	31.68	33.46	34.65	35.53	34.67
29	34.04	33.78	34.67	33.77	---	32.65	32.01	31.70	33.53	34.66	35.52	34.69
30	34.03	33.81	34.68	33.71	---	32.65	32.01	31.70	33.63	34.65	35.49	34.70
31	33.98	---	34.74	33.63	---	32.59	---	31.70	---	34.64	35.47	---
MAX	34.63	33.90	34.74	34.76	33.55	32.86	32.60	32.05	34.56	34.66	35.72	35.81

CAL YR 2002 MAX 34.94
WTR YR 2003 MAX 35.81



SARASOTA COUNTY—Continued

WELL NUMBER.--271134082092202. Big Slough Shallow Well near Arcadia, FL.

LOCATION.--Lat 27°11'34", long 82°09'22" (1927 North American datum), in NE $^1/_4$ NE $^1/_4$ sec.12, T.38 S., R.22 E., Hydrologic Unit 03100102, 30 ft south of State Highway 72, and 17.5 mi west of Arcadia.

AQUIFER.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit 112NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 25 ft, cased to 19 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 33.26 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 3.65 ft above land-surface datum.

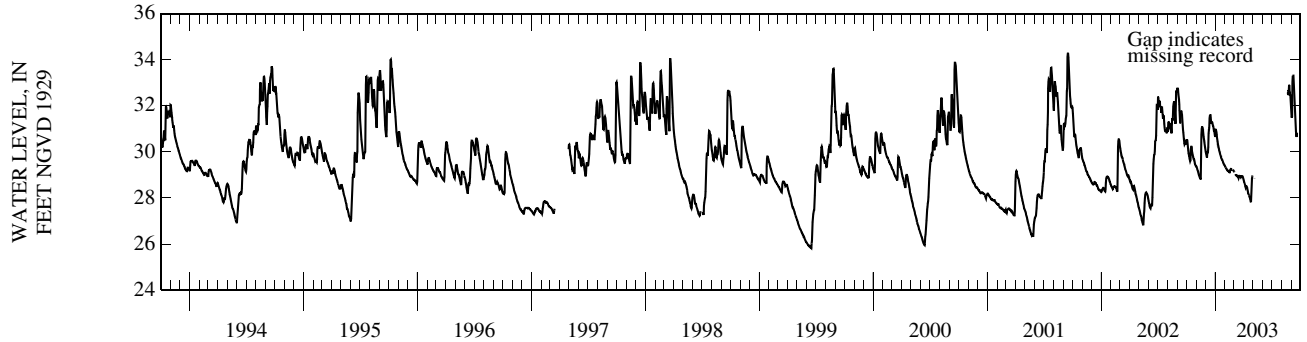
PERIOD OF RECORD.--December 1977 to current year. The figures of water level as elevation, in feet NGVD, prior to Oct. 1, 1982, are in error. Correct elevations for data published prior to this date may be obtained by using datum correction of +0.07 ft.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 34.51 ft NGVD, June 27, 1992; lowest, 25.80 ft NGVD, June 16, 18, 1989.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30.44	29.36	30.01	30.97	29.38	29.16	28.81	---	---	---	---	31.67
2	30.54	29.34	29.94	30.97	29.35	29.14	28.76	---	---	---	---	31.49
3	30.49	29.29	29.88	30.93	29.32	29.11	28.70	---	---	---	---	31.52
4	30.34	29.23	29.81	30.85	29.30	---	28.67	---	---	---	---	31.53
5	30.20	29.19	29.75	30.75	29.28	---	28.62	---	---	---	---	33.03
6	30.05	29.16	29.96	30.64	29.24	29.03	28.57	28.84	---	---	---	33.31
7	29.94	29.12	29.99	30.54	29.23	29.01	28.51	---	---	---	---	---
8	29.87	29.06	29.99	30.45	29.20	28.99	28.45	---	---	---	---	33.36
9	29.80	29.01	30.21	30.35	29.18	28.97	28.49	---	---	---	---	33.02
10	29.71	28.98	30.80	30.27	29.18	28.96	28.51	---	---	---	---	32.58
11	29.65	28.93	30.94	30.20	29.16	28.97	28.50	---	---	---	---	32.26
12	29.59	28.89	31.04	30.15	29.15	28.95	28.46	---	---	---	---	31.92
13	29.63	28.86	31.46	30.07	29.14	28.94	28.39	---	---	---	---	31.61
14	30.11	28.83	31.56	30.03	29.12	28.92	28.33	---	---	---	---	31.34
15	30.22	28.83	31.59	29.97	29.11	28.90	28.26	---	---	---	---	31.10
16	30.22	29.88	31.59	29.91	29.11	28.87	28.21	---	---	---	---	30.89
17	30.16	30.76	31.50	29.87	29.19	28.93	28.19	---	---	---	---	30.74
18	30.04	30.99	31.36	29.83	29.23	28.96	28.15	---	---	---	---	30.65
19	29.95	31.08	31.22	29.77	29.25	28.96	28.11	---	---	---	---	30.78
20	29.89	31.08	31.26	29.72	29.26	28.95	28.06	---	---	---	---	30.76
21	29.84	31.04	31.29	29.69	29.25	28.91	28.02	---	---	---	32.58	---
22	29.77	30.94	31.27	29.67	29.22	28.91	27.99	---	---	---	32.47	---
23	29.69	30.80	31.21	29.65	29.23	28.89	27.92	---	---	---	32.68	---
24	29.68	30.65	31.15	29.61	---	28.93	27.85	---	---	---	32.65	---
25	29.66	30.55	31.12	29.57	---	28.93	27.81	---	---	---	32.91	---
26	29.59	30.46	31.03	29.54	29.23	28.92	28.26	---	---	---	32.88	---
27	29.51	30.39	30.93	29.51	29.21	28.92	28.57	---	---	---	32.45	---
28	29.45	30.29	30.93	29.48	29.18	28.94	28.82	---	---	---	32.51	---
29	29.43	30.19	30.83	29.45	---	28.94	28.93	---	---	---	32.47	---
30	29.39	30.10	30.73	29.43	---	28.91	28.97	---	---	---	32.15	---
31	29.37	---	30.65	29.40	---	28.87	---	---	---	---	31.88	---
MAX	30.54	31.08	31.59	30.97	---	---	28.97	---	---	---	---	---

CAL YR 2002 MAX 32.78



SARASOTA COUNTY—Continued

WELL NUMBER.--271207082154301. Mabry Carlton NRSD Well 46 near Sarasota, FL.

LOCATION.--Lat 27°12'11", long 82°15'43" (1927 North American datum), in SE $^1/_4$ NW $^1/_4$ sec.1, T.38 S., R.20 E., Hydrologic Unit 03100102, 0.6 mi south of State Highway 72, and 19.2 mi southeast of Sarasota.

AQUIFER.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit 112NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 24 ft, cased to 19 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

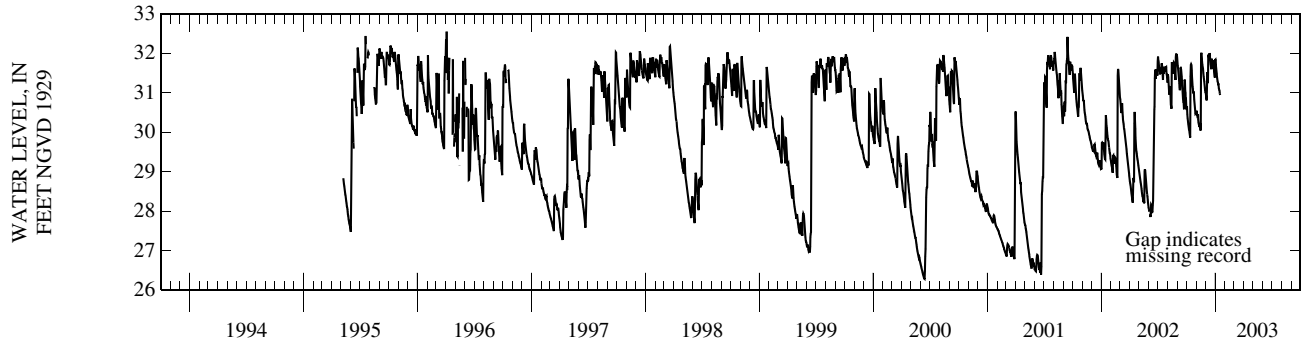
DATUM.--Land-surface datum is 31.00 ft above National Geodetic Vertical Datum of 1929 (levels by Sarasota County). Measuring point: Top of flange, 3.49 ft above land-surface datum.

PERIOD OF RECORD.--May 1995 to January 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 32.55 ft NGVD, Apr. 3, 1996; lowest, 26.29 ft NGVD, June 13, 2000.

ELEVATION ABOVE NGVD 1929, FEET
PERIOD OCTOBER 2002 TO JANUARY 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30.63	30.52	31.01	31.85	---	---	---	---	---	---	---	---
2	30.66	30.55	30.94	31.72	---	---	---	---	---	---	---	---
3	30.46	30.45	30.87	31.65	---	---	---	---	---	---	---	---
4	30.36	30.41	30.81	31.57	---	---	---	---	---	---	---	---
5	30.29	30.42	31.12	31.49	---	---	---	---	---	---	---	---
6	30.21	30.46	31.53	31.42	---	---	---	---	---	---	---	---
7	30.15	30.32	31.42	31.36	---	---	---	---	---	---	---	---
8	30.09	30.25	31.25	31.30	---	---	---	---	---	---	---	---
9	30.06	30.21	31.95	31.27	---	---	---	---	---	---	---	---
10	29.99	30.18	31.97	31.22	---	---	---	---	---	---	---	---
11	29.93	30.14	31.91	31.22	---	---	---	---	---	---	---	---
12	29.87	30.19	31.83	31.12	---	---	---	---	---	---	---	---
13	31.42	30.23	32.01	31.09	---	---	---	---	---	---	---	---
14	31.71	30.07	31.95	31.07	---	---	---	---	---	---	---	---
15	31.73	30.05	31.85	30.99	---	---	---	---	---	---	---	---
16	31.71	31.97	31.77	30.95	---	---	---	---	---	---	---	---
17	31.57	32.02	31.71	---	---	---	---	---	---	---	---	---
18	31.43	31.91	31.66	---	---	---	---	---	---	---	---	---
19	31.30	31.80	31.60	---	---	---	---	---	---	---	---	---
20	31.17	31.72	31.87	---	---	---	---	---	---	---	---	---
21	31.10	31.66	31.79	---	---	---	---	---	---	---	---	---
22	30.99	31.62	31.69	---	---	---	---	---	---	---	---	---
23	31.02	31.51	31.63	---	---	---	---	---	---	---	---	---
24	31.02	31.42	31.70	---	---	---	---	---	---	---	---	---
25	30.84	31.35	31.83	---	---	---	---	---	---	---	---	---
26	30.74	31.29	31.69	---	---	---	---	---	---	---	---	---
27	30.64	31.24	31.60	---	---	---	---	---	---	---	---	---
28	30.55	31.16	31.53	---	---	---	---	---	---	---	---	---
29	30.47	31.07	31.46	---	---	---	---	---	---	---	---	---
30	30.48	31.02	31.39	---	---	---	---	---	---	---	---	---
31	30.51	---	31.84	---	---	---	---	---	---	---	---	---
MAX	31.73	32.02	32.01	---	---	---	---	---	---	---	---	---



SARASOTA COUNTY—Continued

WELL NUMBER.--271227082084801. Mabry Carlton Well No. 6 near Myakka City, FL.

LOCATION.--Lat 27°12'27", long 82°08'48" (1927 North American datum), in NW $^1/_4$ NE $^1/_4$ sec.6, T.38 S., R.22 E., Hydrologic Unit 03100102, 1.0 mi north of State Highway 72, and 9.5 mi southeast of Myakka City.

AQUIFER.--Tampa limestone of Miocene Age, Geologic Unit 122TAMP.

WELL CHARACTERISTICS.--Drilled, irrigation, artesian well, diameter 12 in., depth 369 ft, cased to 311 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

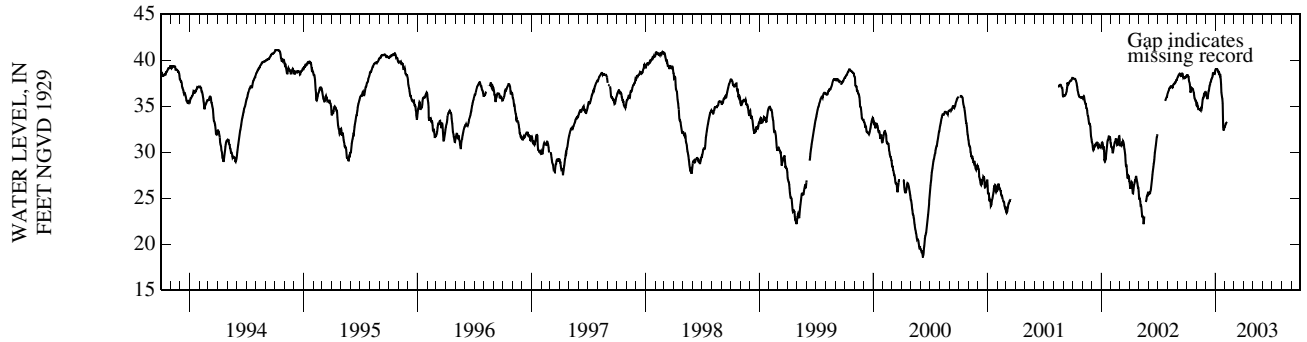
DATUM.--Elevation of land-surface datum is 40 ft, from topographic map. Measuring point: Top of recorder shelter floor, 5.50 ft above land-surface datum.

PERIOD OF RECORD.--March 1983 to February 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 41.10 ft NGVD, Jan. 25, 27, 1984, Oct. 3, 5, 1994; lowest, 18.64 ft NGVD, June 7, 8, 2000.

ELEVATION ABOVE NGVD 1929, FEET
PERIOD OCTOBER 2002 TO FEBRUARY 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38.31	35.09	36.52	38.96	32.80	---	---	---	---	---	---	---
2	38.33	35.08	36.46	39.04	32.91	---	---	---	---	---	---	---
3	38.39	35.03	36.29	39.10	33.09	---	---	---	---	---	---	---
4	38.38	35.11	36.09	39.06	33.15	---	---	---	---	---	---	---
5	38.26	34.90	35.97	39.09	33.18	---	---	---	---	---	---	---
6	38.21	34.89	35.75	39.08	33.13	---	---	---	---	---	---	---
7	38.19	34.68	35.92	39.05	33.12	---	---	---	---	---	---	---
8	37.80	34.69	36.08	38.95	---	---	---	---	---	---	---	---
9	37.67	34.69	36.41	38.80	---	---	---	---	---	---	---	---
10	37.57	34.69	36.63	38.81	---	---	---	---	---	---	---	---
11	37.32	34.66	36.70	38.79	---	---	---	---	---	---	---	---
12	36.97	34.64	36.96	38.59	---	---	---	---	---	---	---	---
13	36.47	34.66	37.20	38.62	---	---	---	---	---	---	---	---
14	36.60	34.54	37.28	38.56	---	---	---	---	---	---	---	---
15	36.91	34.51	37.42	38.35	---	---	---	---	---	---	---	---
16	36.97	34.82	37.55	38.22	---	---	---	---	---	---	---	---
17	36.93	34.87	37.66	38.26	---	---	---	---	---	---	---	---
18	36.86	34.81	37.71	37.91	---	---	---	---	---	---	---	---
19	36.88	35.06	37.89	37.38	---	---	---	---	---	---	---	---
20	36.88	35.40	37.99	36.49	---	---	---	---	---	---	---	---
21	36.87	35.73	38.03	36.22	---	---	---	---	---	---	---	---
22	36.69	35.86	38.11	35.97	---	---	---	---	---	---	---	---
23	36.57	35.88	38.28	35.78	---	---	---	---	---	---	---	---
24	36.48	36.03	38.57	35.33	---	---	---	---	---	---	---	---
25	36.12	36.22	38.58	33.82	---	---	---	---	---	---	---	---
26	35.87	36.33	38.48	32.72	---	---	---	---	---	---	---	---
27	35.81	36.36	38.49	32.46	---	---	---	---	---	---	---	---
28	35.72	36.27	38.53	32.35	---	---	---	---	---	---	---	---
29	35.61	36.38	38.61	32.55	---	---	---	---	---	---	---	---
30	35.60	36.49	38.58	32.78	---	---	---	---	---	---	---	---
31	35.41	---	38.83	32.82	---	---	---	---	---	---	---	---
MAX	38.39	36.49	38.83	39.10	---	---	---	---	---	---	---	---



SARASOTA COUNTY—Continued

WELL NUMBER.--271601082330501. ROMP TR 6-1 Hawthorn Well near Sarasota, FL.

LOCATION.--Lat 27°16'01", long 82°33'05" (1927 North American datum), in NW $^1/_4$ NE $^1/_4$ sec.13, T.37 S., R.17 E., Hydrologic Unit 03100201, 40 ft south of State Highway 789A, 1.8 mi west of U. S. Highway 41, and 4.8 mi south of Sarasota.

AQUIFER.--Hawthorn formation of Miocene Age, Geologic Unit 122HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 315 ft, cased to 300 ft.

INSTRUMENTATION.--Periodic measurement with pressure gage or chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 5 ft, from topographic map. Measuring point: Top of flange, 3.86 ft above land-surface datum.

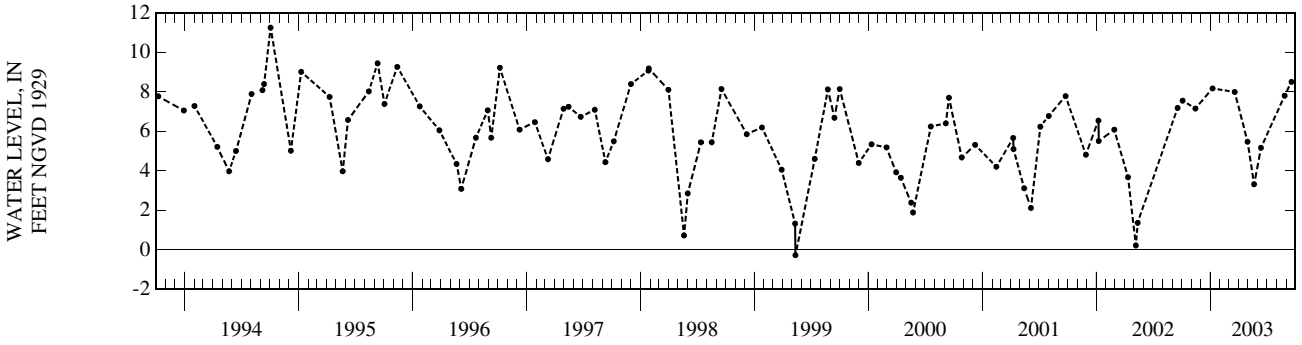
PERIOD OF RECORD.--April 1979 to September 1989; October 1989 to September 2003 (periodic), discontinued.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 12.04 ft NGVD, Sept. 22, 1985; lowest measured, 0.27 ft below NGVD, May 12, 1999.

WATER SURFACE ELEVATION IN FEET (NGVD1929), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	7.56	JAN 08	8.18	APR 30	5.48	JUN 12	5.17	SEP 18	8.51
NOV 14	7.16	MAR 20	8.00	MAY 21	3.32	AUG 27	7.81		

WATER YEAR 2003 LOWEST 3.32 MAY 21, 2003 HIGHEST 8.51 SEP 18, 2003



SARASOTA COUNTY—Continued

WELL NUMBER.--271619082240201. Florida Cities Test Well 1 near Sarasota, FL.

LOCATION.--Lat 27°16'19", long 82°24'02" (1927 North American datum), in SE ¼ SE ¼ sec.9, T.37 S., R.19 E., Hydrologic Unit 03l00201, 20 ft east of Bee Ridge Road, 1.0 mi north of State Highway 72, and 9.0 mi southeast of Sarasota.

AQUIFER.--Suwannee limestone of Oligocene Age, Geologic Unit 123SWNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in.,depth 446 ft, cased to 104 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 34.26 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 2.99 ft above land-surface datum.

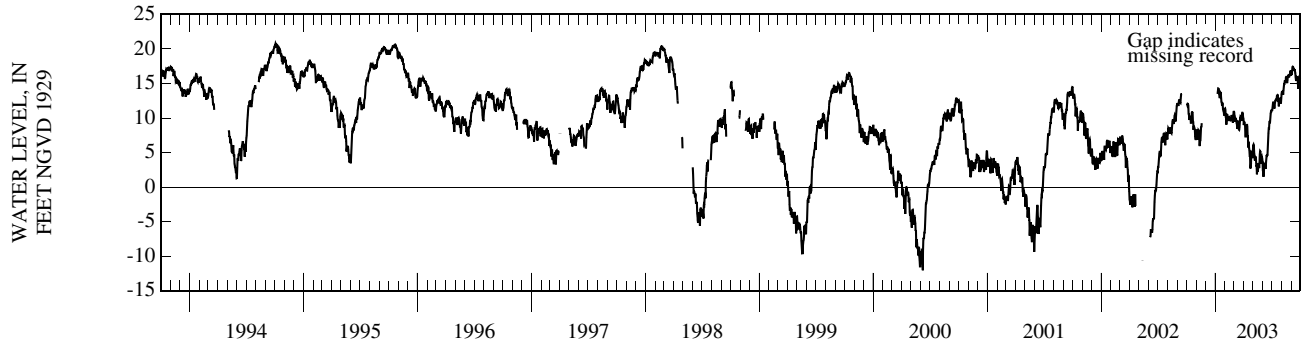
REMARKS.--Water level affected by pumping of nearby irrigation wells.

PERIOD OF RECORD.--March 1974 to December 1974 (periodic); January 1975 to current year. Records of water levels prior to October 1975 are available in files of the Geological Survey. The figures of water level as elevation, in feet NGVD, prior to Oct. 1, 1977, are in error. Correct elevations for data published prior to this date may be obtained by using datum correction of -1.74 ft.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 24.30 ft NGVD, estimated, Mar. 8, 9, 1978; lowest, 20.37 ft below NGVD, May 5, 1976.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	7.72	---	---	11.40	11.03	9.90	5.38	3.77	11.15	13.43	16.37
2	12.05	8.34	---	---	11.17	10.82	8.97	6.04	2.37	11.16	13.76	16.37
3	11.90	7.86	---	---	10.16	10.33	9.41	6.12	2.35	11.54	13.76	16.56
4	12.07	7.40	---	---	10.00	10.20	9.39	5.94	1.50	12.00	13.81	16.76
5	12.04	7.18	---	---	9.06	9.46	9.15	4.87	1.99	12.25	13.81	17.40
6	11.91	6.86	---	---	9.96	10.03	8.86	4.82	2.75	12.25	13.38	17.43
7	10.62	7.66	---	---	10.49	9.95	7.33	3.99	3.31	11.83	14.01	17.38
8	10.54	8.25	---	13.48	10.46	9.85	7.33	3.81	3.23	11.83	14.47	17.16
9	9.72	8.18	---	13.84	10.05	9.73	7.86	4.37	3.21	11.36	14.93	17.13
10	10.25	7.68	---	14.27	9.97	9.25	8.68	4.34	3.21	11.88	14.93	16.84
11	10.01	6.12	---	14.24	9.88	9.13	9.00	4.14	2.65	12.23	15.36	17.01
12	10.30	5.94	---	14.00	9.56	8.42	9.01	3.12	3.60	12.50	15.36	16.98
13	10.08	6.72	---	13.45	10.17	9.00	8.76	3.12	4.10	12.50	15.18	16.75
14	9.33	6.78	---	13.15	10.17	9.50	7.33	1.84	4.65	12.65	15.46	16.50
15	9.33	7.77	---	12.88	10.12	9.50	7.33	2.42	4.55	12.65	15.84	15.88
16	10.19	8.76	---	13.37	9.79	9.15	5.73	2.21	4.65	12.76	15.96	15.55
17	10.70	8.66	---	13.70	9.99	8.32	6.45	2.96	4.65	13.19	15.96	15.37
18	10.84	9.25	---	13.64	9.92	8.28	6.45	2.86	5.58	13.29	15.24	15.65
19	10.83	---	---	12.99	9.66	8.60	5.64	3.34	6.75	13.34	15.06	15.93
20	10.79	---	---	12.39	9.66	9.25	5.33	3.34	7.80	13.28	15.47	15.90
21	9.50	---	---	12.26	9.90	10.01	4.51	2.74	8.51	12.46	15.98	15.78
22	9.45	---	---	11.82	10.44	10.21	4.51	3.45	8.51	12.40	16.01	14.99
23	8.29	---	---	12.22	10.24	10.14	2.68	4.75	9.45	11.70	16.19	14.99
24	8.86	---	---	11.92	9.90	9.94	2.81	5.21	9.45	12.33	16.17	14.21
25	8.71	---	---	11.32	9.78	9.86	3.41	5.13	9.41	12.42	15.99	15.01
26	8.52	---	---	11.21	9.31	9.57	5.12	4.34	10.04	12.79	15.99	15.57
27	8.30	---	---	11.03	10.17	10.32	5.09	4.34	10.62	12.78	16.17	15.88
28	7.34	---	---	10.91	10.83	10.76	5.06	3.45	10.92	12.81	16.51	15.83
29	7.11	---	---	10.38	---	10.77	5.06	4.22	10.92	12.78	16.77	16.13
30	6.80	---	---	10.97	---	10.62	4.18	4.36	11.15	12.10	16.77	16.11
31	7.72	---	---	11.34	---	9.99	---	4.17	---	12.79	16.11	---
MAX	---	---	---	---	11.40	11.03	9.90	6.12	11.15	13.34	16.77	17.43



SARASOTA COUNTY—Continued

WELL NUMBER.--271938082251801. Sarasota Well 9 near Sarasota, FL.

LOCATION.--Lat 27°19'38", long 82°25'18" (1927 North American datum), in SW ¼ SE ¼ sec.20, T.36 S., R.19 E., Hydrologic Unit 03100201, 0.8 mi south of State Highway 780, and 5.0 mi east of Sarasota.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, unused irrigation, artesian well, diameter 8 in., depth 730 ft, cased to 101 ft.

INSTRUMENTATION.--Water-stage and tipping bucket raingage recorders--60-minute interval.

DATUM.--Land-surface datum is 33.56 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 4.00 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby irrigation wells.

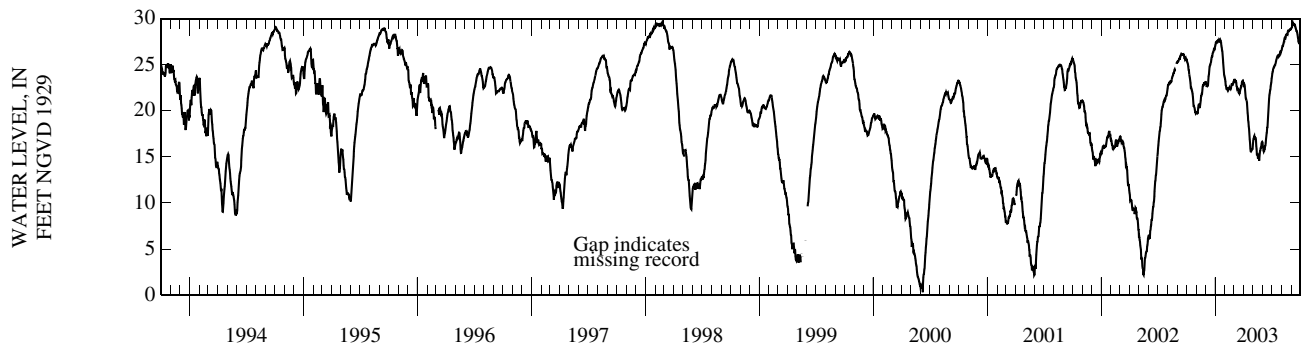
PERIOD OF RECORD.--September 1930 to December 1931 (periodic); January 1932 to April 1937; November 1941 to current year. Records of water levels prior to January 1943 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 38.76 ft NGVD, Mar. 7, 1931; lowest daily maximum water level, 0.31 ft NGVD, June 7, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.53	19.83	23.14	27.18	23.45	23.23	23.01	16.38	16.57	23.70	26.56	28.99
2	25.35	19.85	22.92	27.32	23.19	23.21	22.85	16.74	16.16	24.02	26.72	29.03
3	25.28	19.80	22.91	27.45	22.77	23.38	22.94	16.98	15.99	24.23	26.91	29.07
4	25.20	19.73	22.59	27.43	22.71	23.38	22.87	17.00	15.72	24.31	27.04	29.26
5	25.04	19.77	22.70	27.40	22.40	23.23	22.66	17.22	15.57	24.48	27.05	29.48
6	24.81	20.09	22.87	27.50	22.41	23.27	22.27	17.26	15.66	24.57	27.11	29.59
7	24.43	20.29	22.71	27.47	22.40	23.28	21.82	16.93	15.76	24.69	27.31	29.47
8	24.38	20.58	22.75	27.49	22.32	23.24	21.41	17.06	15.82	24.71	27.44	29.46
9	23.95	20.69	23.27	27.66	22.24	22.99	21.28	17.08	16.14	24.86	27.61	29.38
10	23.76	20.69	23.74	27.71	22.42	22.66	21.21	17.06	16.21	24.93	27.80	29.33
11	23.56	20.44	23.94	27.69	22.42	22.62	21.11	16.84	16.51	24.94	27.93	29.38
12	23.29	20.31	24.38	27.61	22.31	22.32	20.83	16.16	16.94	25.03	27.95	29.38
13	23.02	20.59	24.76	27.74	22.37	22.35	20.33	15.86	17.28	25.14	27.92	29.31
14	22.52	20.86	24.90	27.69	22.46	22.40	19.77	15.18	17.57	25.36	28.09	29.13
15	22.53	21.14	24.95	27.54	22.51	22.34	19.41	15.24	17.62	25.49	28.16	28.98
16	22.35	21.60	25.10	27.56	22.38	22.03	18.98	15.26	18.16	25.60	28.26	28.91
17	22.28	21.63	25.15	27.67	22.41	21.95	18.78	14.91	18.21	25.76	28.27	28.71
18	22.20	21.84	25.28	27.57	22.40	21.93	18.32	14.94	18.97	25.87	28.31	28.70
19	22.05	21.85	25.57	27.37	22.35	21.87	18.01	14.97	19.55	25.96	28.33	28.63
20	21.83	22.26	25.79	27.06	22.48	21.98	17.44	15.02	20.17	26.00	28.30	28.46
21	21.51	22.61	25.88	26.89	22.68	22.20	16.92	14.59	20.71	26.01	28.59	28.26
22	21.04	22.77	25.89	26.59	22.88	22.39	16.53	14.96	21.30	26.05	28.66	28.02
23	20.55	22.79	26.19	26.45	22.88	22.46	15.89	15.42	21.69	25.89	28.63	27.87
24	20.55	22.79	26.32	25.98	22.89	22.66	15.61	15.67	21.88	25.95	28.62	27.57
25	20.46	23.01	26.37	25.54	22.89	22.67	15.57	15.71	22.18	25.96	28.71	27.45
26	20.34	23.01	26.50	25.24	22.88	22.85	15.64	15.95	22.26	26.00	28.79	27.46
27	20.12	22.92	26.65	24.82	23.04	23.07	15.70	16.00	22.66	26.18	28.83	27.38
28	19.86	22.95	26.72	24.40	23.15	23.21	15.81	16.13	22.89	26.43	28.85	27.31
29	19.86	23.07	26.67	23.91	---	23.24	15.82	16.45	23.09	26.44	28.84	27.22
30	19.72	23.14	26.81	23.78	---	23.00	15.86	16.59	23.50	26.34	28.83	27.23
31	19.78	---	27.03	23.62	---	23.12	---	16.63	---	26.47	28.86	---
MAX	25.53	23.14	27.03	27.74	23.45	23.38	23.01	17.26	23.50	26.47	28.86	29.59
*PREC	1.45	3.93	8.19	0.05	1.24	0.36	1.76	0.36	---	---	---	9.83

WTR YR 2003 MAX 29.59



SARASOTA COUNTY—Continued

WELL NUMBER.--272020082194801. Verna T Well 0-4 near Verna, FL.

LOCATION.--Lat 27°20'20", long 82°19'48" (1927 North American datum), in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.20, T.36 S., R.20 E., Hydrologic Unit 03100102, 60 ft north of State Highway 780, and 5.0 mi southwest of Verna.

AQUIFER.--Tampa limestone of Miocene Age, Geologic Unit 122TAMP.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 500 ft, cased to 140 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 43 ft, from topographic map. Measuring point: Top of recorder shelter floor, 3.0 ft above land-surface datum.

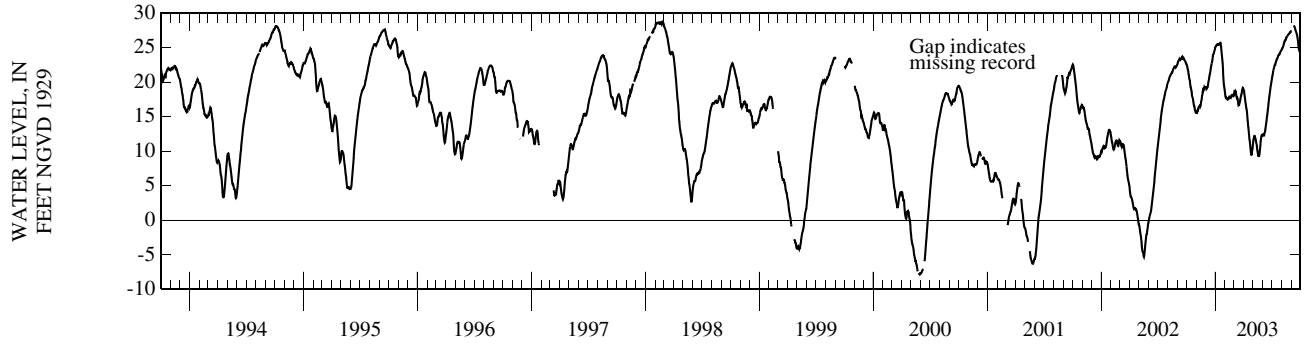
PERIOD OF RECORD.--February 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 28.75 ft NGVD, Feb. 17, 1998; lowest, 7.83 ft below NGVD, May 28, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.56	15.54	19.29	25.12	18.38	18.05	19.00	10.96	12.35	20.54	24.66	27.50
2	22.42	15.68	19.15	25.17	17.99	18.42	18.84	11.39	12.41	20.84	24.80	---
3	22.21	15.62	19.01	25.27	17.80	18.67	18.56	11.72	12.38	21.04	24.85	---
4	21.91	15.74	19.07	25.32	17.77	18.64	18.22	11.83	12.29	21.26	24.91	---
5	21.80	15.79	19.17	25.40	17.65	18.58	17.89	12.12	12.26	21.50	25.04	---
6	21.53	15.98	19.21	25.42	17.67	18.70	17.52	12.20	12.37	21.71	25.14	---
7	21.16	16.14	19.28	25.40	17.67	18.65	17.15	12.20	12.51	21.87	25.29	---
8	20.92	16.17	19.51	25.47	17.58	18.36	16.84	12.07	12.70	22.05	25.43	---
9	20.55	16.40	19.93	25.49	17.48	18.09	16.45	11.93	12.94	22.26	25.66	28.04
10	20.44	16.44	20.16	25.48	17.49	17.80	16.24	11.76	13.20	22.41	25.89	28.07
11	20.21	16.54	20.30	25.44	17.61	17.71	15.99	11.45	13.55	22.50	25.98	28.07
12	19.68	16.62	20.70	25.42	17.62	17.74	15.64	11.20	13.91	22.51	26.01	27.99
13	19.39	16.65	20.99	25.54	17.68	17.65	15.04	11.04	14.23	22.84	26.04	27.84
14	19.16	16.53	21.17	25.57	17.83	17.30	14.48	10.68	14.51	22.91	26.14	27.63
15	19.01	16.69	21.39	25.55	17.91	16.94	14.03	10.21	14.86	23.08	26.23	27.47
16	18.79	17.13	21.65	25.59	17.91	16.66	13.61	9.97	15.13	23.19	26.43	27.35
17	18.40	17.27	21.93	25.64	17.89	16.70	13.38	9.66	15.48	23.32	26.45	27.22
18	18.08	17.53	22.17	25.40	17.81	16.80	12.84	9.35	15.95	23.44	26.53	27.09
19	17.93	17.93	22.45	25.09	17.81	16.91	12.32	9.31	16.27	23.52	26.59	26.90
20	17.76	18.09	22.68	24.58	17.75	17.11	11.77	9.39	16.79	23.61	26.69	26.68
21	17.61	18.55	22.83	24.10	17.83	17.35	11.53	9.39	17.17	23.76	26.78	26.38
22	17.25	18.81	23.08	23.66	18.09	17.56	11.10	9.57	17.67	23.87	26.86	26.04
23	16.97	18.71	23.43	23.22	18.10	17.83	10.67	10.05	17.96	23.98	26.91	25.71
24	16.64	18.82	23.91	22.72	18.17	18.05	10.08	10.49	18.30	24.03	26.97	25.34
25	16.58	19.12	23.92	21.89	18.16	18.23	9.72	10.92	18.66	24.05	27.02	24.98
26	16.37	19.17	24.04	21.06	18.13	18.35	9.49	11.31	19.03	24.04	27.09	24.76
27	16.04	19.30	24.22	20.32	18.11	18.65	9.50	11.69	19.39	24.16	27.13	24.55
28	15.90	19.22	24.35	19.75	18.00	18.86	9.85	12.05	19.65	24.32	27.19	24.46
29	15.69	19.31	24.52	19.39	---	19.03	10.18	12.27	19.93	24.45	27.23	24.48
30	15.64	19.30	24.67	19.17	---	19.18	10.46	12.33	20.24	24.51	27.29	24.58
31	15.55	---	25.00	18.78	---	19.13	---	12.27	---	24.57	27.34	---
MAX	22.56	19.31	25.00	25.64	18.38	19.18	19.00	12.33	20.24	24.57	27.34	---

CAL YR 2002 MAX 25.00



SARASOTA COUNTY—Continued

WELL NUMBER.--272127082323801. City of Sarasota 23rd and Coconut Well near Sarasota, FL.

LOCATION.--Lat 27°21'27", long 82°32'38" (1927 North American datum), in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.18, T.36 S., R.18 E., Hydrologic Unit 03100201, 200 ft north of 23rd Street, 0.5 mi east of Coconut Street, and 1.6 mi northwest of Sarasota.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 570 ft, cased to 45 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 9.37 ft above National Geodetic Vertical Datum of 1929 (levels by City of Sarasota). Measuring point: Top of flange, 3.10 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby wells.

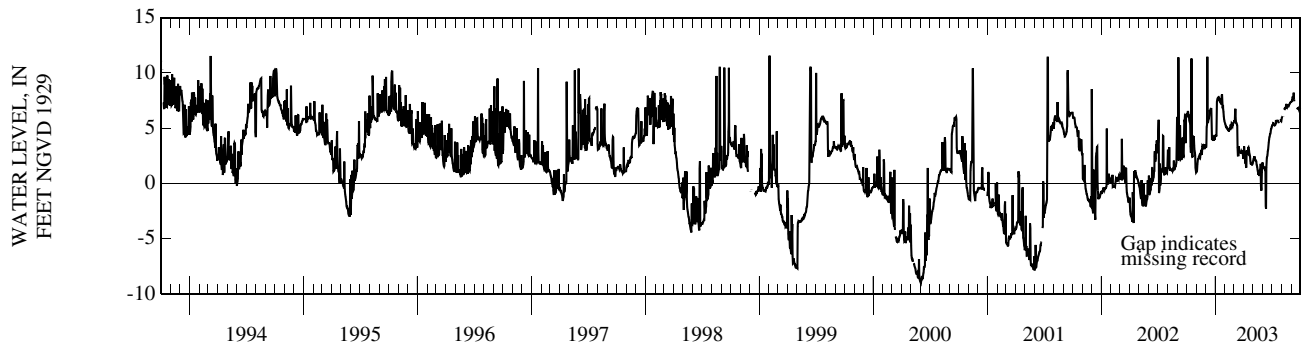
PERIOD OF RECORD.--October 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 11.56 ft NGVD, Feb. 2, 1999; lowest, 9.01 ft below NGVD, June 1, 2000.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.11	1.04	3.39	4.34	5.46	5.54	2.22	1.91	1.91	5.17	5.79	7.38
2	6.16	1.09	3.23	4.34	5.38	5.64	2.78	2.08	1.60	5.25	5.95	7.41
3	6.13	1.22	3.38	4.35	5.20	5.64	3.35	2.21	1.58	5.26	6.03	7.50
4	6.43	1.73	5.11	4.25	5.17	5.70	2.95	2.28	1.43	5.32	6.09	7.50
5	6.56	2.02	5.29	5.95	5.14	6.65	2.34	2.30	1.40	5.45	---	7.74
6	6.36	2.30	11.46	7.39	4.99	6.76	2.04	2.48	1.44	5.44	6.02	7.87
7	6.16	2.17	5.67	7.55	5.12	5.95	1.81	2.23	1.44	5.43	---	7.74
8	6.15	2.25	5.46	7.70	4.92	5.58	2.05	2.23	1.44	5.32	---	7.78
9	5.75	2.40	5.68	7.75	4.89	5.45	1.50	2.10	1.34	5.28	6.67	8.22
10	5.62	2.48	5.88	7.79	4.91	5.44	1.43	2.10	1.40	5.26	6.72	7.59
11	5.54	2.34	5.89	7.77	4.91	5.37	2.98	2.06	-2.04	5.28	6.78	7.44
12	5.39	2.37	6.17	7.67	4.83	5.23	2.80	2.00	-2.27	5.30	6.90	---
13	3.37	2.33	6.66	7.75	4.70	3.26	2.86	1.74	1.45	5.37	6.80	---
14	2.81	2.65	6.48	7.69	4.89	2.55	2.71	1.62	2.07	5.75	6.81	---
15	2.93	2.65	6.48	7.54	4.95	2.56	2.68	1.48	2.31	5.61	6.94	---
16	11.30	2.97	6.64	7.61	4.96	2.56	3.23	1.24	2.40	5.58	7.19	---
17	3.82	3.01	6.75	7.59	4.92	3.39	3.27	1.09	2.57	5.66	7.09	---
18	2.68	2.60	6.76	7.42	4.83	3.08	3.09	0.96	2.91	5.69	7.05	---
19	2.41	2.84	6.82	7.24	5.34	2.88	2.97	0.78	3.06	5.68	7.00	6.87
20	2.43	3.40	5.90	7.15	4.94	2.86	2.70	0.91	3.36	5.68	6.90	6.84
21	3.49	3.36	4.02	7.96	5.21	2.84	2.59	0.68	3.71	5.64	6.96	6.81
22	4.00	3.40	4.00	8.07	5.44	2.79	2.45	0.85	3.97	5.59	7.10	6.71
23	4.23	3.22	4.03	7.38	5.40	2.78	2.04	1.18	4.18	5.45	7.10	6.83
24	4.20	3.20	4.21	6.80	5.29	2.78	1.83	1.26	4.26	---	7.11	6.83
25	3.45	3.28	4.24	7.10	5.22	2.88	1.70	1.28	4.47	---	7.06	6.75
26	2.97	3.53	3.95	6.72	5.39	2.78	1.94	1.77	4.48	---	7.15	6.88
27	2.83	3.21	3.86	6.47	5.43	2.87	1.79	-0.19	4.66	---	7.22	6.92
28	2.58	3.20	4.21	6.08	5.46	2.87	1.71	-0.64	4.92	---	7.27	6.84
29	1.42	3.27	3.99	5.80	---	2.89	1.71	-0.50	4.95	5.82	7.34	6.75
30	1.22	3.35	4.01	5.65	---	2.61	1.77	1.00	5.10	5.66	7.37	6.70
31	0.99	---	4.30	5.56	---	2.44	---	1.52	---	5.63	7.36	---
MAX	11.30	3.53	11.46	8.07	5.46	6.76	3.35	2.48	5.10	---	---	---

CAL YR 2002 MAX 11.46



SARASOTA COUNTY—Continued

WELL NUMBER.--272129082330202. City of Sarasota Hickory Avenue Well near Sarasota, FL.

LOCATION.--Lat 27°21'29", long 82°33'02" (1927 North American datum), in NE ¼ NE ¼ sec.13, T.36 S., R.17 E., Hydrologic Unit 03100201, 200 ft east of Hickory Avenue, 0.2 mi west of U. S. Highway 41, and 1.7 mi northwest of Sarasota.

AQUIFER.--Upper Floridan aquifer of Tertiary Age, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 8 in., depth 591 ft, cased to 38 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 18.13 ft above National Geodetic Vertical Datum of 1929 (levels by City of Sarasota). Measuring point: Top of 6 in. flange, 3.41 ft above land-surface datum.

REMARKS.--Water level affected by pumpage of nearby production well.

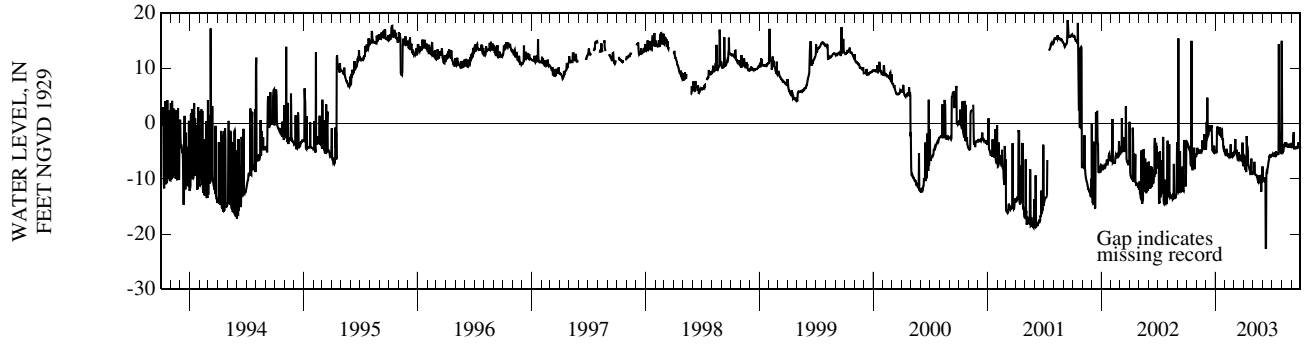
PERIOD OF RECORD.--November 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 18.71 ft NGVD, Sept. 15, 2001; lowest, 28.54 ft below NGVD, May 17, 1989.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-3.23	-5.43	-4.58	-4.96	-5.39	-5.70	-7.71	-8.94	-7.77	-5.47	14.83	-4.25
2	-3.33	-5.57	-4.74	-5.02	-5.56	-5.19	-5.90	-8.86	-9.50	-5.72	14.83	-3.47
3	-3.39	-5.67	-3.37	-5.02	-5.71	-5.13	-5.80	-8.80	-10.17	-5.68	-5.14	-4.04
4	-3.57	-4.39	0.30	-5.18	-5.88	-4.76	-5.90	-8.89	-10.23	-5.73	-4.97	-4.05
5	-3.71	-5.20	-3.02	-5.14	-4.56	-2.97	-7.84	-8.86	-10.41	-5.52	-4.94	-3.71
6	-4.19	-5.19	4.69	-1.48	-5.51	-2.84	-8.09	-6.94	-10.44	-5.59	-5.12	-3.58
7	-4.33	-5.15	-2.04	-1.37	-4.93	-4.18	-8.39	-9.13	-10.31	-5.68	-5.02	-3.84
8	-4.29	-5.15	-2.27	-0.52	-5.68	-5.36	-6.32	-9.13	-10.45	-5.81	-4.11	-2.10
9	-4.67	-5.20	-2.10	-1.44	-5.73	-5.47	-8.60	-9.21	-10.48	-5.80	-3.98	-1.55
10	-4.87	-5.06	-2.00	-1.27	-5.75	-4.99	-8.77	-9.21	-9.67	-5.25	-3.83	-4.36
11	-4.90	-5.25	-1.31	-1.56	-5.91	-4.97	-2.26	-9.31	-22.65	-5.90	-3.80	-4.30
12	-5.16	-5.25	-0.95	-1.75	-6.01	-5.69	-4.09	-9.32	-22.49	-5.95	-3.41	-4.35
13	-7.32	-5.41	-0.28	-1.29	-5.37	-6.33	-4.10	-9.37	-9.37	-5.91	-3.96	-4.12
14	-7.57	-4.98	-1.40	-1.85	-6.06	-6.58	-4.47	-9.64	-8.79	-5.04	-3.88	-4.49
15	-7.55	-5.03	-1.18	-2.13	-5.72	-6.63	-5.00	-9.76	-8.83	-5.30	-3.99	-4.63
16	14.96	-4.86	-1.17	-0.65	-6.06	-6.68	-7.41	-10.04	-8.86	-5.43	-3.39	-4.10
17	-6.03	-4.83	-0.60	-1.93	-6.10	-5.23	-7.45	-10.26	-8.23	-5.17	-3.90	-4.29
18	-8.00	-4.99	-0.63	-2.19	-5.61	-5.96	-7.65	-10.51	-7.88	-5.36	-4.11	-4.34
19	-8.29	-4.76	-0.80	-2.37	-3.76	-6.18	-7.91	-10.77	-7.67	-5.48	-3.89	-4.31
20	-8.29	-3.04	-0.28	-2.38	-5.64	-5.61	-8.19	-9.36	-6.99	-5.55	-4.18	-4.58
21	-6.74	-4.19	-2.71	-1.13	-5.13	-6.30	-8.39	-10.56	-6.81	-5.57	-4.17	-4.29
22	-6.34	-4.13	-4.83	-1.07	-5.74	-6.39	-8.67	-10.45	-6.46	-5.68	-3.67	-4.03
23	-6.08	-4.49	-4.87	-2.70	-5.85	-6.52	-9.05	-10.07	-5.79	14.38	-4.10	-4.11
24	-6.10	-4.44	-4.78	-3.03	-5.41	-6.54	-9.30	-10.02	-6.23	-4.55	-4.15	-4.13
25	-4.38	-4.44	-4.71	-2.70	-6.13	-6.72	-8.86	-10.01	-5.60	-1.55	-4.24	-3.34
26	-8.02	-1.92	-5.20	-4.04	-5.58	-6.73	-6.35	-9.27	-6.13	-5.30	-4.24	-4.16
27	-8.25	-4.57	-5.26	-4.40	-5.25	-6.68	-8.80	-10.62	-5.57	-4.38	-3.62	-3.97
28	-5.43	-4.54	-3.99	-4.34	-5.92	-6.54	-8.98	-12.34	-5.82	-5.11	-4.21	-4.17
29	-5.57	-4.52	-5.25	-5.02	---	-3.44	-9.00	-10.57	-5.87	-4.84	-4.19	-4.57
30	-5.86	-4.52	-5.24	-4.78	---	-7.20	-9.07	-10.53	-5.77	-5.33	-4.15	-4.22
31	-6.09	---	-4.91	-5.24	---	-7.53	---	-9.27	---	-5.37	-4.22	---
MAX	14.96	-1.92	4.69	-0.52	-3.76	-2.84	-2.26	-6.94	-5.57	14.38	14.83	-1.55

CAL YR 2002 MAX 15.40
WTR YR 2003 MAX 14.96



SARASOTA COUNTY—Continued

WELL NUMBER.--272316082302601. Sarasota County Test Well No. 1 near Sarasota, FL.

LOCATION.--Lat 27°23'16", long 82°30'26" (1927 North American datum), in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.4, T.36 S., R.18 E., Hydrologic Unit 03100201, 1.4 mi east of U. S. Highway 301, and 4.1 mi northeast of Sarasota.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 4 in., depth 606 ft, cased to 350 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 34.00 ft above National Geodetic Vertical Datum of 1929 (levels by Sarasota County). Measuring point: Top of recorder shelter floor, 3.23 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby wells.

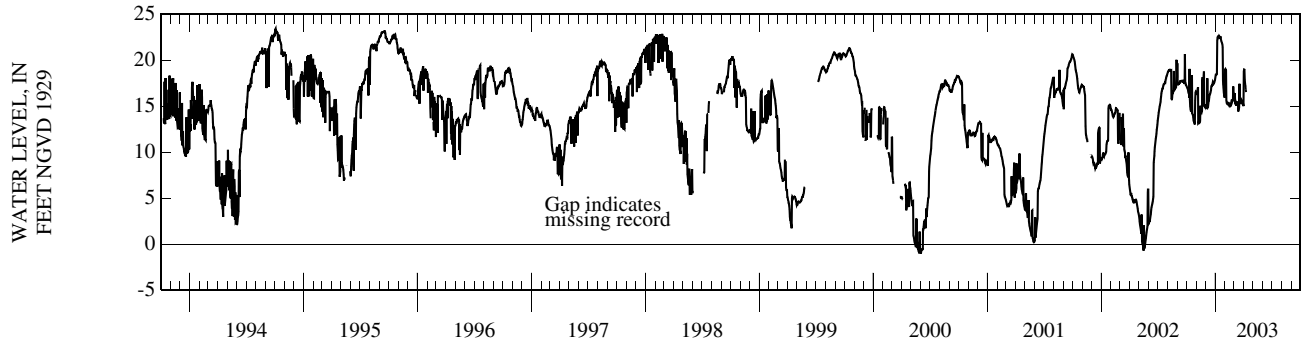
PERIOD OF RECORD.--January 1985 to April 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 23.39 ft NGVD, Oct. 3, 1994; lowest, 2.95 ft below NGVD, May 18, 1989.

ELEVATION ABOVE NGVD 1929, FEET
PERIOD OCTOBER 2002 TO APRIL 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.16	16.37	15.07	18.20	18.99	16.03	15.00	---	---	---	---	---
2	17.08	16.40	14.91	18.42	19.04	16.19	18.77	---	---	---	---	---
3	17.00	16.51	15.00	18.42	18.95	16.33	18.98	---	---	---	---	---
4	16.92	16.66	14.80	18.41	18.88	16.40	18.96	---	---	---	---	---
5	16.78	16.91	14.79	18.46	15.62	15.47	17.88	---	---	---	---	---
6	16.56	17.06	18.01	18.55	15.38	15.51	17.44	---	---	---	---	---
7	16.44	13.12	14.79	22.12	15.37	15.44	17.15	---	---	---	---	---
8	16.46	13.16	14.87	22.44	15.23	15.27	16.79	---	---	---	---	---
9	15.91	13.28	15.21	22.56	15.23	15.04	16.53	---	---	---	---	---
10	19.05	13.33	15.50	22.60	15.28	15.36	---	---	---	---	---	---
11	15.72	13.34	15.58	22.60	15.19	15.38	---	---	---	---	---	---
12	15.00	13.27	15.93	22.52	15.19	15.35	---	---	---	---	---	---
13	14.69	13.36	16.21	22.63	15.12	15.19	---	---	---	---	---	---
14	14.51	15.05	16.29	22.57	15.21	15.48	---	---	---	---	---	---
15	14.50	14.17	16.35	22.44	15.29	14.42	---	---	---	---	---	---
16	14.45	14.39	16.53	22.45	15.26	14.60	---	---	---	---	---	---
17	18.23	14.48	16.60	22.59	15.23	14.69	---	---	---	---	---	---
18	18.34	14.38	16.74	22.32	15.02	14.87	---	---	---	---	---	---
19	14.24	14.52	17.17	22.21	15.05	17.43	---	---	---	---	---	---
20	14.09	17.82	17.22	22.04	15.18	15.30	---	---	---	---	---	---
21	14.05	18.15	17.20	21.97	15.43	15.45	---	---	---	---	---	---
22	13.77	15.16	17.27	21.87	15.62	15.53	---	---	---	---	---	---
23	13.42	14.97	17.44	21.75	15.62	15.61	---	---	---	---	---	---
24	13.40	18.28	17.64	21.41	15.48	15.65	---	---	---	---	---	---
25	13.27	18.76	17.57	17.78	15.58	15.22	---	---	---	---	---	---
26	13.18	15.31	17.48	17.39	15.66	15.31	---	---	---	---	---	---
27	13.01	15.05	17.57	17.00	17.14	15.44	---	---	---	---	---	---
28	15.58	14.96	17.53	16.49	16.21	15.49	---	---	---	---	---	---
29	16.45	15.01	17.61	16.21	---	15.40	---	---	---	---	---	---
30	16.55	15.03	17.74	16.07	---	15.45	---	---	---	---	---	---
31	16.51	---	17.99	15.92	---	15.19	---	---	---	---	---	---
MAX	19.05	18.76	18.01	22.63	19.04	17.43	---	---	---	---	---	---

CAL YR 2002 MAX 20.66



SARASOTA COUNTY—Continued

WELL NUMBER.--272317082290502. Sarasota County Test Well 6A near Sarasota, FL.

LOCATION.--Lat 27°23'17", long 82°29'05" (1927 North American datum), in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.3, T.36 S., R.18 E., Hydrologic Unit 03100201, 2.8 mi east of U. S. Highway 301, and 5.0 mi northeast of Sarasota.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120FLRD.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 4 in., depth 527 ft, cased to 392 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 27 ft, from topographic map. Measuring point: Top of recorder shelter floor, 3.00 ft above land-surface datum.

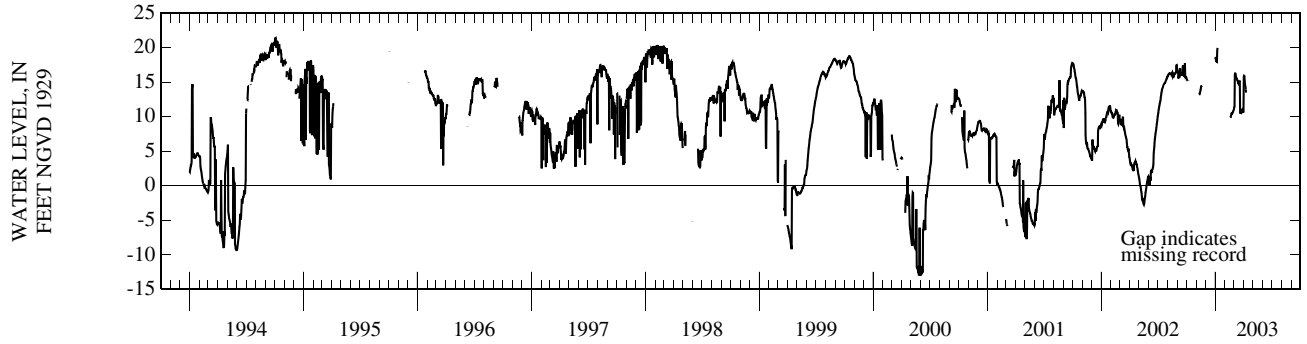
REMARKS.--Water level affected by pumping of nearby wells.

PERIOD OF RECORD.--October 1985 to April 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 21.39 ft NGVD, Oct. 3, 1994; lowest, 14.52 ft below NGVD, May 18, 1989.

ELEVATION ABOVE NGVD 1929, FEET
PERIOD OCTOBER 2002 TO APRIL 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.50	---	---	18.45	---	11.04	10.60	---	---	---	---	---
2	15.40	---	---	18.41	---	11.31	15.78	---	---	---	---	---
3	15.28	---	---	18.04	---	11.43	15.92	---	---	---	---	---
4	15.15	---	---	17.98	---	16.11	15.87	---	---	---	---	---
5	---	---	---	18.04	---	16.24	15.03	---	---	---	---	---
6	---	---	---	18.00	---	16.22	14.62	---	---	---	---	---
7	15.25	---	---	19.63	---	16.13	14.47	---	---	---	---	---
8	---	---	---	19.95	---	15.84	13.96	---	---	---	---	---
9	---	---	---	---	---	15.57	13.48	---	---	---	---	---
10	---	13.18	---	---	---	15.55	---	---	---	---	---	---
11	---	13.20	---	---	---	15.50	---	---	---	---	---	---
12	---	13.43	---	---	---	15.32	---	---	---	---	---	---
13	---	13.52	---	---	---	15.22	---	---	---	---	---	---
14	---	13.78	---	---	---	15.06	---	---	---	---	---	---
15	---	13.99	---	---	---	14.83	---	---	---	---	---	---
16	---	14.38	---	---	---	14.76	---	---	---	---	---	---
17	---	14.44	---	---	---	14.96	---	---	---	---	---	---
18	---	14.45	---	---	9.88	15.11	---	---	---	---	---	---
19	---	14.48	---	---	9.92	15.12	---	---	---	---	---	---
20	---	---	---	---	10.13	15.12	---	---	---	---	---	---
21	---	---	---	---	10.38	10.57	---	---	---	---	---	---
22	---	---	---	---	10.48	10.57	---	---	---	---	---	---
23	---	---	---	---	10.45	10.70	---	---	---	---	---	---
24	---	---	---	---	10.45	10.72	---	---	---	---	---	---
25	---	---	---	---	10.55	10.64	---	---	---	---	---	---
26	---	---	---	---	10.70	10.88	---	---	---	---	---	---
27	---	---	---	---	10.77	10.99	---	---	---	---	---	---
28	---	---	---	---	10.86	11.00	---	---	---	---	---	---
29	---	---	---	---	---	11.06	---	---	---	---	---	---
30	---	---	---	---	---	10.90	---	---	---	---	---	---
31	---	---	18.36	---	---	10.73	---	---	---	---	---	---
MAX	---	---	---	---	---	16.24	---	---	---	---	---	---



MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2002 TO SEPTEMBER 2003

SARASOTA COUNTY

SITE-ID	STATION NAME	WATER-LEVEL DATE	WATER-LEVEL MSL FEET	WATER-LEVEL DATUM CODE
265652082185801	ENGLEWOOD WELL 150 NEAR ENGLEWOOD FL	05-20-2003	7.23	NGVD29
		09-17-2003	9.60	NGVD29
265712082205701	ENGLEWOOD WATER DT R-2 NEAR ENGLEWOOD FL	05-20-2003	3.51	NGVD29
		09-17-2003	6.25	NGVD29
265809082194001	ENGLEWOOD WELL TW 6 NR ENGLEWOOD FL	05-20-2003	6.29	NGVD29
		09-18-2003	10.19	NGVD29
270058082152502	N PORT ON SITE MON WELL NEAR NORTH PORT FL	05-20-2003	25.53	NGVD29
		09-16-2003	16.70	NGVD29
270058082152503	N PORT ONSITE SH MONITOR WELL NEAR NORTH PORT FL	05-20-2003	24.50	NGVD29
		09-16-2003	18.40	NGVD29
270106082214101	ENGLEWOOD DEEP ZONE 3 NEAR ENGLEWOOD FL	05-20-2003	11.17	NGVD29
		09-17-2003	14.15	NGVD29
270240082235701	ROMP TR4-2 TAMPA WELL NEAR VENICE FL	05-20-2003	21.82	NGVD29
		09-18-2003	23.84	NGVD29
270406082220102	PLANTATION SUWANNEE WELL NEAR VENICE FL	05-21-2003	22.23	NGVD29
270406082220103	PLANTATION UPPER HAWTHORN WELL NEAR VENICE FL	05-21-2003	2.58	NGVD29
270406082220104	PLANTATION TMIM WELL NEAR VENICE FL	05-21-2003	17.83	NGVD29
270420082230502	VENICE GARDENS SUWANNEE WELL NEAR VENICE FL	05-21-2003	21.44	NGVD29
		09-16-2003	25.53	NGVD29
270420082230503	VENICE GARDENS HAWTHORN WELL NEAR VENICE FL	05-21-2003	14.69	NGVD29
		09-16-2003	18.95	NGVD29
270432082085701	ROMP 9 AVON PARK WELL NR NORTHPORT FL	05-22-2003	39.80	NGVD29
270432082085702	ROMP 9 SUWANNEE WELL NEAR NORTHPORT FL	05-22-2003	39.82	NGVD29
270432082085703	ROMP 9 TAMPA/NOCATEE WELL NEAR NORTHPORT FL	05-22-2003	39.51	NGVD29
270432082085704	ROMP 9 ARCADIA WELL NEAR NORTHPORT FL	05-22-2003	26.18	NGVD29
		09-16-2003	27.17	NGVD29
270432082085705	ROMP 9 PEACE RIVER WELL NEAR NORTHPORT FL	05-14-2003	17.56	NGVD29
		05-22-2003	18.98	NGVD29
270432082085706	ROMP 9 NRSD WELL NEAR NORTHPORT FL	05-22-2003	15.70	NGVD29
270542082261801	VENICE WELL 35 NEAR VENICE FL	05-22-2003	3.44	NGVD29
		09-18-2003	7.77	NGVD29
270808082270502	ROMP TR5-1 SUWANNEE WELL AT LAUREL FL	05-22-2003	18.01	NGVD29
		09-17-2003	22.02	NGVD29
270808082270503	ROMP TR5-1 HAWTHORN WELL AT LAUREL FL	05-22-2003	5.86	NGVD29
		09-17-2003	11.57	NGVD29
270919082234202	ROMP TR5-2 UPPER HAWTHORN MONITOR NEAR LAUREL FL	05-19-2003	9.03	NGVD29
		09-17-2003	12.94	NGVD29

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2002 TO SEPTEMBER 2003

SARASOTA COUNTY

SITE-ID	STATION NAME	WATER-LEVEL DATE	WATER-LEVEL MSL FEET	WATER-LEVEL DATUM CODE
270919082234203	ROMP TR5-2 LOWER HAWTHORN MONITOR NEAR LAUREL FL	05-19-2003	20.38	NGVD29
		09-17-2003	27.22	NGVD29
270919082234205	ROMP TR5-2 SUWANNEE MONITOR NEAR LAUREL FL	05-19-2003	22.99	NGVD29
		09-17-2003	29.59	NGVD29
271137082074801	ROMP 18 SUWANNEE WELL NEAR SARASOTA FL	05-19-2003	34.62	NGVD29
		09-17-2003	42.62	NGVD29
271137082284501	ROMP 20 SUWANNEE OB-3 WELL NEAR OSPREY FL	05-22-2003	16.88	NGVD29
		09-17-2003	24.68	NGVD29
271137082284502	ROMP 20 HAWTHORN AT OSPREY FL	05-22-2003	13.95	NGVD29
		09-17-2003	20.70	NGVD29
271137082284503	ROMP TR-20 UPPER HAWTHORN WELL AT OSPREY FL	05-22-2003	-4.01	NGVD29
		09-17-2003	2.42	NGVD29
271757082241301	BEE RIDGE WELL 15 NEAR SARASOTA FL	05-19-2003	11.12	NGVD29
		09-17-2003	24.51	NGVD29
271813082201301	ROMP 22 AVON PARK WELL NEAR UTOPIA FL	05-19-2003	10.58	NGVD29
		09-16-2003	27.33	NGVD29
271813082201302	ROMP 22 SUWANNEE WELL NEAR UTOPIA FL	05-19-2003	12.41	NGVD29
		09-16-2003	29.01	NGVD29
271813082201303	ROMP 22 LOW INTERMEDIATE WELL NEAR FRUITVILLE FL	05-19-2003	12.45	NGVD29
		09-16-2003	29.04	NGVD29
271813082201304	ROMP 22 UPPER INTERMEDIATE WELL NEAR FRUITVILLE FL	05-19-2003	16.68	NGVD29
		09-16-2003	27.31	NGVD29
271813082201305	ROMP 22 SURFICIAL WELL NEAR FRUITVILLE FL	05-19-2003	31.47	NGVD29
		09-16-2003	32.95	NGVD29
272049082324501	ROMP TR SA-1 NRSD WELL NEAR SARASOTA FL	05-20-2003	2.45	NGVD29
		09-15-2003	3.66	NGVD29
272049082324502	ROMP TR SA-1 SUWANNEE WELL NEAR SARASOTA FL	05-20-2003	16.21	NGVD29
		09-18-2003	16.32	NGVD29
272049082324503	ROMP TR SA-1 UPPER INTER WELL NEAR SARASOTA FL	05-20-2003	6.51	NGVD29
		09-15-2003	12.82	NGVD29
272053082320202	STA INJ DEEP MTR 2 NEAR SARASOTA FL	05-22-2003	9.07	NGVD29
		09-15-2003	17.72	NGVD29
272119082325101	WHITAKER BAY WELL NEAR SARASOTA FL	05-22-2003	3.56	NGVD29
		09-15-2003	9.26	NGVD29
272127082295301	KENSINGTON PARK WELL 1 NEAR SARASOTA FL	05-21-2003	9.31	NGVD29
		09-15-2003	20.18	NGVD29

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2002 TO SEPTEMBER 2003

SARASOTA COUNTY

SITE-ID	STATION NAME	WATER-LEVEL DATE	WATER-LEVEL MSL FEET	WATER-LEVEL DATUM CODE
272133082324701	CITY SARASOTA 27TH ST WELL NEAR SARASOTA FL	05-22-2003	3.65	NGVD29
		09-15-2003	14.12	NGVD29
272317082302402	COUNTY PUMP STATION 1 3 INCH WELL NEAR SARASOTA FL	05-22-2003	6.35	NGVD29
		09-15-2003	17.77	NGVD29

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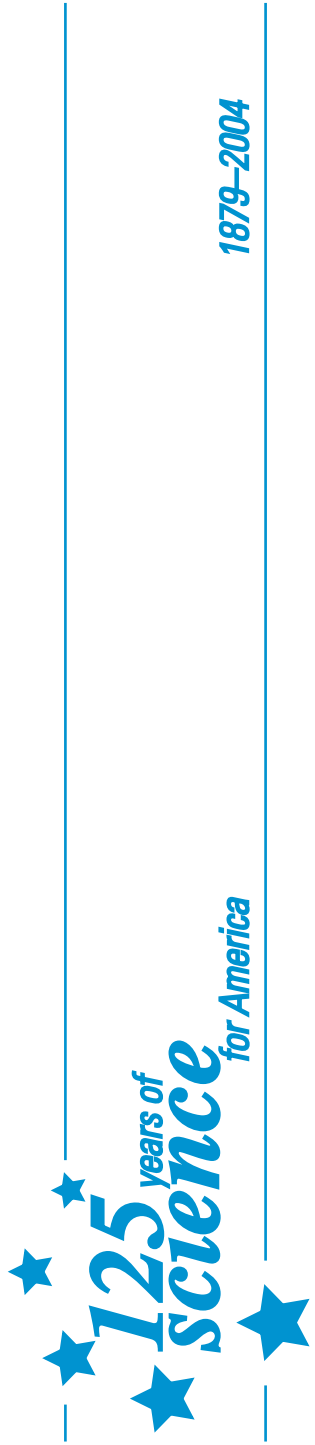
Conversion Factors

Multiply	By	To obtain
	Length	
inch (in.)	2.54×10^{1}	millimeter (mm)
	2.54×10^{-2}	meter
foot (ft)	3.048×10^{-1}	meter (m)
mile (mi)	1.609×10^{0}	kilometer (km)
	Area	
acre	4.047×10^{3}	square meter (m^2)
	4.047×10^{-1}	square hectometer (hm^2)
	4.047×10^{-3}	square kilometer (km^2)
square mile (mi^2)	2.590×10^{0}	square kilometer (km^2)
	Volume	
gallon (gal)	3.785×10^{0}	liter (L)
	3.785×10^{-3}	cubic meter (m^3)
	3.785×10^{0}	cubic decimeter (dm^3)
million gallons (Mgal)	3.785×10^{3}	cubic meter (m^3)
	3.785×10^{-3}	cubic hectometer (hm^3)
cubic foot (ft^3)	2.832×10^{-2}	cubic meter (m^3)
	2.832×10^{1}	cubic decimeter (dm^3)
cubic-foot-per-second-per-day [($ft^3/s/d$]	2.447×10^{3}	cubic meter (m^3)
	2.447×10^{-3}	cubic hectometer (hm^3)
acre-foot (acre-ft)	1.223×10^{3}	cubic meter (m^3)
	1.223×10^{-3}	cubic hectometer (hm^3)
	1.223×10^{-6}	cubic kilometer (km^3)
	Flow rate	
cubic foot per second (ft^3/s)	2.832×10^{1}	liter (L/s)
	2.832×10^{-2}	cubic meter per second (m^3/s)
	2.832×10^{1}	cubic decimeter per second (dm^3/s)
gallon per minute (gal/min)	6.309×10^{-2}	liter per second (L/s)
	6.309×10^{-5}	cubic meter per second (m^3/s)
	6.309×10^{-2}	cubic decimeter per second (dm^3/s)
million gallons per day (Mgal/d)	4.381×10^{-2}	cubic meter per second
	4.381×10^{1}	cubic decimeter per second (dm^3/s)
	Mass	
ton, short (2,000 lb)	9.072×10^{-1}	megagram (Mg) or metric ton

Temperature in degrees Celsius (°C) may be converted to degrees Fahrenheit (°F) as follows:

$$°F = (1.8 \times °C) + 32$$


125 years of science for America
1879–2004